

# Eco-economic ideas in Capital and their contemporary value

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**Abstract:** *The three volumes of Capital are rich in the idea of "ecological economy". From the concept of dialectical relationship between "man" and "nature", Marx searched for the correlation between "productive labor" and "circular economy". "Accordingly, he came up with the idea of "mode of production" and "ecological economy". The core of China's high-quality economic development is the "concept of sustainable development" and "green development", according to which, when analyzing its ecological economy idea, we should clarify the relationship between productive labor and circular economy and the influence of the capitalist mode of production on the ecological economy. In this way, we can correctly sort out and grasp its important value to the development of contemporary green economy.*

**Keywords:** *productive labor, capitalism, mode of production, ecological economy, green development*

## 1. Introduction

At present, China's economic development has jumped into a new historical stage, and ecological development is the main constraint of economic development. The 14th Five-Year Plan for the Development of Circular Economy points out that the economical and intensive recycling of resources is of great significance to the construction of carbon peaks, carbon neutrality and ecological civilization, and proposes that by 2025, China should basically establish a resource recycling industry system and basically build a resource recycling system covering the whole society, so as to support the construction of ecological civilization with the development of circular economy. Ecological civilization construction. Eco-economy is the organic combination of ecology and economy, and it is the elimination of the "substitution pattern" in economic development by ecology. Due to the prevalence of anthropocentric thinking, we ignore the laws of nature in our practical activities and wantonly add our own subjectivity to nature, causing irreversible negative effects.

In "Capital", Marx discusses the intrinsic relationship between ecology and economy in a more systematic way. He points out that ecology is the state of existence of man in relation to nature and the system of living conditions of man himself or social development. He further reveals that the capitalist system is the origin of the modern ecological dilemma and the beginning of the fracture of the relationship between man and nature, centering on the evolution of commodity production, the capitalist mode of production and material transformation. A deep understanding and grasp of the inner meaning of Marx's ecological economic thought is of great value to the high-quality development of China's economy.

## 2. The ideological basis of the ecological economy of Capital

Before writing Capital, Marx's ecological ideas had already taken shape. During his secondary school days, Marx proposed in "Considerations of Youth in Choosing a Profession" that "nature itself prescribes to the animal the sphere of activity it should follow" [1]. Marx has seen that the life activities of animals are not absolutely free, and that nature has inherent regulations. Including Marx's later studies, all laid the theoretical foundation for the idea of ecological economy in Capital.

Man is a part of nature, and nature exists before man. Marx believed that the forces of nature are the prerequisite for the emergence of ecological economy and provide all the needs for its development. Marx's idea of ecological economy is based on the interaction between man and nature, emphasizing that man's power over nature is realized through man's practical activities, and that in the process of socializing nature, humanized nature is formed. Marx insisted on the two lines of cognition, "thing-sense

and sense-thing", and used practice as an intermediary to understand the essential properties of things and the laws of development through rational analysis. The productive work of man makes nature bear the mark of man, and the deepening of this mark is often accompanied by the economic activities of man. In particular, capital production activities are analyzed thoughtfully, forming its ecological and economic thought

### **3. The scientific connotation of the ecological economy idea of Capitalism**

Is ecological economy a priority for ecological development? Or does it give priority to economic development? If productivity is the decisive factor of social development, how can it be developed while taking ecology into account? In *Das Kapital*, Marx's analysis of the "economic force" of nature, the "natural force" of man, the "nature" and "man" of material exchange and the production of exclusion, and the "economic force" of man, is a scientific concept. Marx responds to these questions through his discussion of the "economic force" of nature, the "natural force" of man, the material exchange between "nature" and "man", and the recycling of the excreta of production.

#### **3.1. The destruction of natural productivity**

The core of Marx's ecological thought is the relationship between "man and nature", and this relationship runs through the whole of his ecological thought.

##### **3.1.1. The "economic power" of nature**

Nature is objective, and man cannot change the intrinsic laws of nature. When Marx argued for the duality of labor, he proposed that "labor is the father of wealth, and land is the mother of wealth." [2]. The constraining force of natural externalization is alluded to by labor. Arguing against the duality of production, it is pointed out that in the labor life of man, "the productivity of labor is connected with the natural conditions, and this external condition can be divided in the ecological economy into two main categories i.e. the natural rich sources of the means of living." [3]. The natural rich sources here are the supply and demand expression of natural economic forces for human social production activities. "If the labor force is minute and the natural conditions of labor are poor, then the surplus labor is also minute." [4]. The natural conditions here are a further deeper digging into the natural source of wealth, the range of the amount of value that can be provided as natural land in labor ground rent, i.e., the size of labor force depends on the prior land conditions. On the contrary, if the land condition is poor, the value of labor force is scarce and the natural condition of labor decreases. It can be seen that the hand of nature is invisibly pulling on man, providing him with the material means necessary for his production.

##### **3.1.2. "Natural force" of man**

Nature and man, nature are located in the first place, nature has its own internal regulations of development. At the same time, man has an influence on nature, and he transforms it with the knowledge of his subjective initiative (the laws of nature "constraint"). When Marx argued about the process of labor and the process of value appreciation, he proposed that "in the process of labor, man's activity brings about predetermined changes in the object of labor by means of the means of labor." [5]. Labor is the transformation of nature by man through the object of labor, i.e. nature, through man's purpose, established planning, and the use of labor means. Man's mastery of nature gradually increases with the development of productivity. At the same time, in his additional explanation of the excess of capital in the case of overpopulation, Marx also noted that "the productivity of labor is also linked to natural conditions, and the fecundity of these natural conditions tends to diminish with the increase in productivity determined by social conditions" [6], the creativity of man makes gives greater potency to nature. In the social production of man, it is impossible to produce labor by relying solely on natural economic forces, "good natural conditions always provide only the possibility of surplus labor, and man can produce value only by applying natural economic forces in the process of applying human natural forces, that is, human labor" is always interwoven in a natural process of reproduction. Together.

In *Capital*, Marx takes "labor" as the logical starting point and exposes "man" and "nature" as participants and implementers of the ecological economy, revealing the two-way or symbiotic ecological-economic relationship between the two - the interaction between the natural economic forces and the natural forces of man, the mutual constraints and mutual influences.

### **3.2. Material transformation of "nature" and "man"**

The concept of "material transformation" was first introduced by the physiologist Higarvdt in his description of the application of the cycle of living beings. In *Capital*, Marx used the term "material exchange" extensively to describe the relationship between man and nature, pointing out that material transformation is, on the one hand, the transformation of nature itself and, on the other hand, the transformation caused by labor.

#### **3.2.1. Nature's "self-transformation"**

The self-transformation of nature refers to its internal transformation. Arguing about labor and the value-adding process, Marx pointed out that the internal transformation of nature can be carried out without the participation of labor, and that "the machine is useless unless it serves in the labor process. Not only so, but it is subject to the destructive power of the material transformations of nature." [7]. For example, this influence is manifested in "iron rusts and wood rots. If yarn is not used for weaving or knitting, it will become waste cotton." [8]. Here, Marx defines the rusting of iron, the decay of wood, and the waste of yarn as objective phenomena of nature, nature's material exchange with itself, a natural manifestation without the participation of man as a subject. Therefore, man "can only change the form of matter" [9].

#### **3.2.2. The material transformation of man**

The material transformation of man is synchronized with the process of labor, and Marx divided the material transformation of man into two categories: one is the material exchange between man and nature, which is required by labor, and the other is the material exchange between man and man in the process of labor.

In the first category, Marx argues for the duality of labor in commodities, pointing out that "a blouse does not exchange with a blouse, a use value does not exchange with a use value of the same kind." [10]. The use value has a "qualitative" provision, and the useful labor that gives the commodity its use value also has a "qualitative" provision, "Labor as the creator of use value, as useful labor..... is the eternal natural necessity of the material transformation between man and nature, i.e., the unattainability of human life." In short, the material transformation in the first category presupposes material transformation with nature in terms of labor for the production of commodities. In the second category, in the argument for the morphological transformation of commodities, it is pointed out that commodity exchange is not achieved through the mere circulation of commodities, and "we see how commodity exchange breaks down the personal and local limits of the direct exchange of products and develops the material exchange of human labor." [11]. Along with the development of productive forces, people transitioned from the initial natural economy society to the commodity economy society and entered the stage of material transformation of people. This change broadens the circulation of commodities, enhances the material exchange power between man and nature, and accelerates the arrival of ecological crisis.

By revealing the law of natural self-transformation, Marx pointed out that man is dependent and dynamic to nature, and that while man is undergoing material transformation, nature is also undergoing its own transformation.

### **3.3. Recycling and reuse of excrement**

The essence of ecological economy is to seek economic development on the basis of sustainable ecological development and the recycling of production materials. Marx believed that capitalist production is the so-called "development" in an anti-ecological way, and this kind of industrial development will lead to ecological crisis and irreparable ecological damage.

#### **3.3.1. Ecological consumption**

"Man consumes every day from the first day he appears on the earth's stage, both before he begins to produce and during his production." [12]. In this material transformation, man acquires the use value of the commodity through consumption, and consumption also satisfies man's needs and moves toward his own alienation. "Marx argues for the use of production excreta, pointing out that "by production excreta we mean industrial and agricultural waste; by consumption excreta we mean, in part, the excreta produced by the natural metabolism of man. .... In the use of these excretions, the capitalist economy is very wasteful." [13]. This profit-oriented nature of the capitalist mode of production always seeks to maximize profits. In this profit-oriented production and its expanded reproduction, the consumption of means of production increases continuously and the total amount of excretion also increases year-on-

year, which undoubtedly intensifies the burden on nature and forms a counter-ecological economic development model.

### ***3.3.2. Economical production***

In *Capital*, Marx argues that in the agricultural production of capitalist society, nature has already practiced its own material cycle, and argues against the labor process, specifying that "because it gives the worker a foothold and a place of activity for his labor process." [14]. The profit-making nature of capital makes the capitalist implement "savings" at the input stage of production costs, pooling constant and variable capital for "cost reduction", and he further argues in the same volume that "such savings include not only savings from the means of production but also savings from the includes not only the saving from the means of production, but also the elimination of all useless labor ..... but is in itself a superfluous function." [15]. This saving only carries out the governance of the appearance of waste, while Marx is trying to carry out the governance of the essence of waste. For example, in arguing for the transfer of the value of the machine to the product, he suggested that it could be improved by technology "because the set of uses of the machine, according to strict scientific laws, is able to save more on the consumption of his various components and its means of consumption." In this way, the output of production waste is reduced and the recycling rate of waste is increased.

Through his critique of the capitalist mode of production, Marx pointed out that the saving and reuse of production and consumption are rational factors for the development of ecological economy. The capitalist mode of production and private ownership should be changed to implement the recycling and reuse of ecological consumption and implement the whole process of economical production model.

## **4. The contemporary value of the ecological and economic thought of Capital to China's economic construction**

As one of Marx's classic works, the basic connotation of ecological economic thought in *Capital* has important theoretical value and practical significance for the construction of beautiful China today. Xi Jinping's thought on ecological civilization in the new era has inherited and carried forward Marx's thought on ecological economy and enriched the theoretical system of socialism with Chinese characteristics.

### ***4.1. Provide theoretical guidance for the construction of ecological economy in the new era***

Marx's ecological economic thought provides theoretical guidance for the construction of high quality economy, which is one of the origins of Xi Jinping's thought on ecological civilization and is of great significance to China's ecological civilization and economic development. Green economic development is the core of the modernization of ecological civilization, and green development is the realistic practice of Marx's idea of recycling. On this basis, the government and relevant departments strictly control the high energy-consuming industries and strongly advocate green production and development of green industries by enterprises. The idea of green economic development reflects the Party's new understanding of ecological economic construction, and reflects that China's ecological economic construction has entered a new milestone. Marx's ecological economic thought has responded to such issues as "the relationship between man and nature", "the mutual regulation of human nature and the laws of nature", and "production activities and social development". From the actual situation in China, General Secretary Xi has formulated a series of concepts, national policies, and regulations and other development plans and governance tools in line with Marx's thought on ecological economy. For the world ecological economy law zha you provide wisdom and program to learn from. In a new form to show the way to get along with man and nature, to provide China's ecological economy economic development to provide a strong endogenous power.

### ***4.2. Provide methodological guidance for the solution of ecological dilemmas in China***

Marx's ecological economic thought is a good prescription for solving ecological and economic problems in China, and is an important guarantee for China to take the route of sustainable development. China has entered a new period of ecological civilization construction and a critical period of economic development, and social contradictions have changed. Between economic construction and ecological civilization construction, the disharmony between the people's need for a beautiful home and the deteriorating ecological predicament has come to the fore. Nowadays, China is still in the stage of vigorously developing productive forces and promoting good and rapid economic development, which

has put forward higher requirements for the construction of ecological civilization. How to break the disharmony between economic construction and ecological civilization, our people should establish the concept of harmonious coexistence between human and nature, establish a rational concept of ecological consumption, and implement the concept of ecological civilization into their daily conscious and independent activities; the government should steadily promote supply-side structural reform, reasonably reduce the amount of energy consumption in production, dissipate the pollution emissions caused by production, and optimize the industrial structure of enterprises. The government should severely rectify the "scattered and disorganized households", continuously improve the market access system, and eliminate the logic of capital-only development.

#### **4.3. Promote the development of ecological science and technology in China**

In "Capital", Marx's interpretation of the circular economy, constantly put forward the optimization of the performance and importance of science and technology for economic production. On the one hand, in the logic of capital development, the development of science and technology does not have a positive effect on the ecological environment; on the contrary, science and technology increases the production efficiency of enterprises also brings negative effects on the ecological environment. For example, the transitional exploitation of energy, soil acidification, genetic hybridization technology, etc. On the other hand, the development of science and technology makes people more alienated and become the tools of production, which increases the ecological damage to a greater extent. Therefore, in the ecological economy of green development, we should adhere to the people first and people-oriented scientific ecological concept, and put an end to the metaphysical scientific development concept of "seeing the trees but not the forest", and build a green science and technology concept. While insisting on economic development, we should reasonably regulate the material transformation between human and nature, and develop and utilize renewable energy and other clean energy on a regular basis. The production needs of human beings are based on the needs of nature, and the ecological concept of science and technology is used to drive the development of ecological economy and "to realize the true resurrection of the natural world."

In Capital, Marx, through the non-ecological nature of capitalist economic development, reveals in depth the dialectical relationship between man and nature from humanized nature. From the shortcomings of the capitalist economic system, he points out that the capitalist mode of production is bound to come to an end. Therefore, the ecological economic thought contained in this far-reaching work requires our country, which is located in a socialist society, to take a green economic development route; our Party to take a green reform route; and our people in general to take a green life route.

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