

The Population and Environment Restriction on Circular Flow of Economic Life

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Abstract

In this paper, the author takes Marxist dialectical materialism epistemology and the scientific development concept of population and environment as the guiding thought, uses Marxist scientific abstract method, applies Schumpeter's "Theory of Stationary Circular Flow" and Xunhua Zhang's "Theory of Productivity Layer", historically, logically, and systematically researches basic effects of productivity on the contradictory movement of population and environment. It is stressed that one of severe challenges confronting China is that some basic elements of productivity, such as population and environment, have already become the "strong restriction" to improve life quality in China.

Keywords: Quality of life, Economic development, Popularization and environment, Productivity

1. The emergence of problem

Primitively speaking, the ultimate goal of human social development is the improvement of quality of life. In order to improve the quality of life, mankind must continue to promote economic growth. The modernization process of the world has fully illustrated the correctness of this assertion. Social development experiences from developed countries and regions prove that the focus of development will shift to improve the quality of life, when the economy of one country or region develops to certain degree. For instance, in late 60s of the 20th century, the United States faced the "human dilemma" and "modern poverty" behind the economic prosperity, so that the government advanced the "social index movement", and started to solve the issue of declining quality of life. In today's increasing economic globalization, if one developing country fails to realize economic growth, or with low rate of economic growth, its national strength is inevitably weak. Citizens will suffer from low quality of life, high ratio of unemployment, and instability of society. Besides, the country can not establish a status in international competition. Since the reform and opening up policy in 1978, China has shifted the focus on economy. China's economy has achieved a rapid growth. However, is economic growth certain to bring the improvement of quality of life? The answer is clearly no (Weihoa Du, 2005).

"Quality of life" is a concept originated from the West, firstly mentioned by an American economist John Kenneth Galbraith in 1958 in his book "The Affluent Society". For half a century, the concept of quality of life has been recommended by international social science experts and most political leaders. The 1995 World Summit for Social Development in Copenhagen said: "The ultimate goal of social development is to improve and enhance the quality of life of all people. The quality of life of all people is a measure of valuating social progress. To improve and enhance the quality of life of all people is the sign of social progress." Along with the transformation from pure economic development to overall social development, the concern of "quality of life" and human development becomes the requirement of the new "people-oriented" era of science and technology. Thus, to understand and analyze the quality of life of all people in detail, and on this basis to make scientific decision, are the urgent needs confronting academic fields and relevant government departments.

2. The facts of "quality of life"

There are various definitions of quality of life. But firstly we should notice that the quality of life includes both subjective contents and objective reality. Objectively, the quality of life consists of objective environmental

elements in people's life. Subjectively, the quality of life consists of people's satisfaction degree of life. Since the 70s of the 20th century, view on how environment and economic growth affect people's health and welfare have become the general meaning of quality of life (Quan Rao & Changcheng Zhou, 2002). Expansion of concept of quality of life and diversity of its connotation are reflection of different social development stages. Changcheng Zhou, as an expert of quality of life in a developing country, explores this issue from the standing point of Chinese government and from the social macro aspect. He defines the quality of life as (Changcheng Zhou, 2003, p3): "The quality of life is built on certain material conditions. It is the degree of the society improving people's life, the degree of satisfying people's needs, and the recognition of all social members to self and living environment." So, ultimately the improvement of quality of life depends on two basic elements: the first is the population that is the main body of social life and the primitive driving force of economic growth; the second is the environment that is the object of social life and the material basis of economic growth.

On this point, an economic master Schumpeter has discussed long time ago: the force of production and economic development is from services of two elements ----- labor and land. Labors are provided by laborers. And land is a gift from nature. The given objective material environments and personal needs are two decisive elements of economic process. The two together determine the outcome: When production materials from environmental resources are sufficient, that is, under the condition of overcapacity, production follows needs. How much the market demand is will determine how much the production is. The market capacity determined by people's consumption needs guides the degree and the quantity of combination of production materials and labors. The market-oriented effect is dominant. It can be said that the production is pulled forward by demand at this point. When production materials based on environmental resources are in short, things are different. It is the production that determines consumption. So, Schumpeter put forward that certain population and environment restrict the circular flow of economic life.

3. The "strong restriction" of population and environment

From the population point of view, both population size and population quality will directly or indirectly affect the quality of life, because the driving force of all economic development boils down to human, the occurrence of all economic phenomena can be traced back to human, and human is the core connecting all economic phenomena. Now, more than 200,000 babies are born on earth everyday. By contrast, for almost all living resources, such as air, water, forest, land, and mind, the average is shrinking because of continuous expansion of denominator. At the more profound background, the problem of population shows itself in front of human (Ye Huang). The Vice President of International Union for the Scientific Study of Population pointed out that when the ratio of population growth reaches 4% in one country, the country will suffer from a series of problems in sustainable development. The executive director from the United Nations Population Fund emphasized that the stability of population is essential for achieving the sustainable development. It is a key important goal. The reality shows that the rapid growth of population is indeed sounding the alarm. In 1830, the world population is only 1 billion, 100 years later to 2 billion, 30 years later to 3 billion, 15 years later to 4 billion, and 12 years later to 5 billion. Now, the global annual net increase of population is more than 86 million, 17 million hectares of forest disappears, and 6 million hectares of land suffers from desertification, what trigger a series of social problems, such as the wave of white hair, and a variety of urban psychosis caused by urbanization.

From the environment point of view, the quality of environment, natural resources, and the biodiversity directly affect the living. To trade environmental pollution for economic development is not real development. To trade prosperity for environmental pollution is merely false prosperity. Although economy develops and achieves prosperity, and people's life is improved to a great degree: eat rice and flour, fish and meat, fresh vegetables, and fresh fruits; put silks, Pierre Cardin, and first-class wools; and live in high buildings and villas, the improvement of life is simply superficial. If the environment is damaged because of pollution, food will be polluted by harmful ingredients, clothes will be made of harmful materials, airs will be full of toxic gas, drinking waters will include polluting substances, and sunlight with too much ultraviolet light. Do you think people's lives are better? Even if you can pick the food, clothing, and drinking water, but can you choose the air and sunlight? So, living in a polluted and damaged environment is not a high-quality happy life. For example, during the 2003 SARS period, China has been included in the endemic areas. Travelers were fewer and people were in panic. Illegal traders took this opportunity to raise prices. All these conditions seriously restrict China's development of economy and the improvement of quality of life. Meanwhile, the large population, fast spread of SARS, and drugs in short supply caused panic among people, which aggravated the harm of SARS.

4. The population-resource-environment integrated model

Productivity, speaking from its starting point, namely its source, can be divided into three levels (see Figure 1):

the first is the natural force, followed by the natural force of human (this force turns into social force) and the natural force surround human. In short, the natural force is divided into human force and material force, and then the force of science and technology formed and accumulated in the process of human changing the nature.

Productivity, speaking from itself, namely its components, consists of three elements: laborer, labor materials, and objects of labor. Here, labor materials and objects of labor are production materials. Laborers are the state of population as human resource enters the production process. Labor materials and objects of labor are formed by materials supplied by physical resources (natural and environmental resources). Along with the high-level development of social productivity, the science and technology force has already penetrated among the three elements of productivity. Each element is improved with the penetration of technology.

Corresponding to human society, from the Stone Age (including the Paleolithic and Neolithic), to the Iron Age, to the Age of Modern Mechanical Industry, till today's modern civilization, the circular flow social economic system gradually develops from natural ecological complex reproduction system to modern circular economic development system, which reflects the concept of sustainable development and the concept of scientific development, based on integrating social productivity by population and environment, taking the improvement of people's quality of life as the ultimate goal.

5. Conclusion

China has historically been a populous country all the time, with a large environment and rich resources, which makes it suffer from issue of population explosion, environmental pollution, and shortages of resources. By observing China's history vertically or comparing world history horizontally, we can find: anytime and anywhere, when population and environment achieved the coordinative development, they would promote the social development and economic growth, and improve people's quality of life. Otherwise, they would cause social turmoil and retreat. From the 60s of the 20th century, the population explosion, environmental pollution, and shortage of resources in China are not isolated population problem or environmental resource problem any more, but have rich economic meanings, as the comprehensive and integrated core problem "population-resource-environment sustainable development". The foundation of the core problem is the basic elements of productivity: human and materials.

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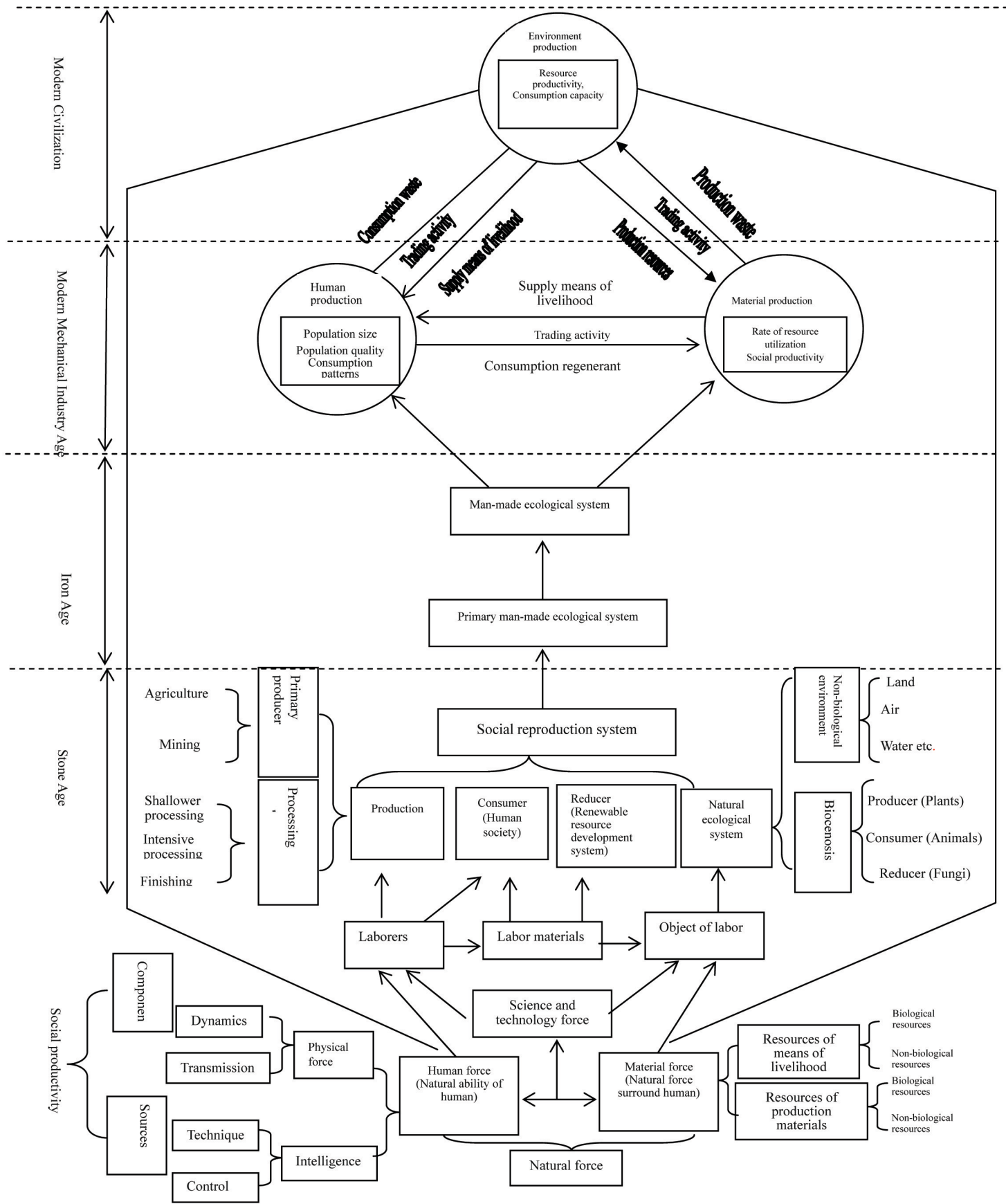


Figure 1. Modern Circular Economic Development System