



Recycling Economy and Sustainable Development

Hua Liu

Maoming University

Guangdong 525 000, China

E-mail: LiuHua-5@163.com

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Abstract

Economic development is the main theme of social progress. By recalling the economic development, the necessity and inevitability of sustainable development is fully demonstrated. With the acceleration of economic globalization, the influence for sustainable development is increasing. There is a complex opposite and united relationship between economic globalization and sustainable development. People are seeking a way to eliminate confrontation and get united. In social practice, we found that the recycling economy is the best way to achieve sustainable development, and it is an important embodiment of the economic, social and ecological sustainability.

Keywords: Economy, Sustainable Development, Economic Globalization, Recycling Economy

"Person" is the center of social development, "material" is the centre of economic development, but the economic development is the basis of social development. Economy, the main line of social development, requires higher demands of the environmental conditions continuously. The relationship between economy and environment has become more complex. In order to strive after the sustainable development of economy and society, the research about economy and sustainable development is very necessary. That is because a good economic situation is based on the ecological sustainable development ability, and environmental industry is about to become an important component of the economic cycle and a new point of economic growth (Mao Hanying, 1995). This article will discuss the relationship between economy and sustainable development in three aspects.

1. The Process of Economic Development and The Introduction of Sustainable Development

The history of human society experienced three periods: the primitive economy, the agricultural economy and the industrial economy. Nowadays, a part of the developed countries have completed the process of industrialization, and entered a period of intellectual economy. The influences of human economic activities on the environment are different from each stages of economic development, the knowledge of economy and environment is also different.

1.1 The Original Economic Period (Primitive Society)

The level of productive forces is extremely low, and labor force is the only production factor. Human just use the environment by taking animals, wild fruit and other things as essential means of subsistence, through metabolism to achieve the energy and material exchange with the environment, and through natural purification to achieve ecological balance of nature. Basically, this period human had no impact on the environment and no understanding about the relationship between human and environment.

1.2 The Agricultural Economy Period (Slave Society, Feudal Society)

Agriculture is the main economic sector, which plays a decisive role. The major activities of human are going around the land. Crop farming is the leading factor of agriculture. Labor, land and simple tools become production factors. Although the level of productivity had a substantial increase than the primitive society, it is still very low in general. Human economic activity has small damage to the environment, and the awareness of the relationship between human and environment is not much either.

1.3 The Industrial Economy Period (Capitalist Society, Socialist Society)

Since the 18th century, industry plays a decisive role in the economy growth. Manufacturing industry becomes a leading sector, and human economic activities are going around the resources. With the advancement in technology, the productivity level has increased significantly. With the increase in material wealth, human's damage to the environment has become increasingly heavier. Although the awareness of the relationship between human beings and the environment is gradually deepened, the traditional concept of development still rules the understanding of "development". That is, the development is defined according to the economic growth, GDP and national income's

growth. Accordingly, a series of problems are broken out, such as the energy crisis, shortage of resources, environmental pollution and ecological damage, etc. (Zhou Wenzong, 2005)

Since the 1960s, mankind has experienced a series of major pollution incidents. Environmental pollution and ecological damage brought about huge losses to the economic and social development, and also a threat to the survival of mankind. Suffering the pain and threatening human positively reflect and conclude, and begin to be suspicious and contemptuous of the traditional model of economic development. This is the first jump of the awareness of "economic development and environment". Since the 1980s, countries around the world started to research the development problems from the economic, political, social and other aspects. Thus forming a new "social development concept", that is, the economic development embodies that the economic growth, social progress, and the environment improvement are acting at the same time. This new "social concept of development" gradually evolved into a "coordinated development concept" in practice. That is, a new idea of the natural ecological and socio-economic coordinated development. In 1980, the World Conservation Union, the United Nations Environment Program and the World Wildlife Fund jointly issued the "World Conservation Program". And the idea of sustainable development was proposed in the program. Taking the United Nations Conference on Environment and Development in 1992 as the hallmark, human began to tend to the road from the separation of the environment and human development to the combination of economic development and environmental protection.

Sustainable development is brought forward and reached a global consensus, which is the most important progress of the human development concept, which is a leap of awareness about the relationship between man and nature, as well as the human socio-economic activity. At the same time, it's the second jump of the awareness about "environment and development". Sustainable development, first of all, is a transformation about the purpose which changes from making the economic growth as the core to a comprehensive social development. The transformation from the exploitation the mainly from natural resources to human resources is followed. What it stresses is the harmony and unity at the economic, social, ecological and other aspects. As a landmark of the new epoch-making concept of development, not only the revolution of ideology, but also a socio-economic changes, the sustainable development is impacting on the socio-economic development historical process of countries around the world. (Wang Lei, 2007)

2. Economic Globalization Impacts on Sustainable Development

In the late 1980s and early 1990s, as "sustainable development" concept was quickly accepted by the world, "economic globalization" wave was sweeping across the world. About the effect "economic globalization" on "sustainable development", it is difficult to make a simple answer. As the two sides of globalization (the economic globalization and the globalization of environmental problems), There are many complex relations. Economic globalization is a campaign process of the world economy. It mainly refers that production factors move freely in the global scale to achieve rational distribution of resources. And the factors of production flow global mainly through trade, investment and financial activities to achieve. At present, the trend of economic globalization is further accelerating, which promoting the free flowing of the production factors in the world scale, and eliminating all kinds of barriers and obstacles to make the national economic correlation and dependence more and more strengthen. Global economic integration is the inevitable result of the world's productive forces and the international division of labor developing to more advanced stage. However, if we can not properly deal with the relationship between economic globalization and the protection of the ecological environment, then, it will exacerbate environmental problems of globalization, thereby impeding the achievement of sustainable development.

2.1 Sustainable Development and Economic Globalization are two Co-restraint and Co-promote Important Aspects Nowadays.

On one hand, economy is the foundation. Sustainable development requires economic growth to provide material wealth; On the other hand, sustainable development is the principle. Economic development needs sustainable development principle for guidance. Therefore, the strategy of sustainable development to improve the ecological environment around the world and through globalization and to promote further economic growth are two sides of the unity of opposite.

2.2 The Economic Globalization and Sustainable Development is Unified in Essence.

Their basic objective is improving human quality of life continuously through the rational allocation of resources. There are strong coherence and complementarities between these two aspects. Economic globalization offers the support and cooperation of the global scope for the implementation of the sustainable development strategy. It has promoted the optimal allocation of resources and the rationalization of production in the global scope, improving the efficiency of resource using, reducing environmental pollution caused by the low efficiency of development resources and production relatively. Moreover, economic globalization will popularize the cost-effective, market-oriented view to all over the world, which contributing to promoting the cost of resources and the value of environment. In addition, economic globalization will further promote and enhance international cooperation in environmental issues and establish

environmental industries. In short, economic globalization on a beneficial effect on sustainable development can be summarized as the following three points:

- (1) Economic globalization makes the distribution and using of resources more effective, improving the utilization rate, thus promoting production growth and reducing pressures on the environment.
- (2) Economic globalization is conducive to economic development, and laid the material foundation for improving the environment.
- (3) Economic globalization provides a realistic way for solving the global environmental issues. For example, the World Trade Organization, the World Bank and other global economic organizations are by virtue of their special status to promote the implementation of the strategy of sustainable development, and helping to resolve the environmental problems of economic globalization process. (Zhang Kun, 2003)

2.3 There are not only United and Favorable Side but also Opposite and Negative Side between Economic Globalization and Sustainable Development.

Economic globalization stressed that we should realize the increase of the "quantity" of human wealth through the effective allocation of resources, while sustainable development stressed that the effective allocation of resources to the environment, with a focus on human life "quality" of improvement. In addition, economic globalization has also widened the gap between developed and developing countries, which makes the developing countries at a disadvantage in the competition of global resources and markets and exploited by developed countries. The developed countries occupy the monopoly of high-tech industries, shifting the serious pollution and high energy-consuming industries to developing countries so that the pollution is spreading to the international scope. Which is not conducive to the achievement of sustainable development. Specifically, economic globalization on the disadvantage effect on sustainable development can be summarized as the following four aspects:

- (1) Economic globalization lead to the spread of environmental pollution. The internationalization of production makes the pollution internationalized.
- (2) Economic globalization brings the economic growth, to a certain extent, also constitutes a pressure on the environment at the same time. Economic growth must cost more energy, transport increased, increasing pollution and shortage of resources.
- (3) Economic globalization has intensified the conflicts in the south and north sides on environmental issues. On the one hand, the developed countries plundered resources, transferred the hazardous production processes, so that the resources of developing countries are destroyed, and the environment is damaged; On the other hand, the developed countries take the environment as an excuse to limit developing countries exporting products to achieve the purpose of exploitation and monopoly. In addition, the developed countries also stressed the international character of environmental problems, required that solutions to environmental problems must be overcome national borders, leading to the sovereignty of developing countries being challenged. All of these are exacerbated the contradictions between the south and north side on environmental issues.
- (4) Economic globalization is widening gap between rich and poor, exacerbated the unfair, which is inconsistent with sustainable development. There are not only the mutually beneficial, and promote role but also disadvantageous effect between economic globalization and sustainable development.

How to take measures to promote and use the advantageous and united side, and to avoid and eliminate the disadvantageous and confrontation side, it is an important subject human society have to face.

3. Recycling Economy is the Embodiment of Sustainable Development

With the rapid development of ecology since the 1960s, people have a wish to imitate the natural ecological system. In accordance with the natural ecosystem material recycling and energy flow law human reconstruct the economic system, making the economic system harmonious integrated into natural ecosystems in the process of the material cycle, and establishing a new economic shape - circular economy. By the 1990s, with the sustainable development of globalization, the developed countries develop recycling economy and establish recycling-oriented society as an important way for sustainable development (Zhu Guohong, 1995).

3.1 Recycling Economy is Essentially a Kind of Ecological Economy

Recycling economy mainly uses the bionomics law to guide socio-economic activities, taking clean production and comprehensive utilization of resources, ecological design and sustainable consumption and so on to be integrated, to achieve the in-house recycling of material and energy. It performs an economic mode of pollution performance for low emissions or zero emission on environment way.

Compared recycling economy to traditional economy, their difference is: The traditional economy is the economy which is made of materials, energy one-way flow by "resources - products - pollution discharges". In this economy,

whether industrial model or agricultural model, can not bring about the sustainable development of mankind. Because the natural world is treated as a "natural storage" and "garbage can". Human thought that natural resources are infinite, inexhaustible, and can be unrestricted and free to obtain more and more things. At the same time, human thought that the ability of the nature to accept waste is unlimited, it's free to discharge more and more waste to the environment. This one-time and extensive mode of operation is at the cost of the environment and resources to seek the social development, which will inevitably lead to the destruction of resources and the serious consequences of environmental pollution. The recycling economy is an economic development model on the basis of a continuous cycle of the material. It requires the economic activities have to according to the model of the natural ecological system to organize the material circulation process of "resources - production - renewable resources", which can make the entire economic system and the process of production and consumption are basically have little or no waste. And, the environmental industries have a certain status in the recycling economy. Clearly, the traditional economy depends on changing resources into waste to achieve economic growth, while the recycling economy depends on recycling resources to promote economic growth. It fundamentally eliminates the contradictions and conflicts between the environment and economic development, achieving the dual function of the waste utilization and environmental protection, which is the perfect embodiment of sustainable development between the economy and the environment.

3.2 The Development of Recycling Economy is an important way to Achieve Sustainable Development. It is the Fundamental Means of the Environment Protection and Reducing Pollution, too

The development of recycling economy is the protection of the environment, which concrete expresses in its 3 R principles. Recycling economy makes "Reduce, Reuse, Recycle" as the code of conduct of the socio-economic activities. Reduction of principle (Reduce) requires with fewer raw materials and energy inputs to achieve the established purpose of production or consumption purposes. At the beginning of the economic activities we should take attention to save resources and reduce pollution. Re-use principle (Reuse) requires that products and packaging should be repeatedly used to avoid the proliferation of one-time items. Recycling principles (Recycle) requires that productions can become available resources rather than useless waste after the completion of its function.

The recycling economy, this new form of the advanced economies, is a set of economic, technological and social integration in the systems engineering. In developed countries the recycling economy is becoming a trend and has been successful in the social practice. But in developing countries, it is only a concept, with very little production practice, the more countries are in the test (Xia Huanlong, 2006). China actively develops the recycling economy to promote the economic, social, and ecological sustainable developments by establishing regulations, implementing green accounting, and developing green technology and green consumption to achieve the recycling economy.

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