

OTHER IMPORTANT FUTURE ENVIRONMENTAL ISSUES

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Keywords: Environmental protection, sustainable development, ecological economy, China, United Nations, efficiency, legislation, management, local administrative authorities

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Summary

The efficient management of the ecological environment is an extremely important issue. It is imperative to acquire a correct concept of efficiency. Governments of all countries should strive to ensure the effectiveness of ecological environment management.

The most important link in ecological environment management is to strengthen state legislation and improve the legal system relating to the environment. After reviewing the process of environmental legislation throughout the world, China's environmental legislation and its statutory framework as well as its fundamental principles embodied in laws and regulations on environmental protection are introduced in this article.

The organizational and coordinating role of the United Nations and the importance of international legal instruments in sustainable development and environmental protection is affirmed. Items on the agenda of the Montevideo Program, convened by the United Nations Environment Programme and aimed at promoting environmental legislation and planning at national and international levels, are listed.

The active participation of local administrative authorities is indispensable for

ecological environment protection and sustainable development. Management of the ecological environment by local administrative authorities is emphasized, and the issue of such management is discussed in two ways – management of the urban ecological environment and that of the rural ecological environment. While discussing the latter, China's experience in building ecological counties is introduced.

The ecological environment and sustainable development have been approached differently. Through more than 30 years of study and discussion, rational knowledge of sustainable development has deepened on a global scale. After study and discussion at a number of major conferences, international organizations, government, countries, and scholars have acquired a common understanding of sustainable development. The idea that it is imperative to protect the ecological environment and achieve sustainable development has been embraced by the public. Yet as far as the practice of protecting the ecological environment and promoting socioeconomic sustainable development is concerned, slow and far from entirely satisfactory progress has been made. Many important global problems such as atmospheric pollution, climate change, over-felling in tropical rain forests, and aggravated desertification have not been resolved and have even grown in intensity. In addition to the interference of and hindrance from vested interests, the efficient management of the ecological environment is an extremely important issue. Because of the very clear externality of the ecological environment known to all, it is necessary to approach in depth the way to overcome market ineffectiveness and government ineffectiveness and raise the efficiency of ecological environment management by correctly combining market forces with government interference. This subject involves legislation in all sovereign states, the role of international organizations in drawing up and implementing international regulations and protocols on the ecological environment, active innovation and effective management by local administration authorities and community organizations in the enforcement of relevant laws and regulations, and countermeasures on the ecological environment adopted by municipal organizations along with the rapid growth of urbanization.

Problems such as the efficiency of management, active participation of the public and nongovernmental organizations, the code of conduct for all enterprises, and economic organizations in the internalization of external problems will be discussed in this article.

1. An Efficiency Issue

The concept of the efficient management of the ecological environment is related to yet different from that of social effect or economic efficiency. The concept of efficiency in economics has a variety of expressions (i.e. production efficiency, overall efficiency, Kaldor efficiency, Pareto efficiency, etc.). The growth of gross national product (GNP) or GNP per capita is not the only modern yardsticks for measuring the efficiency of economic development. Many people are receptive to the concept of Pareto efficiency, regarding it as the criterion for evaluating the efficiency of a social system. This concept view members of society from the angle of welfare status. It says that a certain state of a given system may be praised as Pareto optimum only when this system has no other feasible and alternative state that can make things easier for at least one person and would not make things worse for others. Such a principle affords a method to evaluate

the efficiency of a system in a comprehensive way. It is quite rational to take Pareto efficiency as the criterion for measuring economic efficiency while tackling the problems of the ecological environment and sustainable development. Since the ecological environment has the attribute of a public product, it is inappropriate to measure economic efficiency only by the efficiency of a market economy. If an economic measure adopted by a corporation or an individual for the sake of seeking selfish economic returns impairs or impact upon the ecological environment, this does not necessarily avoid making things worse for other people. Such a measure will lead to a deviation from the Pareto optimum state and a failure to have Pareto economic efficiency; it must be limited by legislation and other means of government interference. From here arises a problem of management efficiency for the ecological environment. The essence of this problem is how governments and societies are to ensure the effectiveness of the management of the ecological environment and prevent government ineffectiveness by means of legislation and a code of behavior.

2. Strengthening State Legislation and Improving the Legal System Relating to the Environment

The most important link in the governance of the ecological environment is to improve the relevant legal system. Environmental legislation is a cross-departmental task of first importance in improving the legal system for achieving sustainable development. Agenda 21 points out that one of the major obstacles to effective management for achieving sustainable development is the inadequacy and invalidation of state environmental law. Environmental law is a general appellation for legal norms aimed at readjusting social relations to meet the needs of the protection and improvement of the environment in which people live and of the ecological environment, and preventing and controlling environmental pollution and other public hazards. Environmental law is a burgeoning and quite independent system of law, and this law should have in itself an integrated system.

2.1. Review of Environmental Legislation

Before the 1960s, environmental legislation had been a weak link in all countries. For example, the environmental policy of the United States had not been clear before 1969. Its traditional laws failed to afford it effective controls to cope with environmental crises. Under the pressure of crises in the ecological environment and encouraged by international conferences and world opinion, great changes of traditional laws took place in the U.S. The U.S. recognized that in order to settle the environmental problem, it is necessary to establish and improve a system of laws for protecting the environment, and applying the law to prevent, control, and eliminate pollution and other environmental troubles comprehensively. In 1969, the congress of the United States adopted the *National Environmental Policy Act* (NEPA). The essence of this act was to promote human development in harmony with nature. It broke limitations of the federal constitution such as the failure to recognize the right to the environment as a private right. It formed such legal ideas as “don’t use your own property at the expense of others’ property” and “no harmful action without compensation may be allowed.” Traditional laws such as the law against infringing upon rights could ensure only that victims of pollution gained compensation afterwards, but failed to prevent and control

pollution. This weak point was overcome through the enforcement of the NEPA. Since the 1970s, the U.S. has brought most types of pollution under legal control by instituting laws such as the *Clean Air Law*, the *Law on the Control of Water Pollution*, and the *Law on the Disposal of Solid Wastes*. In the meantime a number of laws on the protection of natural resources were made. Among them are the *Seashore Administration Law* and the *Law on Endangered Species*.

Generally speaking, before the 1970s, developing countries had already made laws concerning natural resources, including land law and forestry law. These laws aimed at the distribution and utilization of natural resources to a great extent instead of at sustainable exploitation and management of resources. It was destined that such laws lacked stipulations for control over the detrimental effect of resources exploitation on environment. After the Stockholm conference held in 1972, along with the awareness of the need to protect the environment, legislation for resources protection and laws against pollution, aimed at long-term management and sustainable exploitation of natural resources, appeared in developing countries. For example, Kenya's *Agriculture Act* stipulates that schemes for land protection and measures for the control of land use suitable to specific areas should be worked out with a view to settling problems of soil erosion and forest destruction. Rules and measures for the implementation of the water code of the Philippines contain stipulations on a licensing system for the use of surface water and underground water, measures to control pollution, and strict restrictions concerning the disposal of waste water. Since the mid 1970s, along with the awareness of the relation between ecological systems and the pressure of environmental crises, all countries have recognized that it is not enough to ensure environmental quality by depending only upon a number of special laws on resources protection or pollution control. Columbia promulgated in 1974 the Code of Renewable Natural Resources and Environmental Protection and a series of laws focused on it, with a view to comprehensively planning and managing environmental work in accordance with all ecological policies and an overall program of environmental management. Such a practice has become a major trend in environmental legislation of most developing countries.

2.2. China's Environmental Legislation

2.2.1. Statutory Framework

Since the late 1970s, China has established a fairly integrated statutory framework for environmental protection. It consists mainly of the following eight aspects:

- (1) Taking the constitution of the People's Republic of China (PRC) as the foundation.

The stipulations in the constitution concerning the environment form the legislative basis and guidelines for the laws on environmental protection. The constitution of the PRC stipulates: "The state will protect and improve the environment in which people live and the ecological environment. It will prevent and control pollution and other public hazards." "The state will ensure the rational use of natural resources and protect rare animals and plants. Appropriation or damaging of natural resources by any organization or individual by whatever means is prohibited."

(2) A basic law on environmental protection.

The *Environmental Protection Law* of the PRC is the basic law for environmental protection in China. It is a foundation on which to make special laws on the environment. This basic law attaches importance to the relationship between environmental protection and sustainable development. It embodies such ideas proposed in China's Agenda 21 as "to make a comprehensive evaluation of present policies, laws, and regulations, to institute a law and regulation system for sustainable development, to stress the connection and coordination between the economy, society, and the environment, and to promote the coordinated development between the economy, society, and the environment through restrictions by laws and regulations and guidance and control by policies."

(3) Special laws and regulations on environmental protection.

China has enacted and promulgated five special laws on environmental protection and nine natural resources laws related to environmental protection. In addition, a series of regulations on the protection of the ecological environment and natural resources, including regulations (more than 20) on the prevention and control of pollution and other public hazards, have been worked out.

(4) Environmental standards.

These consist of six parts: environmental quality standards, pollutant discharge or emission standards, basic criteria, criteria for samples, criteria for methodology, and others. The environmental quality standards and pollutant discharge or emission standards are divided into state standards and local standards, and priority in implementation is given to the latter.

(5) Organic regulations of environmental management institutions.

(6) Regulations on procedures for settling environmental disputes.

(7) Local regulations on environmental protection.

(8) International legal documents signed by China.

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Biographical Sketches

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