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Ecological Information : the Foundation of Ecological Democracy†

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Abstract: Different from traditional democracy, ecological democracy not only concerns the interests of people, but also pays attention to the benefits of nature. Its goal is the harmony, freedom, equality and sustainable development between humans, nature and society as a whole. Ecological democracy based on ecological information is necessary with dialogue, communication, exchange and consultation in order to jointly govern and protect the environment because the administrative region has divided the integrity and coherence of the geographical conditions into fragements. The scientific ecological information system constructed in relation to each other can predict the overall ecological evolutional trend and formulate corresponding counter measures. Ecological information plays an important and basic role to achieve the reconciliation between people and nature, and people to people.

Keywords: Ecological Democracy; Ecological Information; Relation; share

1. Introduction

Many ecological problems are related to democracy.How can all regions jointly protect and govern the environment? How can we ensure that the development of the modern people do not endanger the survival and development of future generations to realize the intergenerational fair? However, As a result of the administrative region, the whole and connected geographical environment is divided into numerous fragments, there is a lack of communication, dialogue and dialogue on ecological issues among different regions so that they can not jointly manage and protect the ecological environment. The integrity and connectivity of the geographical environment require ecological democracy and share ecological information.

Ecosystem is a complex system composed of human, nature and society, ecological information presents itself in the various relationships of the ecosystem.It is difficult for people to understand comprehensive ecological information so that people's ecological awareness is biased. Therefore, It is necessary to establish a scientific ecological information system which include means of scientific and technological, databases and social management systems so as to share information. In the ecological information system, various ecological information can be obtained by means of science and technology, all kinds of ecological information can be stored and matched by the database, and the social management system can coordinate and communicate various relations between different regions,and ensure ecological balance with scientific ecological information . Ecological democracy based on ecological information system can realize the reconciliation between people and nature, and people to people.

2. Ecological Democracy Needs Ecological Information

Ecological democracy extends the scope of the traditional democracy and emphasized harmony ,equality and sustainable development of people, nature and society. With the excessive development of human beings, there are the problems of real ecological democracy from people and nature to people and people. How can all regions jointly protect and govern the environment? How can we ensure that the development of the modern

people do not endanger the survival and development of future generations to realize the intergenerational fair? Obviously, these ecological problems cannot be simply solved between people and nature, ecological issue is essentially social problems, and is closely related to democracy.

Ecological system has the characteristics of integrity and connectivity, and will be changed and regroup with decrease, increase and alteration of any one of elements in the system[1]. The unmanned ecosystem is a complete ecological chain without waste, but mankind divides the whole of nature into countless pieces. People may ignore the overall relevance of ecosystem or don't recognize the common responsibility of ecological protection, or it is difficult to know the specific ecological conditions without foundation of mutual communication, coordination, commitment because of only considering their own. This is a paradox between artificial fragmentation and ecological integrity. The best way to solve the paradox is that countries, regions, groups and individuals must jointly undertake the responsibility to maintain the ecological system, and share ecological information and solve ecological problems with communication, negotiation. the full, scientific ecological information can predict the overall ecological evolutional trend and formulate corresponding countermeasures. Ecological democracy needs the support of ecological information.

3. Ecological information generated in relationships

There are many different kinds of information concepts. At the level of daily life, information is news with new content and new knowledge. At the level of the natural sciences, information is the elimination of uncertainty（C.E.Shannon）[2],Norbert Wiener argues that information is exchanged contents between the system and the environment[3]. Professor Kun Wu understood information in the field of existence, the information is the manifestation of the way and state of existence of matter, This kind of "manifestation" comes from the change of the internal structure, the movement state, the nature and so on[4]. From the comparison of various information concepts, Professor Kun Wu understood the information in the relationship. Because of the universality of the interaction of matter, all the information contained in the material is generated in the relationship. Ecosystem is a complex system composed of human, nature and society, similarly, ecological information is also generated in relationships. Although it is difficult for people to understand comprehensive ecological information, it is necessary in order to realize the harmony between people and nature.

4.Structuring ecological information system

Structuring ecological information system is a systematic project, From the collection of information, screening, sorting, transfer to application sharing, it involves politics, economy, nature, society, science, technology and many other factors.

4.1.Collection of ecological information by means of science and technology

Population, natural resources and environment are important factors affecting the evolution of ecosystem. The rational matching between the three can achieve sustainable development, therefore, as a regulator of ecological system, people need to maintain the ecological balance on the basis of mastering scientific,adequate and accurate ecological information. Fortunately, the development of science and technology has been able to provide scientific and technical support to the ecological information, which is needed for the early warning, detection, repair and protection, Such as 3S technology(RS: Remote sensing, GIS: Geographic information system, GPS: Global positioning system),Isotope tracing method(such as LI-6400),Modern molecular biology techniques and methods[5].In a word, the integrated application of all kinds of science and technology forms a three-dimensional network system to ecological observation. Of course, there are still three major difficulties in a wide range of ecological unified supervision and monitoring, one is the technical problem, it is difficult to manage and control all aspects. The second is the problem of funds, ecological problems may be more serious in poor areas because of lack of funds. The third is social problems, the development of ecological science and technology and the coming of ecological society need a process because of self-interest and other factors.

4.2.Sorting and storing ecological information by data base

The information obtained through science and technology should be sorted and stored so as to play an important role in ecological balance and sustainable development. First of all, ecological information from the

human, natural and social must be filtered, sorted and sorted out to eliminate unwanted information, for example, local information, false information, outdated information, surface information, redundant information,etc. Secondly,according to ecological information, the best ecological model of human, nature and society is determined ,which will be adjusted in time in dynamic change.

4.3. Coordination and sharing of ecological information by means of social management

The purpose of ecological information storage is to transfer, circulate and use information so as to lay the foundation for ecological equilibrium.so, ecological information must be shared by social management organizations. On the one hand, ecological information should be made public so that all people can use, maintain and supervise it. On the other hand,social management systems should justly coordinate various ecological information in the overall ecological view and is limited by local protection, interests, power, money, etc. We share ecological information and build a better home with the principles of coordination, dialogue, communication and inclusiveness.

5. The role of ecological information in Ecological Democracy

The ultimate aim of ecological democracy is to realize the reconciliation between people and nature, and people to people. Through the establishment of a scientific ecological information system, mankind can fully understand ecological information, respect for the laws of nature, coordinate the various relationships in the ecosystem,and promote the reconciliation between people and nature. On the surface, ecological problems take place between people and nature, In essence, it will lead to conflict between people and people. When natural resources can not meet all the needs of human beings, how to allocate and occupy natural resources becomes a problem between people. Today's social problems in ecology are mainly ecological justice, from a horizontal point of view, can the various regions enjoy the ecological benefits together, and can they share the adverse ecological consequences? From a vertical point of view, can contemporary people consider the survival and development of future generations? In reality, the adverse consequences of ecology are often borne by vulnerable groups,such as the waste was transferred from rich areas to poor areas. Although this phenomenon is closely related to overall social progress, but also related with the ecological information.On the one hand, the relevant ecological authorities are well informed of local ecological information, on the other hand, local people do not understand the local ecological information, there aren’t have good communication channels between competent departments and people. Therefore, the only way to realize ecological democracy is to open ecological information and accept the supervision of the masses. ecological democracy will bring about reconciliation between people through dialogue, communication and consultation on the basis of scientific ecological information.

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