Transformation of environmental policy based on the concept of ecological modernization

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Abstract. The urgency of solving contemporary problems of efficiency and preservation of environmental quality necessitates the formation of a new environmental policy. The article outlines the main theoretical approaches to the study of environmental problems within the framework of theoretical concepts of economics. The point of view of the concept, system of tools and models of environmental policy is presented. The authors view environmental policy as social transformation from the perspective of a three-dimensional implicit analytical framework. It is shown that nature is integrated into the service sector through the creation of a new apparatus. This process has led to a profound institutionalization, commoditization and homogenization of the relationship between nature and society.

1 Introduction

Social and political processes taking place in the global world have led to an awareness of the global nature of changes occurring in the environment and the advisability of forming a new environmental policy. Currently existing international agreements and treaties on environmental issues certainly provide the basis and certain contours for global ecosystem management, but the goals and paths of socio-economic systems are different. Institutional and social changes taking place in countries imply a change in views on the development and modification of the concept, system of instruments and models of environmental policy. The priority and significance of environmental needs in the system of social and economic priorities of society are determined by the degree of development of society.

Modern society has finally recognized that in recent decades, only sciences within the disciplinary identity of sciences related to geography have been solving environmental problems. The term environment certainly has apparent obviousness, since it means the world of flora and fauna that is conventionally cognizable by humans. However, in reality, the problems of nature screen those relationships in a society that uses it in all its diversity. This aspect has received enormous critical analysis in recent years and has become the subject of interest in a number of social sciences. Real objects of analysis in scientists'
research acquire ecological and non-ecological entities that cannot be studied in isolation. Recent trends that define some problems as soon as ecological or economic, cultural, social obviously lose their relevance. A modern approach to studying the world today requires a new conceptual approach and a new model of environmental policy. In fairness, it should be noted that environmental issues have been on the agenda of state and government bodies for more than three decades - especially in the West.

However, despite the diversity of contemporary research on environmental policy formulation and implementation, it remains too academic within the framework of scientific debates in the real world.

The determining role in the formation of the concept of environmental policy, both theoretically and practically, was played by the American political scientist L. K. Caldwell [1]. In his works, he proved the necessity and expediency of developing state policy in relation to the environment as a single whole [2]. Although his proposals for research and development of state environmental policy were multidisciplinary in nature, based on a scientific basis, they were by no means the only tool for implementing environmental policy [2]. L. K. Caldwell not only introduced the term environmental policy into scientific circulation, but also became one of the authors of the conceptual law on environmental policy, certain provisions of which formed the basis of the modern paradigm of sustainable development. As is known, further understanding and development of new guidelines for the concept of sustainable development are reflected in the documents of the UN Commission, the G7 meetings, the Rio Declaration, etc.

2 Materials and methods

The theoretical and methodological basis of the article was set by the concept of sustainable development, adopted after the United Nations Conference on Environment and Development (UNCED) in June 1992 in Rio de Janeiro. An important role in understanding modern environmental policy was played by the concept of the network society by M. Castells, the theory of post-material values by R. Inglehart, as well as the theory of new social movements (A. Melucci, A. Touraine). The following methods were used: elements of system analysis, which made it possible to study environmental policy in terms of its various levels and environmental interactions; comparative analysis identifying the similarities and differences of environmental policy and its models in various socio-economic systems; network approach, which made it possible to interpret the processes of the emergence of new network actors and mechanisms in the field of environmental policy.

3 Results and discussion

The existence and functioning of economic entities is based on satisfying endlessly growing unlimited needs, the most important of which are the needs for environmental goods and services. Satisfaction of environmental needs is certainly associated with the implementation of the state's environmental policy. “Environmental policy” as a scientific category became the subject of many disciplinary studies and, above all, economics only in the 1970s and 80s. The identified interaction between economics and ecology [2] is further developed in the works of many scientists. Thus, in some studies, “environmental policy” is defined as a coordinated system of targeted actions in two directions - environmental protection and distribution of its resources. It is assumed that conservation policy is the state's actions to distribute environmental resources over time, and distributive policy is the
The late twentieth century saw hundreds of articles published on environmental policy. These studies substantiated certain provisions for the formation and implementation of environmental policy: connection with the problem of externalities (external effects) in the economy; conditions for achieving efficiency when using various tools; the role of regulatory functions; environmental policy measurement; a set of eco-political instruments. However, theoretical provisions allow us to build only a “theoretical model” of environmental policy. In the modern world, as is known, the priorities of society are largely determined by the level of development of productive forces and production relations, which determines the presence of national models of environmental policy that can adequately respond to endogenous and exogenous factors (social system, size of the country’s territory, population density, culture, degree of priority of environmental problems, interaction of environmental policy with other political structures, transparency and openness of the legal process, etc.).

The basic economic principles of modern adequate environmental policy should be: the principle of changing the system of making private and public economic decisions; the principle of long-term, as well as the principle of interdependence of ecosystems, technologies and pollutants.

It can be stated that by the beginning of the 21st century, within the framework of environmental economics, basic ideas about environmental policy had developed, shared by most of the scientific community. However, the accelerated processes of globalization have made adjustments to this concept. Over the past two decades, scientific interest in the international component of environmental policy has increased significantly: global environmental problems, issues of international cooperation and competition, problems of control over transnational corporations, etc. A number of empirical studies have been conducted in individual states and regions. New publications have made valuable additions to environmental economics without refuting its basic postulates.

Since the early 1990s, a large number of studies devoted to environmental reforms and environmental modernization have appeared in Western European environmental sociology and political science. It turned out that not only academic researchers, but also politicians appeal to the concept of ecological modernization. There are different points of view on the concept of modernization (from reformist to radical). Proponents of ecological modernization theory reject Marxist criticism of capitalism. Other scholars have raised questions about the environmental costs of capitalist industrialization and their management. Still others question the power structures that are preventing the international community from taking radical action on environmental issues. A number of authors have devoted research to international environmental regimes. Of course, some of the research contains relative solutions to problems, but, basically, they are superficial and do not allow us to see the deep causes and consequences of the current local and global relations between man and the environment. It is necessary to realize that the current position of the economic system is not the final state and its constant ecological restructuring occurs evolutionarily. It seems that the only way out of the environmental crisis is the further modernization of the institutions of modern society. Theoretic economists always examine problems from the point of view of the logic of production and the consequences of distribution relations. Over the past two decades, scholars have conducted significant theoretical research in the areas of political ecology and the identification of environmental
threats and hazards. While most are abstract and conceptual in nature, virtually all studies link environmental change to issues of social power and societal inequality, highlighting the bridging imperative between resources and livelihoods.

The defining concept in the theory of ecological modernization is the so-called ecological rationality. Modern socio-economic systems are subject to constant critical and rational self-analysis through the activities of social movements, non-governmental organizations, government officials, business and academia. If in the early stages of modernization economic rationality dominated, today it is undergoing constant transformation. The theory of “ecological modernization” is intended to explain how modern industrial societies deal with environmental problems (Table 1).

**Table 1.** Comparison of green energy obligations

<table>
<thead>
<tr>
<th>Commitments</th>
<th>UE</th>
<th>Canada</th>
<th>Australia</th>
<th>Japan</th>
<th>China</th>
<th>USA</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas emission reductions</td>
<td>55%</td>
<td>30%</td>
<td>26</td>
<td>28%</td>
<td>65%</td>
<td>50:52%</td>
<td>45%</td>
</tr>
<tr>
<td>Methane emission reductions</td>
<td>30%</td>
<td>30%</td>
<td></td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Share of renewable energy</td>
<td>40%</td>
<td>90%</td>
<td>69%</td>
<td>22%</td>
<td>40%</td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>Improved energy efficiency</td>
<td>32.5%</td>
<td>20%</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net zero emissions year</td>
<td>2050</td>
<td>2050</td>
<td>2050</td>
<td>2050</td>
<td>2060</td>
<td>2050</td>
<td>2070</td>
</tr>
</tbody>
</table>

Source: [16]

The environmental needs of subjects determine the right to possess a complex of vital goods and services, and environmental interests are realized through a system of social norms and social institutions that ensure the satisfaction of environmental needs. Thus, representatives of the theory of ecological modernization argue that sustainable development is achievable only through further modernization of existing institutions, and not through their replacement [11]. All this allows us to take a fresh look at the problems of transnational environmental responsibility and threats as a multi-level interconnected molecular-cellular-tissue/organ-organism-population-community-ecosystem [12].

Despite the obvious popularity of this approach, there are also opponents among researchers [13]. According to the theory of ecological modernization, the vector of development should be aimed at further expansion of the global economy and further modernization. Meanwhile, empirical studies show that modernization, as a process of transformation, leads on a global scale to further deterioration of the state of the ecosystem. According to opponents of the theory, without recognizing the main problem - the conflict between population growth and economic development, on the one hand, and environmental sustainability, on the other - achieving sustainable development is impossible. In addition, the increase in scientific research and the growth of public debate is not directly related to solving environmental problems. Also, the increase and growth of human well-being (expressed, for example, in terms of life expectancy and level of education) does not mean an increase in environmental well-being [14]. It seems that it is difficult to disagree with the arguments of critics of the theory of ecological modernization, since the main issue of achieving sustainable development without fundamental political and economic transformations remains unresolved [15].
4 Conclusion

The concept of environmental modernization, which considers the environmental crisis not as a structural problem, but as a management problem within the existing political-economic order, has had a significant impact on the design of environmental policy in a narrow, economic sense. The emergence and its persistence as a social transformation, as a change that occurred against the backdrop of the overall process of complete social metamorphosis, can be viewed from the point of view of a three-dimensional implicit analytical structure: conservation politics, conservation economics, and conservation culture.

Conservation policy assumes: rationality, access and control over natural resources to be modified by the intervention of an external political body; identifying the behavioral and economic consequences of the withdrawal of land from the management of local jurisdiction and transferring it to the competence of an impersonal and external management organization; ensuring the legitimacy of the claim of a state monopoly on nature conservation; defining the collective heritage as an asset and ensuring its public protection.

Conservation economics means: viewing nature as a collective asset and part of the public heritage (a valuable environment capable of generating revenue through the provision of tourism services); natural heritage is a global market commodity; commoditization of natural heritage and valorization of nature.

Conservation culture. The emergence of the environmental paradigm in the West in the late nineteenth century gradually transformed certain natural systems into valuable collective goods. Awareness of biodiversity conservation requires understanding by territorial, organizational and cultural bodies of the formation of a new human rights paradigm. Increasing values of land, landscapes and lifestyles often lead to cultural conflict, exacerbated by integrated management schemes.

All this indicates that nature has been integrated into the service sector through the creation of a new apparatus. This process led to the institutionalization (politics), commoditization (economics) and homogenization (culture) of the relationship between nature and society.

References

1. Wertz, Wendy Read, Environmental Practice 8, 4, 208-211 (2006)
3. S. V. Ciriacy Wantrup, Land Economics 47, 1, 36-37, (1971)


