

Essence of Socio-Economic Management

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Abstract—The article proves that in the “human-nature” system both elements become equal, which demands a timely development of a network of restrictions and industry and technology limitations which are to become the basis of a new object of socio-ecological control of use of natural resources. The expansion of technicism and economism can be explained with the fact that ecological consciousness and thinking patterns are underdeveloped. The socio-ecological control, on one hand, is based on redevelopment of consciousness and mind of a human being from the processes of subjugation and destruction of nature in the direction of self-limitation, meaning learning to govern while submitting; and on the other hand, to review economical, legislative and organizational norms of social control. We observe the scientific methods of socio-ecological control that can optimize this process. The management decision in the ecosystems is a result of compromising, adapting and considering various interests that are inherent to a human being, a society and interests of consumers of the controlled system. The modern system of socio-ecological management is based on a radical reevaluation of the activity of both controlling and controlled parties.

Keywords—*socio-ecological system, “human-society-biosphere”, socio-ecological management, use of natural resources, socio-economical dimension, self-limitation, ecological consciousness, mechanism of internal self-regulation.*

I. INTRODUCTION

Nowadays, economic management was faced with new and complex problems due to the fact that human impact on nature has reached critical boundaries. In the system of “human-nature” both components have become equal in strength of interaction. Therefore, there is a need to introduce a wide network of prohibitions and restrictions on production and technology in order to preserve and maintain the natural environment. There are new objects of management and among them - the exploitation of natural resources.

II. RESULTS

This is largely due to the underdevelopment of ecological consciousness and style of thinking, as well as the dominance

of technicism and Economism, due to the extremely one-sided worldview only through the prism of technical and economic factors. According to economists themselves, up to our time, social development was considered as a two-dimensional coordinate system, including social and economic dimensions, with parameters: population, social institutions, production income, national wealth, level of technology, profit, etc., and nature is analyzed “as lying beyond the boundaries” of the managed system. Social development itself and many of its components (population, technologies, social institutions, etc.) are considered in this “coordinate system” as purely “pure” social phenomena and processes without their natural component and without relations with the environment.

“The phenomenon of social and environmental management follows from the relationship of people with each other and nature, social and environmental nature of work” [4, p. 198]. “Human cannot control nature not only in its whole, but also in many private relations, for the forces of humanity in the present and future cannot even be commensurate with the boundless power and infinity of nature” [10, p. 87]. One of the features of social and environmental management is precisely that the management of natural processes and phenomena involves the management of social processes, including human actions and actions.

“The transformation of nature and its management begins with you” –the writer, a great connoisseur and admirer of nature M. Prishvin liked to repeat it. In line with these and similar provisions lies the so-called principle of necessary diversity (R. Ashby), according to which effective management is possible only if the internal diversity (complexity) of the control system exceeds that of the controlled system. A person is able to drive a car or other technical system, because their complexity is much inferior to the complexity of the driver. When the biogeocenosis, the landscape, and especially the whole socio - and biosphere act as a controlled system, a person seems to be inferior to them in its internal complexity.

Further, some difficulties in understanding and developing the concept of social and environmental management are associated with an insufficiently differentiated approach to those processes and phenomena in the “man-society-biosphere” system that are already objects of management or

can become such at the right time. Practices and theories have long been known as "selection as controlled evolution", "reclamation", "erosion control", "management of soil formation process", "management of some populations" and "biocenoses", "management of agrobiogeocenoses", etc., which are essentially varieties or forms of socio-environmental management. In this regard, the reasoning that man, even in particular, is not able to control nature, just wrong. Human has long managed a number of natural processes and in some cases very successfully. There are, of course, miscalculations, errors, which are caused by many factors, including the complexity and some inconsistency of the management itself. Therefore, governance is not only good, but also dangerous. Management becomes an essential element of existence. "Control as a dangerous sword. The whole question is whether we will be able to grasp the handle or grab a sharpened blade with a bare hand" [10, p. 318].

The governing system (man, society) voluntarily or involuntarily deal not only with natural and natural processes, but also those that are generated by the controlled system. That is why the objects of management are already the consequences of human activity, which actively affect the management system, forcing it to constantly rebuild. "Management of giant forces, brought to the life of man requires the development of certain mental properties, is able to direct the mind not only to conquer nature, but to make the civilization of the psyche of the person" [3, p. 293].

In the system of social and environmental management, the management and managed systems are mutually active, which requires special tactics, relations, decision-making, setting and implementation of goals. Yes, social and ecological management, as well as any management, assumes restriction or even a ban of some processes, destructive and unreasonable actions of the person in the socio-and biosphere. This can also be attributed to the restriction or blocking of a number of natural forces of nature, the rapid development of some biological processes. Here man must learn to dominate by obeying. Call it the imperative of socio-environmental governance, requiring, above all, flexible systems of management, compliance with governing stock patterns and processes-managed systems, mobility and uncertainty socio-natural processes. Most of the negative consequences of human intervention in natural and social processes are connected with the failure to take into account the activity and unpredictability of the managed system.

Any management, and social and ecological in particular, demands integral system actions from the person and society in relation to the operated object. "It is impossible not to agree with the fact that in the transition to social and environmental management, disparate impacts on individual components of nature included in local socio-natural management systems should be coordinated in such a way that the target pragmatic external management of this object does not suppress the mechanisms of its internal self-regulation and does not exclude the possibility of its functioning as a full-fledged element in the system of natural relations" [8].

Social and environmental management has its own specifics. It seems to integrate the most significant and positive in relation to the person, society and the biosphere features of other types of management on the principle of a systematic approach, developing the position of the presence

in the management of not only economic, legal, organizational, etc. aspects, not only General and specific features, not only the principles inherent in certain types of management, but also new special features of management in General.

The systemic nature of social and environmental management requires the study of its complex structure, taking into account the main parameters, characteristics, processes and relations in the "man-society-biosphere" as the ultimate object of coordination and optimization of social and natural processes and phenomena. Obviously, there is a need in accordance with the socio-environmental knowledge, expressing the complexity of the hierarchy, to organize the structure of the control object as a whole and its components. It is appropriate to note that the lack of knowledge about the system "human-society-biosphere" is sometimes considered an argument for the futility of its management, and management problems are even called imaginary. It should not be so much a lack of knowledge as a lack of ordering. Substantial knowledge is sufficient to implement effective social and environmental management measures in a number of cases.

To think about some "absolute" knowledge is simply wrong. This, firstly, and, secondly, given the extreme complexity, multifactorial and unpredictable behavior of many components of the system "man-society-biosphere" man as a subject of management must learn to live and act in conditions of uncertainty, often relying on common sense in management actions, solving problems of development, environmental management, adhering to the principle put forward at the UN international conference on ecology and development: "it is better if we are more or less right at the right moment than absolutely right too late" [2, p. 37]. This can serve as a good basis for the development of "principles of continuous adaptive management", characterized by flexibility and consistency of solutions, changing factors and conditions of the social and natural environment.

Currently, many components and processes in the system "man-society-biosphere", related to the competence of social and environmental management, are well known and studied. Take, for example, a variety of human activities in the socio-and biosphere: biosphere, environmental, agricultural, land reclamation, health, recreational, industrial and economic. All of them need to be managed in order to harmonize and optimally balance with the biosphere processes, in which the goals of human activity must come in accordance with the "goals" of natural systems and processes.

Humanity is a part of nature, so its functioning cannot be autonomous from nature. Management of social and environmental processes involves not just the summation of knowledge about society and nature, and involves the use of integrating knowledge about social and natural objects, and on this basis the improvement of the theory of social and environmental management.

Functions of management of optimization of social and ecological processes are: information, analytical forecasting, design, modeling, approbation, planning, control, feedback, coordination.

According to V. G. Afanasyev, "the main functions of management arising from the management cycle are:

development and adoption of management decisions, organization, regulation, correction, accounting and control, collection and transformation of information – an information function, which corresponds to information work" [1, p. 382]. In social management there are – phases of diagnosis, programming, monitoring and evaluation" [5, p. 358], management functions "...analyze, function, predict, organize their implementation, monitor and stimulate the work of small and large groups of people engaged in a common cause." M. Meskon, M. Albert, F. Hedouri describe the management process approximately as well: the need for communication (information), management decision-making. Management functions are planning, organization (goal, objectives, structure, technology, people), motivation and control" [7, p. 702].

Socio-ecosystems and their socio-environmental processes is the object of social and environmental management. Environmental processes, as well as social processes, can be divided into functional, contributing to the implementation of the basic functions of the social object and dysfunctional, impeding the implementation of the functions of the latter. Currently, environmental processes, for the most part, are dysfunctional, i.e. are in a state of ecological crisis. It is necessary to find a way out of this situation, to find the best solution to the environmental crisis through the management of optimization of environmental processes. If Bio systems regulate their functions automatically in the absence of anthropogenic pressure, the optimization of social and environmental processes are engaged in people, social groups, society, which are the objects of management, carried out by the subjects of management, various governing bodies.

A large Arsenal of scientific methods of studying social objects is used: observation, social experiment, induction and deduction, analysis and synthesis, abstraction, modeling, system analysis, historical and logical approaches – that is, General scientific methods, as well as specific methods that each of the Sciences that studies social systems has.

The complexity of the object of social and environmental management determines the variety of methods used in the management of natural systems and social: General scientific methods (observation, dialectical methods, including a systematic approach, etc.), private methods of sociology and natural Sciences.

The structure of social and environmental management is also represented by its various forms. Thus, depending on the scale, it is possible to distinguish global, regional and local socio-environmental management; by time measures it is possible to distinguish between long-term and short-term management, in the same context it is possible to talk about permanent and preventive socio-environmental management; depending on the degree of coordination of social and natural processes in the system "human-society-biosphere" it is possible to identify optimizing and optimizing management.

Management is mainly the choice of one solution and action from a variety of possible. This action or decision is considered the best or optimal.

The concept of optimality and extremity in ecology can be called opposite: the first characterizes the normal existence and development of organisms and their groups, and the second – going beyond the norm, i.e. abnormal. Thus, a person

is vitally interested in the maximum improvement of the environment through the highest degree of purification of industrial and economic waste water, maximum utilization of production waste, maximum capture of gases, dust, other volatile substances and residues of hydrocarbon fuel, etc. at minimum energy and labor costs. In connection with the aggravation of environmental problems, the task is to resolve the contradiction between economic and environmental efficiency. It is allowed then, some authors believe, "if the settings of optimal relations between them are such that the production of maximum output is accompanied by minimal damage to the environment at an appropriate reasonable cost. The specifics of social and environmental optimization, of course, associated with the production, economic and biosphere-forming human activity, which is known to be characterized by the widest scope, the ambiguity of the sequence in time, a lot of difficult to predict the consequences of the impact on the socio-and biosphere.

Social and environmental optimization is possible only on the basis of harmonization and compromise between different interests, goals and needs.

Optimizing social and environmental management is a process, an activity, as a result of which the optimal relationship between social and natural is achieved; it is the search for optimal solutions and optimal forms of management. Chaotic, as the experience of history shows, more in the actions and deeds of people than in the biosphere. The optimization of human activity and relations with the biosphere comes to the fore. And it means allocation in social and ecological optimization, at least, two aspects: optimization of components (populations, processes of equipment, technologies, etc.) and optimization of various relations in system "human-society-biosphere". It is obvious that the problem of social and environmental optimization can be understood in the context of the entire biosphere-forming human activity, with all its contradictions, a variety of goals and means, positive and negative consequences.

Among the goals of social and environmental management is the goal of optimizing the human environment for the protection of its biological qualities from the negative consequences of its own production and economic activities in the socio-and biosphere. This criterion should be supplemented by the criterion of normal, healthy human activity in changing environmental conditions.

Reduced efficiency, many human diseases are the right signal of adverse living conditions, often generated by the man himself. And they depend not only on technology, unreasonable economic activity, but also on the moral, aesthetic and other spiritual qualities of man. Therefore, the human dimension of social and environmental optimization should be expanded by moral and aesthetic criteria. Therefore, the transformation of the social and natural environment according to the laws of morality and beauty should be considered as an important sign of social and environmental optimization. "The moral and aesthetic principles underlying the management of nature become the principle of preserving the highest material and spiritual values of human culture" [6, p. 158].

III. CONCLUSION

Based on the above, the following conclusions can be drawn:

1) With full right it is possible to judge special specifics of social and ecological management in relation to other types of management which can be considered by the principle of the system approach, but including economic, legal, organizational and other aspects, with a certain bias of the solution of a problem of relationship "the person-society-biosphere".

2) The goals and objectives of social and environmental management are to achieve their coherence and optimization by influencing social and natural processes and phenomena, and even in such a system as the "human-society-biosphere" system. In other words – it is the management of social and natural in its dialectical unity, ensuring the optimization of all relations in the system "man-society-biosphere" for its sustainable and relatively unlimited development. It is richer in the content of any of the known types of management: social, economic, state, legal, political, etc.

3) Any management decision and action in these systems is the result of compromise, adaptation and consideration of different interests, objectively inherent to man, society and the interests of the needs of the managed system. Without an analysis of these interests, we will never be able to assess the response of the managed system to the control actions.

In this regard, we believe that the problem of the activity of the management and managed systems is subject to fundamental revision in the system of social and

environmental management. If, for example, in the management of technical systems between the control and managed systems is established unambiguous relationship with a rigidly fixed result, in the management of socio-natural systems, this relationship is mobile, ambiguous, and the result is achievable and predictable with more or less probability because natural phenomena and processes are included here in human activity, and it in the cause-and-effect relationships and relationships of natural processes and phenomena.

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