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THE WORLD NEEDS IN A UNIQUE THEORY OF DEVELOPMENT

Now, the mankind is in danger. It has found itself in this dangerous situation because there is no fundamental scientific theory of development and improvement of the social systems (production, economic, state systems and the world as a whole). This situation makes future existence of the mankind impossible. The aim of the paper is to show how to arrange the social systems both at present and in future. Unfortunately, there is no single integrated scientific discipline that studies the social systems comprehensively. It's high time for all technical, social and natural sciences to concentrate their efforts on studying and arranging the social systems, finding their place, "niche" in this process.

The wonderful world of the present and the future is discovered only by science.

Now, we need a theory that would be a guide to actions.

The ideas mature much quicker if they are needed in practice.

Introduction

The socio-economic development early in the XXI century resembles much the development early in the XX one. The mankind has not achieved great progress in this direction.

The problems of social inequality, poverty, degradation of whole nations, political oppositions, non-observance of democratic principles, violation of human rights and freedoms are still observed even in those countries which are highly-developed. However, one can say about a great success in the technical and biological sciences, engineering and technologies achieved by the mankind. As for the humanities and economic sciences, they have not advanced much in the last 100 years. The gap between the technical sciences and the humanities has become larger. This gap and "deformations" have a negative effect on the development of the society and the world as a whole. The humanities should be ahead of engineering and technologies showing the main ways of the society development. So, both the human scientists and economists are facing now the task to liquidate the gap and "catch up" the technical sciences. Improvement, humanitarian, political and socio-economic development of a certain society (state) and the world should go together with the modern technical progress. It will be possible if the theory is elaborated; to say more, not only the theory but a fundamental science able to

show how to improve and develop the society, state and the world not only theoretically but in practice as well.

1. Necessity of the Environics Science Development

Today, the mankind is in a very dangerous situation. This idea is expressed by many world scientists. These are not only the words; it is an alert for the future generation that will live on the Earth.

The danger threatening the mankind is connected with such bitter phenomena as political oppositions, economic crises, military conflicts, environmental destruction, social and other cataclysms.

People all over the world should show their wisdom as to the future development on the Earth. Not only the leaders of all states, parties, world scientists bear the responsibility to the future generation, but every inhabitant of the world should make his contribution to the future development of the civilization.

At present, the scientists are facing the acute and very important problem – to elaborate a scientific concept of the future civilization development and improvement without any cataclysms or at least to minimize them. In our opinion, it should be not only the concept, but a separate unique fundamental science of development and improvement of the society and the world as a whole.

It should be noted that the world civilization has been developing by the try-and-error method through its history and continues to develop this way. Application of this method makes great political, economic, ecological, social and other damages both to each state and the whole world.

The period of a reasonable development and improvement of all social processes should come.

What does the reasonable mankind development mean? It is the development when the processes occurring in each country and in the world should cause minimal moral and material damages. It concerns all types of activities, including economic, political, social, ecological and other types of activity. Nowadays, the mankind is also developing, but it incurs great charges. Sometimes, the total charges exceed the utility of the products made. If one takes into consideration that hundreds of billions of money are spent in the world for armament, satisfaction of privileged persons' needs in each state, erroneous and ambitious management decisions, etc., the development can be characterized as rather negative. In the opinion of many scientists, this situation is likely to lead to degradation of the world and terrible catastrophes in the next decades. Today, the scientists all over the world as well as the leaders of rich states are facing the problem how to find that rational way of development, following which the mankind would really develop and the Earth and nature would preserve in original state. Of course, the proposals of this kind are offered now by the sciences in many countries and there is a great deal of projects as to the ways of development. However, they all are not systematic, unreasoned and lack deep knowledge of the objective laws of the society and world development.

A fundamental science of development and improvement of the society and the whole world should be created by the joint efforts of scholars, leaders of states and parties and even common people who are able to think. If the idea of environics [1] "stirs up" the intellectual potential and make think people over the problem of creating a unique universal science aimed at the development and improvement of human life, then the aim of the author of environics will be achieved.

2. General Provisions

Environics as a science is formed on the basis of centuries-old historical experience of the mankind development and improvement. Despite natural and social cataclysms,

wars, economic crises, mass diseases, etc. the world has been developing and improving during millions of years. That's why it is possible to say that environics is the result of practical experience; it has come out of it. The objective material world and mankind are developing and improving continuously, its new scientific and practical methods are formed in succession, step by step. It would be useless to speak about a general science of development and improvement, as environics is, if the reality itself did not give the health to environics, if there was no practical necessity of this science formation.

The process of development and improvement of living beings has begun since the very moment of their appearance. This process went through practice and experience; the living organisms selected everything that promoted their vital activity and existence using the try-and-error method. There was evolution of the living organisms, and the brain of such unique creature as a man permitted him to look farther ahead practice. Due to practice and having got deep knowledge of the material world, the man could create a number of sciences which help him to develop, deepen practice and bring it to perfection. Now, when the world is becoming more complicated, the man sets serious tasks of development and improvement of the mankind on a global scale. Old methods, views and ways of thinking are no longer of use. A new stage in the mankind development is coming, and the try-and-error methods are not accepted any more. We need a comprehensive fundamental science that will help to minimize the negative consequences, which slow down the development and improvement of the objective material world.

One should note that there are all preconditions for establishing the general science of development and improvement of the society and the world. The way to this science was too long and rather hard. This science should be universal and the most humane promoting harmonious development of a man, society, world and nature.

3. Environics in Social Systems and Main Elements of its Development

Environics should systemize the world experience in development and improvement of the production and economic systems, society and mankind. Every living being and, of course, the man has a certain experience of his development and improvement. The experience is acquired from the very birth of an individual. Then, the practical experience is accumulated through perception and cognition of the world by all available organs given to the living being by the nature. Moreover, the man as the highest reasonable creature has also armed himself with the science. The acquired experience, as a rule, is systemized consciously and sometimes unconsciously and is taken as a guide to development and improvement in different cases. That is, every living being and, of course, every man has his own little "environics".

Environics of production systems studies main ways of their development and improvement at the level of enterprises, firms, farm enterprises, building and transport organizations, etc. These systems being the main economic cells of any society are also developing and improving on the basis of practical experience and application of scientific methods. As a rule, the states can be strong and prosperous enough if the enterprises both in the production and non-production spheres are profitable and make benefits for the society.

Environics of economic systems studies and helps to find the main ways of development and improvement of industrial branches, building, transport, trade, non-production sphere, etc. Exchange of experience between the states, scientific definition of priorities for the branches on the basis of natural and socio-economic conditions are of great importance for every state development.

Environics of society determining the main ways of development and improvement of the state promotes a high level of political, production-economic, socio-economic development of the branches taking into consideration the nature preservation and protection of interests of every person in the society.

Application of environics methods at the world level will bring the political and socio-economic development of the world states together. The integration processes initiated in the West Europe, the North America and other regions are the first steps to global integration of the states on the Earth. However, the total integration can bring benefits to the mankind only when the objective laws ruling the development of social systems are studied profoundly subject to political, national, ideological, religious, cultural, production-economic, socio-economic and other interests of every state. It is environics that should solve these problems.

It is worth of noting that environics is mainly the same at every level of the social systems, i.e. the development and improvement of a man, enterprise and branch in every state has much in common. Though, when making long-term plans for development and improvement of the social processes, one should take into consideration national features, natural conditions and geographical location of this or that state. But the general and common approaches should be mainly the same because the objective laws, according to which the social systems are developing and improving, are common for all states. So, there are principles in environics, which are common for all people, production and economic systems, society and the whole world.

The most important elements of the social systems' development and improvement are information and language. They determine the main ways of development and improvement of the social systems. Information gives us a possibility to study the past and present experience; words help us to set common goals, define place and functions of every person, and evaluate prospects for development and improvement of the social systems. On the basis of the information and language the cognition and thinking of people is organized; with the help of this the experience is accumulated, concentrated and transferred to other people, knowledge is collected, and sciences are formed and improved. That is, they are the basic elements of environics using which the man formulates basic principles for his own development and improvement and all those artificial systems which he created, in particular, the social systems.

4. Ideas of Environics in the Works of Outstanding World Scientists

It should be noted that many scientists both in the past and now have proposed some sciences which deal with the social systems and advanced them. They came close to understanding that environics as a science is necessary in the world. Philosophy was the first to be "fitted" with this purpose. A.Locke, D.Hume and I.Kant tried to make philosophy a general science of cognition – "gnoseology", they wanted to bind the human experience broken by selfish, nationalistic, territorial; socio-economic and other interests into one scientific system.

Hegel also worked on the universal methodology of explaining the objective material world and tried to find a general method of developing and improving the social systems. We should give credit for the scientific researches made by Hegel. He was one of the first who systemized the practical experience with the help of dialectics, tried to explain the social processes from a scientific point of view, his research made a great contribution to formation of the general science of development and improvement of the social systems. However, environics should not be united with philosophy. Having arisen in ancient times, philosophy had the nature of ideological discussions, very often far from the real life. "Philosophers only explained the world in different ways, but the matter is to change it", K.Marx wrote [3]. By the way, the modern philosophy and many special sci-

ences are still explaining the world. Environics employing the potential of all sciences created by the mankind is called not to contemplate and explain the world, but to change it by developing and improving. It is very important that environics requires that all conclusions should be tested in practice. Having learned open objective laws of environics, one should use them in practice. That is, environics in the process of its development should be of a universal theoretical and practical nature.

Environics is a general universal science that deals with development and improvement of the objective material world. It is only arising. But it is just that science which having generalized the mankind experience must show the main ways of developing and improving the objective material world. Environics as any science should be developing rapidly. Its flourishing will reflect intensive and efficient development of enterprises, industries, states, integration, interrelations and harmony between them and nature.

It should be mentioned that A.A. Bogdanov in his "Tectology" [2] also tried to solve the problems of the social systems' development and improvement through the general organizational processes. He did much enough in this direction. He offered the science which through the problems of organization showed how one should solve the problems concerning development and improvement of the social systems in practice. However, this science was not demanded for many years and the world community did not get benefit from it. Tectology supplements environics. Deep knowledge of Environics and Tectology would make possible to eliminate or at least to minimize the negative processes that occur now in the production and economic systems, states and in the world.

The problems connected with the formation and effect of sciences which "work" on the social systems, such as economics, sociology, technology, mechanics, physics, mathematics and many other sciences should be set from the point of view of environics, i.e. from the view of development and improvement of enterprises, industries and states. The experience of all sciences development shows that their recognition, popularity and claim are achieved only in case when the developments and results required by both science and practice are also recognized. Therefore, every scientific theory and practice should consider any actions and processes from the view of environics. It also plays a uniting role as to special sciences, which "work" on environics using their own methods, i.e. on the general processes of development and improvement.

Today, the scientists offer a number of separate sciences which would deal with the general problems of development and improvement of the social systems. However, there are no proper fundamental developments yet. At the best, there is a name and definition of the science. One should agree with the modern social scientists who say that philosophy and other social sciences have their own aims and tasks, and to develop the production and economic systems, society and the world on the whole another science is required, such as environics.

5. Basic Principles of Environics

Profound theoretical works should pass experimental testing, practical approbation which will enable to define and control the effect of the objective laws of environics. Establishing the close unity between theory and practice, the main task of environics is to systemize and generalize the theoretical and practical experience in the development and improvement of the social systems. Therefore, environics should find out what methods are available in the technical systems, nature and human activities, generalize them and define what methods are acceptable and only after that to choose the main ways of developing and improving the social systems. Environics deals with the experience in functioning of enterprises, industries, societies and the world on the whole; in

other words, it covers the material of other sciences and all life practice, i.e. uses all the intellectual potential of the mankind for its own developing and improving.

Formation and functioning of the social systems are investigated by many sciences. To our regret, there is no single coordinating science that could distribute correctly, rationally and completely the efforts of all sciences using the knowledge potential accumulated by the mankind in order to develop and improve the social systems. The science of this kind should be universal both in methods and content. The world is waiting for this science, and the preconditions for its appearing have been already created by other sciences.

The merit of environics is not only in that it coordinates all sciences engaged in development and improvement of the social systems but in that it gives impetus to positive factors at enterprises, in industries, societies and in the whole world.

Environics as a science is intended, first of all, to solve practical tasks using fundamental researches and developments. The way of setting tasks in environics consists in defining the goals of development and improvement. The way of their solution lies in rational organization of all processes taking place in the systems. The principle of a general approach enables to control and develop uniformly all processes occurring in the systems.

Moreover, the principle of the general approach gives environics an opportunity to "make" all sciences work on the problem of development and improvement of the social systems, i.e. covering the fields of all other sciences environics forms the base, support necessary for itself. Environics is impossible without close "cooperation" with other sciences and practice of life, without mutual supplement and interactions. Tectology, for example, shows how to organize the technological, economic, sociological, nature-ecological and functional processes in the production and economic systems. Such sciences as technology, economics, sociology, nature management also should aim their potential at the development and improvement of the social systems. It should be noted that some exact sciences, such as mathematics, physics, chemistry, biology and others are also used by the man. Hence, environics uses all the scientific and practical potential accumulated by the mankind in order to develop and improve the social systems.

The main idea of environics is to provide harmonious development of all processes occurring in the material systems including social ones. It is an all-embracing science that reveals the objective laws according to which the material systems are developing. To cover all processes occurring in the systems, not to miss any of their elements, environics uses the potential of quite different sciences, both natural and social. All thinking people in the world are invited to develop by joint efforts a new synthesizing science that would cover all fields of human knowledge.

To recognize environics generally, it is necessary to create a prevalent atmosphere of development and improvement in every social system and in the world. Any thoughts about destructions, wars, confrontations must be eliminated in all societies. People should make an acquaintance of elementary basis of environics from the very beginning of their character formation, i.e. school programs should include the material describing how to develop and improve the man himself.

If every individual system has comprehensive and general ideas of what its current activity and the prospects depend on, it will be able to avoid many negative phenomena. This approach is especially important in the technical progress period. So, the growing interest in environics is explained by more and more complicated processes occurring in the production and economic systems and societies. The world socio-economic system is also becoming more complicated. The knowledge of universal, general and specific objective laws which rule the development of the social systems is especially acute. If

the mankind learns these laws, the political and socio-economic reconstructing processes realized now in many countries would not be so painful, unreasoned and absurd.

The important principle of environics is the principle of a rational approach. It means that all actions and processes realized by the people should be thought over, grounded scientifically and used in such proportions which would promote the development and improvement of the social systems.

The historical development of the mankind shows that the states, where the political, administrative managers and the society itself used the rational approach principle as the dominating one, were prosperous. The states where the unreasonable actions, right- or left-extremist approaches were used, on the contrary, failed. Now, in the era of political, military, nationalistic and socio-economic and other oppositions this approach is of great significance. The people should begin to organize the production and economic systems thoroughly and very seriously, otherwise the socio-economic and political crises, wars, cataclysms, all sorts of opposition, cataclysms will go on in the long-run prospect. It is wisdom of a man that will save our planet Earth.

6. Interactions in the Objective Material World and Formation of a New Science

The material world surrounding us consists of systems. Each system exists in a certain environment. Systematization of the material world, indissoluble unity of the systems and their external environment, constant exchange of substance, energy and information between them is one of the most important discoveries of the XXth century.

The system and environment would not be able to exist without interaction. Interaction is an impact of environment on the system and, vice versa. The age-long question of interactions is the base for forming new natural and artificial material systems and creating natural and artificial environments necessary for their existence.

As a result of interactions, complex chemical combinations are appearing in the inanimate world, and the landscape and climate are changing. In the animate nature, the interactions between the systems and environment give rise either to the processes of appearance, development, improvement or disappearance, dying. These processes are constantly observed in the plant and animal world.

Interaction is a necessary condition for human existence. With the appearance of first reasonable creatures the necessity has also arisen to establish contacts between them: between individuals, an individual and a group (collective), collectives. Together with improvement of labour implements, machineries and technologies the interactions were becoming more complicated, and it resulted in accelerated growth and prosperity of one groups, collectives, countries, and decline and perishing of others.

Close connection of the man with powerful machineries, technologies, economics, ideology, possession of a great military potential have provoked a crisis, the situation when today's interactions may cause even degradation of the civilization and the world; they can ruin the man himself, nature and all living beings. So, the most important task today is to preserve the mankind, life on the Earth. To solve this task, it is necessary to make the interactions more reasonable and aim them at developing and improving the material systems and the whole objective world.

If people knew the basic laws which rule the different types and forms of interactions between them, if they could foresee future actions of the mankind it would be possible to protect the man, nature and all living beings on the Earth from many negative phenomena and destructions promoting thus development and improvement of the systems and environment.

The scientists all over the world always attached importance to the dialectical interaction. F.Engels wrote, "When we try to visualize the nature or history of the mankind or our own spiritual activity, we see at first the picture of endless combinations of relations and interactions where nothing remains immovable and unchangeable but everything is moving, changing, appears and disappears" [4]. He goes on, "Interaction is the first thing that comes forward when we are examining the whole moving matter from the point of view of the modern natural science. We see various forms of movement, such as technical movement, heat, light, electricity, magnetism, chemical combination and decomposition, transformable aggregate structures, organic life – they all, except of organic life, turn into one another, mutually stipulate one another, in one case they are the reason, in another case they are in action, the total movement being the same (Spinoza's substance is cause sul (lat. – cause of itself) expresses the interaction perfectly well) [5].

Unfortunately, the interaction is the most important specific form of the matter movement that determines all aspects of the temporary world development – has not become the subject of deep and comprehensive dialectical research for the present social scientists. In the best case, the scientists pay attention to the importance and significance of the interaction process: "...Interaction as a more general process is a phenomenon that is absolutely necessary in any form of the matter movement. It's hard to imagine something in our world that does not interact with anything. It is a component part in all processes" [6].

This form of the matter movement is studied mainly by such sciences as physics, chemistry, biology and less by the social sciences.

We have made an attempt to give grounds in favor of the environics science that should investigate universal, general and particular interaction processes between the material system and environment.

The idea of founding the science that would be able to prevent the crisis situations arising as a result of relations between the nature and the man, material systems and their environment is not new. The scientists suggest, as we have mentioned above, and even give definitions to new sciences. They are: nature-sociology, noology, noogenics, global ecology, social ecology, econology, ecolonomics, Ecology with a capital letter, Big Ecology, etc. However, these proposals, though reflecting the barest necessity of studying the system of interrelations between the nature and society, concern only as far as the definitions.

It's hardly possible that the scientists pursue only ambitious aims when they offer to develop new fields of knowledge for solving the urgent problems. It is an anxiety and trouble about fates of the world, next generation and all living beings on the Earth that forces them to make a search. The problem is not simple. It goes about the foundation of the science that would be able to combine the potential of modern scientific knowledge and make the researchers take a great interest in finding a solution of acute problems. Is it really possible? Perhaps, the majority of people will give a negative answer. But now the mankind is to choose between "to be" or "not to be", and it is necessary to do as much as possible for removing the danger that threatens the civilization.

It is a paradox, but the world is in a crisis situation because of its development. It is explained both by objective and subjective reasons. They all testify to the fact that the scientists themselves created this situation directly or indirectly.

When analyzing the history of the technical progress one can notice that the birth of new knowledge is determined by the practical necessity. With the development of society the elements of a new science as if are looming in the «bowels» of the practice becoming more and more apparent. The science has no its name yet, but its laws show themselves in the human activity. Both the scientists and practical workers feel the ne-

cessity to understand, explain them and then to show how they work. It is well known that the ideas are maturing much quicker if they are needed in practice.

When in 1948 Norbert Wiener defined cybernetics as the science of control it did not mean that nobody was concerned with control. In that case, there was a necessity to generalize practice and all researches conducted by different sciences and then to create a new branch which would accumulate all knowledge in this field, define its ideological line and discover the laws of cybernetics and their practical mechanism.

Cybernetics in its turn paved the way for developing a system approach and general theory of systems. At present, there is no branch of science that deals with systems, their development and improvement. Any system is interacting with environment. To manage these interactions, one should know how the system would behave itself in ever changing external and internal environment and those factors which have influence on the system and environment.

In our opinion, environics should study the mechanism of interactions between the system's elements and between the systems and their environments.

This work pays a special attention to artificially created systems and their environments which have a great influence on the present natural world (for example, production systems). Artificial systems have their own laws and environments which come in conflict with laws of nature and society.

Social systems refer to the most complicated artificial systems created by the man. Formation of these systems began at the very outset of the human history. The primitive work of one man who was using the simplest labour means, such as sticks and stones created the simple systems. More difficult work could be done only by the people united together, and gradually the simple means were replaced with more complicated mechanisms and machines.

Production united more and more workers. Plants and factories became larger. At first, trusts and syndicates made possible for one country to engage in the production-economic activity, and then more and more countries and, finally, the whole world was able to join it through production cooperation and the world trade system. Nowadays, the structure of public systems shows the level of their complexity: an enterprise (production and non-production company, farm enterprise and so on) – a production system, a branch – a complex economic system, a state – a supercomplex public system. In other words, the economy of any country presents a supercomplex production and economic system.

If to divide the natural and artificial material systems into the systems which have regulators and those which have no, we see that latter group forms the basis for vital activity, viability, development and improvement of the systems. More complex systems have more complex regulators.

It should be noted that there is no explanation to the interaction mechanism in the material world. Dialectics gave us the notion of material and energy interactions, and cybernetics added the information interactions. However, there is no answer how they are made. For example, the system has influence on the environment through substance and energy, and vice versa. It's very important to know the character of this influence and how this process occurs. Does it have any analogy to the process of pouring the water from one vessel into another? But even in this case it is possible to transfer the substance and energy from the system into environment, and vice versa, slowly, quickly or at one draught. It is quite obvious that this process is much more complicated since it has influence on the qualitative changes in the system and environment. However, to make the qualitative changes, it is necessary to prepare, accumulate some substance, energy or information and only then to make the influence on the system or environ-

ment, i.e. the volume of substance, energy or information should be sufficiently enough to make a substantial (qualitative) change in the system or environment.

In practice, it is really so. To make any actions or to realize the necessary processes, one should prepare them, i.e. to accumulate the necessary substance, energy or information. And only then it is possible to make influence on the system or environment. In the scientific literature, the necessary quantity of substance, energy or information is called the influence factor.

Now, the various modifications in the science, practice and our real life are caused by biological, geographical, geological, technical, economic, social and other factors. But there is no convincing explanation to the influence factor.

7. Laws of Environics

We observe never-ending interactions day and night both in the nature and society. At the first glance, they are unsystematic, in some cases even chaotic. But a more careful analysis of these phenomena gives grounds to conclude that these processes have the stable, sufficient and necessary links and actions, i.e. they have a regular character. The general environics law reveals the mechanism of interactions between the material systems and their environments, the general laws concern one-type material systems, such as production, biological, geological ones, etc.

Our work presents the general environics laws of the social systems including basic laws, laws of interacting processes, and functional laws.

Let's consider how these laws work in practice. Table 1 presents different levels of the social systems under the development and improvement. Of course, the main figure in each of them is a manager (head, executive). It is the manager whom the development, improvement, degradation, crisis or bankruptcy depend on. The Table demonstrates what processes the manager controls, how much time he spends to do it, what objective laws work in the social systems, what sciences study these processes and help to control them.

Basic or dominating laws of the social systems' development and improvement are the law of organization and law of development and improvement. In the objective material world everything begins with the organization that is necessary for achieving a high level of development for any system.

Investigation of management activity shows that more than a half of total working hours a manager spends solving the problems connected with organizational processes, processes of development and improvement.

Environics is a general theoretical science that deals with the universal and general laws of development and improvement expressed through the processes of interactions between elements (parts) within systems and systems with the environment, i.e. it is the science of development and improvement of the objective world and all systems, including social ones.

A universal law is the law of interactions. General laws ruling the social systems include laws of organization, development and improvement, as well as the technological, economic, sociological, nature-ecological and functional laws. Knowledge of the objective laws is necessary, first of all, for applying them in practice. Thus, the social systems should be developed by using the objective laws. It will allow escaping stagnation, crises, any conflict situations, cataclysms in the development of enterprises, industries, states and the world on the whole. Moreover, environics will provide a scientific systematization of the world practical experience in the development and improvement of the social systems and offer the best way of development for the countries trying to search for the methods of arrangement of their systems.

Table 1

Processes, objective laws, and sciences which study the social systems

World system (states all over the world)			
Society (state)			
Economic system (branch of industry)			
Production system (enterprise)			
Manager (head, executive) of social system			
Processes occurring in social systems	Time spent by a manager (head, executive) on management of corresponding processes (%)	Objective laws having force in social systems	Sciences promoting deep knowledge of processes and objective laws occurring in social systems
Organization	40	Law of organization	Tectology
Development and organization	10	Law of development and organization	Environics
Technological	5	Technological laws	Technology
Economic	15	Economic laws	Economics
Sociological	10	Sociological laws	Sociology
Nature-ecological	5	Nature-ecological laws	Management of nature
Functional	15	Functional laws	Cybernetics (forecasting, modeling, norm-setting, planning, accounting, analysis, control, regulation)

The environics laws have their effect on all levels of the systems and society. To observe them means to provide a harmonious all-round and purpose-oriented development of any social system and its environment, especially natural one, to reduce the impact of the negative factors of the production systems on environment and to stimulate positive ones.

The knowledge of the essence of the interaction mechanism allows defining the role and importance of all above laws and each of them for the development of the social systems and their environments as well as the degree of influence of certain processes (organizational, development and improvement, technological, economic, sociological, nature-ecological and functional) on the development of the production systems (enterprises) and economic (higher level) systems.

Employment of mathematical methods, computers and devices for collection, storage and transfer of data gives an opportunity of learning the environics laws of the social systems whatever form they have.

The knowledge of the environics laws will help the people to estimate the drawbacks and advantages of different economic systems and to find the methods and forms of management which are much better as compared with others to provide proportionality, rationality, optimality of such processes as technological, economic, sociological, nature-ecological and functional ones, as well as of the organization, development and improvement.

The environics laws according to which the production and economic systems are developing are characteristic of all social formations, the laws being specific for each of them. The modern world system of states presents the largest and the most complicated

production-economic system with its laws of interaction both inside the states and between them. The task for the science is to find the common points of mutual understanding between rather complicated and even antagonistic interrelations and, thus, to save the piece on the Earth, preserve the mankind, nature, animal and plant world, the air space and water expanse, active and flourishing planet for the next generation.

Environics is called to help in the liquidation of the gap between the humanities and natural sciences, provide the improvement of the production and economic systems on the basis of the objective laws of existence and development of the material world. If even one of them is ignored, the harmonious development of the social systems will be impossible, and the preconditions will be created for but negative effects.

However, it is not enough to find out and understand the environics laws. It is necessary to reveal their internal interdependency and their effect on each other. So, the technical and technological process is impossible without application of a new approach to solution of problems concerning the organization, development and improvement of the social systems. Economic and social restructuring of the society, in its turn, has influence on the methods of organization, development and improvement, requires an accelerated introduction of new technologies, defines a new pattern of forecasting, norm-setting, planning, accounting, analysis, control and regulation of the social systems.

The interdependency of the environics laws is also observed on the level of the states and the whole world. They cause serious problems the solution of which is of vital importance both for every country and the world.

One of these problems is the organization of the state's economy. It should be organized so that it might resist the negative factors, both internal and external. The organization should also provide a "safety factor" that is of great importance both for satisfaction of the society's needs and the technical, military and economic development.

The dynamics of the economic development depends on many factors. For example, to develop and improve the production systems and economy, the rational organization of all economic processes is required, as well as a systematic introduction of new technologies into production, application of advanced socio-economic methods of economic management, rational utilization of the natural resources.

In its turn, the technological development makes the country strong in the economic and military position; in other words, progressive technologies and machineries become the key factors of the economic, social and nature-ecological development.

The state of the economy depends much on solution of such strategic problems as production and distribution of finished products between the society's members, reproduction of production means, economic and trade contacts with other countries, strengthening of the state's power, etc.

Therefore, a special attention should be paid to such social aspect of interactions as the relations between people, in the society, relations with property, production, other countries, nations, etc.

Now, the problems of nature and ecology become very acute. To investigate these problems means to study the ways of human development, relations between the man, society and nature.

And the last but not the least problem is the management of the production and economic systems. The success in solution of the above problems depends on that whether such management functions as planning, accounting, analysis, control and regulation are rational.

Any action is proved in practice. In this work we have tried to show how the environics laws of the social systems function and interact in practice.

The modern technical progress, the development of science, technologies, economy and sociology precondition the improvement of the social systems. Now, one cannot dis-

tinguish the only science that would be the leading one in studying these systems. As it was already mentioned, many sciences are engaged in this process, directly or indirectly. The task of environics is to study the social system as the single organic mechanism using the accumulated scientific potential.

8. Conclusions

So, to lay down the foundations for the science of the social systems' development and improvement that would generalize the scientific potential and practical world experience, the science so necessary in the present stage of the mankind development is the matter of great importance. I feel emboldened to offer this science and hope very much that the majority of scientists will support me in this undertaking. As a pioneer, I'm ready to take a squall of criticism in my address, because I feel something may be wrong in my work, some aspects are disputable and many issues should be studied more carefully.

I'm strongly convinced that the science that would deal with the development of the mankind is sure to appear. Of course, it will be better if it appears as soon as possible. I have taken the initiative and realize that it is a great responsibility. Because a "green" science may compromise the idea itself, and those who work on it may lose the interest in this very important and necessary science. I think it's high time to start the work on this science since the ideas as for the necessity to found this science are already being matured in the mind of many scientists. Moreover, the delay of this science may cause serious cataclysms on the Earth.

This work is addressed to the future generation. It contains little critics and few disputes. It offers concrete proposals on foundation of a unique science of the future that was and is talked much but only to define the problem itself. We have made an attempt to consider this problem so that to show the main trends in the evolution of a new scientific direction.

In conclusion, it should be said that environics does not pretend to be the truth in the highest instance as for the development of the social sciences. The author supposes his purpose to be achieved if the theoretical considerations give rise to the discussions which may lead to the breakthrough on the theoretical front, bring the unity of theory and practice and give an integrated solution of the problems concerning the mankind.

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