Risteski, T. (2024). The law of measure in the use of natural resources and the protection of nature, *SCIENCE International journal, 3*(1), 49-54.
doi: 10.35120/sciencej0301049r UDK: 502.175:340.13

THE LAW OF MEASURE IN THE USE OF NATURAL RESOURCES AND THE PROTECTION OF NATURE

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Abstract: Man, according to biologists, is an animal that belongs to the order of mammals, and within its framework, to the hominids family. Within this family he includes the species homo sapiens. As a creation of nature, he is a part of it. As a part of it, he actually represents human nature. He is born, grows, develops, reproduces, ages and dies according to natural laws. "Man is the measure of all that exists and of all does not exist", says Protagoras." To have measure in everything is the first condition for achieving happiness," says Democritus. For Aristotle, "two extremes are dangerous in human action: what is excessive and what is lacking. Our very nature suits exactly what is in the middle, neither too much nor too little." Man, as a part of nature and a measure of everything that exists in it and of what did not exist, using its resources to create it in order to exist and use it, is obliged to respect the law of measure, as a law of nature. Respecting that law, man must take care to use the natural resources to a limit that will not lead to an unwanted change in its quality, and thus to the disruption of the conditions for his life. Unfortunately, man does not act like that, but mercilessly exploits and destroys nature. The thesis that the nature of Planet Earth has lost its self-regulating mechanisms is not true. On the contrary, the self-regulatory mechanisms of nature are increasingly coming to the fore. Global warming followed by unprecedented dry periods in certain parts of the Planet, the hunger of millions of people caused by them, catastrophic floods, hurricane-ravaged winds, increased mortality due to polluted air, epidemics and pandemics whose spread is facilitated by dense living in cities are nothing else, but regulatory mechanisms of nature by which it reduces the human population and tends to exterminate it. Man, ie, humanity, is the one who has lost self-regulatory mechanisms. Endless industrialization driven by the whip of profit, intoxicated by consumer obsession, with uncontrolled exploitation of natural resources, mercilessly destroys the ecosystem of Planet Earth. Due to the absence or ineffectiveness of self-regulatory mechanisms, Planet Earth, as the global natural environment of man, is facing a severe ecological crisis. Characteristic of this crisis is not only the destruction of living conditions by destruction and pollution of the natural environment, but also by the destruction of the entire ecosystem of the Planet, the maintenance of which is a vital condition for human life and the survival of civilization. Nature is omnipotent and inexorable when it comes to breaking its laws. Man, as humanized nature, can never be her master, as he imagines, but her servant and slave. The French philosopher Paul Holbach writes about this in his work "System of Nature." Humanity must find self-regulatory mechanisms and strengthen the existing ones to the maximum. Otherwise, as Thomas Eliot says, "it comes to an end, not in a brutal detonation, but gradually and with a peaceful exhalation.

Keywords: man, nature, resources, utilization, measure
Field: Social Sciences

1. INTRODUCTION

Man is a creation of nature. As a creation of nature, he is a part of her. As a part of it, he actually represents humanized nature or, more precisely, humanized natural matter. He is born, grows, develops, reproduces, ages and dies according to natural laws.

As a living being, man lives in nature and from nature. For him, nature is a creative mother and a nurturing mother.

Before becoming humanized nature, as an ape, man exploited natural resources for sustenance. Later when he turned into homo faber or, according to Franklin, a tolmaking animal, he began to use nature to make means of production and to improve his standard of living. The first means of production made by human hands was the stone ax, first rough, without a handle, and then perfected with a tied handle. With it he cut small trees and branches from which he made his huts. Then follows the stick (pole), which at first was only sharpened, and then with a stone edge tied to one side, grew into a spear with which he killed animals. Over time, the bow and arrow appeared with which he could kill an animal at a distance (Nugije R.1990). With the appearance of the first tools, the first exploitation of natural resources began, to satisfy human needs for a long time. The anthropoid ape did not make tools, did not create food reserves. Homo sapiens began to do this since the time of savagery and thereby exploit natural resources more than the current needs to eliminate hunger dictated.

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From the time when man, as a newly humanized nature, as Engels says, began to make the first tools, until today, thousands of years have passed. Man improved himself through work in the exploitation of natural resources. His brain was developing. His mental abilities were also developing. His needs grew. The degree of utilization of natural resources for their satisfaction also grew. Today's hunters have modern sniper rifles with which they rarely miss the target. Modern motor or electric saws, held by human hands, slither like snakes through the forests while cutting, in ten minutes, huge trunks of forest trees. Powerful engineering machines tear down thousands of trees in front of them through the dense forests. Also, powerful digging machines dig out one ton of hard coal from the ground with one stroke. In the alluvial fields, huge pumps extract thousands of tons of black gold from the depths of mother earth. On the city streets and on the highways that have crossed the continents, fast cars, buses and trucks are rushing in all directions, leaving millions of tons of exhaust gases in the air and creating an unbearable noise. A huge number of factories spew millions of tons of smoke and dust into the atmosphere and turn the blue of the sky gray. The blue sky above our beautiful planet is torn by huge fighter jets leaving white trails of exhaust gases. The human consumer throws huge amounts of waste onto the earth, into the rivers, lakes and seas. Numerous telecommunication systems and mobile telephony cause enormous electromagnetic pollution of space.

By massively exploiting natural resources, man excessively consumes nature (Keane E.R. 2019). According to the dialectical law of transformation of quality under the influence of changes in quantity (Law of the transition of quantity into a new quality), any excess of the measure that can bear a certain quality of the natural environment gives the environment a change, or dialectically speaking, a new quality – better or worse than the previous one. In this case exceeding the measure, results in a worse quality of the natural environment. The worse quality of the natural environment gives a worse quality of life in it.

In ecological science there are theses that the nature of Planet Earth has lost its self-regulatory mechanisms. This thesis is absolutely not acceptable. On the contrary, man as part of nature or as humanized nature has lost his self-regulatory mechanisms in terms of respecting the laws of nature. As for its only regulatory mechanisms, they are increasingly coming to the fore. Global warming followed by unprecedented dry periods in certain parts of the planet, the hunger of millions of people caused by them, catastrophic floods, hurricane-ravaged winds, increased mortality due to polluted air, epidemics and pandemics whose spread is facilitated by dense living in cities are, nothing else, but nature's regulative mechanisms by which it opposes the disobedience of its laws and punishes humanity by reducing the human population with the obvious possibility of exterminating it as, millions of years ago, it exterminated the huge prehistoric animals.

If man violates natural laws, nature attacks him with all its force, using all its destructive action (Gaber, 1973). The need to respect natural laws stems from the fact that man is a part of nature. As humanized nature, he constitutes the part of matter that has gone the farthest with its development. That is why man, when behaving towards the rest of nature, must keep in mind its entirety as his environment and his dependence on that environment. He must adapt his behavior to the natural environment and the laws of nature that rule in him and with him as humanized nature. It is an established guarantee of his success in the struggle for survival. Man as an individual and as humanity on Planet Earth must find self-regulatory mechanisms to adapt to the laws of nature. Otherwise, he will lose the fight for survival on Planet Earth.

2. THE LAW OF MEASURE IN THE USE OF NATURAL RESOURCES

From a historical point of view, until recently man considered that he has a natural right to live in nature and use its resources. His natural right to life includes several rights: the right to breathe clean air, to drink healthy and unpolluted water, to eat healthy food, to bathe in a sea, a lake or a river that no one has polluted, to enjoy his home undisturbed by anyone, to move peacefully in a quiet forest or by the seashore enjoying the sea of greenery or the blueness of the sea, to look at the countless stars in the clear starry sky, to enjoy looking at the blueness of the sky and the clouds floating on it or, in short, to be free from pollution and waste in its environment on Planet Earth (Đorđević, 1982).

The danger that these human rights will be significantly limited or taken away is obvious because nature as the source of those rights and, with it, the environment in which man lives are excessively endangered.

Industry and technology, which are the fruit of scientific achievements and whose application and results were expected to provide a more reliable and better quality of human life, led to such changes in the human environment that brought into question not only the changing of the way of living, but also the conditions for the basic existence of people and the human population on Planet Earth.

The threat to the environment, and thus to the elementary rights of human life, to his freedom and progress, is a consequence of several factors. They are the unlimited consumption, the uncontrolled use of natural resources, the constant and accelerated increase of the human population on the Planet and the greater mobility of people.

Unlimited consumption and uncontrolled exploitation of natural resources are followed by extremely rapid industrialization and the application of increasingly powerful technology. They are based on the system of values inherited from the past and based on the unlimited belief in the inexhaustibility of nature and in man as its unlimited and happy master (Đorđević, 1982).

"Man is the measure of all that exists and does not exist," Protagoras wisely says (Hegel, 1983). If, as Protagoras says, man is the measure of everything that exists in nature, he should measure his actions and activities in the use of natural resources and not use them more than nature can bear, so as not to undergo changes harmful to its existence in its natural environment. On the other hand, man, as a measure of everything that does not exist, should predict the situations that do not exist in the present, but will arise in the future, due to the use of nature's resources, and predicting to determine the measure in their use so as not to cause harmful consequences for his life in the future, and above all harmful consequences for the lives of future generations of people who will live on this planet.

According to Democritus, having a measure in everything is a condition for achieving happiness (Boshkoski, 1981). Peace and, with it, tranquility and happiness, is disturbed not only by extreme poverty, but also by excessive wealth. "Moderate abundance is safer than excessive abundance," emphasized Democritus (Đurić, 1976). Starting from these views of Democritus, we can conclude that man uses natural resources to have more, to live a better, higher quality and happier life. But when using them, he must take care not to exaggerate, because by exaggeration he will cause undesirable changes in nature, which will disturb his peace and tranquility, and with that, a happy life in well-being.

The goal of using natural resources is to achieve a more reliable and better quality of human life. But the goal requires a measure, says Aristotle. The measure refers to avoiding everything that is excessive or insufficient, and thus, choosing the middle, to achieve the goal. According to him, in every human action, two extremes are dangerous: what is excessive and what is lacking (Aristotle , 2003). From this thought of the genius philosopher, it can be concluded that excessive exploitation of natural resources is also dangerous. That is why man, governed by his will, should always choose the environment that is between two extremes and decide for it (Boshkoski, 1991). The human will should rely on reason, which in turn determines the middle between the two extremes. This thought of Aristotle points to the conclusion that reason should determine the middle ground between insufficient and excessive use of natural resources and use them to the extent that will allow man a quality life in the natural environment, and for nature to be renewed and maintained without significant changes in its quality.

The law of measure was later called by Hegel the law of the transition of quantity into a new quality. In our case, if nature is exploited to the extent that it can bear, changes occur in it, to a new quality that is more or less not natural for human life. Instead of a clean, unpolluted, man gets an impure, polluted natural environment (Hegel, 1973).

Marxist philosophy builds on Hegel's views on the relationship between quantity and quality. Every being is qualitatively and quantitatively determined. Small quantitative changes in being do not cause qualitative changes until the moment the limit of quantitative changes that the existing quality of being can withstand is crossed. That limit is actually the measure or limit that must not be exceeded in order not to cause changes in quality. If that limit is exceeded, changes in quality occur (Engels, 1970). For example, let's take a healthy person as a being. He is always subject to the action of carcinogenic substances that come from his environment. If the quantity of those carcinogenic substances is small, he will not get cancer. But if the amount increases to the extent that his organism cannot withstand, he will certainly get sick. With the illness, there is a transition of the quality - a healthy person into a new quality - a sick person as a result of the action of the quantity of carcinogenic substances that has exceeded the extent that his organism can withstand.

From the point of view of the quantum theory of energy (matter), whose founder is Max Planck, man, polluting nature, brings into living and non-living nature huge amounts of negative energy that changes the balance in the natural environment as his surroundings. Through the natural environment, that energy directly and indirectly affects him negatively, as a part of nature or humanized nature. Correctly understanding the essence of the quantum theory, Nietzsche said "This world is a huge energy without beginning and without end..... which is not consumed, but only changes" (Nietzsche, 1972). Accordingly, even the smallest change in that energy, of which man is a part, affects not him. In addition to this we will quote Holbach who in his work "The System of Nature," addresses man with the words "O man, do you never want to realize that you are only a water flower?" Everything changes in space; there are

no unchanging forms in nature; and you imagine that your species cannot disappear and must be an exception to the general law that requires everything to change? So, in your present being, aren't you also subject to constant change? You who, in your madness, brazenly appropriate the title of king of nature, you who measure both the earth and the heavens... even the smallest incident is enough, it is enough for one atom to move, and to be destroyed, to be humiliated.. ..." (Holbach, 1950).

In the middle of the seventeenth century, the English physicist and philosopher Isaac Newton discovered the three basic laws of nature. These are the law of inertia, the law of force, and the law of action and reaction. The use of natural resources is an action of man towards nature. Nature responds to action. The intensity of nature's reaction depends on the intensity of man's action towards it. Seen through the prism of quantum theory, the introduction of huge amounts of negative energy into the surrounding environment as an action, will cause the release of huge energy by nature as its reaction. Forms of release of that energy of nature are catastrophic hurricanes, deluges, thick snow covers, extreme colds, and in contrast to them, extreme heat followed by huge forest fires, the melting of arctic and antarctic ice and the rise of ocean and sea levels.

3. MAN AND THE SELF-REGULATORY MECHANISMS OF NATURE

Man, as homo sapiens, appeared on Planet Earth about 500 thousand years ago (Lexicon, Biology, 1967). From his emergence until the advent of industrialization in the late eighteenth and early nineteenth centuries he lived in a pure, unpolluted natural environment to which he was genetically adapted. So, living the largest part of his evolution, man is genetically adapted to live in a healthy, clean natural environment. Indeed, like any living being on Planet Earth, it adapts to changes in the natural environment. But every process has its own beginning, duration and end. This also applies to the process of human adaptation to environmental changes. The adaptation process is more effective, if the changes are slower. But if the changes in the environment are very fast, there is a danger that they will become faster than its ability to adapt, the natural law of elimination of the being that is not able to adapt to the newly created changes in the environment comes into force. In this particular case it is the man. The evolution of living beings on Planet Earth has shown this many times. One day, in the future, he will show it to man.

Nature is found in every atom of the human body, starting from the particles of the atom, up to the quanta of energy that are obtained when it is completely decomposed; it is found in every molecule, in every human organ. It surrounds man as his natural environment. From its immediate surroundings, it extends over Planet Earth, to the endless cosmic expanses with numerous galaxies from which light travels thousands of light years at a speed of 360,000 kilometers per second.

Nature understood as the universe is a vast infinite whole. Planet Earth is an invisible particle in the endless expanses of Nature. Her humanity is a very small part of her matter. It is part of nature. A part can never rule the whole, especially not a minor part of it.

Man can never be the conqueror of nature. With his work, he changes the natural environment. He constantly creates new means of work that have a strong impact on the environment. With their help he makes his life easier; creates better conditions for survival and development, but he never could, nor will he be able to live without a close connection and dependence on the land, water, air and everything else that surrounds him.

The nature that surrounds man is largely humanized, adapted for his life and survival. Many natural elements have been overcome. The riches of nature are used for human existence. But the fact is that many natural forces have not yet been conquered, nor will they be conquered again. First of all, man has not mastered his biological limitation, which is brought by diseases and death.

Planet Earth is humanity's living environment. Humanity is dependent on biological and natural laws. By overusing natural resources, man destroys nature. Dialectically speaking, the amount of destruction of nature as his living environment, can lead to a new quality in it understood in a negative sense. The law of transformation of quality under the influence of changes in quantity, or known as the law of transition of quantity into quality, is an approach law. The quantity of destruction of nature due to overexploitation of its resources can lead to a quality unbearable for human survival. Man may begin to die out as a biological species. The extinction of biological species, according to Darwin, does not happen suddenly, but gradually, during which the weaker individuals of the species die out first.

With the beginning of the action of the law of the transition of the quantity into a new quality, the law of the negation of the negation also comes into effect. By destroying nature, man denies, that is, complicates and even destroys the natural conditions for his survival. Nature, in turn, denies him by destroying him as a biological species. Thus these two natural laws appear as self-regulating mechanisms of nature. It will continue to exist by gradually disappearing its destroyer - man.

4. INSTEAD OF A CONCLUSION

The law of measure can also be called the law of balance. If positive, good elements prevail in the development of a being, then it goes in a good, positive direction. But if negative elements prevail, it goes in a negative direction. In our case, the beings are nature, as a human environment and man, as a user of its resources. If man achieves a balance in the use of natural resources, or in other words, sustainable development, he can count on the harmless survival and development of Planet Earth (Katila and oth: 2019). But if it does not achieve this and if, losing its self-regulatory mechanisms, it indulges in unlimited consumption and thereby excessive use of natural resources, it will undoubtedly jeopardize its development and endanger its survival on Planet Earth. The essence of sustainable development is precisely to utilize natural resources, while taking into account the law of measure, that is, to maintain balance in nature and thereby enable further development. More precisely, in order to ensure development, it is necessary to maintain the balance in nature during the use of natural resources.

After all, we should not be sceptical. Let's go back to Darwin. In his work The Origin of Species, he writes, among other things, about the struggle for the survival of individuals within a species, as well as species in nature (Darwin, 1978). The struggle for survival is based on the struggle for life. The one who fights survives and manages to stay alive through the struggle of survival. Man, even in the most primitive state in which he can be found in the Amazon rainforest, the African jungle or the wooded mountains of New Guinea is the most dominant animal that has ever existed on Planet Earth. He spread more over her than any highly organized animal species. All other animal species have given way to him and are giving way to him. There is no doubt that for this he can thank to the enormous superiority in his mental abilities and social habits that made him the most perfect social animal (zoon politkon). The end result of these traits is the successful struggle for the survival of the Planet (Darwin, 1977).

The industrial stage of the development of the productive forces remained behind humanity. We can freely say that she had an almost exclusively negative attitude towards nature, its resources and its ecosystems. At that stage of development, capitalism existed with extreme consumer psychology as the leading ideology of humanity. The scourge of the capitalist consumer society unscrupulously destroyed, and unfortunately still largely destroys nature (Marques, 2020).

Humanity, however, is entering a new phase of the development of productive forces, entering a time of new technology of the post-industrial era. Fossil fuels used to drive vehicles are already being replaced by electricity. Electric power plants that convert solar energy into electricity are being built en masse. The thermal power plants, those huge polluters of the space, are beginning to go into history. The tall factory chimneys that grayed the blue sky are slowly disappearing. Factories that used fossil fuels to power theirs numerous machinery are giving way to factories with electric machines.

Post-industrial society has led to a new, progressive phase of man's relationship with nature. Humanity realizes more and more that the unlimited consumption and overexploitation of natural resources can question its survival on the Planet. Therefore it is realigning towards a humanistic attitude towards nature and its resources and towards a new, also humanistic orientation in environmental science (Jepson P., Blythe C., 2020),

Having this in mind, we can freely say that we are entering a new phase of the development of production forces, in which they will no longer grossly disturb the adjacent ecosystems, but will feel oriented towards their protection. Modern technique, technology and science provide extraordinary opportunities for establishing the balance in nature in accordance with the law of measure written about by the wise Protagoras, i.e. the law of the golden mean which, according to Aristotle, is the basis of the happiness of the individual man and of humanity as a whole.

RERERENCES

Аристотел (2003) Никомахова етика, „Сфинга," Скопје.
Бошкоски Б. (1981), Филозофски етички системи, Богословски Факултет „СВ. Климент Охридски.
Danon J., (1976), Filozofski problemi biologije, „Rad", Beograd.
Дарвин Ч. (1977), Човеково порекло, Матица Српска, Београд.
Дарвин Ч., (1978) Потеклото на видовите, „Култура," „Наша книга," „Комунист," „Македонска книга," Скопје
Das R, and other (2020) Emerging trends in Disruptive Technology Management for Sustainable Development, CRS Pres, Libgen (Ecology).
Đorđević J., (1982), Socijalizam i sloboda, IRO „Prosveta" Beograd.
Đurić M., Historija helenske etike, (1976), Beogradski izdavački grafički zavod, Beograd.
Engels F., (1970), Dijalektika prirode, „Kultura," Beograd.
Габер С., (1973). Теорија на државата и правото, „Култура," Скопје

Gorz A.(1982) Ekologjja i politika, „Prosveta“, Beograd.
Grupa autora (1967) Školski leksikon, Biologija, 12 knjiga, „Panorama“, Zagreb
Hegel (1983) Istorija Filozofije, Beogradski Izdavački Grafićki Zavod, Beograd.
Хегел (1973), Наука логике, „Просвета,“ Београд.
Холбах П., (1959), Систем природе, „Просвета“ Београд,
Jepson P., Blythe C., (2020), Rewilding: The Radical New Science of Ecological Recovery, Icon Books LTD.
Katila P. and other (2020), Sustainable, Development Goals: Their Impacts on Forest and People, Cambridge University Press.
Keane E.R., (2019), Applying Ecosystem and Landscape Models in Natural Resource Management, CRS Pres, Libgen (Ecology).
Marques L. (2020), Capitalism and Environmental Collapse, Springer, Libgen (Ecology).
Ниче Ф. (1972), Воља за Моћ, „Просвета“, Београд.
Nugije R.N., (1990) Prapovjesna vremena, „Založba“ - Mladinska knjiga, Ljubljana – Zagreb.
Сулејмани С., (1976), Филозофски Теми, „Мисла,“ Скопје.
Žarden Ž. (2006), Ekološka etika, Službeni glasnik Republike Srbije, Beograd