

---

**ECOLOGICAL CADASTRE IN FUNCTION OF THE RIGHT TO INFORMATION THE  
CITIZENS ABOUT STATES IN THE LIVING ENVIRONMENT**

**Temelko Risteski**

University FON, Skopje, N. Macedonia, [temelko\\_mkd@yahoo.com](mailto:temelko_mkd@yahoo.com),

**Gjorgi Tonovski**

University St. Kliment Ohridski, Bitola, N. Macedonia, [gtonovski@yahoo.com](mailto:gtonovski@yahoo.com)

**Nazmi Maliqi**

Univesrsity FON, Skopje, N. Macedonia, [nazmi.maliqi@fon.edu.mk](mailto:nazmi.maliqi@fon.edu.mk),

**Fadilj Shabani**

International University, Novi Pazar, Serbia, [nazmi.maliqi@fon.edu.mk](mailto:nazmi.maliqi@fon.edu.mk)

**Abstract:** Living environment is a space in which the man lives with object, flora and fauna on it. The space that is not polluted by harmful agents, emissions of harmful radiation, noise, which does not have excessive humidity, unbearably high or low temperatures is a healthy environment. Man as a creation of nature can live normally and happily in a healthy environment. He has the right to do so. This right is guaranteed to him by the international legal acts and the constitutions of the states. Among them is the Constitution of the Republic of Macedonia.

In order for a person to enjoy the right to a healthy environment and to use the rights to protection of the natural environment, he must have information on environmental pollutants. In the function of informing the citizens about polluters or endangers of the environment are the records and information services or information and documentation services, abbreviated as INDOC services. In the ranks of these services, from the aspect of environmental protection, the Ecological (Environmental) cadastre comes first. This cadastre contains data for activities and installations that endanger and potentially can endanger the environment, and in particular data on:

- the name or title of the polluter and the address of the installation location,
- a brief description of the activities and the technical process,
- significant emission-related, hazardous data substances present in plants, waste generation, utilization natural resources and energy, issued permits and amendments to permits; and
- for the control being carried out, for the significant results and for the undertaken measures.

The Ministry of Environment and Physical Planning establishes and maintains a single Cadastre for the environment (ecological cadastre). This cadastre, includes several cadastres, as follows: Cadastre of air pollutants, waters and the soil, the Cadastre of the Noise Producers, the Cadastre of the Waste Generators, the Cadastre of Protected Areas, Pollutant Register and other cadastre determined by the special laws which contain provisions for the protection of the environment.

**Keywords:** cadastre, right, information, living environment, pollution.

## INTRODUCTION

Natural space in which man lives includes construction space, land (soil), air, water resources (springs, river, lake, and sea), and space above ground, mineral wealth and so on. Natural space with flora and fauna on it in which the man lives is man's living environment.

Due to improper use of resources of natural space comes to pollution of the living environment. Pollution is a change of the living environment as a result of illegal emissions and / or other wrongful act or absence of required actions, or impact that can change the quality of the environment.

The environmental pollution is due to: unplanned construction of buildings, uncontrolled ejection of industrial and municipal waste, destruction of green areas, air pollution by gases and vapors from industry and by exhaust gases, pollution of water sources,<sup>238</sup> watercourses, water reservoirs on land and sea, noise, irregular deposit of radioactive waste and loads of space by electromagnetic, ionizing and radioactive radiation.

The biggest problems in terms of the right to a healthy living environment come from human exploitation of space in order to meet human needs. He exploits the space for the construction of diverse facilities as well as to perform the most varied activities in all areas of economic and social life.

By the Environmental Pollution man is deprived of the right to a healthy living environment and health facilities on it.

---

<sup>238</sup> De Jardin J. R. (2006), Environmental Ethics, Glasnik, Belgrade, p. 104-105

---

Man as a creation of nature can live normally and happily in a healthy environment. He has the right to do so. This right is guaranteed to him by the international legal acts and the constitutions of the states. Among them is the Constitution of the Republic of Macedonia (1991).

The right to healthy living environment includes a number of environmental rights, such as: the right to a healthy climate, as a product of nature, the right to clean air, the right to unpolluted water, the right on the product of nature released from harmful chemical ingredients, the right to a natural area that is not contaminated with hazardous and harmful waste, the right to protection from the noise and uproar on the area, the right to security from radioactive contamination, electromagnetic radiation and other ionizing radiations, the right to a space that is not burdened by dense and inhumane accumulation of buildings, apartments, people and vehicles, the right to enjoyment in a beautiful landscape and blue skies, and other rights.

In order for a person to enjoy the rights of the complex of the right to a healthy environment and the rights to protection of the natural environment, he must have information on environmental pollutants. In the function of informing the person about polluters or endangers of the environment, the records and information services or information and documentation services, abbreviated as INDOC services.<sup>239</sup> In the ranks of these services, from the aspect of environmental protection, the Environmental cadastre comes first.

the Ministry of Environment and Physical Planning establishes and maintains a single Cadastre for the environment (ecological cadastre). This cadastre, as unique, includes several cadastral, as follows: Cadastre of air pollutants, waters and the soil, the Cadastre of the noise producers, the Cadastre of the Waste Generators, the Cadastre of protected areas and other cadastre determined by the special laws which contain provisions for the protection of the environment.

### **1. MATERIAL-LEGAL BASES OF THE ECOLOGICAL CADASTRE IN THE RN MACEDONIA**

Citizens live on the geographical space of the state. From the point of view of environmental protection all objects that are built on this space, in different ways, directly touch their interests. That is why they are always the most directly interested in the problems of spatial and urban planning and the building of objects in the space.

With the spatial and urban planning and the arrangement of the space, the rational organization of the space and the settlements is envisaged by the construction of the settlement of the populated areas and the wider spatial units. It is directed in accordance with the policy of the socio-economic development for the promotion of the material basis of the life and work of the citizens and the improvement of the general living and living conditions of the space. In this connection, it can be said that the basic goals of spatial planning and space arrangement are:

- the achievement of the highest level of functionality of the space in the realization of the interests and satisfaction of the needs of the citizens, in accordance with the principles of economy and rationality;
- protection and promotion of the values of the space, as well as the natural, as well as those created by man;
- construction and arrangement of settlements and areas of space in accordance with the natural needs of people for a healthy environment, and in connection with this, for unmet and correct psychophysical and spiritual (cultural and aesthetic) development of the human person.

One of the basic imperatives of modern planning and arrangement of space is providing the maximum level of functionality in meeting the needs of the citizens.

The functionality of the settlements, the space around them and the wider space will be achieved if they best suit the needs of the citizens as places for becoming, for work and for rest. Then, if they provide their physical and mental health, if the costs of building and maintaining the facilities, installations and devices in them are in accordance with the material possibilities of the citizens and the local self-government units, and if their formation and aesthetics provide them with pleasure and joy citizens, they are of importance for their mental health.

Man as a creation of nature can live normally and happily in a healthy environment. He has the right to do so. This right is guaranteed to him by the international legal acts and the constitutions of the states.

One of the fundamental values of the constitutional order of the Republic of Macedonia is the arrangement and humanization of the space and the protection and promotion of the environment. Under Article 43 of the Constitution, everyone has the right to a healthy environment. Everyone is obliged to promote and protect the environment and nature. The Republic provides conditions for the exercise of the right of citizens to a healthy environment.

To conduct in the life the cited constitutional provisions related to a healthy environment and for implementation the documents of the European Union on the environment the Republic has passed several laws that directly and indirectly protect the environment. Among them, the most important are: The Law on Environment Protection, the

---

<sup>239</sup> Chuchevska D.(1984), INDOC services - the Role and the Functions, Makedonska kniga, Skopje, p. 31-44

---

Law on Nature Protection, the Law on Quality of Ambient Air, the Law on Plant Protection, the Law on Hunting, the Law on Fisheries and Aquaculture, the Law on the Protection and Welfare of Animals and the Law on Waste Management.

## **2. ECOLOGICAL CADASTRE IN FUNCTION OF INFORMATION THE CITIZENS ABOUT STATES IN THE LIVING ENVIRONMENT**

The data (information) contained in the ecological cadastre are basically data, i.e. public information. They are intended for informing the public entities (legal and natural persons and oth.) interested in taking measures for environmental protection. Therefore, the INDOC services that manage this data should provide all interested clients with free access to them.

The normative-legal bases for free access to this and other data are contained in the Law on Free Access to Public Information (2006). This law regulates the conditions, manner and procedure for exercising the right to free access to public information available to the bodies of the Republic and the units of local self-government, as well as public institutions and services, public enterprises, legal and natural persons performing public authorities and activities of public interest established by law (holders of information). This law has been enacted to ensure publicity and openness in the work of information holders, and to enable interested social entities to exercise their right to free access to public information in accordance with the general rule that free access to information have all legal entities and individuals, except in cases determined by law.

Otherwise, from the analysis of the basic and special environmental laws, and the laws on information and electronic communications, there is a certain delay between the environmental laws and laws on information and communication regarding the normative regulation for electronic keeping of records and submission of data, i.e. information by electric way. There is no doubt that this is a consequence of the fact that the development of non-environmental laws was apparently carried out by persons with knowledge deficits in the field of information and communication technologies.

The Law on living Environment does not contain provisions about digitalization of the cadastral evidence. The establishment and maintenance of the digital ecological cadastre is an imperative of the contemporary protection of environmental rights. The Constitution of the Republic of Macedonia (1991), as the hierarchical highest legal act, raises the right to inform citizens about all issues that are in their interest at the level of basic constitutional law.

The Law on Environment contains a principle that encompasses the obligation of all organs of state power, municipal bodies, and the City of Skopje to prescribe procedures that ensure the right of access to information of importance for the protection and improvement of the environment. In addition to this principle, this Law in the provisions for specific obligations and measures also contains provisions for informing the public about environmental pollution and for undertaking and introducing mandatory measures for the most protection. Finally, this law contains provisions for the establishment of a separate environmental information system and its threats (Article 40 -50). Similar provisions also include the Law on Nature Protection (2004) in Article 158. There is no doubt that informing citizens and other environmental actors about environmental threats will be far more efficient if a digital ecological cadastre is established. Its establishment will allow the data on environmental threats to be available to every social entity and at any time. With such data available, the social entities, the citizens and their associations, the inspections and other control and protective institutions of the society will be able to timely undertake the necessary measures for the protection of nature, and thus for the fulfillment of their ecological rights.

Timely and quality informed citizens, directly or through the authorized social institutions, react with the taking of environmental protection measures, usually as soon as the information about its pollution and degradation. This is because of the notorious fact that the protected environment allows a person to live in a healthy environment as the most immediate condition for a healthy life. Only a healthy life can be happy and long-lasting. There is no healthy life without a healthy environment. There is no healthy environment without its protection. With the protection of the environment, the citizens' environmental rights are directly realized and protected.

A natural characteristic of a person is to react to the danger as soon as he finds out about it. Precisely because of this, the provision of timely and thorough information on environmental threats is of existential significance for the citizens and for every social entity. By timely informing the citizens about the threats to nature we will ensure the existence of one of the fundamental values of the constitutional order of the Republic of Macedonia declared in Article 8 of the Constitution. That is the arrangement and humanization of space and the protection and promotion of the environment and nature.

Effective information involves the dissemination of fast, timely, and quality environmental information to stakeholders. The natural response to such information is to take measures to protect that environment. Taking

---

protection measures is in the function of protecting and exercising environmental rights, especially the right to healthy living environment, as a basic ecological right.

### **3. ECOLOGICAL CADASTRE IN FUNCTION ON CONTROL OVER THE POLLUTANTS OF THE SPACE**

In order for a person to enjoy the rights of the complex of the right to a healthy environment and the rights to protection of the natural environment, he must have information on environmental pollutants. In the function of informing the person about polluters or endangers of the environment, the records and information services or information and documentation services, abbreviated as INDOC services. In the ranks of these services, from the aspect of environmental protection, the Environmental cadastre comes first. The Law on Environment (2005), Article 5, item 15 defines the cadastre of the environment as a quantitative and qualitative record of pollutants and sources of pollution that release pollutants and substances in the environmental media, which includes the map of pollutants. The Law on Environment (2005) in Articles 42 and 43 in detail regulates the competence for the establishment and maintenance of the unique Environmental Cadastre. As regards the competence for establishment and maintenance of this cadastre, according to the Law, the body of the state administration responsible for the affairs of the environment is competent. This body is the Ministry of Environment and Physical Planning.

The Law stipulates the contents of the Environmental Cadastre with the provisions of Article 42.

According to Article 42 of the Law on Living Environment, the Ministry of Environment and Physical Planning establishes and maintains a single Cadastre for the environment (ecological cadastre). This cadastre, as unique, includes several cadastral records, as follows: Cadastre of air pollutants, waters and the soil, the Cadastre of the Noise Producers, the Cadastre of the Waste Producers, the Cadastre of Protected Areas and other cadastre determined by the special laws which contain provisions for the protection of the environment.

According to the Law (Article 42), the Environmental Cadastre contains data on the activities and installations that endanger it and can endanger the environment, especially for:

- the name or the name of the operator and the address of the location of the installation;
- a brief description of the activities and the technical process;
- significant data pertaining to emissions, hazardous substances present in the plants, generation of waste, use of natural resources and energy, and
- for the issued licenses and for the amendments and additions to the licenses and the control carried out, for the significant results and for taking measures.

The form and the content of the cadastre shall be prescribed in detail by the Minister of Environment and Physical Planning.

For the purpose of completing and updating the cadastre, the Law obliges legal entities and natural persons to submit to the Ministry of Environment and Physical Planning data on their activities of importance for the conduct of the cadastre records.

The Law, with a dispositive norm, especially gives the opportunity for the municipalities on the territory of the Republic, the City of Skopje and its municipality, to establish and maintain environmental cadastral records for their areas. The mayors of the municipalities, the City of Skopje and the municipalities in it can submit the data from these cadastral records to the Ministry of Environment and Physical Planning at least once a three months.<sup>240</sup>

The Ministry of Environment and Physical Planning, as the holder of the cadastral records for environmental protection, in accordance with Article 3, line 1 of the Law on Free Access to Public Information is the authorized holder of the information contained in that record. As holder of information, it is obliged, in accordance with Article 8 of this Law, to appoint one or more officials who will work on the issues of providing free access to information. These officials should reach out to interested stakeholders, provide them with the information they need, and help them reach out to the information more easily.

The establishment of a digital ecological cadastre imposes the need for these persons to be well trained in the electronic management of cadastral records and in the use and submission of data and information contained in those records and to be capable of handling information and computer technology. The establishment of this cadastre will facilitate and expedite the information of interested stakeholders about phenomena and processes in the living environment important for its protection. Easily accessible and fast information regularly leads to a rapid response by environmental stakeholders. That, in turn, means more effective protection of that environment and thus, more effective realization of environmental human rights. From this it can be concluded that the digital ecological cadastre will directly serve the effectiveness and efficiency in the protection of the environment, and through it

---

<sup>240</sup> Law on Environment (Consolidated text) [www.moepp.gov.mk](http://www.moepp.gov.mk)

---

indirectly will serve the protection of the human environmental rights of the Macedonian citizens. To achieve this, the cadastral handling of data and information should enable the establishment of comprehensive, complete and easily accessible records of cadastral data.

Comprehensiveness of records, from the aspect of living environment protection, implies recording of all data on activities and installations in space that may endanger it.

Completion of records implies timely and complete entry in the records. It is in dialectical unity with the comprehensiveness of the records. As a dialectical unity they lead to a quality of records. Comprehensiveness constitutes the outer - external dimension of quality and the completeness its inner dimension. Contrary to completeness, lies the incompleteness of cadastral records, which is always the result of inadvertent and unethical cadastral work. In this regard, the Law on Free Access to Public Information (Article 9) obliges the holders of environmental cadastral records to regularly update the lists of information - data available to them and make it publicly available. There is no doubt that the most convenient means of publishing these lists is the internet site whose establishment for this purpose is prescribed by this law.

The easy accessibility of cadastral records data encompassed by the digital environmental cadastre implies the existence of networked cadastral data holders and users, with unified communication models for information exchange and standardized information support. The material basis of standardized information support consists of standardized information technique and technology. By this will be established technical-technological compatibility between the user information systems and the information systems of the information holders within the networked information system of users and information providers. The technical-technological compatibility of information systems enables interoperability in the exchange of information. Interoperability is the basis of the efficiency of the information process understood as information communication between the information-holders and their recipients, i.e. users.

#### **INSTEAD OF CONCLUSION**

The right to life is the ultimate human right. It is his birthright. All other rights of man are in its function. As the ultimate human right, that is directly or indirectly subject to regulation of all international legal acts on human rights. Thus, the Universal Declaration of Human Rights recognizes the right to life in the first place along with the right to liberty and security of person. The right to liberty means life free from fear, anguish and anxiety. A man can be freed from fear only when safe. He will be safe if you live in a safe space.

Space, in which he lives, with all the objects on it, both natural and artificial, with all the flora and fauna that inhabit is its living environment. Thus, man's environment is a place where one lives and living performs all life activities. In it he does, rest, recreate, fun etc.

Today, man's living environment is more or less degraded. Degraded environment is not a healthy environment, because living conditions in it are not healthy. Environmental degradation is caused primarily by improper exploitation of natural resources by man; their over-exploitation; then space pollution by emission of harmful gases and vapors; by land pollution with waste materials and nitrates from fertilizers; by rivers, lakes and seas pollution with wastewater and other harmful liquids discharges; by forest fires caused by man; by radioactive and electromagnetic space contamination; by excessive noise etc. Having this in mind, in terms of natural law, improper exploitation of natural resources in the space and its pollution of man is denying many natural rights including: the right to a healthy climate as a natural product, the right to clean air, the right to unpolluted water, the right to the products of nature free from harmful chemical composition, the right to a natural space that is not contaminated by hazardous and noxious waste, the right to protection from noise and in the area, the right to security from radioactive contamination and electromagnetic radiation, the right to a living space that is not loaded with inhumane and dense accumulation of buildings, apartments, people and vehicles which reduce a possibilities to experience life with the necessary satisfaction, the right to enjoy the beauty of the area and other rights.

Citizens need precise information on space pollutants, the types of pollution, their hazards, the space affected by pollution and the possible consequences of pollution in order to enjoy the many rights arising from a healthy environment. With this information, citizens will take appropriate protection measures, either in person or through environmental authorities and institutions.

For this purpose it is necessary to collect and gather information on the state of the environment and its current and potential pollutants. The Environmental Cadastre is an information documentation base and a service for that information. Therefore, the establishment and proper maintenance of that cadastre at state and local level is of paramount importance for the protection of citizens against environmental pollution.

According to the available information in the Republic of Macedonia, measures are taken to establish and maintain the Environmental Cadastre. Proof of this is the provisions of the Law on Environment that regulate these issues.



---

According to the provision of Article 42, paragraph 5 of this Law, the municipalities, the City of Skopje and the municipalities therein may establish and maintain an environmental cadastre for their areas. On the base of the data from the cadastre of the municipality, the City of Skopje and the municipalities in the City of Skopje, at least once every quarter, the mayors of the municipalities, the mayor of the city of Skopje and the mayors of the municipalities thereof, inform the Ministry of Environment and Physical Planning of the works in the area of environment.

The data from the terrain and the actual occurrence on it (high fires, untidy waste dumps, enormous air pollution in cities, especially in winter, etc.) indicate that measures taken to prevent environmental pollution are ineffective. There is no doubt that this is the result, among other things, of the insufficient and inaccurate records of the pollutants, which precludes effective measures against them. For this purpose it is necessary to change the optional provision of Paragraph 5 in Article 42 expressed by the words "may establish and maintain an environmental cadastre" with an imperative provision in which the word "may" shall be replaced by the words "are obligatory." Enormous environmental pollution and endangering obviously require a strong hand of government in the service of citizens and their right to a healthy life in a healthy environment.

#### REFERENCES

- Chuhevska D. (1984), *INDOK services - the Role and the Functions*, Makedonska kniga, Skopje.
- De Jardin J. R. (2006), *Environmental Ethics*, Glasnik, Belgrade.
- Constitution of the Republic of Macedonia (Official Gazette of the RM n. 52/1991 with amendments)
- Law on Hunting ("Official Gazette." Number 26/09).
- Law on Fisheries and Aquaculture ("Official Gazette". No. 7/08).
- Law on the Protection and Welfare of Animals of the Republic of Macedonia (Official Gazette of RM ". No 113/07.).
- Law on Plant Protection of the Republic Macedonia (Official Gazette of RM ". No 25/98.).
- Law on Protection of Ionizing Radiation and Radiation Safety ("Official Gazette of RM". No 48/02).
- Law on Environment -Consolidated text (2015), [www.moepp.gov.mk](http://www.moepp.gov.mk)
- Law on Nature Protection (Official Gazette of the RM.) n. 67/2004, 14/2006, 84/2007, 35/10 и 47/11.).
- Law on Quality Ambientaly Air. (Official Gazette of the RM. n. 67/2004, 92/2907, 35/10 and 47/11).