THE NATURAL HERITAGE OF LIBRAZHD'S DISTRICT, IN FUNCTION OF THE STABLE DEVELOPMENT

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Abstract

During the treatment of this paper it is aimed the accurate characterization of natural objects that constitute the natural heritage of this region, as well as the proposals for new monuments. In this article it is conducted a genuine scientific work for the analysis of these monuments and the values associated with them. The basic method that is used in the treatment of this paper has been the one of direct field observations, analyzing these aspects; their physical condition, size, prognosis and photography. The paper has scientific value to researchers in the field of geography and local authorities.

The main part in the paper is occupied by the results of the performed work in the following areas: The assessment of the natural conditions of this district, in function ofthe natural monuments. The classification of natural monuments; geomonuments, bio and hidromonuments. The physical analysis of the declared monuments,explaining their current situation and future trend.Their association with different views. Proposals for new natural monuments, for those objects that meet the criteria of being such. All these proposed monuments, are analyzed by the natural aspect, and accompanied by photos. At the end of this paper are given the conclusions, noting that the natural heritage of this district is a national asset. There are given some recommendations such as; their defence is responsibility of the state and of all the public opinion. Their good management requires strong legal measures in order to preserve these values.

Keywords: Heritage, Geomonumentes, Biomonuments, Hidromonumentes, Management

Introduction

The district of Librazhd lies in the South-eastern Region of Albania, between these geographical coordinates: 40^{o} 54' 12'' and 41^{o}15'07'' north latitude, 20^{o}08'11''and 20^{o}35'03'' east longitude. The east side of this district is bordered with the state of Macedonia, the border passes in Jabllanicë-Belicë ridge. In the western part it is bordered with Elbasan's district, in the south with the districts of Gramshi and Pogradec, while in north with the districts of Mat and Tirana. It has a total area of 1013 km^2. In this important district pass important national automotive roads as; Elbasan-Librazhd-Qafë Thanë- Macedonia and Librazhd- Pogradec-Korçë- Kapshticë. These roads have created many connectivity possibilities regarding the southeast region such as with Greece and Macedonia, these show a favorable geographical position, which helps the economic development of this region.

From the perspective of the lithologic constuction it has some types of depositions, which express the morphological and complex nature of this district. Magmatic rocks are found in the eastern and central part. A large xtent have the flysch deposits that dominate in the province of Çermenika and in the south area. On these formations, there are carbonate deposits of Upper Cretaceousemerging in the form of spots in the east side of Shkumbin's valley. Molassic deposits are mainly represented by conglomerates, mixed with sandy, clay and alevrolite layers. They lie mainly along Shkumbin's valley, in the area of Mokra, they

have reddish tint. This district lies in the tectonic area of "Mirdita" and has a complex tectonic. There are several geological structures such as; The Shkumbin's syncline, the anticline ridge Jabllanica- Belica, many kueststhat are expressed in the hilly landscape. There are different tectonic discontinuity in the horizontal and vertical direction by conditioning the differentiation in the landscape.

In the region of Librazhd are distinguished some genetic types of landscape, conditioned by the lithology such as; the erosivo-denuding type of landscape, the lithological landscape, the river landscape, and the glacial one. It dominates the erosivo-denuding landscape that is related with the spread of terrigenous and river deposits, where it involves the upper basin of Shkumbin's river.

As a result of the great lithologic diversity, the tectonic evolution and present processes of the landscape's modeling, the district of Librazhd has a complex morphology. Here are distinguished the field of Domosdova in Prrenjas, the river valley of Shkumbin, highlands, ridges, hilly systems, etc.. The landscape is mostly hilly-mountainous. The lowest point is at the height of 173 m above sea level in the extension of Miraka and the highest 2,252 m in the mountain of Shebenik. The values of horizontal fragmentation varies from 1km/km^2 to 5km./km^2. The lowest values are found mostly in limestone formations, while the highest ones in molassic territories. The value of the landscape's energy have high values ranging from 100 to 500m/km^2. The territories with the lowest energy are extended on both sides of Shkumbin's valley, while those with higher values are found in the mountains of Shebenik, Polis, Jabllanica, etc.

The climate is generally mediterranean-hilly in the low, pre-mountainous and mountainous areas with elements of the continental climate. The average annual temperature is 14^o C, in January 4.4 ^{o}C, while in July 23.2^{o}C. The amount of precipitation goes up to 1300 mm per year. The above district is noted for a rich hydrography. The total length of water leakage is 2700 km, which is an average density of 6.5km/km^2. The main river is the one of Shkumbin with its branches in both arms as the one of Rrapun, Zalli I Qarrishtes, Zalli I Gurakuqit, Bushtrica, Hotolishti, Gostimës etj. In this district are distinguished many lakes, as the ones of Shebenik's mountain with glacial origin, there are also karst springs and lakes.[319] (Qiriazi P. Sala S. The monuments of Albania's nature, 2005)

The main morphological units of Librazhd's district are; The highland of Çermenika, the highland of Golloborda. The Massive of Shebenik and Jabllanicë-Belice ridge, Polis-Guri I Zi ridge, the valley of Shkumbin and the hollow of Domosdova.

Methodology

During the drafting of this paper I am based on the method of direct observation of this region's nature in the following areas: The assessment of natural conditions, the soil's geology, the landscape, the climate, plant and waterfront resources. In this paper are explained and interpreted the major proclaimed natural monuments, and are also identified many other natural monuments eligible to be such. Various measurements are made and geomorphological schematic profiles are built. New natural monuments are accompanied by various photos. It is compiled the map of the natural monuments of this district.

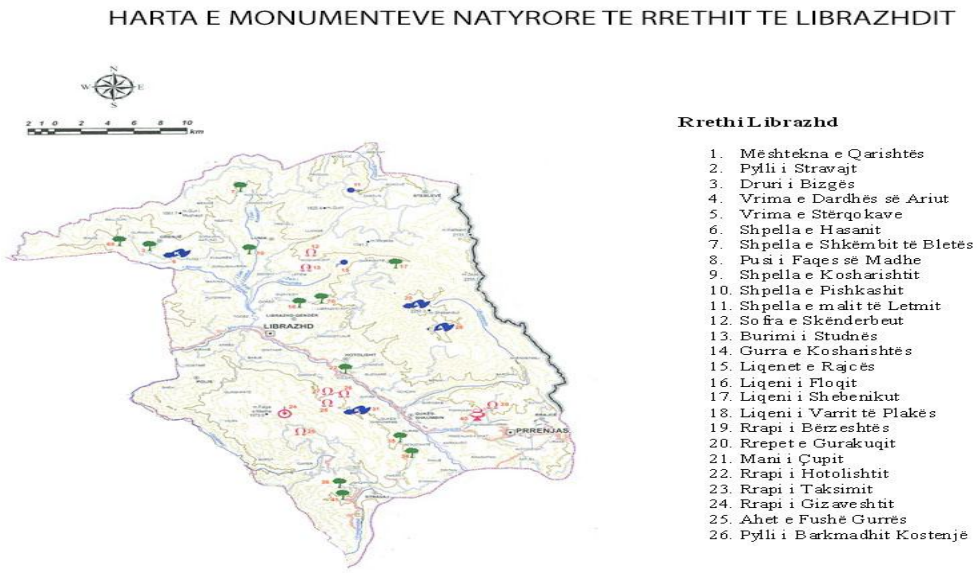
Results

The heritage is a value forwarded generation after generation. It represents a value of the natural environment and, as such, it is natural, but also material and spiritual value of the society and, as such, it is cultural too. In this paper is dealt only with the natural heritage.

In the composition of the natural heritage there are also objects, landscapes, ecosystems, special, rare or unique habitats, relicts, endemic or endangered to extinct. As

[319] (Qiriazi P. Sala S. The monumentes of Albania's nature, 2005)

such, they have great scientific, cultural, didactic, but also tourist importance. Therefore they are stored and protected with strict ways, clearly defined and précised in special laws. All these objects, landscapes, habitats and ecosystems are considered unique natural heritage, which is conditioned only by natural legality, while human activity is practised only to protect and identify their values, which are expressed in many rich biodiversity and in the particular landscape (Map 1).



Map 1. The natural monuments of the Librazhd's district of Librazhd

The monuments of nature are listed on the national heritage values, constituting the third category of protected areas, but according to our law for the protected areas, for their unique and irreplaceable importance, they benefit the protection of first category, in accordance with which are prohibited: the alienation of values for any kind of purpose of economic exploitation; works or activities that change the character of the monument or natural course of its evolution. (Qiriazi P, Sala S. 2005)

A monument of nature is an object of nature with one or some unique values: scientific, ecological, cultural, historical, aesthetic, didactic, religious; a habitat of a rare, endemic, threatened or of special importance specie and surface up to 50 hectares. Their values are related to the specificity of action of the natural factors and legality, which has conditioned a clear distinction from other objects of nature. These values are numerous, mostly unique and irrevocable for the nature and our society:

Irreplaceable source of information for many sciences; resource for scientific researches;

Cultural resource for professionals and people of different ages; Irreplaceable didactic tools, pupils and students in these real natural labs take and materialize their scientific knowledge;

Considering and protecting the values of the monuments of nature, they become a source of ecological education of the citizens. We are concretizing this by giving an example of the catastrophic consequences of erosion. In our country, the forms created by it, are known as "bokërrima", in which lacks not only the plant cover, but also the one of soils, on the surface it has emerged the fundamental rock, which is sterile, barren. These areals are fairly regarded as "wet deserts". They serve as clear examples of nature's 'revenge' for the wild use of soil and vegetation from the human society. As such, they convince all visitors for the danger that accompanies the major human errors.

In the district of Gramsh until today are revealed 26 monuments of nature. Of which; 9 objects are geomonuments, 6 objects are hidromonuments and 11 other objects are biomonuments.

Geomonuments

Vrima e Dardhës së Ariut. It is located in the southwest of the peak of 'Faqes së Madhe' (Polis), 1550 m above sea level. It is a karst shadoof, formed in limestone rocks of the upper Crete, 20 m deep, with the bottom blocked by the clay. It is explored by the Speleologists of "Puglia Grotte-Dauno" of S. Sala. It has scientific geomorphological, biological, didactic values. It can be visited by the rural road Librazhd- Dardhe Mal-monument.

Vrima e Stërqokave.It is located in east of the peak of 'Faqes së Madhe' in Polis, 1640 m above sea level. It is a karst shadoof in limestone cliffs of Crete, 24 m deep with the bottom blocked by a mass of ice, perhaps fossil of Quaternary period. It is explored by the Speleologists of "Puglia Grotte-Dauno" S. Sala. It has scientific geomorphological, biological, didactic value. It can be visited by the rural road Librazhd- Dardhe Mal

Shpella e Hasanit. It is located near the village Dardhe Mal, 930 meters above sea level. It is formed in the limestone cliffs of the upper Crete, about 43 meters long, about 1 meter in wide and 4 meters high. It has stalactites and stalagmites, scientific, cultural, tourist and didactic values. It is explored by the Speleologists[320] of "Puglia Grotte-Dauno" (1996) and S. Sala. It can be visited by the rural road Librazhd-Dardhë Mal.

Shpella Shkëmbi i Bletës.It is located in northwest of the village Dardhë Mal in 'Shkembi i bletes' with height of 100 m. It is explored by the Speleologists of "Puglia Grotte-Dauno" S. Sala. (1996). It is over 60 meters long, 20 meters wide, 25 meters high. It has scientific, didactic and tourist values. It can be visited by the rural road Librazhd-Dardhë Mali-monumenti.

Pusi i Faqes së Madhe It is located on the eastern slope of Polis, 1750 m above sea level. It is formed in the limestone of Crete, 62 m deep, with the blocked bottom. It was explored by the Speleologists (QiriaziP. Sala S. monuments of nature of Albania, 2005) It has scientific geomorphological, didactic, tourist value. It can be visited by the rural road Librazhd-Dardha e Malit.

Shpella e Kosharishtit. It is located near the village of Kosharisht, 350 m above sea level. It is formed in limestone of Crete, about 60 meters long, 10 meters wide and 5 meters high. It has stalactites and stalagmites of rare beauty, and scientific (geomorphological, hydrological, biological), didactic, tourist value. It can be visited by the rural road Librazhd-Kosharisht.

Shpella e Pishkashit. It is located near Pishkash village, 400 m above sea level. It is formed in the limestone of Crete, about 100 m long, 5-7 wide and 3-4 high. It is filled with stalagmites and stalactites, and it has scientific (geomorphological, hydrological, biological) didactic and tourist value. It can be visited by the rural road Librazhd-Pishkash.

Shpella e malit të Letmit. It is located near Letëm village, 800 m above sea level. It is up to 60 m length, while its width reaches 7-8 m. It is formed in the Trias-Jurasi limestone, it has stalactites and stalagmites, scientific (geomorphological, biological), didactic and tourist values. It can be visited by the rural road Librazhd–Letëm.

Sofra e Skënderbeut. It is located in the south of Shebenik, 1,376 m above sea level. It is a limestone block of the upper creteplaced over the ultrabasics in table shaped, about 1 km in length and 800 m wide. In lithological contact the indication of the peneplain "Hello" (Mirdita) is the red crust of iron-nickel ore. The legend says that on this stone, Skanderbeg's

[320]"S. Sala Puglia Grotte-Dauno" (1996)

army ate bread. It is studied by Prof. E. Pumo. The use of iron-nickel ore damaged the monument's values. It has geological, geomorphological, historical, tourist value. It can be visited by the road Përrenjas-Pishkash. [321](Qiriazi P. Stud. Wildlife No. 13. 2002. Pp. 23)

Hidromonumentes

Burimi i Studnës. It is located in the east of Fushë Studnës (Gollobordë), 600 m above sea level. The karst source comes by the contact between the limestones and old flysches. With lavish, pure and cold water it creates a pleasant environment. It has hydrological scientific, didactic, tourist value. It can be visited by the rural road Librazhd-Studnë.

Gurra e Kosharrishtës It is located near the village of the same name, 600 m above sea level. It is a karst source that comes by the contact between the triassic limestones and tortonian molasse. With great flow, clean and cold water, it creates an attractive environment. It has hydrological scientific, didactic, tourist value. It can be visited by the rural road Librazhd-Kosharisht

Liqenet e Rajcës. They are found on the eastern slope of Shebenik, in the glacier circus, near Rajcë village, 2,200 m above sea level. There are four glacial lakes between moraine, with a length of 100-200 m, 80-100 m wide, several meters depth. They comprise alpine lake ecosystem. They have clean water and the surface freezes in winter. They have scientific (hydrological, biological), aesthetic, didactic, ecological value. It can be visited by the rural road:- Përrenjas-Rajcë-Skënderbej –the pedestrian path towards Shebenik.

Liqeni i Floqit. It islocated near Floq village, 700 m above sea level. It is a karst lake formed at the exit of the karst source, in the contact between limestones and molasses. It has hydrological scientific, didactic, tourist value. It can be visited by the rural road Librazhd-Floq.

Liqeni i Shebenikut.It is located in the northern peak of Shebenik, 1800 m above sea level. It is located in a complex circus, it is a glacial lake with pure water, that freezes during winter on its surface. It is an alpine lake ecosystem with hydrological scientific, aesthetic, ecological values. It can be visited by the rode road Librazhd-Rajcë and on pedestrian way by Rajca and Qarrishta

Liqeni i Varrit të Plakës. It is located near the Xhyrë village, 600 m above sea level. It is a small karst lake, formed in the exit of the karst source, by the contact between limestone of crete and tortonian molasses. It has scientific (hydrological, biological), didactic and tourist values It can be visited by the road Librazhd-Xhyrë.

Bio

Mështekna e Qarishtës.It is located on the northern slope of Qarishta's valley, 850 m above sea level. There is a birch forest *(Betula alba),* wood endangered with extinction. It has biological ecological and scientific values. It can be visited by the rural road Librazhd-Qarishtë..

Pylli i Stravajt.It is located near Stravaj village, 800 m above sea level. It has beech trees (Fagus silvatica) accompained with other broadleaved plants. It has scientific biological, ecological values. It can be visited by the rural road Librazhd-Stravaj.

Druri i Bizgës. It is found in the forest of Stravaj, about 1500 m above sea level. It is represented by two beech trees united in the height of 5 m, from where they continue as one trunk. With a diameter of 80 cm, 25 m height and 200 years old, it has scientific biological, ecological, didactic value. It can be visited by the rural road Librazhd-Stravaj.

[321]Qiriazi P. The monuments of nature in Albania – Unrated values, Geog. Stud. no 13. 2002. pp 23-25

Rrapi i Bërzeshtës. It is located in Bërzeshtë village, in the municipality of Qukës. It represents a separated tree with a height of about 26 m, trunk diameter of 280 cm, 820 cm circumference and about 560 years old. The crown circumference reaches 110 m. It is saved by the residents, after serving as a venue for talks and conferences. It has scientific biological, historical, tourist values. It can be visited by the rural road Qukës-Bërzeshtë.

Rrepet e Gurakuqit. It is located in the middle of the village with the same name, Orenja municipality, about 800 m above sea level. There are two trees with 15-16 m height, trunk diameter of 220-230 cm, age of 250-300 years. Under its shadow are developed many meetings and conferences. It has scientific biological, historical, tourist value. It can be visited by the rural road Librazhd-Gurakuq.

Mani i Çupit. It is located in the middle of Librazhdi's village, Orenja. It represents a separate wood, with 6 m height, trunk diameter of 120 cm, 400 cm circumference, and age of 220 years. The crown circumference is 40 m. Some branches have started to dry up. It has scientific biological, historical value. It can be visited by the rural road Librazhd-Orenjë.

Rrapi i Hotolishtit. It is located in Hotolisht village, about 700 m above sea level. It represents a separate tree, height of 25 m, trunk diameter of 300 cm, circumference of 600 cm, age of 500 years. The circumference of the regular crown reaches 94 m. Under the tree the villageres are gathered for assemblies. It has biological scientific, didactic, historical and tourist value. It can be visited by pedestrian street: Hotolisht municipal center -Hotolisht village.

Rrapi i Taksimit. It is located near the village Librazhd Katund, Qëndër municipality, about 1000 m above sea level. 'Rrapi i Taksimit' is 10 m high, with a trunk circumference around 180 cm and 65 cm diameter and age of 140 years. Its 17 branches form the crown with 16 m circumference. It has biological scientific, didactic value. It can be visited by the rural road Librazhd-Librazhd Katund.

Rrapi i Gizaveshit. It is located in the middle of the village with the same name, Qëndër municipality, about 900 m above sea level. It represents a 500 year old tree, with umbrella crown, 28 m height, 190 cm diameter trunk and 643 cm circumference. Its 19 branches form a crown of 85 m circumference. The inhabitants gather there for meetings and conferences, aforetime to pay taxes. It has biological scientific, didactic, spiritual value. It can be visited by the road Librazhd-Dorëz-Gizavesh

Ahet e Fushë Gurrës. It can be found near the village Gurrë, 1300 m above sea level. It represents the 100 year old beech forest, about 50 hectares, 20-30 m height, trunk diameter of 50-80 cm, 150-200 cm circumference. It is still preserved in good condition. It has biological scientific value. It can be visited by the rural road shines Librazhd-Gurrë..

Pylli i Barkmadhit në Kostenjë. It is located near the village Kostenjë (Çermenikë), 1200 m above sea level. It represents the 90-year-old beech forest and other timber, while in the bottom appear the oak. The height of the tree is 15-30 m, it has trunk diameter of 50-60 cm and 70-90 cm circumference. It is still well preserved. It has biological scientific, didactic, aesthetic and tourist value. It can be visited by the rural road Librazhd-Kostenjë.

Proposed Monuments

From direct observations in the geographical area of this district, there have been some natural objects that may meet the criteria to be natural monuments. Geomonumente bio and hidromonumentes have been proposed. The analysis of each of them is done in the following:

Geomonumentes

1. The Canyon of Rinas is located in the northeastern part of this district in Ostrovica Mountain. This canyon has a length of 1 km and height up to 80m. Its slopes are nearly

vertical and built from limestone deposits. Here are developed many surface karst shapes. The nature around is very relaxing with a rich vegetation. It is located about 26 km away from the town of Librazhd. It has specific scientific and tourist value.

2. The Rock of Gurakuq is about 25 km far from Librazhd, in the northern part of this region. It has an attractive view when approaching, its height is up to 400m. The massive is a limestone cliff, incredibly sharp and sculpted view. It resembles to a Olistolitic stone. You can take the rural road of Librazhd in the north direction if you want to visit it.

Bio

1 Rrapi i Shehut. It is an over 100 years old tree. It is located about 26 km far form Librazhd. It has a full crown and is over 70 m high and has 6 m diameter. It has a very attractive appearance,. Also it has special scientific, aesthetic and biological values.[322](Lirëza Q, Sala S. Monograph "Tomorrica." Natural Heritage, Tirana 2013)

2. Pylli i Potlit is a forest massive with an area up to 150 ha, with different trees; maple ash, oak, hornbeam, etc. The massive is located on karstified rocks but is generally well maintained. The distance from Librazhd is about 15 km, and can be visited easily with high vehicles. This massive carries multiple tourist and didactic values.

Hidromonumentes

1. Liqeni i Floqit, has a total surface area up to 3.5 ha, it has karst origin, where is shown the sorrounding environment with limestone rocks. During summer the surface filled with water is greatly reduced. It is located about 16 km away from the town of Librazhd.

2. Gurra e Malit, is a powerful karst resource with rare beauty, it makes very winding in the form of a white foam while it descends. Its average flowing goes up to 100 l of water per second. The distance from Librazhd is about 23 km. It has didactic and scientific value

Conclusion

During the treatment of this paper I have identified the natural monuments of Lidrazhd's district. I have emphasized on the multiple values of this natural heritage as an integral part of all our national heritage.

First in this paper are provided important dates to the nature, geology, climate and the morphology of the landscape, all these in view of this natural heritage.

The main part is occupied by the analysis and evaluation of the monuments of nature, classifying them in geomoumentes, bio and hidromonumentes. The innovation of this paper is the proposal of new natural monuments of this region based on the criterias that must be met to be a subject of natural monuments. In this paper are proposed 3 geomonumentes 2 biomonumentes and 2 hidromonumentes. The map of these monuments of nature has a major value.

[322](Lirëza Q, Sala S. Monography "Tomorrica".The natural Heritage, Tirana 2013, pp 232-232

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