Middle-East Journal of Scientific Research 18 (3): 382-388, 2013
ISSN 1990-9233

DOI: 10.5829/idosi.mejsr.2013.18.3.11899

Some Aspects of Geographic Views on Climate and its Impact on Settlement and the Life Population: The Case Northeastern Montenegro

Goran Rajović and Jelisavka Bulatović

Street Vojvode Stepe 252, Belgrade, Serbia, College of Textile Design, Technology and Management, Street: Starine Novaka 20, Belgrade, Serbia

Abstract: The paper presents some aspects of geographical view of the climate and its impact on the settlement and the population living northeastern of Montenegro, on examples municipalities Berane andrejevica and Plav. Health of the population is formed under the influence of many factors. Among the geographic factors that influence the health of the population, climatic factors are of great importance. Traits northeastern region of Montenegro, are determined primarily its position. In the wider area represented by are temperate continental climate, with a tendency to move towards the mountain type, with increasing elevation height. With more than 1790 days of sunshine a year, a favorable climate, without air pollution and noise, stay in the mountain areas of the north-eastern part of Montenegro, favors: health, prevention, treatment of many diseases, improves fitness and overall health condition of the body, which is analyzed the geographical space very suitable for the development of real oasis of health, recreation and rehabilitation.

Key words: Northeastern Montenegro · Climate · Population health

INTRODUCTION

For thousands of years, man has adapted to it and getting used to the quiet pace of change in the weather and climate and in the last decade there has been and still leads to very fast climate change and the evident inability or reduced ability of the body to adapt to the new time and climatic situation. Today, with the development of medicine and meteorology developed a special science Biometeorology, which is largely focused on the impact of weather on human health. Thus, in the more developed countries of the world with daily weather forecasts, people hear the, see and read and bio-meteorological report on the characteristics of the weather and climate and their impact on human health and medical recommendations depending on the weather and synoptic situation. Meteorological activity contributes to a better understanding of the phenomenon of the human organism sensitivity to weather and climatic conditions. Today's knowledge and experience in Montenegro speak about the first - the pioneering efforts of association meteorology and medicine. And we are confident that considering, the trend in the world, will soon come to life in our meteorological and medical studies, that is, reports, studies and daily newsletters bio-meteorological intended citizenship (www.gradnis.net).

In the uttermost north-eastern of Montenegro, surrounded mountain ranges Mokre Mountains (1933m), Cmiljevice (1963), Visitora (2015), Bjelasice (2122m), Komova (2211m) and Prokletija (2372), There are municipalities Berane andrijevica and Plav. It is a actually the part of the territory of Montenegro, which is filled with high mountain elements relief, which includes the upper part of the river Lim than his source to gorges Tivran [1-2]. So, northeastern Montenegro represents geographical whole, which comprises 10.8% of the total area of Montenegro (13,812 km^2). In this observed geo-space are the two major valleys: Berane, Plav-Gusinje, less: Andrijevica, Polimlje and more district under the mountain (Šekular, Velika, Podkomovlje, Gornja Sela) [3, 4, 7]. With more than 1790 days of sunshine a year, a favorable climate, without air pollution and noise, stay in the mountain areas of the north-eastern part of Montenegro, favors: health, prevention, treatment of many diseases, improves fitness and overall health condition of the body, which is analyzed the geographical

Corresponding Autor: Goran Rajović, Street Vojvode Stepe 252, Belgrade, Serbia, College of Textile Design, Technology and Management, Street: Starine Novaka 20, Belgrade, Serbia.

space very suitable for the development of real oasis of health, recreation and rehabilitation. And now it is more than clear why this part of north-eastern Montenegro writes so, why so many recommended by and why successfully treated many diseases. Moderate climate carries with it the entire moderate - temperature, precipitation, solar radiation and humidity... All factors - climatic and geographical make the air in the observed geographic space, is one of healthiest in Montenegro.

MATERIALS AND METHODS

The core of methodological procedure of used in this study are, these methods: descriptive, causal, comparative and theoretical analysis. Descriptive and causal methods have been used to discover the cause consequential relationship between climate and health of residents. Comparative method was performed collection of data that examined differences and similarities between climate medium climate and higher elevations. Methods of theoretical analysis included the theoretical basis of the research. The combination of these methods is possible to achieve defined research objectives, which is related to the climatic conditions of the settlement and life of the people of northeastern Montenegro.

Of data collection for that the relations the climatic elements, we used the statistical method, i.e., the data Hydro meteorological Office of Montenegro. In scientific the explanation of terms, were applied two methods and it: methods of analysis and synthesis methods. The method analysis we have that parse the complex notions and courts in the study and took the conclusions as to their simpler components and elements. Methods synthesis of encompassed way to systematize knowledge according to is laws of formal logic, a process of theoretical knowledge in the direction of the particular toward general.

RESULTS AND DISCUSSION

Climate northeastern Montenegro is moderately continental and mountain with different localized variations. Factors influencing the local climate characteristics: geographic location, relief and local impacts (exposure terrain, the presence of river systems, vegetation, urbanization...). A valuable evaluation climatic elements are northeastern Montenegro is determined by its reduced base data and the lack of measurements of some climatic elements for long periods of time. Therefore, the analysis of the main climate parameters, partially reduced data used for thirty pieces eight year period from 1969 to 1991 years which enables their comparison. For some meteorological elements (insulation) were used shorter time intervals (1983-1991), because they are not applied throughout the period. We must note that the meteorological stations in the area municipal Andrijevica not and the characteristics of the climate of this area come from the meteorological station data Berane.

Air temperatures as one of the most important climatic elements, the complex subject of study, particularly in the second half of the twentieth century. Analysis of the climatic elements and attempt to define the legality of their changes in a particular area is significant primarily because its impact of life and settlement population. Essential feature of temperature air in the observed geographic space is its constancy, that small differences between coldest and hottest days or between temperatures during the day and in during the night. Of these changes temperatures dependent, as well are many other climatic elements so and vegetable vegetation. And the difference between the hottest month of July (Berane) and the coldest month is January (Berane) amounts only 13.2°C, i.e. the difference between the hottest month of August (Plav) and the coldest month of January (Plav) is 11.6°C, which means that the change of seasons and their crosses very mild and pleasant and conducive the human organism. The average air temperatures individual seasons amounts of Plav - Winter 1.1, Spring 7.2, 15.4 Summer, Autumn 7.7; i.e. Berane - Winter 0.7, Spring 7.9, 16.0 Summer, Autumn 8.5. Mean annual temperatures range from 8.0°C in Berane to 7.3°C in C Plav. The average annual air temperature at the altitude of 670 m amounts 8.0°C. The areas with an altitude of 1000 to 1200 m with an average annual air temperature of 7.0°C to 6.4°C, from 1400 m altitude of 5.8°C, 1600 m above sea level 5.2°C, 1800 m altitude of is 4.6°C, 2000 m altitude of 4.0°C. The absolute maximum temperature metered are in July (Berane) and August (Plav) and range in the interval from 31.3°C (Plav) to 32.6°C (Berane). The absolute minimum temperature recorded in January and the Berane and the Plav and are in the range of -19.4°C (Berane) to -20.7°C (Plav).

Humidity air is an important element of the climate and climatic value this element depends on the temperature and winds. Humidity air is changed according to the seasons and rainfall it brings, but the average annual relative humidity ranges from 67% to Berane to 68% in Plav. Relative humidity of air highest is in December, 75% in Plav and in Berane is 77%. In summer (July and August) the average monthly relative humidity in the afternoon (14 h) was lower and amounts to 45% in

Berane and 46% of the Plav. The average annual cloudiness ranges from 8.1 (Plav) to 9.0 (Berane). Observed by year round biggest is cloudiness in winter (10.2 Blue to Berane 12.4) and lowest during summer (5.1 Berane to 5.2 Plav). Annual precipitation on average increases with altitude. In the lower regions annual amount rainfall is in the range from 863 mm to 1698 mm. So it amounts in Berane 863 mm andrijevica 1152 mm, Plav 1209 mm, Gusinje 1351 mm, Vusanje 1698 mm. Larger part northeastern Montenegro has continental rainfall, with larger volumes in the warmer half of the year, except southwestern areas which have the most rainfall excreted in autumn. On more weather stations Vusanje (1180 m), the maximum precipitation in November (214 mm) and December (201mm). Monthly amount of precipitation declines in direction north, so that in Berane (670m) rainiest month is January (132 mm). Least rainy there is month of July Berane 50 mm andrijevica 65mm, Plav 64 mm, Gusinje 61 mm, Vusanje 87 mm. Occurrence of snow cover is characteristic of the colder part of the year, from November to March and the largest number of days with snow cover in January (12.8 Berane; Plav 8,6).

Solar insulations is one of the important elements of climate and refers to the amount of solar radiation falling on a particular area within a specified period. The insulation northeastern Montenegro is in the zone 1790 hours per year. The highest insulations are the month of July (8.5 h / day) and August (8.6 h / day). Insulations in the winter months are short and amounts in December (1.8 h/ day), January (1.9 h / day). Surface air currents are largely determined by orography. Direction of the Lima valley caused the dominance of the north wind in Berane (140 ‰) and wind in the southern Plav (140 ‰). After these dominant east winds from are northeast and southwest. During the colder part of the year the dominant east and southeast winds. Increase in temperature, the spatial and temporal changes in the precipitation regime, as well as other changes that entail the two climatic parameters can have a strong influence on many aspects of society and the economy.

In terms of the hypsometric Rajoviæ (2011 Oradea) there are three zones: the lower (up to 1100 m), medium (1100m-1700m) and high (over 1700 m). Height difference between the highest (Maja Kolata 2528 m) and lowest (bottom valley Berane 645 m) amounts 1,883 m [8]. According to [9]elevation of the terrain (height above sea or absolute altitude and relative altitude) greatly affects on the general physical condition of the organism. Staying on higher altitudes (permanent or temporary) leads to a series of physiological reactions in the body, arisen as a result of acclimatization; it is adaptation of the organism conditions of reduced atmospheric pressure and reduced oxygen partial pressure. Gradual acclimatization leads to adjustments organisms to these changes, but the physiological reactions people higher altitudes, differ widely from the inhabitants of the lower regions.

On observed GeoScape we highlight two types climate, it is climate of medium altitude (up to 1200m) and air greater heights (over 1200 m). Air medium altitude (up to 1200m) do not require some special adaptation, because the oscillations in the amount of oxygen small and do not requiring additionally involvement of the internal mechanism of adaptation. Exceptionally is suitable for the treatment of diseases, such as asthma and respiratory diseases, neuroses, cardiovascular diseases, skin diseases... Staying on altitudes over 1200m (especially at elevations of 1000-1400 m) stimulates on human organism, primarily due to a favorable effect on the immune system, on the other hand, this band can remain and those who have heart problems and other cardiovascular diseases. Mountain air suits people who are allergic to certain allergens, on house dust, mites... These micro-organisms, invisible to the naked eye, does not reproduce at an altitude above 1000 meters, so you do not have the unpleasant reactions that they trigger, such as hay fever, cough, runny nose, playing in chest. Landscapes with more grooves and ridges, what is after all relief mountainous northeastern part of Montenegro more corresponds the human eye and psyche. Hilly terrains are considered the best for mental health. The slope of are pitch conditions the also, the mobility of populations. Grounds typical by bigger slopes force people who live in them that the moving more. Has a direct impact and slope exposition, which is essential in the construction of houses and roads. From exposure of are pitch dependent sunlight and moisture field? It is important that the apartments are located on the sunny side of the slope or not, because in the colder northern climates exposure acting adversely, as well as conditions in southern warm climates.

Climate greater heights (over 1200m) are good for anemic people, rachitic children, convalescents, to normalize blood pressure and recovery. With increasing altitude increases the pressure on the mechanism of adaptation and the first reaction of stay in the mountains above 2,000 meters above sea level is the frequent occurrence of yawning, drowsiness or psychomotor restlessness. Period of adaptation to living conditions at higher altitudes is, on average, three to five days. After this period, in addition to increasing the hemoglobin

in the blood increases the number of red blood cells, which has health benefits because it improves the transport of oxygen in the blood. It is known to be clean air and clean water is the sources of life. Precisely for these reasons, people from rural areas of the north-eastern part of Montenegro, longer lives just for the reason, ideal altitude, clean air and clean water, to rehabilitate the human body.

For spatial differentiation climate relevant two characteristics conformist climatic characteristics and the length the heating season of the working and living space. Compared to the first characteristic of many authors, among them this time emphasize this: [10, 11, 12] really stand out that "the comfortable climate for living people at a temperature of about 17°C to 24°C at a relative humidity of about 37% - 70%. Above or beneath aforementioned values degree of comfort is reduced to the level of intolerance". Length of the heating season is defined as the period with average daily temperatures below 12°C, that is, it is a period of transition after stable average daily temperature beneath 12°C in the fall, a steady transition of air temperature over 12°C in the spring. From the point of settlement in north-eastern Montenegro, are optimum courts valley, where comfortable climate covers the period from mid-May to late September and the heating season lasts from approximately October to April. In Berane according to our values of the average daily temperature heating season lasts since are first of October until the twenty-eighth of April and 210 days. With altitude characteristics both characteristics exacerbate. Compared on defined criteria comfort climate characteristics, in the valleys of the considered geographic space during the summer months due to high temperatures and low relative humidity, a regular basis the occur sultriness, which adversely affect the thermoregulatory mechanisms of the human organism.

Much of the research [13, 14, 15, 16] show that the comfort man primarily is based at a certain temperature and humidity. Under optimal to imply the following values: the best temperature for work 15-20°C temperature most suitable for the process of breathing 18-20°C, the temperature of the so-called comfort zones 16-21°C. Feeling sultriness the occurs when the temperature and humidity moving within the following limits. According [17] relation of the temperature (°C) and relative humidity (%) is in the following correlations: temperature of 29.5°C, relative humidity 45%, temperature 28°C in a relative humidity of 50%; temperature of 25-27°C, relative humidity 60%, temperature of 23,5°C, relative humidity 70%, temperature of 21-22°C, relative humidity 75%.

Had they high temperatures during the summer at the bottom of this part of valley of northeastern Montenegro frequent show us the following information. According to [18] [1-4], in Berane is during July and August about 44 days with temperatures over 25°C, in Plav about 37 days. t is not rare that this temperature last for more consecutive days, or even a whole week or more. According [17] in countries with a high standard of living, sultriness indirectly affects higher costs for air conditioning of residential and work spaces. In our conditions, in most cases, it still results in a higher exertion thermo-regulation mechanism of the organism itself. Thus, grounds valley of this part of north-eastern Montenegro closer to the hills, due to favorable hypsometric location and proximity to more spacious forested areas, sheltered from strong gusts of wind, a small number of foggy days in particular, are less exposed to air pollution. However, the industrial zone in Berane andrejevica and Plav has an unfavorable position in relation to the wind rose. In fact, on two weather stations, are dominant winds from the N and S quadrants and industrial zones are located precisely in this direction.

The absence of more detailed meteorological observations of air properties, especially outside the urban areas, prevent the execution of more precise judgments about distribution of air pollution outside of urban areas. Therefore, having in mind that the bottom of the valley considered geographic space, maximum temperatures reach a maximum value, followed the relative humidity lowest, that are fog frequent occurrence and the largest air pollution, climatic characteristics of the basin hills, summer from the standpoint of their impact on human organism closer comfortable features.

[19] points out that the overall climate on a particular geographical area determined by tolerance of the population compared to the high temperatures, but for now, there is no data set of weather conditions poses a risk to human health. A few indices that the use by biometeorology, specifying the influence of climatic factors on health, disease and death. Most commonly used indices are: temperature / humidity discomfort index, describing the magnitude of stress, depending on the time (weather stress index), index mortality, which is specifically caused the air temperature (temperature-specific mortality ratio), an index of mortality is specifically caused by air temperature, depending on the age of the subjects (age-and temperature-specific mortality ratio) ... The term "time phase" combines a number of weather conditions that operate in one geographical area.

Other features climate in relation to urban development [20, 21] go beyond the mid-proportional evaluation of the climate and we are looking on large-scaling plan the construction of urban planning. In recent decades we have witnessed all the more obvious changes in climate. Previously, the climate changed only as a result of changes in natural conditions and the development of industry and population growth precedence over the human factor. Let us show, for example Berana. The "Pulp and paper" (shut down in 1988), is located in the deepest and windy part valley Berane. Thus, the time for the temperature inversion above the industrial zones created by the dome, full of particles that changing times, the wind disperses the precipitation falls on the ground. Vertical mixing of the air became more difficult and the smoke from factory chimneys lowers, usually deposited to a certain height. Above the highest chimney "pulp and paper" (96m) drained weigh hits not rare, pierced ground inversion layer created by the dome above the upper limit of cold air. From the dome of smoke created horizon is the result of the spread by the wind. The smoke mixed with water drops, which created "lake" of cold air in the area, Berane lowland [22].

The sun's rays usually not managed to penetrate about 350 m thick layer of fog and reach the earth's surface and the temperature inversion lasted for several days. Given that they made mostly during the peak times of objects firing, in this fog tucked valley constantly flew in fumes and other commercial organizations, institutions as well as motor vehicles. In such circumstances, the smog created [22].

The influence and effect of air pollution on humans, plant and animal life, as well as material goods was very high. Thus, the Institute of Hygiene, Faculty of Medicine in Belgrade noted in workers 'pulp and paper' present: chlorine poisoning, damage to the eyelids liver, lung, kidney and bronchus. A health service data in Berane showed that the expressed air pollution number of patients with acute and chronic damage to the respiratory tract and bronchus increasing. As a result air pollution can be used and examples of dead birds, mostly sparrows, within "pulp and paper"[22].

CONCLUSION

Once man lived in harmony with nature, a very modest is exploited natural resources and it does neither matter nor a larger scale, not injured natural balance. Having lived in small villages around the fertile landscape, problem existence is resolved dealing in hunting and later agriculture. The settlements are getting bigger, the number of people be increasing, more and more developed civilizations. Progressive development followed by is unfortunately, changing the climate in such a way that modern man has caused numerous and far-reaching problems (www.zdravljecacak.com; [23, 24].

For thousands of years, man has adapted to it and getting used to the quiet pace of change in the weather and climate and in the last decade there has been and still leads to very fast climate change and the evident inability or reduced ability of the body to adapt to the new time and climatic situation.

Not enough just to say that the Earth's climate is changing and that's going to solve certain regulations and agreements. Not only the agreement exists, but we need to give to individuals understand and implement the right way. They will just meet and define, one of the ways to do this is just actions by which raise people's awareness on situation in which the planet. Because someone who believes that there is no impact on the events in his life not to attempt anything, the situation he will be "happen" and he will passively to indulge. Someone else who believes that least in some extent, has the ability to affect your life, will do everything in his power to make my life even better and to live out in the best possible way Someone else who believes that least in some extent, has the ability to affect your life, will do everything in his power to make my life even better and to live out in the best possible way [25-30]. This situation can be applied in this case.

With more than 1790 days of sunshine a year, a favorable climate, without air pollution and noise, stay in the mountain areas of the north-eastern part of Montenegro, favors: health, prevention, treatment of many diseases, improves fitness and overall health condition of the body, which is analyzed the geographical space very suitable for the development of real oasis of health, recreation and rehabilitation. Characteristics Climate northeastern Montenegro is determined primarily its position. In the wider areas was approximately is a moderate continental climate, with a tendency to move towards the mountain type, with an increase in altitude. Our research evidence based on similar studies [3] points out that a stay at higher altitudes in the north-eastern part of Montenegro, favorably are maintains in a number of physiological processes in the body, leading to improvements in physical and mental condition of the individual. Mountain areas northeast of Montenegro, in the example municipality Berane, Andrejevica and Plav averaging 1100 meters above sea level, providing ideal conditions for the recovery of cardiac patients,

people with respiratory diseases and skin diseases, and nervous patients. Also, the height above sea level conducive to athletes for sports training and gaining fitness, as well as all healthy people who have needs for recreation by preserving and improvement of health. It is known that. Climate higher altitudes (1200m-2000m) a favorable effect on the anemic people, rachitic children, then the normalization of blood pressure, as well as physical and psychological recovery of exhausted people. Thus, the mountain areas northeast of Montenegro, provide opportunities for the treatment of many diseases, but also improve fitness and overall health organism.

REFERENCES

1. Rajović, G. and J. Bulatović, 2013. Characteristics of housing in rural villages the case northeastern Montenegro, International Letters of Social and Humanistic Sciences, 6: 24-35.
2. Rajović, G. and J. Bulatović, 2013. Some aspects of economic geographic views at the geological makeup the case northeastern Montenegro, International Letters of Social and Humanistic Sciences, 4: 11-21.
3. Rajović, G. and J. Bulatović, 2013. Geographical View of Mineral Resources. The Case Northeastern Montenegro, Journal of Sustainable Development Studies, 2(2): 229-241.
4. Rajović, G. and J. Bulatović, 2013. Some aspects of geographic view on economy the case northeastern Montenegro, International Letters of Social and Humanistic Sciences, 6: 49-61.
5. Abou-Deif, M.H., M.A. Rashed, M.A.A. Sallam, E.A.H. Mostafa and W.A. Ramadan, 2013. Characterization of Twenty Wheat Varieties by ISSR Markers, Middle-East Journal of Scientific Research, 15(2): 168-175.
6. Kabiru Jinjiri Ringim, 2013. Understanding of Account Holder in Conventional Bank Toward Islamic Banking Products, Middle-East Journal of Scientific Research, 15(2): 176-183.
7. Muhammad Azam, Sallahuddin Hassan and Khairuzzaman, 2013. Corruption, Workers Remittances, Fdi and Economic Growth in Five South and South East Asian Countries. A Panel Data Approach Middle-East Journal of Scientific Research, 15(2): 184-190.
8. Rajović, G. and J. Bulatović, 2013. Natural resources as a factor socioeconomic development. The case northeastern Montenegro, Journal of Energy and Natural Resources, 2(2): 7-20.
9. Obradović, D., 2003. Influence factors hypsometrical health population on the case of the tableland Pešter, Proceedings of Geography Faculty, 51: 121-128.
10. McCARTY, J.P., 2001. Ecological consequences of recent climate change, Conservation Biology, 15(2): 320-331.
11. Walther, G.R., E. Post, P. Convey, A. Menzel, C. Parmesan, T.J. Beebee and F. Bairlein, 2002. Ecological responses to recent climate change Journal Nature, 416(6879): 389-395.
12. Parmesan, C., 2006. Ecological and evolutionary responses to recent climate change. Annual Review of Ecology, Evolution, and Systematic, pp: 637-669.
13. Frumkin, H., 2001. Beyond toxicity human health and the natural environment. American Journal of Preventive Medicine, 20(3): 234-240.
14. Kaplan, R., 2001. The nature of the view from home psychological benefits. Environment and Behavior, 33(4): 507-542.
15. Frumkin, H., 2003. Healthy places exploring the evidence. American Journal of Public Health, 93(9): 1451-1456.
16. Maller, C., M. Townsend, A. Pryor, P. Brown and L. St Leger, 2006. Healthy nature healthy people contact with nature as an upstream health promotion intervention for populations. Health Promotion International, 21(1): 45-54.
17. Bursać, M., 1975. Evaluation of space needs settlement planning doctoral dissertation, Belgrade.
18. Rajović, G., 2005. Geographical basis for the development of the economy Upper Polimlje, Printing Vedes, Belgrade.
19. Kojić, Z., 2008. Influence of hot summer days at health, Department of Physiology, Faculty of Medicine, Institute for Lung Diseases, Clinical Center of Serbia. Institute of Public Health of Serbia Dr Milan Jovanoviæ Batut, Belgrade.
20. Rajović, G., 2007. Factors of industrial development limitation in Upper Polimlje and characteristics of project plan construction in function of new business operations, Journal Research and Development, 13(1-2): 61-66.
21. Rajović, G., 2008. Valorization morphmetrics handles and specifics creating project plan for architecture of Upper Polimlja, Journal Research and Development, 14(1-2): 193-196.
22. Lutovac, S.M., 1973. Changes under the influence of urban microclimate Industry on Ivangrad, Environment and Man, Special Publication Serbian Geographical Society, Book 2, Belgrade.

23. Bulatović, J., and G. Rajović, 2011. Public involvement in the conception of active protection of the environment the example Banjica forest, Journal Protection Nature 61(2): 111-128.
24. Bulatović, J. and G. Rajović, 2013. Environmental Awareness for Sustainability. A Pilot Survey in the Belgrade Settlement Brace Jerkovic, International Journal of Advances in Management and Economics, 2(1): 20-27.
25. Antonijević, M., S. Starèević, S. Savić and S. Jovanović, 2013. Climate change and their impact on the quality of life. National Conference on Quality, Available from: http://www.cqm.rs, 19.09 2013., pp: 366-369.
26. ***,2013. Influence of hot summer days at health, Available from: http://www.zdravljecacak.org, 18.09.2013.
27. Hydro meteorological Office of Montenegro, 2004. Meteorological annuals corresponding years, Podgorica.
28. Rajović, G., 2011. Assessment of land use and characteristics of relief valorization morphometric agriculture northeast Montenegro. Annals of the University of Oradea – Geography Series, 1: 105-117.
29. Rajović, G., 2013. Morphology and opportunities agricultural valorization the case northeastern Montenegro. International Letters of Social and Humanistic Sciences, 11: 35-46.
30. 2013. How weather conditions affecting the health, Available from: http://www.gradnis.net, 17.09 2013.