The Influence of pollution on the attractiveness of recreational territory of Lviv region

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The influence of factories on recreational territory of Lviv region has been researched, ecological measures to improve the situation have been provided. The influence of ecological situation factors on the valuation of recreational objects has been defined.

Recreational attractiveness of territory, polluting factories, emission, pollution, ecological insecurity, recreational territory.

I. Recreational resources of Lviv region

The availability of recreational resources in Lviv region is one of the most important questions in the state. The natural recreational resources of Lviv region are presented by medicinal mineral water, curative mud and mineral wax, climate, water, forest. The part of natural and recreational potential of Lviv is 5.37% in the total natural potential of Ukraine.

The influence of factories on the recreational area is quite significant, especially in the current environment, when companies fully or partially conceal the amount of emission. The attributes of recreational areas are defined by their zoning, investment attractiveness and demand in the rest.

Environmental pollution has been analyzed on example of recreational area of Lviv region. Recreational potential and environmental degradation of recreational areas have been considered. The results of this research are useful for other territories.

II. Types of pollutants

The main objectives of the research are: identification of the pollution factors to define their influence on the recreational area of Lviv region, using obtained parameters for further research of situation in the region, using the results to evaluate the attractiveness of the area.

This research can be used to evaluate the territories, investment in the territory, planning environmental protection and regional land protection programs, programs to reduce air pollution by factories in residential areas.

For example recreational areas Lviv region analyzed environmental pollution, recreational potential and environmental degradation on recreational areas, the most depressed of them in terms of load and distance to sources of pollution. This study can be conducted for any site.

Types of pollutants are mobile sources of pollution (cars, industrial machinery, railway and air transport) and stationary sources of pollution.

It is important to take into account the remoteness of recreational areas from stationary sources to define which are the most hard, because many companies hide their harmful pollutants into the environment.

The proof of this can be that the amount of pollutants that went on air pool in Lviv region from stationary sources (excluding carbon dioxide emissions) in 2012 is 129.4 thousand tons, more than the previous year by 14.3%.

Effect enterprises recreational area is quite significant, especially in the current environment, when companies fully or partially conceal the amount and frequency of emissions.

Impact on quality characteristics of recreational areas, in their assessment, zoning, investment attractiveness and demand in the rest.

Research is closely associated with the activities related to land protection, environmental protection, improvements in the financial mechanism of resort and recreational areas, natural resources, rational use of territories emission optimization companies designing recreational areas, zoning and evaluation of recreational attractiveness of investing, determine the value selecting areas and tourist destinations.

On an example of Lviv’s region recreational areas analyzed environmental pollution, recreational potential and environmental degradation on recreational areas, the most depressed of them in terms of load and distance to sources of pollution. The results of this research useful for other territories.

The situation in the Lviv region regardin of pollution of recreational areas remain relevant and require specific actions by the side executive authorities and representatives of enterprises which is polluting the environment.

III. Detection of the influence of pollution for recreational territory of Lviv region

State Administration of Environmental Protection in the Lviv region on cooperation with the "Resource & Analysis Center" NGO realized the project “Eco-rating companies - the main pollutants of Lviv.”

Pollutants are divided into five categories, each of them affects the corresponding color (from the best - compliance with the environmental requirements for the worst) - green, blue, yellow, red, black.

Enterprises pollutants Lviv region caught the "black" category:

- OJSC "Halychpharm" / ARTERIUM
- JSC "Lviv Coal Company"
- OJSC "Mykolaiv"
- JSC "NPK-Galicia"
- Administration «Lvivhazvydobuvannya”
- Deposit "Polmineral"
- SE "Lopatynskyi Distillery”
- SE "Rava-Ruska Distillery”
- Dobrotvir TES
- JSC "Energy - The New Chapter"
- CE "GORODOTSKE water and sewage”
- LCP "Zbiranka"
- LCME "Lvivvodokanal"
- CME "Lvivteploenergo”
- Novorozdilsk deposit "Sulfur”

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The pollutants are considered depend on the distance from recreational areas and class of hazard. For example, gradation of contamination zone has been given for OJSC "Halychpharm" / ARTERIUM, located in Lviv, st. Opryshkivska, 6 and belonged to the most polluting stationary objects of the city.

A lot of recreational areas are focused near this company (Fig.1).

Thus, depending on the distance at which the object of study is its attractiveness will vary in direct proportion. As you can see in Lviv situation is quite critical because the company JSC "Halychpharm" / ARTERIUM located 1.5 km from the recreational area of the Regional Landscape Park "Znesinnya" area of 55.6093 hectares and 3 km from the stadium area Institute of Physical Education, 2055. This exposure shall also include emissions of other pollutants.

Among the largest polluter of submitted recreational areas Lviv is 25.77%. The major factories are OJSC "Halychpharm" GPU "Lvivgaz extraction", JSC "Leather Company" Dawn "CT" Galka ". The largest emission indicators in Lviv region are Kamyanka-Bugsky (23.76%), Sokal (16.39%).

Among the Lviv oblast largest emissions indicators characterized Kamyanka-Bugsky (23.76%), Sokalsky (16.39%), Peremyslyany (5.11%) areas.

The situation in the Lviv region on pollution recreational areas remain relevant and require specific actions on the part of the executive authorities and representatives of enterprises directly polluting the environment.

Lviv region is rich in recreational resources, contributing to the development of tourism, recreation and therapeutic recreation and organizing sports events. Despite, qualitative characteristics of these territories is quite low. A large number of companies listed in the first class of danger and failure of proper waste management leads to fatal damage to nature, and thus to assess the attractiveness of recreational resources.

There are a lot of recreational resources in Lviv region, contributing to develop the tourism, recreation and therapeutic recreation as well as to organize sports events. Though attributives of these territories is quite low.

**References**


To address the recreational attractiveness of Lviv in terms of areas we have analyzed the emissions of pollutants into the air using statistical indicators provided by the Central Statistical Office in Lviv region.