CONSIDERATION OF ENVIRONMENTAL IMPACT CAUSED BY ANTHROPOGENIC ACTIVITY IN THE MOUNTAIN AREA STRAJA

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ABSTRACT. Tourism as any human activity is involved in degradation and environmental pollution and potential tourists travel by direct pressure on the landscape, flora and fauna and other sights that can be partially or totally damaged. Tourism Planning inappropriate land pollution is a factor both physical and economic, the most serious form of degradation of tourism resources by tourism itself. Lack of consistency in terms of quality and quantity of tourism resources and facilities for operational failures lead to repercussions on economic efficiency and physical condition of facilities and resources. In this paper presents aspects of the impact of anthropogenic activity in the mountain area environment Straja.

ВЛИЯНИЕ НА АНТРОПОГЕННАТА ДЕЙНОСТ ВЪРХУ ОКОЛНАТА СРЕДА В ОБЛАСТТА НА ПЛАНИНАТА СТРАЯ

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РЕЗЮМЕ: Както всяка друга човешка дейност, туризмът е свързан с разрушителен и замърсяващ ефект, като потенциалните туристи оказват пряко влияние върху пейзажа, флората и фауната. Неподходящото туристическо планиране е физически и икономически фактор, влияещ върху разрушаването на самите туристически ресурси. Липсата на постоянни грижи за количеството и качеството на туристическите ресурси и възможности води до негативни последствия върху икономическата ефективност и физическото им състояние. Докладът представя някои аспекти на антропогенната дейност върху околната среда в областта на планината Страя.

ABSTRACT.

Introduction

The existence and development of tourism potential target depends on its quality, can be considered as a possible index of its environment, ie a "barometer" of quality. Environmental degradation and tourism resources are generated by two main groups of factors, ie factors that are direct result of economic and environmental determinants of use for tourism and recreation. Degradation of forests is an example of damage to tourism potential. Forest tourism interest in social functions, recreational and aesthetic landscape. These issues turn them into goals that round tourism potential value. By logging occurring degradation processes resulting in the destruction of monuments of scientific interest and tourism. If deforestation around balneoclimatice resorts and settlements in general, diminishes the possibilities of self-purification of the atmosphere around them, put them in danger and hydro reservoirs, reducing the potential for cutting them to extinction.

Degradation of natural reserves and natural monuments tourist potential harm that it lacks the contribution of scientific, aesthetic, the objectives of a unique nature, or natural habitats. Uncontrolled economic activities causing degradation of these monuments heavily damaging both scientific and economic aspect, by reducing their opportunities for tourism recovery. Negative aspects are seen with sightseeing anthropogenic degradation, both by the attack and degrade pollutants following the disappearance of monuments and historical resonance, artistic or cultural and other factors anthropogenic or natural.

The tourism development strategy necessary measures to protect the environment. Environment's natural resources sought to be preserved by encouraging rural tourism, tourism and ecological tourism. World Tourism Organization believes that "rural tourism is to save European countries" covering tourist activities organized and led by the rural population and based on potential natural and human anthropogenic own.

"Ecotourism" is emerging as a new form of tourism, which grew rapidly in the last decade known as the motto of "nature tourism", the main characterizing the orientation activities to certain ecological principles. Tourism is practiced by small groups of people or at a low level (business) contributing to biodiversity and sustain prosperity of the rural population, including tourists from accountable actions and the tourism industry.Fitting mountain areas generally differ with respect to existing natural conditions (landscape, climate, flora, landforms, snow) and the possibilities of access. When dealing

with natural conditions, according to their specific locations or dominant destination (summer, winter), aimed at making the upper parameters of existing resources, land distribution in accommodation and food equipment and their typology, the network of roads and means of transport, leisure facilities are tailored to the characteristics of resources.

2. Materials and methods

Straja Tourist Area is located at an altitude between 1340 m and 1450 m in mountain Vâlcan, with a complex mountainous terrain, very picturesque, with hills and mountain peaks, surrounded by beech and fir forests, north of Valley geographically defined Jiu Western Vâlcan ridge south of the west Valley and east of Valley Sohodol. The natural environment of a special scenic area available in Straja falls with great complexity, variety and attractive landscaping in the structure and value of tourism potential, bringing together all the qualities of a great winter sports resort and summer resort for resting and recreation .

3. Existing pollution and pollution resistance in mountain ecosystems Straja

Straja mountain area is a tourist area who has experienced significant growth since 1990, when they were developed as infrastructure and housing capacities. For this reason the assessment of pollution should be considered and pollution generated by these development works.

Sources of air pollution are divided into two broad categories, namely those produced during the construction of the infrastructure and resources generated by tourism activity. The first category mentioned training dust, cement and other materials that were circulated in order to build the road, of course, exhaust from vehicles that have transported the materials and particles resulting from the construction process itself. In the second category can also include particles driven by vehicles transporting tourists and exhaust gas during the winter, gas, soot and fly ash resulting from combustion of fossil fuels used in heating.

Soil pollution has affected the construction phase of the study area, specific infrastructure construction activities. So we talk about: the removal of topsoil, compaction of land, pollution of storing various construction materials, fuel and oil substances leaking from vehicles involved in the construction process. Another source of soil degradation due to deforestation produced by the implementation of infrastructure development projects and development of sports specific areas proposed in the study area. As a consequence of this deforestation is mentioned: increased risk of soil erosion and the emergence of instability phenomena in certain portions of land.

Aspects of soil erosion

Uncontrolled waste deposits in the resort Straja

In the operational phase of the tourist area, soil pollution is significantly reduced, being represented only by the possibility of uncontrolled waste deposits (which may occupy and contaminate ground surfaces) and deposition of atmospheric pollutants on the ground through precipitation. The emergence of uncontrolled landfills can be generated mainly by the influx of tourists that exceeds the capabilities of accommodation and lack of environmental education and respect for nature, manifested by some tourists.

4. Pollution and risk of affecting surface waters

The construction phase of infrastructure in the mountain area Straja may occur: changes in watercourses, increasing turbidity and to a lesser extent can be revealed the presence of certain harmful substances in surface water. In the operating phase problems are diverse in meaning occur more active and potential sources of pollution. This produces:

- increased turbidity, especially during periods of high influx of tourists;
- contamination of surface waters as solid waste by breaking down toxic substances put into freedom, but especially with manure and organic materials resulting from the practice area.

In the manure has not been a centralized system designed to take over their transport and treatment before being discharged into the emissaries, which would be significantly reduced surface water pollution.

Noise and vibrations in the mountain area close Straja estimated values of environmental pollution in terms of noise and vibration. Noise pollution due to vehicles involved in transport processes and equipment used in the actual construction and equipment of cable transport, transport of the waste, those used for supply and transport of tourists. A discomfort factor that we can consider pollutant in terms of noise is generated by facilities for entertainment of tourists accommodation capacity in the vicinity.

5. Results and discussion Case Study. Evaluation of the impact of tourism activities in the mountain area Straja.

Impacts of air emissions due to pollution sources described above and is minimized in both phases of development of the tourist area Straja by vegetation surrounding atmospheric circulation and other factors. Given the concentrations of air pollutants legislation lags far below the threshold limits alert.[5]

Impact on soil. The most persistent and therefore the most serious of all impacts on soil is soil erosion. Although soil compaction and loss of organic matter will be covered to some extent in the non-use season, usually erosion continues. Recreation activities can cause erosion and can increase its rate of occurrence. Paths are the most affected due to their increased use. Soil erosion can occur in the camping, lookout points, places of departure or boarding in the form of treading. Camping areas lead to erosion: soil stripping, tree root exposure, increasing the area impacted (increased camp), the proliferation of several campsites. If well chosen areas, erosion can be controlled effectively by regular maintenance works. Erosion is nearly irreversible as long as it's so difficult to mitigate its erosion amount necessary to be reflected in the monitoring.

Solid wastes are generally managed in inefficient in the sense that there is a collection, selection capabilities are nonexistent, special waste disposal sites are often overshadowed by the quantities produced which generates both a negative visual impact, but can lead to contamination substances from their decomposition. It is important to use biological treatment technologies, non-mechanical and not to make waste disposal on land.

Impact on groundwater use and surface water quality degradation occurs by surface water. Water quality is a major concern, but not a predominant impact. Crossing the water, erosion and land use change can lead to increased suspended solids, reducing water clarity and satisfaction of visitors. Requires water testing equipment parameters are not usually in many tourist areas, but enough parameters are easily measured.

Impacts on biodiversity

Recreation can impact: the carpet of vegetation, species composition and changing circumstances. Vegetal cover is mostly impacted by visitors as a result of corns, which reduces reproduction by seeds. Mature trees in recreational areas are mechanically damaged by cutting or burning branches on their bark.

Different species have different tolerances of wild people and human activity. Even within a species, the tolerance level varies during the year, during breeding season, animal age, type of animal habitat and individual experience to tourists. Generally lead to lower leisure-specific diversity. Impact on wild life include:

a) due to unintentional disruption of stress conditions on large mammals or birds, for example, disturbance caused by tourists nearby vehicles;

b) accommodate anime with people mainly due to their feeding or feeding by tourists with household garbage;

c) over-harvesting or poaching.

Of course wild animals can be affected by habitat alteration, fragmentation and destruction.

Social impacts caused by tourism can be manifested by changing the quality of life of residents in tourist areas. It is a great need to focus on rules of behavior for both visitors and for residents, and the effects of mutual interaction between local communities and tourists. Visitor satisfaction is strongly affected by other visitors and their actions. In general, social conditions affect visitor satisfaction rather than natural conditions. The desire for solitude, possible conflict between visitors and different perception of the behavior of other guests, are all factors that can affect tourist satisfaction. May adversely affect the satisfaction of visitors crowding.

What visitors consider to be solitude or crowding depends on individual perception that is influenced by the characteristics of visitors and the event or location. Interestingly, managers and visitors have a different perception on the impacts of bio-physical and social. Managers perceive the impacts on resources as more important than social issues while the visitors have an opposite viewpoint. Therefore managers must be aware that the need to reduce conflicts between visitors must be part of management activities.

The method used to assess environmental impact of the infrastructure and tourism activity is carried out Straja massive global impact index method.

Impact assessment of each environmental factor in the phase of the infrastructure of business and tourism was performed by setting overall impact index (IGI).

Notes reliability assigned to each environmental factor sown in table 1:

Table 1. Notes creditworthiness awarded for environmental factors Straja mountain area:

Nr. crt.	Environmental factor	Note creditworthiness given
1	Water	9
2	Air	9
3	Ground	7
4	Vegetation	8
5	Fauna	7
6	Landscape	7

Overall i Overall index value for environmental factors impact analysis is:

$$IGI = \frac{S_i}{S_r} = \frac{259,8}{102,55} = 2,53$$

and corresponds to an environment subject to the effect of human activity causing discomfort forms of life (2 <IGI ≤ 3).

6. CONCLUSIONS

Tourism as an economic activity can cause great damage areas for this purpose, especially if not managed properly, but can bring great benefits. Pressures on growing popular tourist places so beautiful natural areas are becoming more and more places for long-term tourism, visits a day and even sports. In some areas, tourist facilities often come in conflict with conservation and change objectives landscapes. Pressures for development of tourist facilities are very powerful, but if tourism is planned and managed to be sustainable, it can be a positive force, bringing benefits both the environment and local communities.[4]

Straja mountain tourism development in the area is favored by a number of natural factors as:

- issues picturesque landscape and the high value of their Straja;
- the ski area: extension, average snow depth is 40-60 cm, its persistence around 150 days a year and runs with optimal exposure;
- there is a gap harnessed for a tourist resort;
- network streams and rivers that enrich the landscape value of the area and fish fund that allows the practice of sport fishing;
- coniferous forests especially in this area have a therapeutic role-climatic by spray resin and have a very rich wildlife fund;
- karst forms that focus in this area enable speleology practice and scientific tourism.

For sustainable development of tourism in this area should apply measures such as promoting harmony between human and natural components, infrastructure design based on local context, rather than promoting the general solutions, understanding integrated area as an ecosystem in which changes take time. It is important not to sacrifice the integrity of ecological systems and sustainability of economic processes in the development of the area and the impacts caused by infrastructure creation should be limited in these natural changes.

Infrastructure should be mostly simple, with respect basic human needs, a minimum of comfort and safety. It necessary designation of an area to collect all waste produced on site, the infrastructure in phases, leaving the possibility for monitoring cumulative environmental impacts in construction phase also natural ecosystems must be left to latching the highest possible. In-depth analysis of pollutant-acting factors shaping tourism allows green field strategy, which involves either eliminating factors or activation, enhancement or introduction of other factors that help to reduce or cancel these harmful effects.[2]

Recommended for publication
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