

RESEARCH ARTICLE

(Open Access)

Biodiversity effect in ecotourism

INA VEJSIU^{1*}, MERITA STAFASANI²

¹Forest Department, Faculty of Forest Science, Agriculture University of Tirana, ALBANIA

²Chemistry Department, Faculty of Biotechnology and Food, Agriculture University of Tirana, ALBANIA

e-mail: *inavejsiu@ubt.edu.al, mstafasani@ubt.edu.al

Abstract

In the last years, Albania attempted to change his legislation, making possible approach to the European Union standards. A sector which our country push his attention has been the environment sector and in particularly the biodiversity protection. In this reason the government has made several efforts on making policies in the development and management of the Protected Areas and National Parks. The tourism sector an especially ecotourism are manly new industries in the Republic of Albania. The Biodiversity is an attraction for the tourists who visit these specific areas, but is necessary to create touristic guide specialized in this sector and especially in the endemic and sub endemic species. Ecotourism sector development makes pressure in the biodiversity and therefore it requires a qualitative management because besides the economic benefits it constitutes an ongoing threat to the biodiversity in general.

Keywords: Biodiversity, ecotourism, protected areas, strategy.

Introduction

Albania has a surface of 28 748 km², is considered as a country with a plant variety at around 3976 types, of which at around 110 sub-endemike types and around 27 endemic tacsons, included in 180 family, 900 gender and 800 Balkan types [7].

Albania has made a great progress on the biodiversity protection during the period between the first Strategy and the Action Plan on Biodiversity [9] of the year implementing a legal and institutional framework into practice. Therefore has been created the Ministry of Environment and some relevant institutions and the legal framework on environment. In 2006 Albania began the process of Integration and Association in the European Union and it affects on taking measures on the protection of the nature and biodiversity.

In the last years the development of the ecotourism concept and gets the opportunity to catch economic benefits, especially in the Protected areas and not only, and provides a sustainable use of the biodiversity components.

The law number 9868, date 04.02.2008 "For some additional changes of the law nr.8906, date 06.06.2002 "On Protected areas" [6], establishes the criteria for announcing the protected areas and recognize special protected areas in interest for the for the European Committee on ensuring the possibility on evaluating the habitats and then the proposal of these fields in base of the criteria's provident in the law in accordance with the Habitat Directive.

Albania's natural features have the potential to attract tourists seeking ecological and cultural experiences. Thoughtful, sustainable development of these resources could enhance rural village and community livelihoods throughout Albania. The recreational values of biological and landscape diversity is an asset, which can be used to promote tourism development. If no investments are made soon for the protection and preservation of the biological and landscape diversity, there is a risk of losing their recreations values to help foster tourism as a means to promote development and prosperity in Albania [10].

Material and methods

Mathieson and Wall argued that tourism can also be described as a system with an originating area (the market or demand element) and a destination area (the attraction or supply side) with a travel component linking the two. Overlying this approach are the characteristics of tourists and destinations as well as a consequential component (impacts) [3].

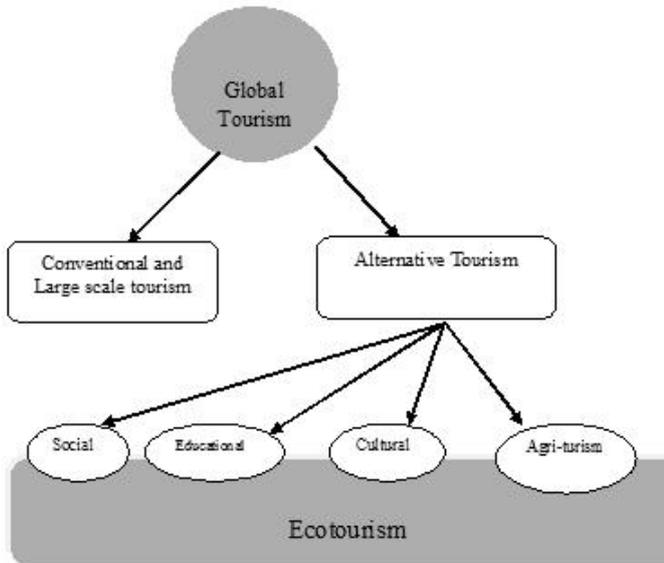


Figure 1: The role of ecotourism in the Global Tourism

Sustainable tourism

The World Tourism Organization (WTO) uses the following definition of sustainable tourism:

Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems [11].

Sustainable tourism policy

Examples of sustainable tourism policy can include:

- actions governments are engaged in as they carry out policy
- policy outputs that governments or their partnerships have developed

- identifiable organizational mechanisms that address sustainable tourism
- participation in and/or endorsement of international initiatives such as the Convention on Biological Diversity, Agenda 21 and free trade agreements [11].

Advantages and disadvantages of a sustainable tourism

The development of the regional tourism affects the quality of life of all the residents. It affects in a positive way the physical and psychological health, get new development of the region and a high quality of the services this sector offer.

Through different programmers the staff, visitors and the local resident gain high consciousness on growing their knowledge's on ecotourism and the National Parks and their benefits from them.

A sustainable ecotourism requires a political additional financial support for this sector. Also will enable some new job position for the local residents and may grow the local revenues on improving the existing situation [10].

The development of the tourism sector makes a person on the nature and the environment. Tourism management consumes the resources and deflects the attention from the different objectives on managing National Parks. Investing in infrastructure effect on the reduction of the investments in the field on the protection of the nature, effect an increment of the life costs and sometimes the residents forgets the fact that this zone is a nature heritage [4].

Ecotourism

There are extensive sources of information about the ongoing debate on definitions of ecotourism, and clearly understanding and defining eco- tourism is critical from a policy perspective. The definition of The International Ecotourism Society that ecotourism is responsible travel to natural areas that conserves the environment and sustains the well being of local

people [2]. Ecotourism should provide some level of contribution to conservation of biodiversity, benefits to local communities, economic and social benefits, and have an education and awareness component.

The tourism sector and especially the one of ecotourism in Albania are mainly new.

According to UNWTO, regarding **Ecotourism, it can be defined as a special form of tourism with the characteristics below:**

- 1 All types of tourism, in which the main motive of the tourist is the view and the nature evaluation and the cultural heritage.
- 2 Has an educative and interpretative features.
- 3 Is organised by specialised touristic operators tend to be small local enterprises.
- 4 Minimise the negative effects on the natural and social and cultural environment.
- 5 Supports the preservation of the natural zones, used for ecotourism attraction through:
 - a) generating economic benefits;
 - b) ensure employment and the possibility of the increase in revenues incomes.
- 6 Increasing the awareness of the local resident and the tourists to protect the natural and cultural resources.

Main threats to biodiversity

The main threats to biodiversity are as a result of industrial development, urbanization, illegal hunting, fishing, soil erosion, energy and mining, transport and tourism, these are sectors that have an important impact on biological diversity. The main factors of biodiversity loss are anthropogenic activities that cause changes in habitat.

There is a lack of understanding of the important link between biodiversity and social welfare of beings. We need knowledge to complete the

biodiversity to social benefits and negative impacts that exercise tourist activities on biodiversity.

The private sector is the one that relies on natural resources for the development of ecotourism. To achieve his goals he tries to create healthy ecosystems tending the removal of waste and to preserve the land, water and air quality. At the same time, they carry out economic activities which may also have significant negative impacts on biodiversity.

A suitable instrument for managing biodiversity impacts and contributing to the protection of biodiversity could be the creation of the Biodiversity Action Plans for these enterprises to manage the overall impacts on biodiversity.

Most activities of these enterprises usually end up damaging ecosystems, or simply pollute the environment. Activities with potential negative impacts should be identified to determine the exact causes and consequences of these activities on biodiversity. These analyzes will allow the identification of alternatives to avoid or minimize the sectoral policy impacts on biodiversity.

Biodiversity and tourism

The concept of biodiversity is particularly relevant to the tourism sector as it deals with the interface between nature, commerce and social processes.

In describing the relationship between tourism and biodiversity, Preece and van Oosterzee [8] wrote: In a positive light, the relationship between biodiversity and tourism (ecotourism) can and should be mutually reinforcing. The declared and publicly promoted protection of natural features, ecosystems, and biodiversity acts as a strong attractor for the tourism trade and provides a vehicle for the development of national and regional economies. On the other hand, there are opportunities and indeed a strong obligation for the tourism trade to promote and contribute to biodiversity conservation.

For successful management of biodiversity and the development of the tourism sector we need the involvement of the public sector in setting policies for

the conservation of nature and private sector investment in services and infrastructure. Only through cooperation of the two sectors becomes possible to have economic and social benefits as well as biodiversity conservation.

More than 75% of the territory of the existing protected areas in Albania are located within forests and pastures land, which shows their importance for the conservation of in-situ (stationary status) of the country's biodiversity

Dajt National Park (DNP) is one of the most important protected areas, in the country due to its complexity. The sustainable management of DNP area calls for expansion of land use planning including specific functions as biodiversity conservation.

Based on the data collected from the floristic inventory, the species richness of Dajt National Park is about 940 vascular plants or 29% of Albanian flora [5].

Flora and fauna in Dajt National Park

All ecosystem services are supported by biodiversity, which includes the full range of genes, populations, species, communities and ecosystems.

The park has a large variety with about 44 species of forest trees and shrubs, which cover about 80% of the territory, herbaceous plants, animals and

wild birds, with a relatively high altitude from the sea level, ranging from 300 meters to 1612 meters the highest peak. In the four phyto-climatic areas we have sunny days and as a result, a cool climate and fresh air of Tirana zone.

In addition to plant flora worth mentioning the area is rich in animal flora. So we can mention amphibians, reptiles, birds like the mountain eagle and falcons as well as mammals carnivores like bear and gray wolf, which are often found in this area.



Figure 2 Images for typical flora of Dajt Park



Figure 3 Images for special fauna of Dajt Park

The large increasing influx of vehicles causing considerable noise pollution, which affects concern and consequently decrease or disappearance of species, it has been the effect of the reduction or disappearance of certain animals and wild birds

permanent residents or forest nomads such as wild bear, deer or partridge, rabbit and foxes.

In all the european counties with an alpin territory has limited the entrance of vehicles ins such areas to protect these species from the noise, the

pollution and lack of gas and oil caused by the engine transportation

The MEA did not consider biodiversity conservation to be an ecosystem service on its own.

Nonetheless, conserving biodiversity provides many values because genes, species, habitats and ecosystems support the provision of numerous services, such as producing trees, enabling genetic resources to continue evolving and providing attractions for the tourism industry. However, the multiple relationships between biodiversity and ecosystem services remain only partially understood and is an area of active research [1].

The development of ecotourism is encouraged by biodiversity zones by the availability of specific species that are attractive for tourists. While investments in the tourism sector affect the way towards not just to improve the conditions of the area but also in creating new environmental attributes. These qualities, often provides negative impact on biodiversity.

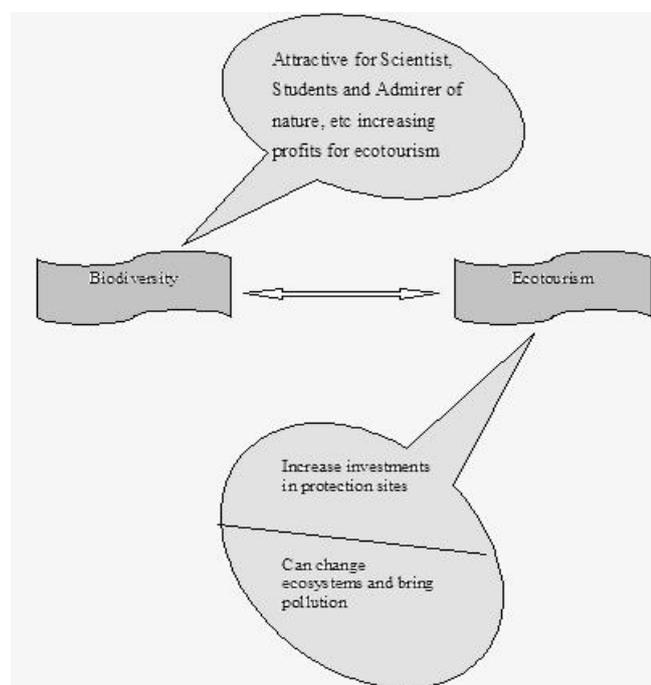


Figure 4 Reciprocal relations between Biodiversity and Ecotourism

Discussions

The recreational values from biological diversity of the landscape are an asset, which can be used to promote tourism development. If we are not able and responsible for the protection of biological and landscape diversity, there is a risk of losing their values, which help tourism as a tool to promote development in Albania. Hunting, fishing, hiking and other activities, which are attractive for tourism, demand for all the actors to take the necessary measures to protect the environment and its biodiversity.

Conclusions and Recommendations

The real biodiversity in the Dajti National Park is lower than potential biodiversity, as the result of human impacts, including tourism.

Public policies and dynamics of policy-making process at local and national levels are essential for improving the relations between tourism development and biodiversity protection at the same time.

The public sector can be an incentive to partnership in the development of sustainable tourism policies and policy-making in the effort to reduce the negative impact of ecotourism sector on biodiversity in general and particularly on endangered species.

The tourism sector an especially ecotourism are mainly new industries in Albania. The Biodiversity is an attraction for the tourists who visit these specific areas, but is necessary to create touristic guide specialized in this sector and especially in the endemic and sub-endemic species.

References

1. Cardinale B. J., Srivastava D. S., Duffy J. E., Wright J. P., Downing A. L., Sankaran M., Jouseau C., : **Effects of biodiversity on the functioning of trophic groups and ecosystems.** *Nature* 2006 **443**, 989-992 (doi:10.1038/nature05202) [CrossRefPubMedGoogle Scholar](#)

2. Epler Wood M, : **Ecotourism: Principles, Practices & Policies for Sustainability**, UNEP, Paris, France & TIES, Burlington, VT USA. 2002.
3. Fennell, David A., and Ross Kingston Dowling,: **Ecotourism Policy and Planning. Wallingford:** CABI Publishing. UH Manoa Ecotourism Research Group 3 Academic Literature on Ecotourism in Hawaii, 2003.
4. IUCN and UNEP-WCMC: The world Database on Protected Areas (WDPA): Cambridge, UK: UNEP-WCMC. February 5 2012.
5. Kalajnxhiu A, :**Vlerësimi i biodiversitetit floristik e vegjetacional të Parkut Kombëtar (të propozuar) të Dajtit** PhD Dissertation, UBT, Tiranë, Albania 2006.
6. Law nr. 9868: Tirane. Albania. 2008
7. National Strategy of Environment. Tiranë, Albania. 2014.
8. Preece, N, Van Oosterzee, P., & James, D. **Two-way track: Biodiversity conservation & ecotourism.** Canberra: Environment Australia. 1995.
9. **Strategjia dhe Plani i Veprimit për Biodiversitetin (SPVB)** Tiranë, Albania. 2000.
10. Vejsiu I,: **Vlerësimi i efektivitetit ekonomik te zonave te mbrojtura: parku kombetar i dajtit, impakti i tij ne turizem,** PhD Dissertation, UBT Tirana, Albania. 2014.
11. World Tourism Organizations (WTO), World Travel & Tourism Council (WTTC), and Earth Council Agenda 21 for the Travel and Tourism Industry: Towards Environmentally Sustainable Development. London: WTTC. 1996.