

## Sustainable Development of Tourism in Kune-Vain Wetland System

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## Abstract

*The Protected Area of Kune – Vain (Nature Managed Reserve of the IV-th Category after IUCN) is made of a complex of lagoons of the most important ones on the Adriatic seacoast. The miraculous landscape, the biodiversity, the historic values of surrounding areas, the rich cultural and musical traditions and the traditional food consist in important factors for the development of tourism in this area.*

*The development of an unplanned tourism is accompanied with the damage of the foundational tourism resources. Many studies there have been undertaken for the sustainable development of the area, but still the tourism situation remains chaotic and far away from being sustainable. Due to the fragility of the potentials and the unplanned land use, the massive and uncontrolled tourism year after year has degraded the values of this area.*

*The mismanagement of solid and liquid urban waste creates visual disorders and at the same time it is a potential risk for the health of inhabitants of the area and the tourists that visit this area. In a small country like Albania and moreover for a closed and sensitive area like Kune – Vain, the deterioration of environmental values is converted rapidly in the reduction of tourism capacities.*

*This research is based on a deep study undertaken in the framework of Compiling the Plan for the Management of the Nature Reserve of Kune – Vain. Based on the existing information, and combined with the scientific survey and verifications in the terrain, in this research work there are analyzed potentials and there are evidenced problems of the development of tourism in the Kune – Vain area. On this basis there are suggested in details effective ways for the restoring and maintenance of the touristy potentials of the area through ecologic, social and financial instruments and mechanisms, with an adequate cost and with rapid action. This research work intends to give a positive example in the management of protected areas, by using the sustainable tourism as a conservation instrument.*

**Keywords:** *sustainable tourism, Protected Area, environmental evaluation, environmental remediation, Kune-Vain (Lezhe)*

## 1. INTRODUCTION

Sustainable development is an orientated concept that is developed in the last decades of the 20-th century. One of most successful concepts was given in the year 1987 by the World Commission on Environment and Development (WCED) in the report “Our Common Future”. According to it, sustainable development is “*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*”.<sup>4</sup> The sustainable development concept is relatively a new one for Albania and is developed during the last two decades. Sustainability and awareness on environmental issues are a major part of the tourism development strategy in Albania. According to this strategy, Albania should build up and increase the sector potentials and should develop the tourism in such a way, so that it remains sustainable in the long term, in the cultural, social, environmental and economical points of view.<sup>5</sup>

Development of nature tourism is in compliance with increasing of world wide tourism interest in not mass tourism. The proposed actions on the development of sustainable tourism try to give priority to nature oriented non-massive tourism and to even control as much as possible the massive tourism.<sup>6</sup>

The Nature Reserve of Kune-Vain, is a wetland system located in the administrative district of Lezha, in the northern Albanian coast, in the latitude 41°45’N and longitude 19° 36’E . The area includes the Kune side in north of Drini of Lezha river and Vaini one in the south of the river (fig. 1). The total surface of the Kune Vain area (without Tale zone and Kenalla lagoon) is about 2000 ha.<sup>7</sup> The Kune Island (part of the Kune side) is a Strict Protected Area<sup>8</sup> (fig.1), and according Albanian environmental legislation, the tourism can not be applied there.<sup>9</sup> The area is bordered by Shengjini beach and Ishull Shengjini village, Ishull Lezha village, Tale village and Tale beach etc.

For its diversity of the ecological factors, this wetland represents one of the areas with the greatest interest in Albania.<sup>10</sup> This reserve is considered as one of the most important national resources of fish and it is an area with

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4 WCED (1987)

5 MTCYS, (2005).

6 Richards and Hall (2000)

7 CEIA (2010)

8 Bego and Koni (1999);

9 Law on Protected Areas (2008)

10 Mullaj (1998)

international values for the wintering and reproduction of water birds<sup>11, 12, 13</sup>. The biodiversity, the wonderful landscape and the rich cultural and historical traditions of the zone, make it also an ideal area for the development of ecotourism.<sup>14</sup> Because of the richness on habitats and biodiversity, the site was used since the early years in the 1900-s as a hunting area, and it is the First Protected Area in Albania, declared as such since 1940.<sup>15</sup> From 1992, Kune Vain is declared Nature Managed Reserve of the IV-th, after IUCN category. Nowadays the site is under the administration of the Ministry of Environment, Forests and Water Administration. The area is very close to the ancient towns *Lissus* (Lezha) and *Nimfeum* (Shengjini), that are very important from the archaeological, historical and heritage point of view. Planning for further development of Shengjini port, the vicinity with Tirana city and “Mother Tereza” airport, with Hani i Hotit (Albanian Border with Montenegro) and geographical position in the middle of Albania, are evaluated as very important factors for tourism development, but in the same time these same factors pose a risk on the overexploitation of its natural resources.

This paper intends to give some guidelines on sustainable tourism development based on the carrying capacity framework. In the carrying capacity there are included both: the qualitative as well as the quantitative aspects and its estimation is empiric and relative for an area. Nevertheless, it is vital to attempt to arrive at some estimation of the carrying capacity of Kune-Vain site, using the best methods and knowledge available. In Kune-Vain case, the carrying capacity can be expressed as a ratio between the tourism potentials and the environmental, social, economical limits, and degradation factors. The situation is conditioning the immediate rehabilitation actions for remediation and strengthening of tourism potentials.

The objectives of this study are to:

- ✓ Give realistic vectors to orient environmental remediation of the site;
- ✓ Orientate the decision makers to increase the site feed-back, by income generated from tourism development;
- ✓ Orientate the evaluation of tourism capacity upon realistic and internationally known criteria;

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11 Reci (1998)

12 Bego et al. (1998);

13 Vangeluwe et al. (1996)

14 Sinojmeri (1998)

15 NEA (2000)

- ✓ Use the present illegally operating actors to contribute to the sustainable tourism development, for as long as they still are operating in the site;  
In this way, the study aims to offer a positive example on the conservation of Protected Areas in all Albanian coasts, by using the sustainable tourism as a major instrument.

## **2. MATERIALS AND METHODOLOGY**

This paper is the result of works done by the authors as part of CEIA (Center of Environmental Impact Assessment) team in the framework of WB/GEF Project “Management Plan of Kune-Vain Marshland” during years 2007-2009. Consultation and usage of existing scientific and technical information and data of the last 50 years were the basis of evaluation of changes in the environmental elements, above all, of those elements that are considered as basic tourism potentials. Among them, there may be mentioned scientific editions and reports of academic institutions, projects and other technical and scientific findings realized by the national and international specialized subjects, etc.

Interviews with tourism actors in the site, questionnaires, and round tables with interested parties, were carried out in order to realize tourism developer wishes and their understanding regarding environmental importance for their investment, visitor demands, administrative objectives, etc. Meetings with tour operators, tourism and environmental NGO-s etc helped to valuate the role of tourism instruments and their desires.

Difficulties were encountered in the collection of data on income from tourism facilities on the site. The reason is that such operators, because they were operating illegally, didn't feel comfortable to give out the real data on their income. The field surveys helped to create a general picture on such data. An unrealistic visitors' number is given by managing administration of the protected area, because they count only the number of cars that pay tickets in Vain side, making it impossible to evaluate the real number of visitors, and more over to estimate how much money they have spent in the site.

## **3. RESULTS AND DISCUSSIONS**

There are three main tourism types that are developed in the Kune-Vain Protected area. One group is represented from the sea sun tourism and two other groups, classified as nature tourism, are respectively consumptive (hunting

and fishing, etc) and non consumptive tourism (walking, watching, scientific, educational, etc). According to field surveys it is estimated that about 7000 visitors come everyday in Kune-Vain during the summer period. In this number there are included not only the sea sun tourists, but also hunters, sport fishers, nature watchers, students etc. Actually, the entrance ticket cost is about 2 USD / car, the hunters pay 3 USD/hunting day and 8 USD/year per hunting permits.

The financial income of Kune-Vain Protected Area has several sources. In total, the income of managing staff as salaries and *per diem* are 34,450 USD/year. Other financial income collected in the Protected Area from fees and hunting permits and deposited in the local budget (but not in the managed area), during the three last years were about 900 USD / year. In the last years, in favor of Kune-Vain protected area, the World Bank has financed projects reaching the amount of 415,000 USD, by a total plan to reach approximately 700,000 USD<sup>16</sup>. The income of tourism services (hotels and restaurants) into protected area (illegal ones) is not calculated, in order to avoid the empiric results.

The very low income from tourism in Kune-Vain protected area, and its cumulative negative impacts on environmental richness are a clear testimony that unplanned activities in small and sensitive areas, in a short time, become destructives of tourism potentials. The area capacity is artificially reduced to its limits. Presently the tourism development in Kune-Vain doesn't seem to be represented as a market response to national or international demands.

Table 1 gives the capacity weight versus potential limitation/degradation factors in Kune-Vain area. It looks clearly that the main potentials are reduced by miss-management, therefore decreasing the capacity weight. Restoring of such situation requires actions that control the degradation factors, thus offering the best opportunities, knowing at least theoretically the number of possible visitors/day in the site and then analyzing the limited factors.

Although it is missing an fixed value/criteria for the necessary minimal beach area per visitor, if it is considered to be 10m<sup>2</sup> per visitor as the limit of surface that can ensure satisfied recreational conditions to sea sun tourists, it can be calculated 60,000 people, as the maximum of sheltering visitors per day (in a total 600 000 m<sup>2</sup> of sandy surface- see tab 1).

**Tab. 1. Kune-Vain Area Capacity Weight versus potential limitation/ degradation factors**

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16 CEIA (2010)

17 Bego et al. (1998)

18 Mullaj (1998)

Potentials	Status of potentials	Limitation/degradation factors	Capacity weight
Climate conditions	Mediterranean (4 seasons)	60 days appropriate for sea sun tourism	High
Diversity in wildlife, attractive and easy observable animals and vegetation, beautiful and interesting landscapes	12 species of fish, 10 species of amphibians, 29 reptiles, 120 species of birds, 7 species of mammals. <sup>17</sup> 200 ha of total surface are high forests. 277 species of vascular trees. <sup>18</sup> Dunes, low sandy coasts, meadows and forests, lagoons, marshes, river and delta	Poaching, over fishing and grazing Damaged habitats and disturbance of wildlife from human presence Tree cutting for building or parking purposes Dune erosion, garbage and inappropriate constructions Illegal constructions Driving into Protected Area Territory Not implementation of legislation	Reduced seriously
Uniqueness species, undisturbed zones	Birds: 2 globally threatened species, 2 extinct species, 12 species protected by international agreements, 2 endangered species, 3 threatened species, 12 rare species, 9 vulnerable, 12 insufficiently known. 1214 Mammals: 1 threatened specie, 1 vulnerable, 1 endangered, 1 rare, etc. Kune Island (strict Protected Area), Nature monuments of Rivat e Drinit and Keneta e Kashtes, all together 134,84 ha.	Low conservation efforts Lack of information services and specialized guides Low community participation in conservation policies and efforts Not implementation of legislation	Reduced seriously
Sandy beaches/coasts	800 000 m <sup>2</sup>	Erosion, pollution, not allowed visitors in Kune Island (200 000 m <sup>2</sup> of sandy beach)	Reduced seriously
Existence of archaeological and historical sites in surroundings.	Existence of ancient towns of Lissus (Lezha) and Nymfea (Shengjini) The castle of Lezha, Scanderbeg grave, ancient churches etc.	Lack of effective tour operators in the closed towns. Lack of information and promotion	Medium
Autochthon culture and heritage	Unique and traditional costume, music, food, etc. Well understanding between three different religions; Catholics, Muslims and Christian	Lack of information and promotion	Medium
Compatibility of the surrounding areas for additional types of tourists	Marine sports in the Adriatic shore, rowing in the Drini river, riding in flats around the area, biking in the paths into Protected Area, climbing in the Renci mountain, etc.	Missing of effective Tour operators in the closed towns. Lack of information and promotion for using of surroundings for recreation, accommodation and services	Low /Medium

Accessibility and infrastructure	70 km far from "Mother Tereza" Airport 84 km far from Tirana (Albania Capital) 18 km far from Lezha city 5 km far from Shengjini city 5 km far from Shengjini Port	No limitation/degradation factors in transport Poor infrastructure on energy source and supply, lack of wastewater treatment, bad management of urban solid waste, etc.	Low/medium
Visually attractive landscape on the access road	Appropriate topography from Lezha to Kune and Vaini sides	Roads on construction Quarries on Renci Mountain Inappropriate architectural structure of buildings Garbage and debris	Medium
Accommodation and services	22 Bar/Restaurants, 7 of which are also hotels and motels, into Protected Area. 3 Hotels in Ishull Shengjini (in the border of Protected Area), one of which, Hunting resort, built in 1943	Illegal constructions with not appropriate architecture into Protected Area territory. Missing of policies on classification of target operators for services and accommodation around Protected Area	Low/Medium
Health and safety conditions	Health care centers and emergency room service in the town of Shengjini.	Lack of bay watches and emergency health services in Protected Area entrance	Low/ Medium
Infrastructure of Protected Area	4 watching towers 1 post block in Vaini 5 sheltering places in Vaini Hunting hutches in Kune and Vaini Paths and information tables for hotels and restaurants Office infrastructure and chancelleries Boats and motor bikes for management staff Field work facilities	Missing of information units Missing of post-blocks in the entrance of Kune and south of Vaini (ex-pheasant center) The Administration of a part of the territory inside the Protected Area by illegal subjects. Lack of information and orientation tables on site. Lack of signal signs for Protected Areas boundaries. Insufficiency of awareness activities	Low/Medium
Administrative staff capability	1 responsible (ranger), 8 technicians and 3 guards Un cleared dependence	Low Number of staff Low know-how of staff Low competency and authority of the managing Staff Missing of responsibilities	Low

One of the most significant limitations in this number on one hand it is related to the inadequacy of water supply for sanitary purpose, and on the other hand on the inability of huge wastewater volume treatment. Taking into account that minimum of sanitary water to be used by a tourist is 150 l / day (a German sea sun tourist consumes about 1,000 l / day), it results that about 9,000,000 liters of waste water / day will be generated during the summer season in the area by the 60,000 potential visitors. This volume is two times

higher than the one of waste water generated by inhabitants of Lezha Region (including Lezha and Shengjini towns). The wastewater treatment plant planned for Lezha and Shengjini and financed by WB/GEF will resolve only demands of two towns' citizens and doesn't include the tourism demands of Kune-Vain area. On the other hand, the conservation status of Kune-Vain and international environmental Conventions doesn't permit that such waters to be discharged untreated in the lagoons or in the sea. The limit number of visitors is also conditioned by the maximal possible number and frequency of the hygienic services like: toilets, showers etc, inside the Protected Area borders, the disturbance to the biodiversity, energetic sources and supply facilities, other infrastructure demands etc. This analyze can create the idea from what and how can be started tourism development planning in this site.

Repairing of tourism potentials, increasing of monetary feedback on the site and use part of income for remediation of environmental features, are the keys for a sustainable tourism development. For as long as the illegally operating subjects are not relocated outside the Protected Area, for the time that they exploit its resources, they should be involved in conservation and profitable services, thus increasing their being interested in the sustainability of the site management.<sup>19</sup> The main steps to remediate tourism potentials and sustain the activity can be considered:

- ✓ Maintain the sandy coasts by the control of land erosion. This action can be done by soft protection measures (sand bags), considered as more appropriate for the protected areas.<sup>20</sup>
- ✓ Increase the fishing potential by reopening and maintenance of Lagoon channels. Usage of the dredged material for filling of protective sand bags will help on a drastic decrease of the coastal protection costs.
- ✓ Construction an adequate number of open showers and toilets, together with their respective septic tanks (both in Merxhani and in Vain). Camouflage, frequent cleaning and disinfecting of the tanks are necessary.
- ✓ Better managed disposals of solid waste, by camouflage of waste bins, frequent cleaning and disinfecting. Awareness of community and visitors on the necessity of waste reduction and also on practicing the proper disposal of waste.
- ✓ Building of 2 small information centers one in Vaini (in construction) and one in Kune, by using as information instruments the existing illegal

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19 Mc Neely and Jeffrey (1988)

20 Bruun (1985)

constructions (owners already agreed to cooperate) as far as they are operating in the site.

- ✓ Avoid for 2 years hunting in the area, inciting remediation of wildlife in lagoons.
- ✓ Strengthening of managing staff with one biologist / information expert and one financial expert. Opening a check point / post block and control hut in Kune side and increase the number of guards.
- ✓ Controlling of motor cars passing into the protected area and using of attractive non motor vehicles transport. An exception will be for the cars moving for emergency reasons, inhabitants' vehicles, furniture etc. These measures will help also to control the massive tourism.
- ✓ Monitoring of the site status and of the tourism impacts on it with a minimum frequency of four times per year (at least every season).
- ✓ Incite the development of tourism in surrounding areas, creating artificial ponds for hunting, flat lands for riding, developing and improving services, such as hotels and restaurants and their support infrastructure etc.
- ✓ Improving tourism support services, such as information and publicity, by preparing, editing and distributing promotional material, ecological and ethical codes, etc. Promotion of local traditions, offering and serving local products, traditional meals and drinks served by people dressed in their traditional dresses, local music, etc.
- ✓ Contracting tour operators, universities, schools etc, for inciting nature package tourism, offering convenient tickets and service prices.
- ✓ Use environmental friendly energy sources, such as solar energy etc.
- ✓ Improving income by tourism in the site by using appropriate financial instruments is another important key on the sustainable development of the site. One of the main steps is to avoid the money-flow outside the Protected Area. This can be done by the following measures:
- ✓ Opening of an independent bank account for the managing office and reaching an agreement with the Ministry of Economy and the Ministry of Environment, Forests & Waters' Administration, to use as feed back for the site at least 75 % of the money collected by activities in the Protected Area territory. Use the money collected for rehabilitation and maintenance of environmental potentials will be a crucial step.
- ✓ Reaching agreements between the tourism facility owners (i.e. illegal operators) at the site and the managing office to use their facilities and their funds on coastal protection and channels' dredging activities, on the allocation and maintenance of hygienic facilities (septic tanks, solid waste collection and transport). It is in accordance with the 'polluters pay' Principle.

- ✓ Reaching agreements for application of fees to every tourism facility owner that generates income inside the Protected Area territory.
- ✓ Reaching agreements between the illegal operating businesses and the managing office to collaborate on notifying for the events of illegal activities, forest fires, etc and for their prevention.
- ✓ Promotion of natural, cultural and historical values of the area in and outside Albania in collaboration with local and national government, non-profit associations, tour operators etc.
- ✓ Incite package and group tourism.
- ✓ Increase prices of entrance tickets for vehicles, visitors, the hunters' tickets, and also to apply severe penalties to poachers and illegal fishers.

As a conclusion, the status of Protected Area in Kune-Vain Wetland system conditions the careful remediation of tourism potentials in the area considering its environmental properties. Such factors expressing carrying capacity incite the development of the no-mass tourism. Implementation of the right financial instruments remains the key for economical development of the region. Public awareness and community participation are essential factors on the successful sustainable development of Kune-Vain.

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**Fig. 1. Map of proposed spatial planning of development and conservation in Kune-Vain Protected Area.**

*(Elaborated from the GIS-geo-formatted image. sc 1:10 000 Original, CEIA, 2010)*

**Legend**

**1/A** – Strict Protected Zone; **1/B** – Core Zone, low human presence / protective intervention; **1/C** – Core zone, controlled recreational activity / low human presence; **2/A** – Traditional development zone (fishing); **2/B** – Sustainable Development Zone-(Tourism development); **3** - Sea and Inland buffer zone (tourism infrastructure).

