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PERSPECTIVES OF DEVELOPMENT OF ECOTOURISM IN WEST AFRICA – EXAMPLES FROM NIGER, MALI AND THE IVORY COAST

Abstract: Ecotourism, understood as a form of leisure conforming with the principles of environmental protection and promoting its natural and cultural values, is dynamically developing in almost all parts of the world. Properly carried out, ecotourism projects may be an essential instrument of regional development. Problems of ecotourism development in four areas of West Africa, i.e. the Comoé National Park (Ivory Coast), the Dogon Country (Mali), the northern Dallol Boss Region and Kouré (Niger), and the Air and Ténéré Natural Reserves (Niger) are discussed in the article.

A common characteristic of the chosen areas are their significant natural and cultural values and the occurrence of tourist activeness allowing to qualify them as ecotouristic sites. The analysis of both external and internal success factors in ecotourism leads to the conclusion that, in the discussed regions, ecotourism development is a positive phenomenon. It should, however, be accompanied by continuous supervision of environmental conditions and ecological education of the local population.

Key words: West Africa, ecotourism

INTRODUCTION

Ecotourism, understood as a form of leisure conforming with the principles of environmental protection and promoting its natural and cultural values, is dynamically developing in almost all parts of the world. One of the basic assumptions of ecotourism is the generation of benefits not only for tourists and travel agencies but also for local communities and indirectly, for the natural environment. Therefore, properly carried out ecotourism projects may be an essential instrument of regional development. Ecotourism achieves success not only in the most economically affluent countries but also in those being in the development phase. Some of the countries, such as Costa Rica or Belize (Kulczyk, Lewandowski 2004), have made it their chief source of income. This paper is an attempt to answer the question whether ecotourism may positively influence the development of selected regions of West Africa

and what conditions must be met in order that ecotourism project be a success.

Skarżyńska (2003) indicates two factor groups influencing tourists to visit a given region or country. External factors comprise the natural attractiveness of a given region, its uniqueness, and the state of conservation. Internal factors include the quality and credibility of the offer and the inhabitants' attitude toward tourists and their own environment. As numerous examples have shown (Kulczyk, Lewandowski 2004a), the latter factor is rigorously linked to the level of benefits (material and non-material) related to the development of tourism and may be defined as a positive impact of tourism on the life of inhabitants. Upon compliance with the proposed modification, the division proposed by Skarżyńska (2003) was accepted as fundamental to the conducted analysis. Most of the information and data helpful in development of the elaboration was gathered locally, in the years 1998-1999 and 2005.

To exemplify, four areas were chosen: the Comoé National Park (Ivory Coast), the Dogon Country, the northern Dallol Bosso and Kouré Region (Niger) and the Āir and Ténéré Natural Reserve (Niger). A common characteristic of all the chosen areas are their large natural and cultural values and significant tourist presence which allows to qualify it as ecotourism activeness.

EXTERNAL SUCCESS FACTORS OF ECOTOURISM

The Comoé National Park is located in the north-eastern part of the Ivory Coast, by a river of the same name. One of the greatest protected areas in West Africa, it comprises 1.149.250 ha. The Precambrian crystalline platform makes up a plain of an average height of 250-300 m above-sea-level, diversified by mountains-witnesses reaching up to 658 m above-sea-level (Mt Yévélé). The park area is an unique example of the transition zone between forest and savanna. Communities characteristic of both zones make up a unique mixture. High grass savannas comprise 90% of the area, whereas the remaining 10% is made up of gallery forests and dry equatorial forests. The main element attracting visitors to the park is the rich fauna, e.g. 11 monkey species, 6 antelope species, lions, elephants and hippopotamus. In 1968, to protect natural resources of the subject area, the Comoé National Park was created. In 1983, it was inscribed on the UNESCO Biosphere Reserve list (www.unep-wcmc.org).

Regarding its' faunistic diversification and abundance of wildlife the Comoé National Park is an attractive, but not particularly unique, protected area located in the savanna woodlands of West Africa. Similar animals may be observed in the W National Park in Niger, the Pendjari National Park in Benin or the Yankari National Park in Niger. Unfortunately, the state of conservation of the animal environment within the Comoé National Park is deteriorating, above all due to activeness of poacher groups.

The Dogon Country is in central Mali. The area does not have precisely defined borders, its name refers to an area inhabited by the Dogon nation. The Dogon Country is located within borders of three physic-geographical regions: the Bandiagara Platform, the Bandiagara Escarpment and the Séno Plain. The Bandiagara Platform is build of Ordovician and Cambrian sandstone formed horizontally, partially covered by an impermeable lateritic cover. Its vegetation reflects a waste-mantle character, oscillating between thorny savanna with acacias and baobabs and areas without any plant cover. Depressions in an almost impermeable surface create favorable conditions for stagnation of water, which is used by the inhabitants for crop irrigation (onion and garlic). More humid areas are highlighted in the landscape by a vivid green colour.

The Bandiagara Escarpment stretches for 150 km, between the towns of Douentza and Ouo. Its relative height oscillates between 100 and 500 m. Numerous deep erosion cuttings diversify the Escarpment edge. Their interior is characterised by shadiness and a cooler microclimate, favoring intensification of vegetation. Rain water reservoirs exist in some of the cuttings, some flatlands are swamped. The Senó Plain, build of Quaternary sands grown over by tree savannas with predominance of acacias. The specificity of the Dogon Country stems from the rich culture of its inhabitants, singled out by a high conservation level of tradition, art, architecture and folklore. In the Dogon Country, an area of 400.000 ha is legally protected, including the centrally located Sanga village. In 1989, this site was inscribed on the World Cultural Heritage list (www.unep-wcmc.org).

The region of northern Dallol Bosso and Kouré in Niger, about 60 km east of Niamey, represents two kinds of landscape. The lateritic plateau is grown over by tiger bush. The specificity of this formation stems from the alternate growth of impenetrable and lacking vegetation covers and belts of the Sudan savanna which, growing in depressions, uses water flowing into it. The second of the landscapes existing here is a wide dry valley filled with alluvial placer deposits. Savanna is dominated by high acacia (with the dominating *acacia albida*). The discussed region deserves special attention because of the giraffes which inhabit it. Only a 100 years ago, animals existing numerously within the territory of today's Niger, Mali, Senegal and Mauretania, were decimated by hunters. In 1966, the last forty one specimen lived there. In 2003, as a result of activeness of the *Association pour la Sauvergarde des Giraffes du Niger* (Association for the Protection of Niger's Giraffes), the herd already numbered 176 specimen (www.wildanimalpark.co.uk/conservation/giraffes). The discussed area is not legally protected. Foremost, its uniqueness stems from being inhabited by giraffes, the number of which increases from year to year.

The Air and Ténéré Natural Reserve constitute the largest protected area in Africa, covering some 7.7 mln ha. The Reserve consists of fragments of two regions representing totally different kinds of landscape. Forty percent of the Reserve is formed by the Air volcanic massif and the remaining area

is the Ténéré sandy desert. The Aïr Massif is a heavily eroded pre-Cambrian metamorphic plateau, constructed of crystalline rock, punctuated by a chain of isolated, similarly eroded, volcanic cones and necks (Tamgak 1988 m above-sea-level). The attractiveness of the region is due to a great number of picturesque weathering forms as well as from the diversification of the geological area. Among the most interesting geological sites are the traces of young Tertiary and Quaternary volcanic features, including the caldera of Arakao and marble hills at the Wadi Zagado outflow. The mountain addax antelope is the great attraction of the animal world. The Aïr Massif abounds in cultural monuments. Among the most spectacular traces of human settlements in this area during the past 30 thousand years are numerous rock-engravings at Agamgam. Currently, about 5000 Twareg inhabit the discussed area. For the most part, they lead a traditionally nomadic lifestyle and are pastoralists, raising sheep, goats and camels. Situated at the Aïr Massif edge, the Ténéré desert is one of the largest sand seas in the Sahara. Several sand dune fields (erg) are to be found there. South of the ergs are extensive flat plains (reg), made-up of coarse sand, gravel and stones. Among the most spectacular places is the border between the mountain massif and the sands. The prevailing north-easterly winds collect sand at the base of mountain slopes, building one of the highest dunes in the Sahara (about 300 m in the Arakao and Temet area). In 1991, the site was inscribed on the Word Heritage List and in 1997 it was designated a UNESCO Biosphere Reserve (www.unep-wcmc.org).

Several massifs with landscapes similar to Aïr may be found in the Sahara but the immediate proximity of a great sand sea and volcanic mountains are determinant of the uniqueness of this area. Due to its size, specific environment and distance to the main urban centers, this area is, to a very limited degree, subject to human influence. In the first half of the nineties, the Twaregs' armed conflict had a negative impact on the Park's natural life and lead to a significant increase of poaching (www.unep-wcmc.org).

INTERNAL SUCCESS FACTORS OF ECOTOURISM

Development of tourism in the Comoé National Park encounters numerous obstacles. Due to the fact that its roads are suitable for driving, the Park is open for tourists only in the dry season, i.e. from November to April. The tourist base within the park is modest and incomparably expensive to its quality. One must have one's own transport vehicle to arrive in the Park and to move around it. Guides have little knowledge on the vegetation of the area they show and evidently demonstrate fear of poachers. The results of the latter's activity are expressed not only in the remains left throughout the area (traces of bonfires, stopping places) but above all, in the fact that animals which rush off to escape at the sight of a local guide, remain indifferent to noises made by tourists.

It is estimated that, in the years 1978 – 98, the number of some ungulates species decreased by 90% (Fisher, Lisenmair, 2001). Park guides come from communities in the vicinity but due to a small number of visitors, the economic significance of their work in the Park is too low in comparison with profits from poaching. We are dealing here with a case of feedback because, to a large extent, the small number of visitors is the result of the limited attractiveness of the Park. During the years 1990-1996, one thousand persons visited the Park annually and only 453 persons came in 1997 (www.cons-dev.org/africanature/djoudj/COM/comoe.htm). The local population makes no attempt to create any sort of a tourist-oriented offer. Even handicraft souvenirs which are so popular in different other regions are unavailable here. The village inhabitants, however, demonstrate a positive attitude toward tourists. If asked, they will serve a meal and will even accommodate them. Evidently, however, they are not aware of the fact that a regional meal served in a village yard may decide upon the attractiveness of a given place and not only be a vital necessity. Due to the armed conflict of the last few years, all forms of tourism have stopped in the Ivory Coast. The Comoé Park is located in a zone occupied by rebels. This fact has practically cut off the Park from the rest of the world and has very negatively affected the animal headage number. In 2003, the Park was inscribed on the List of World Heritage in Danger.

The Dogon Country was discovered for science by French ethnologists (M.Griaule and his students) in the first half of the XXth century. First tourists arrived there not much later. Currently, it is one of the most popular tourist objectives in West Africa. It is estimated that in the 2000/01 season, the Dogon Country was visited by about 15.000 tourists. About fifty tourist agencies, including twenty five from Mali, service travel operations (Racine, Walther 2001). The Dogon Country may also be visited individually but according to their internal regulations, each tourist group is obliged to hire a guide. It is permitted, however, that such a person not come from the Dogon Country. Nevertheless, tourists themselves decidedly prefer local guides who allow for a much better direct contact with the interesting Dogon culture. Guides are the greatest beneficiaries of the dynamically developing tourist movement. It is assumed that one hundred of them work in Bandiagara and Sanga, main places where tourists commence their visits to the Dogon Country (Racine, Walther 2001). Unfortunately, the quality of services and above all, the guides' educational experience, is on an alarmingly low level, especially in regard to the natural environment issues. Thanks to the world popularity of the Dogon Country, numerous researches and projects are carried out in the country, aiming at improving the quality of tourist services in the region and their development according to the sustainable development principles (Racine, Walther 2001). Specific form of tourism in the area are hiking tours (lasting from a few hours to a couple of weeks) along the Bandiagara Escarpment. The Dogons found some interesting ways to solve the problem of a large number of guests. Visitor hostels were built

in larger villages. Architecturally, they do not differ from the remaining facilities in the village. Their construction does not entail large expenses for they are practically not equipped. All necessities are carried in by tourist groups. The chiefs of villages charge each of the visitors with a fixed payment. These funds cover local community needs. Concentration of tourists on the same walking routes is a problem of sorts. This is a pollution burden for the environment (sewage effluents from primitive bathrooms in hostels, issue of solid wastes) as well as it creates favorable conditions for commercialisation. Diversification of charges for entrance into villages may be viewed as an attempt to solve this problem. Due to the high cost of hiking tours around the Sanga village, which is the most popular part of the Dogon Country, some of the tourists decide to visit the less expensive region around the villages of Endé and Teli.

The basic assumption of saving the Niger giraffes is compensation of the local communities for losses which they incurred from the animals' presence. All the inhabitants of villages in the area are the direct project beneficiaries. The Association for the Protection of Niger's Giraffes (ASGN) which pays compensation for crops damaged by the animals has introduced a credit system for purchase of crop seeds, supports a crop diversification program, carries on numerous workshops aiming at educating and making the local population more sensitive to the problems of giraffes (www.wildanimalpark.co.uk/conservation/giraffes). ASGN employs a dozen or so guides – trackers, who are responsible for accompanying tourists to the herd. Years ago, the older guides themselves hunted giraffes and today they are able to skillfully find the animal as well as to tell many interesting things about them. They are also responsible for guests to abide by the rules guaranteeing maximum safety and comfort of observation to both the visitors and the animals.

One of the basic assumptions accompanying the creation of the Aïr and Ténéré Natural Reserve was the promotion of rational use of natural resources by the local population (Newby 1996). It needs to be stressed that the Twareg, who lead a traditional life style and function in a landscape extremely sensitive to external stimuli, stand out with a high level of ecological consciousness (Rybiński 1999). The presence of tourists visiting the Reserve may be an additional attractive source of income. Legal regulations exclusively allow tourists accompanied by licensed guides to enter the Reserve. The majority of the guides comes from the Aïr region and some of them are members of the specially respected Twareg families. Due to the natural purity of the region, visits in off-road vehicles last from a few days to a couple of weeks. The objective of the tourist office is the logistic arrangement of the entire trip. Camel expeditions are also popular. In such cases, vehicles are used to transport the group to the starting point of the journey. Fifteen of the larger tourist agencies from Agadez, the starting point of the excursion to the Reserve, have created a syndicate. This organization runs the Tourist Information Centre, where one may obtain practical information as well as

broaden knowledge on the region's culture and natural environment. The syndicate in Agadez cooperates with several European organizations and the American Embassy in Niger, which guarantee training and the necessary financial resources. Nomads also make use of the tourists in the Reserves, to whom they may sell handcrafts. From year to year tourism in the Reserves grows. Started in 2004, the direct airline connection between Paris and Agadez will undoubtedly bring about an increase in the number of tourists. In the 2003/4 season, two thousand people profited from the services of the Agadez tourist offices (data from the Agadez tourist syndicate). The peak of the tourist season is in January, when 25% of the total annual number of tourists visit the discussed region. 90% of the visitors come from France. The dynamically growing number of visitors brings about a question on the resistance of the Reserve grounds. The guides' objective is not only to efficiently reach the journey's objectives but also to supplement the tourists' knowledge on the nature, history and culture of the region. Guides pay attention to respecting the traditional principles applied in the Twareg society, for example, only using brushwood as fuel. They also make sure that tourists do not take away rock specimen and do not destroy any rock-engravings. The principle of carrying away all non-organic wastes is also respected. A certain anxiety may be provoked, however, by the fact that majority of the expeditions into the Reserve follow the same routes. This is a result of both attractiveness of the region and duration of the expedition. In many places, above all in sandy areas, but not on fixed dunes, marks left by numerous transport vehicles are distinctly visible. Under the circumstances, it is difficult to recommend a good solution to the problem because vehicles driving within the same tracts contribute to an increase of erosion, arrangement of ruts being in parallel traffic lanes and destroy the already minimal plant cover. Should the tourist traffic continue to increase, it should be recommended that the number of simultaneously organized expeditions or those taking place during the same season in one of the chosen parts of the Reserve, be limited.

CONCLUSIONS

Applying the semi-quantitative method, the importance of factors influencing the development of ecotourism in all the discussed regions was re-examined. The results are presented in Table 1.

Among the analyzed factors, as is shown in the above Table, natural attractiveness and uniqueness of the discussed area are the most positively significant for the development of ecotourism. The state of conservation of natural and cultural values is the most subject to change. This regularity principle calls attention to activities aiming at conservation or renovation of these values. As exemplified by the Comoé National Park, a decrease in the attractiveness of the area is immediately reflected by the number of

Table 1.

Ecotourism development factors in selected areas of the Ivory Coast, Mali and Niger. 1- low significance, 2 – average significance, 3 – high significance. Arrows show the direction of changes of the most dynamic elements.

Region	Natural attractiveness	Cultural attractiveness	Uniqueness	State of conservation of natural and cultural values	Quality and credibility of the offer	Positive influence on life of the local community
Comoé National Park	3 ↓	1	2	1 ↓	1	1
Dogon Country	3	3	3	3	2	3
Dallol Bosso and Kouré Region	2	1	3	2 ↑	3	3
Air and Ténéré Natural Reserve	3	2	3	3	3	3

visitors. It is also significant that, in three of the four discussed cases, development of tourism has a decisively positive influence on the life of the local community. It is important that as broad as possible a group of inhabitants benefit from the impact of ecotourism. The best example is the activity of the Association for the Protection of Niger's Giraffes. On the basis of the discussed regularities, it may be stated that ecotourism may be a good instrument for regional development in the discussed countries. However, it is necessary to develop and maintain rigorous environmental resistance standards of the particular regions and continuously preserve their natural and cultural values. Education of the society and guides is an important element of achieving this objective.

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