

APPLYING SUSTAINABLE TOURISM IN PROTECTED AREAS. CASE OF ZOMBITSE VOHIBASIA NATIONAL PARK – MADAGASCAR

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Abstract

In the past two decades, the profound and rapid changes that have taken place in the world have been expressed in changes in tourism. (Butler, 1999). More than anything else, the essence of tourism is the adoption of the idea of 'sustainable growth.' It has gained global popularity and widespread since the appearance of the word at the end of the 90's.

Sustainable tourism is focused on natural resource management and conservation (Liu, 2003). Based on availability, when tourism is applied on natural assets or resources may be classified into three key groups: ubiquity, which occurs everywhere; commonality: widely available in many areas; rarity: occurring in very few places (Healey & Ilbery, 1990).

To go further into the research, a semi-structured interview was sent by e-mail to the National Park Manager in order to discover the protected area and sustainable tourism in the area. The study will be carried out where the Zombitse-Vohibasia National Park is a national park located in southwest Madagascar.

Keywords: Sustainable tourism, protected areas, Madagascar, National Park, Vohibasia National Park,

Introduction

Tourist destinations across the world are facing an increasing number of challenges. Entertainment markets, tourist destinations and interests and habits are constantly developing. Tourists then are more experienced, more critical, and more conscious of quality and are seeking better experiences as well as 'good value for money'.

Therefore, the principle of sustainable tourism can most fundamentally have been seen as an application of ideas for sustained development to the tourism field (Weaver, 2006). The World Commission on Environment and Development (WCED, 1987) described sustainable development as a mode of development that meets the needs of now without impacting the ability of future generations to meet their own needs.'

The motivations, expectations, and perceptions of tourists impact the tourism resource itself in the sense that they evaluate what object or destination becomes a tourist attraction and its relative market value. The diverse structure and the changing value of the distinct forms of tourism products can largely be explained by the evolution of the demand towards tourism.

Sustainable tourism, afterward, has become an increasingly popular area of research since the 1980s and the 1990s.

However with false assumptions and arguments, the debate regarding sustainable tourism is now fragmented, disjointed, and often imperfect (Liu, 2003).

The concept of sustainable development has its sources in environmentalism, which gained fame in the 1970s. The International Union for the Conservation of Nature and Natural Resources (IUCN, 1980) first highlighted the concrete idea of sustainable development in its World Conservation Strategy.

As a local product, tourism requires three levels of resources: tourist attractions, including natural, cultural, and purpose-built attractions; infrastructure to support tourist activities; social and physical environments, including community hospitality.

Sustainable tourism or alternative tourism is thus, at best, a micro solution to what is ultimately a macro problem (Wheeller, 1991). It remains to be seen if the International Year of Ecotourism 2002 introduced by the WTO and the United Nations Environment Program (UNEP) really led to the advancement of the world tourism.

The World Tourism Organization (WTO, 2001) presented a definition of sustainable tourism as the following: "The development meets the needs of present tourists and host regions while protecting and enhancing opportunities 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, and biological diversity and life support systems".

Zombitse-Vohibasia National Park is a national park located in southwestern Madagascar, 147 km northeast of Toliara (Tuléar) in the Atsimo-Andrefana region, created in 1997. It has a surface area of 36,308 ha, divided into three plots: The forest of Zombitse (16,845 ha) ; The Isoky Vohimena sites of (3,293 ha); Vohibasia (16,170 ha).

The park is situated at an altitude between 485m and 825m, it has a dry tropical climate with an average temperature of 23° to 24°C. Rainfall from 721 to 833 mm, the dry season from April to December, and becomes rainy from January to March.

This park has a tropical dry forest. Zombitse Vohibasia National Park is famous for its richness in rare bird species, endemic to Madagascar. It also counts 8 species of lemurs, some of which are almost threatened such as the case of the Phaner furcifer pallescens. This Protected Area has an exceptional biodiversity, because of it; the national park becomes a great site for research area by excellence. The National Park is home for about sixty birds, 47% of which are common to Madagascar, 24% endemic to the Malagasy

region and one local vulnerable species - *Phylastrephus aperti*.

To go deeper into the research, a semi-structured interview was sent by email to the manager of the national park, in order to discover the protected area and the sustainable tourism applied in this zone.

There were 15 questions, some of them were treating the protected area presentation: name, surface area, date of creation, meeting with the IUCN definition, management category, and others questions consisted on the International convention that the protected area is enrolled in, Convention on the Conservation of Migratory Species, Ramsar and Wetlands ..., action to obtain the "World heritage", the "Green list" labels, IUCN Red Listed species, and about the sustainable tourism activities, the protected area threats, that the park is dealing with.

1. Sustainable tourism

The notion of sustainable tourism may be defined as the application of sustainable development approaches to the tourist industry (Weaver, 2006). The World Environment and Development Commission (WCED, 1987) defined sustainable development as "development that meets the requirements of the present without risking future generations' power to satisfy their own needs."

According to the English Tourism Council (ETC, 2001), the application of sustainable development concepts to tourism management includes tourist experience, industry profitability, community acceptance and benefit, and environmental conservation.

The United Nations World Tourism Organization (UNWTO) promotes sustainable tourism, which it describes as "tourism that takes full account of its present and future economic, social, and environmental implications, satisfying the requirements of tourists, professionals, the environment, and host communities" (Charter of Sustainable Tourism, UNWTO 1995).

To a considerable degree, phrases like ecotourism and green tourism are often used interchangeably with the concept of sustainability. However, there was a transition towards the end of the 1980s and the beginning of the 1990s in which the social and cultural dynamics of the destination were tightly tied to the notion. In the latter decade of the twentieth century, there was a significant movement in the explanation of the term, encompassing economic and organizational viewpoints (Mason and Duquette 2008).

Mason (2008) defined sustainable tourism as 'non-intrusive, non-depleting, and renewable, environment-specific, natural in material make-up and presentation, and well-integrated into the local physical, social, cultural, and economic context.'

In light of this, Inskeep (1991) defined sustainable tourism as the management of all resources in such a way that economic, social, and aesthetic requirements may be addressed while preserving cultural integrity, fundamental ecological processes, biological variety, and life support systems.

This definition is shared by the majority of writers. This definition, it is reasonable to say, adopts a generalist approach; hence, it is open to numerous interpretations. Again, it is acceptable to state that sustainable tourism has been accepted as a business model rather than an ideal. The physical environment was central to early concepts of sustainable tourism (Swarbrooke, 1998).

2. Definition of sustainable tourism

Mass tourism frequently has negative implications for host communities, such as price hikes, damage of natural or cultural property, loss of value, local traditions, westernization, and so on (Lansing and De Vries, 2007). As a result, sustainable tourism is promoted as an alternative to typical mass-motivated tourism based purely on revenue, with the goal of avoiding the concerns.

Mass tourism has struggled in recent decades, and sustainable tourism might provide a micro-solution. This notion assembles the WTO's 1993 definition, which states that "sustainable tourism addresses the demands of current visitors and host places while conserving and improving opportunities for the future." World Tourism Organization (WTO), 1993.

Sustainable tourism is a kind of tourism connected with infrastructures that, both now and in the future, work within natural capacity for natural resource regeneration and productivity (Eber, 1992).

Sustainable tourism is capable of assisting local communities while also providing a variety of economic possibilities and activities. The form of tourism that can maintain local economies without harming the environment on which they rely. Countryside Commission (Countryside Commission, 1995).

In terms of parks, sustainable tourism must be understood first and foremost in terms of sustainable ecosystems. (Woodley, 1993), and to adhere to the constraints set by ecological groups (Payne, 1993).

In other words, tourism respects the ecosystem and, as a result, does not contribute to its own extinction (Bramwell et al., 1996).

3. Sustainable tourism in protected areas destinations

The Tourism Concern, in collaboration with the Worldwide Fund for Nature (WWF), reached and created 10 principles for sustainable tourism in the early 1990s, which are as follows:

1. Using resources sustainably.
2. Reducing over-consumption and waste.
3. Maintaining biodiversity.
4. Integrating tourism into planning.
5. Supporting local economies.
6. Involving local communities.
7. Consulting stakeholders and the public.
8. Training staff.
9. Marketing tourism responsibly.
10. Undertaking research.

Tourism Concern, 1991, together with the World Wildlife Fund (WWF), sets out 10 principles for sustainable tourism.

- 1) Use resources on a sustainable basis. Conserving and sustainably using nature, social and cultural resources is critical and contributes to sustainability.
- 2) Minimizing overconsumption and waste. Reducing overconsumption and waste avoids costs to restore long-term environmental damage.
- 3) Maintaining biodiversity. Maintaining natural, social and cultural range is vital for long-time period sustainable tourism and creates a resilient base for the industry.
- 4) Incorporate tourism into planning. The development of tourism that is incorporated into the national and local strategic planning frameworks and conducts environmental impact assessments has improved the long-term viability of the tourism industry.
- 5) Supporting local economies. Tourism that supports a wide range of local economic activities and which takes environmental costs and values into account, both protects these economies and avoids environmental damage.
- 6) Involving local communities. The full involvement of local communities in the tourism sector not only benefits them and the environment in general but also improves the quality of the tourism experience.
- 7) Consulting stakeholders and the public. Consulting between the tourism industry and local communities, organizations and institutions are essential if they are to work alongside each other and resolve potential conflicts of interest.
- 8) Train employees. Staff training that integrates sustainable tourism into work practices and recruitment of personnel at all levels have improved the quality of tourism products.
- 9) Marketing tourism responsibly. Marketing that provides excursionists with the full and responsible information increases respect for the social, natural and artistic surroundings of destination areas and enhances client satisfaction.
- 10) Undertaking exploration. Ongoing exploration and monitoring by the assiduity using effective data collection and analysis are essential to help break problems and to bring benefits to destinations, the assiduity, and consumers. The first set of missions is concerned with the conservation and management of natural resources that contribute to the worldwide preservation and quality of the tourist environment.

Using the same logic of picture, we may understand steps to promote biodiversity (preservation of existing species and reintroduction of species, for example) as well as the general quality of the ecosystem and the steps taken to conserve it. Protection of natural resources as a guarantee of their soundness, quality, and administration.

It is also noticeable that for these two types of measurements (landscapes and biodiversity), what is used as a demonstration is originality: authentic and harmonious places in one case, and authenticity of the habitats in the other. Finally, from the standpoint of territorial

humanization, natural resource conservation may be seen as a modern method of exploiting the environment in a respectful manner, as a continuation of historical environmental protection.

4. Methodology

Fifteen questions were presented, some of which addressed the presentation of the protected area: name, surface area, date of creation, meeting the IUCN definition, management category, and other issues consisting of the International Conventions: Ramsar, Migratory Species, etc And then actions to receive the "World Heritage" and the "Green List" labels, the IUCN Red Listed Species and the threats to the protected area addressed by the park in relation to sustainable tourism activities.

5. Zombitse Vohibasia National Park

Zombitse-Vohibasia National Park was established in 1997 in southwestern Madagascar, 147 kilometers northeast of Toliara (Tuléar) in the Atsimo-Andrefana region.

The park is located between 485 and 825 meters above sea level and has a dry tropical environment with an average temperature of 23° to 24° C. Rainfall ranges from 721 to 833 mm. The dry season lasts from April to December, and the rainy season lasts from January to March.

The Zombitse Vohibasia National Park is well-known for its abundance of unique bird species that are native to Madagascar. It also has 8 lemur species, some of which are critically endangered, such as the *Phaner furcifer pallescens*.

This Protected Location boasts outstanding biodiversity; as a result of its high biodiversity, the National Park is a premier study area. The blooms of the Zombitse Vohibasia Reserve are made up of two didieraceae species native to this location.

The Zombitse Vohibasia National Park is home to endemic fauna, including sixty bird species, 47 percent of which are indigenous to Madagascar, as well as unique lacertilians and fragile species. In the Zombitse woodland, *Ispidina madagascariensis* was discovered.

It covers 36,308 acres and is split into three plots: the Zombitse forest (16,845 ha), the Isoky Vohimena sites (3,293 ha), and Vohibasia (16,170 ha). The Mahafaly and Tandroy are the major ethnic groups in the National Park. A semi-structured email interview was addressed to the national park manager in order to go deeper into the research and learn more about the protected area and the sustainable tourism that is practiced in this region.

6. Results

Answers:

Table 1: About the Zombitse Vohibasia National Park

What is the name of your protected area?	Zombitse Vohibasia National Park
You are:	Land protected area
size of your protected area	36 308 ha (806 Km ²)

your protected area was created	1997
the protected area meets the IUCN definition	Yes
IUCN protected area management category	II: National park

Source: Author

Concerning the question about the international conventions, the answers were.

Table 2: International Conventions and Madagascar

Convention	Your country is a member country	Your country is not a member country	Registration year
Strategic Plan for Biological Diversity 2011-2020 and the Aichi targets	X		1996
The Convention on Biological Diversity	X		1996
Nagoya Protocol		X	2014
World heritage	X		1990
Convention on International Trade in Endangered Species	X		1975
Convention on the Conservation of Migratory Species	X		2007
Ramsar and Wetlands Convention	X		1999

Source: Author

Table 3: Essential functions of the protected area

	1	2	3	4	5
Recreation and nature discovery					X
Raising public awareness of conservation issues.					X
Scientific research space for a better understanding of the animal and floral world				X	
Conservation of cultural or spiritual values				X	
Places of education			X		

Source: Author

Concerning the question about the "World Heritage" label, and the actions to undertake to obtain this label, the answer was:

- Updating of bio and ecological data.
- Pressure reduction.

In relation to the question treating ‘Green List’, and if the protected area is planning to apply for inclusion on the IUCN Green List in order to benefit from this label, and the answer was:

- “Yes, but it is a subject that requires time”.

Regarding the question treating the species in the protected area that are on the IUCN Red List, the answer was: “Yes, with more than 5”, presenting as examples: *Cryptoprocta ferox*; *Propithecus verreaux*; *Mirza coquereli*; *Lemur catta*; *Acrantophis dumerili*; *Phelsuma standing*.

Talking about the timing that protected area benefit from ecotourism activities, the answer was:”July to December”.

The manager answered that the numbers of eco-tourists, was about “5000”.

Treating the types of activities that ecotourists practice in the protected area, the answer was:

- Bird watching.
- Wildlife viewing.

Concerning the threats of the protected area, the response was:

- Biodiversity decline
- Extraction (hunting, mining, logging, fishing)
- Climate change

On the topic of the pressures on biological diversity in the protected areas, the answer was:

- Over-exploitation and unsustainable use.
- Habitat loss and degradation.

About the actions taken for the protection of biodiversity, the answer was:

- Patrol and surveillance;
- Setting up conservation infrastructures;
- Development Project.

Conclusion and Discussion

We could finally say that, the sustainable tourism and the activities managed inside of the national park help to ensure the operative and involvement in spite of the threats and pressures that the national park is suffering from such as habitat loss and degradation, too much extraction (hunting, mining, logging, and fishing), biodiversity decline, IUCN Red Listed species, climate change...

The more specific and diverse the activities offered, the longer tourists will remain on the site and the more likely they will return (Hamilton, 2002).

To summarize, we can state that sustainable tourism is highly important and yet necessary to reduce the negative effects on nature and culture that may hurt the destination objective. There are several techniques to persuade people of the need of environmental protection, including the following, which is not a complete list:

- Inform and promote awareness among tourists about the need of conservation and environmental preservation.
- Work hard to strengthen collaboration with local governments and communities in order to satisfy requirements and provide conservation aid.
- Apply the revenue generated by tourism activities to the conservation and maintenance of protected areas.
- Etc.

Concerning the sustainable tourism, it's very essential to minimize the negative impacts on nature and culture that

can harm a destination, which can be done by these following ways:

- Educate travelers about the importance of conservation.
- Call attention to the importance of responsible business, working in cooperation with local authorities and communities to meet local needs and provide conservation assistance allocations.
- Employ income generated from tourism for the conservation and management of natural and protected areas.

Many experts feel that sustainable tourism will never be a profitable industry (Hamilton, 2002). Businesses suffer from low visitor numbers, and in order to boost the odds of a project's success, it is vital to suggest locations that provide a range of attractions such as wide trail networks, a river to explore, a walking track in the forest canopy, or a butterfly farm.

References

- Bramwell, W., Henry, I., Jackson, G., Prat, A. G., & Richards, G. J van der Straiten (1996) *Sustainable Tourism Management: Principles and Practice* Tilburg University Press.
- Butler, R. W. (1999). Sustainable tourism: A state-of-the-art review. *Tourism geographies*, 1(1), 7-25.
- Council, E. T. (2001). Time for action: a strategy for sustainable tourism in England. London: ETC.
- Countryside Commission (1995). National Countryside Recreation Survey 1990: Summary of Results. Cheltenham: Countryside Commission.
- Eber, S., ed. 1992 *Beyond the Green Horizon: A Discussion Paper on Principles for Sustainable Tourism* Godalming: WWF.
- Hamilton, J. M., Maddison, D. J., & Tol, R. S. (2005). Effects of climate change on international tourism. *Climate research*, 29(3), 245-254.
- Harris, R., Williams, P., & Griffin, T. (Eds.). (2012). *Sustainable tourism*. Routledge.
- Healey, M. J., & Ilbery, B. W. (1990). *Location and change: perspectives on economic geography*. Oxford University Press.
- Healey, M. J., & Ilbery, B. W. (1990). *Location and change: perspectives on economic geography*. Oxford University Press.
- Inskip, E. (1991). Tourism planning: an integrated and sustainable development approach. Van Nostrand Reinhold.
- International Union for Conservation of Nature, & World Wildlife Fund. (1980). *World conservation strategy: Living resource conservation for sustainable development*. Gland, Switzerland: IUCN.
- Lansing, P., & De Vries, P. (2007). Sustainable tourism: ethical alternative or marketing ploy?. *Journal of Business Ethics*, 72(1), 77-85.
- Liu, Z. (2003). Sustainable tourism development: A critique. *Journal of sustainable tourism*, 11(6), 459-475.
- Liu, Z. (2003). Sustainable tourism development: A critique. *Journal of sustainable tourism*, 11(6), 459-475.
- Mason, P. (2008). Tourism impacts, planning and management. 2. Páinos. Hungary: Butterworth-Heinemann.
- Swarbrooke, J. (1999). Sustainable tourism management. CABI. The Three Dimensions of Sustainable Tourism, 47-69.
- WCED (1987) *Our Common Future*. Oxford University Press, Oxford, UK.
- Weaver, D. B. (2006). *Sustainable tourism: Theory and practice*. Routledge.
- Weaver, D. B. (2009). Reflections on sustainable tourism and paradigm change. *Sustainable tourism futures*, 33-40.
- Wheeler, B. (1991). Tourism's troubled times: Responsible tourism is not the answer. *Tourism Management*, 12(2), 91-96.
- WTO (2001) The concept of sustainable tourism. On WWW at <http://www.worldtourism.org/sustainable/concepts.htm>. Accessed 24.3.02