




Impact of  
Tourism  
on Wildlife  
Conservation





---

This publication was prepared by the INTOSAI Working Group on Environmental Auditing (WGEA). The WGEA aims to encourage the use of audit mandates and audit methods in the field of environmental protection and sustainable development by Supreme Audit Institutions (SAIs). The WGEA has the mandate to

- help SAIs gain a better understanding of environmental auditing issues,
- facilitate exchange of information and experiences among SAIs, and
- publish guidelines and other informative materials.

This publication may be downloaded free of charge from the INTOSAI WGEA website <http://www.environmental-auditing.org>. Permission is granted to copy and distribute this publication, giving appropriate credit, provided that such copies are for academic, personal or professional use and are not sold or used for commercial gain.

ISBN 978-9949-9393-0-5 (PDF)

June 2013

# FOREWORD & ACKNOWLEDGEMENTS

Experience has shown that wildlife environment is at great risk without strong governance arrangements. In many countries, conservation and maintenance of the wildlife environment are inadequate. Supreme Audit Institutions (SAI) can influence governments to make management decisions for protecting and conserving wildlife environment. This document aims to provide a common approach for all Supreme Audit Institutions worldwide when dealing with the possible impact of tourism on wildlife environment.

This document was led by the SAIs of Lesotho and Tanzania. In particular, we would like to thank the authors 'Mamahooana Leisanyane (Project Manager, SAI of Lesotho) and Michael Malabeja and Robert Cheyo (SAI of Tanzania) for their hard and excellent work in preparing the document. Many thanks also go to the project sub-committee members, including Botho Entaile, Fumene Mkhonta and Yasser Ahmed Aggour of SAIs of Botswana, Swaziland and Egypt, respectively.

Similarly, we would like to acknowledge the contributions made by the SAIs worldwide. Special thanks to the INTOSAI WGEA Steering Committee for their valuable help in various stages of the project. Readers are invited and encouraged to consult this document, as well as information on other WGEA products and services on the INTOSAI WGEA website ([www.environmental-auditing.org](http://www.environmental-auditing.org)).

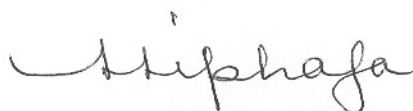
We hope you will find this document useful.



Alar Karis  
Auditor General of Estonia  
Chair of INTOSAI WGEA



Ludovick Utouh  
Controller and Auditor General of Tanzania  
Project Coordinator



Lucy Liphafa  
Auditor General of Lesotho  
Project Leader

# TABLE OF CONTENTS

FOREWORD AND ACKNOWLEDGEMENTS 2

GLOSSARY OF TERMS 5

EXECUTIVE SUMMARY 6

1. UNDERSTANDING WILDLIFE TOURISM 8

- 1.1 Introduction 9
- 1.2 Definitions 9
- 1.3 Tourism and sustainable development 11
- 1.4 Importance of wildlife resources and tourism 12
- 1.5 Overview of the expansion of wildlife and tourism over the years 14
- 1.6 International awareness regarding wildlife and activities 14
- 1.7 Research on wildlife tourism 15

2. RANGE OF IMPACTS OF TOURISM AND WILDLIFE ON ENVIRONMENT 16

- 2.1 Issues to address when considering risks to the sustainability of wildlife tourism 17
- 2.2 Environmental impacts of tourists 19
- 2.3 Social and cultural impacts of tourism 19
- 2.4 Human–wildlife conflicts 20
- 2.5 Positive effects of wildlife tourism 21
- 2.6 Impact assessment of wildlife tourism 22



### 3. REGULATION, MANAGEMENT AND INTERNATIONAL AGREEMENTS ON WILDLIFE CONSERVATION AND TOURISM 23

- 3.1 Principles of sustainable use of biodiversity 24
- 3.2 Major stakeholders regarding wildlife and tourism and their roles and responsibilities 25
- 3.3 National regulation of wildlife tourism 26
- 3.4 Integrated wildlife and tourism management 26
- 3.5 International and regional agreements/treaties on wildlife conservation 29

### 4. GOOD PRACTICE ON WILDLIFE CONSERVATION AND TOURISM 31

### 5. AUDITS RELATED TO TOURISM AND WILDLIFE 35

### APPENDIX I: AUDIT PLANNING PROCESS 40

### BIBLIOGRAPHY 42

# GLOSSARY OF TERMS

<b>Ecosystem:</b>	interaction of wild species and their environment.
<b>Endangered species:</b>	species that are facing threat of extinction.
<b>Flora and fauna:</b>	different types of wild plants and animals.
<b>Host communities:</b>	people who live in the vicinity of the tourist attraction who are directly or indirectly interacting with wildlife.
<b>Tourism:</b>	the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes.
<b>Tourist:</b>	a person travelling to and staying in places outside his or her usual environment for not more than one consecutive year for leisure, business, and other purposes.
<b>Wildlife:</b>	all variety of species of flora and fauna. That is plants, animals, insects, birds and marine life.
<b>Wildlife conservation:</b>	preservation of rare population or endangered species of wild plants and animals.
<b>Wildlife tourism:</b>	human activity undertaken to view wild animals in a natural settings or in captivity.
<b>Wildlife watching:</b>	organized tourism undertaken to watch wildlife.



# EXECUTIVE SUMMARY

Wildlife watching tourism is tourism that is organized and undertaken in order to watch wildlife. This type of tourism has grown dramatically in recent years. A quick search on the internet provides many examples of tourism companies that either market specific wildlife watching tours, or promote their products by highlighting wildlife watching as an optional activity that their clients can enjoy.

Tourism is one of the largest business sectors in the global economy, accounting for \$3.6 trillion in economic activity and 8% of jobs worldwide. The contribution of wildlife tourism to countries' economies has increased significantly. The share of wildlife tourism is claimed to form 9% of global GDP in 2011.

But, wildlife watching tourism can have adverse effects on wildlife: by causing changes in their behavior, changing their physiology, or damaging their habitats. Wildlife species are often particularly vulnerable to disturbance during their breeding periods and during the juvenile stages of their offspring. Any disruption of courtship and mating behaviors, or later on when offspring are being cared for, can reduce overall breeding success. This is a serious threat to population maintenance and survival. For example, if the cubs of big cats, such as cheetahs or leopards, become separated from their mothers, they are vulnerable to predation. Tourists are often particularly keen to watch mother-offspring groups, and therefore great care is needed to limit and control any tourism around them.

## **Environmental, social and cultural impacts and human-wildlife conflicts**

Wildlife tourism can cause significant disturbances to animals in their natural habitats. This may frighten animals, especially at sensitive times of their life cycle, and have an adverse effect on breeding. Feeding of wildlife by tourists can change social behavior patterns. For example, artificial feeding by tourists caused a breakdown of the territorial breeding system of land iguanas in the Galapagos Islands.

Humans as well as animals can be disrupted by tourism. Social and cultural impacts related to tourism may include: changes to family structure and gender roles, leading to tension and loss of self-esteem for men and older generations; dilution of local languages and culture; loss of artefacts and access to private sacred sites; and impacts on health and integrity of local cultural systems.

Although wildlife is a valuable natural resource that brings a range of benefits to the people, in some regions (e.g. Africa) wild animals may cause damage. This damage could be in terms of attacks on people and livestock, damage to crops and other property such as infrastructure, and disruption of peaceful existence in local communities living close to wildlife areas. Increasing human populations brings with it increasing encroachment onto wildlife habitat (e.g. settlements, cattle posts, farmlands). Inevitably, human-wildlife conflicts have become more common.

## Encouraging wildlife and tourism related audits

The INTOSAI (International Organization of Supreme Audit Institutions) Working Group on Environmental Auditing (WGEA)<sup>1</sup> recommends that SAIs give attention to wildlife issues in their audit work. The relative scarcity of such audits suggests there are many opportunities for SAIs to engage in audits of this emerging and important issue. The Working Group also recommends that SAIs make use of the experiences with wildlife and tourism related audits of their sister organizations within INTOSAI. Chapter 5 of this document contains audit case studies related to wildlife and tourism from SAIs around the world. Each case study presents the audit's objective, scope, methodology, criteria, findings, conclusions, and recommendations. Through environmental audits, SAIs will be able to raise awareness about the relevance of wildlife problems in their respective countries and improve government programs.

## Content and structure of document

Chapter 1 introduces the reader to wildlife tourism. It indicates the importance of wildlife and tourism, how tourism activities have expanded over the years and the reasons behind its expansion and increasing international awareness.

Chapter 2 describes the background to tourism and wildlife activities and deals with the benefits of tourism and associated environmental, social and cultural impacts. Human–wildlife conflicts are also discussed.

Chapter 3 is about regulating and managing wildlife conservation and tourism. The chapter describes issues such as national regulation of wildlife tourism and other government tools for responding to threats to biodiversity. The chapter contains a list of various stakeholders in the wildlife and tourism sector as well as international and regional agreements.

Chapter 4 deals with good practice in wildlife conservation and tourism management.

Chapter 5 consists of case studies on wildlife and tourism related audits undertaken in different SAIs.

---

<sup>1</sup> The INTOSAI WGEA website is at <http://www.environmental-auditing.org/>



1.

# UNDERSTANDING WILDLIFE TOURISM

# 1.1. INTRODUCTION

During the 12th Working group meeting of WGEA in Guilin, Guangxi, China in June 2010, the International Organization of Supreme Audit Institutions Working Group on Environmental Auditing (INTOSAI WGEA) approved its 2011–13 work plan. The following projects were approved:

- Research study on land use and land management practices - SAI of Morocco;
- Research study on environmental data - SAI of USA and Canada;
- Research study on environmental issues associated with infrastructure - SAI of the United Kingdom;
- Guidance material on auditing water issues - SAI of USA;
- Guidance material on addressing fraud and corruption issues when auditing environment and natural resource management - SAI of Norway;
- Research study on the impact of tourism on wildlife conservation - SAI of Lesotho and Tanzania;
- Research study on environment and sustainability reporting - SAI of Finland.

This research study on wildlife conservation and tourism aims to provide basic information on wildlife management and tourism and to encourage SAIs to assess whether governments manage wildlife resources in a sustainable way, taking into account environment and cultural aspects.

Watching animals can be an inspiring experience. People are excited by seeing whales or turtles, spectacular bird life, elephants or gorillas. Seeing these and many other species in the wild is not just memorable but it also can motivate people to become more personally involved in conservation. Tourism today provides people with numerous opportunities to view animals that, in the past, they would have only read about and seen in pictures and on TV or, at best, in zoos and aquariums.

As tourism continues to grow and expand, it is inevitable that pressures on the environment and wildlife will increase. Without proper and effective management and protection, these pressures will destroy the very things that people value, and which are the key assets for tourism. These dangers arise because animal populations cannot cope, indefinitely, with increasing visitor numbers.

If tourists are to enjoy high-quality wildlife watching without threatening the survival of the animals they watch or their habitats, wildlife watching practices need to be controlled and properly managed. This means setting firm limits (established through impact assessments) on the tourist numbers, on tourism development, and on how wildlife watching is conducted. This is done to minimize the disturbance tourism causes to wildlife. Achieving this while also ensuring the long-term sustainability and viability of the industry will require concerted action by both governments and the tourism industry.

# 1.2. DEFINITIONS

## **Biodiversity**

Biological diversity - or biodiversity - is a term to describe the variety of life on Earth. Biodiversity is the foundation of life on Earth. It is crucial for the functioning of ecosystems which provide us with products and services without which we couldn't live.

Biodiversity includes plants, animals and other organisms. It is defined in the Convention on Biological Diversity (CBD) as the variability among organisms from all sources, including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part. It includes diversity within species, between species and of and between ecosystems.

## Ecosystem services

Ecosystem services are the goods and services that biodiversity provides. They include soil formation, the provision of food and fibre, air quality and climate regulation, the regulation of water supply and quality, and the cultural and aesthetic values of certain plants and species.

Mankind's use of biodiversity and ecosystem services (BES) has contributed to human well-being and economic development. However, continuing this use at the current or greater levels is not sustainable. The rate and scale of biodiversity degradation is significantly weakening the ability of the natural world to deliver key services such as climate regulation, air and water purification, provision of medicines and protection from natural disasters. The United Nations Environment Programme (UNEP) says (UNEP, 2008) that the key drivers of this degradation are:

- Habitat destruction by conversion of land for urban and industrial development, and agriculture;
- Pollution, particularly of water, but also through air emissions and solid waste;
- Climate change, which is affecting the distribution and status of biodiversity globally, and also the ability of ecosystems to regulate the climate;
- The introduction of non-native invasive species; and
- Over-exploitation (for example, of fisheries, timber, and certain birds and mammals).

The international TEEB Initiative (The Economics of Ecosystems and Biodiversity) has been successful in raising the interest of policymakers in biodiversity and ecosystem valuation, in particular within the context of the Convention of Biological Diversity. It has also led to the development of a strong network of economists and policy makers. One of the TEEB reports (TEEB, 2009) explicitly deals with national and international policy making, and highlights the need for new public policy to reflect the recognition that public goods and social benefits are often overlooked. That report says we need a transition to decision making across a range of policy sectors that integrates the many values of nature.

Foundation PAN Parks has published a comprehensive research report on economic evaluation and ecosystem services of wilderness areas: "The Economics of Wilderness" (PAN Parks, 2011). It particularly highlights why and how the concept of the economic values of nature and the need for payments for ecosystem services might be used in relation to wilderness protected areas in Europe.

### 1.2.1 Wildlife watching and how it relates to tourism

Wildlife is one of the components of biodiversity. It is a general term that technically covers both flora and fauna, although this document will cover fauna only. In popular use, wildlife mostly refers to animals in the wild. Perhaps a classic image of wildlife for many people is a large mammal or a flock of wild birds, but the term is widely used to cover all types of animals, including all kinds of insects and marine life (Tapper, 2006).

The World Tourism Organization (UNWTO) defines tourism as a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. A tourist is a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, but for more than one day. A more common understanding of tourism is travelling for leisure or sightseeing.

It is necessary to distinguish between wildlife tourism and ecotourism, as the terms are often used interchangeably. "Wildlife tourism" encompasses all forms and scales of tourism that involve the enjoyment of natural areas and wildlife. Wildlife tourism can be defined loosely as tourism that includes, as a principle aim, the consumptive and non-consumptive use of wild animals in natural areas. It may be high volume mass tourism or low volume/low impact tourism, generate high economic returns or low economic returns, be sustainable or unsustainable, domestic or international, and based on day visits or longer stays (Roe, D. et al., 1997).

"Wildlife watching" is simply an activity that involves watching wildlife. It is normally used to refer to watching animals, and this distinguishes wildlife watching from other forms of wildlife-based activities, such as hunting and fishing. Watching wildlife is essentially an observational activity, although it can sometimes involve interactions with the animals being watched, such as touching or feeding them.

Wildlife watching tourism is tourism that is organized and undertaken in order to watch wildlife. This type of tourism has grown dramatically in recent years; a quick search on the internet provides many examples of tourism companies that either market specific wildlife watching tours, or promote their products by highlighting wildlife watching as an optional activity that their clients can enjoy.

The tourism industry tends to use the term “wildlife tourism” rather than wildlife watching tourism. In many instances, the two terms are identical, but wildlife tourism is sometimes also used to refer to hunting or fishing tourism and, in a few cases, refers to viewing captive wildlife in zoos or confined parks.

The International Ecotourism Society defines ecotourism as “responsible travel to natural areas that conserve the environment and improve the well-being of local people”. Ecotourism focuses on experiencing wildlife in its natural environment. Although the goal of ecotourism is to enjoy nature, not all tourism in natural areas is sustainable and can be defined as ecotourism. An official global ecotourism certification scheme remains to be developed, but most agree that ecotourism should possess qualities such as minimal impact to the natural environment, sensitivity and enhanced awareness of local environments and cultures, financial support for local conservation initiatives, and empowerment and participation of local communities.

## 1.3. TOURISM AND SUSTAINABLE DEVELOPMENT

Sustainable development is defined as development that meets current needs without compromising the ability of future generations to meet their own needs. Sustainable tourism is tourism that puts the principles of sustainable development into practice. To be sustainable, tourism needs to make a positive contribution to the natural and cultural environment, generate benefits for the host communities, not put at risk the future livelihood of local people, and strive to anticipate and prevent economic, environmental, social and cultural degradation.

Tourism that incorporates environmental and cultural conservation objectives with an emphasis on economic benefits to local communities would appear to be ideal for sustainable development. Any damage to the environment threatens the land and energy on which tourism depends.

The tourism life cycle concept<sup>2</sup> revolves around the premise that, unless intervention occurs, tourist destination areas and resources will inevitably become over-used and consequently decline. There are six main stages of the tourism cycle:

- Exploration (few tourists, poor access and facilities, environment unchanged);
- Involvement (local initiatives, some promotion, increasing numbers);
- Development (many tourists, locals lose control, deterioration of environment);
- Consolidation (tourist numbers exceed local residents, all major chains represented);
- Stagnation (numbers peak, destination falls out of fashion, environmental and social problems); and
- Decline or Rejuvenation (or states in-between).

This cycle has a number of obvious implications for sustainability, such as carrying capacity, local participation and ownership, and social and environmental impacts.

Carrying capacity is an important notion in this respect. In ecology, carrying capacity means the maximum number of individuals that an area of land can support, usually determined by their food requirements. Carrying capacity often holds a different meaning when applied to human activities, where it means the maximum amount of human disturbance an area can support without deterioration.

The World Tourism Organization (UNWTO) proposes the following definition of carrying capacity: “The maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors’ satisfaction.”

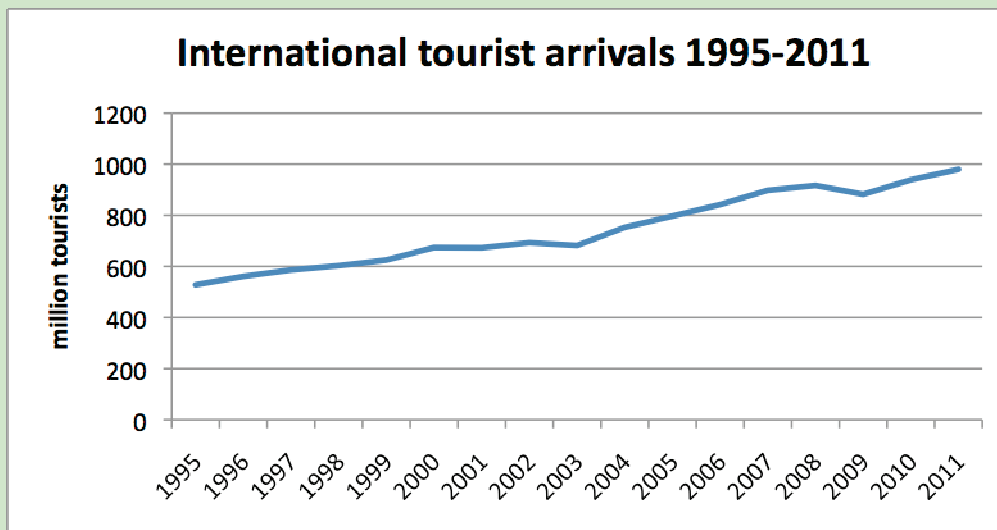
---

<sup>2</sup> Butler, R.W. (1980)

# 1.4. IMPORTANCE OF WILDLIFE RESOURCES AND TOURISM

Tourism is the largest business sector in the global economy, accounting for \$3.6 trillion in economic activity and 8% of jobs worldwide. International tourist arrivals are shown in the figure 1 below.

Figure 1. International tourist arrivals



Source: UNWTO, Volume 10, January 2012.

The contribution of wildlife tourism in countries' economies has increased significantly. The share of ecotourism is claimed to form 255 million jobs and 9% in global GDP or over USD \$6 trillion in 2011.<sup>3</sup> For example, a survey undertaken in the United States in 2001 indicated that the direct expenditure on wildlife watching was around USD \$32 billion, which includes the USD \$7.5 billion spent on food, transport and accommodation related to wildlife watching trips.<sup>4</sup>

In Africa (2011 data), tourism in Kenya, Tanzania, and Uganda contributed 5.7%, 5% and 4%, respectively of their total GDP. In sub-Saharan Africa the direct contribution of travel and tourism to GDP was USD \$33.5bn (2.6% of total GDP) in 2011, and is forecast to rise by 5.4% in 2012, and to rise by 5.0% pa, from 2012-2022, to USD \$57.7bn in 2022.<sup>5</sup>

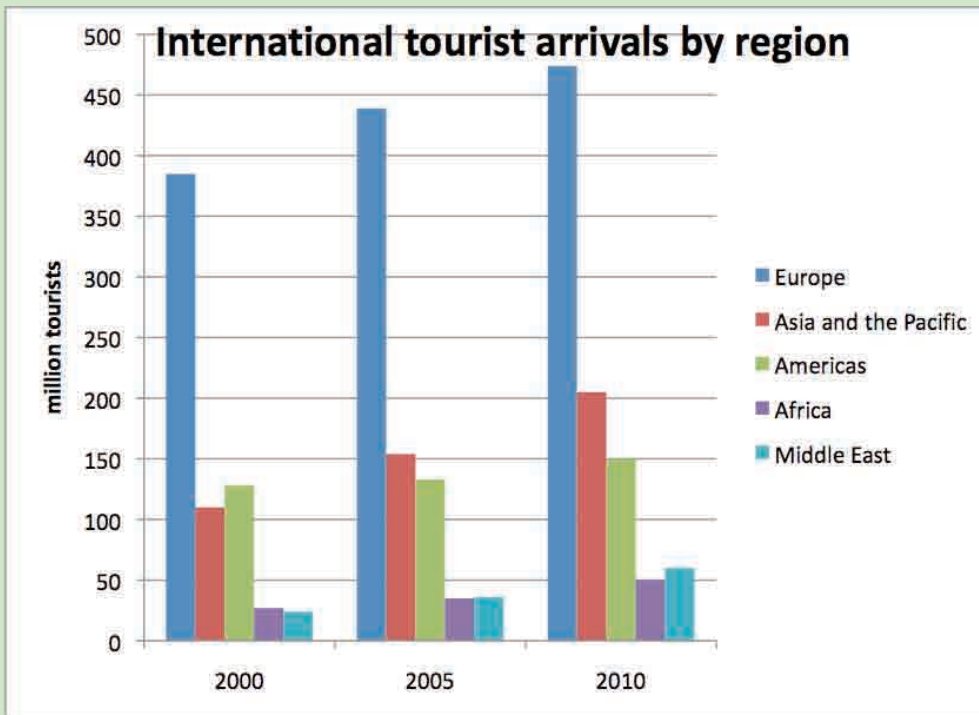
Figure 2 below indicates regional tourism growth from 2000 to 2010. It indicates that growth in tourist number has been greatest in Europe, followed by Asia and the Pacific.

<sup>3</sup> World Travel and Tourism Council (no date). Webpage entitled "Economic impact research": <http://www.wttc.org/research/economic-impact-research/> (Accessed 24 February 2013).

<sup>4</sup> Convention on Migratory Species (no date). Publication called "CMS Family Guide" page 7: [http://www.cms.int/publications/family\\_guide.htm](http://www.cms.int/publications/family_guide.htm) (Accessed 24 February 2013).

<sup>5</sup> World Travel and Tourism Council (no date). Webpage entitled "Economic impact research": <http://www.wttc.org/research/economic-impact-research/> (Accessed 24 February 2013).

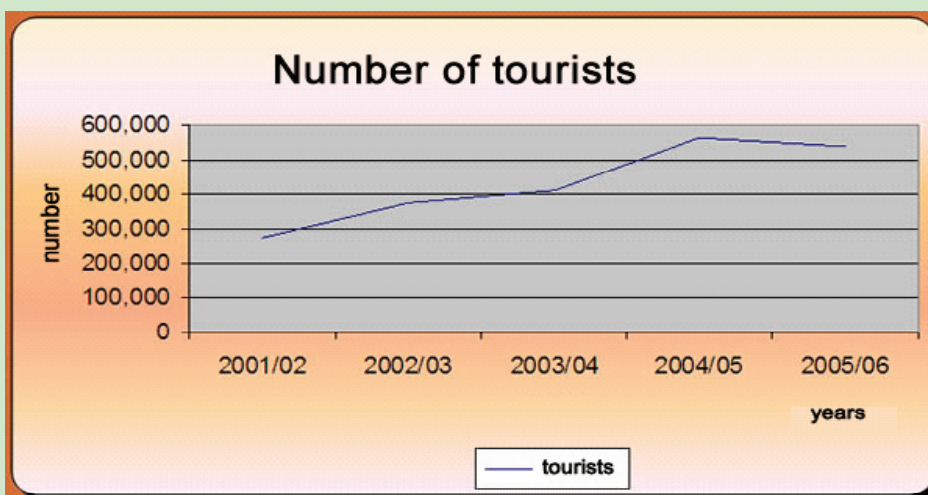
Figure 2. International arrivals



Source: UNWTO (2012). Volume 10, January 2012.

In Tanzania, the wildlife tourist attractions have been diversified to enhance visitor experience. New products include walking safaris, canoeing, and night game drives. Traditional products such as day game drives, ballooning, sport fishing; chimpanzee tracking and mountain climbing have been progressively improved. The number of resident arrivals increased from 98,509 in 2000/01 to 262,598 in 2006/2007. Similarly, international arrivals increased from 220,910 in 2000/01 to 396,233 in 2006/2007 ([www.tanzaniaparks.com](http://www.tanzaniaparks.com)), Figure 3 below shows this increase in tourist arrivals in Tanzania.

Figure 3. Number of tourist arrivals from 2000/01 to 2004/05 in Mbeya and Iringa Regions of Tanzania



Source: [www.tanzaniaparks.com](http://www.tanzaniaparks.com)



In the spirit of sustainable development and to protect biodiversity, the Tanzanian government has merged some existing neighbouring National Parks and created one large National Park. The government has merged Usangu Game Reserve with Ruaha National park and Ihefu wetland together with Ruaha River.

### 1.4.1 Other values of wildlife

Diverse wildlife is an essential component of an ecosystem and a sign of a healthy environment. Humans derive many essential goods from ecosystems, including seafood, game animals, feed for animals, firewood, timber, and medicinal products. Diverse wildlife provides a range of services to humans, which are often unnoticed by many. These services include: medicines, air and water purification, drought and flood mitigation, generation and preservation of soils and renewal of fertility, detoxification and decomposition of wastes, and control of the vast majority of potential agricultural pests.

## 1.5. OVERVIEW OF THE EXPANSION OF GLOBAL WILDLIFE AND TOURISM ACTIVITIES OVER THE YEARS

The growth of tourism and travel over the past two decades has been enormous. There were 441 million international tourist arrivals in 1990, which grew to 763 million by 2004, with 52% of these being for recreational and leisure tourism. This growth continued, with an estimated 1.6 billion international tourist arrivals in 2007.

This growth is not inevitable, however. Environmental degradation of one form or another can curtail tourism growth. For example, poaching of rhinos and elephants, as is the case in South Africa, will eventually lead these species to become extinct. Aside from the fact of this extinction, ecotourism would suffer (as would revenue), leaving no jobs for local people working in the parks.<sup>6</sup>

## 1.6. INTERNATIONAL AWARENESS REGARDING WILDLIFE AND ACTIVITIES

Different international organizations have taken initiatives regarding conservation of wildlife environment.

The Convention of Biological Diversity (CBD), its thematic programs and its cross-cutting issues are the major global reference for the topic of wildlife tourism. The Secretariat of CBD provides links between various thematic programs to assist in the Convention's implementation. These programs, such as island biodiversity, marine and coastal biodiversity, forests, and invasive species, are crucial to a complementary approach to tourism issues.

The CBD works closely with the United Nations World Tourism Organization (UNWTO), including applying the Guidelines on Biodiversity and Tourism Development adopted by the Conference of the Parties of CBD at its seventh meeting (CBD 2004A).

UNWTO is responsible for the promotion of responsible, sustainable and universally accessible tourism. As the leading international organization in the field of tourism, UNWTO promotes tourism as a driver of economic growth, inclusive development and environmental sustainability.

The United Nations Environment Programme (UNEP), in collaboration with the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), has identified the benefits and risks of wildlife tourism (Tapper, 2006).

---

<sup>6</sup> Bonamie, Bart. (2007)

UNESCO is another specialized agency of the United Nations working for sustainable development. UNESCO's mission is to contribute to the building of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information. UNESCO does not explicitly address wildlife and tourism issues. However, these issues are addressed by various programs, such as World Heritage sites or the biosphere reserves of the Man and the Biosphere (MAB) Programme.

The world's largest professional nature conservation network is IUCN, the International Union for Conservation of Nature, which includes more than 1200 members, among them about 200 governmental organizations. IUCN approaches tourism through its Business and Biodiversity Programme.

The World Wide Fund for Nature (WWF) is an international non-governmental organization working on issues relating to the conservation, research and restoration of the environment. It is the world's largest independent conservation organization, with over 5 million supporters worldwide, working in more than 100 countries, and supporting around 1,300 conservation and environmental projects. WWF has special tourism topics within its major thematic programs. WWF, among others, encourages responsible tourism that enhances not only the quality of life but also natural and cultural resources in destinations.

In Brazil, WWF is helping to prepare manuals that will guide the development of specific policies and good ecotourism practices. These manuals take into account issues relating to local circumstances in more detail, and are designed to be accessible to partner organizations and other agencies. So far, twelve guidelines are in place. They are grouped into four sections that relate to different stages of community-based ecotourism initiatives: considering whether ecotourism is an appropriate action, planning ecotourism with communities and other stakeholders, developing viable community-based ecotourism projects, and strengthening benefits to the community and the environment.

Capacity building is important in countries where environmental awareness is still low. Brazil has been witnessing an explosion of interest in international funding for ecotourism. However, because of the low environmental awareness, this threatens uncontrolled tourism, which would have serious impacts on natural habitats. So, WWF Brazil has instigated a program of awareness raising at local and national levels, as a way of promoting ecotourism that is community-based and well regulated.

The EUROPARC Federation, an NGO for nature and national parks in Europe, has published the European Charter for Sustainable Tourism in Protected Areas (EUROPARC, 2010). The Charter's focus is on initiating and assisting a process of sustainable tourism planning which will lead, step by step, to sustainable development. The Charter assists this process by providing a "strategy development kit" containing principles, a methodology, and check-lists for the protected areas to use. The implementation of the Charter methodology increases the awareness of and support for European protected areas.

## 1.7. RESEARCH ON WILDLIFE TOURISM

Tourism based on wildlife is widely assumed to be inherently sustainable. Nevertheless, few attempts have been made to verify this assumption. Internationally, little research has been done on the environmental impacts of wildlife tourism. The need for more rigorous data on the impacts of wildlife tourism is becoming necessary. Most research carried out on wildlife tourism to date has concentrated on legally protected areas, although wildlife tourism is not only restricted to protected areas.

This research paper highlights the importance of tourism as a key area where links between people, the global economy, and the environment are clearly visible. The international tourist sees firsthand the environmental, social and economic conditions of other countries and cultures. At its best, tourism can be a powerful way to promote understanding between people and cultures. At its worst, tourism can result in the exploitation of people, social disharmony and environmental degradation.



# 2.

## RANGE OF IMPACTS OF TOURISM AND WILDLIFE ON ENVIRONMENT

# 2.1. ISSUES TO ADDRESS WHEN CONSIDERING RISKS TO THE SUSTAINABILITY OF WILDLIFE TOURISM

The continuing worldwide growth in tourism, and the tendency of tourism to follow the “tourism cycle” with a stage of rapid growth that is often difficult to control, means that wildlife watching tourism can also be expected to continue to increase. This is likely to lead to more pressure on existing wildlife watching sites, their animal populations and habitats. It will also lead to development of wildlife watching activities in new areas and for new species. It is therefore vital for governments, conservation managers, and the tourism sector to monitor the effects of tourism on wildlife. Such monitoring will lead to a better understanding of how the tourism sector operates in relation to wildlife watching, enable tourism to be planned and managed so it does not exceed acceptable limits, and help ensure that tourism makes a net contribution to conservation (Tapper, 2006).

Wildlife watching can only be sustainable if it contributes to the conservation and survival of the watched species and their habitats, provides benefits for local communities and community development, offers good quality tourism in line with market expectations, and is commercially viable. The requirements that are needed to attain long-term sustainability of wildlife watching includes interaction, long-term survival of population and habitats, improvement to livelihoods of local people, plans put in place for sustainably managing wildlife watching tourism, conservation and community development based on set limits of acceptable change, and management that is flexible enough to respond to changing circumstances.

An important reference for the human impacts on wildlife is the International Union for Conservation of Nature (IUCN) Red List of Threatened Species. It is the most comprehensive information source on the status of wild species and their links to livelihoods. The IUCN Red List is used by government agencies, wildlife departments and others interested in halting the decline in biodiversity.<sup>7</sup>

## 2.1.1 Biology of watched species and monitoring of the effects of tourism on them

Most wildlife watching guidelines are based on attempting to minimize the most visible stresses that can be caused to animals - for example, too many tourists, too much feeding and contact with tourists, and disturbance during breeding periods. However, understanding of the effects of wildlife watching tourism is still quite limited, even for the big cats, great apes, whales and dolphins, and some bird species that have been the subject of most research.

Recent research, for example, is starting to show up significant differences between apparently similar species in terms of how they respond to tourism. For example, there are large biological and behavioral differences between lions and cheetahs, or large whales and small whales. This means that wildlife watching codes developed for one species cannot be assumed to be appropriate for other species within the same group.

## 2.1.2 Training of guides in interpretation

Enforcement of codes and regulations can be particularly difficult in many wildlife watching situations, and the most effective means is to ensure that guides and tourists understand and are committed to compliance. This requires better training for guides and better briefing of tourists, linked with certification or licensing schemes for guides and tour organizers (that include checks on their compliance with wildlife watching codes and regulations), and on improving the quality of interpretation guides provide for tourists. Training of guides in interpretation offers scope for enhancing the quality of wildlife watching experiences for tourists and their awareness of conservation issues. This is because interpretation is a way of putting a wider context into what the tourist is seeing before them.

<sup>7</sup> The Red List can be accessed at <http://www.iucnredlist.org/>

### **2.1.3 Planning and management of tourism in protected areas and wildlife viewing sites**

Successful wildlife watching tourism requires sound plans as the basis for managing the watched populations and their habitats. Because of the uncertainties associated with understanding the effects of wildlife watching on animals, and keeping in mind the dynamic nature of tourism, it is particularly important to use “adaptive management” approaches for managing wildlife watching tourism. Adaptive management requires plans and objectives for wildlife and tourism, in combination with continuous monitoring and evaluation of tourism and its effects on wildlife, to check that the objectives set in the plans are being met. If they are not being met, management actions are adjusted as necessary to bring wildlife watching tourism into line with the planned objectives.

Effective implementation of plans often requires the interaction of different stakeholders, particularly tourism businesses and local communities and wildlife managers. A good understanding of stakeholder roles is necessary if wildlife watching tourism is to operate in ways that result in high quality tourism, effective conservation and tangible local community benefits. Participatory approaches to planning wildlife watching tourism are being used widely; successful examples of stakeholder participation include the adoption of a voluntary code of conduct for whale watching in Peninsula Valdes, and the establishment of no-fishing zones and dive sites as part of the overall zoning of Bunaken National Marine Park (Tapper, 2006).

Monitoring is used to check whether targets are being met or not. Management actions are adjusted and improved to achieve these targets in future. This adaptive management approach enables continuous improvement to be made in management actions for conservation, tourism and community benefits - based on lessons learned from day-to-day management experience.

### **2.1.4 Effects of disturbance from tourism on wildlife**

Wildlife watching tourism can have adverse effects on wildlife in three main ways – by causing changes in their behavior, changes to their physiology, or damage to their habitats.

Wildlife species are often particularly vulnerable to the effects of disturbance during their breeding periods and juvenile stages of offspring. Any disruption of courtship and mating behaviors, or later on when offspring are being cared for, reduces overall breeding success, and therefore is a serious threat to population maintenance and survival. For example, if the cubs of big cats, such as cheetahs or leopards, become separated from their mothers, they are vulnerable to predation. Tourists are often particularly keen to watch mother-offspring groups, and therefore great care is needed to limit and control any tourism around them.

### **2.1.5 Physiological effects of disturbance**

Recent studies have found physiological changes in animals subject to disturbance through tourism. The long-term implications of such physiological changes on the survival of individuals and populations are only beginning to be investigated. However, such changes emphasize the need for caution in managing populations that are regularly subject to wildlife watching activities.

### **2.1.6 Damage to the wildlife habitat**

Wildlife watching tourism can also result in damage to sites and habitats where species are watched. One dramatic example of this is the damage that is commonly reported to coral reefs that are regularly visited by too many recreational divers. Damage to coral destroys reef organisms and reduces the habitat available to fish for spawning and feeding. This in turn reduces the abundance of marine life at these sites, and ultimately makes them much less attractive to divers.

## 2.1.7 Managing visitors to minimize impacts on wildlife

The main options for managing wildlife watching are to reduce visitation, modify visitation, redirect visitation, and prevent visitation. Reducing visitation involves restricting the numbers of tourists allowed into viewing sites at any one time - this can be done by increasing fees for visitation and/or restricting the times when viewing is allowed. Modifying visitation involves altering the way in which wildlife watching is conducted and briefing visitors on appropriate behavior while they watch the wildlife. Redirecting visitation involves developing alternative attractions and infrastructure, such as visitor and interpretation centers, viewing points, and additional wildlife watching sites in less sensitive locations. Preventing visitation involves closing wildlife watching sites and associated infrastructure to protect sensitive areas, or to allow for maintenance and restoration.

# 2.2. ENVIRONMENTAL IMPACTS OF TOURISTS

Tourists usually want to see animals from a short distance away, and they want to be able to take close-up photographs. But, this may frighten animals, especially at sensitive times of their life cycle, and can have adverse effects on breeding. Feeding of wildlife by tourists can change social behaviour patterns. For example, artificial feeding by tourists caused a breakdown of the territorial breeding system of land iguanas in the Galapagos Islands.

The expansion of wildlife sites and related activities such as creation of hotels can improve the livelihood of the communities around those sites. However, it affects the natural organisms and processes on that land. This highlights, for instance, the need for proper management of waste so that it does not affect the surroundings.

Unchecked tourist activities at sites may have significant detrimental effects on wildlife and ecology. The cumulative effect may intensify permanent degradation, thereby compromising the viability of the sites as tourist destinations. Environmental impacts of tourism include, among others:

- Use of land resources for accommodation, tourism facilities and other infrastructure provision, including road networks, airports and seaports;
- Damage to or destruction of ecosystems and habitats, including deforestation, draining of wetlands and intensified or unsustainable use of land;
- Unsustainable consumption of flora and fauna (e.g. through picking plants or buying souvenirs manufactured from wildlife - especially from endangered species such as coral and turtle shells or through unregulated hunting, shooting and fishing);

Food and Agriculture Organization (FAO) research (FAO, 2010) warns that adverse effects can result from ecotourism when the streams of tourists grow.

# 2.3. SOCIAL AND CULTURAL IMPACTS OF TOURISM

Socio-cultural impacts of tourism refer to the effects on host communities of direct and indirect interactions with tourists and with the tourism industry. The impacts arise when tourism brings about changes in communities' value systems and behavior; this could threaten indigenous identity. Furthermore, changes often occur in community structure, family relationships, collective traditional life styles, ceremonies, and morality.<sup>8</sup>

<sup>8</sup> There is more information about these topics at [www.coastlearn.org](http://www.coastlearn.org) is an internet based distance vocational training package on Integrated Coastal Zone Management (ICZM).



Tourism can cause changes or loss of local identity and values, through:

- Commercialization of local culture. Tourism can commodify local culture if religious traditions, local customs and festivals are altered to conform to tourist expectations, resulting in what has been called “reconstructed ethnicity”.
- Standardization due to having to satisfy tourists desires. Although landscape, accommodation, food and drinks, etc., must meet the tourists’ desire for the new and unfamiliar, they must at the same time not be too strange to be sellable.
- Adaptation to tourist demands. Tourists want souvenirs, arts and crafts, and to experience the local culture. In many tourist destinations, craftsmen have responded to this growing demand and have made changes in the design of their products to make them more saleable to customers.

The physical influences that increasing tourism can cause to a destination may cause severe social stress on local communities, in the form of:

- Cultural deterioration and damage to cultural heritage, from vandalism, littering, pilferage and illegal removal of cultural heritage items or by changing the historical landscape that surrounds it.
- Resource use conflicts, such as competition between tourism and local populations for scarce primary resources like water and energy.
- Conflicts with traditional land-uses, when the construction of tourist facilities cuts off the locals’ access to traditionally used areas.

Social and cultural impacts related to tourism may also include: changes to family structure and gender roles, leading to tension and loss of self-esteem for men and older generations; dilution of local languages and culture; and impacts on the health and integrity of local cultural systems.

## 2.4. HUMAN-WILDLIFE CONFLICTS

Although wildlife is a valuable natural resource with several beneficial values to the people, in some regions (e.g. Africa) wild animals may cause damage to society in terms of attacks on people and livestock, damage to crops and other property such as infrastructure, and disruption of peaceful existence in local communities living close to wildlife areas. Increasing human populations brings with it increasing encroachment onto wildlife habitat (e.g. settlements, cattle posts, farmlands). Inevitably, human-wildlife conflicts have become more common. The following are some of human-wildlife conflict issues:

### 2.4.1 Human deaths and injuries

Large mammalian carnivores are responsible for numerous fatal attacks on humans, and large herbivores such as hippopotamuses and elephants are involved in human deaths. This is mostly prevalent in Africa. Road accidents caused by wildlife may result in human death and injury.

### 2.4.2 Destruction of crops

Birds, rodents, primates, antelopes, buffalos, hippopotamuses, bush pigs and elephants can raid crops. The occurrence and frequency of crop raiding is dependent upon conditions such as the availability, variability and type of food sources in the area.

### 2.4.3 Livestock depredation

Carnivores such as leopards, lions, cheetahs, hyenas, civet-cats, and crocodiles kill livestock such as cattle, goats and sheep. The number and type of domestic animals killed by wildlife varies according to the species, time of the year and the availability of natural prey.

### 2.4.4 Transmission of diseases to livestock and/or humans

Wildlife transmits diseases such as rabies to domestic livestock and possibly to humans. Scavengers and predators, such as spotted hyenas, jackals, lions and vultures, spread pathogens by opening up, dismembering and dispersing parts of infected carcasses. African buffalos are crucial for transmitting foot and mouth disease, especially in the southern part of Africa.

### 2.4.5 Adverse interaction with other species (endangered or highly valuable)

One example is elephants in Sub-Saharan Africa. The destruction of habitats by elephants can jeopardize the survival of other wildlife in the area, such as giraffes, buffalos and bushbucks. This can also be harmful to the development of populations of roan, sable and tsetse. Elephants also destroy infrastructure such as ponds, tracks and other water installations in both parks and elsewhere.

## 2.5. POSITIVE EFFECTS OF WILDLIFE TOURISM

To date, we know much about negative effects of wildlife tourism on wildlife. But, in principle, wildlife tourism can have many positive effects on wildlife species and their habitats.

The positive effects operate through four main mechanisms:

- (1) financial contributions (e.g. entrance fees, visitor levies and operator licensing fees);
- (2) nonfinancial contributions (e.g. monitoring or research by operators or tourists);
- (3) socio-economic incentives for conservation (e.g. restoring natural habitats, the creation of protected areas and changes in land management practices); and
- (4) education (e.g. increased awareness of conservation or animal welfare issues).

As Higginbottom et al. conclude for Australia (Higginbottom et al., 2001), governments can enhance the positive effects of wildlife tourism on wildlife. Their recommendations include:

- 1.** Government agencies, conservation NGOs and tourism industry bodies should work together to strategically develop mechanisms for enhancing links between wildlife tourism and conservation.
- 2.** Governments should make greater use of economic instruments to promote conservation in association with wildlife tourism - balanced appropriately with consideration of social equity objectives. This should include: (a) greater adoption of the user-pays principle, with charges appropriate to the market value of the natural resources concerned; (b) return of a greater proportion of tourism revenue for management of the natural areas concerned; and (c) investigating raising entrance charges to high quality, high profile wildlife tourism attractions.
- 3.** Governments (and the public) need to recognize the substantial economic gains to society resulting from tourism based on nature, including wildlife, and thus increase their levels of funding for protected areas.

4. Governments should continue to recognize wildlife conservation as a public good and invest in it accordingly, irrespective of financial benefits relating to tourism.
5. As a way of generating revenue for conservation, opportunities for developing additional high-quality, high-yield attractions based on wildlife should be investigated by government conservation agencies.
6. Opportunities for increased economic value-adding at protected areas and government-run wildlife tourism attractions should be explored by government conservation agencies.
7. Wildlife tourism operators should be encouraged, through suitable government incentives, to donate funds for conservation purposes and to promote this in their own marketing.
8. Wildlife tourism operators should be encouraged, through suitable government incentives, to engage in appropriate forms of conservation management, monitoring and research, and to promote this in their own marketing.
9. Mechanisms for encouraging tourists to make donations to conservation should be well developed.
10. Governments should encourage and support organizations that use tourists as volunteers in conservation programs, as this is a cost-effective way of providing labour for such activities.
11. Governments should encourage and support wildlife tourism attractions becoming actively involved in research on their target species.
12. Governments should encourage shifts from traditional agriculture to wildlife or nature-based tourism on private land in cases where this is economically viable.

## 2.6. IMPACT ASSESSMENT OF WILDLIFE TOURISM

Measures should be taken to ensure adequate impact assessment of wildlife tourism (CBD, 2004A). At a national level, governments should normally assess impacts associated with the overall vision, goals and objectives for tourism and biodiversity. In addition, this assessment process may also be undertaken at more local levels by local government, and by indigenous and local communities.

Governments will normally evaluate the adequacy of impact assessments submitted by proposers of tourism developments or activities. These evaluations will need to be undertaken by an appropriately qualified team, drawing on a range of expertise (including expertise in tourism and in biodiversity management). Indigenous and local communities that would be affected by the proposals need to be involved. There should be public access to the documentation.

Indigenous and local communities concerned should be involved in impact assessment. Their traditional knowledge should be acknowledged and considered as a part of impact assessment, especially when tourism projects will affect their sacred sites or lands and waters traditionally occupied or used by them. Sufficient time should be allowed for considering the different conditions and circumstances, to ensure that all stakeholders are able to participate effectively in the decision-making process. Such information should be accessible and comprehensible to all stakeholders.



# 3.

## REGULATION, MANAGEMENT AND INTERNATIONAL AGREEMENTS ON WILDLIFE CONSERVATION AND TOURISM

This chapter discusses national regulations, policies and programs/guidelines and international agreements signed to preserve biodiversity. It also highlights major wildlife and tourism stakeholders and their roles and responsibilities.

# 3.1. PRINCIPLES OF SUSTAINABLE USE OF BIODIVERSITY

The parties to the Convention of Biological Diversity (CBD) have adopted specific principles and operational guidelines on sustainable use of biodiversity (the Addis Ababa Principles and Guidelines). These Principles and Guidelines help ensure that the use of the components of biodiversity will not lead to the long-term decline of biological diversity. They have been drafted to generate incentives for conserving and restoring biodiversity because of the social, cultural and economic benefits that people derive from it. The principles and Guidelines are considered as applying to both consumptive and non-consumptive use of biodiversity (CBD, 2004B).

<b>Practical principle 1</b>	Supportive policies, laws, and institutions are in place at all levels of governance and there are effective linkages between these levels.
<b>Practical principle 2</b>	Recognizing the need for a governing framework consistent with international and national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.
<b>Practical principle 3</b>	International, national policies, laws and regulations that distort markets - which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity - should be identified and removed or mitigated.
<b>Practical principle 4</b>	Adaptive management should be practiced, based on: 1. science and traditional and local knowledge; 2. iterative, timely and transparent feedback derived from monitoring the use, environmental and socio-economic impacts, and the status of the resource being used; and 3. adjusting management based on timely feedback from the monitoring procedures.
<b>Practical principle 5</b>	Sustainable use management goals and practices should avoid or minimize adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.
<b>Practical principle 6</b>	Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.
<b>Practical principle 7</b>	The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use, and its impact on, biodiversity.
<b>Practical principle 8</b>	There should be arrangements for international cooperation where multinational decision-making and coordination are needed.
<b>Practical principle 9</b>	An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance.
<b>Practical principle 10</b>	International, national policies should take into account: 1. current and potential values derived from the use of biological diversity; 2. intrinsic and other non-economic values of biological diversity; and 3. market forces affecting the values and use.
<b>Practical principle 11</b>	Users of biodiversity components should seek to minimize waste and adverse environmental impact, and to optimize benefits from using those components.
<b>Practical principle 12</b>	The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity (along with their contributions to its conservation and sustainable use) should be reflected in a fair distribution of the benefits from using those resources.
<b>Practical principle 13</b>	The costs of management and conservation of biological diversity should be internalized within the area of management and reflected in the distribution of the benefits from the use.
<b>Practical principle 14</b>	Education and public awareness programs on conservation and sustainable use should be implemented, and more effective methods of communications should be developed between and among stakeholders and managers.

# 3.2. MAJOR STAKEHOLDERS REGARDING WILDLIFE AND TOURISM AND THEIR ROLES AND RESPONSIBILITIES

There is need for collaborative effort of stakeholders to ensure that both social and environmental benefits are realised. Given their central influence on the impacts of tourism on diversity, the major stakeholders involved in wildlife and tourism are governments, the private sector and communities.

## 3.2.1 Governments

Governments formulate the policy framework and regulations covering tourism development and wildlife conservation. That framework and associated instruments for tourism development and wildlife conservation include: laws and regulations defining standards for tourism facilities, access to wildlife resource and land use regulations and zoning; establishment of national parks, reserves and other protected areas; and allocation of tax revenues for protecting biodiversity-based tourism attractions.

## 3.2.2 Private sector

The private sector is a key player because it: is often responsible for establishing the tourism infrastructure and attracting tourists to a region; contributes to the environmental protection and conservation; maintains the ecological integrity of the areas in which it operates; contributes financially to the conservation of biodiversity; and educates members and customers about the impact of tourism on biodiversity and on local people.

## 3.2.3 Local residents in tourism destinations

Local people (communities and indigenous people) make up a large part of the workforce in the tourism and wildlife industries. If properly resourced and educated, local communities also engage in conservation, especially in buffer zones of protected areas and conservation corridors and wildlife management areas.

## 3.2.4 Other key stakeholders

This category of stakeholders includes consumers/tourists, non-governmental organizations (NGOs), research institutions and inter-governmental organizations:

### Consumers/tourists

Tourists and tourism operators contribute to conservation efforts by participating in impact alleviation activities, monitoring and scientific research etc. Satisfied tourists lead to more tourists and increased benefits to host indigenous and local communities.

### Non-Governmental Organizations (NGOs)

International organizations assist in biodiversity conservation and protection, while local NGOs help local communities diversify their income through sustainable tourism and protection of the natural resources base.

### Inter-Governmental Organizations

Inter-governmental organizations provide technical assistance and information guidelines, facilitate negotiations, mediate agreements and also provide financial and logistical resources.

### Research institutions

Research institutions contribute significantly to research into the impacts of tourism activities on species and habitats (cause-effect relationships) and provide scientific data on environmental and socio-activities within protected areas, fragile ecosystems and important heritage tourism sites.



# 3.3. NATIONAL REGULATION OF WILDLIFE TOURISM

Several national documents have identified the main threats and challenges to wildlife conservation which need to be addressed by governments. A thorough analysis of these is presented, for instance, in the wildlife management strategy of Kenya. The threats and challenges that apply to Kenya are widely applicable elsewhere. They are:<sup>9</sup>

- Land use changes;
- Destruction of wildlife habitats;
- Inadequate incentives for conservation;
- Lack of local partnership in protected area management;
- Insufficient size of protected areas;
- Lack of management plans;
- Need for assessment of management effectiveness;
- Inadequate and inaccurate scientific data;
- Illegal and unsustainable off-take of wildlife;
- Human-wildlife conflict and adequate compensation mechanisms;
- Pollution;
- Biopiracy; and
- Invasive alien species.

Responses of governments to threats towards biodiversity (including protected areas) are explicitly described in the INTOSAI WGEA – Auditing Biodiversity: Guidance for Supreme Audit Institutions (Chapters 2 and 3).

## 3.3.1 Respective Government tools in response to threats to biodiversity:

### a) Legislation and Regulations

Governments have legal powers to regulate all wildlife and tourism activities.

### b) Policies and Programs/Guidelines

Governments formulate national policies as guiding tools for conserving and protecting the environment within protected areas, and for how tourism should operate in those areas. Programs are funded to ensure implementation of policies and maintenance of protected areas.

# 3.4. INTEGRATED WILDLIFE AND TOURISM MANAGEMENT

Governments use a variety of tools to identify, assess, manage and mitigate impacts on wildlife. Impact management is essential to avoid or minimize any potential damage to biodiversity conservation and sustainable use that tourism development or activities might cause. In particular, governments should be aware that the tourism industry could provide a direct impetus for conserving vulnerable ecosystems. This impetus will come from supporting sustainable tourism activities that have a direct commercial interest in maintaining a vulnerable ecosystem in good condition. In the Guidelines on Biodiversity and Tourism Development by the Secretariat of the Convention on Biological Diversity (CBD, 2004A) the following impact management is suggested.

<sup>9</sup> Draft Wildlife Policy. Ministry of Tourism and Wildlife, Republic of Kenya. 2007. <http://www.forestryandwildlife.go.ke/>

Tourism should be planned and managed using the internationally accepted planning methodologies (such as the Recreation Opportunity Spectrum and the Limits of Acceptable Change). In vulnerable ecosystems, based on these methodologies and relevant background information, tourism should be restricted and where necessary prevented.

Impact management can include:

- measures for the siting of tourism development and activities, including establishing appropriate activities in different designated zones;
- differentiation between the impacts of different types of tourism;
- measures to control tourist flows in and around tourist destinations and key sites;
- promoting appropriate behavior by tourists so their impacts are minimized; and
- establishing limits to visitor numbers and their impacts within Limits of Acceptable Change at any site.

Impact management in relation to trans-boundary ecosystems and migratory species requires regional cooperation. There is a need to identify those who will be responsible for implementing impact management and the resources needed for managing those impacts.

Impact management for tourism development and activities can include the adoption and effective implementation of policies, good practices and lessons learned that cover, for example:

- (a)** Controlling impacts of major tourist flows including excursions, cruise ships, etc., which can cause serious effects on destinations even though they are visited for only short periods.
- (b)** Reducing impacts of activities outside tourism areas on adjacent and other ecosystems important for tourism (e.g. pollution from nearby farming activities or extractive industries may affect areas of tourism development).
- (c)** Responsible use of natural resources (e.g. land, soil, energy, water).
- (d)** Reducing, minimizing and preventing pollution and waste (e.g. solid and liquid waste, emissions to air, transport).
- (e)** Promoting the design of facilities that are more eco-efficient, which adopt the cleaner reduction approach, and use environmentally sound technologies – especially those that reduce emissions of carbon dioxide and other greenhouse gases and ozone-depleting substances, as set out in international agreements.
- (f)** Conserving flora, fauna and ecosystems.
- (g)** Preventing the introduction of alien species as a result of the construction, landscaping and operating of tourism activities (e.g. from shipping associated with tourism).
- (h)** Conserving landscapes, and cultural and natural heritage.
- (i)** Respecting the integrity of local cultures and avoiding negative effects on social structures, involving and cooperating with indigenous and local communities - including measures to ensure respect for sacred sites and customary uses of these sites, and to prevent negative impacts on them and on lands and waters traditionally occupied or used by them, as well as on their subsistence resources.
- (j)** Using local products and skills, and providing local employment.
- (k)** Promoting appropriate behavior by tourists so their adverse impacts are minimized, and promote positive effects through education, interpretation, extension, and other means of awareness-raising.
- (l)** Alignment of marketing strategies and messages with the principles of sustainable tourism.
- (m)** Contingency plans for handling accidents, emergencies or bankruptcies that may occur during construction and use of facilities, and which may threaten the environment and the conservation and sustainable use of biodiversity.
- (n)** Environmental and cultural sustainability audits and review of existing tourism activities and developments, and of the effectiveness with which impact management is being applied to existing tourism activities and developments.

- (o) Mitigation measures for existing impacts, and appropriate funding to support them. (Such measures should include development and implementation of redress and compensation measures if tourism activities have resulted in negative environmental, cultural, and socio-economic effects.)

Governments - in cooperation with biodiversity managers, communities affected by the proposals, and other stakeholders - would normally assess the need for impact management in addition to any management measures included in the proposals under consideration. All stakeholders should understand the importance of such impact management.

The tourism industry can assist by promoting corporate policies on sustainable tourism and biodiversity, with defined goals, monitoring and regular public reporting on their progress.

### 3.4.1 Legislation, regulations and permits

Respect for existing national legislation and appropriate regulatory mechanisms and tools (e.g. land-use planning, protected area management plans, environmental assessment, building regulations and standards for sustainable tourism) are essential for the effective implementation of any overall vision, goals, and objectives. Legislation and control measures considered could include measures for:

- (a) Effective enforcement of existing laws, including the participation of all stakeholders.
- (b) Approval and licensing processes for tourism development and activities.
- (c) Controlling the planning, siting, design and construction of tourism facilities and infrastructures.
- (d) Management of tourism in relation to biodiversity and ecosystems, including vulnerable areas.
- (e) Undertaking environmental assessments on all proposed tourism developments, including assessment of cumulative impacts and effects on biodiversity, and as a tool to develop policies and measure their impacts.
- (f) Setting national standards and/or criteria for tourism that are consistent with overall national or regional plans for sustainable development and national biodiversity strategies and action plans, through:
  - (i) Environmental quality and land-use criteria in and around tourism sites.
  - (ii) Development of a decision-making process with environmental and cultural sustainability guidelines for new and existing tourism development within the designated goals and objectives of the site's different zones and within the limits of acceptable change. (CBD, 2004A).

### 3.4.2 Trade

Trade is done on an approved quota system only, one that is strictly regulated using CITES permits (CITES is the Convention on International Trade in Endangered Species of Wild Fauna and Flora).

### 3.4.3 Wildlife off-take

The legal wildlife off-take is enshrined in countries' laws applies where the individuals/communities/tour operators are given a right to defend human lives and property. In some countries, governments use the CITES-approved annual hunting off-take (e.g. for elephants).

### 3.4.4 Compensation

#### Direct compensation

Communities, especially those in sub-Saharan Africa, are paid compensation in the event of loss of human life or livestock by predators or destruction of crops by elephants.

#### Indirect compensation

The Community Based Natural Resource Management Programmes involve local communities in managing and utilizing the wildlife in their locality. This is designed to motivate communities to protect wildlife outside the protected areas.

### 3.4.5 Prevention practices

Governments construct fences to help prevent the transmission of certain endemic contagious diseases such as foot and mouth disease, African swine fever and theileriosis. The establishment of control areas, game-proof fences, sanitary cordons and movement control are intended to separate wildlife from domestic livestock. Fencing is used throughout Africa for a range of purposes.

### 3.4.6 Community awareness

Awareness raising is carried out in the community at different levels, for instance in schools or in adult education arenas. Education and training promote commitment towards conservation and raise awareness of the essential role wildlife plays in ecosystems and its ethical and economic value, as well as its recreational and aesthetic importance.

## 3.5. INTERNATIONAL AND REGIONAL AGREEMENTS/TREATIES ON WILDLIFE CONSERVATION

International agreements have been signed in order to preserve wildlife or biological diversity. This list is not exhaustive as other regional or bilateral agreements may exist. A brief description of each international and regional agreement follows:

### 3.5.1 International/Global environmental agreements

These include:

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, also known as the Washington convention). CITES is an agreement between governments, and it aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
- The Convention on Biological Diversity (CBD). CBD has three main objectives: the conservation of biological diversity, the sustainable use of the components of biological diversity, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.
- International Convention for the Protection of Birds. Its objective is “To protect birds in the wild state, considering that in the interests of science, the protection of nature and the economy of each nation, all birds should as a matter of principle be protected”.
- Convention on the Conservation of Migratory Species of Wild Animals (CMS, also known as the Bonn Convention). This intergovernmental treaty aims to conserve terrestrial, aquatic and avian migratory species throughout their range.
- Convention on Wetlands of International Importance Especially as Water Fowl Habitat (RAMSAR) is an intergovernmental treaty that sets out the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
- International Convention for the Regulation of Whaling. The Convention was signed in order to provide for the proper conservation of whale stocks and make possible the orderly development of the whaling industry.
- International Plant Protection Convention (IPPC). IPPC is an international plant health agreement that aims to protect cultivated and wild plants by preventing the introduction and spread of pests.
- Convention Concerning the Protection of the World Cultural and Natural Heritage (also known as the World Heritage Convention). The Convention aims to promote cooperation between nations to protect heritage around the world that is of such outstanding universal value that its conservation is important for current and future generations.
- The United Nations Convention on the Law of the Sea (UNCLOS). The Law of the Sea Convention defines the rights and responsibilities of nations in their use of the world’s oceans, establishing guidelines or businesses, the environment, and the management of marine natural resources.

## 3.5.2 Regional environmental agreements

They include among others:

### 1) Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere

The objective of the convention is to preserve all species and genera of Native American fauna and flora from extinction and preserve areas of extraordinary beauty, or historic or scientific value.

The convention provides for the following:

- Parties to establish national parks, national reserves, nature monuments and strict wilderness reserves. The national parks are to provide recreational and educational facilities to the public and strict wilderness areas are to be maintained inviolate.
- Maintain cooperation between governments in the field of research.
- Species listed in annex to enjoy special protection.
- Impose controls on trade in protected fauna and flora.

The Convention was adopted in Washington D.C. in October 1940 and came to force in May 1942.

### 2) Convention on Conservation of Nature in the South Pacific

The objective of the convention is to take action for the conservation, utilization and development of the natural resources of the South Pacific region through careful planning and management for the benefit of the present and the future.

The convention provides for the following:

- Parties to create protected areas to safeguard representative samples of natural ecosystems.
- National parks not to be altered so as to reduce their area except after full investigation, resources not to be subject to commercial exploitation, hunting and collection of species to be prohibited, and provision to be made for visitors.
- Parties to maintain lists of indigenous fauna and flora in danger of extinction and to give such species the maximum protection possible.
- Make provision as appropriate for customary use of areas and species in accordance with traditional cultural practices.

### 3) Convention on the Conservation of European Wildlife and Natural Habitats

The objective is to conserve wild fauna and flora and their natural habitats, especially those species and habitats whose conservation requires the cooperation of several states, and to promote such cooperation.

The convention provides for the following:

- The contracting parties to take requisite measures to maintain the population of wild and flora at, or adapt them to, a level which corresponds in particular to ecological, scientific, and cultural requirements, and take further steps to promote national policies for conservation with special attention to endangered and vulnerable species and endangered habitats.
- Appropriate and necessary measures to be taken to ensure the conservation of the habitats of the wild species of fauna and flora, with special attention to be given to protecting areas that are important for migratory species.
- Appropriate and necessary measures to be taken to ensure the special protection of wild species of fauna and flora.
- Establish a standing committee responsible for monitoring the application of the convention.

The convention was adopted in September 1979 in Berne, and came into force in June 1982.

### 4) Convention on the Conservation of the African – Euro Asian Migrating Water Birds

This convention aims at adopting procedures for conserving migrating water birds, especially birds which are threatened with extinction or species which live in bad conditions. It also aims to evaluate the information collected on their environment, get acquainted with the convenient homelands for such birds and explore how to keep them, discuss the problems caused by human activities, set remedies and compensations in case people lose their homeland, prevent water birds from having to live in other environments, avoid the release of alien species that can harm wild animals and plants, deliver monitoring programs and carry out research, pay attention to the damp lands, deliver training programs for enhancing environmental awareness, and exchange information and the results of research and monitoring programs. States have to provide for the conservation of the various species and homelands and for the Convention's implementation.



# 4.

## GOOD PRACTICE ON WILDLIFE CONSERVATION AND TOURISM



Sustainable tourism does not happen by itself. In fact, several factors can work against sustainability. The needs of tourists, for instance, are different from those of local residents, and planners may tend to prioritize the expectations of customers. Competition for resources between locals and tourists may cause inflation and over-exploitation of resources.

Sustainable tourism is about site or destination plans, and tourism policies and strategies that reflect the ways and means of achieving the goals and milestones for sustainability. Policies often defer to institutional set-ups that allow governance of tourism development. Policies may not be site specific and may apply across all of a country's area, whereas strategies are more action oriented and are often linked to a destination or region. Policies and strategies describe a future desired state (vision) and detail the necessary steps to achieve that vision.

Although governments are essential in moderating negotiations between different interest groups, it is important to have a consistent interrelationship between different policies and strategies (tourism, poverty reduction and biodiversity). To achieve sustainable tourism, tools that can be used include tourism policies, inter-ministerial and inter-agency corporation mechanisms, partnerships that allow park agencies to work with industry and retain parts of revenue for conservation and local development, and training for professionals and communities. Appendix 1 (Planning process) suggests that auditors utilize the CBD Guidelines on Biodiversity and Tourism Development and its User's Manual as references in their sustainable tourism planning process. The Guidelines ask questions about the use of regional/global standards, guidelines and principles, and global criteria.

## WATCHING CHEETAHS IN SERENGETI NATIONAL PARK, TANZANIA

Serengeti National Park is the most popular in Tanzania. It was visited by just over 150,000 people in 2002/03, 60% of whom were international tourists. Total income from tourism fees for visiting the park were around USD \$5.5 million (Tapper, 2006). Over 95% of the visitors come to the Serengeti to watch wildlife. People report that they enjoy watching lions most, followed by cheetahs, leopards, elephants, giraffe, wildebeest, and hippos.

Each of these species has different behaviors and ecological requirements. For instance, of all the large cats, cheetahs are the most vulnerable to disturbance; this is because they hunt during the day, need to hunt daily, and are often shy.

Cheetahs are largely non-territorial and are highly mobile animals. Reports suggest that they are now keeping further away from roads in the Serengeti than in the past.

High numbers of tourist vehicles can disrupt hunting by cheetahs and reduce their overall hunting success – for example, noisy vehicles can alert prey to nearby cheetahs. There are observations of cheetahs being killed on roads by tourist vehicles. In one case in 2003, the cubs of a mother cheetah were scared away from her by 15 vehicles and were never seen again – probably having been killed by lions or hyenas.

Because of the high levels of tourism, animals in the areas of the park visited by tourists can be subject to acute disturbance. The size of the park makes it difficult for rangers to ensure that vehicles are complying with the park's viewing regulations. The park is tackling this problem by setting up clear and enforceable guidelines and communicating these to tourists, and by promoting development of a national driver/guide accreditation system for all of Tanzania's parks.

A central part of the park's tourism management is a zoning scheme. This sets out acceptable types and levels of use and impact in each of three zones, and also establishes a No-Go Zone where tourism access or use is not permitted. In the Intensive and Low Use Zones, game viewing by vehicles is the main visitor permitted activity, with driving restricted to designated roads and tracks. Short guided trail walks are also being developed in these zones, along with tourism sinks, which are designated areas where visitors can get out of their vehicles for specific activities, such as picnicking, short walks, visits to cultural sites and viewing water birds.

No game viewing by vehicles is permitted in the Wilderness Zone, with visitor use being restricted to walking safaris of at least two days' duration for small groups with a maximum of eight visitors per group. Visitors can only camp at designated campsite locations during these safaris. Throughout the park, the only new accommodation permitted is permanent or non-permanent tented sites. No further development of permanent lodges is allowed, and existing lodges can only expand their bed capacity if this is matched by an equivalent expansion of facilities, including tourist sinks.

The combination of zoning, development of tourist sinks, guided trail walks and walking safaris is being used to diversify the visitor experiences available within the park. By spreading tourism activities more widely in the Intensive Use Zone, these initiatives enable the park to manage an increased number of visitors and to minimize overuse of existing tourism attractions.

This combination is also important for managing tourism around cheetahs. Preventing off-road driving reduces the threat of crowding by viewing vehicles in the Intensive and Low-Use Zones, and the Wilderness and No-Go Zones provide areas of minimal disturbance for cheetahs.

# GORILLA WATCHING TOURISM

Gorilla tourism has mostly concentrated on mountain gorillas in Rwanda, Democratic Republic of Congo (DRC) and Uganda. More recently, the development of tourism linked to lowland gorilla populations in west and central Africa has also been explored. By 2000, four groups of gorillas in Rwanda, three in DRC and three in Uganda were habituated and visited by paying tourists.



Gorilla in its natural living environment  
(photo by Hendrik Relve)

Since then, lowland gorilla groups have been habituated in the Central African Republic and Republic of Congo. Gorillas are highly endangered: there are less than 1000 mountain gorillas and 110,000 western lowland gorillas thought to remain in the wild. They are subject to threats from logging and land conversion to agriculture, which fragment their forest habitat and make it easier for poachers to kill gorillas for the bush meat trade. From a conservation perspective, even though there are risks to gorillas from tourism, these are far less than other threats. It is also argued that, without the incentives, revenue and international attention from tourism, the mountain gorilla population would not have survived.

Currently, tourists pay around USD \$350 per person for a permit to watch mountain gorillas, in addition to paying park entrance fees and for their guides. This price ensures that gorilla watching tourism generates significant amounts of revenue, and helps to manage demand from tourists for gorilla watching (Tapper, 2006).

Gorilla watching tourism also leads to spending by tourists on accommodation and other services during their visits, and attracts them to travel in countries that they might not otherwise visit. For example, nearly three quarters of the 8,000 tourists visiting Uganda each year for gorilla watching also visit other national parks in the country. This economically significant spending, which is not directly associated with gorilla watching, would not occur without gorilla watching tourists.

Thus, gorilla watching is important as much for its indirect economic effects as well as for the revenues that it generates directly. It is also significant in that it promotes protection of the forests which provide the gorillas' habitats. Therefore, gorilla watching tourism also helps to preserve the valuable ecosystem services provided by the forest – for example, as water catchments for downstream agricultural areas and by preventing soil erosion of the slopes of the Virungas.

The main issues for gorilla conservation and tourism are associated with problems of stress in the habituation process, potential loss of gorillas to human diseases through contact with visitors and guards, and the risks posed to habituated gorilla groups from poachers, guerrillas and other armed people in the forests. It is also important to ensure that tourists are protected from any risk of danger to themselves.

These issues can be managed through strict compliance with existing regulations that are designed to minimize negative impacts on gorillas, supported by training courses for guards and guides, and the provision of information leaflets for visitors. Existing regulations for gorilla watching include a maximum group size of eight tourists, a limit of one tourist visit (for a maximum of one hour) to a gorilla group in a single day, no physical contact with the gorillas, and a separation distance of at least five meters (seven meters is now recommended), no visits by people who are obviously ill or by children under 15 years, no flash photography, removal of all litter, and no loud noises or talking by the tourist group.

### Box 4.1: World Travel and Tourism Council Environmental Guidelines

Travel and tourism companies should state their commitment to environmentally compatible growth:

- Targets for improvement should be established and monitored.
- Commitment to the environment should be company-wide.
- Environment improvement programs should be systematic and comprehensive.  
They should aim to:
  1. Identify and minimize product and operational environmental problems, paying particular attention to new products.
  2. Pay due regard to environmental concerns in design, planning, construction and implementation.
  3. Be sensitive to the conservation of environmentally protected or threatened areas, species and scenic aesthetics, achieving landscape enhancement where possible.
  4. Practice energy conservation.
  5. Reduce and recycle waste.
  6. Practice freshwater management and control of sewage disposal.
  7. Control and diminish air emissions and pollutants.
  8. Monitor, control and reduce noise levels.
  9. Control, reduce and eliminate environmentally unfriendly products, such as asbestos, CFCs etc. pesticides and toxic, corrosive, infectious, explosive or flammable materials.
  10. Respect and support historic or religious objects and sites.
  11. Exercise due regard for the interests of local populations, including their history, traditions and culture and future development.
  12. Consider environmental issues as a key factor in the overall development of travel and tourism destinations.

Source: WTTC (1994)

### Box 4.2: British Airways “Fragile Earth” Guidelines for Travelers, *Fragile Earth: Wherever You Go Be A Friend To The Environment*

After a comprehensive review of its operations, British Airways Holidays stated that the company’s policy is to improve its environmental performance and work as a member of the tourism industry to safeguard holiday destinations for future generations.

As part of that commitment, British Airways Holidays asks all its customers to respect the history, culture and natural beauty of the countries they visit. The following suggestions are made to travellers:

- Never buy ivory or similar products that exploit wildlife.
- Try to use local services and produce, by doing so you will get better value for money and help the local economy.
- Avoid disturbing or damaging wildlife or plants. Always pick up your litter - bottles, cans and plastic can be deadly to wild animals.
- Take special care near coral reefs. Corals are living organisms, easily damaged by touch. Avoid standing on coral reefs and resist the temptation to remove corals, shells or other reef species.
- Many countries are working to protect their environment. You can help support those efforts by visiting buildings, museums, parks and reserves.
- Don’t stay silent if you come across environmental problems. Write to the local tourist organization, the country’s UK tourist office or an environmental organization.
- Take care not to disturb wildlife by disturbing their natural behavior or habitat.
- In reserves/national parks, avoid damaging vegetation, keep to roads and tracks and do not risk starting fires with discarded cigarettes.

Source: British Airways Holidays “worldwide” brochure (undated)

# 5.

## AUDITS RELATED TO TOURISM AND WILDLIFE

Impact of tourism on wildlife and environment has not been one of the most audited subjects among Supreme Audit Institutions (SAIs). The main objective of this document is to encourage SAIs to conduct audits on tourism impacts on environment-related activities. We hope that this document provides the reader with essential key questions and information needed to undertake audits in this field.

This chapter contains audit case studies in areas related to wildlife and tourism. To facilitate the planning of an audit on tourism and wildlife, it may be useful to see how other SAIs have approached the audit assignment, to benefit from what they have learned. Therefore, this chapter presents a set of examples of audits that reveal the most pressing problems related to tourism and wildlife that have been investigated by other SAIs.

The examples do not present a full description of the audit; instead, core elements common to any audit are presented. In some cases, certain parts of an audit have been emphasized or selected to illustrate a particular audit topic. The focus is on deviation, and many findings related to good practices have been left out. However, the examples here were selected because they are thought to be relevant and informative for other SAIs.



## Case Study 5.1. ETHIOPIA

Title of the Audit	Auditing Wildlife Conservation, Tourism and Development in Ethiopia
Date of the report	July 2011
Objective of the audit	To verify whether or not the process and implementation of the country's wildlife conservation and development activities were effective in maintaining the country's wildlife resources in a sustainable manner. Specifically: <ol style="list-style-type: none"><li>Availability of park management systems and their effective implementation;</li><li>The utilization of wildlife resources to attract tourists; and</li><li>The availability and sharing of wildlife related information among stakeholders.</li></ol>
Scope/Lines of Enquiry/ Criteria	The audit was conducted on the Ethiopian Wildlife Conservation Authority (EWCA) and protected areas under its administration; and covered from 2007 to mid 2011.
Methodology	<p>Data were collected from different relevant documents in the EWCA headquarters and four national parks and two wildlife sanctuaries under the Authority's administration. Field visits were also conducted in these protected areas.</p> <p>Survey questionnaires were sent to the remaining seven national parks.</p> <p>Information was also collected from Oromia Regional State Forestry and Wildlife Enterprise and from the Southern Nations, Nationals and Peoples Region (SNNPR) Culture and Tourism Bureau, which are responsible for wildlife management and administration in their respective regions.</p> <p>Officials of the EWCA and wardens of the visited national parks were interviewed.</p>
Main Audit Findings and Conclusions	<ul style="list-style-type: none"><li>Only four wildlife protections were defined; the remaining wildlife protection areas were not defined or gazetted.</li><li>Many national parks did not prepare management plans.</li><li>Illegal activities were observed in the six national parks (Omo, Abijata-Shala Lakes, Awash, Gambela, Nech Sar and Bale Mountains) and two wildlife sanctuaries (Babile elephant Sanctuary and Senkelle Swayne's Heartbeest Sanctuary) – the main illegal activities were illegal settlements (both permanent and seasonal), farming, grazing, deforestation and poaching.</li><li>Environmental impact assessment studies for development activities in and around wildlife protected areas.</li><li>It was observed that much of the wildlife was under the custody of individuals, hotels, business entities and government and non-government organizations - without the permission or approval of the EWCA or regional wildlife agencies. In the EWCA store there were 29,899 illegal items from 320 different wildlife products captured. These items include 5288 kilograms of ivory and jewellery made of ivory.</li><li>The country's wildlife resource and existing protected areas are advertised, documentary films and dramas are shown on national television and different radio stations including FM radio stations. Various billboards, posters and leaflets were also distributed to the wider public. However, the impact of the awareness campaign was not assessed.</li></ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"><li>The process of defining and gazettement of protected areas must be done as soon as possible, in consultation with local communities around the protected areas.</li><li>With the support of the respective regional state governments, local communities and other federal bodies, all illegal settlers and other illegal activities must be prohibited and the habitats of wildlife must be clear from human interference.</li><li>The EWCA should establish a system whereby bodies that approve environmental impact assessment studies need to ensure that any development activities near the protected areas will not affect wildlife and their habitat.</li><li>A memorandum of understanding must be signed with regional and district agricultural officers to prevent and protect epidemics and other diseases which affect wildlife. The EWCA must implement its own operational manual which was developed to be an early warning system.</li><li>To make possible an enjoyable environment for tourists and make their stay satisfying, all the necessary infrastructures must be developed and properly maintained; sign posts also must be in place wherever necessary within and outside the wildlife protected areas.</li><li>A national quota system should be developed for sport hunting. This should be based on the national population numbers of that species.</li><li>An integrated system should be established to prevent the illegal movement of wildlife and their products in the country. Those wildlife products which were held by the EWCA must be disposed of based on international agreements.</li></ul>
Source reference to audit report	<a href="http://www.ofag.gov.et/">http://www.ofag.gov.et/</a>

## Case Study 5.2. GEORGIA

Title of the Audit	Audit of the adequacy of measures for developing eco-tourism under the supervision of the agency "for protected areas" (JPÖR)
Date of the report	2011
Objective of the audit	The main audit objective (as set out by the AGS JPÖR) was to find out how well the Ministry of the Environment carried out certain statutory measures to promote eco-tourism – namely the 'Development of eco-tourism' program. The audit also investigated other programs and activities contributing in some way to the overall development of eco-tourism program.
Scope/Lines of Enquiry/ Criteria	<p>Eco-tourism activities were against five universally recognized general principles developed by The International Ecotourism Society (TIES):</p> <ul style="list-style-type: none"><li>• Minimize impact.</li><li>• Build environmental and cultural awareness and respect.</li><li>• Provide positive experiences for both visitors and hosts.</li><li>• Provide direct financial benefits for conservation.</li><li>• Provide financial benefits and empowerment for local people.</li><li>• Raise sensitivity to host countries' political, environmental, and social climate.</li></ul> <p>The audit covered the period of 1 January 2009 to 1 January 2011. The audit was carried out by the Chief Auditor of the Chamber of Control of Georgia, and the Auditor Assistant - on the basis of a decree of the President of the Chamber of Control of Georgia Council of 28.06.2001 Nr41/43. The audit began on 29 June 2011 and ended on 29 July 2011. The audit was conducted with the support of the German Society for International Cooperation (GIZ).</p>
Methodology	<p>The methods of documentary research, data analysis, comparative analysis, statistical analysis, etc were used.</p> <p>The sources of audit evidence were strategies, programs, projects, management plans, reports, written statements, documentation from expert councils, financial and accounting reports, etc.</p>
Main Audit Findings and Conclusions	<ul style="list-style-type: none"><li>• The development of eco-tourism requires a unified national strategy and a comprehensive program that includes all the development of eco-tourism oriented activities in protected areas.</li><li>• The existing "Development of eco-tourism" program had no quantitative targets. Specific eco tourism promotional measures need to be developed.</li><li>• There was no information or data about whether local wildlife populations have been maintained or improved.</li><li>• Income from eco-tourism activities have not increased at the same rate as tourist numbers.</li><li>• There was no measure of benefits to local communities, or of direct financial benefits to conservation itself.</li><li>• The State's funding for priority eco-tourism areas in the country was inadequate. When applying for funding from the Treasury, priorities were not clearly explained and the reasons why funding should be increased were not adequately argued and justified.</li><li>• The program "Development of eco-tourism" did not meet the generally accepted principles of the development of eco-tourism. The State policy in this area was uncoordinated and left too much up to the actions of individuals.</li><li>• The AGS was not able to evaluate the efficiency of those who had promoted eco-tourism. The AGS itself lacked criteria to assess any improvements to local communities, or criteria to assess improvements in conservation of the protected areas.</li></ul> <p><b>Recommendations</b></p> <ul style="list-style-type: none"><li>• A unified national strategy and a comprehensive program that included all of the development of eco-tourism oriented activities in protected areas was needed if the eco-tourism industry was to develop successfully.</li><li>• Regular, independent investigations needed to be carried out to verify whether program objectives were being met. Better monitoring would go some way towards resolving these issues.</li><li>• The AGS needed an internal evaluation document, so it could highlight difficulties and problems it faced when doing its job. This would help resolve existing issues and help improve service in the future.</li><li>• Individual protected areas needed better management. Ideally, a manager should have some knowledge and experience gained from the business sector, and be proficient in financial matters and cost-effective approaches to team management.</li><li>• It was recommended that existing training courses for local small entrepreneurs, local people and representatives of the tourist industry continue, and be expanded in the future to cover all groups needing such training.</li></ul>

## Case Study 5.3. BULGARIA

Title of the Audit	Management of the protected areas in the republic of Bulgaria – National and Nature Parks
Date of the report	July 2004
Objective of the audit	<p>To analyse and assess the effectiveness and the efficiency of the system for managing the protected areas (activities related to planning, implementation, procedures, resources and organizational structure). This audit was conducted on the basis of criteria determined by the audit team and coordinated with the audited organizations.</p> <p>To provide to the management of the Ministry of Environment and Water (MoEW) and the National Forestry Board (NFB) the results from the audit, and to make recommendations for the management of protected areas.</p>
Scope/Lines of Enquiry/ Criteria	<p>The Republic of Bulgaria shall ensure the protection and reproduction of the environment, the conservation of living Nature in all its variety, and the sensible utilization of the country's natural and other resources (Article 15 of the Constitution of the Republic of Bulgaria).</p> <p>Audited bodies are:</p> <ul style="list-style-type: none"><li>• The Ministry of Environment and Water – the National Nature Protection Service Directorate, the Rila National Park, the Central Balkan National Park, and the Pirin National Park;</li><li>• The Ministry of Agriculture and Forestry;</li><li>• The National Forestry Board (the Forestry Directorate and the Vitosha Nature Park, the Roussenski Lom Nature Park, the Strandja Nature Park);</li><li>• Three of the ten nature parks were audited in order to obtain a more comprehensive idea of the management of this category of protected areas. The audit covered the management of protected areas between 1 January 2001 and 31 December 2003.</li></ul> <p><b>Criteria for Performance Assessment</b></p> <ul style="list-style-type: none"><li>• Correlation between the statutory instruments regulating the management of protected areas in the MoEW and the NFB with the current legislation.</li><li>• Correlation between the priorities for protected areas (embedded in the national strategies and action plans) and the priorities for achievement of the strategic goals of the Management Programme of the Government of the Republic of Bulgaria (in terms of how it deals with the environment, the waters and the agricultural sector).</li><li>• Correlation between the objectives of the management plans for the protected areas and the objectives of the national strategies and action plans.</li><li>• Correlation of procedures used during development of protected areas management plans with the requirements of the statutory instruments.</li><li>• Reported results from the activities of the protected areas for the audit period – compared to the planned results (on the basis of criteria applied by the audited bodies).</li><li>• Funding of activities related to managing protected areas.</li><li>• Staffing of activities related to managing protected areas.</li><li>• Availability of facilities and equipment for activities related to managing protected areas.</li><li>• Availability of information for activities related to managing protected areas.</li></ul>
Main Audit Findings and Conclusions	<ul style="list-style-type: none"><li>• The management of tourism in the national and nature parks had improved considerably. However, visitor management plans had not been adopted for these protected areas. This was why the impact of the tourist flow on the environment was not monitored and assessed. Such assessment was a prerequisite for management effectiveness.</li><li>• The security protected areas – national and nature parks – showed that the management policies and controls related to park security were not sufficiently effective, although the results achieved were variable because of the inadequate staffing and funding.</li><li>• As a whole, the legislation on protected areas was well-coordinated and complied with European and international legislation. There were no major discrepancies or discrepancies which could not be overcome through proper application of the law.</li><li>• Rules on the functions, tasks and activities of the nature parks complying with the requirements of the respective laws had not been issued; and the acts of secondary legislation had not been updated (the Rules of Organization and Operation of the Regional Inspectorates of Environment and Water, the Rules of Organization and Operation of the National Park Directorates, the Rules for Commissioning of Activities with Protected Areas Exclusively Owned by the State).</li><li>• The protected areas for which management plans were adopted by 31 December 2003 were fewer than envisaged, which had impacted negatively on the effective and efficient management of protected areas.</li></ul>
Source reference to audit report	<a href="http://www.bulnao.government.bg/files/_en/NationalParks.doc">http://www.bulnao.government.bg/files/_en/NationalParks.doc</a> (Accessed on 24 February 2013)



## Case Study 5.4. CZECH REPUBLIC

Title of the Audit	Property of the State and Funds Allocated for Activities of the National Parks and Other Protected Areas
Date of the report	July 2004
Objective of the audit	The objective of the audit was to review management of the State property and the funds allocated to the National Parks (NP) and other protected areas.
Scope/Lines of Enquiry/ Criteria	<p>The audit was carried during June 2006 to November 2006 by Supreme Audit Office (SAO) audit groups from of the Environmental, and Agricultural Department and Regional Departments from Southern Moravia, Eastern Bohemia, Southern Bohemia, and Northern Bohemia.</p> <p>The audited period was from 2000 to 2005 and, for factual connections, also the previous and related periods.</p> <p>Audited bodies: Ministry of the Environment (ME), Agency for Nature Conservation and Landscape Protection of the Czech Republic (APNL), Podyji National Park Administration, National Park and Protected Landscape Area (PLA) Sumava Administration, Bohemian Switzerland NP Administration, and Giant Mountains NP Administration.</p>
Main Audit Findings and Conclusions	<ul style="list-style-type: none"><li>• Most NP Administrations had stated that the contribution to operational activities and other available funds were not fully adequate and that, in the performance of duties following from the laws, they must make savings. The audit found that some necessary measures (such as felling – disposal of unfavorable types of wood species) had been postponed; as a consequence of this delay, the costs of their future implementation could be several times higher.</li><li>• In terms of managing funds specifically intended for implementation of the Natura 2000 network, the APNL acted at variance with the budgetary rules when they spent CZK 850,000. Without demonstrating the economy of their use, they concluded formal contracts with mappers (certain contracts were concluded on or after the date of performance); several contracts were concluded with the same subject of performance without specifying the work; unrealistic contracts were concluded with certain mappers - based on which the mappers would be forced to map up to 64 ha every day for a period of five months in order to perform the work within the agreed deadline.</li><li>• The issue of providing the employees of bodies falling within the authority of the Ministry of the Environment with service uniforms had not been systematically and comprehensively resolved at the time of the audit. . The individual organizational departments (also within a single organization) preferred different designs of the service uniform. Enforceable legal regulations (e.g. on limiting spending on these uniforms) would be needed to resolve the issue.</li><li>• The Ministry of the Environment had failed to consistently fulfill its duties imposed by Section 38 of Act No. 114/1992 Coll. in that it failed to ensure timely preparation of management plans for all NPs. For example, the Giant Mountains NP Administration and the Podyji NP Administration did not have a valid management plan in the period from 1992 to 1994. Bohemian Switzerland NP had not had an approved management plan since its promulgation as of 1 January 2000.</li><li>• The NP administrations did not have the competence needed to manage certain properties requiring special protection and certain properties where natural monuments were located.</li><li>• A total of 38 of the 41 originally proposed bird areas had been gradually approved and promulgated by January 2005. The Government postponed the discussions concerning further bird areas at the end of 2004 due to numerous disputes between the Ministries of Agriculture, of Industry and Trade and of the Environment. In this respect, the Czech Republic was facing the danger of potential infringement proceedings initiated by the Commission and, if remedy was not ensured, a high lump-sum fine or repeated penalties.</li></ul>
Source reference to audit report	<a href="http://www.environmental-auditing.org/Portals/0/AuditFiles/cz143eng07ar_sum_nationalparks.pdf">http://www.environmental-auditing.org/Portals/0/AuditFiles/cz143eng07ar_sum_nationalparks.pdf</a> (Accessed on 24 February 2013)



# APPENDIX 1:

# AUDIT PLANNING PROCESS

# SOME QUESTIONS WHICH CAN BE ASKED BY AUDITORS DURING PLANNING.

In your sustainable tourism planning process, do you utilize the CBD Guidelines on Biodiversity and Tourism Development and its User's Manual as references? Do you use other regional/global standards, guidelines and principles such as the UNWTO's Global Code of Ethics (UNWTO 2001) or the Global Sustainable Tourism Criteria (GSTC n.d.)?

## *Policies and Strategies*

- Do you have specific policies, strategies or plans on tourism, nature and development/poverty reduction? If so, do your plans, policies and strategies on biodiversity, tourism and poverty reduction overlap/reinforce each other (i.e. do policies in one segment consider policies in the other two)?
- Is there a federal-level institutional framework that brings together all relevant Ministries and government agencies (tourism promotion/marketing boards, park agencies, investment promotion offices, etc.) in governing/implementing the plans and strategies?
- Do you have sustainable tourism destination/site plans (or a series of them) that consider biodiversity and poverty reduction and that are developed and governed by site-specific multi-stakeholder working groups?
- Do you have a portfolio of projects/proposals supporting your sustainable tourism policies, strategies and destination plans?
- Are your tourism laws, codes and norms supportive of your sustainable tourism policies and destination plans?
- Are public-private partnerships objectively supported/encouraged for sustainable tourism in your destination, including through capacity building and special attention to local trade associations and SMEs?

## *Measurement/baseline information*

- Is there a monitoring and evaluation system in place for sustainable tourism, with a set of indicators, supporting policies and destinations plans? Are there appropriate reporting mechanisms, which communicate information to all relevant stakeholders and the public in general?

## *Economics/finances/markets*

- Are you using certification systems or eco-labels (through self-assessment or third-party auditing) for sustainable tourism? Are they compatible with policies and plans on biodiversity and poverty reduction/development?
- Are there clearly defined and monitored concession policies and norms for sustainable tourism operators in protected areas and sensitive ecosystems?
- Are there economic incentives in place that promote biodiversity-friendly and pro-poor tourism, such as tax exemptions, awards for best practices, special credit lines, investment promotion strategies, business incubators, or other tools?
- Have visitor impact management systems (e.g. technologies, management procedures) been put in place for protected areas or natural areas in your country/region/destination?

## *Capacity building*

- Do you have regular/ongoing capacity building initiatives (e.g. training programs, networks, and web-based platforms) for key stakeholder groups in your destination, on the links between tourism, nature and development?
- Is sustainable tourism included in tourism-related curricula and training programs (formal and informal), in educational institutions, trade associations and local NGOs? If so, are biodiversity and poverty reduction considered in the content and evaluation methods?

## *Communication/awareness*

- Has sustainable tourism (including messages on biodiversity and local development) been incorporated in communication/promotional materials on the destination targeted to visitors, residents and tourism professionals?
- Are there support systems (e.g. clearinghouses, databases, collaborative platforms) in place to encourage/assist the private sector in including sustainability issues in their communication activities and materials?

# BIBLIOGRAPHY

Bonamie, Bart. Canakkale Onsekiz, Mart University, School of Tourism & Hotel Management: International Tourism Biennial 2007  
Butler, R. W. (1980) The Concept of a Tourist Area Cycle of Evolution: Implications for Management of Resources The Canadian Geographer XXIV, 1, 2007.

EUROPARC, "European Charter for Sustainable Tourism in Protected Areas", 2010. URL: <http://www.europarc.org/uploaded/documents/460.pdf> (accessed 20 March 2013).

FAO, "Ecotourism and other services derived from forests in the Asia-Pacific Region: Outlook to 2010".  
FAO Working Paper No: APFSOS/WP/24, 2010. URL: <http://www.fao.org/docrep/w7714e/w7714e00.htm> (accessed 20 March 2013).

Higginbottom, K., Northrope, C., & Green, R. "Positive Effects of Wildlife Tourism on Wildlife". Wildlife Tourism Research Report Series: No. 6. Status Assessment of Wildlife Tourism in Australia Series, 2001.

PAN Parks, "The economics of wilderness. Overcoming challenges and seizing opportunities", 2011. URL: <http://www.panparks.org/what-we-do/publications/the-economics-of-wilderness-overcoming-challenges-and-seizing-opportunities> (accessed 20 March 2018).

Roe, D., Leader-Williams, N., & Dalal-Clayton, B., "Take only photographs leave only footprints: the environmental impacts of wildlife tourism". A publication of the Environmental Planning Group (EPG): IIED Wildlife and Development Series, No.10, October 1997. URL: [http://biblioteca.duoc.cl/bdigital/Documentos\\_Digitales/300/39709.pdf](http://biblioteca.duoc.cl/bdigital/Documentos_Digitales/300/39709.pdf) (accessed 20 March 2013).

Secretariat of the Convention on Biological Diversity, "Guidelines on biodiversity and tourism development.", 2004. URL: <http://www.cbd.int/doc/publications/tou-gdl-en.pdf> (accessed 20 March 2013).

Secretariat of the Convention on Biological Diversity, "Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity" (CBD Guidelines), 2004. Full text URL: <http://www.cbd.int/sustainable/addis-principles.shtml> (accessed 20 March 2013).

Tapper, R., "Wildlife watching and tourism: a study on the benefits and risks of a fast growing tourism activity and its impacts on species". Produced by UNEP/CMS Convention on Migratory Species and TUI, 2006. URL: [http://www.cms.int/publications/pdf/CMS\\_WildlifeWatching.pdf](http://www.cms.int/publications/pdf/CMS_WildlifeWatching.pdf) (accessed 20 March 2013).

TEEB, "The economics of ecosystems and biodiversity for national and international policy makers." TEEB study report, 2009. URL: <http://www.teebweb.org/publications/teeb-study-reports/national-and-international/> (accessed 20 March 2013).

UNEP, "Biodiversity and Ecosystem Services: Boom or Bust?", A Document of the UN Environment Programme (UNEP) FI Biodiversity & Ecosystem Services Work Stream (BESW), 2008. URL: [http://www.unepfi.org/fileadmin/documents/bloom\\_or\\_bust\\_report.pdf](http://www.unepfi.org/fileadmin/documents/bloom_or_bust_report.pdf) (accessed 20 March 2013).

[www.environmental-auditing.org](http://www.environmental-auditing.org)