Ecotourism and Interpretive Nature Guiding

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A Comprehensive Overview

Edited by

Francesc Romagosa

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CONTENTS

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PREFACE

The rapid growth that the tourism industry has experienced during the last decades -with the notable exception of the COVID-19 crisis- brings sustainability concerns to the forefront of the agenda for tourism development. Managing and implementing tourism in a sustainable manner is getting more crucial than ever. Research results achieved by academia worldwide prove that ecotourism exploits natural resources in the most benign way. It indorses environmental protection, wildlife conservation, local employment and job creation. It provides a self-perpetuating revenue base for tourism businesses and for countries that strive for social and economic development. If well managed, ecotourism can be one of the best ways to achieve a sustainable tourism, at least in natural settings, since it has emerged as a feasible option for preserving the natural heritage.

This book aims to delve into the world of ecotourism in an innovative manner, bringing together, for the first time in an academic publication of this kind, the management of ecotourism businesses within the realm of nature guiding and the interpretation of natural heritage -elements that, from our understanding, form an almost inseparable unity since in most of the cases offering any ecotourism product or activity means offering some type of interpretative product.

The book has been a result of a collaborative work between university professors and researchers from different disciplinary backgrounds and from different European and Latin American countries, which give a global but also a very wide approach to the topics covered in the different chapters of the book. This collaborative work has been made possible thanks to the NATOUR project, funded by the European Union under the Erasmus+ program (project number 619157-EPP-1-2020-1-ES-EPPKA2-CBHE-JP), to whom we are immensely grateful. In addition to helping strengthen the ties between the participating institutions, the project has enabled the creation of a joint training program in the field of ecotourism and interpretive nature guiding, the thematic content of which is presented in this book.

The book is mainly addressed to students, teachers and researchers interested in the field of ecotourism and interpretive nature guiding, as well as to current and future professionals of this sector that wish to improve and complete their knowledge, and offer as well high-quality, economically,

environmentally, culturally and socially sustainable ecotourist activities, products and services, while promoting and ensuring responsible use of natural resources and the protection of natural ecosystems.

After reading this book, readers are expected to be able to: a) identify the components of ecotourism and sustainable processes associated based on natural, social and cultural resources (chapter 1); b) recognize the main aspects in the design and management of ecotourism experiences, contributing to implement innovative and sustainable approaches at tourism destinations and companies (chapter 2); and c) design ecotourism guided experiences, providing an interpretation of the local ecosystems, contributing to the conservation of the natural and cultural heritage, and benefiting tourism destinations and their local communities (chapters 3 and 4).

It is our wish that this book contributes to a better understanding of ecotourism and to the recognition of the invaluable role of nature guides in fostering a profound appreciation for the beauty and significance of our natural heritage. May this exploration pave the way for a more sustainable and responsible approach to travel and tourism, ensuring the preservation of our planet's treasures for generations to come.

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CHAPTER ONE

NEW TRENDS IN ECOTOURISM AND NATURE-BASED TOURISM

1.1 Ecotourism: Definition, Principles, and Practical Application

What Is Ecotourism?

There are various ways to learn about ecotourism, such as by Googling, attending expert lectures, reading technical books or academic articles, or having a memorable ecotourism experience. There is no complete or absolute definition of ecotourism, but many interesting definitions exist, which are similar to each other but also differ on some level (Weaver, 2001; Fennell, 2008; Buckley, 2009; Hill and Gale, 2009).

Depending on whom we ask, the question "what is ecotourism?" will yield different answers. If we ask a politician, a local resident, a professional linked to tourism, a professional from another sector, the manager of an attraction or a protected area, a tourist, or a frequent visitor, each will have a different answer. By analyzing these responses, we can identify patterns of perceptions that group certain profiles of stakeholders according to their perceptions and expectations.

Ecotourism began to gain prominence in the late 1970s and exploded in the 1990s, due to several factors such as (i) being an alternative to mass tourism, (ii) being seen as a form of "sustainable development", especially in tropical and/or developing countries and regions such as Latin America, Southeast Asia and Africa, (iii) providing spaces for recreation, leisure, sport and tourism that provide reconnection with nature, and (iv) promising sustainable use for reserves, parks and other types of protected areas (Eagles and McCool, 2002; Cunha and Costa, 2018).

Although accurate definitions have been proposed, the word "ecotourism" has been and is increasingly used with different meanings and is often confused as a synonym for adventure tourism or nature tourism in general. Hector Ceballos-Lascurain first used the term "ecotourism" in 1983

and defined it as "tourism that consists of traveling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas" (Ceballos-Lascurain, 1987).

The International Union for the Conservation of Nature (IUCN) defines ecotourism as an environmentally responsible tourism modality that seeks to develop outdoor activities in order to visit and learn about natural areas to enjoy and value natural attractions such as landscape, flora and fauna, as well as cultural manifestations of the present and the past (IUCN, 1997). The process must mainly promote the conservation of natural and cultural resources, with low negative impacts of the activities, designed based on the conditions and capacity of each place, community, and the environment, and should also promote socioeconomic benefits to the local host communities through the incorporation of fairer trade, social inclusion, and empowerment.

The International Ecotourism Society (TIES) defines ecotourism as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education" (TIES, 2022). For TIES, ecotourism is a triplet with conservation, communities, and interpretation.

According to the UNWTO definition, the term "ecotourism" applies to any form of tourism that has the following characteristics (UNWTO, 2002):

- Revolves around nature, and the main motivation of tourists is the observation and appreciation of the natural environment and the predominant traditional cultures in natural areas.
- Includes pedagogical aspects and interpretation of nature.
- The organization is usually run by specialized tour operators and typically caters to small groups, although there may be exceptions. In the destinations, partner service providers are often small, locally owned businesses.
- Ecotourism aims to minimize negative impacts on the natural and socio-cultural environment.

Principles

The various definitions of ecotourism may use different phrases or statements, but they all share common and fundamental elements. These elements can be considered the principles of ecotourism, which include:

Wallace and Pierce (1996)	Honey (2008)	TIES (2022)
Entails a type of use that minimizes negative impacts to the environment and to local people.	Involves travel to natural destinations	Minimize physical, social, behavioral, and psychological impacts.
Increases the awareness and understanding of an area's natural and cultural systems and the subsequent involvement of visitors in issues affecting those systems	Minimizes (negative) impacts	Build environmental and cultural awareness and respect.
Contributes to the conservation and management of legally protected and other natural areas.	Builds environmental awareness	Provide positive experiences for both visitors and hosts.
Maximizes the early and long-term participation of local people in the decision-making process that determines the kind and amount of tourism that should occur.	Provides direct financial benefits for conservation	Provide direct financial benefits for conservation
Directs economic and other benefits to local people that complement rather than overwhelm or replace traditional practices (farming, fishing, social systems, etc.)	Provide financial benefits and empowerment for local people	Generate financial benefits for both local people and private industry.

Provides special opportunities for local people and nature tourism employees to visit natural areas and learn more about the wonders that other visitors come to see	Respect local culture	Deliver memorable interpretative experiences to visitors that help raise sensitivity to host countries' political, environmental, and social climates.
	Support human rights and democratic movements	Design, construct and operate low-impact facilities.
		Recognize the rights and spiritual beliefs of the Indigenous People in your community and work in partnership with them to create empowerment.

Ecotourism in Practice

The term "ecotourism" should be intensively debated, but it is also important to pay attention to its practical application. In the field of marketing, the use of the term is important mainly if it manages to attract and persuade people without the need for in-depth debates or evaluations and monitoring of impacts. However, the proper use of the term must be coupled with practices, products, and services that, in fact, represent its principles.

Being able to critically analyze, plan, design, and implement ecotourism businesses, improve professional skills, interpret the natural environment, and work within the context of ecotourism requires technical skills combined with practical application. Achieving the conservation objectives and goals implicit in the principles and definitions of ecotourism, sustainable tourism, and responsible tourism is possible, and there are good examples to inspire us.

1.2 Ecotourism in the Wider Framework of Tourism

Tourism is a complex system resulting from economic, cultural, and environmental interactions that arise from the displacement and consumption of goods and services by people outside their usual place (Sancho, 1998; Fletcher et al., 2006; Vinasco Guzmán, 2017; Osorio-García and Domínguez Estrada, 2019). It is one of the fastest-growing sectors in the global economy, directly or indirectly contributing more than 10% to the global GDP and generating around 300 million jobs worldwide (UNWTO, 2019).

According to UNWTO (2019), the main trends in the tourism market are traveling to experience change, living with local communities, and traveling with greater awareness of sustainability. For instance, Leal (2017) reports that 42% of tourists considered themselves sustainable, and there was an 11% increase between 2014 and 2015 in consumers who wanted to pay more for sustainable brands with social and environmental commitments. Other motivations such as visiting trendy and wish list destinations, seeking to get out of the comfort zone, and taking trips closer to home to create new and authentic memories are also important (Burkhard et al., 2016).

Tourism is a fluctuating and vulnerable industry that can be affected by certain conditions, such as the Covid-19 pandemic, which has hit the industry hard. However, domestic tourism, especially nature tourism and adventure tourism, have experienced significant recovery (Goretti et al., 2021). Tourism is a travel decision based on the motivations defined by a context, which may vary depending on the assessment of an attraction, destination, activity, and/or management.

Ecotourism is also following the aforementioned trends. However, it caters to the current demand for tourism motivated by nature and sustainability-oriented management practices, where activities like interpretation hold significant importance. According to ATTA (2022), there was a 200% growth in domestic hotel reservations on Trip.com in 2021 compared to 2019 in North America, particularly among travellers seeking this type of tourism. Burkhard et al. (2016) projected that, from 2017 onwards, tourists would be more interested in travel characteristics associated with the reduction of carbon footprint (by traveling close to home), choosing companies with a social focus, leaving a positive impact through volunteer programs, and choosing homestays that gained more interest than traditional hotels or bed and breakfasts. Leal (2017) reported that the market share of ecotourism increased considerably in the last decade, going from 7% in 2010 to 25% in 2016.

Although it is difficult to find figures for this type of tourism, the available ones are usually associated with the places where tourism is developed (in some countries, mainly evaluated by the figures of tourism in National Parks and protected areas) or often with figures related to outdoor and adventure activities, as mentioned (Bricker, 2017).

On the other hand, nature and adventure tourism were favoured during the pandemic. In 2020, the demand for outdoor tourism prevailed, mainly motivated by the desire for better health and a break from work in front of a screen. Key tourism activities included jogging, climbing, fishing, cycling, and camping, with a preference for places close to home (less than 15 km) (Outdoor Foundation, 2021), or in small towns or villages, and in groups of less than ten people (ATTA, 2021).

The sustainable approach characteristic of the ecotourism typology also gained greater relevance during the pandemic, as shown by studies carried out by:

- Euromonitor, cited by Vargas (2020), states that the main motivations of tourists were "sustainable tourism (34.6%), natural immersion (29.3%), and authentic local experiences (52%)."
- The Booking 2021 sustainability report (Booking.com, 2021), where 61% of Booking travellers after 2019 sought more sustainable trips where the impacts on the territories were considered. Around 84% of the clients want to understand and preserve cultural heritage, 76% look to have an economic impact in terms of the equitable distribution of profits, 73% want authentic experiences from local cultures on their trip, and in topics, 46% of travellers are concerned about excess waste, 38% are concerned about threats to biodiversity and its habitat, and 29% are concerned about their CO_2 emissions.

However, there are some things to consider regarding the cost-benefit ratio in terms of sustainability. For example, 22% of tourists do not opt for a sustainable destination due to its high price, and 13% distrust it as "eco" (Leal, 2017). This leads to a new tourist profile, which can also be applied to ecotourists:

- Made up mainly of Millennials and Generation Z (73% according to CREST 2016 (Leal, 2017)), divided into different segments: Hard-Core, dedicated, conventional, and casual.
- They are highly educated and experienced travellers with medium-high purchasing power, spending approximately $400 per day (nature tourist) to $80 per day (average tourist). Most of them travel independently, as

a couple, or with a group of friends (Procolombia, 2018; Crespo Jareño, 2019; Leal, 2017).
- They are motivated by immersion in nature and culture and visit places with ecological and cultural importance that contribute to conservation and local development. They visit unique and unexplored destinations and require good quality information (Procolombia, 2018; Crespo Jareño, 2019).

1.3 Ecotourism in the Framework of Nature-Based Tourism

Natural environments around the world offer a wide range of opportunities for tourist activities. These activities can be classified based on the interest in the natural resources found in the environment. Ecotourism is a form of nature tourism where the objective of the tourist activity is to show and interpret the biotic or abiotic natural resources that are part of it, such as whale watching or bird watching. Additionally, these activities can involve interaction with the local communities that live in the area, giving visitors a greater understanding of the culture.

Ecotourism creates experiences -tourism products- that enable deep contact with nature through knowledge and enjoyment of the activity. It is a form of tourism based on nature that has specific characteristics, including ethical and interpretive components that all ecotourism activities should offer. There are many approaches to ecotourism, depending on the level of public interest and the specificity of the resources. A significant aspect to consider is the type of natural environment in which the activity takes place, such as a terrestrial or aquatic environment, aerial environment (if it only takes place in the atmosphere), or specific habitats or ecosystems, such as jungles, deserts, glacial areas, high mountains, or marine and underwater environments.

Professional guides with in-depth knowledge are necessary to ensure the safety of tourists, and sometimes special certifications are required. It is important to note that the primary objective of ecotourism is to gain knowledge and enjoyment of nature, rather than seeking adventure for the degree of danger or insecurity it presents. Adequate equipment and transportation are needed without changing the purpose of the activity.

We can identify general types of activities within ecotourism in which the focus is on observing the totality of resources, also known as natural history, in Latin America. However, there are other types of activities in which the natural resource is specific, which determines many technical aspects and gives a specific name to the type of tourism or ecotourism

modality. These can be grouped under a broad umbrella of resource groups, such as:

- Geological tourism
- Flora or fauna observation tourism
- Tourism to observe atmospheric or climatic phenomena
- Astrotourism
- etc.

Other types of activities, due to their historical importance, have already created a segmentation within a group of organisms, which has given the activity a specific name. Some examples include those that make up the animal kingdom, where we talk about (among many others):

- bird watching tourism -birding, birdwatching-
- insect observation tourism
- big (terrestrial) mammals' observation tourism
- amphibian and reptile observation tourism -herping-
- tourism of observation or sighting of cetaceans -whale watching-

There are other types of tourism that can be considered ecotourism, although they focus their attention beyond observation and interpretation. For example, we have:

- scientific tourism: tourism based on the observation and study of a resource or nature for scientific purposes and in which the users are part of a team of scientific guides or who use scientific methodology for the development of the activity.
- conservation tourism: tourism that is based on participating in a conservation action during the course of a nature guiding activity. For example, the extraction of marine debris, the restoration of a habitat, etc.
- photographic tourism or photographic safaris: the purpose of the activity is, in addition to the observation of a resource or the landscape, to learn about nature photographic techniques to make good images or recordings.
- ethnobotanical tourism: it is defined as the type of activity in which the focus is on plant or fungi resources and their relationship with the local culture related to their use (medicinal, culinary, spiritual, religious, etc.).

There are endless activities that can be described, more and more in natural environments for purposes other than those mentioned, which fall within

the concept of nature-based tourism but not necessarily within ecotourism (although they may be partially ecotourism). Some examples include:

- adventure tourism: a type of tourism that seeks excitement or intense emotions through high-risk activities and mainly needs to guarantee safety out of the ordinary in nature. Some of these activities include canyoning, canopy, rafting, mountain biking, horse riding, climbing, rappelling, caving, skiing, canoeing, mountaineering, paragliding, skydiving, surfing, trekking, etc.
- active tourism: tourism that occurs in natural environments (although also in urban environments), mainly as a low-risk sporting activity and that can include a part of observation or interpretation in the tour. Depending on the main objective, it can be included as ecotourism. Examples include cycling, hiking, snorkelling, etc. Some of those activities are offered as purely sporting activities even though when the main focus is the observation of the natural environment, even at a more generic level - enjoyment of terrestrial or underwater landscapes - they could be considered ecotourism.

Likewise, there are other types of tourism in natural environments where the activity is focused on learning about the way of life or various human activities:

- agro-tourism or rural tourism, fishing tourism: tourism based on participating in the way of life of a rural or fishing community and its way of obtaining food.
- Ethnic or community-based tourism: tourism based on participating in the way of life of an ancestral community that usually lives from nature with little intervention.

Finally, there are specific tourism denominations, such as responsible, sustainable, or regenerative tourism, among others, which focus on the positive impact of their action on the destination and its community. They are transversal in nature and should be applicable to all types of tourism, including ecotourism.

Some authors, such as Boullon (2002), Font (2006), Vera et al. (2011) or Gray (2012) have developed their own definitions for each of the previously presented modalities.

1.4 Ecotourism and the Design of Experiences:
Characteristics, Elements, and Factors
of the Tourist Experience

According to Qianni (2021: 129), "an ecotourism experience means that tourists obtain ecological enjoyment, ecological perception, and ecological aesthetic taste through senses and thinking activities during ecotourism activities."

The design of an ecotourist experience must consider not only the sustainability of the action so that it can be replicated endless times without diminishing the tourists' degree of satisfaction, but it must also be appealing to attract potential clients. Thus, the number and type of elements (both natural and cultural) involved in each ecotourist experience will ultimately define the characteristics of the experience and the degree of satisfaction.

Tourism is intimately related to the concept of "aesthetic experience" that can be taken from nature (Kirillova and Lehto, 2015), and in nature-based tourism, it may represent something sacred whose aesthetic quality of landscape positively affects tourist loyalty (Zhang & Xu, 2020). In other words, emotional experiences have an influence on the holistic destination image in an ecotourism context (Li et al., 2021). Nature is usually perceived to be green landscapes (e.g., Scolozzi et al., 2015; Bijker and Sijtsma, 2017), even if those landscapes have little conservation value (Pavão et al., 2021). That is why cultivating ecotourism knowledge and attitudes towards ecotourism during ecotourist visits can increase the perceived value of protected areas and tourist satisfaction, a key element for the long-term success of ecotourism products and destinations (Castellanos-Verdugo et al., 2016). Because ecotourism is important to support conservation efforts, the ecotourist experiences should be designed to include different types of protected areas, making this a key factor to enhance the tourist experience. Here, nature guides could play an important role as conservation practitioners given the usually high educational level of this type of tourists (e.g., Queiroz et al., 2014).

However, sharing the same educational level doesn't necessarily mean sharing the same ecotourist motivation. The United Nations considers the existence of three types of ecotourists: hard ecotourist, soft ecotourist, and adventure ecotourist, so we must be able to design different types of experiences to accommodate different preferences. "The hard ecotourist is motivated primarily by a scientific interest in nature and is interested in birdwatching, nature photography, and botanical trips" (Crocodile Bay Resort, 2012). The soft ecotourist "is interested in observing wildlife and participating in local culture". This is the fastest-growing segment of

ecotourism, and although it can relate to the hard ecotourist in the sense that it likes to watch nature, it is in a more contemplative way - observing while hiking or riding a boat. Thus, the presence of trails is a good element to develop activities and an important factor in achieving satisfaction. Finally, the adventure ecotourist "engages in moderate to high-risk activities such as surfing, scuba diving, snorkelling, windsurfing, white-water rafting, and sport fishing" (Crocodile Bay Resort, 2012). Here, the key elements for the ecotourist experience must again be found in nature. Thus, each partner must seek potential elements to satisfy this kind of tourist. In the Azores, for example, several studies point to the importance of seascape and marine biodiversity to attract scuba divers and sports fishermen (e.g., Bentz et al., 2014; 2016), while emerging activities such as canyoning and coasteering are also gaining a growing importance (Silva and Almeida, 2013; Botelho et al., 2022).

Because ecotourism experiences involve outdoor activities, any natural hazard can limit the experience. Before planning an ecotourist activity, it is important to check the weather conditions for the day of the activity and to also ensure that the environment is safe. Briefings are an important way to raise awareness among tourists about potential risks before they embark on an activity.

Another important aspect of ecotourism is that it should generate income for local communities that live near the protected areas where ecotourist activities take place and rely on tourism revenue (Slocum et al., 2022). Therefore, when planning an ecotourist experience, it is important to involve the local population in the activities. For example, visits to local artisanal shops where tourists can buy products made with local materials can be planned, or activities can be designed where tourists can cook their own meals using fish they have caught. An example of this is the successful artisanal fishing tourism in the Azores.

In summary, an ecotourism experience includes aesthetic, emotional, and action-oriented aspects, and understanding how the destination image is affected by the tourist's experience can help operators design appropriate experiences (Wang et al., 2012). Therefore, a participatory design process involving tourists at every stage of the planning is crucial for a successful experience (Tussyadiah, 2014).

In essence, designing an ecotourist experience should consider:

- The characteristics that define the type of ecotourist (hard, soft, adventure)
- The local elements that will make the ecotourist experience appealing to a particular type of ecotourist (streams, lakes, forests, trails, etc.)

- The factors that can affect the success of the experience (weather, steep slopes, risk of landslides, etc.).

1.5 Sustainable Tourism and Ecotourism: Fundamentals, Objectives, Principles, and Current Trends

Tourism is a complex social phenomenon that is recognized for its transversality, multidimensionality, interdisciplinarity, multisectorallity, and dynamism (Beni, 2003, 2020; Moesch, 2004). Although academics, activists, and planners only began to consider applying the concept of sustainability to the field of tourism in the late 1980s, in the face of heated discussions arising from the publication of the Brundtland Report (1987) and the Rio Conference (1992), the seeds of the concept of "Sustainable Tourism" were planted before that (McCool and Bosak, 2016).

The recognition of negative impacts, mainly on the natural system (Dias, 2008), attributed to the unbridled growth of a mass and disorderly model of tourism (Cooper and Ozdil, 1992; Swarbrooke, 2000), occurred in parallel with the outbreak of debates about the limits of global ecological changes in the 1970s (Sharpley, 2000). However, the idea of sustainable tourism actually gained strength in the early 1990s (Saarinen, 2006), among other things, due to the finding of negative impacts produced by the sector on economics, sociocultural, and physical environments. For example, intensive and repeatedly predatory use of the natural assets that make up its attractions and the basis of support for many of its activities (Dias, 2008), processes of cultural uprooting by the devaluation of traditional local productive activities due to the focus on the "monoculture" of tourism (Valls, 2006), increased living costs for the resident population (Costa, 2013), saturation of psychological or social carrying capacities (Liu, 2003), social and socio-productive exclusion, marginalization, and low participation of local communities in the economic benefits of the production system (Krippendorf, 2001; Tasso, 2014; Irving et al., 2015), among others.

Consequently, tourism began to gain new propositions and concepts diametrically opposed to those rooted in the predatory model of mass tourism. These new concepts were centred on prudence with the environment, autonomy and participation of the resident population, respect for cultural identities, and carried out on a smaller scale. Such changes led to new typologies, such as alternative tourism (Kilipiris and Zardava, 2012), ecotourism, green tourism, responsible tourism (ICRT, 2014), among others (Meler and Ham, 2012).

Gradually, the idea of "sustainable tourism" has gained strong momentum and is now a frequent topic of discussion at various international events (Saarinen, 2006). The World Tourism Organization has presented the understanding that "sustainable tourism can meet economic, social, and aesthetic needs, while maintaining cultural and ecological integrity. It can benefit both hosts and visitors while protecting and enhancing opportunities for the future" (WTO, 1994: 51).

Over time, a growing number of guidelines and principles have been added to the conceptual framework of sustainable tourism. Scholars and researchers have sought to demonstrate that sustainable tourism is structured on a balance of fundamental elements that interact with each other. Müller (1994) highlighted a pentagon of irreplaceable elements for the sustainability of tourism, including economic health, subjective well-being of the hosting community, optimization of customer satisfaction, preservation of nature and resources, and healthy culture.

In 1999, the "World Code of Ethics for Tourism" was presented at the UNWTO General Assembly, strengthening the discourse that sustainable tourism development must ensure equitable participation of resident communities in the economic, social, and cultural benefits arising from the tourism sector (Brazil, 2007a). New approaches such as ethics in the implementation of the activity, encouraging participation and cooperation of all stakeholders involved, directing visitor behaviour towards a responsible posture, and integrating with the local economy have been emphasized.

In addition to the characteristics mentioned above, other aspects have been highlighted in the process of building models that seek to solidify sustainable tourism practices. These include the importance of articulation between spheres of local power, waste reduction, workforce qualification, responsible commercialization of activity, and promoting scientific research in destinations (Garrod and Fyall, 1998):

1. Reduction of waste and excessive consumption, increasing the resilience of the degraded environment;
2. Articulation between the public and private powers, aiming at minimizing conflicts and problems;
3. Multiple qualification of the residents ' workforce so that they can work at all levels of the sector;
4. Responsibility in tourism marketing procedures, striving for awareness of respect for the destinations' social, cultural and natural environments;

5. Expansion of the research framework developed in tourist destinations that seek a situational analysis of the activity, as a way of identifying impacts and problems, alternatives and the improvement of the sector.

Gradually, the understanding of sustainable tourism has undergone considerable advancements, with questions passing through increasingly specific spheres in order to achieve the cohesive development of the activity. These questions include:

- Being ecologically supported and economically viable simultaneously
- Equitably distributing benefits
- Observing ethics and being socially accepted by the host community
- Integrating with all aspects of the environment to respect fragile areas and the support capacity of the areas visited
- Encouraging the participation of all actors involved, as the conservation of cultural and natural heritage involves cooperation, planning, and management
- Ensuring tourist satisfaction while driving their behavioural towards the conservation of environments and respect for local culture
- Being integrated into the local economy and promoting the improvement of the quality of life of host communities
- Being necessarily planned and applying the principles of sustainability to all components of the tourist product, from transport used to the harmony of built facilities with the environment, sanitation issues, and efficient use of energy
- Conducting responsible marketing
- Researching and monitoring tourist activity to ensure that development takes place in accordance with sustainability principles and criteria, so that advances are maintained, and setbacks are avoided (France, 1998 apud Brazil, 2007b).

It is relevant to note that ecotourism is linked to the development of sustainable tourism, which is defined by the UNWTO as "tourism that fully takes into account the current and future economic, social, and environmental repercussions to satisfy the needs of visitors, the industry, the environment, and the host communities". This definition provides the basis for sustainable development and management practices in all forms of tourism. However, to guarantee its long-term sustainability, ecotourism activities must be aligned with the principles of environmental, economic, and sociocultural sustainability and strike an appropriate balance between these three dimensions. Therefore, sustainable tourism must:

- Make optimal use of environmental resources that constitute a fundamental element of tourism development, maintaining essential ecological processes and helping to conserve natural resources and biological diversity.
- Respect the sociocultural authenticity of host communities, conserve their cultural and architectural assets and traditional values, and contribute to intercultural understanding and tolerance.
- Ensure viable long-term economic activities that bring well-distributed socio-economic benefits to all actors, including stable employment and income-earning opportunities and social services for host communities, contributing to reducing poverty.

A common guideline for pursuing sustainability is the Sustainable Development Goals 2015-2030 (SDGs), developed by the United Nations (UNWTO, 2015). In the field of tourism, many indicators for sustainability have been developed and applied, and recently, the relationship between tourism and its indicators with the SDGs has been increasingly analyzed (Rasoolimanesh et al., 2020; Spenceley and Rylance, 2022). In practical applications, advances towards sustainability in tourism highlight the need to strengthen governance and partnerships between the local population, entrepreneurs, civil society, and the government, among actors at different levels, with attention to horizontal, vertical, and power relations (Scheyvens and Cheer, 2021). Generally, the relationship between SDGs and tourism and ecotourism can be illustrated as shown in the table below.

Sustainable Development Goal	Themes and actions related to tourism and ecotourism
1 NO POVERTY	Provide income, job creation, poverty reduction, promote entrepreneurship and empowerment of less favoured groups, particularly youth and women.
2 ZERO HUNGER	Promote sustainable agriculture, supply hotel and restaurants with local production. Sales of local products and agro and rural tourism enhancing tourism experiences.
3 GOOD HEALTH AND WELL-BEING	Tax income from tourism invested in health care, maternal health, preventing diseases and reduction of child mortality.

4 QUALITY EDUCATION	Promote inclusiveness, invest in developing skills for workforce, provide learning opportunities for youth, women, and people with special needs.
5 GENDER EQUALITY	Empower women, provide direct jobs and income, promote women engagement and leadership
6 CLEAN WATER AND SANITATION	Contribute to water access, security, hygiene, and sanitation for all. Reinforce efficient use, pollution control and technology efficiency.
7 AFFORDABLE AND CLEAN ENERGY	Promote the shift towards renewable and clean energy sources. Reduce greenhouse gases, mitigate climate change, and contribute do access of energy for all.
8 DECENT WORK AND ECONOMIC GROWTH	Decent work opportunities, enhancing positive socio-economic impacts.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Promote and influence infrastructure initiatives and policies, towards sustainability, innovation, resource-efficient and low carbon practices, attracting tourists and other investments.
10 REDUCED INEQUALITIES	Reduce inequality and engage local population, giving people the opportunity to prosper in their place of origin. Tourism as a tool for economic integration and diversification.
11 SUSTAINABLE CITIES AND COMMUNITIES	Promote regeneration and preserve cultural and natural heritage, green infrastructure, smarter and greener cities.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Adopt sustainable consumption and production norms and tools to monitor impacts and economic, social and environmental outcomes.

13 CLIMATE ACTION	Play a leading role in the response to climate change. Promote low carbon growth and reduce carbon footprint.
14 LIFE BELOW WATER	Help to conserve and promote healthy marine ecosystems, contribute to the sustainable use of marine resources, promoting a blue economy
15 LIFE ON LAND	Conserve natural heritage and biodiversity, preserve fragile zones, promote sustainable management and generates revenues as an alternative livelihood to local communities
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Foster multicultural and inter-faith tolerance and understanding, benefits and engages local communities, and help to consolidate peace.
17 PARTNERSHIPS FOR THE GOALS	Strength private/public partnerships and engage multiple stakeholders to work together to achieve the SDGs and other common goals. Public policy and innovative financing are at the core for achieving the 2030 Agenda.

*Adapted from: https://tourism4sdgs.org/.

1.6 Ecosystem Services: The Benefits of the Natural Environment to Human Beings and the Important Role of Ecotourism

Humans have a constant relationship with the biodiversity that surrounds us and from which we derive our biological and social development processes. From the fruit we consume in the morning, the water we depend on, and even the beautiful views that fill us with happiness during our travels and tourism processes - they are all ecosystem services that contribute to our well-being. Nevertheless, what exactly are these ecosystem services, how can we identify them, how do they benefit people, and what is their link to ecotourism?

According to the Millennium Ecosystem Assessment (MEA), ecosystem services are "the benefits that people obtain from ecosystems." These benefits can be placed into four types or levels (MEA, 2005): 1) Provisioning services; 2) Cultural services; 3) Regulating services; 4) Support services. Let us look at these categories in detail.

1. Provisioning services (also called supply or provision): These are the most easily identifiable ecosystem services. They are tangible products that we obtain directly from nature, such as milk, fruits, tea, coffee, and clean water for human consumption. Provisioning services also include materials like wood that can be used in construction or handicrafts, and natural fibers that can also be used in handicrafts or decorations (Fedele et al., 2021). Within ecotourism practices, there are multiple links in this category, such as the consumption of typical foods in the region and having drinking water on the routes.

2. Cultural services: This category is intangible and associated with the different territories and relationships that we establish in each locality with the natural resources surrounding us. Here we find personal or collective experiences and sensations of joy, well-being, and other emotions that people obtain from their interaction with nature. Of course, this is a central service in ecotourism activities since it leads us to the search that people carry out to have contact with the natural environment. In addition, all those activities that are recreational, contemplation of a beautiful or unique landscape, or what we obtain through learning from the observation and knowledge of nature, and even what leads us to identify ourselves as cultures differentiated by our values and spiritual inspiration (Angarita-Baéz et al., 2017).

3. Regulating services are services associated with the functioning of ecosystems that create beneficial conditions for people. Consider the vegetation of a forest, for example, which can capture CO_2 and other atmospheric polluting gases while at the same time providing us with oxygen, filtering the air we breathe, and ensuring that living things can generate growth and biomass. Also, the vegetation in the paramo areas or high mountain forests captures and regulates water, which is gradually released into rivers and streams, ensuring a measured water flow. As part of this category of services are some insects, birds, and bats that play a fundamental role in pollination processes, both wild plants and the crops on which we depend (Rodríguez et al., 2015).

4. Support services: This last category corresponds to the conditions for the other types of services to be provided. They are processes, such as photosynthesis or the decomposition of organic matter, that return essential nutrients to the earth to be used by other organisms, and upon which we indirectly depend (MEA, 2005). Some researchers do not recognize this category as ecosystem services but as processes within ecosystems (Rincón-Ruíz et al., 2014), without which none of the others could occur.