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# **Evolution in the world of ecotourism: a systematic review of the literature on current knowledge**

Evolução no mundo do ecoturismo: uma revisão sistemática da literatura sobre o conhecimento atual

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#### Abstract

Ecotourism is the appropriate activity for carrying out tourism in protected places, as it is concerned with environmental conservation, contributing to the development of local communities. The potential for ecotourism is significant due to national parks, wildlife sanctuaries, conservation reserves and community reserves, many of which include animal reserves. Therefore, this study aims to conduct a systematic review of the literature on high impact research on the evolution and trends related to ecotourism in the world context to understand the various perspectives through critical analysis, identifying gaps for future research and investigating trends in this body of literature. To that end, filters were applied to the gross portfolio to identify the most relevant studies in the area. The VOSviewer software was used, for reference management topics and researchers. The results show the main developments and trends in the referred body of literature, possible Ecotourism nexus, as well as the main journal conducting studies on the topic and what their results draw on. Yet, it can be seen the main countries housing high impact studies (JCR 2019) on the approached themes and their locations. Furthermore, this study gives an overview on the ecotourism and sheds light on possibilities for future research. Future opportunities for ecotourism should be drawn in terms of protected areas.

Keywords: Ecotourism. Biodiversity. Natural Resources. Sustainable Development.

#### Resumo

O ecoturismo é a atividade apropriada para a realização do turismo em locais protegidos, pois se preocupa com a conservação ambiental, contribuindo para o desenvolvimento das comunidades locais. O potencial para o ecoturismo é significativo devido aos parques nacionais, santuários da vida selvagem, reservas de conservação e da comunidade local,

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muitas das quais incluem reservas de animais. Portanto, este estudo tem como objetivo realizar uma revisão sistemática da literatura sobre pesquisas de alto impacto sobre a evolução e as tendências relacionadas ao ecoturismo no contexto mundial, a fim de compreender as diversas perspectivas por meio de análises críticas, identificando lacunas para pesquisas futuras e investigando tendências neste corpo de literatura. Para isso, foram aplicados filtros ao portfólio final de artigos para identificar os estudos mais relevantes na área. Utilizou-se o software *VOSviewer*, para tópicos de gerenciamento de referência e pesquisadores. Os resultados mostram os principais desenvolvimentos e tendências no corpo de literatura referido, possível relação do ecoturismo, bem como as principais revistas que realizaram estudos sobre o tema e quais são seus resultados. No entanto, podem ser vistos os principais países que abrigam estudos de alto impacto (JCR 2019) sobre os temas abordados e suas localizações. Além disso, este estudo fornece uma visão geral sobre o ecoturismo e as possibilidades de pesquisas futuras. Oportunidades futuras de ecoturismo devem ser relacionadas em termos de áreas protegidas.

**Palavras-chave:** Ecoturismo. Biodiversidade. Recursos Naturais. Desenvolvimento Sustentável.

## 1 INTRODUCTION

Economic growth to serve the population and the local community increases the awareness process regarding sustainability in the economy. With a comprehensive conceptual framework for sustainability, a concept widely recognized in the report of the World Commission on Environment and Development (DE LORENZO; TECHERA, 2019) sustainable development must ensure that it responds without influencing future generations.

The travel and tourism sector are significantly important in the world economy because of its ability to generate jobs and to act as a driver of economic development. The tourism sector in the world registered a growth rate of 4%, through the arrival of tourists during the year 2019 and is expected to register a growth rate of around 6% in the year 2020 (WORLD TOURISM ORGANIZATION, 2020). Tourism contributes about one in ten jobs generated worldwide, which is equivalent to the creation of 109 million jobs (World Travel and Tourism Council, 2020). On the other hand, tourist activities have grown rapidly compared to other economic sectors, and thus, the sector helps with 8.84% of the total emissions of polluting gases in the world (CARTER et al., 2020). Due to the growing public demand to reduce pollution and for tourism capacity to support social dimensions, such as poverty reduction and interaction processes, therefore, in 2017 the United Nations said it was the international year for the development of ecotourism (WORLD TOURISM ORGANIZATION, 2020). In this sense, it is essential that the tourism sector intensifies its sustainable development to reduce its dangerous impact on the environment.

Ecotourism is a part of sustainable tourism, with the potential to become an essential segment in the tourist area in general (CHOI; SIRAKAYA, 2019). However, the lack of understanding of ecotourism initiated an ambiguity among professionals in the sector and researchers (LEE; JAN 2018). The concept of ecotourism is organized trips with responsibilities to natural areas in order to conserve the environment and preserve the well-being of the local community (MOZUMDER et al., 2017). Ecotourism involves two

factors, the first being care for sustainable development and the second the benefits for the local population. The fundamental themes of ecotourism are classified into environmental preservation, community interaction, cultural aspects and economic advantages (FONT, 2019).

Hence, this study tries to explore important aspects of ecotourism research. The general objective is to conduct a systematic review of the literature on high impact research on the evolution and trends related to ecotourism in the world context to understand the various perspectives through critical analysis, identifying gaps for future research and investigating trends in this body of literature.

This study carries out a systematic review on the evolution and the world trend on ecotourism and the implications for future research. The study is structured as follows. This section presented the initial considerations, the objective of the study and its originality. The next section of this article presents the methods adopted for the development of this study. Following, the main trends and discussions on the topic are presented. Finally, the final considerations of this study are presented.

# **2 THEORETICAL BACKGROUND**

The worldwide growth of tourism has expanded rapidly, mainly in areas of natural preservation. Ecotourism is one of the main activities in the development of the economy, while sustainability in tourism represents a worldwide problem (SAIZ-ALVAREZ, 2017).

Ecotourism involves a wide range of definitions, it involves reconciling social, economic and environmental issues (DE LIMAR; WEILER, 2018). All of them are based on responsible production and consumption through effective use in reducing waste (CHOI; SIRAKAYA, 2019).

The relationship between sustainability and ecotourism is important according to the role of ecotourism in the economy in several countries (ORGAZ-AGUERA, 2015). The effectiveness of income generated in employment is explained in the literature as one of the good effects of ecotourism (LEE; JAN, 2018).

However, ecotourism can also have long-term negative impacts on the environment, such as damage to biodiversity, degradation of the destination, pollution, etc. (PRAVDIC, 2006; Walter; Sen, 2003), in addition to impacting local communities (DE LORENZO; TECHERA, 2019; HORNG et al., 2018; NETO, 2016). Therefore, this can prevent the development of the economy in several tourist destinations (PERKUMIENE et al., 2010; PIASECKI et al., 2009).

In summary ecotourism needs to be organized, designed and planned to achieve an evolution proposal in accordance with sustainability standards in local communities (CARTER et al., 2020; YOOPETCH; NIMSAI, 2002). The development of tourism can impact the evolution of tourist regions due to a difference between the growth of economic resources and finite natural resources (FONT, 2019; HAALAND; AAS, 2018; QIAN et al., 2003).

The ecotourism is seen as a synonymous with sustainable tourism (HAALAND; AAS, 2018). The ecotourism is not sustainable, socio-culturally and environmentally appropriate, acceptable to be considered sustainable (LAUBSCHER et al., 2018). In general, most of the ecotourism literature focused on sustainable issues refers to the tourism concept which

involves socially environmental sustainability, personal growth and responsible travel (NINEROLA, et al., 2015).

The ecotourism should satisfy attractions should be nature-based, visitor with those attractions should be focused on education and product management should follow principles and practices associated with economic sustainability, socio-cultural and ecological (CARTER et al., 2020). Ecotourism is recurrent keyword for tourism development and sustainable tourism.

Ecotourism is a sustainable tourism and a vital segment in the overall tourism industry because of its crucial role in generating income through monitoring of trends (DE LIMAR; WEILER, 2018). The themes of ecotourism can be categorized as empowerment of vulnerable groups, environmental conservation, community participation and cultural preservation (MOZUMDER et al., 2017).

Therefore, the concept of ecotourism is vital because it will act as an incentive coupled with environmental needs and satisfying social (HORNG, et al., 2018). The development of ecotourism has not gained much attention as compared to that of developed nations (CHOI; SIRAKAYA, 2019). Culture plays a significant role in ecotourism and knowledge of stakeholders in ecotourism activities (PAWSON et al., 2012).

# **3 METHODS**

To conduct a systematic review based on high impact articles, was used to build the present study's portfolio, as presented in Figure 1. This study used the ScienceDirect, Scopus and Web of Science databases to search articles and review articles, within no time limit. The set of keywords used in the search was defined using truncation symbols and Boolean operators, as follows: ('ecotourism" AND 'trend" AND "evolution" AND sustainable tourism"). After searching the databases, 148 articles were found (as observed in Figure 1).

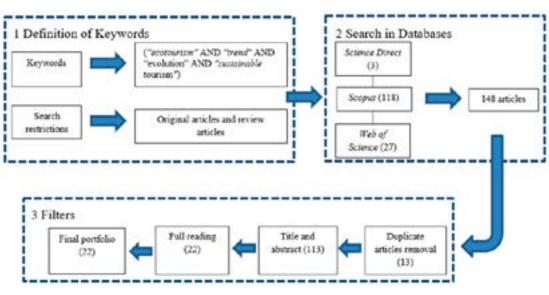


Figure 1 - Summary of literature review steps

Source: Own Authorship (2020).

Thereafter, a series of filters and ranking techniques were applied in order to find the relevant and most impacting studies to be fully analyzed, since the assessment of all the documents encountered would be impractical time wise. Therefore 148 articles remained. In summary, duplicate articles were excluded from the final portfolio. From the 148 articles, 135 remained for analysis. After the title and abstract filter, since there were studies that did not fit in this research, there were 22 left. Thereafter, the number of citations (using Google Scholar) and the IF (using the Journal Citation Reports (JCR)) were obtained in July 2020.

The application of such method helped identify high impact research conducted on this study's theme within no time limit. At last, after full reading of the remaining articles, the ones found not tied to this review's topics were excluded from the portfolio.

Final portfolio of articles used in the study between 2002 to 2020, as by Table 1.

Table 1 – Final portfólio

Nº	Author	Title	Year	Journal
1	Carter, R. W. B., Thok, S., O'Rourke, V. and Pearce, T.	Sustainable tourism and its use as a development strategy in Cambodia: a systematic literature review	2020	Journal of Sustainable Tourism
2	Choi, H.C. and Sirakaya, E.	Sustainability indicators for managing community tourism	2019	Tourism Management
3	De Lorenzo, J. and Techera, E.J.	Ensuring good governance of marine wildlife tourism: a case study of ray-based tourism at Hamelin Bay, Western Australia	2019	Journal of Tourism Research
4	Font, X.	Environmental certification in tourism and hospitality: progress, process and prospects	2019	Tourism Management
5	Haaland, H. and Aas, O.	Eco-tourism Certification - Does it Make a Difference? A Comparison of Systems from Australia, Costa Rica and Sweden	2018	Scandinavian Journal of Hospitality and Tourism
6	Hora, B.	Do large private protected areas contribute to sustainable development? A case study from the Huilo Huilo Biological Reserve in Neltume, Chile	2018	Eco Mont-journal on Protected Mountain Areas Research
7	Horng, J. S., Hu, M. L. M., Teng, C. C	Energy saving and carbon reduction management indicators for natural attractions: a case study in Taiwan	2018	Journal of Sustainable Tourism
8	Laubscher, C.P., Ndakidemi, P.A., Bayat, M.S. and Slabbert, A.	Conservation and propagation of endangered Proteaceae on the Agulhas plain for sustainable ecotourism development	2018	Scientific Research and Essays
9	Lee, T.H. and Jan, F. H.	Development and validation of the ecotourism behavior scale	2018	International Journal of Tourism Research
10	de Limar, I.B. and Weiler, B.	Indigenous Protagonism in Tourism Operations and Management in Australia, Brazil, and New Zealand	2018	Journal of Social Sciences and Humanities
11	Manuel Saiz-Alvarez, J.	Sustainable tourism and social entrepreneurship. The magic town of Tequila, Mexico	2017	Retos-revista de Ciencias de la Administracion y Economia
12	Mozumder, M. M. H., Uddin, M. M., Schneider, P., Islam, M. M. and Shamsuzzaman, M. M.	Fisheries-Based Ecotourism in Bangladesh: Potentials and Challenges	2017	Resources-Basel

Continua.....

13	Neto, F.	A new approach to sustainable tourism development: Moving beyond environmental protection	2016	Natural Resources Forum
14	Ninerola, A., Sanchez- Rebull, M. V. and Hernandez-Lara, A. B.	Tourism Research on Sustainability: A Bibliometric Analysis	2015	Sustainability
15	Orgaz-Aguera, F.	Model to Establish Strategies that Foster Social Economy of Rural Communities in Natural Areas Protected in the Dominican Republic	2015	Rosa dos Ventos-Turismo e Hospitalidade
16	Pawson, S., D'Arcy, P. and Richardson, S.	The value of community-based tourism in Banteay Chhmar, Cambodia	2012	Tourism Geographies
17	Perkumiene, D., Pranskuniene, R., Vienazindiene, M. and Grigiene, J.	The Right to A Clean Environment: Considering Green Logistics and Sustainable Tourism	2010	International Journal of Environmental Research and Public Health
18	Piasecki, W., Glabinski, Z., Francour, P., Koper, P., Saba, G., Garcia, A.M., Unal, V., Karachle, P.K., Lepetit, A., Tservenis, R., Kizilkaya, Z. and Stergiou, K.I.	Pescatourism a european review and perspective	2009	Acta Ichthyologica et Piscatoria
19	Pravdic, V.	Sustainable development: Its meaning, perception, and implementation. The case of ecotourism in Croatia	2006	Drustvena Istrazivanja
20	Qian, J., Wei, J. and Law, R.	Review of critical discourse analysis in tourism studies	2003	International Journal of Tourism Research
21	Walter, P. and Sen, V.	A geography of ecotourism in Cambodia: regions, patterns, and potentials	2003	Journal of Tourism Research
22	Yoopetch, C. and Nimsai, S.	Science Mapping the Knowledge Base on Sustainable Tourism Development	2002	Sustainability

Source: Own Authorship (2020).

Monitoring the development and trends of each source, showed in Table 1, allows us to see that recently the Journal of Sustainable Tourism (2020), Tourism Management (2019), Journal of Tourism Research (2019) and Scandinavian Journal of Hospitality and Tourism are taking the lead in terms of JCR 2019, but this novelty did not contribute to reaching a notable number.

Eco Mont-journal on Protected Mountain Areas Research, Tourism Management, Scandinavian Journal of Hospitality and Tourism, Journal of Tourism Research, Resources and Journal of Sustainable Tourism publish a very stable number of articles on the theme of sustainability, with an impact on their citations. These journals occupy the first, second, third, fourth, fifth and sixth positions in the management category ranking at JCR 2019. Therefore, Table 1 reveals that 18 years ago a number of journals had published articles on ecotourism. In summary, their articles report concerns between the environment, the evolution of the scale of behavior of ecotourism, community tourism, fishing, geography of ecotourism and the evolution of tourism, growing year after year.

Therefore, this section sought to show some of the main characteristics of the final portfolio of documents found in the literature. In the next section, a discussion seeking to present the highlights on the theme is presented.

## **4 RESULTS AND DISCUSSION**

The final portfolio comprised 33 articles relating the evolution and trends related to ecotourism in the world context to understand the various perspectives. Term-co-occurrence visual maps were constructed assisted by the VOSviewer, as by Figure 2.

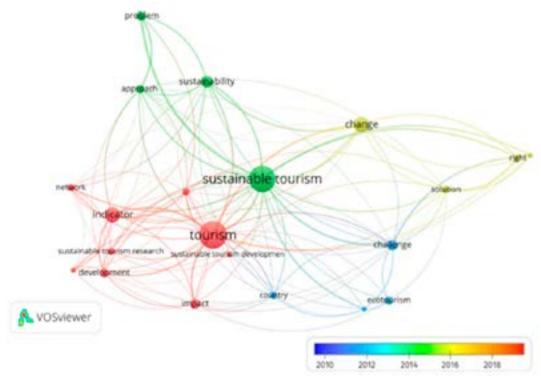


Figure 2 – Co-occurrence of terms – final portfolio

Source: Own Authorship (2020).

A visual map based on text data was made considering titles and abstracts, using VOSviewer's full counting method with a minimum number of occurrences of 5, thus 708 terms out of a total of 122 met the criteria. Ecotourism is the most frequent keyword for sustainable tourism articles, followed by tourism development.

Finally, to perform the full analysis of the final portfolio, some characteristics were taken into consideration, even though not all the articles covered all the topics analyzed. Besides the year of publication, authors, journal, impact factor of the journal and the number of citations, which were already mentioned, the remaining observed and assessed characteristics were: article's subject (what it was about), main topics (sustainable tourism, ecotourism, natural resources, etc.), country, continent, main recommendations, conclusions, and any other observations made by the authors.

The authors neither claim this study to be exempt from limitations nor exhaustive. Nonetheless, it is believed to bring a reasonable contribution to the addressed body of literature, since to the best of the authors' knowledge there have been found no studies investigating the joint approach of this study's topics of interest as in the present piece of work. Various topics were covered on ecotourism and sustainable tourism in numerous countries.

The median years of appearance, it is possible to conclude that the terms in dark blue (country, ecotourism, challenge), the terms in red and green (sustainable tourism, sustainability, tourism, indicator, sustainable tourism research, sustainable tourism development) are subject to high impact articles, according to the filters applied in this study, as by Figure 2. In addition, green and red terms comprise more recent approaches (2019 and 2020), as they appear only in recent years. Therefore, it is clear that high-impact research has been carried out on the environmental impacts of tourism (CARTER et al., 2020); sustainability indicators for community tourism management (CHOI; SIRAKAYA, 2019); preservation areas to encourage sustainable development (HORA, 2018); fishing-based ecotourism (MOZUMDE et al., 2017); tourism for environmental conservation (NETO, 2016); sustainable tourism (NINEROLA et al., 2015); the value of community tourism (PAWSON, D'ARCY and RICHARDSON, 2012); clean tourism with green logistics (PERKUMIENE et al., 2010); the use of fishing-tourism as a new perspective (PIASECKI et al., 2009); sustainable development for the perception of ecotourism (PRAVDIC, 2006); the challenges of tourism (QIAN, WEI; LAW, 2003); the promotion of sustainable tourism (YOOPETCH; NIMSAI, 2002).

Regarding the number of publications, periodical and the impact factor of the articles on the evolutions and trends of ecotourism in the world over time, main recommendations, conclusions and any other observations made by the authors, found through the classification method of this study. The classification of the journals of the 22 selected final articles, as presented in Figure 3.

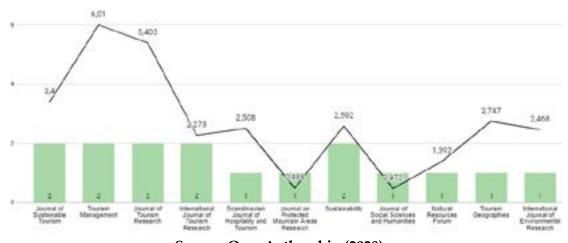


Figure 3 – Number of publications per journal

Source: Own Authorship (2020).

In the literature, the top 8 journals have published 148 articles, representing 100% of the papers in the sample on ecotourism development and trends.

The Tourism Management, Sustainability, Tourism Geographies, Scandinavian Journal of Hospitality and Tourism, Journal of Sustainable Tourism, Scientific Research and Essays, Journal of Tourism Research and International Journal of Tourism Research are the leader on both indicators (JCR 2019). They are journals that perfectly fit the theme of the study, since, since 2002 to 2020, they are the only periodical for research in ecotourism trends (CARTER et al., 2020; CHOI; SIRAKAYA, 2019; HORA, 2018; SAIZ-ALVAREZ, 2017; NETO, 2016). Previous reviews in the survey also highlighted their relevance in the field of ecotourism (NINEROLA et al., 2015; PERKUMIENE et al., 2010; YOOPETCH; NIMSAI, 2002).

The journals that have received studies on ecotourism and sustainable tourism have changed over time, as presented in Figure 2. It is observed that the journals that most published high impact articles on the research topic were: Journal of Sustainable Tourism, Tourism Management, Journal of Tourism Research, International Journal of Tourism Research, Journal Protected Mountain Areas Research, Sustainability, Tourism Geographies and International Journal of Environmental Research.

In the literature, it is observed that sustainable tourism is responding to the need for more responsible policies and forms of corporate governance in the sector, adding the involvement of stakeholders in the processes (FRONT, 2019; HAALAND; AAS, 2018). Tourism favors the avoided impact through carbon emissions related to tourist transport and waste generation (DE LIMAR; WEILER, 2018; NETO, 2016). Therefore, there are studies that assess the optimization of these effects (DE LORENZO; TECHERA, 2019; HORA, 2018). Other research investigates the changes in tourism demand stimulated by damage to climate change (ORGAZ-AGUERA, 2015; PRAVDIC, 2006).

In the geographic analysis, the number of publications by country, since the first high impact article found through the classification method of this study, as presented in Figure 4. There seems to have been an increase in the number of publications on the topic over time, however, it is still too early to reach conclusions on trends, since there is still no extensive history.

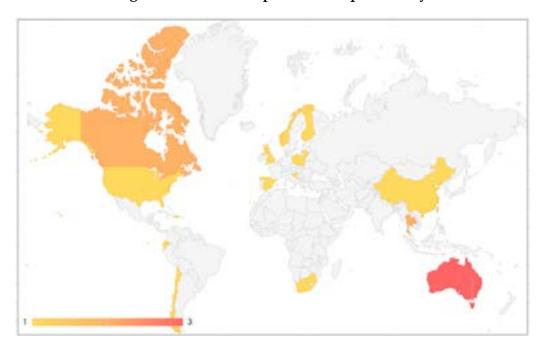


Figure 4 – Number of publications per country

Source: Own Authorship (2020).

Figure 4 shows the countries with the largest academic output on the development and trends of global ecotourism. Therefore, according to the data, Australia, the United States, Canada and Taiwan are the countries where most documents were recorded, followed by Thailand, respectively. The division of studies by continent, as presented in Figure 5.

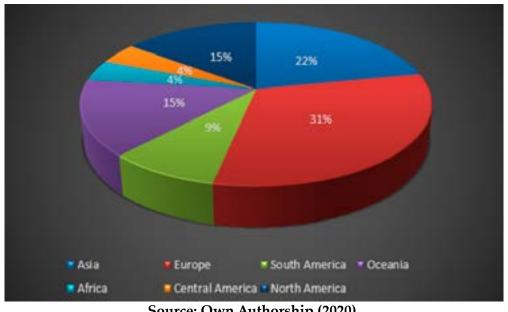


Figure 5 – Number of publications per continent

Source: Own Authorship (2020).

Figure 5 shows the concern with studies on development and trends with ecotourism, Europe stands out with 31% of the studies, followed by Asia with 22%, Africa and Central America with only 4% of the studies, North America and Oceania with 15% and South America with 9%.

The process for the formation of knowledge between tourist companies and the local population contributes to the identification of fundamental aspects for the local process development on environmental and social factors. Local communities are unaware of most activities carried out by the government or entities related to the environment, the development of local tourism and on sustainable development (CARTER et al., 2020; CHOI; SIRAKAYA, 2019; PIASECKI et al., 2009).

Studies have shown that the community participates in group activities and it ends up manifesting itself, but direct action is essential for the formulation of laws that seek environmental preservation. The authorities' lack of awareness of the excess of tourist activities directly within the preservation areas close to the communities, impacts on their tradition, history, nature and local culture. The localities with natural attractions, affection of the local population and a direct contact with the environment encourage the access and dissemination of tourist points, and thus, showing an unmeasured tourist potential for ecotourism.

The main developments and trends related to ecotourism and sustainable tourism in the selected literature, as presented in Table 2.

Table 2 - Development and trends in ecotourism

Year	Development	Trend		
2020	Economic gains for communities and tourist locations.	Broad environmental protection initiatives. Economic security, preservation of local traditions and cultures.		
2019	Tourism impacts differ in several ways regions of the world.	Natural tourism with marine species attracts public interest worldwide.		
2018	Encouragement and support for the development of certification systems for ecotourism.	Ecotourism is focused on aspects of sustainability and the green economy.		
2017	Relationship between fishing and tourism meets the need as an innovative tourism.	Infrastructure development for tourist facilities.		
2016	Ecotourism expansion must be controlled due to environmental and socio-cultural impacts.	Ecotourism is an important source of income in job creation.		
2015	Integration of different dimensions for the development of sustainability in decision making to mitigate the potential consequences of economic development.	Sustainability is a strategic approach for companies and tourist destinations.		
2012	Community tourism is in evidence.	Investment in programs to raise awareness among tourists and the local community.		
2010	Tourism helps to preserve cultural and natural heritage.	Rethink the concept of sustainable logistics solutions in the tourism sector.		
2009	Fishing tourism should be considered an activity different from fishing tourism or recreational fishing.	Contribution to the education of society and the problems in the marine sector.		
2006	Sustainable tourism is a local development activity.	Sustainable tourism contributes to the economic advancement of the region.		
2003	Local sustainable tourism encourages preservation.	Ecotourism in local communities promises an alternative to mass tourism.		
2002	Need to increase ecotourism research.	Attention to climate change.		

Source: Own Authorship (2020).

Concepts on the development and trends on ecotourism that have changed over the 18 years analyzed. In the literature, it was identified that natural sites and communities that are economically benefited through broad environmental protection initiatives (see Table 2). It is essential to increase investments in raising the awareness of tourists and local communities in the development of value for local products and services through tourism. The benefits of ecotourism for communities and places are economic security and the preservation of local cultural traditions (CARTER et al., 2020; FRONT, 2019).

The development of tourism products is a form of income for local residents. Providing adequate infrastructure to tourists and residents are important characteristics in the spread of tourism (DE LORENZO; TECHERA, 2019; NINEROLA; SANCHEZ-REBULL; HERNANDEZ-LARA, 2015). People's understanding of the regional context is essential to achieve the expectations of sustainable tourism, as it must be offered as a viable alternative to current tourism practices (HAALAND; AAS, 2018; QIAN; WEI; LAW, 2003).

The impacts of tourism differ in several regions of the world, but the main conclusion is the continuity of research on the preservation of natural environments. Governance needs to ensure the protection of marine species and areas, as nature-based tourism, including experiences involving interaction with marine species, continues to attract considerable public interest worldwide. The increase in uncontrolled tourist activities portrays negative environmental effects (ORGAZ-AGUERA, 2015; PIASECKI, et al., 2009).

Tourist authorities should encourage the development of certification systems for ecotourism (PERKUMIENE et al., 2010; YOOPETCH; NIMSAI, 2002). The relationship between fishing and tourism is a solution to the need to create innovative tourism and a way to find new sources of income for fishing, in order to make them more profitable and sustainable (MOZUMDER et al., 2017). The development of sustainable tourism is a trend of change and contribution to climate change (NETO, 2016; WALTER; SEN, 2003).

#### **5 FINAL CONSIDERATIONS**

This article presented a quick systematic review of high impact literature on the evolution and trends of ecotourism. From this study's final portfolio a few conclusions could be drawn. Research in the referred body of literature is still incipient and cannot be said to have been following solid trends so far. Studies on ecotourism is noted to be in its infant stage, yet to be further developed and defined. This form of literature review has contributed to expand the existing knowledge on the subject and future studies.

Furthermore, most high impact research has been conducted in Europe and Asia, with a small participation of developing countries, being Australia and United States the developing countries of highlight. Yet, most studies address sustainable tourism and its use as a development strategy, regions, patterns, potentials, managing, social entrepreneurship, community tourism and validation of the ecotourism behavior scale.

Research on ecotourism and sustainable tourism has not been distributed equally in the world, even though several countries have published at least one article. Most of the studies identified are concentrated on the continents of Oceania and North America. Australia is the leader in studies on this subject, but in recent years, some countries, such as Canada, Taiwan and Thailand have come close in number of publications. On the other hand, the recent emergence of countries like Chile, Ecuador, the United Kingdom, Poland, among others, are noticeable.

Ecotourism encourages the solution of important issues such as poverty and environmental degradation. Several international destinations have achieved the desired results with ecotourism, as is the example of National Parks in Ecuador, Brazil and India. This result was achieved with awareness measures with training and information about the possible environmental damage to tourists, local communities and local traders.

In contrast, other ecotourism destinations such as the southern region of the African continent, South America and countries in Eastern Europe identified in the systematic literature review face many challenges due to the slow progression of ecotourism. Therefore, it is essential to understand the problems with ecotourism initiatives among countries with difficulties and to understand how these situations should be resolved in the future. These difficulties involve cultural and social impacts of tourism, essentially when not structured with the parameters of sustainability. The degradation of the environment, changes in the values of local communities and in the social process among local residents, as the excess of tourism encourages the abandonment of traditional cultures, resulting in the growth of violence. The cultural traditions of communities need to manifest themselves spontaneously with incentives from government systems and without necessarily becoming a tourist activity.

In this sense, the study examines the positive impacts of ecotourism for tourists, local communities and traders, the challenges and the solutions to correct these obstacles. Finally, the research implications proposed in this study provide concepts for academics to initiate new research.

As future research, it is suggested to analyze the challenges that prevent the expansion of ecotourism in attractive destinations and the economic, social and environmental implications for sustainable development. The present study shows trends that can be addressed in future research. For future studies it is considered important to investigate other impacts, such as political, technological and legal. The study is expected to provide perspectives on the status of ecotourism research worldwide and to encourage researchers.

Furthermore, approaches that are world can unite practitioners, researchers and government in more strong and focused actions developing worldwide networks to assist knowledge about the development and trends of ecotourism.

# **REFERENCES**

ALBRECHT, J. N. Networking for sustainable tourism - towards a research agenda. **Journal of Sustainable Tourism**, v. 21, n. 5, p. 639–657, 2013.

BOLEY, B. B.; GREEN, G. T. Ecotourism and natural resource conservation: The potential for a sustainable symbiotic relationship. **Journal of Ecotourism**, v. 15, n. 1, p. 36–50, 2016.

CABRAL, C.; DHAR, R. L. Ecotourism research in India: from an integrative literature review to a future research framework. **Journal of Ecotourism**, v. 19, n. 1, p. 23–49, 2020.

CARTER, R. W. B.; ROURKE, V.; THOK, S.; PEARCE, T. Sustainable tourism and its use as a development strategy in Cambodia: a systematic literature review. **Journal of Sustainable Tourism**, v. 23, n. 5, p. 797–818, 2015.

CHOI, H. C.; SIRAKAYA, E. Sustainability indicators for managing community tourism. **Tourism Management**, v. 27, n. 6, p. 1274–1289, 2006.

FODNESS, D. The problematic nature of sustainable tourism: some implications for planners and managers. **Current Issues in Tourism**, v. 20, n. 16, p. 1671–1683, 2017.

GÖSSLING, S. Tourism, information technologies and sustainability: an exploratory review. **Journal of Sustainable Tourism**, v. 25, n. 7, p. 1024–1041, 2017.

GUO, Y.; JIANG, J.; LI, S. A sustainable tourism policy research review. **Sustainability** (Switzerland), v. 11, n. 11, 2019.

HEALY, T. J.; HILL, N. J.; BARNETT, A.; CHIN, A. A global review of elasmobranch tourism activities, management and risk. **Marine Policy**, v. 118, 2020.

HORNG, J. S.; HU, M. L.; TENG, C. C.; LIN, T. Energy saving and carbon reduction management indicators for natural attractions: a case study in Taiwan. **Journal of Sustainable Tourism**, v. 20, n. 8, p. 1125–1149, 2012.

LAMBERT, E.; HUNTER, C.; PIERCE, G. J.; MACLEOD, C. D. Sustainable whale-watching tourism and climate change: Towards a framework of resilience. **Journal of Sustainable Tourism**, v. 18, n. 3, p. 409–427, 2010.

LU, J.; NEPAL, S. K. Sustainable tourism research: An analysis of papers published in the Journal of Sustainable Tourism. **Journal of Sustainable Tourism**, v. 17, n. 1, p. 5–16, 2009.

MANDIĆ, A. Nature-based solutions for sustainable tourism development in protected natural areas: a review. **Environment Systems and Decisions**, v. 39, n. 3, p. 249–268, 2019.

MORRISON, C. Impacts of tourism on threatened species in the Pacific region: A review. **Pacific Conservation Biology**, v. 18, n. 4, p. 227–238, 2012.

MUNDET, L.; COENDERS, G. Greenways: A sustainable leisure experience concept for both communities and tourists. **Journal of Sustainable Tourism**, v. 18, n. 5, p. 657–674, 2010.

NINEROLA, A.; SANCHEZ-REBULL, M. V.; HERNANDEZ-LARA, A.-B. Tourism Research on Sustainability: A Bibliometric Analysis. **Sustainability**, v. 11, n. 5, mar. 2019.

PAN, S. Y. et al. Advances and challenges in sustainable tourism toward a green economy. **Science of the Total Environment,** v. 635, p. 452–469, 2018.

PERKUMIENE, D.; PRANSUNIENE, R.; VIENAZINDIENE, M.; GRIGIENÉ, J. The Right to A Clean Environment: Considering Green Logistics and Sustainable Tourism. **International Journal of Environmental Research and Public Health**, v. 17, n. 9, 2020.

QIAN, J.; SHEN, H.; LAW, R. Research in sustainable tourism: A longitudinal study of articles between 2008 and 2017. **Sustainability**, v. 10, n. 3, 2018.

QIAN, J.; WEI, J.; LAW, R. Review of critical discourse analysis in tourism studies. **International Journal of Tourism Research**, v. 20, n. 4, p. 526–537, 2018.

RAZALI, M. K.; ISMAIL, H. N. A sustainable urban tourism indicator in Malaysia. 6th **International Conference on Sustainable Tourism,** ST 2014, v. 187, p. 133–145, 2014.

REDDY, M. V. Sustainable tourism rapid indicators for less-developed islands: An economic perspective. **International Journal of Tourism Research**, v. 10, n. 6, p. 557–576, 2008.

UNITED NATIONS WORLD TOURISM ORGANIZATION. Available online: https://www.unwto.org/news/covid-19-international-tourist-numbers-could-fall-60-80-in-2020. Accessed on 18 July 2020.

ZOLFANI, S. H.; SEDAGHAT, M.; MAKNOON, R. Sustainable tourism: A comprehensive literature review on frameworks and applications. **Economic Research-Ekonomska Istrazivanja**, v. 28, n. 1, p. 1–30, 2015.