

# Conceptual Tripod of Ecotourism for Compliance Assessment of a National Park in the Brazilian Amazon

Margarita María Dueñas Orozco<sup>1</sup> , Frederico Yuri Hanai<sup>2</sup> , Heros Augusto Santos Lobo<sup>3</sup> 

<sup>1</sup>(Prof. Dr.), Federal University Rondônia (UNIR), Department of Environmental Engineering, Rondônia state, Brazil.

<sup>2</sup>(Prof. Dr.), Federal University of São Carlos (UFSCar), Department of Environmental Sciences, São Carlos, Brazil.

<sup>3</sup>(Prof. Dr.), Federal University of São Carlos (UFSCar), Department of x, São Paulo State, Brazil.

## ABSTRACT

National Parks in Brazil are Natural Protected Areas where ecotourism can be developed associated with nature conservation, respecting the guidelines of its Management Plan (MP). This study comprehensively analyzes the ecotourism compliance of the MP of a National Park located in the Western Amazon region. Qualitative criteria for analysis were developed based on the concept of the International Ecotourism Society, supported by scientific literature. The criteria were used to analyse the Management Plan of the park and to verify its applicability as an analytical tool. The results showed that the plan complied with 53.3% of the criteria and partially complied with 13.3%. The findings of this study point to the great potential of the PNNP for ecotourism, given its rich natural and cultural diversity, which comes from the transition ecotone between important Brazilian biomes and the indigenous populations that inhabit the region.

**Keywords:** Conservation, The International Ecotourism Society, Local communities, Rondônia, Western amazon

## Introduction

The State of Rondônia, located in the Northern region of Brazil, is largely covered by the Amazon rainforest; this rainforest, which arouses national and international interest, is considered one of the major biomes of Brazil. In this globally popular biome, one can find the Central Amazon Biosphere Reserve, one of Brazil's seven biosphere reserves. The Central Amazon Biosphere Reserve is part of a collection of Natural Protected Areas (NPAs) maintained for local sociobiodiversity conservation (UNESCO, 2020). In addition, out of the eight areas classified as Ramsar sites (wetlands of international importance) in Brazil, seven are found in Brazil's Legal Amazon (WWF, no date).

Concerning Brazil's NPAs, the Amazon biome contains 352 areas, representing approximately 14.4% of the national total. A careful analysis of the Brazilian National System of Natural Protected Areas shows that some areas allow public visitation activities, as well as activities related to environmental education and interpretation and nature tourism or ecotourism—a term that has a wide range of definitions (Brasil, 2000). The main conceptual framework for public policy in the tourism sector considers ecotourism as a sustainable market segment with local community participation and using the natural and cultural heritage as a resource for ecotourism activities. In addition to the promotion of public visitations, the main objectives of ecotourism include providing ample support for nature conservation, creating environmental awareness through environmental interpretation, and promoting the well-being of all stakeholders involved in the ecotourism activities, including visitors, residents of the local community, and businesses (Brasil, 1994).

Globally, there has been an increasingly growing interest in the conservational and sustainable practises of ecotourism; this can be observed in the dramatic rise in the publication of academic works and articles on the issue (Fennell, 2014) and the active engagement of actors and market specialists in the defence of conservational and sustainable ecotourism. In this context, the present article uses as a conceptual and methodological guideline the definition of ecotourism provided by *The International Ecotourism Society* (TIES); according to TIES, ecotourism involves “responsible travel to natural areas to conserve the environment, promote the well-being of the local community, and fostering environmental education and interpretation” (TIES, 2015).

In Brazil, the public use of Parks—a category of NPA provided for in Brazilian legislation—is determined by the Management Plan. This document outlines the principles of sustainability that are required to have complied and it is structured based on the

**Corresponding Author:** Heros Augusto Santos Lobo **E-mail:** heroslobo@ufscar.br

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principles of ecotourism (Brasil, 2000). Taking these observations into account, the present study employed an analytical method to assess the ecotourism practises proposed in the Management Plan for the Pacaás Novos National Park (PNNP) in Rondônia and their compliance with the principles of ecotourism. The study was justified by the need to formulate and implement public policies targeted at the valorisation of the Amazon rainforest in Rondônia (Meirelles Filho, 2014), where ecotourism is seen as an alternative sustainable way of using the territories that are home to the cultural and natural heritage of the Amazon.

## Literature review

The concept of ecotourism was widely spread in academia and society in the early 1990s after the World Environment Conference, which is popularly referred to as *Eco 92*. The development of a global sustainability agenda at the political, social, technical, and market levels contributed significantly towards the spread of ecotourism and the generation of new social practises in support of ecotourism (similar to the practises promoted in support of tourism). After *Eco 92*, market segments related to ecotourism began to feature in the media as well as in political and market spheres, along with profound concerns regarding sustainability in tourism (Pires, 2006).

Over time, ecotourism became gradually conceptualised in a way to distinguish general tourism practises and leisure activities that occur in natural areas from the practises that were concerned about the environment and nature conservation, as well as the well-being of the local communities where the ecotourist areas were located (Martins & Silva, 2018). Although concerns about nature conservation were part of the initial conceptual framework of ecotourism (Ceballos-Lascurain, 1998), the solid foundations of ecotourism and its effective distinction from traditional tourism were only firmly established several years after *Eco 92*. Here, the introduction of the so-called “ecotourism tripod” was seen as a watershed in terms of the activities considered pivotal to ecotourism (Fennell, 2014; TIES, 2015). In other words, for an activity to be classified as an ecotourism activity, it needs to be characterised as follows: i) the activity must be a contributor to environmental conservation; ii) the activity must boost and involve the active participation of the local community where the ecotourism activity is performed; and iii) the activity must involve the use of environmental interpretation as an interface between the visitors and the spaces visited. It is worth noting that the most suitable spaces for ecotourism are the natural protected areas (Cobbinah, 2015; Leung et al., 2018), which include Parks, in the Brazilian context.

Ecotourism development in Parks is linked to its role as a space for public use, which should be clearly defined in the Management Plan (MP). The MP is a technical document that defines the zoning of the Parks and establishes the rules for the usufruct of the area, as well as the management of the natural resources in the area (Brazil, 2000). Also, the MP is required to contain guidelines, relevant elements, and specific actions that are designed to help attain the objectives and goals of NPAs. In Brazil, the Parks are home to most of the ecotourism attractions that can be offered and experienced by tourists from all over the world (Crema & Faria, 2018; Barros, Carvalho & Leuzinger, 2021).

The Parks are strategic territories for the conservation of natural diversity. These areas bring numerous environmental benefits and provide vital ecosystem services. It should be noted however that the parks are also territories characterised by complex dynamics where the pressure on existing resources is constantly increasing. The efficient management of these areas requires the use of planning instruments that are suitable for each Park and the MP is essentially fundamental to ensure the effective management of these territories (D’Amico, Coutinho & Moraes, 2018).

It is worth noting that the history of the State of Rondônia has been characterised by a massive and disorderly occupation, which is a direct result of poor and misguided government policies. In most cases, these government policies disregarded the legitimate concerns and interests of the indigenous and traditional populations that inhabit the region and encouraged deforestation in the region, causing the negative social and environmental effects that are still observed today (Santos, 2014; Pereira, 2017). The culture of deforestation has been deeply ingrained in the mindset of the people who live in the region, who generally associate deforestation with “progress and development” (Meirelles Filho, 2014). Studies reported in the literature show that deforestation in NPAs and Indigenous Territories (ITs) is between 10–20 times lower compared to other areas in the region. Essentially, this points to the importance of NPAs and ITs in the quest against deforestation in Brazil’s Legal Amazon, particularly in the States of Rondônia, Mato Grosso, and Amazonas (Ferreira, Venticinque & Almeida, 2005). Remarkably, however, in the past few years, specifically in Rondônia, these NPAs and ITs have been extremely threatened mainly by agriculture and the expansion of large infrastructure projects. Unlike the National or State Parks, a larger portion of the Extractive Reserves (RESEX) area, which is a type of NPA meant for sustainable use, has been converted to pasture (Costa, Pimentel & Cavalcante, 2021). According to the data obtained from the Project for Monitoring Deforestation in Brazil’s Legal Amazon by Satellites (Prodes) run by the National Institute for Space Research (INPE), which monitors deforestation in this region since 1998, the annual deforestation rate in Brazil in 2019 was approximately 10129 km<sup>2</sup>. The State of Rondônia has been found to account for nearly 12% of the total area lost to deforestation in Brazil (PRODES, 2020). Indeed, as can be noted from the news reports published in the media from the year 2020 to the beginning of 2022, deforestation problems have become a matter of huge concern in Brazil over the past few years.

Despite this unprecedented increase in deforestation in the Amazon rainforest, this tropical forest still arouses immense curiosity and expectations among different audiences in Brazil and internationally due to its rich socio-biodiversity, which is reflected in its exuberant flora and fauna, and the numerous indigenous populations with vast and preserved culture who live in this region. Surprisingly, however, the number of tourists that visit the region is still extremely low (Ferreira & Oliveira, 2020).

Owing to the massive cultural wealth of the Amazon, government agencies can incentivize ethnic tourism (Brazil, 2010) in Indigenous Territories and Quilombola Communities, as well as in other traditional communities. Oddly enough, over the years, government policies for this segment of tourism have been more directed to areas where tourism has been more consolidated (central-south region), leaving aside areas in the Northern region of the country, which is home to the Amazon. Due to its complexity and peculiar characteristics, this portion of the Brazilian territory requires specific public policies that include the native population as protagonists (Neto & Toppino, 2019) and respect their culture and traditions as an essentially important cultural heritage found to be vital for the exchange of knowledge and immersion in intercultural experiences. This logic of approximating diverse segments and specific modalities of alternative tourism (e.g. ecotourism, community-based tourism) is operationalised through the analysis of the fundamental elements that characterise these tourism modalities, with the focus being directed towards the aspects and underpinnings of the “tripod of ecotourism”. According to TIES (2015), ecotourism offers economic incentives that are suitably effective for nature conservation and for the enhancement of biocultural diversity with the ultimate aim of protecting the natural and cultural heritage of the territories. Concerning the local populations that inhabit the natural areas, this tourism segment is an efficient tool for empowering the residents of these communities and for the generation of employment and income. Similarly, ecotourism promotes a greater understanding and appreciation of nature and the local communities and their culture through environmental interpretation and education of the stakeholders, including the collaborators (key players in the tourism process) and the visitors (tourists).

Among the guiding principles of ecotourism adopted by TIES include the following: the reduction of the negative effects of ecotourism (including physical, social, behavioural, and psychological effects); the design, construction, and operationalisation of low-impact facilities; the provision of positive environmental interpretative experiences that help raise awareness about the political, social and environmental conditions of the territories and countries that receive the tourists; and the recognition of the rights and beliefs of the indigenous and traditional populations; among others (TIES, 2015). All the aforementioned principles were used as part of the analytical criteria for assessing the compliance and conformity of the proposal involving public use outlined in the Management Plan for the Pacaás Novos National Park (PNNP).

## **Material and Methods**

### ***Object of the study***

The Pacaás Novos National Park (PNNP) is located in the Central-Western region of the State of Rondônia in Brazil’s Legal Amazon (Figure 1). This natural area was specifically chosen for this study because it is an NPA with full protection under the National Park category. The PNNP is devoted to the development of environmental interpretation and education activities, as well as recreation activities in contact with nature and ecological tourism (ecotourism). In addition, the Park is the first NPA created in Rondônia (established in 1979) and occupies 3.2% of the territory of the State, encompassing seven municipalities (ICMBio, 2009).

Another reason why the PNNP was chosen for the conduct of this study was that it houses the headwaters of the main hydrographic basins of the State of Rondônia. The PNNP also protects a transitional ecotone between the Cerrado and the Amazon rainforest and encompasses the Central Mosaic of Rondônia and the Guaporé-Iténez-Mamoré Ecological Corridor (international border with Bolivia). The PNNP overlaps the Uru-Eu-Wau-Wau Indigenous Land (TIUEWW) and plays an important role in the containment of deforestation in the State of Rondônia (ICMBio, 2009). The first version of the Management Plan for the PNNP was elaborated in 1984 and was revised and updated 25 years later (in 2009).

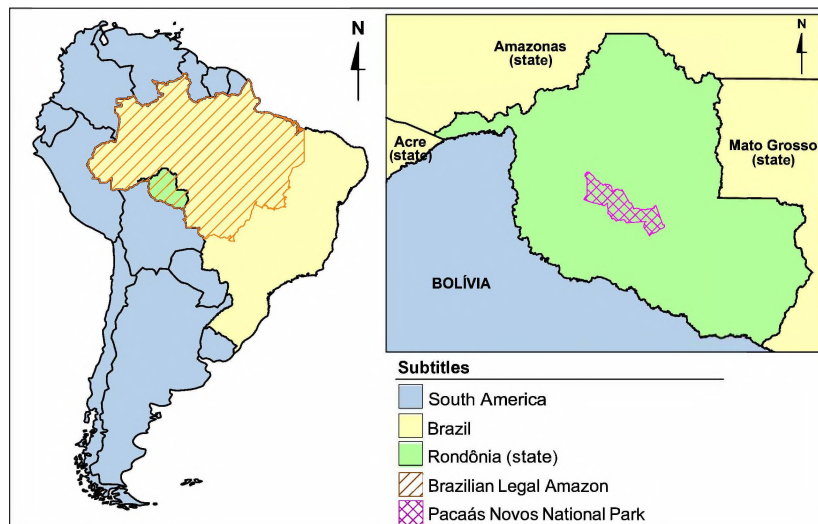


Figure 1. Location map of the Pacaás Novos National Park (PNNP), Rondônia, Brazil. Prepared by Rômulo Mendonça Borel (2023)

### Research Procedures

The most recent version (2009 updated version) of the Management Plan for the PNNP was subjected to analysis to assess its compliance with the principles of ecotourism. This analysis was conducted based on the notion that Parks are required to provide the necessary conditions for the practise of ecotourism (Brasil, 2000). The three pillars of TIES of ecotourism were taken as the conceptual basis for the conduct of our analysis (TIES, 2015). The TIES conceptual framework was chosen because this society is an international entity that operates worldwide and actively seeks to promote the development of ecotourism to its fullest capacity. The choice of this international conceptual framework was intended to help diminish any political bias of local definitions and the unrealistic idealism present in academic definitions. The existence of objective guidelines in the description of the TIES tripod of ecotourism also played a decisive role in the choice of this conceptual framework, as it enabled us to significantly diminish the influence of subjectivity in the selection of the elements to be analysed.

The concepts described under the three pillars of ecotourism were transformed into our analytical criteria, with the definition of sentences in the form of matters/issues that can be evaluated in terms of their conformity to the principles of ecotourism. The approach employed in this study has been applied previously for the conduct of analyses related to ecotourism in territorial (Guerrero et al., 2018; Makian & Hanifezadeh, 2021) or normative (Alves et al., 2016) cases. In addition, specific parameters identified in the literature (WWF-Brasil, 2011; FUNBIO-SMAC, 2012; Aguilar & Domasian, 2023) were used to ensure greater objectivity for the criteria that could render the analysis susceptible to authorial opinion/biases. A qualitative scale was created, considering the level of compliance (full, partial, non-compliance) of each criterion used to analyse the Management Plan. It is worth noting that there was no quantitative balance between the criteria within each Pillar, given that the criteria were derived from a greater or lesser descriptive emphasis found within the theoretical-methodological basis adopted in the study. The nature conservation pillar allowed the creation of 7 different criteria focused on effective incentives (not solely economic incentives) for biocultural conservation in the Park area and its immediate surroundings. Under the local community pillar, 5 possible criteria related to local training and employment opportunities were created. Concerning the environmental interpretation, the 3 criteria derived from this pillar were based on the understanding and appreciation of nature and of the local community and culture. The analysis of the Management Plan was carried out using the methodological guidelines of Bardin's discourse analysis (2013). The construct proposed in each criterion was compared with the Management Plan, allowing the analytical description of the content and verification of compliance with the analysed criterion.

The results obtained were analysed based on the conformity of the ecotourism activities stipulated in the MP for the PNNP (transformed into the proposed criteria) with the principles of ecotourism. The criteria were evaluated using the following classifications: i) in full conformity; ii) not in conformity; and iii) in partial conformity. The study also sought to identify possible priority actions for better management of ecotourism in the PNNP.

### Results and Discussion

In its updated version, the Management Plan for the PNNP contains 209 pages, divided into four sub-contents. The four sub-contents are as follows: i) Contextualisation of the Park; ii) Analysis of the Park region; iii) Characterisation of the Park; and

iv) Management Planning of the Park. Although the present study was conducted based on the fourth sub-content, due to the multidisciplinary nature of the Management Plan, some relevant data found in other sections of the document helped us have a comprehensive understanding of the public use proposal. The results of the compliance/conformity analysis are presented in Table 1.

**Table 1. Analysis of the Compliance of the Management Plan (MP) of the Pacaás Novos National Park (PNNP) with the Tripod (Principles) of Ecotourism**

Analytical Dimensions of the Sustainability Tripod	Compliance with the Criteria (FC – Full; PC – Partial; NC - Non-compliance)	Evidence Obtained and Additional Observations
<b>Conservation</b>		
Are any of the specific objectives of the MP aimed at public visitation, recreation, or ecotourism in the Park?	NC	There are no specific objectives aimed at public visitation.
Does the Park have a buffer zone?	FC	The buffer zone of the Park is described properly.
Does the Park zoning system allow public visitation and/or ecotourism?	FC	Concerning Exclusive Use Zones (ZUEX), one can specifically identify three such zones (ZUEX 1, 2, 3) that are used for educational and recreational purposes by the public in a regulated way, basically through trails for environmental education.
Does the MP provide incentives for conservation and/or the enhancement of natural diversity? (The following were considered as incentives: research, ecological corridors, recovery of degraded areas, payment for environmental services, increased coverage of riparian forests, protection of endangered species, inventory of natural resources, and institutional partnerships – FUNBIO-SMAC, 2012; WWF-Brazil, 2011)	FC	With the implementation of the Management Plan, the intention is to stimulate the conduct of scientific research by specifying some priority issues. Similarly, greater institutional cooperation (municipal government and organised civil society) is expected to intensify environmental education actions and integration with local communities. Strategic activities involving a partnership with the National Indian Foundation of Brazil, as well as environmental education and scientific research were proposed.
Does the MP provide incentives for conservation and/or the enhancement of cultural diversity? The following were considered as incentives: research, inventory of cultural resources, “the existence of guidelines, goals, and strategies correlated with socio-cultural aspects and committed to the development of the traditional/local populations living in and around the Park” (WWF-BRAZIL, 2011).	FC	The MP describes the cultural heritage derived from the Uru-Eu-Wau-Wau Indigenous Population, where it highlights both the intangible cultural features (adornments and festivities) and tangible cultural features (traditional rituals). In the Environmental Education Subprogram, the strategic activity involves “supporting the dissemination of the importance of the Indigenous culture in surrounding schools and municipalities”. The strategic activity of the Sustainable Development Subprogram involves “supporting and encouraging the implementation of sustainable development actions in the Indigenous communities (agroforestry, organic farming, extractive activities) developed by NGOs”.
Does the MP establish regulations and/or procedures for controlling visitation activities?	FC	The strategic activity of the Environmental Education Subprogram involves “developing and implementing a visitation plan focused on environmental education”.
Does the MP seek to monitor the impacts of visitation in the Park?	NC	The Management Plan (MP) does not clearly state that it seeks to monitor the impacts of visitation in the Park areas. The monitoring described in the MP is specifically aimed at the implementation of the plan (p. 195, Section 5–Monitoring and Evaluation).
<b>Local Community</b>		
Does the MP stipulate mechanisms for generating employment and income for the local community?	NC	There are no such mechanisms in the MP.
Does the MP encourage the development of and affiliation with associations or other community organisations (partnerships) for empowering the local community?	PC	The strategic activity of the Sustainable Development Subprogram is “to support and encourage the implementation of sustainable development actions in the Indigenous communities (agroforestry, organic farming, extractive activities) developed by NGOs”.
Does the MP intend to stimulate capacity building and/or training of the local community residents in activities related to the management of the Park and/or actions to support ecotourism?	NC	There is no such intention.
Is there an effectively functioning local council?	NC	There is no mention of any functioning council in the Management Plan for the PNNP.
Are the local communities involved in the management of the council and the decision-making process involving the functioning of the Park?	NC	As there is no functioning council, there is no community participation.
<b>Environmental Interpretation</b>		
Does the document provide for the development and implementation of a visitor-oriented environmental education and interpretation programme?	PC	Under its specific objectives, the MP mentions environmental education, but this education is not oriented to visitors but rather to the surrounding communities.
Does the MP seek to produce and distribute informative material about the Park to raise awareness among the visitors regarding the conservation and sustainable use of natural resources?	FC	One of the strategic activities of the Environmental Education Subprogram is “to produce and distribute publicity material about the Park”.
Does the MP encourage the planning and implementation of a permanent visitation programme for public school students or other groups of visitors to raise environmental awareness?	FC	Current activities: Environmental education in the schools located in the municipality and in the surrounding areas; Environmental awareness activities for the surrounding communities since 2000; Developing environmental education activities with small landowners and producer associations. Developing environmental education activities in schools in the municipality and offering guided tours for students from the schools.

As a summary of the data obtained and considering that 15 criteria were investigated to determine the conformity of the Management Plan for the PNNP with the ecotourism principles, Table 2 presents the dimensions of analysis and the number of

criteria that i) were completely met (FC); ii) were not met (NC); and iii) were partially met (PC) by the Management Plan based on the TIES tripod of ecotourism.

**Table 2. Summary of the results obtained from the analysis of compliance of the PNNP Management Plan with the TIES tripod of ecotourism**

Dimension of the analysis	Full compliance	Not compliance	Partial compliance
Conservation (7)	5	2	0
Local Communities (5)	1	3	1
Environmental Interpretation (3)	2	0	1
<b>Total</b>	<b>8</b>	<b>5</b>	<b>2</b>

Overall, the Management Plan offers guidelines for the planning and management of ecotourism in the PNNP, where the document fully satisfies 53.3% of the pre-established criteria for ecotourism and partially satisfying 13.3% of the criteria, while failing to meet 33.35% of the criteria. It is worth noting that the conformity of the MP with the criteria related to Conservation and Environmental Interpretation was found to be largely satisfactory but at the expense of the criteria related to Local Communities, which exhibited the least satisfactory results (in terms of conformity with the ecotourism principles) among the criteria investigated. It should be pointed out, however, that this does not necessarily mean that the local communities are being negatively affected by the implementation of the Management Plan (MP) of the PNNP, since our analysis did not focus on the effective implementation of the guidelines of the MP but rather on the conformity of the planned guidelines with ecotourism principles.

Based on the results obtained from the analysis of the compliance of the MP for the PNNP with the TIES tripod of ecotourism, we observed that the Park has prioritised the conservation of natural resources and has failed to fulfil the mission of “developing activities related to environmental education and interpretation, recreation in contact with nature and ecological tourism”, as set forth by the Brazilian legislation (Brazil, 2000).

We also noted that the target audience of the environmental education and interpretation activities are the communities surrounding the Park and not the visitors, since public visitation has not been effectively stimulated. The Management Plan for the PNNP also highlights that one of the biggest obstacles to the public visitation of the Park has been the overlap between the Park and the TIUEWW. This fact further undermines the design and implementation of activities for public use, which require joint inter-institutional actions between government agencies, such as FUNAI and ICMBio.

The MP mentions the existence of a spontaneous request from the residents of the surrounding communities to visit three specific points of the Park that are of low impact, and emphasises that planned activities for public use can help solve the problems related to irregular tourism and other negative consequences associated with it.

As it has become clear at this juncture, there appear to be some obstacles to the implementation of the MP due to numerous internal and external factors; these factors may represent both opportunities and threats to the proper management of the territory in which the Park is located. Bearing that in mind, we found it important to find out from the Park managers how ecotourism is effectively developed in these areas.

To gain a better understanding of this matter, we spoke with the head of the BAV (Advanced Base) of Porto Vermelho–North Regional Management/GR1 from ICMBio, who stated the following: “*We still do not have structured visitation and ecotourism activities in the federal conservation units in Rondônia. However, perhaps activities of this nature occur in an unorganised and unauthorised way. To have access to this information, you’ll need to talk to each manager.*”

We also spoke to the coordinator for the structuring of visitation and ecotourism of ICMBio for the Federal Conservation Units of the State of Rondônia (from 2002 to 2009) who said that during the period he worked as a coordinator, they tried to implement some ecotourism initiatives, notably annual expeditions to Pico Tracoá, located in the interior region of the PNNP and situated at an altitude of 1.126m—the highest peak of the State of Rondônia (ICMBio, 2009). According to this former coordinator, such initiatives did not prosper due to the following factors: i) lack of interest from the state government during this period; ii) lack of adequate infrastructure to receive the visitors/tourists; and iii) the fact that the ecotourism activities would be carried out with people from outside the State of Rondônia. Despite the aforementioned obstacles, the coordinator pointed out that the PNNP and other similar NPAs in Rondônia have great potential for ecotourism and recommended that ecotourism activities be initially developed jointly with the local community to create the initial economic conditions required for the development of this segment of tourism (local inns, local tourism operators, etc.).

In short, as pointed out in the MP for the PNNP, it can be noted that although some spontaneous initiatives are developed by the residents of the surrounding communities aimed at the public use of the PNNP, ecotourism in the Park has still not been regulated by the institution that is responsible for its management. In addition, specific plans to regulate ecotourism in the Park have not yet been put into practise. There is no doubt about the great potential of the Park for ecotourism, and it would be a good opportunity to take advantage of these natural areas for the development of this tourism segment.

## Conclusions

The present work reported the construction of a methodological technique that involved the transformation of concepts in assessment criteria for the conduct of qualitative analyses of the public use of Parks, with an applicability test through the Management Plan of a National Park in the Brazilian Amazon.

Based on the application of the analytical tool created in this study for the analysis of the PNNP in Rondônia, it was possible to evaluate the ecotourism practises described in MP for the Park and verify whether the document meets the theoretical assumptions and requirements stipulated by TIES based on the following three basic pillars of ecotourism: conservation; local communities; and environmental interpretation. Thus, the present work highlights the importance, applicability, and effectiveness of the analysis of compliance of ecotourism in Parks through the use of the proposed analytical tool for planning and management of public use.

One cannot overstate the importance of the Management Plan for the PNNP. Surprisingly though, despite the enormous potential of the PNNP in offering positive socioenvironmental experiences with opportunities for understanding and appreciating nature, we noted that the number of tourists visiting the region is still very low (ecotourism has not yet been regulated by the managing institution). Despite the development of some spontaneous initiatives by the surrounding communities in favour of the public use of the PNNP, we noticed that strategic actions aimed at the promotion and development of ecotourism (such as activities related to public visitation, environmental education, and interpretation, etc.) are poorly oriented.

Management Plans for Parks are required to provide conditions for the practise of ecotourism through strategic planning actions, which include the development of activities related to environmental education and interpretation, recreation, and public visitation.

Thus, we highly recommend the reincorporation of the following elements in the Management Plan for the PNNP: i) expansion of public visitation in the Park (as in the previous version of the MP); and ii) directing specific strategic actions towards the promotion of ecotourism to contemplate educational and recreational activities for public use since there are specific zones established in the Zoning System (Zones of Exclusive Use – ZUEX, of the Park) with the definition of trails for environmental education and visitation in a regulated manner.

In addition, it should be noted that there are challenges and investments required for the effective implementation of the actions in the Management Plan. These include gaining access to the protected area, obtaining financial resources for the development of ecotourism infrastructure, investing in research and activities targeted at the promotion of environmental education, and establishing public-private partnerships, among others.

However, concerning the case investigated in this study, we consider that the overlapping of the Indigenous Land with the PNNP paves the way for the adoption of a community-based tourism (CBT) model within the Central Mosaic of Rondônia, given the varied and multiple NPAs located in this area and the cultural wealth of the Uru-Eu-Wau-Wau ethnic group and other ethnic groups that inhabit the territory.

Finally, we hope that the present study contributes towards the identification of priority areas for the design and implementation of public policies and actions that are aimed at the promotion and enhancement of environmental conservation associated with the public use of natural protected areas based on the guiding principles of ecotourism.

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## ORCID ID of the author

Margarita María Dueñas Orozco 0000-0002-9410-5617  
Frederico Yuri Hanai 0000-0001-8428-0019  
Heros Augusto Santos Lobo 0000-0001-6994-0138

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