

## **Perceptions on Tourism in Rural Areas: limitations and possibilities in APA Caverna do Maroaga, Presidente Figueiredo/AM<sup>1</sup>**

João Rodrigo Leitão dos Reis<sup>a</sup>Julio César Rodríguez Tello<sup>b</sup>Christina Fischer<sup>c</sup>

### **Abstract**

Tourism in conservation units is an alternative for their financial and environmental sustainability, involving the local population. To know this process in the environmental protection area (APA – *Área de Proteção Ambiental*) Caverna do Maroaga, we performed an exploratory investigation in three local communities, analyzing the current situation, the expectations of improvement of this activity, and the awareness, interest, and motivation of the community. Information were collected from 87 interviews with adults of the region. Noting that the tourism of these communities focuses on natural attractions, but without proper organization, we observed that the community is interested and motivated to start a management guideline but is not prepared to undertake or develop programs and are unaware of a possible supply of training courses required for it.

**Keywords:** Rural areas; Tourism; Conservation unit.

### **Resumo**

#### **Percepções Sobre o Turismo em Áreas Rurais: limitações e possibilidades na APA Caverna do Maroaga, Presidente Figueiredo/AM**

O turismo em unidades de conservação é uma alternativa para sua sustentabilidade financeira e ambiental, com envolvimento da população local. No intuito de conhecer esse processo na área de proteção ambiental (APA) Caverna do Maroaga, realizamos uma investigação exploratória em três comunidades do local, analisando a situação atual, as expectativas de melhoria dessa atividade, a percepção, o interesse e a motivação dos comunitários. As informações foram coletadas a partir de 87 entrevistas com adultos da região. Constatando-se que o turismo dessas comunidades se direciona aos atrativos naturais, mas sem uma organização adequada, percebe-se que os comunitários têm interesse e motivação para iniciar uma diretriz de gestão, mas não estão preparados

1. Research conducted with promotion of the Fundação de Amparo à Pesquisa do Estado do Amazonas (FAPEAM)
- a. PhD student of the Graduate Program in Environmental Science and Sustainability in the Amazon (PPG-CASA) of the Federal University of Amazonas (UFAM), Manaus, Amazonas, Brazil. Email: jrleis@gmail.com
- b. PhD by the Graduate Program in Tropical Biology and Natural Resources, created from the agreement between the National Institute for Research in the Amazon (INPA) and the Federal University of Amazonas (UFAM). Professor of the Undergraduate Course in Forest Engineering and of the Graduate Program in Forestry and Environmental Sciences (PPG-CIFA) at the Federal University of Amazonas (UFAM), Manaus, Amazonas, Brazil. Email: jucerote@hotmail.com
- c. Master by the Graduate Program in Freshwater Biology and Inland Fisheries (PPG-BADPI) of the National Institute for Research in the Amazon (INPA), Manaus, Amazonas, Brazil. Email: lourdes.fischer:8@gmail.com

para empreender ou desenvolver programas e desconhecem uma possível oferta de cursos de capacitação necessários para tal.

**Palavras-chave:** Áreas rurais; Turismo; Unidade de conservação.

## Resumen

### **Percepciones Sobre el Turismo en Áreas Rurales: limitaciones y posibilidades en la APA Caverna do Maroaga, Presidente Figueiredo/AM**

El Turismo en las unidades de conservación es una alternativa para su sostenibilidad financiera y ambiental, con participación de la población local. A fin de entender este proceso en el área de protección ambiental (APA) de Caverna do Maroaga, se realizó una investigación exploratoria en tres comunidades de la APA Caverna do Maroaga, analizando la situación actual, las expectativas y las perspectivas de mejora de esta actividad, la percepción, el interés y la motivación de la comunidad. Se realizaron 87 entrevistas con adultos de las comunidades seleccionadas. Considerando que el turismo practicado en estas comunidades se dirige específicamente a los atractivos naturales, pero sin organización adecuada, se nota que la comunidad tiene interés y motivación para iniciar una directriz de gestión, sin embargo, les falta preparo para emprender o desarrollar programas, y además desconocen una posible oferta de cursos de capacitación necesarios para ello.

**Palabras clave:** Áreas rurales; Turismo; Unidad de conservación.

## INTRODUCTION

The Amazon is known worldwide for the exuberance of its natural attributes and the cultural and ethnic diversity of its inhabitants, diversified components for an increasingly segmented tourist market that forms tourist destinations. In this context, the tourism developed in rural Amazonian areas can improve the quality of life of the host communities, especially in conservation units (CU) of sustainable use. The incorporation of methods that conserve natural and/or cultural areas – basic prerequisites for their sustainability – has oscillated with the absence of technical support, promotion, and appropriate management in areas of mass tourism activity, generating a burden to the physical environment and limiting the time of use of the sites.

The tourist activity in rural areas is called “rural tourism,” defined as “the set of tourist activities developed in rural areas, committed to agricultural production, adding value to products and services, rescuing and promoting the cultural and natural heritage of the community” (Brasil, 2001).

On Amazon, this typology is dedicated almost exclusively to the tourism of natural attributes of rural properties, in regions affected or not by public or private CUs, whose recreation has been an alternative to the economic development of the region (Scherl et al., 2006). Thus, the local population starts to preserve the natural tourist resources and their own culture (Lima, 2003).

The establishment and management of CUs in Brazil follow Federal Law no. 9,985, of July 18, 2000, which established the National System of CU (SNUC – *Sistema Nacional de UC*), as well as its regulatory decrees; with complementary law no. 53, of June 5, 2007, in accordance with SNUC, the Amazonas State instituted the State System of CU (SEUC – *Sistema Estadual de UC*).

Tourist activities can occur at CUs, provided that duly licensed and authorized by the managing agency and boards. In the Amazon, the State Decree no. 30,873, of December 28, 2010, regulated the SEUC regarding the guidelines for public use in CU. The state is a pioneer in regulating tourism activity at Brazilian CUs.

Except for the categories Biological Reserve (REBIO – *Reserva Biológica*) and Ecological Station (ESEC – *Estação Ecológica*), tourism in CUs occurs by the permission of the managing agency and from agreements with communities, generating income, training, and social empowerment. To this end, the social inclusion of local populations must include their environmental education, aiming not only isolated actions, but a conduct transformation and, therefore, a legitimate management of the protected areas (Milano, 2000). Hundreds of areas around the world receive nature tourism, but the examples of communities successful both in community development and environmental protection are rare (Brandon, 1995). Surely, the participation of local residents is still a challenge for local development (Lima, 2003).

In Brazil, the Federal Law no. 11,771, of September 17, 2008, addresses the National Policy of Tourism (*Política Nacional de Turismo*) and defines the responsibilities of the federal government in the planning, development, and stimulus of the tourism sector. Article 5 of this law stipulates: the practice of sustainable tourism in natural areas, promoting the activity as a means of education and environmental interpretation; the adoption of conducts and practices with minimum impact, compatible with the conservation of the natural environment; and interdisciplinary partnerships with entities of the federal government, to preserve and organize the natural and cultural heritage for tourist purposes.

However, Brandon (1995) warns that, in both developed and underdeveloped countries, communities generally believe they cannot be influential in this development. Thus, tourism projects aimed at local communities must involve them so that they decide the type of management they would like, to then help them implement it.

On Amazon, tourism has been encouraged in areas affected by CUs, whose full protection group goes through a gradual process of insertion of the surrounding population to benefit from indirect services (sale of handicrafts, etc.) with the tourism in the region. In the CUs composed of public areas, the aim is to create an agreement of collective use and benefit between communities, tourists, and tourism operators. However, since the APA allow the coexistence of public and private properties, they have the challenge of sharing the benefits among all those involved in local tourism.

This scenario can be observed in APA Caverna do Maroaga, a state CU created in the 1990s in Amazonas. It should be noted that these sectoral policies of tourism development need precise and rigorous diagnoses, which show the interest of the community and the supply, demand, and feasibility of implementing and maintaining the enterprises. The tourist activities planned or in development in this location must follow the guidelines for public use established by the State Decree no. 30,873/2010.

Thus, considering that the APA covers rural areas where tourism already occurs, but only with the work of the 26 local communities, besides the fact that the region needs studies evaluating the current status of its tourism, this article presents the results of an environmental analysis on the development of tourism

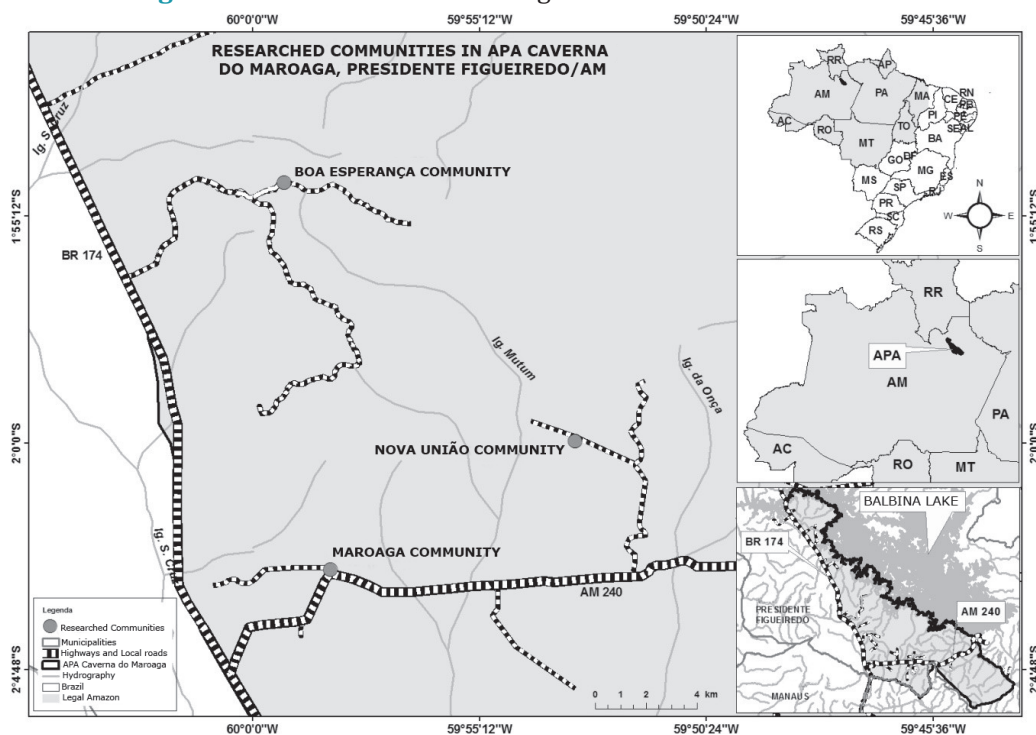
in three communities of the APA, focusing on detecting the main obstacles of this activity and the possible opportunities for its endogenous development.

## METHODOLOGY

### Study area

APA Caverna do Maroaga has 374,700 ha, equivalent to 14% of the area of the municipality of Presidente Figueiredo (AM). The CU is between the geographical coordinates  $1^{\circ}11'35''$  and  $2^{\circ}16'02''$  South latitude and between  $59^{\circ}17'24''$  and  $60^{\circ}25'12''$  West longitude of Greenwich. The unit was created to “protect the scenic beauty and relevant environmental attributes, and to effectively protect the speleological cavities of the municipality of Presidente Figueiredo, especially Caverna Refúgio do Maroaga.” The CU was established by State Decree no. 12,836, of March 9, 1990, and ratified by Decree no. 16,354, of December 7, 1994, regarding its surface. The State Secretariat for the Environment of Amazonas (SEMA-AM – *Secretaria de Estado do Meio Ambiente do Amazonas*) is its managing agency.

**Figure 1** – APA Caverna do Maroaga and researched communities



Source – Prepared by the authors (2015)

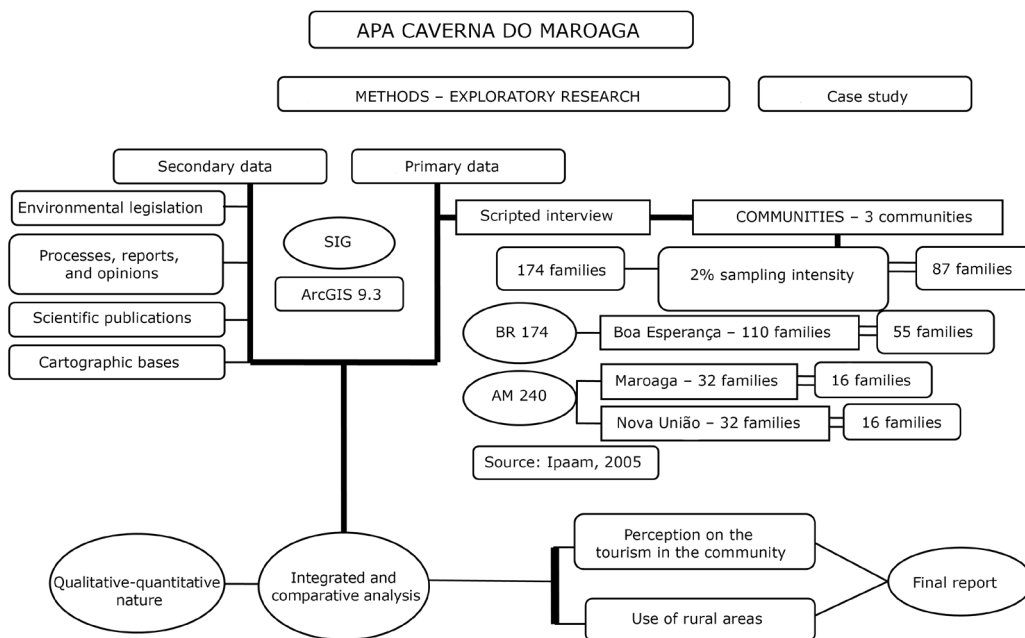
It is the only APA of the Amazonian territory with operating Deliberative Board and approved management plan. The Managing Board was created by SEMA/GS Ordinance no. 114/2009. The Management Plan was approved by SEMA Ordinance no. 70/2012, with support from the American NGO Gordon and Betty Moore Foundation. The APA comprises 26 rural communities, with about 2,193 families (Amazonas, 2012). Among the factors potentially responsible for the

economic growth of Presidente Figueiredo in recent years, the paving of Highway BR-174 stands out, allowing most of the state land distribution of products and minerals from Pitinga region, Balbina Dam, and their infrastructure.

## Research methods and steps

Our exploratory research was developed from a case study, with literature and documental analysis, and field research, with direct observation and data collection (Gressler, 2004; Marconi & Lakatos, 2016; Yin, 2015). The research was developed in three communities of APA Caverna do Maroaga (Figure 2). These communities were chosen because they develop tourist activity and have a strategic location, on the edge of highways that cut through or border the APA. The interviews were carried out with residents of communities Boa Esperança, Maroaga, and União.

**Figure 2** – Flowchart of the methodological strategy



Source – Prepared by the authors.

Family units were selected by sampling, using the total number of families by community and applying the sampling intensity of 2% of their total in the selected communities. The samples were chosen randomly among adults of both sexes, with the only criterion of living in the communities. Thus, the sampling being 50% in each community, the number of families was 55 throughout the community; and Boa Esperança and Maroaga, with 16 families each, totaled 87 sampled families.

An integrated data analysis was conducted by interaction matrices and control listing, connecting the information obtained by primary and secondary surveys with graphs, tables, or diagrams, in the structure of an interaction model (Fidalgo, 2003). Therefore, the data from the forms and the results from the interviews were analyzed from preset variables.

## RESULTS AND DISCUSSION

The emergence of Presidente Figueiredo, marked by the implementation of large enterprises, is the key to understand the current situation of use and occupation of APA Caverna do Maroaga. Some marks of this process are visible, such as the emergence of the communities along BR-174 and AM-240. The pioneering spirit of occupation of the area replaces the advancement of illegal logging and exploitation of specific species of fauna, such as the Guianan cock-of-the-rock (*Rupicola rupicola*) (Omena Júnior & Martins, 2007), and flora, such as the Brazilian rosewood (*Aniba rosaedora*) (Mitja & Lescure, 2000), endemic to the region, which still persist.

Throughout this process, farms with livestock grazing or intensive agriculture have succumbed before the replacement of the forest, mainly because of pests, infertile soil, and absence of logistic and technical support, which caused the abandonment, given the lack of a consistent agrarian policy (non-assistentialist) for the region, of immense areas with pastures, in addition to the intensive return to illegal logging (sawmills in communities; abandoned local roads; etc.) and exhaustion of precious woods (wood, charcoal, and utensils, with emphasis on skewers). However, in this new phase, the tourist activity draws the attention of the residents from the communities or from other regions.

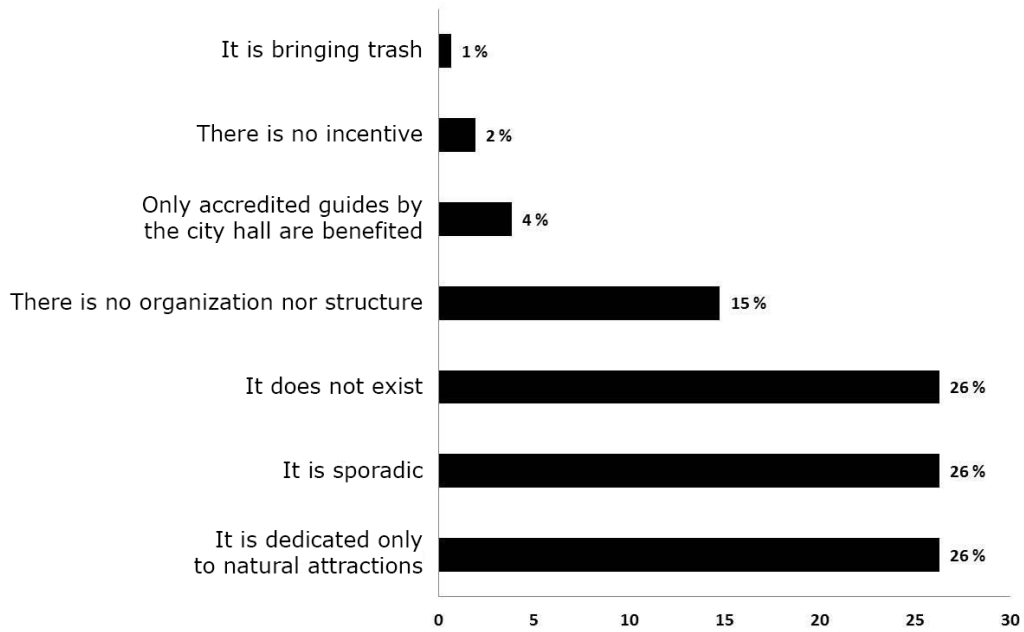
For tourism, valuing rural areas with natural attractions is an opportunity to supplement the family income, and the research within the forest is intense and promotes new fronts of occupation and rampant exploitation. The purposes of conservation of these areas are not the main goal, but the guarantee of a new or only source of financial resources.

According to the Agricultural Census of 1995 and 1996, at that time there were 143 rural establishments in Presidente Figueiredo, which corresponded to 53,382 ha of the municipality. Currently, the 2006 Census (IBGE, 2007) showed that the number of establishments increased more than 22 times, reaching 3,176, occupying an area of 60,406 ha.

The results show the effort of occupants to regularize their areas and productive activities. However, an increase of only 7,024 ha was observed in 10 years (Agricultural Census 1996-2006). One of the possible reasons is the subdivision of land and its sale in plots. In 1996, the registered areas were licensed, thus the legal reserve of the enterprises was eliminated because of the commercialization of the land. Thus, the abandonment of vast deforested areas – because of the impracticality of maintaining agricultural activity and the lack of actions to recover the degraded areas – motivated a search for new strategies to use the forest and its natural/cultural attractions, driven by the training of rural producers and their inclusion on new work fronts, including tourism.

When asked, 52% respondents confirmed the existence of tourism in the communities. Of these, 26% reported that the visitation is dedicated only to natural attractions, sporadically (Graph 1). In addition, as reported by 15% of the community, there is no organization nor proper structure in these places; for 4%, only accredited guides by the city hall of Presidente Figueiredo benefit from this practice; for 2%, there is no incentive; and for 1%, it is bringing trash. Thus, one can say that mass tourism is occurring, but few residents are directly or indirectly benefited.

**Graph 1 – Tourism in the communities of APA Caverna do Maroaga**



Source – Prepared by the authors

One can observe that the tourism in the communities is being done incipiently and without control over the use of natural resources, in addition to the lack of technical and financial incentive to structure the community and the attractions. The selection of trained professionals for the activity also stands out, concentrating the service of tour guide and using the attractions of the community properties disrespectfully, without even requesting their permission.

For 80.9% of respondents, the tourism practiced in the community does not bring collective benefits, and only 19.1% of them think the opposite (Graph 2), with the following factors: hiring of community people to manage and guide the attractions (6.4%); trade strengthening (6.4%); exchange of experience (4.3%); and provision of training courses (2%).

**Graph 2 – Benefits of tourism in the communities**

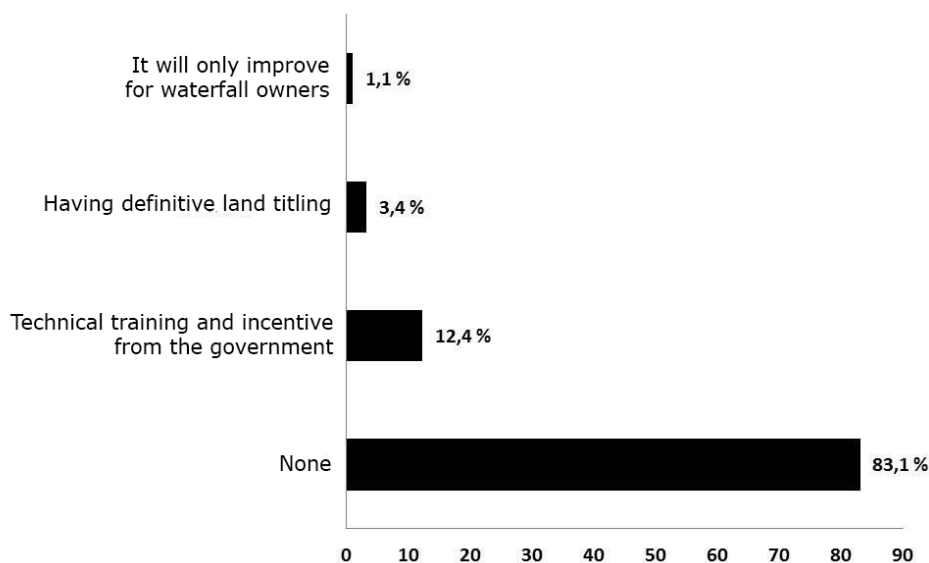


Source – Prepared by the authors.

It should be noted that these actions are expected by a large part of the community. However, there are specific professional qualification actions for tourism, often linked to local administrative agencies and/or residents of the urban area. Residents who can access these programs are almost always linked to government agencies.

On the perspective of tourism (Graph 3), 83.1% of respondents did not observe effective actions to implement it in the community. For 12.4%, tourism activities can bring technical training and financial incentive from the government. In addition, 3.4% hope they can regularize their possession of land, and 1.1% believes that only large owners, waterfall owners, are benefited.

**Graph 3** - Perspective of tourism in the community



**Source** – Prepared by the authors.

The big tourist enterprises implemented in Caverna do Maroaga were responsible for a change in attitude with community residents, who sought to join the tourist market. However, the absence of technical guidance in the search for financial support and the management of the natural attractions of the area are the main threats to the continuity of its use. In addition, this expectation is positive to claim punctual actions of landholding regularization and recognition of this activity and its needs.

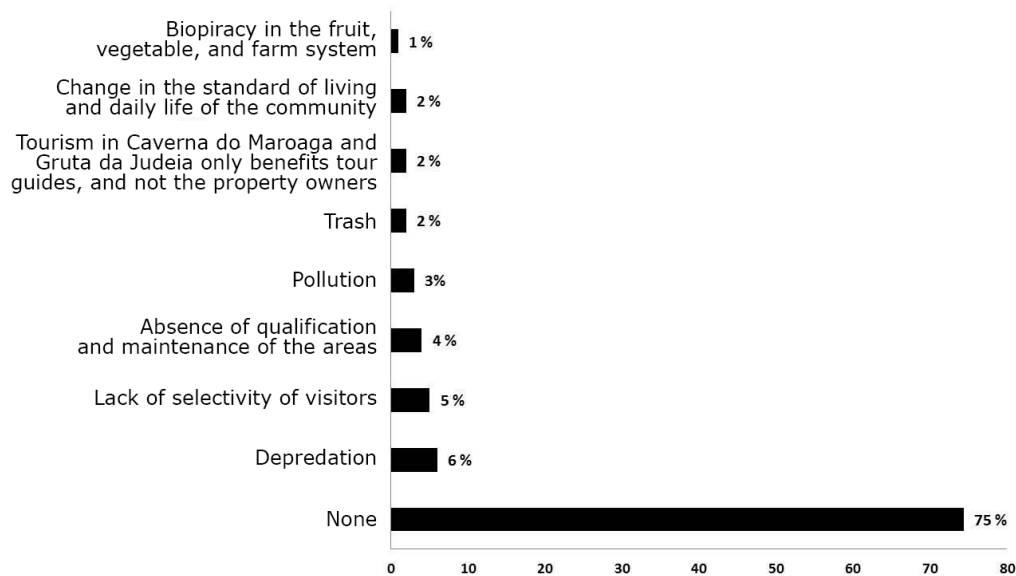
When asked about the negative aspects of tourism in the community (Graph 4), 75% reported that the activity does not generate any impact. However, 6% reported depredation of attractions, mainly because of the lack of selectivity of visitors (5%), absence of qualification and maintenance (4%), pollution of attractions (3%), increase of solid waste (2%), and change in the standard of living and daily life of the community (2%). This last aspect is primordial, especially because of the increase in the migratory flow from the urban to the rural area and the transformation of communities into villages, i.e., the emergence of urban micro-areas.

For 2% of the community, the tourism practiced in Caverna do Maroaga and Gruta da Judeia does not benefit local property owners, but only the tour guides



of Presidente Figueiredo. This issue is extremely important to the community, especially to the owners of tourist attractions.

**Graph 4 – Negative aspects of tourism**



**Source** – Prepared by the authors.

The unauthorized intervention of government agencies in the natural attractions stands out, considering that no document was signed by the owners supporting the action of the guides – accredited by the municipal power – to access the areas, and that the tourism does not give financial return to the owners in poor conditions, who suffer from use restrictions. In addition, 1% of respondents mentioned the biopiracy in the fruit, vegetable, and farm system as one of the main negative aspects of tourism in the region.

On the other hand, the community realizes the importance of maintenance of natural areas and of the advancement of degradation on them, which suggests a search for more concrete actions to structure and regulate the tourism in the rural area. This change, which aims to replace the unrestrained exploitation by the appreciation of ecotourism activities in natural areas, requires a planning of the public use of these areas from the CU managers and other spheres of government.

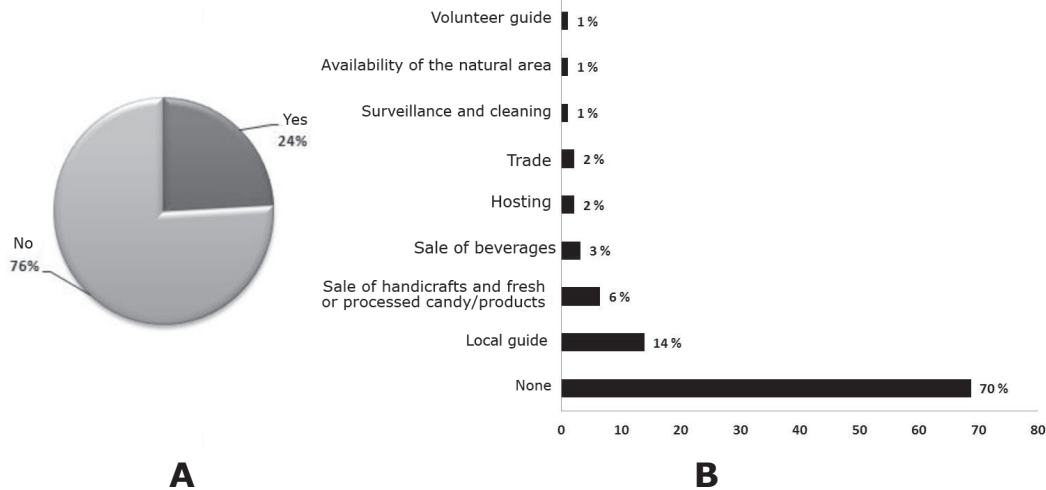
Although the tourism in Caverna do Maroaga communities offers a variety of activities that would directly or indirectly involve the local population, 76% of respondents claim not developing them with visitors, against 24% who claim otherwise; and 70% do not work with any type of tourist activity.

The services listed by respondents are: (1) acting as local or community guide (14%); (2) sale of handicraft and fresh or processed candy/products (6%); (3) sale of beverages (3%); (4) hosting (2%); (5) stimulus to trade (2%) (Graph 5).

Regarding the direct management of the natural attractions, only 1% of respondents reported working with their surveillance, cleaning, and availability to tours, charging by the entry of tourists or as a volunteer guide. The tourist activity has a direct impact on the local economy and tourist destinations, creating new work alternatives to community members and propelling their commercial life, which shows the vitality and variety of

options of the community to add value to the tourist product that it has to offer. However, they still suffer with lack of infrastructure, professional training, and promotion.

**Graph 5** – Services developed with visitors: a) Do you work with community visitors?; b) Which services do you develop with them?



**Source** – Prepared by the authors.

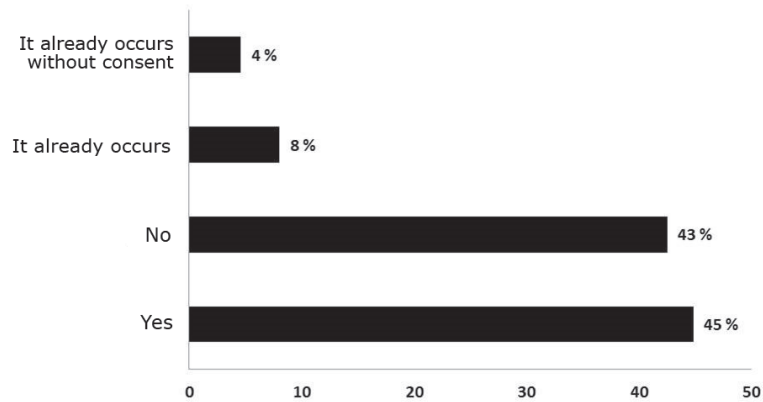
The motivation regarding the implementation of tourism in the rural properties was also asked, and most respondents (45%) confirmed interest in sightseeing tours in the areas under their possession; 43% do not have this interest, for various reasons. In addition, 8% reported that the visits already take place, and 4%, that they occur without consent from the owner. This is important to expand the discussion on the violation of the right to property and the absence of clear rules to accredited guides by the city hall of Presidente Figueiredo on how to organize tours to natural attractions in private properties inside APA Caverna do Maroaga.

On the motivation for the tourist activity, the respondents said that their great interest is financial gain (43%), both as a complement of the family income and, in some cases, the only source of resources. However, 40% believe there is no hope for a solution to these problems, given the difficulties to maintain and improve the business (Graph 6).

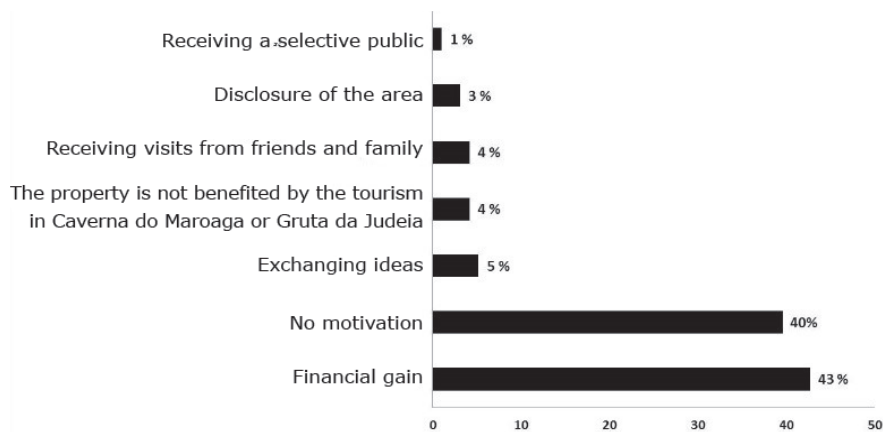
The data show that 5% of respondents highlighted the exchange of ideas as the main motivation for the visits, in addition to receiving friends and family (4%) and disclosure of the area (3%). The community values the presence of qualified audiences (researchers, agency technicians, etc.) as paramount to preserve these areas. We highlight that 4% of respondents living in the vicinity of Caverna do Maroaga and Gruta da Judeia do not benefit from the tourism in their properties, a problem that must be solved immediately.

The natural attributes of this region are of extreme importance to organize tourist visits. Thus, 25.2% of respondents reported that their properties contain forest; 17.6%, streams; and 14.7%, springs. However, 7.6% reported the existence of plantations with diversified culture. The speleological attractions were mentioned, such as exposed rocks (6%), waterfalls (3.5%), caverns and caves (2.9%), chutes (1.8%), and cave (1.8%). Pasture areas received 1.2% of mention, and fauna reproduction areas also stood out (4.7%) (Graph 7).

**Graph 6** – Interest in tourism in communities of APA Caverna do Maroaga: a) Interest in sightseeing tours; b) Motivation for tourism



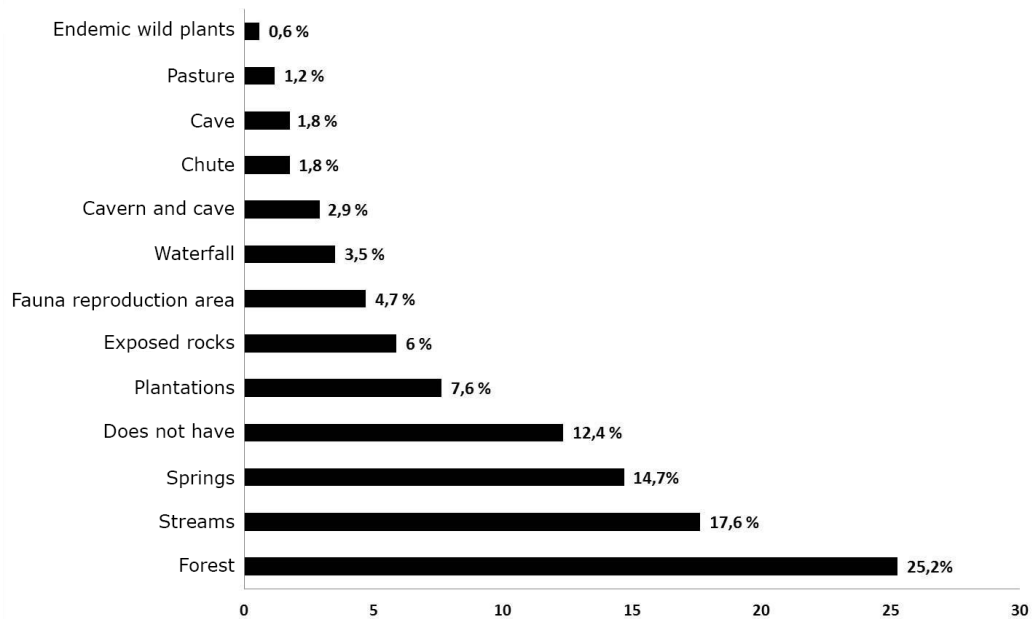
**A**



**B**

Source – Prepared by the authors.

**Graph 7** – Natural attributes in the properties

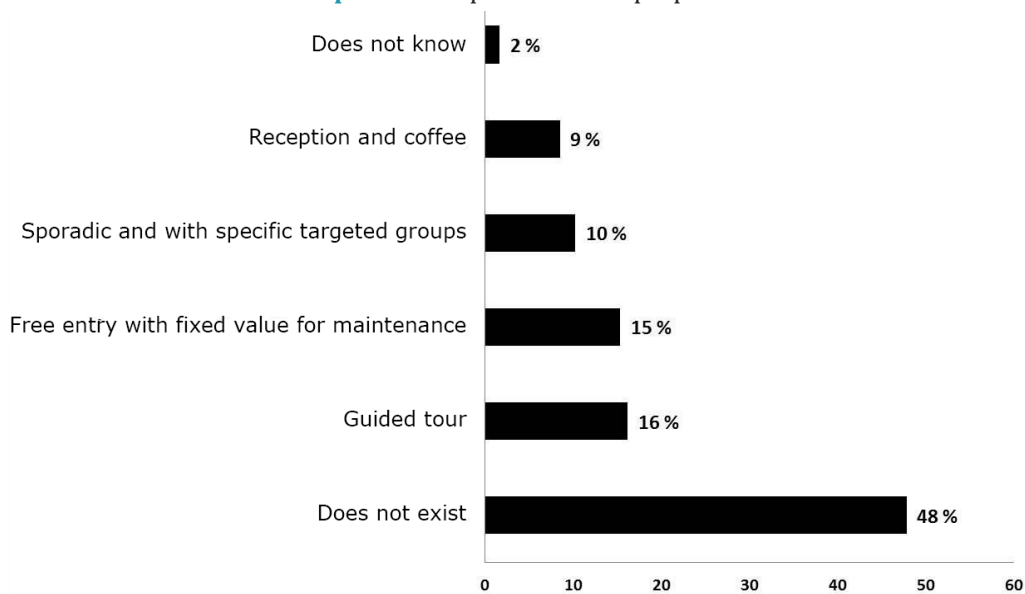


Source – Prepared by the authors.

Only 3.5% of respondents claim having “waterfalls” in their properties, one of the most recognized natural attributes. Their absence demands the appreciation of other areas hitherto little used to visit, enabling new leisure and recreational activities and a more selective and segmented audience.

The usage situation of rural areas is dealt with quite significantly. Most properties is not visited (48%). Of the visited ones, 16% have guided tours; 15%, free entry, with fixed value for maintenance; 10% receive sporadic visits and targeted groups; 9% have only reception and coffee to visitors; and in 2%, the owners have no idea how the process would occur. Many community members know the importance of ensuring accommodation to visitors, which also implies a provision of relevant information on the locations of visit and the minimum of comfort, without losing the originality of the rural world (Graph 8).

**Graph 8 – Visit process in the properties**



**Source** – Prepared by the authors

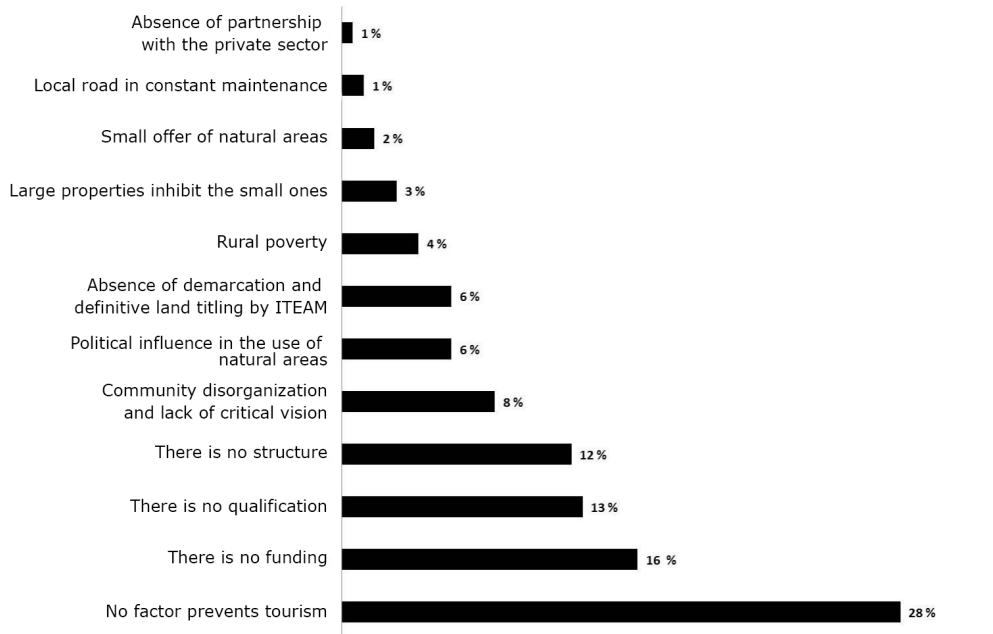
For a large part of the community (28%), there is no factor that prevent the tourist activities in the region (Graph 9). Based on the responses obtained, one can say that the community has a limited view of the needs to be met to prepare a proper management of tourism, presenting short-term perspectives on the use of these areas and the financial return with the activities.

According to the respondents, one of the main factors that prevents the development of tourism in the region is the lack of funding (16%) or unfamiliarity with help lines and required procedures to encourage it. They also report the lack of qualification (13%) and inadequate infrastructure for the stay and feeding of visitors (12%). The disorganization of the community and the lack of critical vision regarding the problems faced by them is a relevant factor (16%), mainly concerning the social mobilization to demand improvements.

The political influence in the natural areas (6%) is, in the view of respondents, the biggest current problem of the communities, because local politicians appropriate areas that could be intended for the creation of municipal CUs. Another problem is the absence of land titling by the National Institute for

Colonization and Agrarian Reform (INCRA – *Instituto Nacional de Colonização e Reforma Agrária*) and Land Institute of Amazonas (ITEAM – *Instituto de Terras do Amazonas*). The large properties with definitive title and capital to invest in the structure of the areas for tourism (3%) inhibit those of smaller size because of scarce funding and technical support policies, given the small offer of natural areas (3%) with natural attractions of interest and conducive to visit, as well as rural poverty (8%) and absence of own resources to invest in the region, a result of the fear of smallholders to be in debt with promotion/funding agencies.

**Graph 9 – Unfeasibility of tourism in the properties**



Source – Prepared by the authors.

The precariousness of public services in the maintenance of local roads (1%) and basic structures of access to the communities, such as schools, artesian well, headquarters, etc., also stands out. A priority factor, mentioned by only 1% of informants, are partnerships with the private sector, since no connection between tourist agencies and the communities exist. Only Cachoeira Santuário has a consolidated partnership, given its investment for hosting, meals, and events.

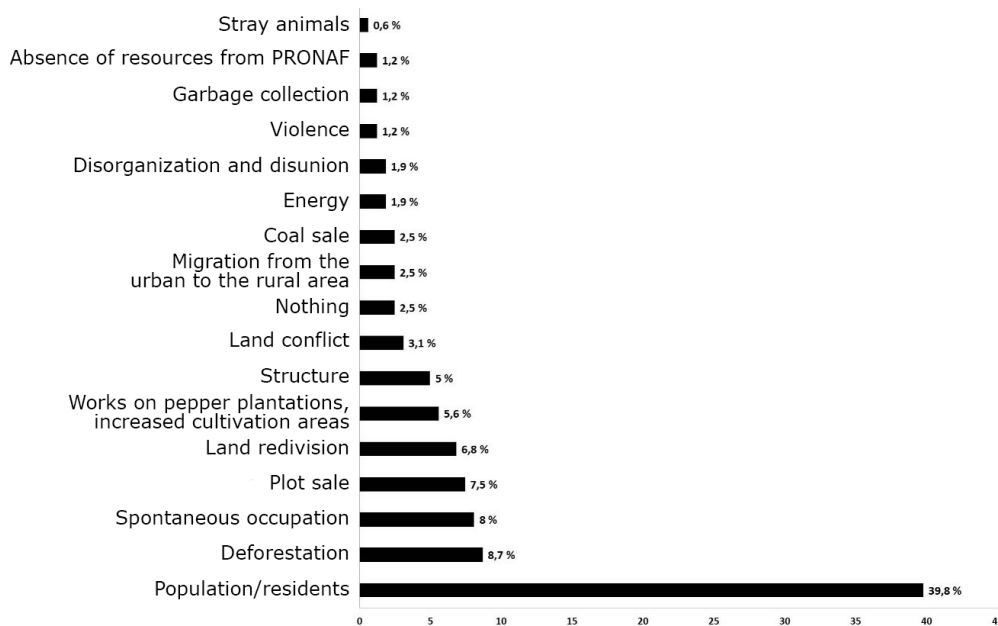
The 2006 Agricultural Census (IBGE, 2007) presents the land occupation in Presidente Figueiredo, exposing 986 establishments, totaling an area of 60,371 ha. Of these, one can verify that 39, with an area of 1,547 ha, are frequented by “occupants.” One can also observe that this number increased in 2017 because of the large expansion of the communities, as well as the current stage of implementation of the Terra Legal program, which provides for the land regularization in areas of the federal government, within the Legal Amazon, with planning for the region of Presidente Figueiredo. An important point is the implementation of the Rural Environmental Registry (CAR – *Cadastro Ambiental Rural*), established by Federal Law no. 12,651, of May 25, 2012 – the new Brazilian Forest Code.

We highlight activities aimed at the payment for environmental services in the embryonic stage of regulation in the Amazon. According to Flores and Silva (2008), in the regions of natural forests with high availability of wood affordable

at low cost, that source will still be an option. However, this resource must be explored in low-impact organizations, to ensure the maintenance of biodiversity, raising the cost of wood. Analyzing the current trends, the main motivation to maintain the remaining natural forests in other regions, except the Amazon region, will be leisure and environmental services.

When asked about the social and environmental situation of the community (Graph 10), most (39.8%) community members reported the increase in population/residents, which is related to the increased deforestation (8.7%), spontaneous occupations (8%), illegal plot sale (7.5%), and land redivision (6.8%), giving rise to land conflicts (3.1%). Possible factors are the migration from the urban to the rural area (2.5%), mainly because of job offers in pepper plantations, increased cultivation areas (5.6%), and the improvement of access to communities and basic structure (5%), such as schools, rural electrification (1.9%), garbage collection (1.2%), among others. Another aspect that deserves to be mentioned is the offer of land for occupation, passed on by land agencies or nominated by the leaders of the communities, in some cases.

**Graph 10** – What most increased in the community in recent years.



**Source** – Prepared by the authors.

One of the negative aspects is coal sale (2.5%), which shows a great demand for wood in the community, obtained illegally. The communities present political and administrative disorganization, and community members are disunited (1.9%). We highlight the lack of resources from the National Program for the Encouragement of Family Agriculture (PRONAF – *Programa Nacional de Fortalecimento da Agricultura Familiar*) with 1.2% of the quotes, especially for residents of the settlement project (PA – *projeto de assentamento*) Uatumã and the communities selected for the implementation of the program Rural Tourism of Family Agriculture (TRAF – *Turismo Rural da Agricultura Familiar*). Only 0.6% of respondents mentioned the increase of abandoned animals.

These aspects show the extreme poverty and negligence on the part of the government to meet the demands of the communities, which are at the mercy of political articulations or political party involvement to achieve representativeness. Some communities are “benefited” by the mayor, to the detriment of others that stay outside the services for disagreeing with the fragmented and political-oriented actions.

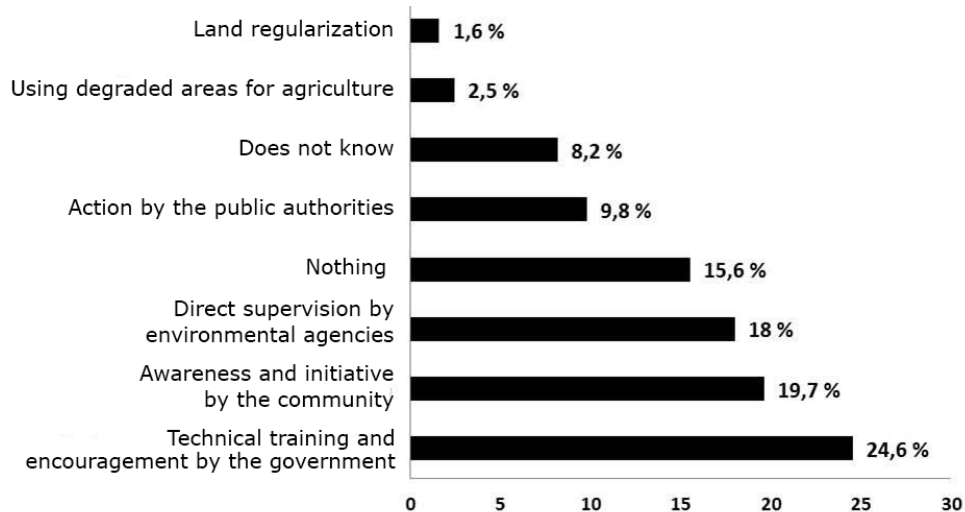
Deforestation (Figure 3) first occurs with the opening of local roads, often with deforestations not allowed by the government. Then, paths or narrow trails are open in the forest, leading to clearings, whose trees are felled with greater potential and organized in the form of planks. Offenders take care not to clear the area, removing only the larger trees, thus camouflaging the deforestation. Then, the wood planks are hidden at the entrance of the local road or in its surroundings. They are usually brought to sawmills by the end of the afternoon, which are located in the community or at the municipality.

**Figure 3** – Cycle of deforestation: a) Tree cut in the forest); b) Wooden planks; c) Wood remains in the forest; d) Opening of local roads; e) Illegal withdrawal wood – wooden planks hidden among bushes at the entrance of the local road; f) Sawmill in the community



**Source** – Prepared by the authors (2013).

To solve these problems, respondents suggested the technical training and encouragement by the government (24.6%), one of the main strategies to address the administrative and managerial obstacles in the communities. These aspects are the basis to conduct a concrete policy and regulate ecotourism in APA Caverna do Maroaga currently. This requires a good performance on the part of the community members, who must demand concrete and not merely palliative solutions, and also require a “real” performance from environmental agencies in the environmental control and management of protected areas (Graph 11).

**Graph 11 – Solution to the problems in the community**

Source – Prepared by the authors.

Therefore, governmental actions (9.8%) are a priority, and they include the direct supervision of environmental agencies to infractions, licensing, and monitoring of enterprises (18%) and land regularization (1.6%), essential aspects to seek investment. In addition, there must be awareness and initiative by the community itself (19.7%) in claiming solutions.

Community members know how important fighting and controlling deforestation is, and how damaging it can be to ecological maintenance. Thus, they mention as crucial the use of degraded areas for agriculture (2.5%), preventing the advancement of cultivation areas into the forest. In addition to these factors, 15.6% believe that nothing should be done, and 8.2% did not know how to answer the question.

It is important to stress the importance of the change of vision of the community on the use of the forest and the attributes of the region. The old view of massive exploitation is being replaced by the claim of concrete actions to address the environmental degradation that threatens the attractions and, as a result, their tourist use. Awareness precedes the value for the natural area as a source of resources and leisure.

A key point to protect these areas is the creation of public and private CUs, seeking a favorable environment, mainly with enterprises-reservations, viewed by the community as models to be followed. However, the government still needs to create clear actions to support the implementation of CUs.

On the other hand, tourism in rural areas requires favorable conditions. A political-community organization is essential, in addition to public investment in basic infrastructure in the communities, especially in the maintenance of local roads and extension of the rural electric grid. The promotion of tourism must be guided by participatory and deliberative actions, mainly to implement tourist infrastructure (such as identification cards in the attractions) and route the places for tours.

National programs to promote tourism always bring the same interests, aimed precisely at creating favorable and satisfactory conditions to the tourist development. However, in effect, these actions always face the absence of



minimum conditions of support and even the disinterest or lack of training of local actors to act in a more active and consistent way. Therefore, one more expectation is created by small farmers, who, without working capital, depend on promises or programs that attempt to solve the great environmental-land-tourism impasse left as inheritance for this and for future generations.

In the APA, one can observe the absence of actions for community training and promotion of tourism, although the CU is an object of action of important programs by the federal government:

- a) The Program for the Development of Ecotourism in the Legal Amazon (PROECOTUR – *Programa de Desenvolvimento do Ecoturismo na Amazônia Legal*), which supported an important product of planning for this CU: the speleological management plan for two attractions of the APA (Caverna do Maroaga and Gruta do Batismo);
- b) TRAF, of the Ministry of Agrarian Development (MDA – *Ministério do Desenvolvimento Agrário*), is in its early stages and aims to: promote the sustainable rural development by the implementation and strengthening of tourist activities by family farmers, integrated with local productive arrangements in the adaptation and implementation of infrastructure, in the study of the law and technical regulations, and in the creation of a favorable environment to be inserted into the national market, improving local living conditions. Only the community of Boa Esperança participates in this program.

For ecotourism, the daily life of the communities is also an attraction, whose center is the historical context of occupation and use of natural resources, encouraging the continuity of knowledge and practices to a usufruct and healthy production. It is necessary to regulate the use of certain areas to conserve their biodiversity and production.

## CONCLUSIONS

On Amazon, rural tourism is developed in a few communities for different reasons, and it is little studied. The development of tourist activities in the state CUs is still in the structuring stage, being little stimulated by the government. One can also observe that the tourist locations are informal and driven by the visit of natural attractions, such as waterfalls, caves, igapó areas, stone inscriptions, endemic animal species, or interest in sport fishing.

Depicting the development of tourism in rural areas in the Amazon, APA Caverna do Maroaga is an example that this economic activity, directed to the natural tourist attractions, is not well organized and does not generate income for the communities. Thus, the tourist operation lacks environmental monitoring, social involvement, income distribution, and planning, which transforms this activity in mass tourism, detracts the landscape, and compromises the future the CU natural attributes, affecting the community routine and customs.

Community members have interest and motivation for tourism but are not prepared to establish enterprises nor receive guidance on the possible training courses in visitor administration and entrepreneurship. An APA dispenses

expropriation and action of the communities, being a significant factor to equate situations without practical solutions or expose the neglect of government agencies. Therefore, it is vital to promote an entrepreneurial mindset that claims more consistent actions from public authorities, or to provide, by associations, investments in the areas and in the hiring of consultants, for preparing consistent studies, aimed at the proper use of the region and ensuring new job opportunities to the community.

Thus, we highlight the need for:

- 1) Preparing studies on tourist supply/demand: the administration of tourism in the CU must meet basic infrastructure needs and have an appropriate management to the environmental conditions of the site; improving the availability of cards and routes and the trafficability conditions of roads and local roads. This will develop the tourist destinations, with their resources and defined and structured products (main, peripheral, and complementary), which affects their sustainability and, therefore, their life cycle, combined with a policy of disclosure of attractions and creation of businesses.
- 2) Paying for environmental services provided in the natural areas: as in the use of the image, APAs and private reserves are also excluded from the economic use of services from the region, which does not prevent the development of mechanisms to protect natural areas in private properties, to inhibit the advance of deforestation, promote the recovery of degraded areas, prevent the degradation of natural resources, and appreciate and organize natural/cultural attractions.
- 3) Studies of load capacity and administration of tourist visits: a properly implemented park has all the favorable conditions for a greater control over the flow of visits and power to count it, but how will this procedure be effective in an APA dominated by private areas and right to property? The alternative is to engage and persuade the owners to collaborate or impose sanctions with reprints of the Normative Instruction that regulates the public use of natural attractions, limits polluting activities, and records the number of visitors. Programs aimed at organizing the tourist use are essential, especially if based on load/support studies and tools to manage visitors and their preferences.
- 4) Improving the management of the natural areas: a comprehensive program of public use for this APA must offer conditions for current owners to participate in all phases of discussion and planning. This policy must have three basic pillars: (1) regulating tourism in natural areas, establishing conduct guidelines and standards subject to penalties; (2) providing the areas with adequate infrastructure to the biophysical conditions, adapting and studying the landscape feasibility of equipment in the environment, location signs, internal signaling, among others; and (3) professional training in natural areas for tourism.
- 5) Engaging the communities in the APA tourism planning: the communities have interest and motivation to work in projects of public use of natural areas

and in structuring actions of tourism, but they must use their expectations and desires to seek plausible solutions, which must be distributed in the communities and improve their housing conditions, access, infrastructure, and offer of attractions to meet the tourist demand.

We conclude that community involvement is essential in the formulation and management of projects, as it can solve other demands, such as land titling, professional training, and guidance for promotion, associations, and entrepreneurship.

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## CONTRIBUTIONS

**João Rodrigo Leitão dos Reis:** defined the research problem and objectives; developed the theoretical proposition; performed the literature review and theoretical framework; chose the methodological procedures; carried out data collection and analysis; prepared tables, graphs, and figures; wrote the manuscript and adapted it to the RTA standards.

**Julio César Rodríguez Tello:** defined the research problem and objectives; developed the theoretical proposition; performed the literature review and theoretical framework; chose the methodological procedures; carried out data analysis; conducted the critical review of the manuscript.

**Christina Fischer:** performed the literature review and theoretical framework; chose the methodological procedures; carried out data analysis; conducted the critical review of the manuscript; wrote the manuscript.