

MIRINGUAVA RIVER BASIN: TOURISM AS A POTENTIAL ACTIVITY FOR IMPROVING THE SOCIOECONOMIC AND ENVIRONMENTAL CONDITIONS OF SÃO JOSÉ DOS PINHAIS

BACIA HIDROGRÁFICA DO RIO MIRINGUAVA: O TURISMO COMO ATIDADE POTENCIAL PARA A MELHORIA DAS CONDIÇÕES SOCIOECONÔMICAS E AMBIENTAIS DE SÃO JO-SÉ DOS PINHAIS

CUENCA HIDROGRÁFICA DEL RÍO MIRINGUAVA: EL TURISMO COMO ACTIVIDAD POTENCIAL PARA LA MEJORA DE LAS CONDICIONES SOCIOECONÓMICAS Y AMBIENTALES DE SÃO JOSÉ DOS PINHAIS



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ABSTRACT

The Miringuava River basin is located in São José dos Pinhais and is the main source of water for the local population, integrating the basin system that also supplies the capital Curitiba and other cities in the metropolitan region. The Miringuava River dam and reservoir are part of the Curitiba Metropolitan Region Water and Sewage Master Plan, and the demand for restoration of the affected areas will lead to the emergence of new businesses, generating income diversification for local communities, as well as involving actors inside and outside the basin. The objective of this research is to diagnose tourism as a potential activity for improving the socioeconomic and environmental conditions of São José dos Pinhais. The socioeconomic and environmental challenges related to the use of water resources, as well as the economic dependence on agricultural production, are highlighted. Among the possible strategies, sustainable tourism stands out as a potential activity consistent with the socioeconomic development of the region, since it is committed to the conservation of natural resources, the appreciation of regional culture, and the pursuit of improving the living conditions of local residents. It was concluded that tourism is a potential activity for the development of the municipality, with its main attractions being the appeal of water security, its natural beauty, and the local community through historical and cultural preservation.

Keywords: Sustainability. Local Communities. Sustainable Tourism. Rural Tourism.

RESUMO

A bacia hidrográfica do rio Miringuava localiza-se em São José dos Pinhais e é a principal fonte de água da população local, integrando o sistema de bacias que abastece também a capital Curitiba e outras cidades da região metropolitana. A barragem e reservatório do rio

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Miringuava fazem parte do Plano Diretor de Águas e Esgotos da Região Metropolitana de Curitiba, sendo que a demanda por restauração das áreas afetadas proporcionará o surgimento de novos negócios gerando diversificação de renda às comunidades locais, além de envolver atores dentro e fora da bacia. O objetivo desta pesquisa é diagnosticar o turismo como uma atividade potencial para a melhoria das condições socioeconômicas e ambientais de São José dos Pinhais. Destacam-se os desafios socioeconômicos e ambientais, relacionados ao uso dos recursos hídricos, além da dependência econômica da produção agropecuária. Dentre as estratégias possíveis, o turismo sustentável destaca-se como uma atividade potencial condizente com o desenvolvimento socioeconômico da região, a partir do momento em que está comprometido com a conservação dos recursos naturais, a valorização da cultura regional, como também na busca de melhoria das condições de vida dos moradores locais. Concluiu-se que o turismo é uma atividade potencial para o desenvolvimento do município, tendo como principal atrativo o apelo pela segurança hídrica, suas belezas naturais e a comunidade local, através do resgate histórico-cultural.

Palavras-chave: Sustentabilidade. Comunidades Locais. Turismo Sustentável. Turismo Rural.

RESUMEN

La cuenca del río Miringuava se ubica en São José dos Pinhais y constituye la principal fuente de agua para la población local, integrando el sistema de la cuenca que también abastece a la capital, Curitiba, y a otras ciudades de la región metropolitana. La presa y el embalse del río Miringuava forman parte del Plan Maestro de Agua y Alcantarillado de la Región Metropolitana de Curitiba, y la demanda de restauración de las áreas afectadas propiciará el surgimiento de nuevos negocios, generando diversificación de ingresos para las comunidades locales e involucrando a actores dentro y fuera de la cuenca. El objetivo de esta investigación es diagnosticar el turismo como una actividad potencial para mejorar las condiciones socioeconómicas y ambientales de São José dos Pinhais. Se destacan los desafíos socioeconómicos y ambientales relacionados con el uso de los recursos hídricos, así como la dependencia económica de la producción agrícola. Entre las posibles estrategias, el turismo sostenible se destaca como una actividad potencial compatible con el desarrollo socioeconómico de la región, ya que está comprometido con la conservación de los recursos naturales, la valorización de la cultura regional y la búsqueda de la mejora de las condiciones de vida de los residentes locales. Se concluyó que el turismo es una actividad potencial para el desarrollo del municipio, siendo sus principales atractivos el atractivo de la seguridad hídrica, sus bellezas naturales y la comunidad local a través de la preservación histórica y cultural.

Palabras clave: Sostenibilidad. Comunidades Locales. Turismo Sostenible. Turismo Rural.

1 INTRODUCTION

In 2017, the Sanitation Company of Paraná began the construction of a dam that will be part of the supply system of Greater Curitiba. The Miringuava River reservoir was designed to strengthen water security for more than six hundred thousand people in Curitiba and the Metropolitan Region (SANEPAR, 2025).

The installation of the Miringuava dam and reservoir is a reality, therefore, by itself the project already causes changes in the local way of life, land use, changes in flora and fauna, in addition to impacts on the local community. On the other hand, as long as it occurs in a planned way, opportunities will be created for the development of sustainable tourism.

The objective of this research is to diagnose tourism as a potential activity for the improvement of the socioeconomic and environmental conditions of São José dos Pinhais. The specific objectives are:

- a) Develop the state of the art on rural tourism, sustainable development and local communities;
- b) Describe which potentialities of the Miringuava River basin favor Sustainable Tourism;
- c) Identify how tourism can generate market value for the local economy.

According to the Department of Social and Economic Indicators of the Municipal Secretariat of Planning and Economic Development of the Municipality of São José dos Pinhais, agriculture has always been a traditional sector in the São José economy. With industrialization, technological advances did not prevent farming communities from continuing their development.

The municipality has also been gaining prominence in the production of organic and honey, from the breeding of stingless bees, coordinated by the Association of Organic Producers and Meliponiculturists of São José dos Pinhais (APROMEL).

In addition, the involvement of actors from different sectors with common interests has the advantage of creating shared value and enhancing results. Among the possible strategies, tourism stands out as a potential activity consistent with socioeconomic development, from the moment it is committed to the conservation of natural resources, appreciation of regional culture and improvement of the living conditions of local communities.

In order to contribute to the rural development of São José dos Pinhais, the research was carried out in order to generate subsidies for the implementation of actions and enterprises aimed at tourism in the region.

2 THEORETICAL FRAMEWORK

2.1 RURAL TOURISM

According to Lane *et al.* (2022), rural tourism became a worldwide and growing activity in the late 1970s and early 1980s. At first, it was seen as an unimportant activity, perhaps tending to disappear in the future. However, it has proven to be extremely important to the development of sustainable tourism, leading the way for the creation of new tourism modalities based on growing niche markets.

According to the Ministry of Tourism (BRASIL, 2003), although visiting rural properties is an old practice in Brazil, displacement to rural areas began to be faced with professionalism in the eighties, when some properties in Rio Grande do Sul Santa Catarina, due to the difficulties of the agricultural sector, decided to diversify their activities and began to receive tourists.

According to Souza and Dolci (2019, p. 26), the typical characteristics of the rural environment, such as gastronomy, natural and cultural heritage, customs, as well as the possibility of leisure and rest have increasingly attracted city dwellers.

In this context, several types of tourism proliferate, such as ecotourism, rural tourism and cultural tourism, enabling new ventures in rural spaces.

The concept of rural tourism adopted by the Ministry of Tourism is based on aspects that refer to tourism, territory, economic base, natural and cultural resources and society.

Based on these aspects, Rural Tourism is defined as the set of tourist activities developed in rural areas, committed to agricultural production, in addition to adding value to local products and services, rescuing and promoting the cultural and natural heritage of local communities (BRASIL, 2003, p. 11).

According to Petrović *et al.* (2018), rural tourism contributes not only to the greater profitability of families, but also to the sustainable development of rural areas, diversity of tourist offers and improvement of the quality of life of local communities in the countryside.

In addition to the commitment to agricultural activities, it is characterized by the appreciation of natural and cultural heritage, being part of the tourist offer in rural areas.

Therefore, entrepreneurs must maintain authenticity, through the rescue of regional manifestations and practices such as gastronomy, folklore, handicrafts, in addition to ensuring the conservation of the natural environment.

According to Visentin and Vallerani (2018), the restructuring of the agricultural sector through tourism is an alternative strategy for the development and consequent economic and social growth of rural areas.

Rural tourism is not necessarily located in an intensely productive rural area, but in

specific landscapes with rural characteristics.

This type of tourism finds its roots in rural landscapes where local cultures still influence the Cloydian lifestyles. The increase in demand for rural tourism and the growing demand for organic and authentic products has attracted new residents to the countryside (VISENTIN and VALLERANI, 2018).

For Lane *et al.* (2022), rural tourism, like other forms of tourism, was once based on visiting a place. It's still place-based, but its main draw is providing experiences. In other words, it is necessary to sell long-term and short-term experiences. Just knowing the place is no longer enough.

2.2 SUSTAINABLE DEVELOPMENT

For Barbieri *et al.* (2010), the values linked to sustainable development and respect for environmental policies have been institutionalized in several countries, socio-environmental movements and governments. As a response to these institutional pressures, new organizational models emerge, seen as the most appropriate for this new cycle, as is the case of sustainable innovative organizations.

According to Philippi Jr. *et al.* (2013, p.511), "growing reflections on environmental accidents that occurred and the need to review the paradigms then in force stimulated countries and the international community to develop joint actions". In other words, the population realized the importance of valuing and protecting cultural capital, based on the protection of ecosystems and natural resources.

The first dimension of sustainable development is environmental, whose production and consumption model is compatible with the material base on which the economy is based, as a subsystem of the natural environment. It is, therefore, a matter of producing and consuming in a way that ensures that ecosystems can maintain their capacity for resilience (DO NASCIMENTO, 2012, p. 55).

The second dimension is the economic one, with increased efficiency of production and consumption with increasing savings of natural resources, with emphasis on permissive resources such as fossil sources of energy and resources such as water and minerals. The third dimension is the social one. A sustainable society supposes that all citizens have the minimum necessary for a dignified life and that no one absorbs goods, natural and energy resources that are harmful to others (DO NASCIMENTO, 2012, p. 55).

For Jacobi (2003), the concern with sustainable development generates socio-political changes that do not compromise the ecological and social systems that sustain the communities.

On the other hand, the same balance required to ensure environmental conservation must also be ensured to society, involving the social, economic, political, ethical and environmental variables, which indicate the degree of sustainability of a society, as proposed by Emery (2016).

Thus, the integral development of any territory depends on the construction of sustainable bases, supported by the tripod of social justice, economic viability and environmental balance (PHILIPPI JR. *et al.*, 2014, p.30).

According to Sanches (2000), environmental management aims to "manage the organization's relations and interactions with the environment, evaluating and correcting present environmental problems, minimizing future negative impacts".

In this sense, the production of knowledge must contemplate the natural and social environment, including the analysis of the determinants of the process, the role of the various actors involved and the forms of social organization that increase the power of alternative actions for a new development, with an emphasis on socio-environmental sustainability (JACOBI, 2003, p. 3).

According to Feliciano (2015), the term sustainability can be used to express what is durable and remains over time.

Based on the assumption that social relations are perpetuated through the harmonious interaction between social beings among themselves and in relation to nature.

Although the concepts mentioned above are widely used, there is no single vision of what sustainable development is. Even Dias (2003, p.48) states that for some authors, achieving sustainability is to obtain economic growth through more rational management of natural resources and the use of more efficient technologies. For others, sustainable development is a social and political project aimed at eradicating poverty, raising the quality of life, and meeting the basic needs of the local community.

According to Dias (2003, p. 50), "the search for sustainable development revalues traditional forms of production, generating new forms of productive organization in almost all economic and social activities".

For Sachs (2008), sustainable development obeys the double ethical imperative of solidarity with present and future generations, and requires the explicitness of criteria of social, environmental and economic sustainability. Strictly speaking, solutions that consider these three elements, that is, that promote economic growth with positive impacts in social and environmental terms, deserve the name of development.

For Beni, Sustainable Tourism involves understanding the impacts of tourism; equal distribution of costs and benefits; generation of local jobs; promotion of profitable businesses;

injection of capital with consequent diversification of the local economy; interaction with all sectors and segments of society; strategic and logistical development of means of transport (BENI, 2003, p. 14).

2.3 LOCAL COMMUNITIES

According to Polukhina *et al.* (2021), mass tourism will have to give way to tourism that respects the interests of local communities, not limited to profit alone. This implies new strategic decisions and focuses on tourism modalities such as rural tourism and ecotourism.

According to Streimikiene *et al.* (2020), tourism services have an impact not only on the environments, but also on the local population, generating jobs and contributing to the well-being and development of local communities.

For Aman *et al.* (2019), tourism contributes to economic growth. The concerns associated with the local community contribute to a more participatory management. Planning a sustainable tourist destination requires the support of local communities, as it involves reception and hospitality that are key to the satisfaction of tourists, contributing to local development.

According to Gastal (2021), excluding nature, the picturesque would be redimensioned, when cities start to be sought after by tourists, for differentiated cultural experiences.

The development of sustainable tourism generates additional revenue for actors who invest in the development of local tourism and the conservation of tourist attractions, ensuring the sustainability of tourist areas (AMAN *et al.*, 2019).

According to Flores e Silva, Cunha Lima and Christoffoli (2016), it is important to understand that projects of this nature contemplate the development of rural infrastructure and strengthen the capacity of local communities to foster networks and societies that lead to the creation of institutions, exhibitions and training for the management of this form of tourism.

For Reher (2022), one way for farmers to benefit from tourism is to bring back the original idea of rural tourism, in which tourists experience the work of a farm as a way to escape urban life and return to a cultural environment.

It is necessary to value cultural heritage in order to benefit and empower local communities. This needs to be integrated into a broader sustainable development strategy that emphasizes entrepreneurship and social innovation associated with the cultural landscape. In this sense, measures to maintain and protect the traditional use of local land are practical strategies for the preservation of cultural values (REHER, 2022).

According to Lima (2019), this change in posture receives various denominations according to the vocation of the territories and populations where it occurs, assuming to be: community, local development, creative, experience, solidarity and social.

3 METHODOLOGY

For Marconi and Lakatos (2010), research produces science when it systematizes knowledge, proposes and logically organizes a set of "propositions about the behavior of certain phenomena that one wishes to study". Research, for these authors, "consists of the observation of facts and phenomena as they occur spontaneously, the collection of data related to them and the recording of variables that are presumed relevant, in order to analyze them".

The definition of the research method of this study considered the following classifications: nature of the research, collection environment, objective, nature of the data and research procedure.

Table 1

Research classification table

Classification	Type
Regarding the nature of the research	Applied
Collection environment	Field research
The objective	Exploratory
The nature of the data	Qualitative
Regarding the search procedure	Case Study

Source: Authorship (2025).

From the point of view of its nature, it is an applied research, since it aims to generate knowledge for practical and immediate application in a circumstantial reality, aimed at solving specific problems (GIL, 2010).

It is noteworthy that the applied nature aims to generate knowledge for practical application and solution of specific problems, involving local truths and interests (SILVA; MENEZES, 2005).

As for the collection environment, this research is classified as experimental field research. That is, they will be complemented with semi-structured interviews and questionnaires with a set of social actors (HOUTART, 1994).

The semi-structured interview is a scientific activity that brings the researcher closer to the reality studied, combining everyday facts with the existing theory on the subject. For Richardson (1999, p. 160) the interview "is a technique that allows the development of a close relationship between people".

From the point of view of its objectives, since no scientific studies were found on the potential of the Miringuava River basin for Sustainable Tourism, the research is classified as exploratory.

For Gil (2010), it aims to provide greater familiarity with the problem to make it explicit or to build hypotheses, based on a bibliographic survey, interviews with people who had practical experiences with the problem in question, and analysis of examples that stimulate its understanding.

The approach of this research provides for the investigation of the qualitative characteristics of the phenomenon studied in a subjective way, in order to build its own concepts about the phenomenon studied, as described by Lozada and Nunes (2019).

For the authors, qualitative research has the following characteristics: the native environment is the source of data collection; the researcher is considered the main instrument for data collection; the research uses processes of detailing the observed reality and seeks the meaning of the situations and their impacts for the researched group (LOZADA and NUNES, 2019).

According to Minayo (2014), qualitative research responds to particular questions, which corresponds to a deeper space of relationships, processes and phenomena that cannot be reduced to the operationalization of variables.

Regarding the research procedure, this study is characterized by an approach restricted to the local communities of São José dos Pinhais, a phenomenon with qualitative characteristics studied subjectively.

As for the point of view of technical procedures, in Gil's (2010) view, it is a bibliographic study consisting mainly of scientific articles, added to scientific journals, in addition to research carried out on the internet as part of the theoretical framework of the study. Thus, from the literature review the necessary elements will be obtained for the elaboration of the proposed structure.

3.1 DATA COLLECTION

The data collection phase began with the definition of the criteria for selecting the participants. These criteria determined what requirements the participants needed to meet in order to be selected. This procedure was fundamental to maintain scientific rigor in qualitative research and to establish transparency in relation to the decisions made (FLICK, 2009b).

Those selected from the local community should live near the surroundings of the Miringuava River Dam, work with agricultural activity, tourism or other enterprise in the place.

In the case of regional development support entities, they are professionals who have had contact with projects in the Miringuava River basin region in São José dos Pinhais – PR.

The stage of selecting the sample of interviewees was part of the data collection phase. For Flick (2009a), the sample in qualitative research should follow different criteria from quantitative research and aims to search for examples of individuals who have some relationship with the object studied.

The interviewees were chosen based on the previously established criteria and according to availability, as it was necessary for the individual to be willing to participate in the research over a certain period of time.

Ten residents of the Miringuava River dam region were interviewed, who were within the previously established criteria and willing to participate in the research. The interview was also conducted with eight representatives of entities that support regional development.

The contact with the local community was made in person in the region around the Miringuava River Dam in São José dos Pinhais - PR, in their homes. The criteria for choosing the interviewees was carried out through a visit to the site of the Miringuava River dam.

4 RESULTS AND DISCUSSIONS

The purpose of this chapter is to present the results of the research, in addition to the empirical structure from the collection and analysis of data. The results and discussions were elaborated from the detailed analysis of the bibliographic research that led to a series of reflections regarding the themes that involve the research.

Data collection was done through interviews with the local community and took place in person in the region of the Miringuava River basin. All data collected were properly stored, as well as procedures to ensure the secrecy and confidentiality of the research participant's information.

Data analysis was carried out with previously established criteria and supported by the related literature and documentary research. It is noteworthy that all the interviewees, both from the local community and representatives of entities that support regional development, have knowledge about the construction of the dam and reservoir of the Miringuava River.

According to interviewee E3, the proximity of Curitiba and the coast, both location and access, favor the development of tourism in the region. For interviewee E4, the proximity to large urban centers and favorable relief facilitates the movement of tourists.

In addition to São José dos Pinhais being crossed by three important highways (BR-376, BR-277 and BR-116), it is close to the Port of Paranaguá, in addition to having the Afonso Pena international airport. It is located sixteen kilometers southeast of the capital,

with the limits of the municipalities of: Pinhais and Piraquara to the north; Tijucas from the South to the South; Morretes and Guaratuba to the East; Curitiba, Fazenda Rio Grande and Mandirituba to the west, being accessible by BR-376.

The geographical position of the Miringuava basin, close to two federal highways, the capital and large urban centers, becomes strategic for the development of tourism.

According to interviewee E13, eighty percent of visitors are from Curitiba, that is, the proximity to large urban centers is a potential. They are people who move from the capital in search of contact with nature and contact with the rural environment.

With great potential and a growing tourist demand, the Miringuava River basin region has natural landscapes, family farming properties, colonies of immigrants and their cultures, vineyards, the appeal for water conservation, the historical context of the construction of the dam, in addition to the future reservoir, at first, for contemplation purposes.

In addition to attracting visitors from other regions, tourism has the potential to stimulate local commerce, diversifying the economy and generating jobs. It will also be able to promote historical rescue, gastronomy, in addition to creating business opportunities for the local community, taking advantage of the historical-cultural heritage of European immigrants.

According to interviewee E17, the location of the Miringuava River basin region is strategic and facilitates the reception of tourists.

According to interviewee E7, many local residents are still afraid of the transformations that the dam requires, especially in terms of production. In this case, tourism is an alternative income, generating less environmental impact and providing a positive impact, as they will not need to leave the place to have another source of income.

With the Miringuava dam, the appeal for the conservation of water resources, conservation of biodiversity is enormous. Tourism is an opportunity to generate income, as long as the local community is trained, as the owners of the region are simple people. Local development should be aligned with sustainability, as it is a source area. The main economic aspect of the region is olericulture, but it needs to reduce the use of agrochemicals (E1, 2025).

In the region of the dam there are family enterprises where visitors have the opportunity to pick fresh fruits and vegetables directly from the tree. Some enterprises also have leisure structures such as fish and pay.

Some entrepreneurs already have good practices with receiving a certificate. The potential is an appeal for water preservation. There are several actors working on the ground,

moving the region through projects such as the Viva Água Movement of the Boticário Group Foundation, the city of São José dos Pinhais, and Sanepar (E7, 2025).

According to interviewee E1, sustainable tourism has the potential to promote harmony between the local community and nature, attracting tourists looking for rural activities in the Atlantic Forest.

For Petrović *et al.* (2018), rural tourism contributes not only to the greater profitability of families, but also to the sustainable development of rural areas, diversity of tourist offers and improvement of the quality of life of local communities in the countryside.

In addition to the landscapes, the region has the potential for socio-environmental education through pedagogical tourism in rural areas, aimed at preserving biodiversity and water. It is possible to develop environmental education practices through interpretive trails, tree planting and guidance on water conservation and nature preservation.

It can be seen that the appeal for environmental conservation is enormous because it is the main source of supply for the city of Curitiba and the Metropolitan Region. Rural tourism involves tourist activities developed in rural areas, committed to agricultural production, in addition to adding value to local products and services, rescuing and promoting the cultural and natural heritage of local communities (BRASIL, 2003, p. 11).

The analysis of the research data allows us to conclude that the region of the Miringuava River basin will be able to create experiences such as the contemplation of these landscapes, conversations with the local community in order to learn more about the culture and traditions, cultivation and harvesting of fruits and vegetables, animal handling, beekeeping, awareness of the importance of water for future generations, in addition to raising awareness about the climate impacts caused.

In addition to the commitment to agricultural activities, it is characterized by the appreciation of natural and cultural heritage, being part of the tourist offer in rural areas. Therefore, entrepreneurs must maintain authenticity, through the rescue of regional manifestations and practices such as gastronomy, folklore, handicrafts, in addition to ensuring the conservation of the natural environment.

In other words, it is possible to strengthen the provision of accommodation, food and leisure services in family units, creating tourist activities integrated with environmental protection and historical-cultural rescue of the local community.

According to the survey with representatives of entities that support regional development, tourism will diversify the local economy, generating income and local jobs. It is important to encourage water conservation, socio-environmental education, in addition to the preservation of local biodiversity.

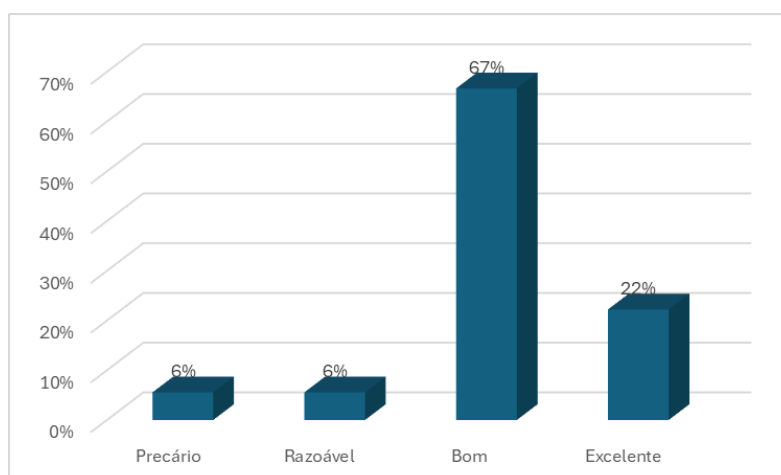
According to interviewee E2, if tourism is developed in a sustainable way, it can help in the development of the local community. Interviewee E18 emphasizes the exuberant nature of the region and the appreciation of culture aimed at tourist interest.

It can be seen that the local community values natural landscapes and is aware of the preservation of biodiversity. For them, it is very important to rescue the historical-cultural and the appreciation of the existing cultures in the region.

According to interviewee E4, the potential is the history of the dam itself and how much it has changed the local community, in addition to the recomposition of vegetation through the formation of an ecological corridor, facilitating the observation of the flora and fauna of the region. It is worth mentioning that for 67% of respondents, the offer of natural and cultural attractions in the region is good.

Figure 1

Natural and cultural attractions



Source: Authorship (2025).

5 CONCLUSION

The study highlights the potential for sustainable tourism, but still facing structural challenges, such as sanitation, precarious access and insufficient signage. Despite this, there is a potential for growth, driven by the training and appreciation of the local community, consolidating tourism as a vector of sustainable development for the region.

It is necessary to satisfy the needs of visitors and the socio-economic needs of the region, in order to maintain cultural aspects, the integrity of natural environments and biological diversity in order to allow the practice of tourism in the long term. In this way, it will be possible to develop urban and environmental sustainability, considering the development of local communities and their current and future environmental, social and economic impacts.

Tourism has the potential to generate jobs, in addition to diversifying the sources of income of the properties, adding value to local products through experiences such as rural coffees, harvest and pay, environmental education, contemplation of nature combined with thematic itineraries.

Therefore, it is important to reduce impacts in order to encourage the inclusion and strengthening of the environmental dimension in the educational process, in order to prevent and mitigate impacts on the environment. It is perceived that there is a strong bond with nature, and tourism is perceived as a way to preserve family traditions, valuing local culture and strengthening community ties.

It is also important to develop tourism products and itineraries that reflect the natural, cultural and social integrity of the destination, taking into account the negative impacts related to climate change, resource depletion, among other factors that may compromise the continuity of tourism activities in the future.

These elements reinforce the role of sustainable tourism as a tool for cultural appreciation, environmental preservation and strengthening of community bonds. In other words, sustainable tourism has potential in the region as long as its planning contemplates new alternatives as a source of work and income, promoting an interaction between the region and other existing tourist routes in São José dos Pinhais.

Within this context, it is necessary to encourage municipal and state public policies, promoting equality and meeting the collective needs of the local community in the region. As well as policies to direct and mobilize economic resources in order to encourage tourism in this region, attracting sources of financing so that small local landowners can promote tourism activity.

In this way, tourism will encourage the restoration of degraded areas within properties, promoting environmental education and awareness, raising awareness about the importance and respect for natural heritage, controlling the flow of visitors and tourist activities in a sustainable way.

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