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## TOURISM AND SECOND RESIDENCE IN RONDONÓPOLIS – MT: THE PROCESS OF SOCIO-SPATIAL OCCUPATION OF ` ` RODOVIA DO PEIXE ` ` (MT – 471)

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*Silvio Moises Negri*

<http://lattes.cnpq.br/1106288907071464>

*Marcelo Cervo Chelotti*

<http://lattes.cnpq.br/7311791678201968>

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**Abstract:** The growing presence of second homes along ``Rodovia do Peixe``, in Rondonópolis since 2009, has raised questions about the impacts of this form of occupation on the socio-spatial and economic organization of the region. This study aimed to analyze the role played by these second homes and their effects on local dynamics. To this end, a methodology was used that includes analysis of cartographic data, empirical research with several institutions and the use of the Case Study as an investigation method. The general objective of this study is to analyze the role played by second homes on ``Rodovia do Peixe``, in Rondonópolis- MT, from 2009 onwards, and their impacts on the socio-spatial and economic organization of the region. Land use maps and software were used to map areas with second homes, on-site research with various institutions and primary and secondary data collections. In the theoretical-methodological framework, the Case Study was used as a comprehensive method. The object of study was MT – 471, known as ``Rodovia do Peixe``, in Rondonópolis - MT. It is concluded that the analysis of the role of second homes on ``Rodovia do Peixe``, in Rondonópolis, Mato Grosso, reveals not only the occupation patterns, but also the significant impacts on the socio-spatial and economic organization of the region.

**Keywords:** Tourism, Second Home, Rondonópolis, ``Rodovia do Peixe``, Socio-Spatial Organization.

## INTRODUCTION

The socio-spatial organization of medium-sized Brazilian cities has been the object of growing academic interest due to urban and territorial transformations resulting from phenomena such as population growth, disorderly urban expansion and real estate appreciation. In this context, the emergence and growth of second homes have stood out as influential elements in the configuration of urban space and the socioeconomic dynamics of these locations.

``Rodovia do Peixe`` (MT-471), located in Rondonópolis, Mato Grosso, is an emblematic example of this trend. Since 2009, this region has witnessed a significant increase in second home occupation, driven by socioeconomic factors and the search for a lifestyle closer to nature.

Given this context, there is a need to understand more deeply the role of second homes on ``Rodovia do Peixe`` and their impacts on the socio-spatial and economic organization of the region. This analysis is relevant not only to understand local transformations, but also to contribute to broader reflections on urban development, sustainable tourism and territorial management in medium-sized Brazilian cities.

With this in mind, the following question arises: How has the presence and growth of second homes along ``Rodovia do Peixe`` affected the socio-spatial and economic organization of Rondonópolis - Mato Grosso?

The transformations on ``Rodovia do Peixe`` reflect urban growth driven by real estate production and marketing, with the search for a better quality of life and proximity to nature. Real estate appreciation, combined with the lack of adequate spaces in the urban area dedicated to leisure, led to the development of second homes.

The study of second homes on ``Rodovia do Peixe`` is relevant because it offers insights

into how the dynamics of tourism, leisure and urbanization influence the socio-spatial and economic organization of medium-sized Brazilian cities. Furthermore, it contributes to understanding the implications of real estate appreciation and disorderly urban growth.

The general objective of this study is to analyze the role played by second homes on ``Rodovia do Peixe``, in Rondonópolis - Mato Grosso, from 2009 onwards, and their impacts on the socio-spatial and economic organization of the region. To achieve this objective, the specific objectives are: to investigate the socioeconomic factors that led to the consolidation and spatial occupation along ``Rodovia do Peixe``; understand the process of real estate appreciation and its relationship with the development of tourism and leisure in the region; and evaluate the consequences of the emergence and growth of second homes on the spatial organization and lives of small local farmers.

## METHODOLOGY

The methodology consisted of the following instruments: technical, empirical and theoretical-methodological. Thus, land use maps were created, created and handled, using aerial photos and digital cartographic bases, as well as appropriate software for analyzing the object of study.

In order to present the areas with second homes, geoprocessing software was used to map and delimit the scope of ranches and sites based on appropriate literature.

Empirical investigation research was also carried out on site, with Rondonópolis City Hall, the real estate market, construction companies, land owners and organized civil society, through primary and secondary data collections, as well as in any other competent institution.

In this research, it was necessary to use the Case Study as a comprehensive method,

which was considered for the present work. This method describes a real problem situation, experienced within a space, and which requires strategic decisions. The “conclusion” is a set of questions that outline different possibilities for strategic action. It brings together a large amount of qualitative and quantitative information – that is the art of the case study: using the information in an objective way, accessible to the layman while at the same time organizing it into an underlying theoretical structure.

As the case study has a relative dose of theory, the researcher has the opportunity to apply their formal knowledge in concrete situations.

However, without losing sight of the need for a critical view of socioeconomic reality, the differences and conflicts that exist between social classes distributed in geographic space.

## RESULTS AND DISCUSSION

Rondonópolis is a city located in the Southeast region of the state of Mato Grosso, 215 km from the capital, Cuiabá. Its geographic coordinates are approximately latitude 16°28'15" South and longitude 54°38'08" West, with an altitude of 227 meters (NEGRI, 2008).

According to Negri (2008), the municipality of Rondonópolis is located in the microregion that bears its name, standing out as an economic leader among the surrounding municipalities, and inserted in the southeastern mesoregion of Mato Grosso. Recognized as the “Gateway to the Amazon” due to its strategic geographic position, on the banks and at the confluence of the Vermelho and Arareau rivers, and located at the junction corridor of BRs 364, 163 and 070, it has become an obligatory passage to the North, South and Southeast of the country.

In recent years, Rondonópolis has experienced notable development, mainly driven by agriculture and livestock, with emphasis on soybean cultivation, which has led the region to become one of the largest grain producers and the modernization of rural businesses.

The municipality of Rondonópolis, as well as the State of Mato Grosso, presents a diversity of edaphic landscapes, resulting from different formations, including ancient morphopedological surfaces with latosol, areas of river erosion with quartz sands, areas of river accumulation with sands hydromorphic and glei soils, in addition to the scarps and dissected edges with litholic soils.

With a tropical climate, characterized by hot, humid summers and hot, dry winters, Rondonópolis has an average annual temperature of 25 °C and an average minimum temperature of 18.6 °C. The hottest months are September and October, with average temperatures above 26 °C, while the coldest months are June (21.9 °C) and July (22.3 °C). Regionally, it is located in an area of hot tropical continental climate, alternately humid and dry, due to the variation of tropical, equatorial and extratropical systems (PMR, 2018).

Due to the very hot climate, the population seeks areas with lush vegetation, rivers and waterfalls to cool off. Tourism in Rondonópolis is driven by agribusiness, but the region's natural beauty also attracts tourists interested in nature tourism. The region is rich in waterfalls and rivers suitable for fishing, practicing extreme sports such as abseiling or simply contemplating the nature of the cerrado.

The MT-471 state highway, known as ``Rodovia do Peixe``, is located within the municipality of Rondonópolis, with its entrance close to the city's urban perimeter. This highway was named in honor of Isabela Carrasqueira Smozinski, a young Psychology

student at ``Universidade de Cuiabá`` – UNIC, resident in Rondonópolis, who died in a traffic accident in 2009. Opened on October 11, 2009, the road was named after in honor not only of the young woman, but also of her family.

According to Mauro Renato Smozinski, businessman in the transport sector and elected president of the Rotary Clube Rondonópolis Leste, Isabela, the psychology student, was the granddaughter of pioneers from Rondonópolis, belonging to the Anjos Carrasqueira family, who arrived in the municipality in 1952. Only now, through his daughter, the family was honored. Mauro shared that Isabela was deeply loved, had a passion for nature and eagerly awaited the opening of MT-471, where the family owned properties.

The inauguration took place during the mandate of Governor Blairo Maggi, with an investment of approximately R\$12.9 million in paving and signage. The works began in September 2008 and were completed in 2009 (PMR, 2018).

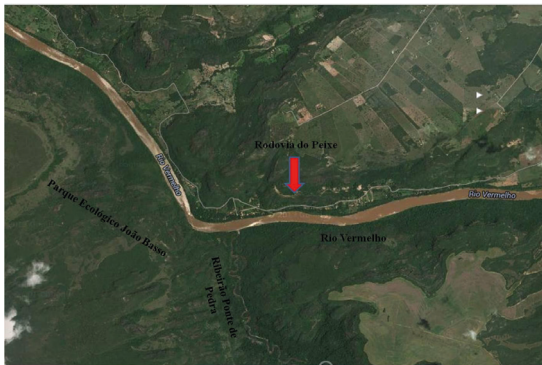
The MT-471, made up of around 24 kilometers of paved road, as illustrated in (figure 01), is equipped with horizontal and vertical signage, in addition to many curves that highlight the natural beauty of the region, on the banks of the Red River. This highway connects Rondonópolis to the famous tourist location known as “Stone City”.



Figure 01: Beginning of ``Rodovia do Peixe``

Source: Pereira, 2014

``Stone city`` is a set of rock formations located in a Permanent Preservation Reserve (RPPN), where archaeological sites with rock inscriptions are also found. Access to this location is via the ``Rodovia do Peixe`` region, using boats. Within this area is the João Basso Ecological Park, a private environmental preservation area, which includes waterfalls, caves, rock inscriptions and trails that lead to ``Stone city``. This Ecological Park covers an area of 3,624.57 hectares and was recognized as a permanent preservation reserve by IBAMA in 1997, through Ordinance nº 170, dated December 30, 1997, as illustrated in figure 02.



**Figure 02:** ``Rodovia do Peixe`` x João Basso Ecological Park

Source: Google Earth (2013)

The gorge valley, the result of the Ribeirão Ponte de Pedra docking to reach the Red River, on sandstones and siltstones of the Furnas Formation, forms a scenic landscape of rare beauty, with rapids, waterfalls and rocky outcrops.

The reference configuration for the cultural tourist itinerary in Rondonópolis includes the attractions of Rio Vermelho, Caís and Parque das Águas. The Red River has always played a significant role in the lives of the pioneers who arrived in the region, being in some cases an obstacle to be overcome and in others a source of transport and fishing that facilitated the colonization of the unexplored area. To

enhance the area along the Vermelho River, an architectural project was built representing the Cais do Rio monument, next to the Casario on Avenida Marechal Rondon, materializing the history of the site of the old ferry that crossed this point.

Currently, Parque das Águas offers a variety of leisure options, including a walking track, multi-sports courts, a football and sand volleyball court, a gym for seniors and a space with a skate and roller-skating rink. The environment is wooded with native and exotic species, providing a pleasant environment for visitors. From Caís, it is possible to take river trips to the surroundings of Aldeia Bororo, or follow the MT-471, ``Rodovia do Peixe``, to the João Basso Ecological Park.

It is evident that the Red River has always played a notable role in the lives of the population of Rondonópolis, since the beginning of its foundation, being used for subsistence and income generation. Nowadays, it offers a variety of leisure options, with emphasis on Parque das Águas and Caís. The MT-471 became known as ``Rodovia do Peixe`` due to the abundance of these animals in the region, attracting many fishermen.

The construction of the highway benefited around 130 families in the region, stimulating tourism and bringing economic benefits to small farmers and rural landowners. The infrastructure of the neighborhoods was also improved, facilitating access to the city center and improving the quality of life for residents and tourists. Residents also highlight that the highway brought significant improvements to the education of children, who began to attend school more regularly and safely. Before the construction of the highway, farmers in the region faced difficulties due to dust during the dry season and mud during the rainy season.



Residents of the region subsist mainly through family farming, fishing, livestock, fruit production and tourism. Tourists and visitors are attracted to the ranches along the highway in search of the beauty of the natural landscapes and the diverse leisure options provided by local residents. These options include areas for swimming and fishing, as well as accommodation and food.

Visitors are amazed by the natural landscapes, which include waterfalls, caves, rock formations, animals, lush vegetation, hot springs and a variety of restaurants offering local delicacies. While traveling along the highway, it is possible to contemplate, on both sides, a variety of stunning landscapes, characterized by a wide diversity of vegetation.

### **SOCIOECONOMIC FACTORS THAT ENABLED CONSOLIDATION AND SPACE OCCUPATION ALONG THE PEIXE RODOVIA**

Regional economic growth driven by agribusiness, especially soybean cultivation, has stood out as a vital engine for the development of several areas. The continuous expansion of this agricultural activity not only strengthens local economies, but also contributes significantly to the growth of the country as a whole (ARAÚJO, 2015).

Soy, as the dominant crop, has been one of the main pillars of this growth. Its versatility and global demand have encouraged farmers to expand their plantations, increasing productivity and generating jobs throughout the production chain (MYANAKI, 2007). From production on farms to transport and export logistics, soy agribusiness drives a series of economic sectors.

The development of agribusiness creates opportunities for technological innovation and the adoption of sustainable practices. Investments in research and development

constantly seek to improve efficiency and try to reduce the environmental impacts of soy production, ensuring its long-term viability (MARTELLO, 2015).

Regional economic growth resulting from soy agribusiness is not limited to the financial sphere alone. It also plays a crucial role in social development, providing infrastructure, access to basic services and improvements in the quality of life of rural communities.

However, it is important to address the challenges associated with this growth, such as environmental, social and economic issues. The uncontrolled expansion of soybean plantations can lead to environmental degradation, land conflicts and social inequalities (COSTA, 2010). Therefore, it is essential to adopt sustainable approaches and appropriate policies to ensure that economic growth is equitable and environmentally responsible (SERPA, 2011).

Soy agribusiness has been a crucial driver of regional economic growth, offering opportunities for development and progress. However, it is essential that this growth is accompanied by measures that guarantee sustainability and inclusion, thus guaranteeing a prosperous future for present and future generations (VITTE; KEINERT et al., 2009).

Investments in road infrastructure, such as the asphaltting of ``Rodovia do Peixe``, have played a fundamental role in regional development, facilitating access and boosting economic growth. These improvements to the road network not only make transport more efficient, but also open up new opportunities for commerce, tourism and social integration.

The paving of ``Rodovia do Peixe`` not only connects local communities to urban centers and regional markets, but also attracts investment to the area, stimulating the development of local businesses and industries. Furthermore, easier access to essential services, such as health and education, improves the quality of life of people living along the route (SILVA, 2011).

This improved road infrastructure also plays a crucial role in reducing logistics costs for local producers, increasing their competitiveness in regional and international markets. More efficient transport of agricultural products, such as grains and meat, strengthens agribusiness and contributes to sustainable economic growth in the region (COSTA; PEQUENO, 2015).

In addition to the economic benefits, the asphaltting of ``Rodovia do Peixe`` promotes greater social integration, facilitating cultural exchange and access to essential public services for historically isolated communities (DANTAS; ALVES, 2016). This contributes to greater social cohesion and strengthens the community fabric.

Asphaltting roads can have negative impacts on the environment, such as deforestation and pollution, and can result in the displacement of local communities. Therefore, it is essential that these projects are carried out in a sustainable manner, with due respect for the environment and the rights of the people affected (BRAZIL – IBGE, 2010).

Investments in road infrastructure, such as the asphaltting of ``Rodovia do Peixe``, play a crucial role in regional development, facilitating access, stimulating economic growth and promoting greater social integration (Figure 03). Despite this, it is essential that these projects are conducted responsibly, ensuring lasting benefits for local communities and minimizing negative impacts (VITTE; KEINERT et al., 2009).

The expansion of tourist activity in the region has been marked by a growing interest in nature and leisure tourism (DANTAS; ALVES, 2016). This trend reflects not only the search for authentic experiences and direct contact with natural environments, but also the recognition of the economic and cultural potential of these destinations.

Nature tourism offers visitors the opportunity to explore stunning landscapes, such as majestic mountains, lush forests and crystal-clear rivers (CRUZ, 2003). Hiking trails, bicycle tours and ecotourism activities allow tourists to engage with the environment in a responsible way, promoting conservation and environmental awareness (PANIZZA; PEREIRA, 2009).

Leisure tourism in the region provides a variety of recreational and relaxing activities, such as boat trips, fishing, camping and cultural activities (SILVA, 2015). These entertainment options cater to a wide range of interests and ages, making the region an attractive destination for families, couples and individual travelers (GOMES, 2013).

As tourism activity expands, new business and employment opportunities arise, including accommodation, food, tour guides and local crafts (SPÓSITO, 2004). This boosts the regional economy, promoting sustainable development and the diversification of income sources for local communities (PEREIRA et al., 2013).

The increase in tourism also presents challenges, such as the sustainable management of natural resources, the preservation of cultural authenticity and the appropriate management of the impact on local communities. It is essential to adopt responsible tourism practices that promote respect for the environment and local cultures, ensuring that the benefits of tourism are shared in an equitable and lasting way.

The expansion of tourist activity in the region, with emphasis on nature and leisure tourism, represents an exciting opportunity for economic and cultural development. At the same time, it is crucial to address the challenges associated with tourism growth, ensuring that it is sustainable, inclusive and beneficial to all stakeholders (VITTE; KEINERT et al., 2009).

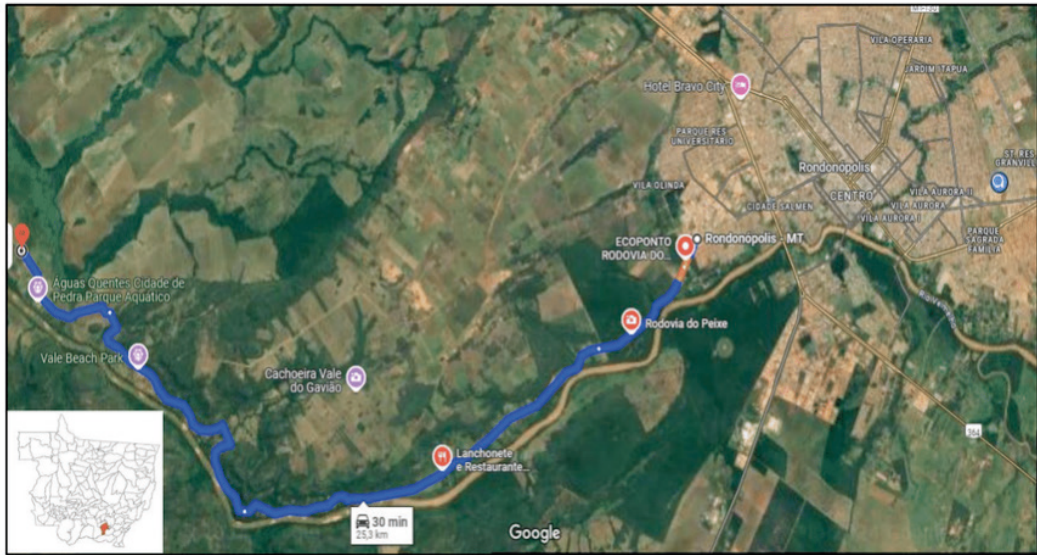


Figure 03: Asphalted area of MT-471

Source: Google Earth, 2024.

## REAL ESTATE VALUATION RESULTING FROM DEMAND FOR RECREATIONAL AREAS AND SECOND HOMES

Real estate appreciation in the region is closely linked to the growing demand for recreation areas and second homes. This phenomenon reflects not only a change in lifestyles, but also the search for a refuge amid nature and spaces that offer quality of life.

The search for recreation areas is driving the appreciation of land and properties close to natural resources, such as lakes, mountains and forests (SILVA, 2011). These places offer opportunities for outdoor activities, such as hiking, fishing, skiing and boating, attracting both tourists and residents looking for a lifestyle more connected to nature (GOMES, 2013).

Demand for second homes is growing as more people seek to escape urban stress and find a peaceful escape on weekends and holidays (VIEIRA, 2008). Country houses, chalets and seaside properties have become attractive investments for those who wish to enjoy moments of leisure and relaxation

away from the hustle and bustle of the city (PEREIRA et al., 2016).

This real estate appreciation brings with it a series of economic benefits for the region, including increased investment in infrastructure, services and local commerce (VITTE; KEINERT et al., 2009). New real estate developments, such as residential condominiums and resorts, generate jobs and stimulate economic growth, contributing to the sustainable development of the area (COSTA, 2010).

Rising land prices can make properties unaffordable for low-income residents, resulting in gentrification and displacement (ARAÚJO, 2015). Furthermore, uncontrolled development can lead to environmental degradation and the loss of natural habitats (NARDES, 2005).

Therefore, it is essential to adopt urban and environmental planning policies that balance real estate development with nature conservation and the promotion of social inclusion (BRASIL – IBGE, 2010). By doing this, we can ensure that real estate appreciation in the region benefits not only investors, but also local communities and



the environment, creating a sustainable and prosperous environment for everyone (SERPA, 2011).

The marketing and publicity of ``Rodovia do Peixe`` as a tourist destination and leisure area have played a crucial role in promoting this region as a tourist attraction. Located in an area of lush natural beauty, ``Rodovia do Peixe`` offers a variety of opportunities for outdoor activities and relaxation, making it a popular destination for tourists and locals looking for tranquil getaways and outdoor adventures (COSTA; PEQUENO, 2015).

Marketing campaigns highlight the unique natural resources along the highway, such as waterfalls, hiking trails, fishing rivers, and picturesque camping areas (PEREIRA, 2016). Through attractive photos, videos and descriptions, potential visitors are captivated by the scenic beauty of the region and the leisure opportunities it offers.

Strategic dissemination in the media, social networks and travel websites has expanded the reach of ``Rodovia do Peixe`` as a tourist destination (ARAÚJO, 2015). Partnerships with digital influencers, travel bloggers and tourism agencies help promote the region and attract a diverse audience of visitors looking for new experiences.

Tourism support infrastructure, such as rest areas, restaurants and accommodation, is promoted as part of the tourist experience along ``Rodovia do Peixe``. This ensures that visitors have a comfortable and pleasant stay while exploring the area (SILVA, 2011).

Effective marketing and publicity play a vital role in transforming ``Rodovia do Peixe`` into a popular tourist destination and leisure area. By highlighting the natural attractions and activities available along the highway, these initiatives help attract visitors and boost the region's economic development.

## **THE PROPERTY VALUATION PROCESS AND ITS RELATIONSHIP WITH THE DEVELOPMENT OF TOURISM AND LEISURE IN THE REGION**

The real estate appreciation process plays a significant role in the development of tourism and leisure in a region (PEREIRA et al., 2016). This occurs through a series of investments in tourist infrastructure, such as hotels, inns and leisure areas, which end up boosting the value of properties in the area.

When a region is recognized as a popular tourist destination, demand for accommodation and entertainment naturally increases. This leads investors to direct their resources to the construction of new projects, such as hotels and inns, to meet this growing demand. As a result, the supply of properties in the region becomes scarcer, which, in turn, increases the prices of existing properties.

As tourism infrastructure expands and improves, demand for properties in the region continues to grow, creating a virtuous cycle of real estate appreciation and development of tourism and leisure (ARAÚJO, 2015). This process not only benefits existing property owners, who see the value of their properties increase, but also encourages new investment in the area, further boosting economic growth.

Investment in tourism infrastructure plays a crucial role in the appreciation of real estate in a region, as it attracts more visitors and investors, thus boosting the development of tourism and leisure. This positive cycle of growth benefits both residents and businesspeople, creating economic opportunities and improving the quality of life in the region (PEREIRA et al., 2016).

The development of tourism-oriented real estate projects, such as residential condominiums and resorts, plays a fundamental role in the growth and prosperity of tourist regions. These projects are designed to meet

the needs and expectations of tourists, offering a variety of amenities and services to ensure a memorable experience (ARAÚJO, 2015; PEREIRA et al., 2016).

Tourist residential condominiums are designed to provide visitors with a comfortable and convenient stay during their vacation. They generally offer a range of accommodation options, from apartments and holiday homes to luxury chalets and villas. Furthermore, these developments can include a wide range of facilities and amenities, such as swimming pools, spas, restaurants, gyms and leisure areas, to ensure maximum comfort and entertainment for guests (COSTA, 2010; VIEIRA, 2008).

By investing in tourism real estate developments, developers not only contribute to the economic growth of the region, but also help boost tourism and sustainable development. These projects not only create jobs and business opportunities for the local community, but also attract visitors from around the world, generating revenue and stimulating the growth of the tourism sector (PANIZZA; PEREIRA, 2009; DANTAS; ALVES, 2016).

The development of tourism-oriented real estate developments, such as residential condominiums and resorts, plays a crucial role in strengthening tourist regions, offering visitors a variety of high-quality accommodation and entertainment options. These projects not only drive economic growth and sustainable development, but also help promote the region as a world-class tourist destination (PEREIRA et al., 2013; GOMES, 2013).

The increase in demand for land and properties close to natural tourist attractions, such as rivers, waterfalls and trails, is a phenomenon observed in many tourist regions around the world (BRASIL, 2010). These attractions offer not only scenic beauty, but also opportunities for outdoor activities and contact with nature, becoming points of

interest for tourists and potential real estate investors.

Land located close to rivers and lakes is especially valued due to the panoramic views and the possibilities for water recreational activities, such as fishing, swimming and boating (PEREIRA et al., 2016). Waterfalls and natural trails also have a strong appeal for property buyers, offering the opportunity to explore lush landscapes, practice extreme sports and enjoy moments of tranquility amid untouched nature (MARTELLO, 2015; SILVA, 2015).

The growing search for properties near these tourist attractions has boosted the real estate market in many regions, leading to an increase in land and property prices in the area (VITTE; KEINERT, 2009). As a result, investors are increasingly interested in acquiring land close to these natural tourist attractions, with the aim of developing residential, commercial or tourist developments that capitalize on the proximity to such attractions (PANIZZA; PEREIRA, 2009; DANTAS; ALVES, 2016).

In addition to the potential for financial return, the demand for properties close to tourist attractions also reflects a growing appreciation of the outdoor lifestyle and the search for authentic experiences connected with nature (SILVA, 2011). For many buyers, the opportunity to live in a naturally rich and diverse environment is a determining factor in choosing their residence or real estate investment (CRUZ, 2003).

The increase in demand for land and properties close to natural tourist attractions reflects both the economic appreciation of these areas and the growing preference for a lifestyle that values nature and outdoor experiences. This phenomenon not only boosts the local real estate market, but also contributes to the sustainable development of tourist regions, by promoting the conservation and responsible use of natural resources (ARAÚJO, 2015; PEREIRA et al., 2013).

The appreciation of areas with privileged panoramic views and lush natural landscapes is a phenomenon that reflects the search for quality of life and impactful visual experiences. Land and properties located in locations with stunning views of mountains, oceans, valleys or any other picturesque setting tend to be highly coveted in the real estate market (SILVA, 2011).

The natural beauty of a lush landscape can have a strong appeal for property buyers, who are looking not only for a place to live, but also a refuge where they can enjoy moments of tranquility and contemplation. The opportunity to wake up every morning to a stunning view or relax at the end of the day while admiring the sunset over a magnificent setting is something that many people deeply value.

In addition to the aesthetic aspect, the appreciation of areas with privileged panoramic views is also associated with a series of factors, such as the exclusivity of the location, the privacy provided by the natural geography and the feeling of connection with the surrounding environment (COSTA; PEQUENO, 2015). Properties located in areas of exceptional scenic beauty often become symbols of status and prestige, adding an element of prestige to their value (SILVA, 2015).

On the other hand, the demand for areas with panoramic views can also boost the development of luxury real estate projects, such as residential condominiums, resorts and high-end villas (PEREIRA et al., 2013). These projects are designed to maximize stunning views and offer residents a truly exceptional living experience.

The appreciation of areas with privileged panoramic views and lush natural landscapes reflects the human search for beauty, tranquility and connection with nature. Not only do these locations provide a visually

stimulating environment, they also represent highly desirable real estate investments capable of providing a unique and rewarding lifestyle.

The attractiveness of the local real estate market is often closely linked to the supply of properties for leisure and second homes (PEREIRA et al., 2016). These types of properties not only meet practical accommodation needs, but also offer an escape for moments of rest and recreation, attracting buyers in search of a different quality of life (DANTAS; ALVES, 2016).

The availability of leisure and second home properties is particularly attractive for those who want a temporary escape from the hectic pace of urban life or wish to invest in a haven to relax and unwind during holidays or weekends (VITTE; KEINERT, 2009). These properties are often located in areas of natural beauty such as beaches, mountains, lakes or countryside, providing a serene and rejuvenating environment for homeowners and their families.

Leisure and second home properties often offer a wide range of amenities and recreational activities, such as swimming pools, sports courts, hiking trails, social clubs and barbecue areas, providing homeowners with a complete and satisfying lifestyle experience (2014).

For many buyers, the possibility of owning a second home in a picturesque location represents not only a financial investment, but also an opportunity to create precious memories with friends and family and enjoy moments of leisure and relaxation in a relaxed and welcoming environment.

Demand for leisure and second home properties can drive economic growth in a region, generating additional revenue through tourism and the development of local infrastructure and services to meet the needs of second home owners and visitors.

The supply of leisure and second home properties plays an important role in the attractiveness of the local real estate market, offering buyers the opportunity to invest in a relaxing and enriching lifestyle amid stunning natural landscapes and high-quality amenities. These properties not only satisfy the need for temporary accommodation, but also represent a valuable investment in buyers' well-being and quality of life.

## **THE CONSEQUENCES OF THE EMERGENCE AND GROWTH OF SECOND HOMES ON THE SPATIAL ORGANIZATION AND ON THE LIVES OF SMALL LOCAL FARMERS**

The reduction in the availability of arable land due to the conversion of rural areas into leisure spaces and second homes is a common phenomenon in many regions experiencing an increase in tourism and real estate development. This transformation could have several significant consequences for local agriculture and community food security.

Firstly, the conversion of agricultural land into leisure spaces and second homes can lead to the loss of important agricultural resources, compromising the region's ability to produce food locally. This can result in greater dependence on food imported from other regions and a reduction in agricultural diversity, making the community more vulnerable to external shocks such as increases in food prices or disruptions in supply.

The reduction in the availability of arable land can negatively affect the local economy, especially for family farmers and small producers who depend on the land for their livelihood (SILVA, 2011). The loss of agricultural land can limit their opportunities for expansion and diversification, thereby increasing their economic and social vulnerability.

Another consequence is the environmental impact of converting rural areas into leisure spaces and second homes. Uncontrolled urbanization can result in deforestation, water and air pollution, loss of natural habitat and fragmentation of ecosystems. This can lead to loss of biodiversity, soil degradation and scarcity of water resources, affecting not only agriculture but also the quality of life of the community in general.

Effective policies and regulations are needed to protect agricultural land and promote sustainable development (COSTA, 2010). This may include the implementation of agricultural protection zones, tax incentives for conserving farmland, integrated urban planning that preserves rural areas, and the promotion of sustainable agricultural practices.

The reduction in the availability of arable land due to the conversion of rural areas into leisure spaces and second homes presents significant challenges for agriculture, the local economy and the environment. It is essential to adopt balanced approaches that enable urban and tourism development, while protecting and promoting agricultural sustainability and community food security.

Pressure on land prices due to the conversion of rural areas into leisure spaces and second homes can have a significant impact on small farmers, hindering their access to land and increasing production costs (SILVA, 2011). This situation is mainly due to real estate speculation and the increased demand for land for non-agricultural purposes, which inflates prices and makes purchasing or leasing agricultural land more expensive for family farmers.

The appreciation of rural land due to the interest of investors in developing tourism or real estate projects can make agricultural areas inaccessible to small farmers, who often do not have sufficient financial resources to compete with buyers or renters interested in



using the land for other purposes. This can result in farmers being forced off their land or unable to expand their farming operations to meet the growing demand for food.

Rising land prices also increase production costs for small farmers who are able to maintain their land, as they need to allocate a greater portion of their income to paying taxes, lease fees or financing (COSTA; PEQUENO, 2015). This can reduce your profit margin and make your farming operations less economically viable.

Another negative impact is the tendency for land to be concentrated in the hands of large landowners or investors, which can lead to a decrease in agricultural diversity, the loss of rural jobs and the weakening of the local economy (CRUZ, 2003). The lack of access to land can also discourage young farmers from entering the agricultural sector, thus compromising the continuity and sustainability of family farming.

Therefore, there is a need for policies and measures that promote the protection of small farmers' land rights, encourage sustainable agriculture and support the permanence and development of rural communities. This may include implementing legislation that limits the conversion of agricultural land to other uses, granting subsidies or tax incentives for family farming, and promoting agrarian reform programs that guarantee access to land for smaller farmers.

The pressure on land prices due to the conversion of rural areas into leisure spaces and second homes represents a significant challenge for small farmers, potentially compromising their livelihoods and contributing to the concentration of land and the weakening of family farming. It is essential to adopt measures that protect farmers' land rights and promote sustainable and inclusive rural development.

The fragmentation of rural space due to the irregular occupation of properties by second homes and real estate developments is a significant concern, as it can have negative consequences for both the environment and rural communities (GOMES, 2013). This fragmentation occurs when areas previously used for agricultural activities or environmental preservation are divided into small lots for the construction of vacation homes, condominiums or resorts, without following appropriate urban or environmental planning standards.

One of the main consequences is the loss of natural and agricultural areas, resulting in negative impacts on biodiversity, the hydrological cycle and soil quality (MYANAKI et al., 2007). Habitat fragmentation can lead to reduced species diversity, ecosystem degradation, and loss of ecosystem services essential to human well-being, such as climate regulation, pollination, and water filtration.

The irregular occupation of properties can overload existing infrastructure in rural areas, such as water supply systems, sewage networks, roads and health services, increasing costs for the local government and negatively impacting the quality of life of local communities (COSTA; PEQUENO, 2015).

Another worrying aspect is the social impact of the fragmentation of rural space, which can result in the loss of cultural identity, the decharacterization of traditional landscapes and the weakening of community ties (MARTELLO, 2015). The presence of second homes often implies a seasonal floating population, which may not be as involved in local issues as permanent residents, thus hindering social cohesion and the development of a vibrant and sustainable community.

The fragmentation of rural space due to the irregular occupation of properties by second homes and real estate projects represents

a significant challenge for environmental conservation, sustainable development and the well-being of rural communities. It is essential to adopt measures to protect and preserve rural areas, thus ensuring their long-term vitality and resilience.

## **SPATIAL DISTRIBUTION OF RURAL PROPERTIES**

The research team conducted structured interviews with property owners or residents along ``Rodovia do Peixe``. A total of 40 people was interviewed, randomly selected among owners or residents of rural properties in the study area.

Many properties along the highway are dedicated to agriculture, growing a variety of products including fruits, vegetables and legumes. Additionally, some owners reported growing ornamental or medicinal plants.

Livestock farming is also a present activity, with some properties involved in raising cattle, pigs, poultry or sheep. On some properties, livestock farming is the main activity, while on others it complements agriculture.

Some properties have agro-industry activities, such as dairy production, food processing and manufacturing of agricultural products. These activities add value to agricultural products and provide economic diversification for owners.

Rural tourism is also a significant activity in some properties, offering accommodation, trails, horse riding, fishing, organic food production.

Some owners highlighted environmental preservation initiatives, such as the creation of natural reserves, reforestation programs and the adoption of sustainable management practices for natural resources, demonstrating a commitment to environmental conservation.

The survey of properties along ``Rodovia do Peixe`` provides important insights into rural activities in the region. Understanding

these activities is crucial for integrated and sustainable planning, which takes into consideration, not only urban development, but also the rural surroundings and their interactions with the urban environment.

In addition to understanding the activities carried out on rural properties, it is also crucial to record their geographic locations for more accurate and efficient urban and rural planning. This study carried out a survey of rural properties and relevant areas, recording their geographic coordinates along ``Rodovia do Peixe``.

Using GPS devices, the research team recorded the geographic coordinates of rural properties and relevant areas along ``Rodovia do Peixe``. This included agricultural properties, environmental preservation areas, points of tourist interest, among others. Coordinates were recorded in a format suitable for later spatial analysis.

Geographic coordinates were recorded for the following categories along ``Rodovia do Peixe``: Rural Properties, Agricultural Areas, Livestock Areas, Environmental Preservation Areas and Points of Tourist Interest. Coordinates were recorded for all rural properties interviewed, including information on the size of the property and the activities carried out.

The coordinates of the growing areas of different crops along the highway were recorded, providing a comprehensive view of agricultural activities in the region. The coordinates of areas dedicated to cattle breeding and other livestock activities were recorded, highlighting the distribution of these activities in the study area. The coordinates of environmental preservation areas, such as natural reserves, protected forests and conservation areas, were recorded, contributing to the identification and conservation of natural resources in the region. Furthermore, the coordinates of points

of tourist interest, such as trails, viewpoints, ecotourism farms and other attractions, were recorded to promote rural tourism and the valorization of local natural resources.

Recording the geographic coordinates of rural properties and relevant areas along ``Rodovia do Peixe`` is essential for detailed spatial analysis and integrated land use planning. This information is valuable for identifying patterns, potential conflicts and opportunities for sustainable development in the region.

For more detailed and effective planning, it is important not only to record the geographic coordinates of rural properties, but also to identify the boundaries of these properties. This study mapped the boundaries of rural properties along ``Rodovia do Peixe``, where possible, to provide a more accurate understanding of the distribution of land use in the area.

The research team used a combination of field techniques and satellite images to identify and map the boundaries of rural properties along ``Rodovia do Peixe``. When possible, interviews were conducted with property owners or residents to obtain information about their property boundaries. Additionally, high-resolution satellite imagery was used to visually delineate property boundaries.

The results of mapping the boundaries of rural properties along ``Rodovia do Peixe`` were revealed as follows. Using high-resolution satellite imagery, we were able to visually delineate property boundaries in some areas along the highway, allowing for preliminary identification of property boundaries.

In addition, we conduct interviews with owners or residents whenever possible to obtain more accurate information about the boundaries of their properties. The information obtained from these interviews was then used to complement the visual mapping.

Based on this data, both from interviews and analysis of satellite images, we were able to delimit and map the boundaries of rural properties in specific areas along ``Rodovia do Peixe``. However, it is important to note that in some areas we face limitations, either due to lack of access or the unavailability of accurate information. In these situations, we use estimates based on available information to draw property boundaries.

Mapping rural property boundaries offers a more detailed understanding of the distribution of land use in the region. This information is essential for territorial planning, natural resource management and the resolution of potential land conflicts.

## FINAL CONSIDERATIONS

Based on the findings of this study, there are several suggestions for improvements or future developments in the area in question. One of them involves adopting an integrated approach to urban and rural planning along ``Rodovia do Peixe``, considering the interactions between urban land use and rural properties, aiming to ensure sustainable development and quality of life for residents.

Environmental conservation measures, including the protection of environmental preservation areas and incentives for sustainable agricultural practices on rural properties, with the aim of protecting local ecosystems and natural resources.

Another important suggestion is to promote economic diversification in rural areas, supporting activities such as rural tourism, agroindustry and organic food production. These initiatives can significantly contribute to increasing the income and resilience of rural communities. It is also essential to implement policies and instruments to manage land conflicts between urban and rural land use, ensuring clear property rights and promoting the peaceful resolution of disputes.

Finally, it is essential to establish a continuous monitoring and evaluation system to track changes in urban and rural land use over time, allowing for adjustments and interventions as necessary for the sustainable development of the region.

This study provided a comprehensive analysis of urban land use and rural properties along ``Rodovia do Peixe``, highlighting several key points. An association was identified between densely populated urban areas and smaller rural properties, in addition to the diversification of activities on rural properties, which include agriculture, livestock and rural tourism.

Challenges identified include the conflict between urban and rural use, environmental degradation and the need for economic diversification, all highlighted as important issues to be addressed. However, significant opportunities for intervention were also identified. This includes promoting integrated territorial planning, environmental conservation, economic diversification and the management of land conflicts. These measures can contribute to promoting sustainable development in the area under study, creating a balance between urban and rural needs, in addition to preserving the environment and boosting the local economy.

This study provides a solid basis to guide future interventions and research in the area, aiming to promote balanced and sustainable territorial development along ``Rodovia do Peixe``.

The analysis of the role of second homes on ``Rodovia do Peixe``, in Rondonópolis, Mato Grosso, from 2009 onwards, reveals a series of significant impacts on the socio-spatial and economic organization of the region. The process of tourism and establishment of second homes along MT-471 has profoundly influenced local dynamics, bringing both positive and challenging changes.

Firstly, the emergence of second homes along ``Rodovia do Peixe`` has boosted the economic development of the region. Investment in leisure properties has stimulated job creation in the construction sector, as well as boosting local commerce, hospitality services and recreational activities. This has contributed to the economic growth of the area and the diversification of job opportunities.

However, these economic changes have also generated social and spatial challenges. The concentration of second homes along ``Rodovia do Peixe`` can lead to gentrification and property appreciation, making properties unaffordable for low-income local residents. Furthermore, increased tourism can overwhelm local infrastructure such as roads, water and sanitation, leading to problems of congestion, pollution and resource scarcity.

The arrival of new residents, many of whom are seasonal tourists, can introduce new perspectives and values, altering established traditions and social dynamics. This can generate tensions between residents and new residents, as well as challenge community cohesion and the preservation of local culture.

Faced with these issues, it is crucial to adopt integrated planning approaches and sustainable management of development along ``Rodovia do Peixe``. This includes establishing policies that ensure a balance between tourism development and the preservation of the region's natural and cultural resources. Furthermore, it is essential to promote the active involvement of local stakeholders, including small farmers, residents, government authorities and tourism sector entrepreneurs, in the decision-making process.

Ultimately, by addressing the challenges and opportunities associated with tourism and second homes along ``Rodovia do Peixe``, it is possible to promote a more sustainable, inclusive and resilient development of the region, benefiting both residents and visitors.



## REFERENCES

- ARAÚJO, Enos Feitosa de. **Políticas governamentais e metropolização no nordeste brasileiro: apontamentos espaciais nas cidades de João Pessoa (PB), Maceió (AL) e Aracaju (SE)**. 2015. 402 f.
- BRASIL – Instituto Brasileiro de Geografia e Estatística. Censos Demográficos do MT. 2010.
- COSTA, Everaldo Batista da. **A concretude do Fenômeno Turismo e as cidades – Patrimônio – mercadoria**. Uma abordagem geográfica. Rio de Janeiro: Livre Expressão, 2010
- COSTA, Maria Clélia Lustosa; PEQUENO, Renato (ed.). **Fortaleza: transformações na ordem urbana**. 1. ed. - Rio de Janeiro: Letra Capital: Observatório das Metrôpoles, 2015.
- CRUZ, Rita de Cássia Ariza da. **Introdução à Geografia do Turismo**. 2.ed. São Paulo: Roca, 2003.
- DANTAS, Eustógio Wanderley Correia; ALVES, Larissa da Silva Ferreira. **Nordeste turístico e políticas de ordenamento do território**. Fortaleza: Imprensa Universitária, 2016.
- DEMAMANN, Miriam Terezinha Mundt. **Rondonópolis – MT: campo, cidade e centralidades**. Tese (Doutorado em Geografia Humana). FFLCH/USP – Programa de Pós-graduação em Geografia. 2011.
- GOMES, Iara Rafaela. **Vilegiatura além da metrópole: urbanização em Tibau (RN)**. Tese (Doutorado) – Universidade Federal do Ceará, Centro de Ciências, Programa de Pós- Graduação em Geografia, Fortaleza, 2013.
- MARTELLO, Alex Teodoro. **Análise Socioambiental de Propriedades Rurais Situadas entre a ``Rodovia do Peixe`` e o Rio Vermelho em Rondonópolis-MT**. (Dissertação de Mestrado). Rondonópolis, 2015. 55 f.
- MYANAKI, Jacqueline...[et al.]. **Cultura e Turismo**. São Paulo: IPSIS, 2007.
- MOREIRA, Ruy. **GEOGRAFIA: Teoria e crítica, o saber posto em questão**. Petrópolis, RJ. Vozes. 1982.
- NARDES, Antonia Marília Medeiros. **Caracterização e zoneamento ambiental da Reserva Particular de Patrimônio Natural Parque Ecológico João Basso (Fazenda Verde, Rondonópolis, MT)** Tese de Doutorado. Universidade Federal de São Carlos. São Carlos: UFSCar, 2005.
- NEGRI, Silvio Moisés. **Segregação socioespacial no contexto de desenvolvimento econômico da cidade de Rondonópolis – MT**. 2008. Tese (Doutorado em Organização do Espaço) UNESP, Rio Claro, SP. 2008.
- PANIZZA, Andrea C.; PEREIRA, Alexandre Queiroz. **Residências secundárias e estruturação sócio-espacial da zona costeira cearense, Brasil**. Geografia (Londrina) v. 18, n. 2, 2009. Disponível em: <http://www.uel.br/revistas/uel/index.php/geografia/>.
- PEREIRA, Alexandre Queiroz; ARAÚJO, Enos Feitosa de; SOARES JUNIOR, Antonio Tadeu Pinto; SILVA, Marília Natacha de Freitas; SILVEIRA, Bruno Rodrigues da. **Maritimidade na metrópole: estudos sobre Fortaleza – CE**. Porto Alegre: Deriva, 2013. 165f.
- PREFEITURA MUNICIPAL DE RONDONÓPOLIS. DADOS OFICIAIS DO MUNICÍPIO. Disponível em: <http://www.rondonopolis.mt.gov.br>, 2018; 2021.
- SANTOS, Milton, **A Urbanização Brasileira**, Hucitec: São Paulo. 1997.
- SERPA, Ângelo. **O Espaço Público na Cidade Contemporânea**. São Paulo. Contexto. 2011. 142
- SILVA, José Borzacchiello da. **Discutindo o Rural e o Urbano**. Revista da ANPEGE, v. 7, n. 8, p. 3-11, ago./dez. 2011.
- \_\_\_\_\_. **Reestruturação Produtiva E Reconfiguração da Área Central de Fortaleza**. Mercator, Fortaleza, v. 14, n., p. 75-88, set./dez. 2015.
- SPÓSITO, Eliseu Savério. **Geografia e filosofia: contribuição para o ensino do pensamento geográfico**. São Paulo. Unesp. 2004.
- STURZA, J.A.I. **Lugar e não lugar em Rondonópolis - MT: um estudo de cognição ambiental**. Tese de Dutorado. Rio Claro - SP: Unesp, 2005.
- VITTE, Claudete de Castro Silva, KEINERT, Tânia Margarete Mezzomo (ORG), et.al. **Qualidade de vida, planejamento e gestão urbana: discussões teóricos-metodológicas**. Rio de Janeiro. Bertrand Brasil. 2009.