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Urbanization in precarious settlements: the case of the Carrapicho Settlement in Várzea Grande – MT

Giovanna Erina da Silva Moraes
Master, UNIVAG, Brazil.
giovannaerina@gmail.com

Rosana Lia Ravache
PhD Professor, UNIVAG, Brazil.
rosana@univag.edu.br

Jeane Aparecida Rombi de Godoy
PhD Professor, UNIVAG, Brazil.
jeane.rosin@univag.edu.br

Fabiana Zili Salmoria
Master, UNIVAG, Brazil.
fabianaziliarquitetura@gmail.com

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SUMMARY

This study addresses irregular occupations in an environmental preservation area in the Carrapicho Settlement, in Várzea Grande - MT. The research aims to understand the socio-environmental vulnerability of the local population and identify possible means of intervention to improve the quality of life of these communities. As well as discussing the historical relationship between rivers and cities, the importance of conserving wetlands, the lack of coherent public policies to deal with irregular occupation, environmental degradation, and the need for interventions to improve the situation of vulnerable communities in permanent preservation areas. The observational method was used to analyze the current situation in the city of Várzea Grande and the Carrapicho Settlement and its surroundings. In the spatial area, we observed inadequate urban infrastructure, self-built housing with low construction standards, as well as a lot of abandonment and neglect on the part of public authorities.

KEYWORDS: Carrapicho Settlement. Irregular occupation. Socio-environmental Vulnerability.

1. INTRODUCTION

The research aimed to study occupations in areas of environmental vulnerability in the Eastern Region of the city of Várzea Grande – MT, focusing on the Carrapicho Settlement, including the adjacent areas of the Cristo Rei and Parque do Lago neighborhoods. The choice of this settlement as the object of study was due to its specificities and precariousness, which made it possible to analyze and diagnose the area to identify the main factors related to the process of irregular occupation, environmental degradation, and socio-environmental vulnerability, linked to socio-spatial segregation.

Faced with this challenge, it sought to understand the process of undue occupation in areas of environmental fragility, develop studies to support urban interventions in the Eastern Region of Várzea Grande and understand the best form of intervention for areas of permanent preservation or environmentally misconfigured. For its development, the research carried out a brief analysis of the regulations applicable in the spatial area selected for this study.

The qualitative method was used to focus the investigation on socio-spatial and urban aspects, and two characteristic moments in the occupation processes of the Carrapicho Settlement were compared, in 2019 and 2022, through data collected during technical visits and photographic survey of local scenes.

The morphological analysis was carried out using thematic maps, depicting the road and urban mobility systems, in addition to the expansion of land use and occupation. The observational method was used to analyze the current situation in the city of Várzea Grande and the Carrapicho Settlement and its surroundings, with the intention of finding solutions that would mitigate the urban and environmental problems raised.

Authors such as Bordest (2022), Chiaranda (2002), Moura (2013), Ravache (2008) and Rosin (2014/2016) were important for composing the theoretical basis, which supported the development of the 2nd. Phase - methodological phase, where the survey, systematization and analysis of the data collected was carried out with the purpose of obtaining a diagnosis of the spatial outline defined for this study, based on the spatialization of data through the creation of maps.

Rivers have always had great importance in the emergence and development of cities, demonstrating an intrinsic relationship between human settlements and water bodies. The presence of rivers near urban agglomerations favored not only the supply of water and food, but

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also communications, commerce, territorial control, the flow of goods, irrigation, the movement of people, the generation of energy and the waste flow (BAPTISTA E CARDOSO 2016, p.127).

Several studies report that rivers were the first access routes, guaranteeing access to water to supply cities, which led to the emergence of most cities next to bodies of water (PRESENTE, 2018).

However, even though they are fundamental for life and development, over time, rivers have suffered hydrological and environmental impacts resulting from urban growth, gradually losing their role as an integrating element of the landscape and suffering numerous negative effects due to anthropization and occupation of risk areas. With the progressive advancement of urbanized areas, areas considered highly vulnerable were deteriorating and requiring more attention from public authorities, especially given the effects caused by environmental disasters and climate change (BAPTISTA; CARDOSO, 2016).

This complex relationship between cities and rivers highlights the importance of rethinking current urbanization models, considering the environmental and socioeconomic impacts resulting from the disorderly occupation and degradation of water bodies. Understanding these challenges is fundamental for the preservation and conservation of the environment, avoiding territorial degradation and seeking sustainable solutions for urban development.

This information highlights the need for policies and practices that promote the sustainability and resilience of cities in relation to water resources, considering the historical and current importance of rivers for urban communities. Given this situation, it is necessary to develop and monitor efficient public policies to preserve sensitive areas, as well as to improve the quality of life of the population that lives in these places. It is through good urban planning, with interventions aimed at urban sustainability, that there will be an improvement in the quality of life for the population.

Therefore, this research aims to contribute to understanding the importance of implementing intervention processes in areas of environmental vulnerability, with the aim of promoting urban and environmental requalification, the creation of linear parks, mitigating socio-spatial segregation, and curbing irregular occupation, and environmental degradation in sensitive areas.

2 OBJECTIVES

This research aimed to study occupations in areas of environmental vulnerability in the eastern region of the city of Várzea Grande – MT, with the Carrapicho Settlement as its object of study.

3 ANALYSIS METHODS

The logical bases of scientific research were provided by the qualitative method, aiming to focus the investigation on socio-spatial aspects.

During the research, two characteristic moments in the occupation processes of the Carrapicho Settlement were compared: one carried out in 2019 and the other in 2023. This comparison was carried out using data collected during technical visits, accompanied by a photographic survey of local scenes.

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With this data, the existing scenarios were documented, as well as the surrounding area where a new bridge was built. This bridge provides yet another connection between the two cities, linking the Parque do Lago neighborhood in Várzea Grande to the Parque Atalaia neighborhood in Cuiabá, an intervention that should change the entire territory studied.

After the morphological analysis carried out using thematic maps, the road and urban mobility systems were portrayed, in addition to the gradual expansion of land use and occupation, which required data and photographic surveys, using satellite images and software.

The observational method was used to analyze both the current situation of the city of Várzea Grande and the situation of the Carrapicho Settlement and its surroundings, to identify the main factors involved, as well as find solutions that mitigate urban and environmental problems. For these purposes, to carry out the research, the following were used as primary sources:

- Photographic survey in field research (2019 and 2022);
- Survey of urban infrastructure, public services, and other local data.
- Maps and satellite images.
- Legislation Survey.

Secondary sources on the main related concepts were investigated through bibliographic and digital surveys, due to the lack of information available in public institutions in the municipality.

Some authors were important for the composition of the informative material, notably Bordest (2022), Chiaranda (2002/2016), Moura (2005), (Ravache (2008) and Rosin (2014/2016).

Therefore, the methodological phase boils down to an analysis of the data collected with the purpose of obtaining a diagnosis of the area selected to carry out this study using studies based on digital cartography.

4 RESULTS

4.1 The Metropolitan Region of the Cuiabá River Valley

The municipality of Várzea Grande where the object of study is located, belongs to the Metropolitan Region of Vale do Rio Cuiabá (RMVRC), is formed by the municipalities of Acorizal, Chapada dos Guimarães, Cuiabá, Nossa Senhora do Livramento, Santo Antônio de Leverger and Várzea Big. These municipalities are in the Paraguayan hydrographic basin to which the Cuiabá River belongs. This spatial configuration demonstrates the ecological importance played by the Cuiabá River, which distributes its natural wealth (fauna and flora), supplies the capital and other cities such as Várzea Grande, Acorizal, Santo Antônio do Leverger, Rosário Oeste and Nossa Senhora do Livramento, in addition to being the main river that contributes to the Paraguay Basin, forming the Pantanal (SALMORIA, 2021). In addition to these, there are seven other municipalities that make up the so-called metropolitan area[1] and that are somehow affected by the metropolization process.

[1] Metropolitan surroundings - The metropolitan surroundings refer to the municipalities located in the Cuiabá River Valley and that are in some way affected by the metropolization process, they are: Barão de Melgaço, Jangada, Nobres, Nova Brasilândia, Planalto da Serra, Poconé and Rosário Oeste.

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It is worth noting that initially the Metropolitan Region was an urban agglomeration formed by the municipalities of Cuiabá and Várzea Grande (VÁRZEA GRANDE, 1993). Only on May 27, 2009, with the enactment of Complementary Law nº 359, the Metropolitan Region of Vale do Rio Cuiabá was created, composed of Cuiabá, Várzea Grande, Nossa Senhora do Livramento and Santo Antônio de Leverger, and in 2016, they were included the municipalities of Acorizal and Chapada dos Guimarães (L.C. 577 of 2016). The publication of Complementary Law nº 359/2009 resulted from a process of searching for alternatives that could respond to the demands arising from social inequalities, with the commitment to present an integrated regional planning proposal capable of welcoming municipalities across the entire socio-spatial context (SILVA, 2011, p.217).

4.2 Várzea Grande

The City of Várzea Grande is located on the right bank of the Cuiabá River, forming a conurbation with Cuiabá, capital of the state of Mato Grosso. The City of Várzea Grande was born in 1832, from the donation of a sesmaria[2] to the Guanás indigenous people, by the Brazilian Imperial Government (IBGE,2023). The municipality has a territorial area of 724,279 km², limited to the east with the municipality of Cuiabá, to the south with the municipalities of Santo Antônio do Leverger and Poconé, to the west with the municipality of Nossa Senhora do Livramento and to the north with the municipalities of Acorizal, Jangada and Rosário Oeste (IBGE, 2023).

Throughout its history, the city of Várzea Grande has always had a link with the city of Cuiabá, making the history of its formation intertwined with that of the capital. In the early days of the occupation of the territory, that is, still in Colonial Brazil, the city of Cuiabá was divided into two nuclei, later called districts; the 1st District in the area where the urban center of Cuiabá is today and the 2nd District, in the area where the Porto neighborhood is located. There was also a 3rd District, today the Municipality of Várzea Grande (RAVACHE, 2008).

The current territorial division of the Municipality of Várzea Grande results from a long process of evolution, the beginning of which dates to the first occupations of its territory, only Passagem da Conceição and Bom Sucesso remained as districts; the rest were extinguished or incorporated into the Urban Macrozone (MU)[3]. The territorial organization is made up of: Municipal Headquarters (urban perimeter); Good success; Clean Large; Father André; Conceição Passage; Praia Grande Souza Lima and Formigueiro. The division into districts is based on the recognition of the local population, as well as the symbolic heritage of historical, cultural and environmental interest (PLANO DIRETOR DE VÁRZEA GRANDE, 2021, p. 17).

Throughout history, the territory of Várzea Grande has always been the gateway to Cuiabá. The Cuiabá River divides the two municipalities, and in the past, the Cuiabá side was home to Porto Geral, while the Várzea-Grandense side was home to Porto Velho. Thus, Cuiabá was connected to the other cities in Mato Grosso through these two ports, which enabled all the traffic of products and people in the region. For Bordest (2022), the old Porto Velho

[2] Plot of land distributed to a beneficiary, in the name of the king of Portugal, with the aim of cultivating virgin land.
[3] According to Art. 34, of the Várzea Grande Master Plan (2021), the Urban Macrozone (MU) corresponds to the areas contained in the urban perimeter of Várzea Grande (Municipal Headquarters) and the urban perimeters of the districts (District Headquarters); Bom Sucesso, Limpo Grande, Pai André, Passagem da Conceição, Praia Grande and Souza Lima.

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neighborhood has spanned two centuries of existence, and still survives in the 21st century. This persistent survival, in the memory of the people of Várzeagrandenses, would then occur through the existence of all these surrounding neighborhoods. Pioneer families managed to establish themselves in the area during the Brazilian imperial period, when the natural conditions of this swampy area on the banks of the Cuiabá River made communications by land difficult, but the proximity of the Cuiabá River allowed contacts through navigation (BORDEST, 2022).

Thus, the importance of waterways for the colonization of Mato Grosso can be seen. The route between Cuiabá and São Paulo used the Cuiabá, São Lourenço, Xianes, Paraguai, Taquari, Coxim, Camapuã, Pardo, Paraná and Tietê rivers (RAVACHE, 2008). At this point on the Cuiabá River, between these two urban centers, it became a strategic point and in 1942 it was chosen for the construction of the Júlio Müller Bridge, the first bridge connecting Várzea Grande to Cuiabá. The construction of the old Júlio Müller Bridge caused profound changes in the geography of Cuiabá and Várzea Grande, connecting the current Ponte Nova neighborhood in Várzea Grande to the Porto neighborhood in Cuiabá, boosting the growth of Várzea Grande.

According to Ravache (2008), this bridge allowed the connection of the city of Cuiabá with other municipalities in the State, other cities in Brazil and the Latin American countries with which the State of Mato Grosso shares a border. From this, it is understood that the urban evolution of the Eastern Region occurred as the urban fabric was consolidated until forming the area today known as Várzea Grande, located between the Marechal Rondon International Airport and a large floodplain of the Cuiabá River[4] that became known as Christ the King.

With the growth of the city, municipal public management divided the urban area of the municipality into five regions, through Complementary Law No. 3,356 of October 8, 2009, which provides for the urbanization of the municipality of Várzea Grande – MT and takes other measures.

According to Article 2 of LC No. 3356:

> Art. 2 - The municipality of Várzea Grande is divided into 5 regions, thus called:
> 1 – North Region, or Glória and Pari;
> 2 – South Region, or Costa Verde and Pai André
> 3 – Eastern Region, or Cristo Rei;
> 4 – West Region, or Santa Izabel and Formigueiro;
> 5- Central Region, (LC No. 3356, 2009).

With the Building Law, the current division by regions (Map 1) was consolidated, which established the territorial division of Várzea Grande into: Center, South, North, East and West.

[4] The municipality of Várzea Grande has as its main geographical characteristic the large floodplains formed by the meanders of the Cuiabá River, among these floodplains of the Cuiabá River, the largest is the one that surrounds the entire Eastern Region of the city. Historical evidence indicates that the urban nucleus of Várzea Grande emerged in this region of the city, where it was previously known as Porto Velho. Thus, the name "Várzea Grande", which names the city, arose from this evident geographical characteristic, which reinforces its intrinsic relationship with the river.

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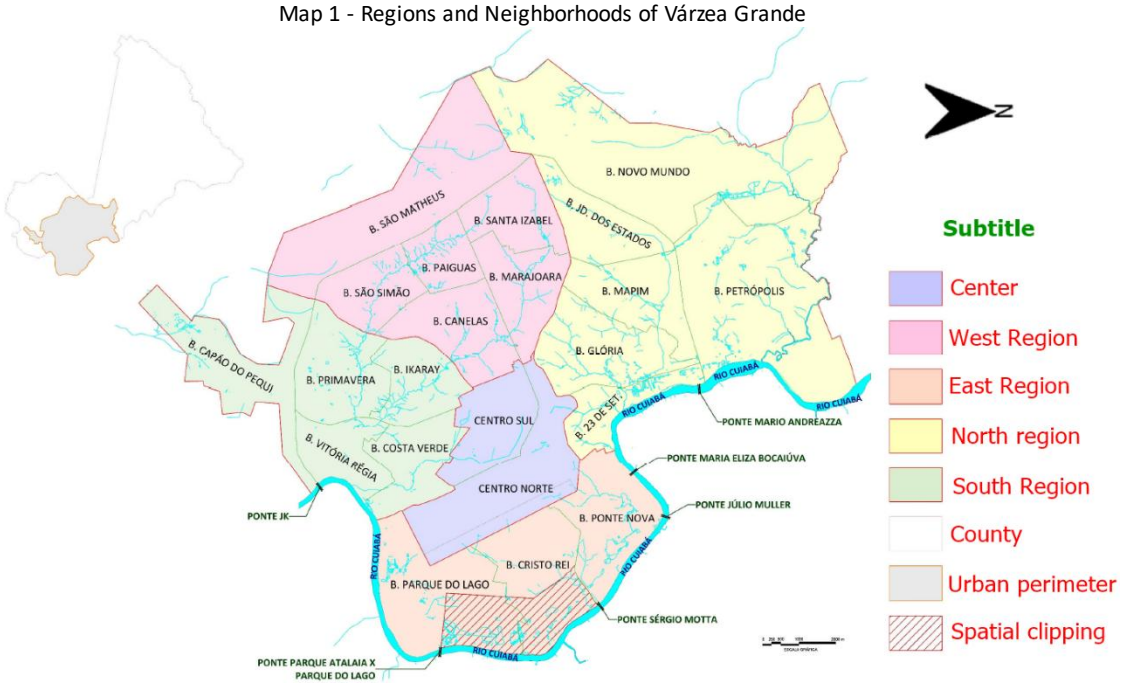
Map 1 - Regions and Neighborhoods of Várzea Grande



Source: Map of the Neighborhoods Law – LC nº 3356 of 2009, adapted by the Author (2023).

On map 4, it is possible to observe the 5 regions into which the Municipality of Várzea Grande was divided, as well as the location of the object of study of this research, the Carrapicho Settlement, which is in the Parque do Lago and Cristo Rei neighborhoods, both in the region East of the city.

4.2.1 Characterization of the Eastern Region (Grande Cristo Rei)

The East Region of the city is located between Marechal Rondon International Airport and the Cuiabá River. This is the most densely occupied region and the one with the greatest connection with the municipality of Cuiabá since most of its inhabitants are employed in Cuiabá. The Eastern Region, one of the five regions that make up the city of Várzea Grande, is divided into three neighborhoods; Ponte Nova, Cristo Rei and Parque do Lago (VÁRZEA GRANDE, 2014).

The Cristo Rei neighborhood is the most important in the Eastern Region; therefore, the best known. Its importance for the city, both social and economic, is due to the companies and institutions installed there, which also explains why the Eastern Region is commonly called Cristo Rei or Grande Cristo Rei. The main responsible for the urban evolution of this region is the Center University of Várzea Grande (UNIVAG) which, as its facilities expanded, the surroundings were transformed with the entry of a significant number of companies and population. As a result of the historic omission and neglect of public management, the neighborhood grew in disarray and began to share the same problems faced by Carrapicho and other vulnerable areas along the entire waterfront, where the Parque do Lago and Ponte Nova neighborhoods have similar characteristics. to Bairro Cristo Rei. However, Parque do Lago is predominantly residential and commercial, housing small and medium-sized activities. The Ponte Nova neighborhood has more diverse activities, compared to Parque do Lago, such as: Meatpacking industry, large enterprises, educational institutions, among others. The three neighborhoods have irregular occupations in

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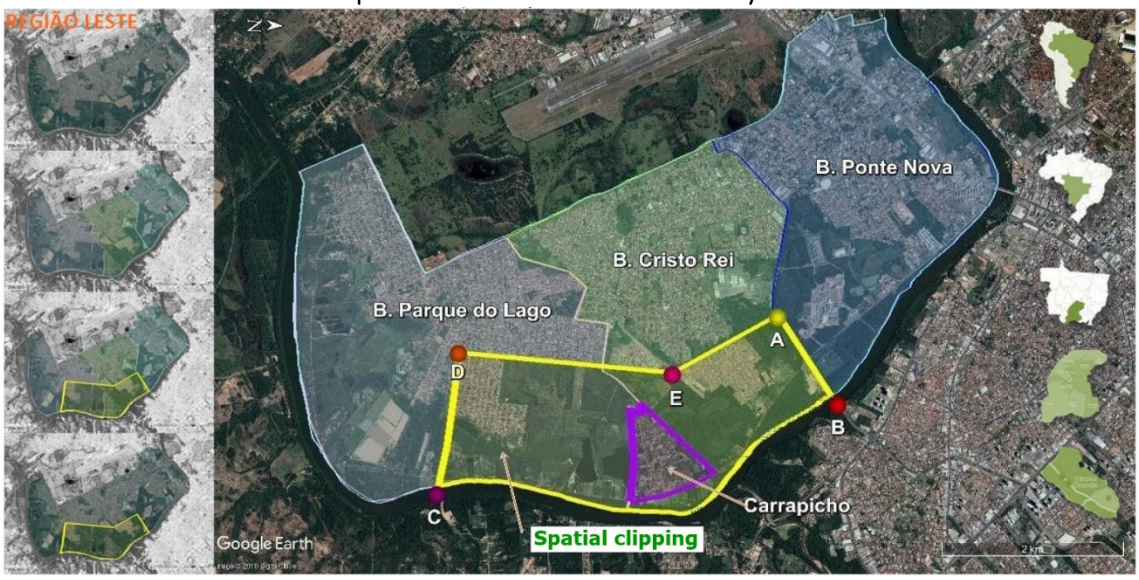
permanent preservation areas (APP), however, the spatial outline defined for this study is limited to the Carrapicho Settlement, located in the Cristo Rei neighborhood (Map 2).

Map 2 - Urban Insertion of the Study Area



Source: Google Earth Pro (2023). Prepared by the author (2023).

The city has geophysical and environmental characteristics of transition from the Pantanal biome to the Cerrado biome. According to the historical facts presented in the book "Bairro Porto Velho em Cartografias de Famílias" by Suíse Monteiro Leon Bordest (2022), the Eastern Region of the city of Várzea Grande is a swampy area where the first settlers had difficulty establishing themselves. The Eastern Region has peculiar characteristics as it is located on a plain, located in a large floodplain of the Cuiabá River, therefore forming a swampy region with patches of Cerrado vegetation.

According to Lima (2002), in the urban perimeters of Cuiabá and Várzea Grande are the main micro-basins formed by the tributaries of the Cuiabá River: Coxipó, Ribeirão do Lipa, Barbado, Pari, Prainha, Mané Pinto, Gambá, Guarita, São Gonçalo, Piçarrão, Santana, Engordador and Lavrinha (LIMA, 2002, p. 28). The region is characterized as predominantly swampy, with low altitude in relation to the Cuiabá River, where during its occupation process many areas were filled in indiscriminately. The humid and swampy soil allows water insurgencies to occur spontaneously, forming lakes and intermittent floods in various parts of the region. Therefore, the Eastern Region does not have well-defined micro-basins. Through satellite images and mapping carried out, it was possible to identify the presence of some perennial streams.

4.2.1 Carrapicho Settlement

The area under study covers parts of the Cristo Rei and Parque do Lago neighborhoods, two of the three neighborhoods that make up the Eastern Region of the city of Várzea Grande – MT. The spatial area is approximately 6 km² (six square kilometers), divided with five reference points that define its perimeter, here represented by through the letters "A", "B", "C", "D" and "E" (Figure 1), whose main landmark is the Sergio Motta bridge.

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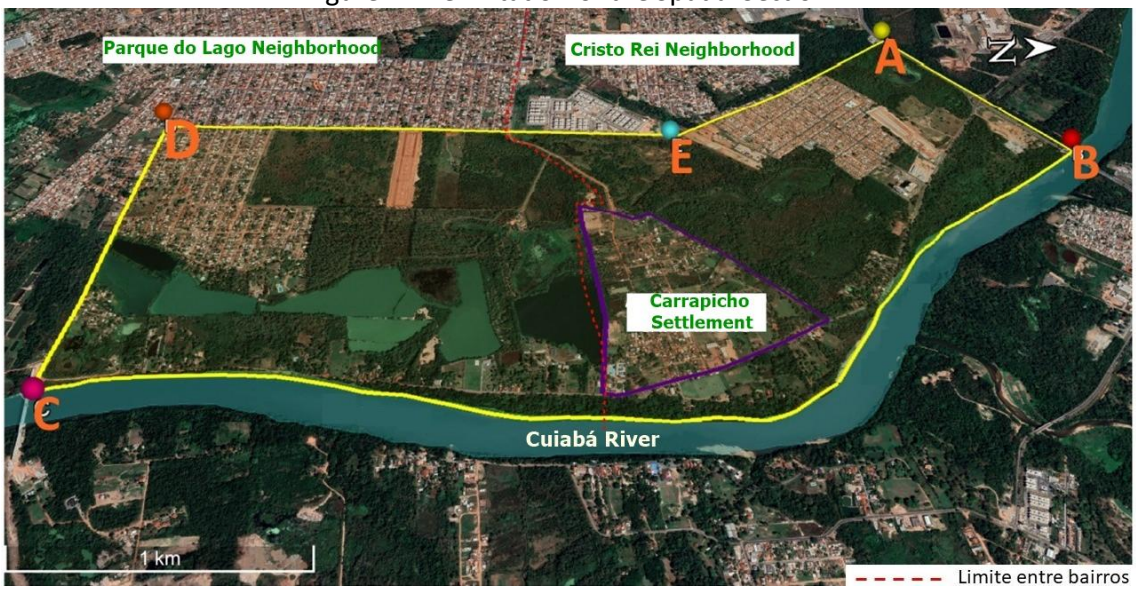
Figure 1 - Delimitation of the Spatial Section



Source: Google Earth Pro. Organized by the author (2023).

Point A is on Avenida Doutor Paraná, 1,100 km (one kilometer and one hundred meters) away from the Sergio Motta Bridge. Point B is located on the Sergio Motta bridge.

Point C is the place where the new bridge is being built that will connect the Parque Atalaia neighborhood (Cuiabá) to the Parque do Lago neighborhood (Várzea Grande). Therefore, points B and C are parallel to the bank of the Cuiabá River. Point D is 1.5km (one kilometer and five hundred meters) from the construction site of the new bridge, close to the confluence of Avenida São Gonçalo and Avenida Tricolor, in the Parque do Lago neighborhood. And, Point E, is on Avenida Tricolor, 2.25km (two kilometers and twenty-five meters) from point D, already on the limits of Bairro Cristo Rei. Thus, points D-E are parallel to Avenida Tricolor, ending with a straight line drawn from point E to point A.

In addition to environmental aspects, another crucial factor that contributed to this delimitation of the spatial outline being established was the consolidation of the urban fabric of the Eastern Region, observed in the road hierarchy of Várzea Grande, which configured the existing road network and its future interventions and expansions. , provided for in the Road Hierarchy Map of LC No. 4,701 of 2021, which defines the Road System of the Municipality of Várzea Grande.

Art. 4, LC No. 4,701 of January 22, 2021, structures the road system of the city of Várzea Grande into local roads, greenway, collector, main, arterial, perimeter and road (LC No. 4,701/2021). The precarious characteristics of the Carrapicho Settlement (Figure 2) originate from the stage of invasion and irregular occupation of areas in the Cristo Rei neighborhood, in addition, it was entirely within an Environmental Conservation and Preservation Zone – II, ZCP-II, or In other words, it is a risk area with great environmental and social vulnerability, which is why it would not be suitable for the permanence of a human settlement

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Figure 2 - Satellite image of the Carrapicho Settlement

Source: Google Earth Pro. Organized by the author (2023

In 2021, the entire framework of urban laws underwent review together with the review of the Várzea Grande Master Plan. The analysis of the urban and environmental regulations applicable to this territory determined that the new laws go backwards in terms of the preservation and conservation of environmentally fragile areas. A clear example is the change in the Status of the Carrapicho Settlement itself. When comparing the Urban Land Use and Occupation Zoning map from the year 2013 with the map from the year 2021 (Map 3), it is possible to notice a serious suppression in environmental preservation areas, with the total removal of the Carrapicho Settlement from the perimeter of the Environmental Conservation and Preservation Zone II – ZCP II and attached to the Mixed-Use Zone – ZUM.

The same analysis also noted the changes that occurred in Complementary Law No. 4700/2021, which provides for the Zoning of Use and Occupation of Urban Land in the Municipality of Várzea, which removed the entire area of the Carrapicho Settlement from the Environmental Conservation and Preservation Zone – II - ZCP II, which became part of the Multiple Use Zone 1 – ZUM 1.

This fact does not change the unsuitability for human occupation, due to its physical and environmental characteristics, considering that the question of whether, it belongs to ZCP II, does not change its morphological and environmental characteristics in any way, as the area remains unsuitable for human permanence. Based on this data, a spatialization of important information for the morphological and environmental study of the Carrapicho Settlement in Recorte Espacial (Map 4) was created by crossing data and satellite images collected in 2019 and 2023.

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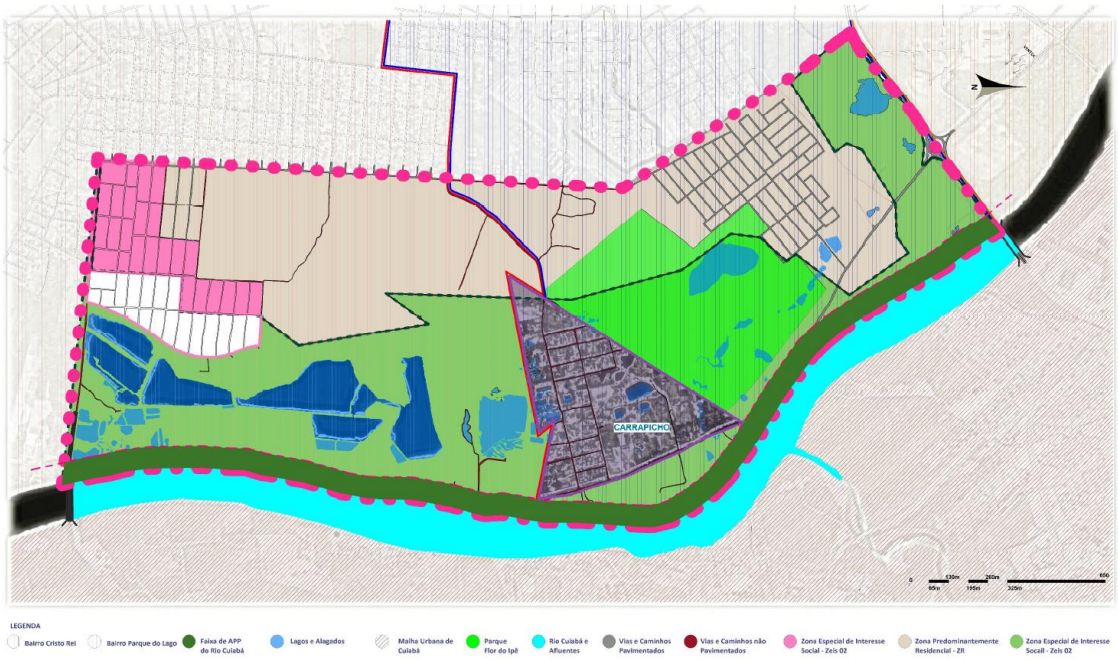
Map 4 - Occupation, Vegetation Cover and Water Bodies.



Source: Prepared by the author (2023).

To recognize the area under study, the following data were cross-overlaid: Satellite Images to recognize the urban fabric, urban zoning, water bodies, preservation areas, the road system, urban parks, regular occupations, as well as irregular occupations and the permanent preservation area of the Cuiabá River.

Based on this spatialization, a second mapping was carried out in 2023, including satellite images and photographic surveys, allowing a more in-depth recognition of the area under study, expanding, and deepening the analysis, to prepare a diagnosis of the study area - now defined based on four criteria: environmental potential, environmental pollution, urban infrastructure offered and the construction standard of buildings.

Based on these studies, a Mapping of the Environmental Potentialities of the site was prepared (Map 5), which identified large areas with vast environmental and landscape potential suitable for the implementation of parks and spaces for public use, enabling the creation of laser and recreation. The large lakes present in the area would make it possible to use it for water sports and bathing.

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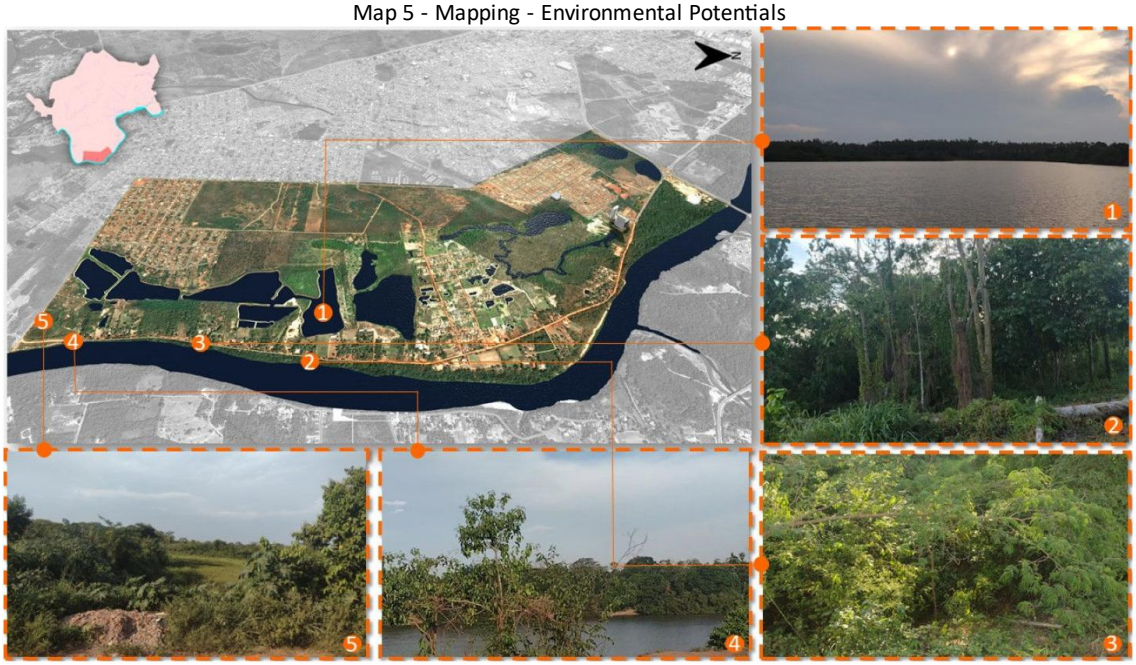
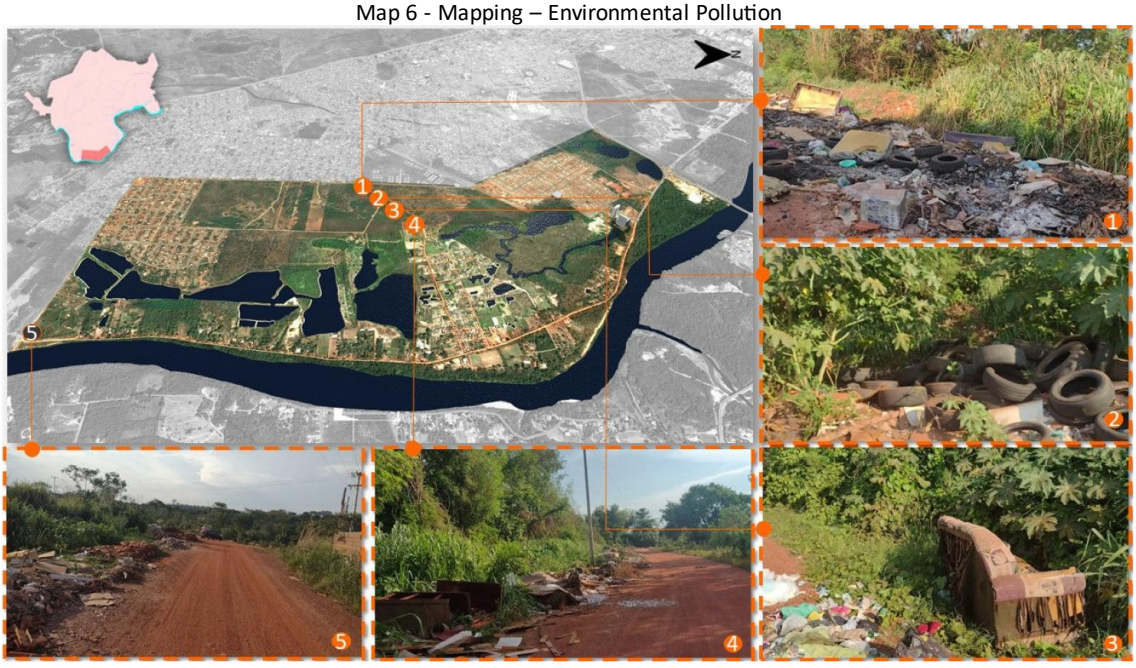
Map 5 - Mapping - Environmental Potentials



Source: Prepared by the author (2023).

The area under study lives with abandonment and neglect from public authorities and, despite all its environmental potential, the area receives daily illegal dumping of waste, intensifying pollution, and environmental degradation (Map 6).

Map 6 - Mapping – Environmental Pollution



Source: Prepared by the author (2023).

The mapping carried out also identified inadequacies and deficiencies in the infrastructure. Only along the roads that delimit the Spatial Cutout, there is asphalt paving in some sections of Alameda Júlio Muller and part of Avenida Tricolor, the rest of the roads are unpaved and are therefore dirt roads.

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The existing houses are the result of self-construction, presenting a low construction standard, with precarious structure and lack of finishes (Map 7).

Map 7 - Mapping – Construction Standard of Houses

Source: Prepared by the author (2023).

In addition to these particularities, it was noticed that the area has an electrical network, however public lighting is scarce or absent. It has a water supply network, but there is no sewage collection and treatment, and homes still use septic tanks, increasing the risk of water pollution. In general terms, from an urban planning point of view, there are many failures that face the consequences of the lack of infrastructure and urban planning. Among the main consequences caused by urban disorder are, in addition to socio-spatial segregation, environmental degradation, the occupation of vulnerable areas and urban sprawl.

4 FINAL CONSIDERATIONS

The studies carried out showed that the urban precariousness identified is a consequence of a history of errors that have been persistently repeated for decades. Both Várzea Grande and Cuiabá have a long way to go to correct these problems, but the situation in Várzea Grande is much more critical.

To this end, urgent measures would be needed to mitigate the harmful effects caused by degradation throughout the metropolitan region and the Cuiabá River Valley to overcome the obstacles that have arisen with the economic development of the region. Conurbadas, Cuiabá and Várzea Grande are confused. If it weren't for the Cuiabá River separating them, they would be imagined to be a single urban space due to their very similar geomorphological and socioeconomic characteristics. Among these characteristics, urban disorder is, without a doubt, one of the biggest fronts to be combatted. Unbridled urban expansion, due to population growth observed following the expansion of the agricultural frontier at the end of the 20th century, caused much of the disorder and contributed to the sprawl or underutilization of spaces, even

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those that still have great potential to be explored. With sprawl, urban voids arise which, in most cases, are vulnerable areas and treated with neglect until they become underutilized and degraded areas, generating more spending on infrastructure or poorly designed logistical support.

Because of poor public management over the years, the absence of adequate public policies and poor urban planning, Várzea Grande needs extensive attention focused on the basic services offered to the population, especially in locations further away from the central core, where the population is most poor settles down.

Public management fails to deliver the minimum services necessary for a good quality of life for the population, such as basic sanitation, leisure, and cultural services.

This chaotic and deficient scenario of adequate public policies is reflected in the irregular occupations in environmental preservation areas that have emerged in the municipality throughout its three centuries of existence, as is the case of the Carrapicho Settlement and other inappropriate occupations in environmentally sensitive locations. fragile.

The occupation, which has been in existence for over 60 years, although it was not possible to prove the exact time of this settlement, lives with practically the same problems that have not been resolved to this day. The Carrapicho Settlement is an area that has coexisted, over the years, with omissions from the municipal public authorities in dealing with the socio-environmental issues of low-income residents, a situation that, in a certain way, has encouraged irregular settlements whose consequences result in increased degradation. environmental.

What can be deduced is that the origin of urban land ownership is public, considering the historical context and the formation process of both the State of Mato Grosso and the city of Várzea Grande. It is possible to affirm that these lands, in the distant past, were vacant lands, that is, "no man's lands" and that over time they went through a process of land grabbing. In the near past, both Carrapicho and the Recorte Espacial of this research were still outside the urban perimeter, in a rural area. It is evident, from the recognition of the location, that to this day the settlement still retains intrinsic characteristics of rural areas. In Carrapicho, the urban and the rural meet in the Pantanal setting of Mato Grosso and we can still observe the figure of riverside dwellers with a typical profile of the population that occupied this region in very ancient times.

Two possibilities for intervention in the Carrapicho Settlement can be considered. The first, with the total relocation of the entire population of Carrapicho to an Eco neighborhood designed in a safe area within the Spatial Retreat itself, outside the floodplain of the Cuiabá River. The second keeps the population in place, through initiatives to requalify urban space, such as:

- Sustainable land regularization of the entire area through reurbanization, geotechnical and environmental studies to assess the scale of criticality of areas with the greatest risks.

- Implementation of engineering and drainage projects to improve the construction quality of the entire area.

- Implementation of green/sustainable neighborhoods.

Considering the population density of the municipality of Várzea Grande and the large number of urban voids in this vast territory that is still largely unoccupied, the Public Power could create standards so that these spaces could be occupied and optimized, parallel to the implementation of parks and spaces for public use at the along its entire length.

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