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# Preamble between mining modernization and territorial planning in the Amazon: the case of housing and rural villages in Canaã dos Carajás-PA

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#### **Abstract**

The spatial formation of the economic and social structures of the municipality of Canaã dos Carajás was limited to the regional policies formulated by the Amazon Development Superintendence (SUDAM) for the Amazon to reduce regional inequalities, culminating in the adoption of programs and projects for the extraction of mineral resources in a spurious way, which led to a territorial occupation linked to mining dependency and it is currently represented by S11D project undertaken by Vale. Based on the effects of the changes caused by ore extraction project at the S11D mine (Vale), the objective of this paper is to compare actions for the territorial planning of rural villages and housing in the urban perimeter, carried out through the public policies of the municipal management of Canaã dos Carajás, the Master Plan and the Local Plan for Housing of Social Interest (PHLIS), underlying the data referring to the Financial Compensation for Mineral Exploration (CFEM). In the analysis of the mentioned public policies, it is possible to affirm that in PHLIS only two projects have administrative autonomy to be implemented, Administrative Management and Decent Housing, since the resources are related to the municipal budget. The other Reform Card, National Social Interest Housing Policy, Minha casa, Minha vida and Lote solidário programs are supported by federal funds. So, given the precariousness of housing in rural villages, there is little space for maneuver for the administrative decentralization announced by the Master Plan, in relation to the federal government, to implement actions that are directly related to the demands of the population.

Keywords: Canaã dos Carajás. Mining Dependency. Rural Villages. Housing Program. CFEM.

# Preâmbulo entre a modernização da mineração e o planejamento territorial na Amazônia: o caso da habitação e vilas rurais em Canaã dos Carajás PA

## Resumo

A formação espacial das estruturas econômicas e sociais do município de Canaã dos Carajás foi circunscrita às políticas regionais formuladas pela SUDAM, para a Amazônia, visando a redução das desigualdades regionais, o que culminou na adoção de programas e projetos de extração de recursos minerais de maneira espúria, o que acarretou uma ocupação territorial vinculada à dependência minerária e que, atualmente, é representada pelo projeto S11D, da empresa Vale. A partir das mudanças provocadas pelo projeto de extração de minério da mina S11D pela Vale, o objetivo desse artigo é cotejar quais foram as ações para o ordenamento territorial das vilas rurais e a habitação no perímetro urbano, realizadas por



intermédio das políticas públicas da gestão municipal de Canaã dos Carajás, com referência ao Plano Diretor e o Plano Local de Habitação de Interesse Social (PHLIS), subjacente aos dados referentes ao CFEM. Na análise das políticas públicas referidas é possível afirmar que o PHLIS apresentou dois projetos implementados que possuem autonomia administrativa municipal: Gestão Administrativa e Moradia Digna, pois os recursos estão relacionados ao orçamento municipal. Os demais programas, tais como Cartão Reforma, Política Nacional de Habitação de Interesse Social, Minha casa, Minha vida e Lote solidário estão lastreados pelos recursos federais. Em função da precariedade da habitação nas vilas rurais, é pouca a margem de manobra para a descentralização administrativa enunciada pelo Plano Diretor, em relação ao governo federal, para implementar ações que estejam diretamente relacionados às demandas da população.

**Palavras–chave**: Canaã dos Carajás. Dependência minerária. Vilas rurais. Programas de habitação. CFEM.

# Preámbulo entre la modernización de la minería y la planificación territorial en la Amazonía: el caso de la vivienda y las aldeas rurales en Canaã dos Carajás PA

#### Resumen

La formación espacial de las estructuras económicas y sociales del municipio de Canaã dos Carajás se circunscribió a las políticas regionales formuladas por la SUDAM para la Amazonía para reducir las desigualdades regionales, culminando en la adopción de programas y proyectos para la extracción espuria de recursos minerales, que condujo a una ocupación territorial vinculada a la dependencia minera y que actualmente está representada por el proyecto S11D de Vale. Con base en los cambios provocados por el proyecto de Vale para extraer mineral de la mina S11D, el objetivo de este artículo es comparar las acciones para la organización territorial de las aldeas rurales y la vivienda en el perímetro urbano, realizadas a través de las políticas públicas de gestión municipal. de Canaã dos Carajás, el Plan Director y el Plan Local de Vivienda de Interés Social (PHLIS), que sustentan los datos del CFEM. En el análisis de las políticas públicas mencionadas, es posible afirmar que solo dos proyectos del PHLIS tienen autonomía administrativa para ser implementados: Gestión Administrativa y Vivienda Digna, ya que los recursos están relacionados con el presupuesto municipal. Los demás programas Cartão Reforma, Política Nacional de Vivienda Social, Minha casa, Minha vida y Lote Solidario cuentan con el apoyo de recursos federales. Entonces, dada la precariedad de la vivienda en las veredas rurales, hay poco margen de maniobra para la descentralización administrativa anunciada por el Plan Director, en relación al gobierno federal, para implementar acciones que estén directamente relacionadas con las demandas de la población.

**Palabras clave**: Canaã dos Carajás. Dependencia Minera. Aldeas Rurales. Programas de vivenda. CFEM.

# 1 Introduction

The boom in mineral extraction and exports in Brazil has as one of its centers of mineral reserves the municipality of Canaã dos Carajás, in Pará, in which there are currently two large mining projects, the Mina do Sossego, copper extraction, started in 2004, and S11D, opened in 2017. Although mining extraction in Canaã is recent, this process is linked to the creation of the export hub implemented by the Polamazônia –Carajás program, defined in 1974, for Serra do Carajás - Pará, and it had profound impacts on the modernization of the dynamics of territorial planning and urbanization of the municipalities that are part of the Southeast of Pará. This process strengthened and redefined the phenomena arising from territorial inequalities,



under the spectrum of the analytical categories of productive and spatial fragmentation, urbanization with socio-spatial segregation and economic/social heterogeneities in the territory.

Canaã dos Carajás is located in the urban hierarchy under the area of influence of Marabá, considered a regional capital C, and Parauapebas, as a sub-regional center A, capable of founding its own network (REGIC, 2020). The municipality represents the strategic locus as it houses the largest ore repository on the planet, reconciling the effects reverberated from this process, such as the abrupt demographic growth and the capture of budget revenue via Financial Compensation for Mineral Exploration (CFEM), on behalf of large mineral extraction projects in operation.

This paper focuses on the analysis of productive modernization in Canaã dos Carajás through the implementation of mining projects, from the 1970s until the creation of the S11D mine, carried out in 2017. This historical trajectory, despite focusing on Canaã dos Carajás, is aligned with macrospatial scale referring to the federal government's decision-making when adopting development policies for the Amazon and which formed the core of mineral extraction. This trajectory can be divided into phases of occupation: first phase (1970-1999), by the occupation of federal economic integration programs and municipal emancipation of Canaã dos Carajás; the second (2000-2017) for equipping the municipal government and installing the Mina do Sossego Project; and the third one (2018 and ongoing) for the start of operation of the S11D Project and collection of financial resources from the Financial Compensation for Mineral Exploration (CFEM).

The objective here is to identify which projects were organized by the planning of the municipal government of Canaã dos Carajás in light of the changes caused by the extraction of ore from the S11D mine by Vale. The focus was on territorial planning and housing in rural villages, considering two public policies, the 2007 Master Plan and the Local Social Interest Housing Plan (PHLIS).

This paper is divided, in addition to this introduction, into four sections. The first presented the methodology applied in the research. The second section discussed the analytical categories to interpret underdevelopment, which focused on the peripheral structure of Canaã dos Carajás; and presents the formation and modernization of federal government projects in the 1970s, guided by programs, and the territorial organization for the formation of Marabá and subsequently Canaã dos Carajás. The third section compared the programs and projects related to territorial planning mobilized by the municipal government, concomitantly with the expansion of mining extraction in Canaã dos Carajás, through the S11D mine. Finally, in the last section, final considerations were made.

## 2 Method and application in analysis movements

The methodology applied in the analysis in this paper went through two movements. The first one was to identify in the works of authors of Brazilian social and economic thought conceptual categories that made it possible to relate to the effects arising from territorial inequalities in Canaã dos Carajás. The choice of Sérgio Buarque de Holanda, Otavio Velho and Carlos Brandão was not random, we were concerned with searching in their conceptual inventory for concepts that could be applied to the formation and modernization process.



Subsequently, the second movement focused on analyzing the actions promoted by the municipal government of Canaã dos Carajás for housing planning with an emphasis on a qualitative analysis of the plans. The analysis was complemented by the consultation of secondary data referring to the municipality.

The first movement mentioned above aimed to create an inventory with categories and strong ideas, which can help to understand the inequalities introjected into the social, economic and political structures in Canaã dos Carajás, with dedication to the analysis of Brazilian social and economic thought: Sérgio Buarque de Holanda, in "Raízes do Brasil"; Otavio Velho, in "Expansion fronts and agrarian structure"; and Carlos Brandão, in "Território e Desenvolvimento".

The categories analyzed by these authors were: the border, recognized as originating from the economic and social formation of Brazil; economic and social stratification as arising from peripheral modernization and positioned in the international division of labor as an exporter of commodities; and forms of domination, understood as the synthesis of underdevelopment in peripheral countries related to the concertation of decision-making centralized in agents representing fractions of capital. The authors explored the ideas of forces that converge towards the announced analytical categories.

In Holanda (2006), the force ideas were the Weberian idea types of social actors that make up the social fabric of the territory, equipped with the *ethos* and rationality, which shape the social structure. In Brandão (2007), these ideas are interpreted by the division of labor, comprising the articulations between the scales of the relationship between work and the productive forces, converging as models of the economic structure. In Velho (2013), the components that describe the modernization of the periphery were the border, fronts of expansion of modernization and socio-political organization of territories, composing the political structure of the territory.

In the second analysis movement, the focus was on identifying in the urban planning of the municipal government of Canaã dos Carajás the actions organized for rural territorial planning, specifically in Vila Planalto, Vila Serra Dourada, Vila Bom Jesus, Vila Feitosa, Vila Ouro Verde and Vila Mozartinópolis. The methodology applied in this analysis was to identify in the Master Plan the actions aimed at the territorial planning of the rural area in the municipality. The analysis of the Local Social Interest Housing Plan (PHLIS) of Canaã dos Carajás went through identifying the actions aimed at housing in rural villages, with an emphasis on the financial resources applied to the projects by the municipal council of Canaã dos Carajás, as a guide to interpret the actions carried out by the municipal government.

Furthermore, the analysis included the analysis of data collected at the National Mining Agency, Amazon Foundation to Support Studies and Research (Fapespa) and municipal transparency data from Canaã dos Carajás, referring to socioeconomic data and those related to CFEM, with the aim of demonstrate the extent to which territorial inequalities have been reduced.



# 3 Analytical categories to interpret the formation and modernization of the structure of underdevelopment

The mobilization of analytical categories to understand the process of formation and modernization of regional, inter and intra-regional inequalities in Canaã dos Carajás deserves explanatory notes to strengthen the argument made in this paper. The category proposition is an effort to understand how economic, social and political structures were shaped in accordance with phenomena originating from the periphery of the capitalist system. The first category is the frontier understood by the formation and specialization of productive activity as a vector for land occupation, and consequently expansion of the capital accumulation frontier. The second is modernization mobilized by the formation of the social fabric driven by the processes of occupation and migration of economic agents and workers. The third one is positioned as forms of domination based on political arrangements determined by economic agents in the territories, strengthening relations of exclusivity and amplification of capital accumulation through the concentration of decision-making regarding the productive forces in the territory, delimiting the territorial ordering.

Based on this, the selected authors can base the analytical categories for the interpretation of the processes of inequalities in the formation and modernization in the periphery. The option to deal with categories that dialogued with each other was with the aim of systematizing the plot to understand the next step of this paper, that is, the formation phases of Canaã dos Carajás and its vicissitudes arising from its formation and modernization problems.

The first category treated was the border, which can be discussed based on the formation of Brazil's *ethos*, through the interpretation of Holanda (2006). In it, the colony and metropolis conception is established to give weight to the clash of conceptions between the *ethos* of modern European civilization, in its eagerness for colonization, and the original civilization formed by indigenous communities in Brazil. The connotation of the conception of the frontier of civilization is related to the territorial dimension and ideas, the culture of Iberism, protected by the Portuguese, the formation of social dynamics in Brazil through patriarchalism and subsequently the corrosion of this mentality through the process of change, from rural to the urban in the modernization process. However, the patriarchal *ethos* is preserved in the modernization process and is introjected into the formation of the modern State, generating private interests in relation to public institutions.

For Brandão (2007), the concept of borders is positioned as the modernization of the accumulation process dictated by connection links by the division of international trade between peripheral and central countries, intensified by globalization. The internationalization of the economic, financial and technological circuits of globalized capital weakens national decision-making centers and the particularities that form the local space are subject to the "demands" of globalization, which benefits elected places with investments in the productive sector. This process denies the hierarchical nature, formed by intermediate scales (and mediations) between the local and the global, introducing the "single thinking" that hegemonizes the debate on territorial development. Although the aforementioned author does not position the frontier category, he presents one of the foundations of the modernization of capital accumulation guided by



globalization, touching this category, but under new terminologies, such as the logical unit of the 3 "exes" used to designate the capitalist system: exploitation of work, expropriation and extraction of income and natural resources.

In Velho (2013), the border is part of the formation of Southeast Pará and is the result of the process of agricultural expansion fronts, marked by economic cycles. The first phase was the succession of rubber extraction to chestnut exploitation, in Marabá, from the 1920s onwards, under the aegis of the shipping system employed by traders, who in turn were financed by traders and exporters from Belém. In its second stage of the chestnut cycle, from 1925 onwards, the chestnut grove leasing system was granted by the State government, combined with the interests of the local oligarchy and the need for the dominant political system. From the 1950s onwards, the agricultural front of expansion in the Eastern Amazon was backed by the construction of the Belém-Brasília and Transamazônica highways, by tax Development Superintendence (SUDAM), the Amazon concomitantly with the implementation of the export hub specialized in extraction of ores, in Serra dos Carajás.

The second category is economic and social stratification, treated by Holanda (2006) as the organization of individuals by the conception of ideal types, the designation determined by behavior in the formation of the social structure and social types: adventurer and worker, sower and tiler, and the hybrid type generated by the figure of the cordial man. Among them, it is important to highlight the adventurer, as the ideal type, and the emergence of the hybrid type formed by the colonization of the metropolis in Brazil, namely the cordial man. The characteristics of the adventurer dialogue directly with the quick search for gain, abstaining from civic and republican responsibilities, while the cordial man has elements of patriarchalism at the center of his *ethos* in a modernizing society in Brazil, appropriating institutional spheres to practice of patrimonial traits of private interests.

According to Brandão (2007), underdevelopment permeates the social division of labor as a basic explanatory category present in all spatial dimensions and scales. The division of labor is the unit that contemplates the different stages reached by the productive forces, and acts as a mediating category to understand heterogeneities, hierarchies and specialization within and between any scale (regional, national, international). For the aforementioned author, the phenomena generated by territorial inequalities that can be regulated by different forms of domination of fractions of capital in underdeveloped countries: a) homogenization, conditions the situations of capital reproduction and capital appreciation; b) integration occurs under the face of competition between productive structures in space; c) polarization represents domination and irreversibility, combined with a hierarchy that establishes an unequal nature of development; d) hegemony based on a system of correlation of social and political forces, represented by limited spaces of power for decision-making.

In Velho (2013), modernization is the insertion of new forms of capital accumulation based on the economic integration of the Amazon into the national economic system in the 1970s, which determined the social stratification composed of: large farmers; peasants linked to the commercial sector; and the small peasant with the activity of agriculture. Another element within the social stratification was



the company United States Steel, which established itself as the provider of resources for the extraction of iron in Serra dos Carajás, underlying Companhia Vale do Rio Doce, they were represented by agents who constituted fractions of monopoly capital., in a peripheral region. The organization of the social fabric carried out by the accumulation of capital formed a social stratification composed of agents allied to their productive activities, which intensified with the insertion of international fractions of capital accumulation, such as the United States Steel company associated with the former state-owned company Vale do Rio Doce.

The third and final category addressed is related to forms of domination, which Holanda (2006) justifies by patrimonialism, redefined by the elites responsible to reproduce the family ethos in state institutions, guided by their private interests. In Brandão (2007), the global scale assumed a connotation of hierarchization of power, based on autonomy in decision-making in relation to the space and location in which the productive activity is inserted. Based on this notion, the local scale is subordinated, decisions are taken in other instances, institutional and by fractions of agents of capital accumulation, with participatory democratic instances being demobilized in this process, the federative dialogue between the national and state scales, giving way to hierarchization commanded by the global scale through forms of capital accumulation. In Velho's (2013) conception, this category is directly related to the change in the guiding principle for the urbanization of municipalities in the Southeast of Pará, which, before, was established close to rivers and, later, repositioned on the fringes of logistical infrastructures such as Belém-Brasília and Transamazônica highways, and the accumulation of capital generated by the extraction of minerals as a foundation for modernization and urbanization.

Table 1 – Categories and ideas as guides for diagnosing inequalities in economic and social structures in Canaã dos Carajás – Pará

	aliu sociai structures in Canaa uos Carajas – Para					
	Border ( colonial formation )	Economic and social stratification (peripheral modernization)	Forms of Domination ( underdevelopment )			
Sergio Buarque de Holanda	ethos of modern European civilization - Iberism, in its eagerness for colonization, and the formation of the rationality of patriarchalism in the colony.	Ideal types in social formation. The adventurous quick-win interest is averse to civic and republican notions. The cordial man synthesis of the rationality of patriarchalism in the modernization of institutional spheres.	Demonstration effect of patrimonialism in the management of state institutions by regional elites associated with their private interests.			
Carlos Brandão	Connections via the division of international trade, through the export of natural resources in peripheral countries to central countries, intensified by globalization.	The inequalities analyzed by the division of labor, replicated on all scales, propagating more acute effects of homogenization, polarization, hegemony and integration.	Hierarchization of power through selective decision-making spaces circumscribed by the global scale under the national scale, economic and political fragmentation through the economic activities of commodities, linked to the interests of international capital.			
Otávio Velho	Fronts of agricultural expansion, guided by economic cycles and subalternizing the Southeast region of Pará to the forms of capital accumulation in the centers.	Productive modernization and inequalities in the social stratification of Southeast Pará, composed of: large farmers; peasants linked to the commercial sector; and the small peasant with the activity of agriculture; the company United States Steel and Companhia Vale do Rio Doce, in iron extraction.	Logistical transport and electrical energy infrastructures to support the implementation of networks of economic activities specialized in the extraction of minerals in the Southeast of Pará, reverberating in forms of urbanization aligned with the effects of this process.			

Source: HOLANDA (2006); BRANDÃO (2007); VELHO (2013). Elaborated by the author.



# 4 Phases of the modernization of Canaã dos Carajás: historical and institutional formation as a synthesis of the productive nucleus of mineral extraction

In 1967, the Master Plan I (SUDAM) positioned the logistics of economic integration of the Amazon as a strategy for the Belém-Brasília and Brasília-Acre road axes, with the basins of Tocantins, Xingú, Tapajós, Madeira and Purús, and logistics integration between the capitals Belém and Manaus (SUDAM, 1967).

The characterization of the Carajás region was reviewed by studies by Monteiro and Silva (2021), understood by the capillarity of infrastructure logistics installed since the 1970s, by SUDAM. The authors argue that the logistical axes implemented in the process of integrating the Amazon into the national economic system allowed the demobilization of political structures represented locally in the territories of Carajás, for the control of infrastructures through the exercise of economic power reverberated as political capital, determining decision-making linked to the territory, such as the decision to implement the mining extraction project in Serra dos Carajás. Figure 1 shows the location of the municipality in its region.



Source: IBGE, 2022.

The main infrastructures that founded the integration and modernization of productive activities were: Belém-Brasília highway (BR-153) with PA-070; Transamazônica highway (BR-230); the National Institute of Colonization and Agrarian Reform (INCRA), with the implementation of the Integrated Colonization Project in 10km stretches on each side of the Transamazônica; highway PA-150, implemented for transportation purposes for the construction of the Tucuruí Hydroelectric Plant; installation of the Grande Carajás Program (PGC) that led to the extraction of ore from Serra dos Carajás. The logistics network installed in Carajás triggered the demand for the migratory flow of workers, from miners to farmers eager for land subsidized by the State, via the process of colonization and population



settlement, through the Land Redistribution and Northern-Northeast Agroindustry Stimulus Program (PROTERRA) (MONTEIRO and SILVA, 2021).

The first phase of occupation in Canaã dos Carajás occurred from 1970 to 1999, initially as part of Serra dos Carajás, which was characterized by the idealization and implementation of the economic model for the Amazon designed by SUDAM, guided by the Amazon Development Plans (PDAs) and applied under the guidance of the Polamazônia Program projects. In the case of Carajás, Marabá was positioned as central in this arrangement for ore extraction, due to its surroundings with infrastructure projects, such as railways for transporting ore, the Tucuruí hydroelectric plant, which conditioned urbanization (SUDAM, 1976).

In the 1970s, Canaã dos Carajás was part of the municipality of Marabá, due to the occupation of migrants from the center south in the Mozartinopólis village and in the subsequent decade the migration flow occurred to the CEDERE II village, resulting from the Grande Carajás Program (PGC). The occupation in Canaã was a consequence of large investments in the implementation of infrastructure for mineral exploration in southeastern Pará, associated with the regional policies of the State. Agricultural villages were organized to provide basic food supplies for the local population. Three Regional Development Centers (CEDERE) called settlement projects were implemented. Of these, CEDERE II was the main one for incorporating the facilities of the body responsible for the project, the Araguaia-Tocantins Executive Land Group (GETAT) and became the headquarters of Canaã dos Carajás (CANDIDO, 2018).

The GETAT demarcated the land allocated to settlers and doubled the offer of larger portions of land to farmers in other locations, as a way of making the settlements official, which led to friction between these social groups over land. In 1985, after the extinction of GETAT, there was a halt in assistance to settlers settled in the territories, which discouraged their stay and generated an exodus to other locations. In 1994, the emancipation of Canaã dos Carajás occurred, as a synthesis of the concentration of ownership of large land concentrations, representing the transition from backwardness to modernity with the arrival of a social group called pioneer, capable of modeling space, structuring of decision-making processes and as the bearer of civilizing action. The Pioneers hegemonized the local political system, through their insertion in political positions representing decision-making and occupied the best neighborhoods in the urban perimeter (CANDIDO, 2018).

The second phase occurred from 2000 and it can be comprehended until 2017; its main characteristic was the inauguration of copper mining, through the Mina do Sossego project (2004). This project strengthened local productive forces and impacted urban space, represented by the expansion of urban subdivisions, concomitantly with the warming of land values, propagated by real estate speculation.

In this phase, there was institutional strengthening of the municipal government through the creation of the Canaã dos Carajás Urban Development Institute (IDURB), in 2009, institutional competence specialized in urban planning, which expanded the state capabilities of the municipal government. Law No. 225/2009 formulated by the Canaã dos Carajás City Hall established the creation of the IDURB with the objective of protecting the Participatory Master Plan of Canaã dos Carajás, based on developing control and supervision of occupation and use of



land, right to housing citizens, promote the right to urban and social services for the population. The governance of the aforementioned institute involves advising on topics related to the Administrative and Financial Directorate, the Planning and Urban Projects Directorate and the Housing and Land Affairs Directorate (PREFEITURA MUNICIPAL DE CANAÃ DOS CARAJÁS, 2009).

The formulation of the IDURB expanded the state capacity of technicians imbued in strengthening the public policy arrangement, managed by the municipal secretaries of Canaã dos Carajás, granted by the plans and programs: Organic Law (2012 and updated in 2015); Local Social Housing Plan (2013 and revised in 2018); Municipal Development Plan 2035 (2015); Municipal Plan for Integrated Solid Waste Management (2015); Municipal Mobility Plan (2015); Multiannual Plan (2014-2017); Canaã Meu Lugar, a Municipal Land Regulation Program (2018).

As a result of the tightening of the pressure on the borders between urban and rural areas, through the accumulation processes arising from mining, the logistical structures that subsidized mining advanced, such as roads, railways and accommodation. To the detriment of the centrality of this productive activity, there was the marginalization of local agriculture and the latent aggression against nature, with an emphasis on the suppression of vegetation cover and silting of water courses (CANDIDO, 2018).

In the rural area, there was the creation of subdivisions that were targets of speculation and real estate investment in the space, and were installed close to the Parauapebas River, as a form of leisure, but which manifests itself under the mimicry of metropolitan spatial arrangements. The second type were the subdivisions occupied by the low-income population, in which a pendulum relationship was established between the population of Vila Planalto and the city, through a protoconurbation corridor between Canaã dos Carajás and Parauapebas (CARDOSO, CÂNDIDO, MELO, 2017).

The urbanization process in Canaã is the synthesis of an urbanization pattern of incomplete modernization, adapted from the center to the periphery, connected by the interests of agents representing fractions of capital, with the aim of intensifying the seizure of natural resources for the concentration of capital (MELO, 2015).

If in the past the constitution of urban centers in the Amazon followed the flows of rivers and the natural rhythm of the forest, Canaã dos Carajás shows that there is currently another pattern of urbanization in development in the region to compete with that one. The trajectory that developed between the Grande Carajás Program and the current moment of mineral exploration consolidated a process of urbanization on the tax frontier of large projects, and which at the same time has the novelty of incorporating financialized elements of the recent neoliberal turn (CANDIDO, 2018, p. 115).

For Michelotti (2019), the terms territory, territoriality and territorialization are interpretations to understand how globalized corporations territorialize themselves in certain spaces, imposing and disputing the material and symbolic dynamics of production and spatial reconfiguration. The regionalization of the subsystems is the arrival point of the analysis, as it is the locus that generates ramifications that strengthen reproduction relations and its territorial configuration that allows its limits to be demarcated. Carajás corresponds to one of the most



important iron mines in the world, but it produces bulky merchandise with low unit value, leading to a great "diseconomy of space", aggravated by its distance from any port.

For Cardoso, Candido and Melo (2017), Canaã illustrates the relationship between the extractive production hub, on a territorial scale, with the global market regulated by the fierce demand for commodities. The characterization of this process, called extractive neoliberalism by the authors, demonstrates that the center of decision-making is in developed countries, which have the autonomy to manage territories on the periphery by capital, which is not homogenized, but is concentrated in specific points, as in the case of the exploitation of natural resources.

# 5 The inflections of S11D mining project by Vale and its reverberations for the institutionalization of planning in Canaã dos Carajás

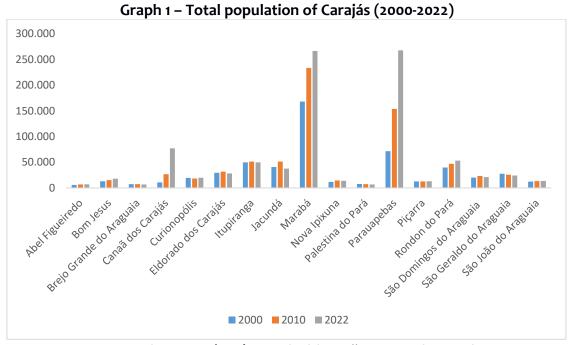
In this topic, the Master Plan and the Social Interest Housing Program will be analyzed, as pieces of analysis in relation to territorial planning and population occupation, mainly in rural villages, an area of tension due to the expansion of the strategic area of S11D, by Vale. The start of operation of the S11D Project (2016) in Canaã dos Carajás, harbored uncertainty regarding the effects of this process on the population.

The demographic data in the following graph shows the general population made up of data made available by the 2000, 2010 and 2022 Censuses, from IBGE. Based on these data, in the Carajás integration region¹, Marabá is central in the regional urban hierarchy until 2010 Census data, with 233,669 thousand inhabitants. However, as of the 2022 Census, it was surpassed in number of inhabitants by Parauapebas, jumped from 153,908 thousand inhabitants in 2010, to 267,836 thousand inhabitants in 2022. In the municipality of Canaã dos Carajás, the 2010 Census registered 26,716 thousand inhabitants, but from of the 2022 Census, 77,079 thousand inhabitants were recorded, assuming a relevant position in the regional urban hierarchy alongside Parauapebas and Marabá.

<sup>&</sup>lt;sup>1</sup>The Carajás integration region is made up of the following municipalities according to the Fapespa designation adopted by the state of Pará: Bom Jesus do Tocantins, Brejo Grande do Araguaia, Canaã dos Carajás, Curionópolis, Eldorado dos Carajás, Marabá, Palestina do Pará, Parauapebas, Piçarra, São Domingos do Araguaia, São Geraldo do Araguaia and São João do Araguaia.



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Source: IBGE, Demographic Census (2022). Consulted: https://censo2022.ibge.gov.br. Elaborated by the author.

Table 2 presents the occupation of workers by economic sector. A first analysis filter was the expansion of the mineral extraction sector, which expanded from 42 formal employment contracts to 3,647 in 2018. The civil construction sector in 2014 employed 9,344 workers, and in the following year it reached its peak with 14,362 workers, subsequently, there was a regression in the number of workers in this sector to 2,117 in 2018. The manufacturing industry sector also regressed over the years, in 2015 there were 1,045 and declined to 353 employed workers in 2018. The second analysis filter was in relation to the population general employment, in 2014 there were 16,110 formal workers and in 2018 there was a reduction to 11,926 jobs occupied by workers in the municipality of Canaã dos Carajás.

Table 2 – Employment relationships in formal employment by economic sector in Canaã dos Carajás

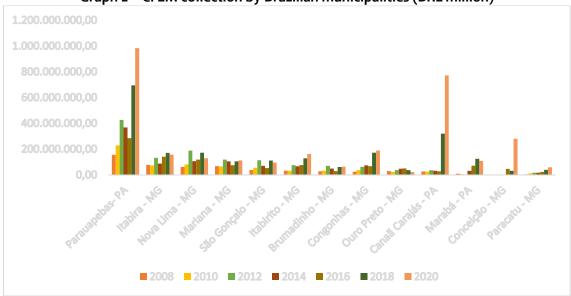
Cariaa aos carajas									
Years	Mineral Extractive	Ind. Transformation	Industrial services	Construction	Business	Services	Public Adm	Agriculture	Total
2014	42	992	29	9344	1235	1682	2509	277	16110
2015	28	1045	22	14362	1421	2052	2008	399	21337
2016	81	785	3	7220	1522	2145	2879	255	14890
2017	3245	369	1	1404	1367	1861	2872	254	11373
2018	3647	353	4	2117	1207	2010	2342	246	11926

Source: Fapespa. Consulted at:

http://www.fapespa.pa.gov.br/sistemas/anuario2020/tabelas/social/5.3-mercado-de-trabalho/tab-5.3.4-vinculos-empregaticios-no-emprego-formal-por-setor-economico-2014-a-2018.htm . Elaborated by the author.



Pará has consolidated itself as the largest recipient of CFEM resources due to its specialization in mineral extraction, with the pioneering work of the Grande Carajás Project (1982) based on prospecting and the beginning of activities in Parauapebas and Marabá. In the historical series (2008-2020) Parauapebas led until 2018, losing its leadership in 2019, at the CFEM reception, due to the S11D project in Canaã dos Carajás, in which it began to lead the collection of this tribute.



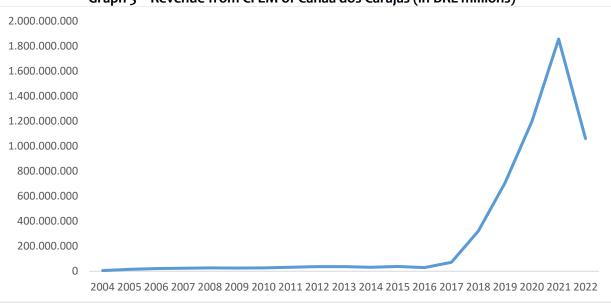
Graph 2 – CFEM collection by Brazilian municipalities (BRL million)

Source: National Mining Agency. Consulted at:

https://sistemas.anm.gov.br/arrecadacao/extra/Relatorios/cfem/maiores\_arrecadadores.aspx. Elaborated by the author.

In graph 3, it can be seen that Canaã dos Carajás began collecting resources from CFEM (2005) increasing from BRL 14,834 to BRL 38,597 million (2015). However, with the start of operation of the S11D project (2017) there was an abrupt increase in the revenue of CFEM, from BRL 71,425 million to BRL 320,722 million (2018) representing an increase of 350% in its first year of ore extraction from S11D. In 2021, revenue reached its highest value recorded until 2022, BRL 1.857 billion, but in 2022 it dropped to BRL 1.060 billion. These data reinforce the capacity and scale of ore extraction in Canaã, so that the composition of the municipal public budget became dependent on CFEM and currently earns impressive amounts.





Graph 3 – Revenue from CFEM of Canaã dos Carajás (in BRL millions)

Source: National Mining Agency. Consulted at:

https://geo.anm.gov.br/portal/apps/webappviewer/index.html?id=c92683edf03e46148454150021c4e ecb. Elaborated by the author.

The rural area of Canaã dos Carajás is made up of villages, which compete for space with the exploration of iron ore, constituted since the first projects in the territory and remained as housing for the residents, who were encouraged to migrate due to iron extraction enterprises. ore in previous decades. The villages are: Vila Serra Dourada was organized due to gold mining in the early 1980s; Vila Planalto was part of the GETAT settlement project, called Cedere II, it has the greatest infrastructure and population occupation among the other villages, due to the offer of services and commerce and its strategic location in relation to the distance from the urban area (17km) and the connection with the state highway (PA–160) that connects Canaã dos Carajás to Parauapebas and VP-45, which limits its location to Mina do Sossego and the other villages; Vila Bom Jesus emerged due to the GETAT occupation project and its occupation was implemented by families who were using clandestine mining in Serra do Sossego; Vila Feitosa is the result of the GETAT settlement and the occupation by settlers of Três Braços Farm, starting in 1983; Vila Mozartinópolis originates from the first mining studies in the territory, emerged in the late 1970s and early 1980s, and its occupation was carried out by farmers and small farmers; Vila Ouro Verde was one of the pioneer settlement centers of GETAT, called Cedere III, in 1983.





According to Table 3, there was a variation in the proportion of the urban and rural population of Canaã dos Carajás, from 6,998 it reduced to 5,989 (2000 to 2010) while the urban population increased from 3,924 to 20,727 (2000 to 2010). In the comparison between the percentage of the population urban and rural with the total in Canaã dos Carajás the percentage of the rural population reduced last year to 17.74% and the urban population increased to 82.26%.

Based on data consulted in Cadúnico and analyzed by Silva and Sousa (2022) regarding the situation of households and type of households in Canaã dos Carajás (2020) households in the urban area were considered permanent in 71.5% and 0.3 % called improvised. In rural areas, the percentage of 15.6% was permanent and 12.8% was improvised, demonstrating greater vulnerability in housing conditions in rural areas than in urban areas.

Table 3 - Population according to household unit situation (2000-2022)

Urban	Rural
3,924	6,998
20,727	5,989
31,080	8,192
63,253	13,728
	3,924 20,727 31,080

Source: IBGE. Elaborated by: FAPESPA/SEPLAD. Consulted in: Pará Municipal Statistics: Canaã dos Carajás, organized by FAPESPA (2022).

Candido (2018), changes in the expansion of the urban perimeter in Canaã dos Carajás were the result of the abandonment of rural productive devices, underlying the insertion of metropolitan characteristics with reference to the arrival of national brand chains and international fast-food chains. Therefore, for the aforementioned author, the affirmation of neoliberalism as an ideology crystallized the reproduction of capital accumulation through productive modernization, such as S11D mining, as well as a change in the traditional habit and culture of residents, who began to seek forms of leisure by consumption in shopping centers.



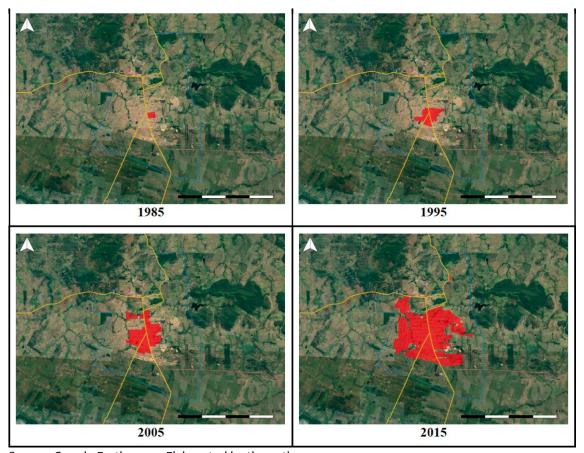


Figure 3 – Map of urban evolution in Canaã dos Carajás - PA (1990 -2015)

Source: Google Earth, 2023. Elaborated by the author.

The analytical framework of the 2007 Participatory Master Plan is divided into axes, in each of them, there are programs guided by proposals and execution instruments. Priority was given to the axes of the programs that are related to the territorial planning of the rural area of Canaã de Carajás and based on the instruments mobilized for their execution. Because of this, the field of analysis was restricted to city hall actions that can make changes to the territorial structure.

In the Participatory Master Plan, the municipal axis prioritized urban decentralization in relation to public services for neighborhoods and towns. Together, it was proposed to organize land planning based on vectors of urban expansion and rural activities, with the democratization of public spaces. In the Sustainable Territorial Planning axis, territories were regionalized into macrozones and specific projects for each of them, and land regularization with registration of municipal properties (PMCC, 2007).



The thematic axis of the urban area has as its priority the Urban Sustainable Territorial Planning, in which it proposed the implementation of the use of urban space between two microzones, decentralization of public services and urban requalification projects in degraded areas. Collection of data regarding population density and occupancy rate and urban zoning. In the rural axis, territorial planning prioritized the diversification of production with an emphasis on encouraging the agricultural hub and rural producers and infrastructure for the flow of production. In this sense, the use of the territory was oriented towards plant restoration and articulation between productive diversity and supply in the municipal market. The strengthening of rural associations and the requalification of the Pronaf producer register are guidelines for strengthening family farming (PMCC, 2007).

In the village axis, projects to expand infrastructure for basic sanitation, electricity, public roads, paving projects, and restructuring of the village circulation system were prioritized as programs. The territorial planning of the villages was guided by the land use and occupation project, with the removal and revitalization of areas occupied by irregular use. Regarding housing, monitoring of settled families and investments in infrastructure and social projects was carried out. The construction of public spaces aimed to be directed towards the use of the population in forms of leisure and social organization. The development of the villages prioritized strengthening associations and productive activities carried out in the villages such as inclusion of the population in income generation, related to local productive potential, such as sustainable tourism in Vila Mozartinópolis, and implementation of the industrial district in Vila Planalto (PMCC, 2007).



Table 4 – Thematic axes of the Participatory Master Plan (2007)

Table 4 – Thematic axes of the Participatory Master Plan (2007)						
Axle	Program	Proposals	Instruments			
	Urban Decentralization Program	Thematic Municipal  Decentralize services to neighborhoods and towns in relation to the center	Equitable distribution of CFEM to neighborhoods and towns.			
Municipal Structuring for a Fair Future	Program to Control the Expansion of Urbanized Areas	Orderly land division; organize vectors for urban expansion; strengthen rural productive activities in urban and rural transition areas; create and democratize public spaces.				
Sustainable Territorial Planning	Macrozone Compatibility Program	Regionalization and implementation of projects in macrozones; and specific legislation for each macrozone.				
- Territorial Flamming	Land and Real Estate Registration and Regularization Program	Regularization of land and buildings; georeferenced registry of the properties of the municipality.				
Sustainable Territorial Planning Urban	Compatibility Program for Zones, Planning Areas and Uses	Thematic Urban area  Ordering of use between two or more zones (microzones); Decentralization of services; Planning new neighborhoods; and Urban requalification project in degraded areas.	Creation of the Public Land Bank, under the supervision of the Secretariat of Management and Planning.			
	Axes	Thematic Rural area				
Rural Sustainable Territorial Planning	Rural Property Densification Monitoring and Assessment Program	Planning for financial incentives for production diversification; Project for drainage and infrastructure for the supply of agricultural products; Encouragement of agricultural hubs; Rural producer market project.	Canaã dos Carajás Economic and Social Development Agency; Partnership between Adepará and Emater.			
Qualification of the Rural Environment	Land Use Restructuring and Requalification Program	Delimit areas for plant restoration; Coordination between diversified production and the sale of production in the Municipal Market.	Canaã dos Carajás Economic and Social Development Agency			
Development Rural Economic	Incentive Program for the Settlement of Small Producers in Rural Areas	Strengthening rural associations; Reevaluate the registration of producers receiving Pronaf; Strengthening family farming.	Canaã dos Carajás Economic and Social Development Agency; Partnership between Adepará and Emater.			
		s Themed Villages				
Infrastructure and Services Program in Villages	Infrastructure Expansion and Diversification Project in Villages	Basic sanitation; supply network in Sol electricity network; cleaning of public s	spaces and roads.			
Transport, Mobility Human Accessibility	Planning and Restructuring Program for the Circulation System in Villages	Restructuring of the village circulation design; implementation of public sidew sidewalks.	ralks; permeability of public			
Sustainable Territorial Planning in Villages	Compatibility Program for Zones, Planning Areas and Uses	Projection of land use and occupation revitalization of areas with irregular oc	cupation or use.			
Decent Popular Housing	Diversified Policies Program for the Production of Housing Units	Monitoring project for settled infrastructure; job offer; social projects	5.			
Medium Qualification- Environment	Environmental Qualification Program for Public Spaces	Formalization of deliberative decision Revitalization of public spaces, such as	squares.			
Economic and Social	Productive Activities and Income Generation Development Program  Mozartinópolis Tourist-	Strengthening associations; Identificat activities in the villages; renewable ted to generate income.  Project to encourage sustainable	chniques and raw materials			
Development in Villages	Cultural Development Incentive Program  Vila Planalto Development	education project.  Industrial district implementation proje				
	Program	and health equipment; and Urban's Village.				

Source: PMCC, 2007. Elaborated by the author.



Among the actions proposed by Master Plan of Canaã dos Carajás (2007), it is possible to evaluate, based on the data made available by the Municipal Planning Secretariat, the works completed by 2015, so that it is possible to approximate the relationship between the proposals and the implementation of the aforementioned actions.

The actions formulated by the municipal government of Canaã dos Carajás presented in Table 5 are contained in the document Socioeconomic Diagnosis of Canaã dos Carajás. It is possible to correlate with the actions proposed by the Canaã dos Carajás Master Plan, seeking to compare the proposed actions and those that were implemented until 2015. There was progress in the formalization of the following actions proposed by the Master Plan: in the Vilas Thematic Axis, the infrastructure program and services in the Villages, through the asphalt project of the Urban Center for Rural Zones and the asphalt project in Vila Planalto; the Decent Popular Housing program advanced with the construction of popular houses through the Minha Casa, Minha Vida Program; the Environmental Qualification program was implemented by the construction of the Vila Planalto square; the Economic and Social Development in Villages program was systematized by projects for the construction of municipal schools, sports courts and health centers in villages; and the Development of Productive Activities and Income Generation program through the implementation of the Municipal Rural Producer Fair.

Table 5 – Projects completed in the villages of Canaã dos Carajás (2015)

Axes	Projects	Importance	
Urban mobility	Asphalt in Vila Planalto Asphalting 75km of roads in the Urban Center and Rural Zone Asphalting 50 km of roads in the Urban Center and Rural Zone	Improved mobility from rural villages to the city	
Space, leisure and tourism	Vila Planalto Square	Offer public space to the population for leisure	
Housing	Construction of popular houses with installed urban and social infrastructure	Minha Casa, Minha Vida Program	
Education	Vila Planalto Municipal School Coverage of sports courts in Rural Areas Construction of a school with 10 classrooms in Vila Ouro Verde	Education provision in villages	
Agriculture and Management	Construction of the Adepará Office in Vila Ouro Verde	Decentralization of planning management	
Economy and Market	Municipal Rural Producer Fair	Strengthen the relationship between family farmers and local production and marketing	
Health	Construction of Health Posts in Vila Planalto Construction of Health Centers in Vila Bom Jesus Construction of Health Centers in Vila Ouro Verde Construction of Health Centers in the Zé Levino Community	Improving the provision of health services in the Rural Area	

Source: Consulted in PMCC (2016). Elaborated by the author.



In the document 1st Review of the Local Social Interest Housing Plan (PLHIS) formulated by the Municipal Secretary of Planning and the Municipal Secretary of Housing (2018) of Canaã dos Carajás, the area referring to the planning was structured between the urban and rural. During the process of land occupation in Canaã, agents with large rural properties were involved, who, in the face of conflict over land with gold miners and the Landless Movement, carried out the division of plots of land, so that the urban perimeter could be expanded, however, with a lack of land regularization. The process of transferring land from INCRA to the municipality resulted in land regularization that diverged from urban policy, which made it impossible to achieve territorial planning established by the municipal government with regard to land for housing and urban infrastructure (SMP-SMH, 2018).

There are lands originally belonging to INCRA and they are in the process of being transferred to Canaã, and irregular subdivisions in patrimonial leagues are related to two models of irregularities, due to the lack of a project by the subdivision and the location on land pre-arranged for agricultural production (SMP-SMH, 2018).

Table 6 – Data on villages in Canaã dos Carajás (2014)

Village	Perimeter location -urban	Population and income	Infrastructure
Vila Planalto	17 km (between PA-160 (state highway that connects Canaã dos Carajás to Parauapebas) and VP-45.	2,872. 57% of population have income, 61.3% income lower BRL 1,449.99 and 4.0% BRL 2,900.00	Schoolchildren Unit, Health Unit, Paving road network, Commerce and Services.
Vila Bom Jesus	30 km (the main accesses are VS-45 and VP-12, near Mina do Sossego)	1,455. 66.7% lower income BRL 1,449.99 and 6.7% BRL 2,900.00.	Schoolchildren Unit, Health Unit, Paving road network, Commerce and Services.
Vila Feitosa	23 km (the main accesses are VS-14, VP-21, VP-20)	1,596. Of the 68.8% of pop. has income, 75% lower income BRL 1,449.99 and 6.3% BRL 2,900.00	Not included.
Vila Ouro Verde	35 km (the main accesses are rural roads VS–14, VP–21, VP–20 and VS–80).	85.7% of pop. has a lower income of BRL1,449.99 and no one has a higher income of BRL2,900.00.	Not included.

Source: (SMP-SMH, 2018). Elaborated by the author.

According to the Joaquim Pinheiro Foundation, in Canaã dos Carajás there was a rural housing deficit of 248 (2010). And the number of precarious homes in rural areas was 227 (2010) (SMP-SMH, 2018).



Table 7 - PLHIS 2018 Programs

Line programmatic	Program	Goal	Resources 2019 – 2022 (BRL million )
Development Institutional	Management Administrative	Institutional organization of SEMHAB (expansion of technical staff); Software for monitoring the management of urban and rural Housing Policy.	5,302,761.73 (municipal resources)
Housing Production and Acquisition		Offer of 60 housing units; the Reform and Expansion Plan, Risk Area Elimination and Management Program until 2020.	7,339,913.00 (municipal resources)
Improvement Service- Housing	Decent Housing	Offer resources for housing renovations and expanding the supply of housing units through the Cheque Moradia program, building sanitary modules.	17,437,586.34 (state resource, 9,380,438; federal resource 6,482,147; municipal resource 1,575,000).
	Card Remodeling	Implement the card reform program	500,000.00 (federal resource )
Housing Production	National Social Interest Housing Policy	Execute the Socio-territorial Development Plan Minha casa, Minha vida Program (Residencial Canaã)	811,710.00 (federal resource )
and Acquisition	Minha casa, Minha vida Program	Build housing units in ranges one (1) and two (2) of the Minha casa, Minha vida Program	27,200,000.00 (federal resource).
Urban Integration of Precarious Settlements	Batch supportive	Concession of social lots for families in vulnerable situations. Launch of 30 lots housing .	2,000,000.00 (federal resource)

Source: (SMP-SMH, 2018). Elaborated by the author.

### **5 Final Considerations**

The paper, when presenting the phases of formation and modernization of occupation in Canaã dos Carajás, prioritized the second and third phases, referring to the changes caused by the ore extraction project from the S11D mine by Vale in urban planning related to the territorial organization of rural villages and of housing in the urban perimeter. When focusing on this analytical focus, three analytical movements were carried out seeking to resolve the changes that occurred from one phase to another: a) theoretical analytical categories in Holanda, Velho and Brandão applied to assess the data and public policies analyzed; b) balance of the Master Plan and PLHLIS, which consisted of identifying the programs and projects related to the territorial planning of rural villages in the Master Plan, comparing with the projects and actions implemented in the document Socioeconomic Diagnosis of Canaã dos Carajás, and subsequently investigating by through PLHILIS, actions aimed at housing in rural villages, comparing with the amounts of financial resources spent by the municipal government of Canaã dos Carajás; c) collecting data relating to demographics, occupation of jobs and CFEM collection by Canaã.

The analytical categories border, economic and social stratification and forms of domination collaborated to understand the irruption of changes in territorial dynamics in Canaã dos Carajás, caused by the improvement of capital accumulation processes determined by the beginning of operations at the S11D mine for mineral extraction, under the responsibility of Vale. Data from 2017 onwards showed a



regularity, the growth of demographic data, from 26,716 inhabitants in 2010 to 77,079 inhabitants (2022). The value of municipal Gross Domestic Product (GDP) followed the trend of expansion of resources collected by CFEM, increasing by BRL 2,396 million (2016) to BRL 7,106 million (2018). The collection of CFEM resources corroborates this regularity by recording its highest value in 2021, corresponding to BRL

1,857,040,185.99. However, the data recorded regarding jobs did not record the same trend, there was a drop in 2018 to 11,926, compared to 2015. The data mentioned attested that the epicenter of demographic and economic growth is due to the installation of S11D, at the same time it is possible to mobilize the frontier category interpreted by its modernization through the approach of Brandão (2007), whose hierarchical nature commanded by global demand strengthens the productive spatialization specialized in the extraction of ore on a local scale, generating economic growth, however, not having a positive impact on the generation of formal jobs.

The municipalities with the highest CFEM collection (2021) were Parauapebas, BRL 983 million, and Canaã dos Carajás BRL 771 million, which highlights the leading role of Vale as a strategic agent in the territorial economic stratification in these municipalities. Furthermore, these resources became part of the municipal budget as revenue, imposing a relationship of dependence on mining. For Holanda (2006), the category of economic and social stratification is provided under his watchful eye by designating the confluence of private relationships and interests within institutional spheres, under the spectrum of patriarchalism. So, it is possible to understand that Vale plays a relationship between the interests of the private sector, as a multinational company, with the decision-making process on a local scale with planning bodies due to the productive specialization of the ore. Brandão (2007) points out that the social division of work analyzed from the perspective of scales allows identifying the confluences that come to exist in the relations between the global and local, through selectivity in choosing the place for federal government investments combined with the initiative private, as occurred in the case of the Amazon development plans and programs and in the case of S11D, in Canaã dos Carajás.

The actions proposed by the Canaã dos Carajás Master Plan regarding territorial planning and the provision of infrastructure for rural villages encompass an important repertoire of public policies that aim at population equity, but also at land regularization, with the decentralization of services to the neighborhoods and rural areas, encouraging agricultural production in the countryside and strengthening family farming come up against a structural problem, namely the effects of the category of forms of domination. According to Table 4, the proposals that were implemented in the Master Plan were actions aimed at asphalting and paving areas that connect the towns to the Urban Center, the construction of schools, multi-sports gyms, health centers and squares. Despite progress in projects linked to urban and social infrastructure in the provision of public services such as education and health in rural areas, there was no progress in the structural proposals of the axes: Macrozone Compatibility Program, Land and Real Estate Registration and Regularization Program, Program for Compatibility of Zones, Planning Areas and Uses, Program for Monitoring and Evaluation of the Densification of Rural Properties,



Program for Restructuring and Requalification of Land Use and the Program to Incentive the Settlement of Small Producers in Rural Areas.

The data on the participation of value added by sectors in the economy of Canaã dos Carajás helps to demonstrate the loss of space for agriculture in the local economy, reducing the participation of the primary sector in the municipal GDP from 1.74% (2014) to 0.39 %(2020). While the industrial sector grew from 73.46% (2014) to 87.74% (2020) (FAPESPA, 2022).

According to Velho (2013), one of the main problems was related to the impacts of logistical infrastructure projects for transport and electricity generation, implemented as a basis for the mineral extraction complex. Going against the proposal of actions aimed at the democratic pact between the municipal government and social actors. Because of this, according to Brandão (2007) there is a hierarchy of decision-making that formulates the territorial ordering of space, given that decisions are taken by agents representing fractions of capital, as is the case with Vale.

The conditions triggered by data from rural villages according to the PLHIS highlight the vulnerability and territorial asymmetries not recorded by economic indicators. In Vila Planalto, Vila Bom Jesus, Vila Feitosa and Vila Ouro Verde the income of the population is less than BRL 1,449.99, and the infrastructure is precarious, in addition to being on the front line of the conflict over the struggle for land with the representative agents agricultural production and Vale for ore extraction.

From the programmatic line of programs by PHLIS, only two have administrative autonomy to be implemented, Administrative Management and Decent Housing, as the resources are related to the municipal budget. The other programs, such as the Reform Card, National Social Housing Policy, Minha casa, Minha vida and Lote solidário are sponsored by federal resources. As identified in the Master Plan institutional documents, the proposals implemented according to the information in the document Socioeconomic Diagnosis of Canaã dos Carajás were allocated to social infrastructure, the construction of schools and health centers, and the paving of access streets to the Urban Center. The resources implemented by the PHLIS of Canaã dos Carajás in housing had the highest percentage granted by the federal government, 63.65%, the municipal government participated with 23.46% of the resources granted and the state government with only 15.5%. So, given the precariousness of housing in rural villages, the administrative decentralization set out in the Master Plan is reduced, centralizing the largest percentage of resources in federal government programs in Canaã dos Carajás, in programs related to territorial planning and housing.

There is a need to advance the popular participation agenda in dialogue with the secretaries and the municipal government for the coalition of institutional apparatuses capable of implementing programs and projects consistent with territorial problems.



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#### CONTRIBUTION OF EACH AUTHOR

The steps described below were all carried out by the author

Conceptualization \_ \_ Data Curation \_ \_ Formal Analysis \_ Obtaining Financing acquisition )
Investigation / Research
Methodology \_ \_ Project Administration \_ Resources ( Resources )
Software
Supervision/guidance ( Supervision )
Validation \_ \_ Visualization \_ \_ Writing - First Draft ( Writing - original draft)
Writing - Review & Editing.

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