

## CHALLENGES AND REALITY OF SANITARY SEWAGE SERVICES IN SUBNORMAL AGLOMERATES IN THE STATE OF SÃO PAULO

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**Abstract:** This article aims to analyze the problem of precarious sewage services in subnormal agglomerations in the state of São Paulo. The research presents updated data on sewage collection and treatment and an overview of the evolution of the number of subnormal agglomerations in the state. The proliferation of these clusters becomes an even greater problem when related to the difficulties in universalizing basic sanitation in these settlements, especially regarding sewage services. This work adopts a dialectical approach and a methodological procedure based on the indirect documentation technique, using statistical sources from government agencies and bibliographically exploring works and research related to the topic. The results of this study reveal the challenges faced by residents of these settlements with regard to access to sewage services. Furthermore, they point out that the increase in the number of subnormal agglomerations in the municipalities of São Paulo is a worrying trend, directly related to the lack of access to decent housing and the precariousness of basic sanitation. This study contributes to a better understanding of social inequalities, shedding light on the gaps in basic sanitation conditions in peripheral communities. Furthermore, it offers subsidies that can guide efforts aimed at improving these conditions and helping the residents of these communities to overcome the difficulties inherent to life in subnormal settlements. This research emphasizes the need for public policies and concrete actions to improve the quality of life of these vulnerable populations and promote access to sanitation services regardless of socioeconomic status or geographic location.

**Keywords:** Basic sanitation; Sanitary Sewage Services; Subnormal Clusters; State of São Paulo.

## INTRODUCTION

Global urban growth has increased the number of people living precariously in subnormal agglomerations. The lack of adequate public policies and urban planning allowed an accelerated expansion of housing in these clusters, which are characterized by a lack of infrastructure and sanitation. In the Brazilian context, urbanization is closely linked to the dynamics of the real estate market, shaped by the logic of capitalist accumulation, which results in the significant expulsion of less favored classes to peripheral areas, hillsides and urban outskirts, causing a housing crisis and precarious housing conditions. (MARICATO, 2015).

The social and economic transformation of Brazil in the last century, especially in the Southeast region, boosted urbanization with the concentration of large industries and migration of labor, mainly from the Northeast to the state of São Paulo. This scenario challenges the provision of essential services, such as sanitation in subnormal agglomerations. The expansion of Brazilian peripheries is marked by the self-construction of residences, in a precarious manner, within urban exploration and real estate speculation. All of this culminates in an urban crisis evidenced by socio-spatial segregation and the submission of populations in situations of poverty in spaces lacking adequate urban infrastructure, often referred to as “swells”, “poverty belt” and “marginal spaces” (MARICATO, 1982, p.83).

Urbanization emerges as a significant capitalist enterprise, in which residential spaces are controlled by actors who shape the urban environment under neoliberal principles. It is evident that government strategies and actions, aligned with the interests of the private sector, are gradually transforming urban spaces into economically productive environments, while at the same

time accentuating segregation. For the most disadvantaged, such as the inhabitants of slums, the homeless population and needy communities, segregation manifests itself through violent and arbitrary expulsions. These actions aim to realize the valorization of space, integrating with the strategies of hegemonic agents (PÁDUA, 2015).

According to Sassen (2008), when analyzing the different specializations of global cities, the social morphology of contemporary cities reveals a striking duality. On the one hand, there is an immense concentration of wealth in privileged social classes, demonstrating a favored consumption process. On the other hand, there is an increase in the concentration of poverty, with the less privileged classes being increasingly segregated into precarious spaces. Despite coexisting in the same city, these realities barely intertwine, with meetings being rare and often marked by a position of subordination. This situation is reproduced in the cities of São Paulo, where precarious urban expansion is predominant. These precarious settlements are found on the outskirts of metropolises, in medium and small cities and even in rural areas. Under these circumstances, the city ceases to be an integral part of the lives of workers and less favored classes, accentuating the division between different social groups.

The term subnormal agglomerations find its basis of definition in the Brazilian Institute of Geography and Statistics (IBGE), which conceives it as irregular forms of occupation of public and private land for housing purposes in urban areas.

Generally, these areas are characterized by a disorganized urban arrangement, a lack of essential public services and their location in regions with restrictions on occupation. The concept encompasses different types of settlements, such as irregular, clandestine subdivisions, slums, precarious settlements,

informal settlements, invasions, caves, lowlands, tenements, communities, villages, stilt houses and other similar situations (IBGE, 2020).

When subnormal agglomerations are addressed, it is clear that it is not just the continuous lack of sanitation, but several other needs, which include transport, security, health, public facilities, leisure, etc. In most precarious settlements, the population does not have access to basic sanitation services, considered essential by law. While privileged social classes enjoy care and other benefits, peripheral communities are often neglected or simply ignored. This disparity persists due to a different process of social experience, evidenced by the precariousness that appears in a visually cruel, anti-ecological and inhumane way (MORAIS; KRAUSE; LIMA NETO, 2016).

The diversity of subnormal agglomerations in Brazil, with their different characteristics in terms of urban types and locations, requires a specific analysis. This study proposes a relevant approach to understanding how urban management deals with precarious conditions in these areas. Such places house communities in unacceptable situations for the social and economic progress that society enjoys today, aggravated by the lack of sanitation, which generates challenges and deprivations, especially for the less privileged classes, who live in precarious housing, directly impacting their quality of life. This reality highlights the importance of inclusive urban planning, sensitive to the particularities of sanitation. Neglect not only perpetuates social inequality, but also compromises the fundamental principles of public health and collective well-being, essential for a civilized and equitable society (NEVES-SILVA; HELLER, 2016).

The state of São Paulo constitutes a complex set, made up of objects, things, people and

a network of interactions in an uneven and combined movement. This dynamic encompasses cooperation and conflict. The rapid expansion of São Paulo results in a marked process of peripheralization, especially in larger cities, becoming a significant challenge for state management. With the growth and multiplication of problems, the population in peripheral areas faces significant limitations.

This makes mobility towards areas with more adequate urban structures or improvements in the inhabited area more theoretical than practical. “Based on such questions, it can be seen that the course of urbanization among us has been heartbreaking” (SEABRA, 2004, p.305).

This work uses a dialectical approach and a methodological procedure based on documentary research in statistical sources based on official bodies and works and research related to the topic, with the aim of analyzing the problem of the precariousness of sewage services in subnormal agglomerations in the state of São Paulo, which is home to the largest number of clusters in these conditions in Brazil (MARCONI; LAKATOS, 2003).

This article is organized into three sections. In the first, an analysis of the proliferation of subnormal agglomerations is made, accompanied by a synthesis of the territorial formation of the state of São Paulo. The second section addresses the challenge related to access to sewage services in subnormal agglomerations. And, in the third section, a discussion is presented about the precariousness of sewage services in subnormal agglomerations in the state of São Paulo, establishing comparisons with the variables and theories exposed throughout the research.

## **THE PROLIFERATION OF SUBNORMAL CLUSTERS: THE DYNAMICS OF THE PERIPHERAL FORMATION**

The territorial structure of the state of São Paulo is formed by “structural axes and regions”, that is, by historically constructed elements that influence the current spatial organization. These elements represent the territorial expression of an inseparable relationship between technology and economy, inserted in a neoliberal capitalist model of urban development. The less favored classes were pushed to the periphery. The formation and development of cities followed an urban organization, which is the basis of this configuration. Over different periods, the same patterns of “axes and centralities” have been repeated, manifesting the same dynamics: in waves and from the capital to the interior.

The locational logic in the state is integrated into the historical structure of the space, possibly explaining the robustness of its economy, derived from the high degree of “technical-economic interaction” in the territory (SILVA NETO, 2002, p.25-26).

The socio-spatial construction of São Paulo follows the logic that the country has its roots in the occupation of the territory by indigenous peoples. The arrival of European colonizers, along with the presence of black people and immigrants, shaped what we know as national territory. The cultural values, techniques, sciences and economic movements brought by these groups played a crucial role in the transformation of the territory, explaining a significant part of this socio-spatial construction (SILVA NETO, 2002).

The analysis of the socio-spatial formation of the state of São Paulo is relevant for a comprehensive understanding of the economic, political and social dimensions,

especially with regard to urban construction in peripheral areas and their precarious conditions. The economic structure of society, outlined by the development of productive forces and technological advances, generates territorial dynamics that contribute to processes of exclusion and segregation. Exploring the dynamics of socio-spatial formation not only broadens the understanding of these complex relationships, but becomes instrumental in proposing and strengthening territorial public policies. By identifying particularities and challenges in socio-spatial formation, it is possible to develop more effective strategies to address issues related to peripheral urbanization and precarious housing, aiming to build more inclusive and equitable spaces.

From colonization to the beginning of industrialization in São Paulo, in the first decades of the 20th century, the geographical configuration played a significant role in the urbanization process, as shown in Table 1. The occupation of the territory, following the different economic cycles, occurred predominantly according to the characteristics of the relief and the hydrographic network (SILVA NETO, 2002).

The urbanization of the state of São Paulo, like Brazil, followed a peripheral global logic. Initially, it was subject to an essentially agrarian economy, within an agro-export model in which the metropolis sought to extract the most from the colony. The way in which the land was used and shared gave the settlement a rural character, limiting urban functions, since the large estates functioned as semi-autonomous units. With the advancement of industrialization, albeit late and with the introduction of a new technical base, represented by the informational technical-scientific environment, Brazilian urbanization underwent significant transformations.

These changes, especially occurring in the state of São Paulo, overlapped with previous patterns, generating profound impacts on the structuring of cities. This scenario enabled greater integration not only at the national level, but within the state of São Paulo itself. Geographer Milton Santos (1993), when publishing the book: *``A Urbanização Brasileira``*, raised questions that still cause concern today, as we can see below.

How do most Brazilians live in cities? What are your working and non-working conditions? What is your income? What access do they have to maternity benefits? What are your main needs? How are people distributed in the city, according to classes and income levels? What are the consequences of marginalization and segregation? What are the problems of housing and mobility, education and health, leisure and social security? How to define social places in the city, the center and the periphery, the increasing deterioration of the conditions of existence? (SANTOS, 1993, p.10).

The formation of the urban network in the state of São Paulo was strongly influenced by the natural structure of the territory. Areas in the interior, such as Campinas and Ribeirão Preto, prospered economically due to soil fertility, while Presidente Prudente faced challenges with extensive areas of low fertility, requiring technical skills in soil management. In Registro and Itapeva, the rugged topography and unproductive soil explain the economic stagnation, despite their proximity to the capital. Urbanization in São Paulo was led by the expansion of coffee farms, following a clear technical-economic logic. Coffee was a significant source of export revenue, in addition to driving technical factors, such as the expansion of plantations, with the search for fertile areas, the improvement of cultivation techniques and the employment of salaried labor. This dynamic resulted in the expansion of the urban network,

Century	Municipal Formation
XVI	The occupation of the coast, especially on the south coast, began with the establishment of São Paulo, marking the beginning of the occupation of the Atlantic Plateau region. This period was characterized by the advancement of communities towards the interior, with São Paulo as the central point of this expansion.
XVII	Starting from São Paulo, the territorial expansion covered the Atlantic Plateau, extending to the north, east and west. This movement represented not only a geographical landmark, but a significant boost in the occupation and development of the region.
XVIII	The Atlantic Plateau was already populated by urban centers, indicating an established presence of communities that contributed to the dynamics and development of the region.
XIX	With the emergence of the coffee cycle, the expansion known as the “march to the west” began, heading progressively towards the Peripheral Depression. This movement not only transformed geography, but also played a fundamental role in the economic and social direction of the region.
XX	The occupation of the Western Plateau was completed, marking a significant stage in territorial development, in which the current formation of the state was defined, and the areas were fully inhabited and explored.

Table 1: Chronology of municipal formation in the state of São Paulo

Source: Adapted from Silva Neto (2002, p.28).

marked by the construction of railway and port infrastructure, banking institutions, commercial and service establishments, and by industrialization, especially in the textile and agricultural machinery sectors (SILVA NETO, 2002).

Currently, the state of São Paulo is divided into 645 municipalities, covering a total area of 248,219.481 km<sup>2</sup>, corresponding to 2.9% of Brazil’s territorial area. With a population of 44,420,459 inhabitants and a demographic density of 178.96 inhabitants/km<sup>2</sup>, it represents approximately 22% of the Brazilian population. São Paulo, in addition to being the most populous state in the country, is the third most inhabited political unit in South America, surpassed only by Colombia and the rest of the Brazilian federation. Additionally, São Paulo stands out for leading industrial production and having the highest Gross Domestic Product (GDP) among all states. In 2020, the São Paulo economy contributed around 31.2% of the total wealth generated in the country. This economic performance is reflected in its cities, many of which are ranked among the richest and most developed in Brazil (IBGE, 2022).

However, despite being the richest state, São Paulo leads the ranking when it comes to the number of homes located in subnormal

agglomerations. This reveals a critical scenario, as shown in Table 2, which lists the states, accompanied by the total number of households in subnormal clusters in 2019.

States	Number of households located in Subnormal Agglomerates – 2019
São Paulo	1. 066. 813
Rio de Janeiro	717. 3026
Bahia	469. 677
Pará	432. 518
Amazonas	393. 995
Pernambuco	327. 090
Espírito Santo	306. 439
Ceará	243. 848
Minas Gerais	231. 385
Maranhão	114. 625

Table 2: Number of households located in Subnormal Agglomerates by state

Source: adapted from IBGE (2020).

This reality calls into question the unequal distribution of resources and access to the benefits of economic development. Other states, such as Rio de Janeiro, Bahia and Pará, also face worrying numbers, which indicates significant challenges with regard to quality of life and decent housing in different regions of Brazil (IBGE, 2020).

The data reveals a critical scenario in the state of São Paulo, noting the fact that it is the federative unit with the largest number of homes located in subnormal clusters in 2019, totaling 1,066,813 homes in this situation. This significant number of subnormal agglomerations distributed in the state of São Paulo (Figure 1) reflects the housing challenge and brings to light the socioeconomic discrepancies present in this territory. In particular, the worrying lack of sanitation further worsens the living conditions of communities. The significant number of households in such conditions highlights the urgency of public policies aimed at promoting access to adequate housing and improving sanitary conditions (IBGE, 2020).



Figure 2: Subnormal agglomeration with precarious basic sanitation

Source: Mello, ``*Agência Brasil*`` (2016).

This reality requires a critical analysis of existing mechanisms, with the aim of correcting these problems and improving the living conditions of communities residing in these clusters (``*INSTITUTO TRATA BRASIL*`` , 2016).

Although IBGE data provides relevant information about the number of subnormal clusters in Brazil and the state of São Paulo, indicating a growth trend, professor Ermínia Maricato (2021, p.37) highlights that “there are no general, reliable, on the occurrence of slums throughout Brazil”. Furthermore, it draws attention to methodological flaws and difficulties in determining slum land ownership. The urbanization process in Brazil is like a machine that generates slums and negatively impacts the environment. “But of all the problems resulting from this urbanization process, in which a part of the population is excluded from the legal private residential market and the city’s formal production, one of the most serious can perhaps be identified in the area of sanitation” (MARICATO, 2021, p.39).

Within the context of capitalist logic, the different forms of access to housing in the city are closely linked to the spatial contradictions originated by social relations of production. These contradictions are

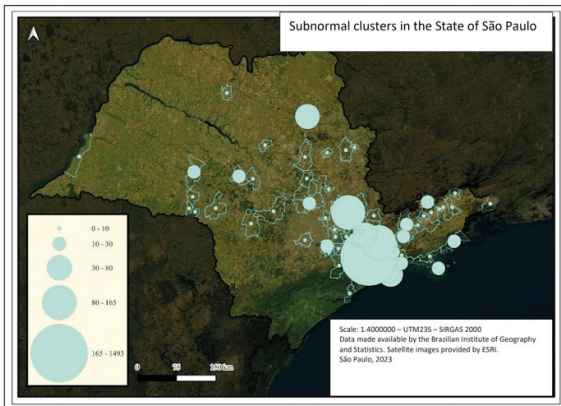


Figure 1: Subnormal clusters in the State of São Paulo (2019)

Source: IBGE (2020), elaborated by Daniel Fontoura.

The growth in the number of subnormal agglomerations not only presents social and environmental challenges, but also appears as an obstacle to the universalization of basic sanitation. When the population does not receive due support, they are forced to occupy areas that are often unsuitable for housing. Inadequate sewage disposal practices are a common occurrence in these locations, making the distortions present in urban planning and public management of essential services noticeable, as can be seen in Figure 2.

evident through conflicts regarding land use and obtaining access to urban infrastructures (VILLAÇA, 2012). Data released by IBGE in 2020 indicates a significant increase in subnormal agglomerations throughout Brazil, reaching the mark of 13,151, with 5,127,747 households. This scenario raises a reflection on the urbanization process driven by the capitalist mode of production and the resulting disparities in access to housing and social and economic infrastructures. Subnormal clusters thus emerge as a visible manifestation of socio-spatial inequalities. Table 3 details the growth in the number of subnormal clusters in the country from 2010 to 2019.

Characteristics	2010	2019
Municipalities with subnormal agglomerations	323	734
Total number of subnormal clusters	6.329	13.151
Number of occupied homes in subnormal agglomerations	3.224.529	5.127.747

Table 3: Quantitative of Subnormal Clusters in Brazil

Source: Adapted from IBGE (2020).

In fact, the capitalist city, focused on private ownership of urban land, excludes low-income individuals, imposing the need for an income that few can afford to occupy urban space. The less privileged classes often find themselves in areas where the benefits of private property do not apply, such as public land or empty spaces subject to speculation, known as subnormal agglomerations. In this context, landowners play a crucial role in the production of urban space, especially in the growth of the urban area, aiming to obtain more substantial remuneration for their properties. This dynamic exposes the central influence of landowners on the urban configuration, shaping access and distribution of space in an unequal way. Professor Paul Singer (1982) explains pedagogically how this dynamic works:

Ultimately, the capitalist city has no place for the poor. Private ownership of urban land makes the possession of monetary income an indispensable requirement for the occupation of urban space. But the normal functioning of the capitalist economy does not guarantee a minimum income for everyone. On the contrary, this operation tends to keep part of the workforce in reserve, which means that a corresponding part of the population does not have the means to pay for the right to occupy a piece of urban land. This part of the population ends up living in places where, for some reason, private property rights do not apply: areas of public property, land in inventory, plots kept empty for speculative purposes, etc., forming the famous invasions, slums, etc... when private property rights are asserted again, residents of the areas in question are evicted, dramatizing the contradiction between economic marginality and the capitalist organization of the soil (SINGER, 1982, p.33-34).

## INEQUALITY IN ACCESS TO SANITARY SEWAGE SERVICES: A CHALLENGE TO BE FACED

The Thematic Diagnosis on Water and Sewage Services, focusing on Technical Sewage Management, published in 2022, by the National Sanitation Information System (SNIS), of the National Sanitation Secretariat (SNS), linked to the Ministry of Regional Development - MDR (BRAZIL, 2022), reveals that, in 2020, around 55.8% of Brazil's total population had access to sewage collection networks. However, it is important to note that approximately 100 million inhabitants still did not have this service. For example, the North region recorded a rate of just 14.0%, while the Southeast region had a considerably higher rate, reaching 81.7%, as we can see in Table 4, below.



REGION	PERCENTAGE OF THE TOTAL POPULATION WITH ACCESS TO SEWAGE COLLECTION
North region	14,0%
Northeast region	30,2%
Midwest region	61,9%
Southeast region	81,7%
South region	48,4%

Table 4: Sewage collection index with collection network by region

Source: Adapted from MDR (BRAZIL, 2022).

This discrepancy highlights the pressing need to address these deficiencies, aiming to ensure broader, more equitable and effective access to essential sewage services throughout the territory, in addition to highlighting the sewage service as the most complex element of sanitation to be achieved. across the entire population (BRAZIL, 2022). The data presented reveals a clear inequality in access to sewage collection between the different regions of Brazil. The Southeast region leads, with 81.7% of the total population enjoying this essential service. However, despite these good rates, the majority of the population in São Paulo's subnormal agglomerations is not being served by these services. On the other hand, the North region has the lowest percentage, with only 14.0% of the total population having access to sewage collection. This unequal distribution raises critical questions about the unequal distribution of basic infrastructure and public services (BRAZIL, 2022).

With regard to states, there is high inequality in sewage collection rates. Only São Paulo (93.5%) and the Federal District (90.9%) manage to surpass the 90% mark. On the other hand, the presence of sewage collection rates below 20% is concentrated in the North region, especially in the following states: Amazonas, Acre, Pará, Rondônia, Amapá and Maranhão. This situation demonstrates a worrying reality of inequality and neglect

in relation to essential basic sanitation services, especially in these most vulnerable regions of the country. This discrepancy not only accentuates socioeconomic disparities between states, but imposes the urgent need for interventions and investments in sanitation in these areas (BRAZIL, 2022).

Although the state of São Paulo has good sewage collection rates with the general network, reaching 93.5%, this apparent development contrasts with the critical reality of its subnormal agglomerations (BRAZIL, 2022). It is disturbing that, despite the general development of the state, contrasts persist in more abandoned areas, where sewage collection is precarious. This disconnect between aggregate indices and the situation in subnormal clusters expresses not only intrinsic inequality, but the need for a more comprehensive, inclusive and isonomic approach to providing sewage services to all communities, regardless of their location or socioeconomic context.

With regard to sewage treatment in Brazil, according to the SNIS diagnosis, referring to the year 2020, it is observed that the sewage treatment rate, in general, reaches 79.8%, when considering the total volume of collected sewage. However, the treatment index in relation to the total volume of sewage, calculated based on the proportion between the volumes treated using water consumption as a reference, shows a reduction to 50.8% of the treatment index. This divergence highlights critical issues related to the effectiveness of sewage treatment. The analysis reveals a situation that requires critical assessment and the implementation of effective measures to improve the management and effectiveness of these services. Table 5 presents the urban coverage rates for sewage treatment in relation to the total volume collected, divided by region, for the year 2020 (BRAZIL, 2022).

REGION	PERCENTAGE OF TREATED SEWAGE IN RELATION TO COLLECTED SEWAGE
North region	84%
Northeast region	78%
Midwest region	95%
Southeast region	77%
South region	94%

Table 5: Sewage Treatment Index by region  
Source: Adapted from MDR (BRAZIL, 2022).

### PRECAUTION OF SANITARY SEWAGE SERVICES IN SUBNORMAL AGGLOMERATES IN THE STATE OF SÃO PAULO

The analysis of subnormal agglomerations in the state of São Paulo offers a clear vision of the deficiencies in the provision of basic sanitation, highlighting the difficult reality of communities that lack the essentials for a dignified life. Families residing in these areas face extremely precarious conditions, with significant challenges in accessing essential sanitation services, especially sewage treatment. These circumstances signal the imminent need to address sanitation issues in these communities and prove the socioeconomic disparity, as occurs, for example, in Slum Paraisópolis (Figure 3).



Figure 3: Paraisópolis slum in the city of São Paulo

Source: Rovena, ``Agência Brasil`` (2022).

The complex dynamics of socio-spatial formation in São Paulo, marked by historical elements that shaped its territorial organization,

reveals an interconnection between technology, economy and capitalist urban development, resulting in the segregation of the less privileged classes to the periphery. Historical analysis, since occupation, indicates the influence of these processes on the urban configuration. São Paulo's urbanization, initially agrarian and linked to the agro-export model, underwent significant transformations with the late advance of industrialization, especially in São Paulo. The coffee cycle, with its economic and technical implications, was decisive in shaping the expansion of the urban network. This critical trajectory establishes the complexity and consequences of socio-spatial formation in the state (SILVA NETO, 2002).

The lack of access to adequate sewage services not only has serious implications for public health and quality of life, but also significant environmental repercussions. Inadequate sewage disposal is directly associated with several diseases, which aggressively impact vulnerable communities. These diseases further aggravate the already unfavorable conditions faced by these people. Furthermore, soil and water contamination pose a considerable environmental threat.

The worrying scenario is that this reality persists in more than one million households occupied by less well-off social classes in the subnormal agglomerations of the state of São Paulo (BRAZIL, 2022). Faced with this critical situation, a considered analysis and the implementation of sensitive actions are pertinent, aiming to protect the most vulnerable communities and, at the same time, preserve the environment.

Although São Paulo is the most populous, economically structured and prosperous state, the predominance of subnormal agglomerations exposes social discrepancies. This reality contradicts the state development narrative, highlighting negligence in the provision of basic sanitation services to

vulnerable communities. The critical analysis of urban mechanisms points to the exclusion of the less privileged classes from the legal real estate market. By transforming into a territory dominated by the capitalist model, centered on private ownership of urban land, this system excludes lower-income citizens, establishing the requirement for an income that is accessible only to some, in order to have the right to occupy the space urban. This dynamic makes visible the exclusionary structure of the system, in which access to the city is conditioned by financial capacity, marginalizing the less favored social strata (SINGER, 1982).

The inequality in access to sewage services is undeniable in the data that reveal disparities in sewage collection rates between regions of Brazil. Although the Southeast region leads with 81.7%, the majority of subnormal agglomerations in São Paulo lack these essential services, even with the state of São Paulo leading with more than 90% of sewage collected. States in the North region, on the other hand, have rates below 20% (BRAZIL, 2022). This inequality determines the urgency of interventions and investments in sanitation in the most susceptible regions. Despite the high state indexes in São Paulo, the neglect of subnormal clusters reveals a disconnect between aggregate indicators and reality in the most unprotected areas.

North-American urban planner Mike Davis (2006) presents, in *Planeta Slum*, a diligent investigation into the origins of the rapid population increase in precarious housing from the 1980s onwards, in the emerging countries of the so-called Third World. With the advent of urbanization in these places, the emergence of slums was observed, which developed on the outskirts of urban centers, driven by the rise of capital. According to Davis' estimates, there are approximately 200,000 slums across the planet.

The author emphasizes the role of real estate speculators, who profit from poverty and the State's inability to provide adequate infrastructure and popular housing. On the other hand, he highlights the collaboration of these speculators with the State, especially in removal processes, paving the way for real estate speculation. This dynamic reveals the complexity of interactions between private and public agents, shaping urban geography and directly impacting the lives of the most vulnerable populations.

Davis (2006) presents a detailed analysis of the transformation in human geography in Third World urban centers, mentioning the emergence of islands of prosperity in skyscrapers and fortified condominiums, protected by physical barriers and private security services, and which distance themselves from the growing population in slums. The author carefully examines the dynamics of this new context of class conflict, describing the inequality between those who live within these barriers, resembling a medieval city. While enthusiasts endlessly celebrate the globalization of wealth, Davis reveals the flip side of this phenomenon: the significant increase in poverty on a global scale.

The lack of basic structure in sewage services in subnormal agglomerations in the State of São Paulo reveals, therefore, a deep connection with the challenging conditions faced by the underprivileged population. The rapid growth of precarious housing, driven by urbanization and the advancement of capital, mirrors the same deficiencies found in Third World countries. This situation makes it clear how the lack of adequate investments in basic sanitation perpetuates a cycle of inequalities, negatively impacting the quality of life of these communities.

Just as in the slums that emerged on the outskirts of large cities, the lack of access to adequate sewage services in

the state of São Paulo contributes to the persistence of precarious living conditions in subnormal agglomerations. Insufficient health infrastructure not only compromises public health, but also increases existing socioeconomic disparities. Given this scenario, it becomes urgent to implement effective policies that aim not only to resolve immediate needs, but to promote structural transformation capable of guaranteeing dignified conditions for all communities.

In this scenario, a complementary reflection arises given the increase of more than 100% in the number of municipalities with subnormal clusters in Brazil, in nine years, going from 323 municipalities to 734 municipalities (IBGE, 2020). This significant increase raises questions about the possible consequences resulting from an increase in the volume of sewage without adequate collection and treatment. How to deal with the challenges associated with this significant growth and ensure effective measures to preserve environmental quality and guarantee the well-being and decent standard of living for residents of these subnormal agglomerations?

In the same way that occurred in the slums on the urban outskirts, the lack of access to adequate sewage services in the state of São Paulo perpetuates precarious living conditions in subnormal settlements. The lack of health infrastructure not only affects public health, but also intensifies the already existing socioeconomic imbalance. Given this situation, it is imperative to implement effective policies that not only meet immediate needs, but also promote structural transformation capable of ensuring dignified conditions for all communities.

## FINAL CONSIDERATIONS

According to the analysis developed on the precariousness of sewage services in subnormal agglomerations in the state of São Paulo, a complex reality emerges, which transcends geographic and socioeconomic borders. The clear visualization of deficiencies in the provision of basic sanitation reveals the difficult situation faced by the most vulnerable communities, challenged daily by the lack of essentials for a dignified life.

The complex dynamics of the socio-spatial formation of the territory of the state of São Paulo, shaped by historical, technological and economic influences, outlined a scenario of segregation, in which the less favored classes were pushed to the urban fringes. This dynamic makes clear the influence of these processes on the urban configuration. Urbanization, initially agrarian, underwent significant transformations with late industrialization, shaping the expansion of the urban network during the coffee cycle.

The historical analysis, from occupation to industrialization, and the introduction of a new technical base, represented by the technical-scientific-informational environment, reveals the metamorphoses that Brazilian urbanization has undergone over time.

The lack of access to adequate sanitation services is not limited to a challenge to public health, quality of life, and a basic condition for full citizenship; it also extends to significant environmental repercussions. Inadequate sewage disposal is directly associated with several diseases that aggressively impact vulnerable communities. Soil and water contamination represent a considerable environmental threat, persisting in more than one million homes occupied by less privileged social classes.

It is disturbing to observe the growing trend of increase in the number of subnormal agglomerations in Brazil, bringing a latent concern regarding the lack of access to housing. This phenomenon reflects the expansion

of the less favored classes in urban areas, aggravating the housing problem. The significant expansion of these clusters is a cause for concern, given that many of them are devoid of basic infrastructure, notably adequate sewage systems. The analysis of subnormal agglomerations in the state of São Paulo serves as a concrete example of this reality, highlighting the urgency of effective approaches to deal with the challenges associated with the growth of these communities in vulnerable situations.

Although São Paulo holds the title of the most populous and economically structured state, when confronted with the reality of social disparities, a paradox emerges in the state's development narrative. The critical analysis of urban mechanisms attests to the exclusion of the less privileged classes from the legal real estate market, perpetuating a system that conditions access to the city to financial capacity, marginalizing the less favored social strata.

The inequality in access to sewage services, explained by the discrepant rates between regions of Brazil, advocates the urgency of interventions and investments in sanitation in the most precarious areas. Despite the high state indexes in São Paulo, neglect of subnormal clusters produces a disconnect between aggregate indicators and reality in the most vulnerable areas.

Reflection on the origins of the rapid population increase in precarious housing, as presented by Davis (2006), adds a layer of complexity to the urban scenario. The collaboration between real estate speculators

and the State, notably in removal processes, highlights the intricate web of interactions between private and public agents. This dynamic not only shapes urban geography, but also has a direct and lasting impact on the lives of the most defenseless populations. Given this panorama, it is imperative to deepen the understanding of these relationships and develop strategies that promote changes in the urban scenario, aiming for a more inclusive and fairer environment.

Ultimately, the lack of basic structure in sewage services in subnormal agglomerations in the state of São Paulo is a multifaceted challenge, which requires not only immediate actions, but also a structural transformation. The implementation of effective policies becomes crucial to ensure that immediate needs are met and, even more so, to promote an improvement in the quality of life and equity for all communities, regardless of their location or socioeconomic context.

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