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The expansion of the agricultural frontier in the north of the state of Mato Grosso and the emergence of "planted" cities: Sinop (MT), an agribusiness city?

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Abstract

The rural-city relationship is created and intensified as a result of the advance of the agribusiness productive market. It is relevant to highlight that the forms of resistance to this productive market are always intrinsic in the city and the countryside, in productive backyards, in farms, in the guilombos, among other ways, diversifying the manners in which society relates to nature. In this article, we intend to discuss the process of implantation of a city "planted" in the advance of the agricultural frontier in the northern region of the state of Mato Grosso, specifically in the city of Sinop, to later understand if it can in fact be classified as a city of agribusiness. For this, bibliographic research, documentary research, specifically IBGE data and field research were used for the analysis of the urban landscape, considering that the main focus is the city. It is hoped that this text will contribute to the discussions inherent to the city in question, especially about its polarizing role in the region in which it is inserted.

Keywords: Countryside-city relationship; agribusiness; soy.

A expansão da fronteira agrícola no norte do estado de Mato Grosso e o surgimento das cidades "plantadas": Sinop (MT), uma cidade do agronegócio?

Resumo

A relação campo-cidade é intensificada com o avanço do mercado produtivo do agronegócio. Torna-se relevante destacar que as formas de resistência a esse mercado produtivo são intrínsecas às paisagens da cidade e do campo, em guintais produtivos, chácaras, comunidades quilombolas, entre outras formas de uso e ocupação do espaço geográfico, diversificando as maneiras com as quais a sociedade se relaciona com a natureza. Neste artigo, pretende-se discutir o processo de implantação e estruturação de uma cidade "plantada" na fronteira agrícola no norte do estado de Mato Grosso (MT), especificamente a cidade de Sinop. Busca-se sobretudo entender se tal espaço urbano pode de fato ser classificado como uma "cidade do agronegócio". Para isso, fez-se uso de pesquisa bibliográfica e documental, principalmente de dados do IBGE e de pesquisa de campo para a análise da paisagem urbana, tendo em vista que o principal foco é a cidade. Espera-se que este texto possa contribuir para o avanço das discussões inerentes à cidade em questão, em especial sobre o seu papel polarizador na região em que está inserida.

Palavras-chave: Relação campo-cidade; agronegócio; soja.

La expansión de la frontera agrícola en el norte del estado de Mato Grosso y el surgimiento de ciudades "plantadas": Sinop (MT), una ciudad del agronegocio?

Resumen

La relación campo-ciudad se crea e intensifica como consecuencia del avance del mercado productivo de agronegócio. Es relevante resaltar que las formas de resistencia a este mercado productivo son siempre intrínsecas en la ciudad y en el campo, en los traspatios productivos, en la fincas, en los quilombos, entre otras formas, diversificando las maneras en que la sociedad se relaciona con la naturaleza. En este artículo, pretendemos discutir el proceso de implantación de una ciudad "plantada" en el avance de la frontera agrícola en la región norte del estado de Mato Grosso, específicamente en la ciudad de Sinop, para luego comprender si ella puede de hecho ser clasificada como una ciudad de agronegócio. Para ello, se utilizó investigación bibliográfica, investigación documental, sobre todo datos del IBGE e investigación de campo para el análisis del paisaje urbano, considerando que el foco principal es la ciudad. Se espera que este texto contribuya a las discusiones inherentes a la ciudad en cuestión, especialmente sobre su papel polarizador en la región en la que se inserta.

Palabras-clave: Relación campo-ciudad; agronegocios; soja.

Introduction

Cities emerge and develop over the years due to various economic, social, and cultural functions. Thinking about the city and its relationships with the countryside goes beyond the connections established between them, becoming necessary to consider issues related to the link between society and nature. Teixeira and Castilho (2020) understand that the process of (re)production of the city and urban space, therefore, when guided by the of capitalist mode production, follows the principle of production-distribution-circulation-consumption. This system reinforces socioeconomic and territorial inequalities. For the authors mentioned above, such transformation will result in different forms of land use and cover, which exert significant influences on the quality of life of living beings.

The way society appropriates nature can sometimes be described as perverse, especially when the capitalist mode of production guides its process of appropriation and

(re)production. Whitaker (2006) explains that society has been undergoing an unprecedent environmental and sociocultural crisis throughout human history as there is intense destruction of cultures parallel to the destruction of nature and its numerous ecosystems. This situation has intensified since the first Industrial Revolution, due to the eagerness of various societies for dominance and transformation/production of nature coupled with greed for profit.

Understanding the dynamics present in cities stems from various forms and functions that they assume according to their diverse socio-spatial (re)production characteristics. Carlos (2007) understands the city as a human construction being a historical-social product, a context that makes the city a materialized work which emerges over several generations through society's relationship with nature.

Economic activities are extremely important for the development of cities, however, it is always pertinent to remember that they do not exist alone as they depend on the countryside that surrounds them to a greater or lesser extent, as well as on other cities present in the urban network. According to Carlos (2007), there is an inseparable articulation of three planes in the city: the economic, understanding that the city is produced as a condition for the realization of capital; the political, considering that the city is produced as a space of domination by the State; and the social, because the city is produced as socio-spatial practice as being the central element of the reproduction of human life.

We realise that the city only exists because of its economy, society, culture, and its various connections, it is understood that the countryside in many cases is an indispensable part of the mode of (re)production of the city and urban space, thus, it becomes relevant be able to comprehend who are the producing agents of these urban areas. Corrêa's classic definition (1989) divides the producing agents into five groups: (I) landowners; (II) owners of means of production; (III) the State; (IV) real estate developers; and (V) excluded social groups.

With this, it is believed that the characteristics, forms, and functions of cities will be defined and redefined as the interests of the main producing agents are outlined and shaped. As this becomes clearer, it is possible to figure out that the relationship with the countryside and the dependency to a greater or lesser extent will be defined by the interests of the agents. Fontoura (2011) explains that the city will grow as much as the countryside creates possibilities to sustain itself and sustain the people who engage in tasks other than directly linked to agricultural production. The countryside is so intertwined with the city that besides being the location of agricultural production, it also becomes a space where non-agricultural activities are carried out such as housework, day laborers, gardeners, among others (Marafon, 2014).

Both in the city and in the countryside, territories of capital are being constructed, but without completely destroying the other pre-existing forms, which during the process of metamorphosis find ways to resist and persist while other forms are being created. For this reason, it is relevant to emphasize that in the countryside there are not only agriculture and agribusiness, but also small agro-extractive producers such as caiçaras, quilombolas, Riverside populations, faxinalenses, occupants of pasturelands, indigenous populations, among several others. All these productive forms involving populations that have a deep relationship with the goods of nature are multiple ways of social resistance, which configure territories that deny the mercantilist logic of capital marked by processes of modernization that involve the construction of a new relationship between the countryside and the city today (Suzuki, 2007).

Hence, it is admitted that the city and the countryside have a relationship of interdependence for their process of socio-spatial (re)production. However, there are cities in which their relationship is much closer which is evident in their urban areas. Santos and Silveira (2006) when analysing the role of medium-sized cities, identified them as suppliers of information, technical and scientific knowledge for a modernized Brazilian countryside, as well as offering goods and services for this new reality in agricultural activity. Defined by these authors, such configurations can fit into the definition of medium-sized cities as they manifest themselves in territorial organization, new models of exchange, new interpersonal relations, and in general, a new rural world is created around them with standardized productive processes, where each action must be predicted to ensure the highest possible productivity and profitability. Sposito (2010) adopts the following definition of "medium-sized cities":

"[...] those that play intermediary roles within simple or complex urban systems that distinguishes them from 'medium-sized cities', are those classified as due to a given demographic size, which, in a given country is considered medium according to this or that classification or typology" (Sposito, 2010, p. 52).

The forms of organization of the cities mentioned above predominate in the northern state of Mato Grosso as it is a region with important prominence on the national scene due to large-scale agricultural production. We are mostly talking about grain production areas once this analysis is restricted to the cities along BR-163, considering that soybeans have played a fundamental role in the regional economy. On the margins of the highway, the medium-sized cities have been named agribusiness cities because their urban development is intrinsically associated with it.

But, conceptually, how can we define the notion of "agribusiness cities?"

Elias (2022), one of the pioneering researchers in the discussion of this term in the field of geography, points out that considering a methodological proposition such spaces have specificities that allow us to classify them in a type of urbanization that is structured under the command of economic activities associated with a modernized corporate agriculture. According to the author herself, in her text "Thinking about the operationalization of studies on agribusiness cities", the agribusiness cities are urban centres linked to the diffusion of "globalized agribusiness", which were consolidated by the agricultural production process, especially in the agricultural frontier. In this vast space of the Brazilian hinterland, some of these nuclei have emerged in the wake of occupation by agricultural producer families often migrants from the South of Brazil; others, however, had already existed as urban nuclei but had to adapt to the new regional production context, gaining dimension and importance as places specialized in services and trade focused on the productive consumption demands of a new rural area that was technically modernizing.

In consonance with the demand for services directly associated with the countryside, it also emerges the activities focused on consumer consumption (Santos, 1993), that is, the general population's consumption based on the acquisition of goods in clothing store, electronics stores, beauty products, but at the same time, education, telecommunications, health services, etc., also expand. As well as to adding new activities to meet the demands of agribusiness economic groups, this movement also have enabled the implementation of important transportation and telecommunications systems in these places that begin to ensure greater fluidity to the territory, another phenomenon that highlights the socio-economic changes underway in the Brazilian agricultural frontier. Thus, the new urban updates both meet productive and consumer consumption playing the role of economic leadership and regional polarization. It is the constitution of this urbanization with close ties to large-scale agricultural production that defines the agribusiness city.

Although Elias (2022) as early as the 1990s has adopted the use of the term "agribusiness city", the author alerts us in the aforementioned text that such a notion is a derivation of the term "countryside city" used by Santos (1993) to qualify urbanization that was transforming due to its new economic functions linked to agricultural modernization which political and economic command was exercised by the new urban. Despite this term having gained argumentative strength in the field of geographic Science about the advancement of the new urban in non-metropolitan areas, Elias states that with the notion of agribusiness cities, it is possible to better explain "to which agents and interests the production of such cities is associated to, seeking to better consolidate this notion conceptually" (p. 145).

Thus, facing an urbanization that has grown in the interior of Brazil and consolidated

in the 1990s – an important part of it in the agricultural frontier from the installation of agricultural colonization projects by the military governments since the 1970 - Elias (2022) brings the following definition about this urban phenomenon in non-metropolitan areas inside de country, which gains analytical centrality for understanding areas of high agricultural:

The agribusiness city is a non-metropolitan urban space, resulting from the processes inherent to the new forms of use and occupation of the Brazilian territory associated with the productive restructuring of agriculture and the expansion of agribusiness economy and society. These cities exert urban centrality in the APAs [Agricultural Productive Regions], that is, they constitute a link between large agricultural spaces – extremely rationalized with high level of science, technology, information, and capital – and the regional urban space. Thus, agribusiness cities must be studied on their interactions with agricultural and regional spaces. At the same time, they constitute nodes of the network of cities associated with globalized agribusiness, which brings together small cities to regional and global metropolises (Elias, 2022, p. 146).

Therefore, considering the importance of Sinop in the context of the expansion of the agricultural frontier and its classification as an agribusiness city in the BR-163 axis of Mato Grosso being born from a private colonization project, this article aims to discuss the role of "planned" cities¹ in the expansion of the agricultural frontier and how the urban nucleus in question can be considered an agribusiness city. For this purpose, an analysis of its development throughout history was carried out, accompanied by a brief analysis of the elements of agribusiness present in the urban landscape and some aspects related to the local economy.

Methodological Procedures

For the development of this study, a survey and analysis of the bibliography documents and fieldwork information conducted in the urban area of the municipality were adopted. Therefore, the aim is to understand the city beyond theoretical aspects and economic figures present in various databases as the analysis is also guided by the forms present in the urban landscape of Sinop - MT.

The survey and analysis of the bibliography were carried out following the steps described by Carmo (2022). The author points out that research should be conducted in official bibliographic databases, searching for keywords to guide the survey. In this sense,

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¹ The cities 'planted,' as defined by Trevisan (2011), can be understood as a means of occupation, colonization, and urbanization of the territory, functioning as a mechanism for defense and protection of the borders, as well as the integration of the national territory.

new surveys should be conducted whenever necessary.² After organizing the bibliography, the author recommends that the reading may be divided by level of priority to ensure a comprehensive analysis.

The survey of the bibliography was conducted on online platforms such as Coordination for the Improvement of Higher Education Personnel (CAPES) journals, Scopus, and Google Scholar. Subsequently, the bibliography incorporated into the discussions was read and analysed. As for documentary research, it was mainly based on data from the Brazilian Institute of Geography and Statistics (IBGE), which present information regarding the municipality's economy aiming to understand which activities are most locally representative.

Regarding fieldwork, Gil (2002) establishes that it is at this moment that the researcher will deepen up their knowledge about the studied area. This stage was carried out in the first semester of 2022 along with the Urban Geography class from the Geography course at the State University of Mato Grosso (UNEMAT), focusing on identifying how the urban landscape reveals materiality and movements of agribusiness referring to what is known as "agribusiness city".

Agribusiness Cities: A necessary Discussion in the Context of Agricultural Frontier Expansion

According to Oliveira (1997), the economic development of the state of Mato Grosso post-1970s was based on the objectives of the military governments to occupy and economically integrate the territories belonging to the Legal Amazon with the rest of the Brazilian regions. This government project constituted the expansion of the agricultural frontier with the encouragement of economically and technically modernized agribusiness projects through the construction of highways and the establishment of urban nuclei interconnected by these highways (Bernardes, 2007). From this same process, there emerged a greater articulation with the national territory through the establishment of a more integrated regional urban network with the most dynamic urban centres, especially these in the concentrated region of the central-south of the country driven by a greater technical density of the territory (Santos; Silveira, 2006).

This more articulated urban network allowed for the increase and incorporation of new flows of goods and people. In the words of Corrêa (2006), those cities essentially located on the agricultural frontier become the centres of production and circulation of capital.

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² It is important to point out that the cited databases do not cover all existing research. However, considering the objectives of this work, the search yielded positive results with which we were able to answer the questions that were raised in this study.

That is, the surplus capital generated by economic activities, especially those linked to modernized agriculture will also take place in the city. Thus, the agricultural frontier that receives the adjectives "new" or "modern" refers to the areas occupied since the 1970s through the implementation of intensive monocultures in capital and technology replacing the original vegetation (Cerrado and Amazon rainforest) with traditional crops and extensive pasture areas (Frederico, 2011).

The internal dynamics of the new agricultural frontier can be understood through the creation and use of technical means that allow the expansion of farming in Cerrado areas, and currently on the "edge" of the Legal Amazon (Alves, 2022) favouring the economic development of activities related to this business activity (Santos; Silveira, 2006). Among the technical systems created for the expansion of economic activities associated with agribusiness in Mato Grosso, it can be said that BR-163 is one of the greatest symbols of this occupation process. Coy and Kingler (2014) treat this highway as a backbone, which interconnects this northern region of Mato Grosso with the rest of the country, becoming indispensable in the process of modernization and construction of globalized localities in the region.

This conception of BR-163 as a backbone leads us directly to the concepts of "fixes" and "flows" developed and refined by Santos (1988), who understands the "fixes" as technical and social objects being materialized and organized via "flows". Therefore, a BR-163 can be considered a materialized version of the flows, and the cities and their materiality (related to agribusiness or not) on the edges of this highway are the "fixes".

Thus, the medium-sized cities emerge as links between agricultural space production and the globalized world as well as connections with small cities, which do not have the same forces and conditions for their insertion on a scale beyond their relationship with the regional. Depending on the context, these cities stand out for their importance at the regional, state, and national level (Silveira, 2002). Regarding the importance of small and medium-sized cities in contrast to the influence of metropolitan areas, which flows go beyond the regional scale, Sposito (2010) highlights the role that small and medium-sized urban nucleation have for the understanding of the regional space as inferred from the following quotation:

The geographical tradition of analysing cities based on their regional relationships has always been important for understanding medium-sized and small cities. Not that this perspective was or is unimportant for understanding large cities and metropolises, but in these cases, the breadth of the flows established far exceeds the regional scale of actions and movements" (Sposito, 2010, p. 53).

The role of these cities in a globalized world demonstrates that quality of life,

scientific and technological development, availability of labour, and the presence of government incentives are some of the elements responsible for their transformation (Pereira, 2005). What's more, despite the enormous relevance of large cities and metropolises, especially as centres of command of capital, medium-sized cities currently appear as drivers of capital development.

Especially those in agricultural frontier areas, some of the medium-sized cities have appeared on the national scene with the designation of agribusiness cities due to the proximity of relations between the countryside and urban areas. Elias and Pequeno (2007) understand that cities are materialized forms of the capital reproduction process. For these authors, agribusiness cities are those where urban functions mainly serve the demands of globalized agribusiness being hegemonic over other urban activities.

Among the urban functions that agribusiness cities have received are the various services they offer to modern agriculture. These include the resale of chemical mechanical and biological inputs; consultancy services for agriculture, logistics, finance and market, the agro-industrial processing of grains, storage and transportation of agricultural products and inputs, provision of operating and investment credit (through banks and private companies), and finally, the marketing of production (via brokers and traders) (Frederico, 2011).

In his research on the socio-economic and spatial dynamics of the new Brazilian countryside, Frederico (2011) has already classified Sinop as an agribusiness city along with the cities of Rondonópolis (MT), Rio Verde (GO), Dourados (MS), and Unaí (MG). This is mainly due to the fact that in the characterization of these cities, the author considers that they concentrate a large number of bank agencies which shows the possibility of financial nexus of production.

This urban dynamism exerted by agribusiness cities materializes in their landscape. In the case of cities near BR-163 in the state of Mato Grosso, the marks of this economy under the command of the countryside are concentrated, above all, on the margins of the highway due to easy access to it, as well as in central areas, as these cities were born under the insignia of agribusiness.

Sinop (MT): A Brief Historical Context of the Formation Process of a "Planned" City and Its Links with Agribusiness

It is within the context outlined in the previous section that Sinop emerges and develops the area taken as the subject of study in this text in the northern region of the state of Mato Grosso (figure 1). The city in question has a population of 196.067 people according to the 2022 Demographic Census (IBGE) with an area of 3.990,870 square kilometres, a per

capita GDP in 2020 of R\$ 55.310,00, and a Municipal Human Development Index (IDHM) of 0,745, for the year 2010. The discussion in this text will focus on the urban perimeter of the municipality (figure 1), and beyond that, the municipal economy will be considered as well as how the context of agribusiness appears and stands out.

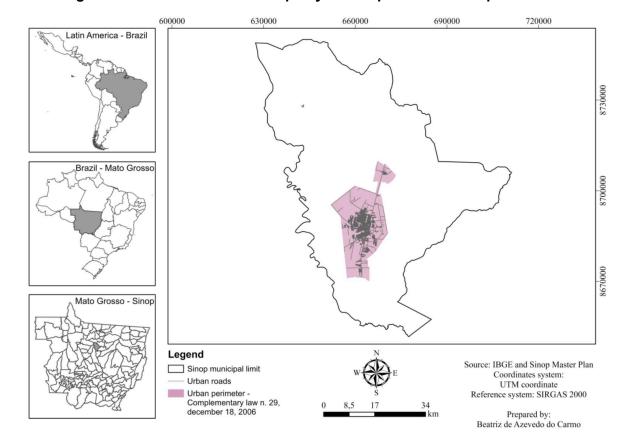


Figure 1: Location of the municipality of Sinop and its urban perimeter

Source: Figure organised by the authors (2022).

The concept of Sinop lies within a project of occupation and integration of the Legal Amazon of Brazil implemented by the Federal Government in the 1970s, being the result of the private colonization project of SINOP S.A. led by owners Ênio Pipino and João Moreira de Carvalho. The majority of the families known as pioneers who occupied the initial nucleus of the city, primarily came from the states of Paraná, Santa Catarina and Rio Grande do Sul. These families arrived in this area of the state of Mato Grosso between the years 1972 and 1973. However, the foundation of the urban nucleus only occurred on September 14, 1974, and its elevation to the category of district only in 1976 through Law 3.754, dated Jun 29, 1976.

From the analysis of the first printed documents, it is evident that Sinop can be seen as a city that was produced exclusively for the reproduction of capital, especially for the

production of commodities aimed at a global scale and primarily directed towards exports. However, over the years, the city has also assumed the role of providing services to agribusiness.

From this perspective, it is clear that cities with these characteristics of formation and consolidation can be termed "childless cities" because they skip stages of their socioeconomic development phases. In other words, from its genesis there is an intense process in the construction of cities that will be appropriated by consumers, where their parts are bought in pieces to be subdivided and sold in instalments due to their attractiveness to the maintenance of the agro-industrial complex. In this sense, the city ceases to be designed for the people who reside there, but to make the flow of goods and services more fluid (Martins, 1996).

In the context of agribusiness, these cities are planned to increasingly serve the maintenance of the agro-industrial complex; therefore, they are no longer designed for people but rather for the circulation and expansion of capital linked to agribusiness. With the implementation and inauguration of BR-163 - Cuiabá-Santarém stretch - in Sinop in 1986, the necessary infrastructure was established to connect northern Mato Grosso to other national and international markets attributing to the municipality the role of a sub-regional hub. With the highway in place, there was reinforcement for the encouragement of regional economic exploitation of natural resources starting with timber extraction seen as the pioneering activity in the area, and in 1990s, the implementation of agribusiness primarily targeting the external market (MACEDO; RAMOS, 2015).

The soy corridor (BR-163) is where the most developing cities are concentrated, mainly due to the influence of agribusiness with the cultivation of commodities. Souza (2004) identified that the discourse of progress is very present in Sinop, causing certain euphoria in urbanization projects. In a way, this can be understood as planned and controlled, considering the strong influence of the real estate market. The author highlights that there is a large influx of migrants from other parts of the country to the municipality who ends up reconfiguring a demographic and cultural pattern of the city that becomes quite diversified.

Volochko (2015) explains that the spatialisation of cities in the northern part of the state of Mato Grosso occurs from Nova Mutum, Lucas do Rio Verde, Sorriso, and Sinop - all built along BR-163 (figure 2).

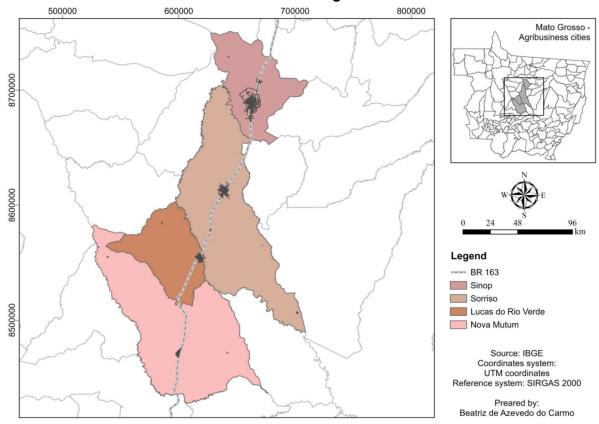


Figure 2: The spatialisation of the cities of Sinop, Sorriso, Lucas do Rio Verde and Nova Mutum along BR-163.

Source: Figure organized by the authors (2022).

Due to the adapted scale, it is not possible to visualize the urban roads in figure 2 effectively. However, the cities in question present their roads as extremely straight, which gives the idea of a city planned by the adopted format for implementation and expansion.

As planned cities, they turn out to be a network of cities with urban morphology, homogeneous, and symmetrical landscapes with similar internal organization characteristics. Thus, these cities ultimately take on a conception of an "organized city" or "planned city" aesthetically articulating with the countryside.

Souza (2017) explains that the characterization of the city of Sinop as a planned urban nucleus occurred mainly because of the development of its urban perimeter incorporated BR-163 and from its inception was already playing an extremely important role in the agricultural frontier standing out in the regional political-economic context. The highway exerts enormous influence on the development of cities located along its margins, as with the intense economic flow and the exploitation of agribusiness, these cities develop and expand their urban perimeters under the influence of the productive market.

These characteristics has become self-explanatory due to the fact that the main producing agents of these geographical spaces (rural space and, mainly, urban space) are

real estate developers, large landowners, and the State. In the case of Sinop, specifically, there is a direct influence from a real estate developer from where it comes the initial urban patterns of implementation, straight streets, and the idea of a "planned" city amidst the forest as shown in figure 3.



Figure 3: An aerial view of Sinop in 1973 and 2022.

Source: Photographic collection Tem. Cel. Jaime Ribeiro (1973) shown above, and photo by the authors (2022) below.

In the area where Sinop is installed, there is an intense international visibility due to the Legal Amazon; hence the importance of integrating and exploiting this territory. Over the years, the configuration of Sinop's urban fabric has expanded and the landscape has taken on new forms maintaining, however, the characteristics of a city with strong influences from activities carried out in the countryside. Still in the figure above, for the year 2022, it is possible to observe how the urban sprawl has expanded significantly with greater concentration of houses and an initial process of verticalization being visible, although there is still not a large concentration of buildings precisely because this process of verticalization is still in its infancy.

But regardless of its young age, the city has developed significantly mainly due to the productive activities of the countryside revealing an extension and pressure of its urban perimeter towards agricultural areas and its surroundings. In figure 4, it is possible to observe the new condominiums implanted to carry out its urban expansion into areas on the outskirts of the city.



Figure 4: Views of the entrance to a gated community and of an up-and-coming popular neighbourhood in the city of Sinop (MT).

Photographs by the authors (2023).

In these new areas of urban expansion, there is a growth of neighbourhoods with a concentration of gated communities inhabited by people of higher economic status and also working-class neighbourhoods, thereby revealing the consolidation of a segregated city. Based on the findings from the consulted bibliography and observations made in the fieldwork, it is possible to consider that over the years Sinop has assumed the role of supplying rural areas and agricultural activities with products, machinery, and inputs. Additionally, the city has fostered the development of technologies and the concentration and qualification of labour to meet regional demands.

These reflections are supported by Macedo and Ramos (2015) when analysing the document of Areas of Influence of Cities (REGIC) (IBGE, 2008), which classified Sinop as Sub-Regional Capital B. In the new versions of the REGIC document (IBGE, 2018), the city under discussion appears as Regional Capital C, a result of the movement already identified by the authors with the inauguration of the UFMT campus in 2006 offering undergraduate and postgraduate courses. Prior to this, the city had already had a UNEMAT campus. In addition to these universities, some private colleges were established such as the Faculdade de Sinop – FASIPE, UNIC and FASTCH. In 2008, the airport was inaugurated to offer commercial flights out of the state, and currently, its physical and logistical structures are being expanded and improved. In 2012, the EMBRAPA Agrossivilpastoril was also inaugurated.

With these facts, it can be inferred that Sinop was conceived from the beginning to be a polarizing city managing regional agribusiness. Perhaps, its central function is not actually agricultural production, but rather the provision of services to meet this market and supply regional demands, mainly because with the airport and the highway, the city is more

integrated into the national and global market than any other cities along the BR-163.

Is Sinop a city of agribusiness?

As addressed by the authors being discussed so far, "planned" cities, generally over time become areas with significant ties to agribusiness and are also classified as medium-sized cities defined beyond their demographic characteristics. It is important to highlight that a large part of the functions performed by medium-sized cities is directly interconnected with agricultural activities (Sposito, 2007).

In this context of the functions of medium-sized cities, it is important to highlight the institutions present in Sinop in addition to those mentioned in the previous section, as it is anticipated that the city may attract other investments given its regional importance in various contexts: productive, real state, services, etc.

The new land development projects also demonstrate a new direction for Sinop's growth, on contrary to what happened at other times when the city expanded north-south along the axis of BR-163, now its horizontal expansion also follows towards the airport and UNEMAT. In other words, it is directed westward, as well as towards areas near UFMT. In these areas, the "pioneer" land developer no longer holds land inventory, though it maintains contact with farm owners, suggesting the possibility of coordination between economic agents that produce urban space also aiming at the speculative process. In this sense, Sinop's current expansion strongly encroaches on areas that until recently were used for agricultural production, and now new land developments are being implemented, especially gated communities, real estate ventures managed by various sector companies (Lima; Palmisano, 2023). With that, there is a competition for urban land by large developers who are increasingly seeking to valorise their properties.

But what is it about the urban landscape that makes Sinop an agribusiness city? And beyond the landscape, what characteristics can be identified? To answer these questions, in figure 5, based on information available on Google Earth, we sought to demonstrate some elements of the urban landscape to corroborate with this approximation of rural to urban reality.

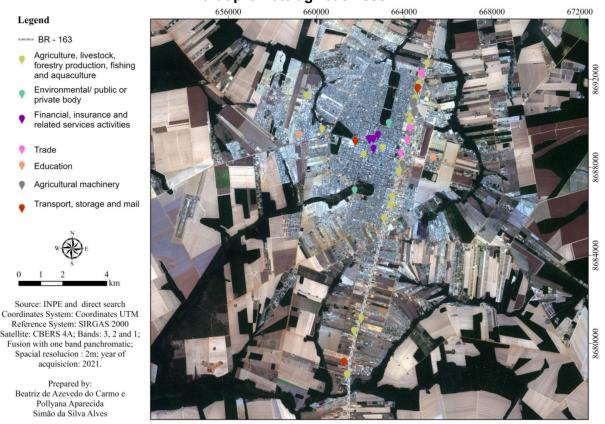


Figure 5: The urban perimeter of Sinop (MT) - 2022: The spatialisation of the elements that promote agribusiness³.

Source: Picture organised by the authors (2022).

In the figure above, it is observed that the elements are spatialized based on the presence of commerce and services in the urban landscape which have some connection with agribusiness, either by offering goods and services or by providing the training of qualified professionals to work in the field. In summary, it is evident that the axis of urban sprawl is mainly towards the west, while expansion to the east is quite recent influenced primarily by the location of UFMT and the establishment of a shopping centre. The concentration of materiality near BR-163 occurs mainly due to the ease of drainage and the availability of these services in addition to some concentration in the central area of the city. However, there is a special emphasis on the financial sector represented in the figure by banking agencies.

Despite the growth of the urban sprawl, BR-163 still holds relatively great importance regarding the development of the city of Sinop. This is made clear primarily from

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³ For the classification of landscape elements that promote agribusiness in the urban perimeter of Sinop (MT), identification via Google Earth images (visual identification, using street view, as well as information provided by the application itself) was used, and validation was done through field visits. Regarding the classification of these locations, the proposal of the National Classification of Economic Activities (CONCLA, 2024) was adapted.

the findings of Coy and Klingler (2014) who characterize it as a backbone of one of the most important economic corridors in the Brazilian Amazon, as mentioned earlier. This section of the road is seen as a modernisation corridor, as it is a place where large companies, mostly foreign capital, rely on for the emergence of globalized spaces, which undoubtedly contribute significantly to the process of exporting agricultural products.

What is also evident in figure 7 is how the city is surrounded by agricultural monocultures. This is highlighted when expressing the municipal agricultural production process in numbers. Such data regarding the presence of temporary and permanent crops can be observed in table 1.

Table 1: Evolution of Agricultural Production in Sinop (in hectares).

	2000		2021	
	Lavoura permanente	Lavoura temporária	Lavoura permanente	Lavoura temporária
Brasil	6.245.371	45.573.754	5.381.233	81.290.999
Mato Grosso	95.999	4.746.968	37.337	17.930.752
Sinop	347	43.288	360	296.720
Sorriso	32	504.840	5	1.225.091
Lucas do Rio Verde	95	258.458	27	460.306
Nova Mutum	299	240.163	50	711.323

Source: IBGE/SIDRA (2023), adapted by the authors.

The data regarding other agribusiness cities are necessary to demonstrate that Sinop still has the smallest area dedicated to agricultural production per hectare when compared to Sorriso, Lucas do Rio Verde, and Nova Mutum, despite experiencing a significant increase in temporary crops over 20 years (2000 a 2021). This situation results from its smaller territorial extension compared to the other municipalities.

Furthermore, the information in the table above shows that in both years, temporary crops experienced the most growth compared to permanent ones. However, in 2021, permanent crops saw a significant reduction in the mentioned municipalities in comparison to what was presented in the year 2000, except for Sinop, which had a slight increase. Alongside these data, another variable that merits attention is Sinop's Gross Domestic Product (GDP) which can be visualized in table 2.

Brasil

35.935.74

	2000	2010	2020	
PIB	433.703,00	2.011.403,00	8.075.614,44	Sinop (MT)
PIB per capita	5.608,00	17.476,12	55.310,53	Sinop (MT)
PIB	14.870.532,8	59.599.990,7	178.650 (Milhões)	Mato Grosso
PIB per capita	5.937,87	19.636,77	50.663,19	Mato Grosso
PIB	1,19 trilhão	3,88 trilhões	7,4 trilhões	Brasil

19.938.60

Table 2: Evolution of GDP and GDP per capita over the years in Sinop and Brazil (in Brazilian reais).

Source: IBGE (2023), adapted by the authors.

PIB per capita

6.900.62

From the analysis of the data presented in the table, it is possible to verify a significant increase in GDP and GDP per capita⁴ over the last 20 years in Sinop, Mato Grosso, and Brazil with values steadily growing each decade. In the case of Sinop, this indicates that economic growth was more significant than that of Mato Grosso and Brazil, particularly in the last ten years, reflecting the influence of the agribusiness economy in the municipality. Consequently, this growth induces transformations in the municipal urban space. The same trend is observed regarding GDP per capita with more visible growth at municipal level.

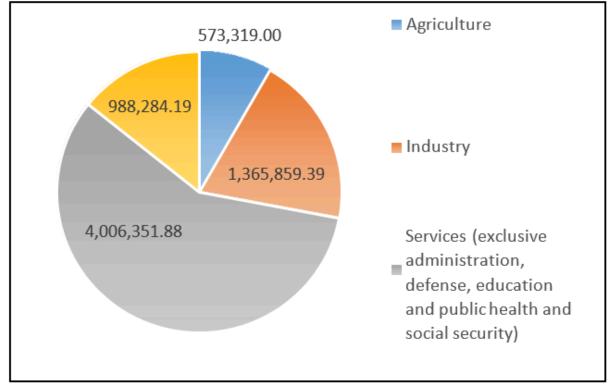
In addition, information regarding the Municipal Human Development Index (MHDI) demonstrates that this economic indicator for Sinop corresponds to 0,754. When compared to Brazil for the reference years of 2021/2022, the indicator has the same values at 0,754, although Sinop has economically grown proportionally more than Brazil. It is observed, therefore, that the municipality of Sinop has followed the same corresponding performance as the national one, but with higher economic growth indicating a greater concentration of wealth in the municipality. However, it is important to note that GDP, GDP per capita, and MHDI data are generic references and correspond to statistical averages certainly concealing ever more socio-economic and territorial inequalities of the studied reality.

Meanwhile, when analysing the case of Sinop considering it when compared to the national level, these figures point to an even greater contrast in income distribution which implies recalling that we are dealing with a country of continental dimensions with various regional particularities. While Sinop's money production indicator are faster than the national level over the last 20 years, the data shows that this richness has not been distributed among the municipality's population as a whole, which is evidence of the unfair wealth distribution.

Considering GDP data, it is relevant that these are accompanied by those of the predominant economic activities in the municipality. That said, Graph 1 shows how the total value is distributed among the various economic branches.

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⁴ In the table, the gross value in current prices is taken into account.



Graphic 1: Breakdown of Sinop's GDP (in Brazilian reais) by economic sector (2020).

Source: IBGE (2020), adapted by authors.

According to the data presented in the graph, it is possible to note that Sinop's municipal GDP is primarily sustained by the service sector with agriculture having the least impact in the value, especially when compared to the industry sector and public administration, defence, education, public health, and social security.

Nevertheless, when these data are compared to those regarding export and import values for the year 2022, Sinop emerges as the 3rd municipality with the highest exports at the state level and the 39th at the national level. The municipality exported to countries on all continents demonstrating that its network of relations extends beyond the national scale. When comparing export data with import data, Sinop exported US\$1.72 billion in 2022 and imported US\$ 394 million, indicating a municipal surplus.⁵

The various transformations observed in the regional and local economy in Sinop are primarily revealed through BR-163, not only with the disappearance of logging activities but also with the emergence of huge grain warehouses owned by multinational and national companies such as Amaggi, Bunge, ADM, Cargill, among others. This situation confirms the city's incorporation into the productive region of agribusiness significantly transforming the rural-urban relationship (COY and KLINGLER, 2014).

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⁵ Information taken from the Comex Stat website. Available at: < http://comexstat.mdic.gov.br/pt/comex-vis > Accessed on: 15 Feb. 2023.

Agricultural Productive Regions (APRAs) or agribusiness regions can be understood as new territorial arrangements focused on agricultural production, comprising agro-industrial networks that receive significant productive investments as a result of globalized agribusiness. These regions introduce changes in rural-urban relationships and in the urbanization process itself making it more intensive since the effective development of agricultural and agro-industrial production requires cities to become functional for agribusiness (Elias, 2011).

The classification of Sinop as an agribusiness city does not only occur due to the production of commodities but also due to its regional importance and the profound changes its establishment has caused in the regional urban network. Its importance and classification as such are not only due to production but mainly to the provision of goods and services it provides regionally, whether through agricultural machinery maintenance companies or the sales of production inputs. Overall, the city participates in the entire agribusiness production chain.

The restructuring of the rural-urban relationship and the latent presence of agricultural activities around the city of Sinop has become even more evident when considering figure 6, which demonstrates how the two forms of interaction are intrinsically linked in the locality highlighting the strength of agribusiness in the municipality, but with less strictly productive influence from this sector and more related to the demands of other stages of the production chain.

Figure 6: Aerial view of Sinop showing urban sprawl, near UFMT and the shopping centre (2022).



Photograph by the authors (2022).

In the above image, part of the UFMT campus in Sinop can be visualized with emphasis on the blocks. Additionally, a public school can be seen in the centre of the image,

and on the right side, a white building represents the Sinop shopping centre. It should be noted in the image in the background, near the two institutions, it is already possible to see agricultural plantations with temporary ploughing around the urban area. Furthermore, the majority of the courses offered by UFMT are geared towards providing qualified workforce training to maintain and develop the agribusiness production chain.

As such, it becomes evident, both through production and the established relationships between rural and urban areas, as well as through service provision, that Sinop can be characterized as an agribusiness city not only due to its agricultural production process - which, when compared to other cities with similar urban characteristics, is relatively smaller, but also because it plays a polarizing role in the economic structure of globalized agriculture at the regional and state levels. So, it can be said that Sinop's economic growth is likely to continue and its regional, state, and national importance is expected to increase considering its economic influence and the significance of agricultural commodities for the Brazilian economy.

Final Remarks

The expansion of Brazil's agricultural frontier since the 1970s has enabled economic and demographic growth as well as the expansion of urban space into rural areas in the municipality of Sinop with its increasing integration into the national market. With the implementation of BR-163 and the intensification of agricultural exploitation in the northern region of Mato Grosso, the society-nature relationship has become ever more prominent with significant environmental impacts including the suppression of much of the native vegetation. Yet, the high economic growth witnessed in recent decades in the municipality has not guaranteed a relationship of greater socio-economic equity mainly due to this growth being driven by capitalist production, which prioritizes profits over social well-being and socio-environmental quality.

Understanding that Sinop is a medium-sized city of immense relevance in its region in the northern part of the state of Mato Grosso directs attention to the notion that, in addition to its regional importance, its participation in the regional urban network is of great importance particularly for better coordination with other cities along the BR-163 axis. Another point that is worthy of attention is the consolidation and integration of this area, which came about especially as a result of the international recognition given to the Legal Amazon from the second half of the 20th century onwards. In any case, the integration and economic development of this area has not guaranteed the preservation of its natural potential.

Considering Sinop as an agribusiness city goes beyond its productive capacities (in terms of agricultural commodities production), but also encompasses the provision of goods and services by the city. This is mainly due to the fact that large transnational and national companies have established themselves in the region to serve the agribusiness production market. The municipality's agricultural production remains highly relevant, but it is not the only sector that makes the city economically important, especially when observing the urban landscape marked by significant changes throughout its brief history highlighting a city with increasing economic activity diversification and playing a prominent role in the regional urban network, although agribusiness still defines its socio-spatial and economic dynamics.

It should also be emphasised that although Sinop is classified as an agribusiness city that has acquired regional economic centrality and concentrates a significant portion of the wealth produced in Mato Grosso, not only through activities directly associated with globalized rural areas but also through its economic diversification. The logic of capital reproduction continues to maintain the same accumulation pattern. This is because urban space production with hits consequent valorisation continues to be controlled by a few economic groups that gather urban and rural land, consequently leading to the expansion of socio-spatial segregation and the increased exclusion of considerable portions on the municipality's population who cannot fully benefit from the wealth its produced. Moreover, there are significant environmental liabilities generated over decades of intensive exploitation of natural resources by agricultural activities and urban expansion driven by real estate speculation. In this sense, it is an economically unfair and an environmentally unsustainable model.

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