

AGRIBUSINESS AND REDEFINITION OF THE SEGMENT OF MATOGROSSENSE URBAN NETWORK

O agronegócio e a redefinição do segmento de rede urbana mato-grossense

El agronegocio y la redefinición del segmento de red urbana matogrossense

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ABSTRACT

The formation of the segment of the Matogrossense urban network is recent. Even though it was the initiation of the constitution process of urban centers in the XVII century, the disarticulation and fragmentation of spatial interaction stayed until the decade of 80 when the advance of the agricultural border established new territorial arrangements. It is relevant the creation of SUDECO in 1967, which acts in the implementation and road paving, the extension of the electrical network, and incentives to the occupation and modernization of the countryside. As a result of those actions, there was a strong growth of soy production in the state starting in 1980, which made it the biggest producer of Midwest in 1987. In 1993, it was possible to talk about the successful segment of the network articulated by Cuiabá and the emergence of cities linked to the modern field as Sinop. With the advance without precedents of agribusiness starting the year 2000 and making Mato Grosso the biggest producer of soy of the country, it is observed a deep and constant restructuring of the regional network: increasing of the intermediation centers, intercalary spatial interactions, competence and complementarity, ascent of medium cities and agribusiness and decreasing of old centers that cannot get the innovations. Furthermore, this work analyzes the formation of Matogrossense urban network, starting with the influence of agribusiness activities. This work was constructed based on the data collection of micro-data from “Regions of Influence of the Cities” publications from IBGE, data of farming production, commercial establishments and theoretical revision.

Keywords: Urban Network; Mato Grosso; Agribusiness; Redefinition.

RESUMO

A formação do segmento de rede urbana de Mato Grosso é recente. Embora o processo de constituição de centros urbanos tenha iniciado no século XVII, a desarticulação e fragmentação das interações espaciais se manteve até os anos de 1980, quando o avanço da fronteira agrícola impõe novos arranjos territoriais. Destaca-se a criação da SUDECO em 1967, que atua na implantação e

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pavimentação de rodovias, ampliação da rede elétrica e incentivos a ocupação e modernização do campo. Como resultado dessas ações, a partir de 1980 há um forte crescimento da produção de soja no estado, tornando-o maior produtor do centro-oeste em 1987. Em 1993, era possível falar em um efetivo segmento de rede, articulado por Cuiabá e com o aparecimento de cidades ligadas ao campo moderno, como Sinop. Com o avanço sem precedentes do agronegócio a partir dos anos 2000, tornando Mato Grosso o maior produtor de soja do país, observa-se uma profunda e constante reestruturação da rede regional: aumento dos centros que realizam intermediação, interações espaciais interescares, relações de competição e complementariedade, ascensão de cidades médias e do agronegócio e declínio de centros antigos que não conseguem absorver as inovações. Assim, este trabalho analisa a formação do segmento de rede urbana mato-grossense a partir da influência das atividades do agronegócio. O trabalho foi construído com base no levantamento de microdados das publicações “Regiões de influência das cidades” do IBGE, dados de produção agropecuária, de estabelecimentos comerciais e revisão teórica.

Palavras-chave: Rede urbana; Mato Grosso; Agronegócio; Redefinição.

RESUMEN

La formación del segmento de red urbana de Mato Grosso es reciente. Aunque el proceso de constitución de centros urbanos haya iniciado en el siglo XVII, la desarticulación y fragmentación de las interacciones espaciales se mantuvo hasta la década de 1980 cuando el avance de la frontera agrícola impone nuevos arreglos territoriales. Se destaca la creación de la SUDECO en 1967, la cual actúa en la implantación y pavimentación de carreteras, ampliación de la red eléctrica e incentivos a la ocupación y modernización del campo. Como resultado de esas acciones, hay un fuerte crecimiento de la producción de soja en el estado a partir de 1980, tornándose el mayor productor del centro-oeste en 1987. En 1993, era posible hablar de un segmento efectivo de la red articulado por Cuiabá y con la aparición de ciudades vinculadas al campo moderno como Sinop. Con el avance sin precedentes del agro-negocio a partir de los años 2000, haciendo de Mato Grosso el mayor productor de soja del país, se observa una profunda y constante reestructuración de la red regional: aumento de los centros que realizan intermediación, interacciones espaciales interescares, relaciones de competencia y complementariedad, ascenso de ciudades medias y del agro-negocio y disminución de centros antiguos que no logran absorber las innovaciones. De esta manera, este trabajo analiza la formación del segmento de red urbana matogrossense a partir de la influencia de las actividades del agro-negocio. Este trabajo fue construido basado en el levantamiento de micro-datos de las publicaciones “Regiones de influencia de las ciudades” del IBGE, datos de producción agropecuaria, de establecimientos comerciales y revisión teórica.

Palabras clave: Red urbana; Mato Grosso; Agro-negocio; Redefinición.

1 INTRODUCTION

Since the beginning of their constitution in the XVII century, the spatial interactions of the urban centers from Mato Grosso passed by long periods of stability until the first half of the XX century. Those periods were characterized by proximity, slowness relations, and low density. However, the advance of the agricultural frontier and the consolidation of agribusiness from the 1980s imposed constant redefinitions of hierarchies, extension of interaction scales, competition relations, and complementarity among the cities.

It is observed the formation of a more complex segment of the urban network that has in Cuiabá the biggest articulator center and the ascension of medium cities such as Rondonópolis and Sinop, cities of agribusiness such as Sorriso, Primavera do Leste, Nova Mutum and Lucas do Rio Verde and subregional dynamic centers such as Água Boa and Pontes e Lacerda, the foundations of the new centralities and interactions.

The agents that acted in the structuration and restructuring of the regional space referred to the state, notably until 1990 decade, with the implementation of infrastructure and financing and, then, to the economic groups with the creation of stronger regional companies, the arrival of big national groups and especially the international ones, which looked to adjust the network to their necessities of accumulation.

As in regard, the following research aims to analyze the formation of the Matogrossense urban network segment, starting with the influence agribusiness activities. It was constructed by a) theoretical revision of the restructuring process of urban networks mainly in Corrêa (1997); Harvey (2018); Sposito (2009, 2010, 2018, 2020); Sposito and Sposito (2022) and Elias (2011, 2018, 2022). It looked for support from authors of the regional literature such as Abreu (2001), Higa (2005), Azevedo (2006), and others.

The data about the state network segment was obtained from publications “Regiões de influência das cidades” (IBGE, 1972; 1987; 2000; 2008; 2020a). In each publication, there was an exploration of microdata, which reveal in details how life relations are in urban centers. To think about the modernization of countryside, it was used the 1985, 1995, 2006 and 2017 agricultural censuses to think about to countryside modernization. In relation to the productive consume, it was checked the agribusiness establishment quantity data present in the cities based on RAIS (Relação Anual de Informações Sociais) (BRASIL, 1995; 2005; 2015; 2021).

This work is divided into three sections: in the first is discussed the redefinition process of urban networks. In the second one, it is argued the long path of installation and restructuring of Mato Grosso urban network segment and, in the third section is analyzed the redefinition to which segment is submitted, starting with the ascension of agribusiness as main economic activity at the end of 1980 years.

2 SOCIO-SPATIAL RESTRUCTURATION AND THE REDEFINITION OF URBAN NETWORKS

The socio-spatial restructuring processes are inherent to the capitalist production manner, whose agents constantly look to expand their profit margins, solving

accomplishment problems. In the last century and a half, according to Harvey (2018, p. 136), the spatial adjustments happened because of “the amplification of both final consume and the productive consume in the world market” which expressed and demanded profound alterations in the territorial settings.

Harvey (2018, p. 161) points out that “the acceleration of production and circulation has been the fetishist crusade” of our times, emphasizing the technological and organizational waves that occurred starting the 1980s, which restructured “the regional values regimes radically.” In practice, it means the enlargement of accumulation scales, conflicts, and analytical articulations necessary to comprehend this period.

According to Sposito (2020), capital restructuring has altered the urban network since the end of the XX century, at least in three manners. The first refers to the increase of the relationships between the cities of different urban networks to attend to “the vectors of globalization economy and the globalization of values, practices, and traditions in multiple geographical scales” (SPOSITO, 2020, p. 179).

Still, according to the author, a second manner of altering urban networks regards the superposition of hierarchical and heterarchical relationships among cities of different and equivalent sizes. In the third place, there is the augment of the weight of goods and services trade in the spatial interactions among cities, supporting the expansion of large commercial chains, franchising networks and, credit offerings.

On the regional scale, conforming to Sposito (2018), the restructuring is apprehended through the functions attributed to the urban centers and spatial interactions. Those are not made without the restructuring of the cities that can be read from the perspective of urban morphology. The instability is the central mark of the structuration and restructuring process, especially in an acceleration and liquidity period of the socio-spatial relationships.

The restructuring of urban networks was marked by the imposition of independence exchanges among the cities of a region, hierarchical organization, and contiguous spatial interactions in which the topographical distances had a huge weight. There, the delimitation of the regions of influence of the cities, the mapping of the flow's extension, and the connections were easier to visualize, given the more zonal characteristics of the spatial arrangements.

With the ongoing process of restructuring, the spatial arrangements before mentioned are not broken completely, but they are added to the new processes, whose relations among the cities absorb other modalities of interaction such as the horizontal and

transversal ones, de hierarchical organization, extensions and connections constituted by spatial discontinuities after the physical distances were profoundly relativized by the techniques of transportation and information (SPOSITO, 2010; 2020).

The main agents of that restructuration of urban networks in Brazil were the biggest economic groups that adopted new locational logics, looking for the amount extension of their consumers, observing the selection of non- metropolitan urban spaces (SPOSITO, 2009; 2018). The economic logics and spatial strategies adopted by bigger companies can performance both in the sense of reinforcing the urban hierarchies and deny them (SPOSITO & SPOSITO, 2022).

In agreement with Sposito & Sposito (2022, p. 76), “the force of big capitals reinforces or redefines the structures of urban networks”. The deconcentration of retail groups, wholesalers, and franchise groups is significant in medium and subregional cities (SPOSITO & GOES, 2015; LOZANO & SPOSITO, 2015). However, as Moreira (2020) points out, for certain realities of Brazil as the Midwest, there is an enormous weight of capital displacement related to agribusiness.

Elias (2011, 2018, 2022) shows in several of his works how from the 1970s in the Southeast and South regions and the 1980s in Northeast, Midwest, and North regions, agribusiness activities have contributed to the countryside urbanization, especially in medium cities, medium and small cities and imposed profound regional restructurations.

One of the main characteristics of agribusiness regards the interdependence of economic sectors that, beyond the agricultural one involves the “industrial production that generates the production goods for the farming production, as well as the commercial sector and services”, because “agribusiness requires a big quantity of products and specialized services” (ELIAS, 2022, p. 295).

It is in the cities that part of the conditions of reproduction of the globalized agribusiness are made, such as the supply of workforce (specialized and physical work), financial support, chemical supplies, agricultural machines, agricultural technical assistance, biotechnological research laboratories, marketing services, logistics, exportation, air aviation, tractor rental companies, food agroindustry composed of beverages manufacturing, dairy products, toasted and ground coffee, slaughter and preparation of meat products (ELIAS, 2018; 2022).

According to Elias (2022), that kind of commerce is commanded by large national and international economic groups that use the selected cities as support to the agriculture production that stimulate the settling of interscalar spatial interactions. Then, they go to

constitute as relevant nodes in the urban regional segments for demands related to specialized and specific agribusiness such as beans, meat or tropical fruits.

The processes of restructuration are not made without massive governmental support with the offer of infrastructures for the performance of economic groups and direct financing of their activities. The result is the profound refunctionalization of urban network segments, which modify their roles, centralities, and spatial interactions to attend to the new market demands.

That context takes to the emergence of several center that assume some roles of agribusiness cities, medium or subregional cities, but, at the same time, it is verified the marginalization, stagnation and decline of the non- selected cities as nodes of the new urban networks. The mere instrumental use of the field in some municipalities produces cities that remain as simple reserves of precarious work force. Then, the modern demands are solved in the regional and subregional centers.

3 ESTRUTURATION OF THE URBAN NETWORK SEGMENT IN MATO GROSSO

It can be affirmed that the restructuration of the urban network segment of Mato Grosso at least has two essential moments: the first refers to the long period from the colonization to 1960s and it can be characterized by the slow technical density of territory, disarticulation of urban centers, absence of intermediary centers, capital priority of Cuiabá, limited spatial interactions and profound interurban segregations visualized in the isolation of some people cores.

A second period is located between the decades of 60s and 90s, in which will be assembled the main traces that characterize the urban network segment in terms of shapes- contents nowadays. There were built three road axes: BR-364 in the south portion initiated in 1961; BR-163 that cuts the center of the state in a longitudinal sense, which was built in 1976; and BR-158 that goes through Vale do Araguaia and concluded in 1980.

In agreement with Higa (2005), the oldest occupation structured some centers in the south of the state. Some cities located in the Southeast such as Vila Bela da Santíssima Trindade and Cáceres emerged related to the exploitation of gold garimpos, mate herb, and poaia exploitation and defense of the international border of Brazil. In the Southeast rose cities such as Barra do Garças, Guiratinga, Itiquira e Alto Araguaia, whose functions and interactions were related to the exploitation of diamonds. Moreover, Cuiabá was born in support of mineral exploitation in the XVII century.

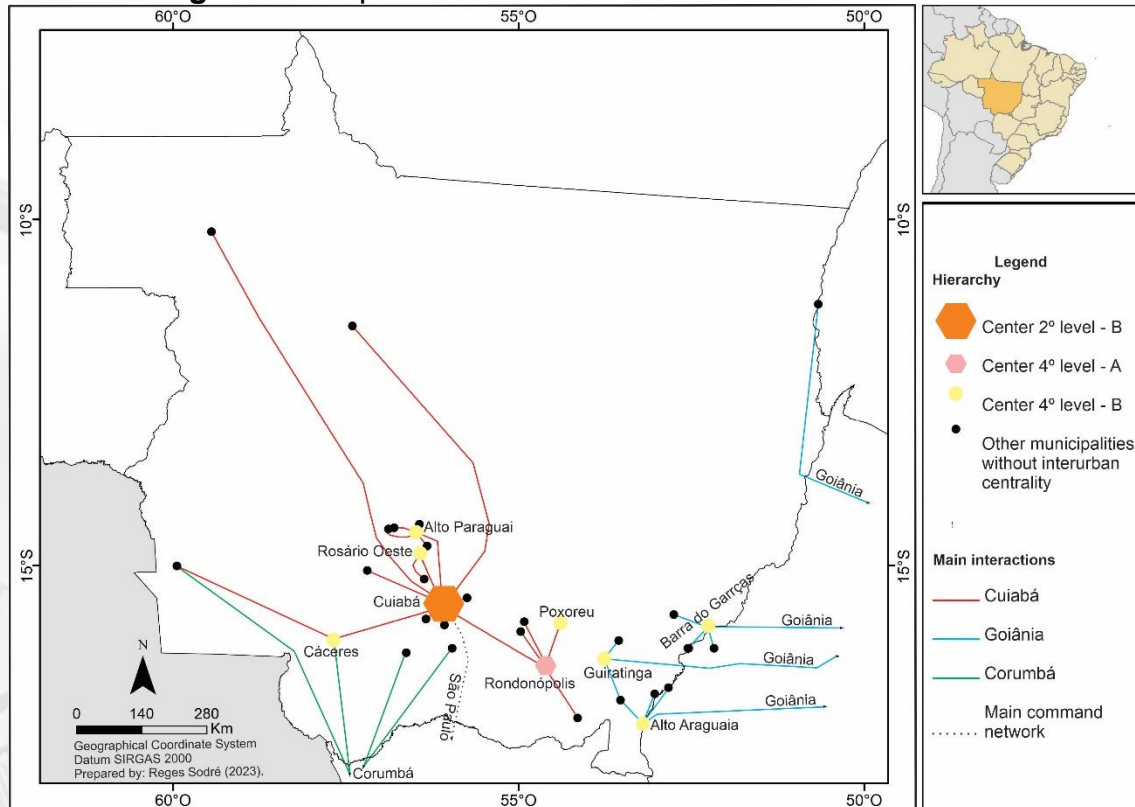
Preferably, the relationships among the cities until the middle of the XIX century were made by sailing. It is not by chance, the more prosperous urban centers were located around Cuiabá (Cuiabá, Araguaia (Barra do Garças), and Paraguay (Cáceres) rivers. From the beginning of the XX century, it added the importance of muleteer paths to the roads that made possible the connection west-east from Vila Bela da Santíssima Trindade to Barra do Garças (HIGA, 2005).

In conformity with Higa (2005), after the decline of extractive activities, the ascension of raising cattle allowed a weak life of relationships in the region. The opening of land roads allowed that the urban cores of Mato Grosso expanded its interactions with other Brazilian territories, exporting products as sugar cane and beef jerky that attracted the migratory movement.

Despite the colonization tries and national integration from the Getúlio Vargas government, the state remained with an incipient economy and a pre-technical means until the 1960s when large roads of penetration started to be constructed (ABREU, 2001). The immense state of Mato Grosso had just 34 municipalities, a good part of which were in the southern portion (IBGE, 2012).

The IBGE first study about urban networks published in 1972, based on data from 1967, shows the disarticulation of the spatial interaction as well as the little differentiation of matogrossense urban centers. It is not possible to affirm that there was a segment of the urban network at that time, taking into consideration that any center articulated around itself the majority of the cities¹. What there happened was a fragmentation of spatial interactions, as can be visualized in figure 01.

¹ Duarte (1989, p. 16) referring to Midwest affirms that until the effective integration initiated from 1970, “[...] the intraregional space was a set of cores and areas non-articulated between each other.”

Figure 01 – Spatial Interactions of Mato Grosso Cities in 1972

Source: IBGE (1972)

As can be observed in figure 01, the space of Mato Grosso was divided into three arrangements of spatial interactions. The first is Vale do Araguaia linked to Goiânia. There, the main cities were Alto Araguaia, Barra do Garças and, Guiratinga that exerted the function 4° level B characterized as centers that “give some services to a reduced number of small next localities bank, high school, hospital services generally, beyond the concentration of agriculture production” (IBGE, 1972, p. 14).

In the central part, there was an organized segment around Cuiabá that had the function 2° level B, influencing Rondonópolis city (4° level A), Alto Paraguai, Rosário do Oeste, and Cáceres. The extern link of that arrangement occurred with São Paulo city. Finally, the third segment in the Southeast which was caught by Corumbá City, located in what would be Mato Grosso do Sul (See Figure 01).

In 1967 was created SUDECO (Superintendência de Desenvolvimento do Centro-Oeste). Abreu (2001) shows that the agency had a decisive role in the installation of the Matogrossense space. Among the programs created in the 1970 decade, it emphasized PLADESCO I and II (Plano de Desenvolvimento Econômico-Social do Centro-Oeste),

PRODEPAN (Programa Especial de Desenvolvimento do Pantanal), POLAMAZÔNIA² (Programa de Polos Agropecuários e Agrominerais da Amazônia), and POLOCENTRO (Programa de Desenvolvimento dos Cerrados).

Together with the creation of Mato Grosso in 1977 is presented a new set of programs headed by SUDECO for the consolidation and development of a new federative unity. It is emphasized PROMAT (Programa Especial de Desenvolvimento de Mato Grosso, POLONOROESTE (Programa Integrado de Desenvolvimento do Noroeste do Brasil, and PLADESCO III (ABREU, 2001).

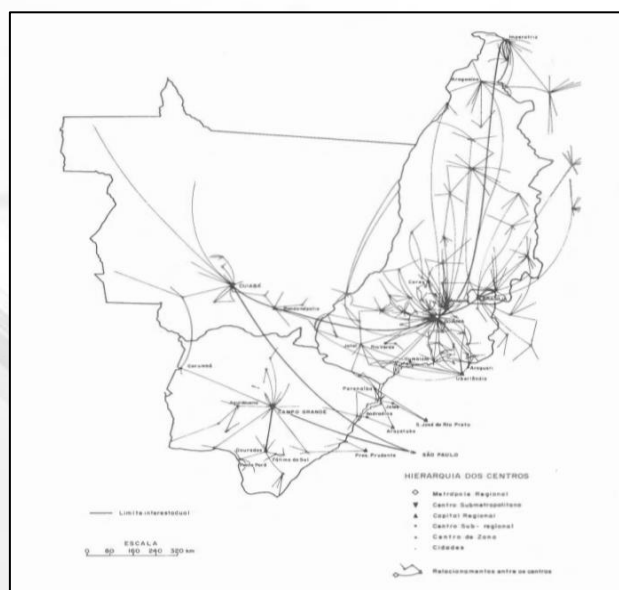
As a whole, considering Abreu (2001), it can be affirmed that the objective of those programs was the investment in energy, transportation, sanitation, landing pad, storage, silos, communication, agriculture and farming development, support to the exportation, researching performance, directed colonization projects, projection and creation of cabinet cities, technical assistance, and rural credit.

Moreover, between 1970 and 1985, the main worry of the federal government was to occupy Mato Grosso and promote the expansion of farming production, prioritizing to large rural producers. From there, the necessity of support for the appropriation of land and the implementation of infrastructure to workforce and merchandise circulation (ABREU, 2001). That frontier advance will promote more changes in the state, but they will be just verified in the urban network from 1990.

When the second study “Regiões de influência das cidades” was made by IBGE in 1983, the setting of spatial interactions from Mato Grosso continued similar to the one of 1972 (see Figure 02). The main change was the centrality expansion of Cuiabá that extinguished, practically, the affluence of Corumbá in the Southeast but, at the same time, it saw the power of Goiânia to advance over the state territory to the point of disputing the command over Rondonópolis (IBGE, 1987).

² According to Abreu (2001, p. 128), there was a division of work between SUDECO and SUDAM in the space of Mato Grosso for the execution of POLAMAZÔNIA. To SUDAM “it would fit the application of fiscal supports”, especially through BASA. SUDECO would be responsible “for the studies and diagnoses, [...], as well as the management and accompaniment of programs”. Beyond that, SUDECO worked in the execution of “infrastructure, especially road network” (ABREU, 2001, p. 141).

Figure 02 – Spatial Interaction in the Midwest Region in 1983



Source: Cardoso (1989)

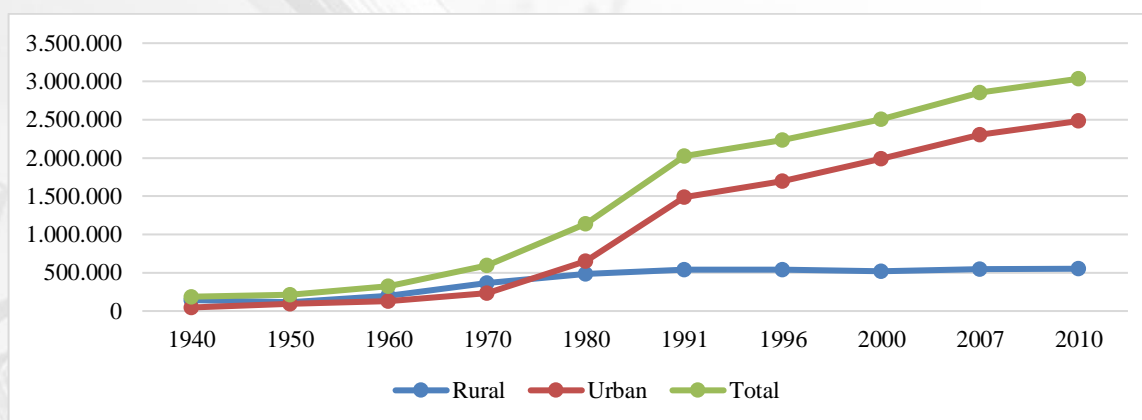
Cardoso (1989, p. 232) points out the strong rise of urban roles of Cuiabá between 1970 and 1980 that was constated in the installation of “regional headquarters and offices of colonized companies and agricultural projects plan and advisory.” Thus, it was verified the arrival of “machinery and equipment firms to wood and farming activities, besides agriculture aviation and air taxis. That allowed the emergence of firms providing other services and the augment of the bank network.”

However, look at Figure 02 that, at the beginning of 1980, Mato Grosso state was the one that has spatial interactions stricter and more disarticulated in the Midwest. Even though Cardoso (1989) talks about the “urban network commanded by Cuiabá”, it is understood that the city began to articulate its segment. Its extension was limited by the influence of Goiânia to the east, marked by the slow density of arrangement given the fragility of the intermediary centers, mobility infrastructure, fragmentation, and dispersion of few existent urban cores.

The territory impacts of border expansion stay nitid if we consider that between 1960 and 1980, nine municipalities were installed, but between 1981 and 1990, about 57 municipalities appeared (IBGE, 2012). Azevedo (2006, p. 143) presents the hypotheses that creation of new villages occurs “from the intensive occupation process at the beginning of 1970 decade and the development of productive structures linked to agribusiness” that created new political leadership.

Effectively, the creation of that vast set of municipalities produces the conditions for the constitution of a segment of the urban network in Mato Grosso, which was born functional to agribusiness. Among those cities that evolve in the 1980 decade, emphasize those from the North as Sinop, Nova Mutum, Lucas do Rio Verde, Alta Floresta, Sorriso, and, in the Southeast, Primavera do Leste. All those cities will have support functions to agribusiness such as machinery and farming supplies offers.

Graphic 01 – Evolution of Urban, Rural, and Total Population of Mato Grosso

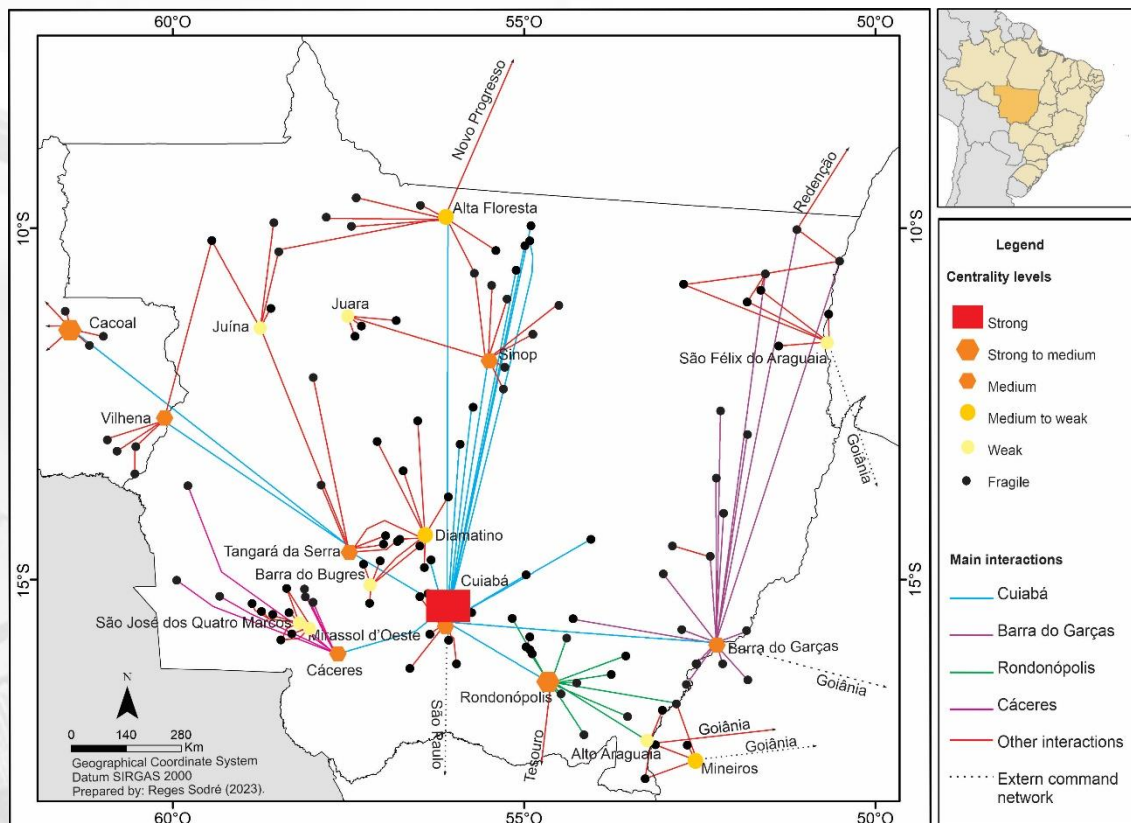


Source: IPEADATA (ca. 2022)

It was in 1987 that Mato Grosso became the biggest soy producer of Midwest with 2.389.033 tons. Since then, there has been remarkable ascension, arriving to 35.336.979 tons in 2021, the biggest production of Brazil (IBGE, 2022). The decade of 1980, especially from its second half, points out an inflexion point in the restructuring of regional space that passes to serve the interest of the globalized agribusiness.

In 1980, that dynamic was reinforced by the growing urbanization because the urban population exceeded the rural by the first time, representing 57,52% of the total (see Graphic 01). The distance between the curve of the urban population and the rural one just increased, reaching a number of 81,80% of urban residents and just 18,20% in the rural areas in 2010. Despite this, the rate the urbanization remains below the national average that was of 84,40% in 2010. In 1980, the total population attained one million people, and in the next three following decades reached several three million people (IPEADATA, 2022).

Figure 03 – The Urban Nexwork Segment of Mato Grosso in 1993



Source: IBGE (2000)

Thus, in 1993, it is possible to visualize a segment of the urban network articulated by Cuiabá that extends its influence throughout the state (see Figure 03). That network is structured in three axes, which existed until now. The first is visualized in the south of the State with an east-west extension around fundamental road such as BR-070, BR-174, and BR-364. The second axis goes with Vale do Araguaia and BR-158, and the third emerged entirely in the year of 1980, and gravitates along BR-163, in the central area of Mato Grosso.

As can be observed in Figure 03, the segment of the state network appeared hierarchized, having Cuiabá in the top that exerted a strong centrality. Then, Rondonópolis city from strong centrality to medium. There is a third group of centers as Tangará da Serra, Cáceres, Barra do Garças and Sinop with, medium centrality levels. Then, there are centers from medium to weak, weak and fragile level centrality (IBGE, 2000).

It is noticeable that Sinop which was established in 1981, grew a little more than ten years at the functional level of traditional cities, Cáceres and Barra do Garças created still at the beginning of the XX century. Freire Filho (2006, p. 73) noticed that the city is in the

north region of the state that was born modern and has a fundamental role of “organization of population” and support to the agricultural production around it.

From the end of the 1990 decade, once structured and established a segment of the urban network, the differentiation of the center got prominent with the emergence of cities that assume roles of intermediation, agribusiness cities and subregional. At the same time, the globalized agribusiness which is at the base of the network constitution, put into play the interscalar spatial interactions so that hierarchical patterns combine with heterarchical relations.

4 AGRIBUSINESS AND THE RESTRUCTURATION OF MATOGROSSENSE URBAN NETWORK SEGMENT

From 1990, the Federal and State policies for Mato Grosso were not a priority for the state occupation but for the modernization and agri-industrialization of agriculture production (ABREU, 2001). From there, the performance of large regional, national, and international economic groups gain relief to contribute to a constant definition of the young segment of the urban network.

At the first moment, at the beginning of the decade of 1990, predominated companies of national capital but own restructuring of the national capital already announced the changes of the territory control with the sale, fusion, and incorporation of vernacular groups to multinationals. Castro & Fonseca (1995) affirm that in 1991 about 61% of agroindustry in the state had capital from the national origin, 20% of regional, and just 11% of international interest.

An example of an international capital advance happened with the purchase of Ceval in 1997. At that time, it was the biggest soy processor in Brazil by Bunge, an American multinational that acted in Mato Grosso too. In the same year, Sadia sold four factories of smashing and soy refinement, one of them is in Rondonópolis of Archer Daniels Midland (ADM), which is a multinational of the same country (SADIA, 1997; PADUAN, 2011).

Those capitals imposed a profound modernization of the Matogrossense countryside with the contribution of state financing. In 1985, there were 19 534 tractors in agricultural establishments. In 1995, that number grew from 32 752. In 2006, they were 42 330, and in 2017, about 71 132 tractors in rural establishments (IBGE, 1985; 1995; 2006; 2017).

Considering another relevant variable, technical assistance, it is noted that in 1985, just 6 339 establishments received collaboration. In 1995 that number increased to 22 131, and in 2006, it was about 27 783 establishments with technical assistance. In 2017, there was a regression to 21 998 establishments because of the accentuated decadence of state participation that followed with a national tendency. This was compensated with the advance in the assistance percentage made by the own rural producer that grew 43,84% with 2006 (IBGE, 1985; 1995; 2006; 2017; 2020b).

That modernization is athirst of stores and urban services facing the countryside. It can be verified in Table 01 that presents, between 1995 and 2021, the number of service companies related to cattle area, machines and equipment for agriculture, poultry farming and obtainment of animal products, machinery wholesale trade, gadgets and material for farming use and vet services. Those are justly activities related to merchandizing and maintenance of agriculture machines that had increasing, with an annual superior variation of 11%.

Those economic dynamics supported each other and demanded modifications in the city networks for the beginning of a new round of municipal emancipation. Between 1991 and 2005 were created 41 new districts. A good part of those municipalities emerged linked to agribusiness directly, being that six of them are among the twenty soy producers of the state: Sapezal, Nova Ubiratã, Querência, Campos de Júlio, Ipiranga do Norte e Nova Maringá (IBGE, 2012; 2022).

Table 01 – Companies Increasing Linked to Agribusiness in Mato Grosso

Companies	1995	2005	2015	2021	Annual Increase %
Service activities related to cattle área, except vet activities	324	1047	827	969	4,30%
Machinery and equipment to farming manufacturing, poultry farming and obtainment of animal products	2	16	37	47	12,91%
Machinery wholesale trade, gadgets and equipment for farming use	43	206	550	667	11,12%
Vet services	14	26	48	131	8,98%

Source: BRASIL (2021)

The reflections in terms of network restructuration of the cities happened with notoriety in the ampliation of the center that perform any degree of intermediation. They were 16 in 1993, 10 of them were in the South-Central of the state. In 2007, they expanded from 29 to 33 cities³ in 2018 with better distribution in the main regional road axis and the larger complexity of their functions because they do not always extend their areas of influence (Figures 04 and 05).

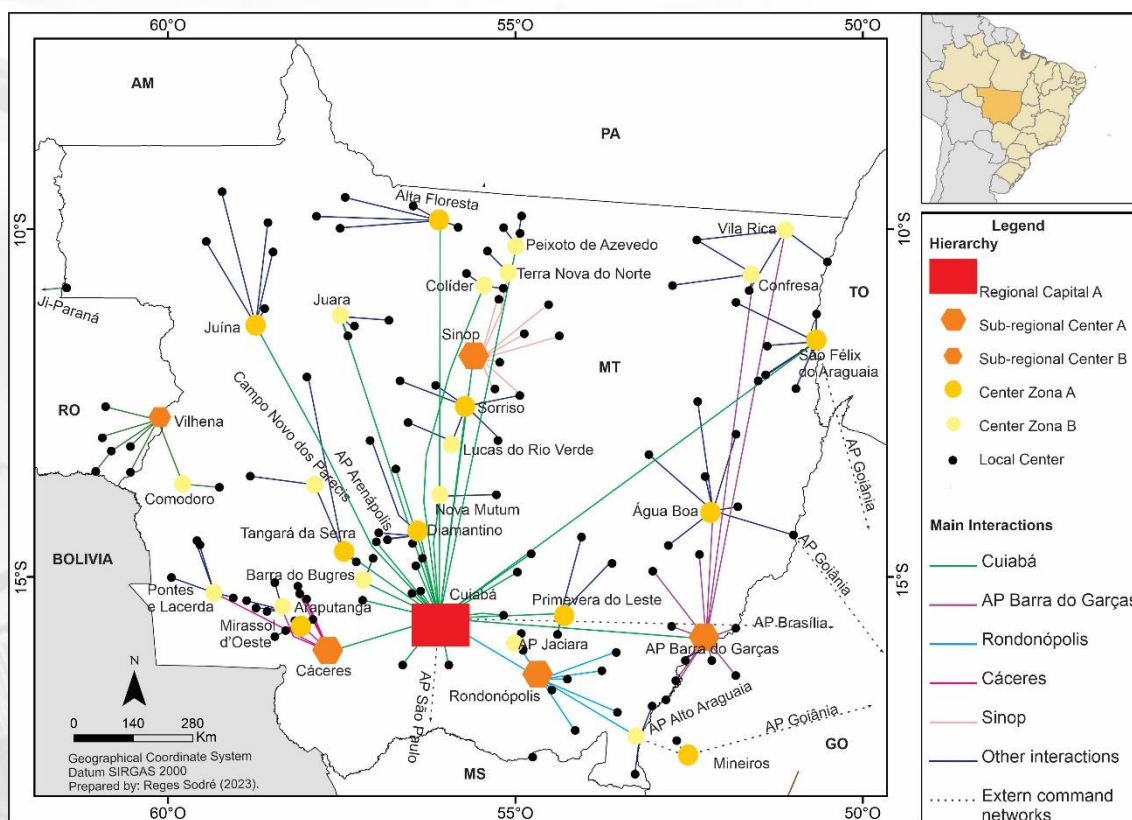
In 2007 five centers around the 163 road in the North portion of the state assumed roles of B zone center (Nova Mutum, Lucas do Rio Verde, Colíder, Terra Nova do Norte, and Peixoto de Azevedo), and one started to exert the function of the zone A, Sorriso. It is emphasized the complexification of the east portion network with the ascension of Confresa and Vila Rica cities as zone B centers and Água Boa and São Felix do Araguaia, fulfilling roles of zone A centers (see Figure 04).

Cáceres and Barra do Garças cities with old territorial formation, Rondonópolis emerged in the context of agropastoral groups of 1950 year, and Sinop from beans modern group had functions of subregional centers. Cuiabá became at the top of regional space as the regional A capital, influencing all the state. At the base of the network, a vast contingent of the cities appeared as local centers, attending the population of their municipalities (Figure 04).

In 2018, the regional network segment is fortified with greater complexity of urban centers. At the top, Cuiabá keeps its position of Regional Capital A. Then, two regional capitals C emerged, Rondonópolis and Sinop, which consolidated their positions as medium cities. In the Southwest, Cáceres is reduced to the condition of subregional center B and Barra do Garças, in the East continues as subregional center A (see Figure 05).

³ That comparison is just an approximation because IBGE modified the methodology between 2007 and 2018 with the introduction of urban population arrangements. That suppressed centers that were considered separately in 2007 such as Várzea Grande and Cuiabá, which start to be considered just a whole center in the network. Nowadays, Mato Grosso has six population arrangements (IBGE, 2020^a).

Figure 04 – Centralities and Spatial Interactions in the Urban Network Segment of Mato Grosso in 2007

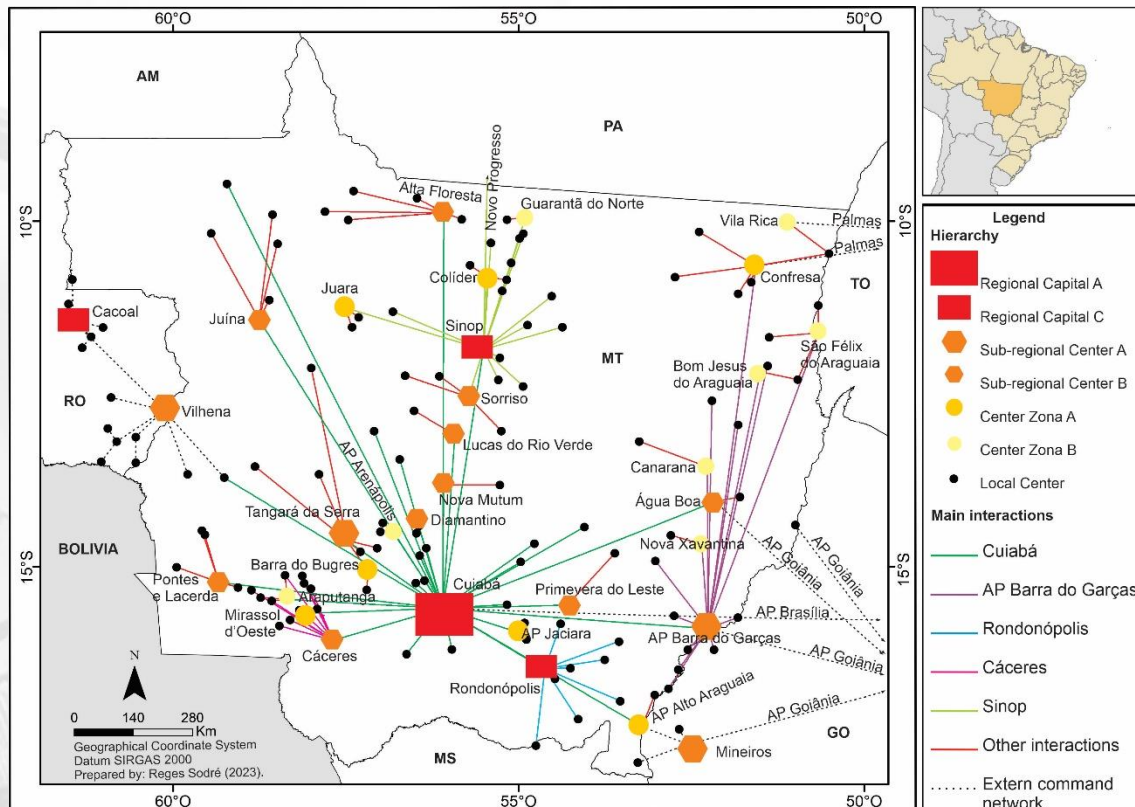


Source: IBGE (2008)

In the influence area of 163 road, Nova Mutum, Lucas do Rio Verde, and Sorriso passed to performance some roles of subregional centers B. That same position became to be occupied by Pontes and Lacerda in the Southeast; Primavera do Leste in the Southwest, Água Boa in the East, Juína in the Northwest and Floresta in the North extreme. Those centers consolidate their functions linked to beans and beef cattle agribusiness. Also, it is emphasized Tangará da Serra city which goes from A center zone to subregional center A, going to the condition of medium city.

In the last IBGE research (2020a), agribusiness roles are more explicit in the conformation and restructuring of the network. Until the beginning of the century, Cuiabá had a central function in offering of supplies for Matogrossense agribusiness, as well as the traditional centers of Barra do Garça and Cáceres. That was completely modified in 2018 when the main centralities of that thematic were Rondonópolis and Sorriso.

Figure 05 – Centralities and Spatial Interactions in the Urban Network Segment of Mato Grosso in 2018



Source: IBGE (2020a)

Thus, Sorriso is the fundamental center in the offered segment of machinery and farming supplies. In the origin of technical assistance are emphasized Primavera do Leste, Lucas do Rio de Verde, Sinop, Rondonópolis, and Sorriso. Those last cities are the essential destinies of state agricultural production. There, it is observed that there is a fierce competence for the flow control associated with agribusiness, generating a network of “multiple circuits” (CORRÊA, 1997).

Matogrossenses cities are emphasized when are considered the 30 centralities more relevant in Brazil in farming supplies provision. Rondonópolis occupy the national second position, followed by Sorriso in the third place. Thus, Sinop, Primavera do Leste, Nova Mutum, Campo Novo dos Perecis, Tangará da Serra, and Sapezal appear on the list. Those same cities are in the list of fundamental centralities for technical assistance, indicating Sorriso with the largest national centrality (IBGE, 2020a).

The list of 30 most meaningful centralities that offer machinery and supplies are Sorriso, Rondonópolis, Sinop, AP Cuiabá, Primavera do Leste, Nova Matum, Lucas does Rio Verde, and Tangará da Serra. Except for the last one, the others and Campo Verde are

on the list of the most 30 centralities for the destiny of farming production. Even though it is not in the ranking, it is worth mentioning Água Boa city, which attracts 10 municipalities in that agribusiness segment; Pontes e Lacerda and Floresta which attract 8 municipalities each (IBGE, 2020a).

Finally, it is pointed out that it is the general chart of current transformations. This cannot prohibit of recognizing the remains and selectivity of new dynamics. On one side, several small cities continue isolated and they are not even provided of paved roads such as Rondolândia, Colniza and Aripuanã in the Northwest extreme and Luciara and São Felix do Araguaia in the east region (MATO GROSSO, 2021).

As can be seen it is a big state and the third largest in the federation and there are still few medium cities, distances to be traveled looking for services by the residents of small cities are superior to 400 km in some cases. That does not mean to affirm the existence of a disarticulated network segment, but some points remain viscosities and opaque spots.

Besides, in most cases, agribusiness does not promote the small cities, which in reality, as Sposito (2015, p. 136) reveals large rural properties “do not need” the supplies support. They need strategic cities with intermediary actions. Thereby, some cities of Mato Grosso as Itiquira, Verá, Feliz Natal e Guiratinga appear as the largest soy producers, but it does not mean the offer of urban productive consume. They are cities that serve as non-qualified workforce reserves for harvest work.

5 FINAL CONSIDERATIONS

The constitution of the first urban cores of Mato Grosso was associated with mining and herb exploration. Subsequently, agropastoral activities kept some level of relation among the cities, but that happened in a fragmented manner by a small group of centers articulated around Cuiabá, Cáceres, and Barra do Garças.

The plan actions of occupation of the state, in the expansion bulge of the farming expansion from the 1960s started to alter the Matogrossense space. The conditions are created for the constitution of the urban network segment that, however, just is concretized at the end of 80 decade. It pointed out the structuring of road creation, modernization of the countryside, and the formation of dozens of municipalities as essential conditions.

Thus, since the 1990s, some types of urban relationships appeared that did not exist before in Mato Grosso. We can cite some of them related to the complementarity and

competition among the center of the lower status of urban hierarchy. They are agribusiness cities, subregional centers, and small cities that dispute the control of subregions.

On the other side, Cuiabá consolidates in regional space command with expansion of its influence all over the state. At the intermediary level, there is the advent of dynamics medium cities such as Rondonópolis, and Sinop, and others that still have some consolidation difficulties as Tangará da Serra and Barra do Garças.

At the same time, the spatial interactions ceased to be restricted to the proximity scales and become agree increasingly their interscalar dimensions. Instead of having a unique displacement vector, they add multiple circuits of interactions, which agree with several manners and direct access to centralities, especially related to the search for supplies linked to agribusiness.

The level changing centers has been more frequent each time, given the fierce competition among them. That does not mean the amplification of their influence areas but does the functional complexity and the spatial interactions. That happens because of the density of the regional space, even selective, in the offer of goods and services and active dispute by the area commands of the network.

REFERENCES

ABREU, S. **Planejamento governamental: a SUDECO no espaço mato-grossense, contexto, propósitos e contradições.** 323 f. Tese (Doutorado em Geografia) – Universidade de São Paulo, São Paulo, 2001.

AZEVEDO, D. **A rede urbana mato-grossense: intervenções políticas e econômicas, ações de planejamento e configurações espaciais.** 305 f. Dissertação (Mestrado em Geografia) – Universidade de São Paulo: São Paulo, 2006.

BRASIL. Ministério do trabalho e emprego. **Relação Anual de Informações Sociais.** RAIS estabelecimentos. Brasília, MTE, 1995. Disponível em: <https://bi.mte.gov.br/bgcaged/inicial.php>. Acesso em: 13 nov. 2022.

BRASIL. Ministério do trabalho e emprego. **Relação Anual de Informações Sociais.** RAIS estabelecimentos. Brasília, MTE, 2005. Disponível em: <https://bi.mte.gov.br/bgcaged/inicial.php>. Acesso em: 13 nov. 2022a.

BRASIL. Ministério do trabalho e emprego. **Relação Anual de Informações Sociais.** RAIS estabelecimentos. Brasília, MTE, 2015. Disponível em: <https://bi.mte.gov.br/bgcaged/inicial.php>. Acesso em: 13 fev. 2023.

BRASIL. Ministério do trabalho e emprego. **Relação Anual de Informações Sociais**. RAIS estabelecimentos. Brasília, MTE, 2021. Disponível em: <https://bi.mte.gov.br/bgcaged/inicial.php>. Acesso em: 13 jan. 2023.

CASTRO, A. C.; FONSECA, M. G. **A dinâmica agroindustrial do centro-oeste**. Brasília: IPEA, 1995.

CARDOSO, M. F. T. C. O urbano e a totalidade social. *In*: (Org.). IBGE. **Geografia do Brasil – região Centro-Oeste**. Rio de Janeiro: IBGE, 1989. 189-239.

CORRÊA, R. L. Interações espaciais. *In*: CASTRO, I. E.; GOMES, P. C. C.; CORRÊA, R. L. (Orgs.). **Explorações geográficas: percursos no fim do século**. Rio de Janeiro: Bertrand Brasil, 1997b. p. 279-318.

ELIAS, D. Agronegócio e novas regionalizações no Brasil. **Revista brasileira de estudos urbanos e regionais**, [s.l.], 13(2), 153, 2011. DOI: <https://doi.org/10.22296/2317-1529.2011v13n2p153>

ELIAS, D. **Globalização e agricultura: a região de Ribeirão Preto-SP**. São Paulo: Edusp, 2018.

ELIAS, D. Agronegócio globalizado e (re)estruturação urbano-regional no Brasil. **Revista de Geografia**, Recife, v. 39, n. 9, p. 290-305, 2022. DOI: <https://doi.org/10.51359/2238-6211.2022.254811>

DUARTES, A. C. O centro-oeste na organização na organização regional do Brasil. *In*: (Org.). IBGE. **Geografia do Brasil – região Centro-Oeste**. Rio de Janeiro: IBGE, 1989. 243-267.

FREIRE FILHO, O. Hierarquia urbana e modernização da agricultura *In*: (Org.). BERNARDES, J. A.; FREIRE FILHO, O. L. **Geografias da soja: BR-163, fronteiras em mutação**. Rio de Janeiro: Arquimedes Edições, 2006. p. 57-76.

LOZANO, L. P. G.; SPOSITO, E. S. Cidades médias e distribuição espacial do comércio de eletrodomésticos no Brasil. *In*: (Eds.). BELLET, C.; MELAZZO, E. S.; SPOSITO, M. E. B.; LLOP, J. M. **Urbanização, produção e consumo em cidades médias/intermediárias**. Presidente Prudente: Universidade Estadual Paulista; Lleida: Edicions de la Universitat de Lleida, 2015. p. 79-108.

IBGE – Instituto Brasileiro de Geografia e Estatística. **Divisão do Brasil em regiões funcionais urbanas-1966**. IBGE: Rio de Janeiro, 1972.

IBGE. **Regiões de influência das cidades-1978**. IBGE: Rio de Janeiro, 1987.

IBGE. **Censo Agropecuário**. Rio de Janeiro: IBGE, 1985. Disponível em: <https://www.ibge.gov.br/>. Acesso em: 14 ago. 2020.

IBGE. **Censo Agropecuário**. Rio de Janeiro: IBGE, 1996. Disponível em: <https://www.ibge.gov.br/>. Acesso em: 14 ago. 2020.

IBGE. **Regiões de Influência das cidades-1993**. Rio de Janeiro: IBGE, 2000. Disponível em: <https://www.ibge.gov.br/>. Acesso em: 14/08/2020.

IBGE. **Regiões de Influência das cidades-2007**. Rio de Janeiro: IBGE, 2008. Disponível em: <https://www.ibge.gov.br/>. Acesso em: 14 ago. 2020.

IBGE. **A legislação municipal, municípios vigentes-2012**. Rio de Janeiro: IBGE, 2012. Disponível em: www.ibge.gov.br. Acesso em: 05 fev. 2014.

IBGE. **Censo Agropecuário**. Rio de Janeiro: IBGE, 2017. Disponível em: <https://www.ibge.gov.br/>. Acesso em: 14 jan. 2023.

IBGE. **Regiões de influência das cidades-2018**. IBGE: Rio de Janeiro, 2020a.

IBGE. **Atlas do espaço rural brasileiro**. IBGE: Rio de Janeiro, 2020b.

IBGE. **Pesquisa agrícola municipal 1976-2021**. IBGE: Rio de Janeiro, 2021. Disponível em: <https://www.ibge.gov.br/>. Acesso em: 25 mar. 2020.

IPEADATA. **População**. Brasília, [ca. 2022]. Disponível em: <http://www.ipeadata.gov.br/Default.aspx>. Acesso em: 13 abr. 2023.

HARVEY, D. **A loucura da razão econômica: Marx e o capital no século XXI**. São Paulo: Boitempo, 2018.

HIGA, T. C. S. Processo de ocupação e formação territorial. (Org). MORENO, G.; HIGA, T. C. S. **Geografia de Mato Grosso**. Cuiabá: Entrelinhas, 2005. p. 18-33.

MATO GROSSO. **Mapa rodoviário 2021**. SINFRA: Cuiabá, 2021.

MOREIRA, R. **A formação espacial brasileira: contribuição crítica aos fundamentos espaciais da geografia do Brasil**. Rio de Janeiro: Editora Consequência, 2020.

PADUAN, R. O poder da Bunge. **Revista exame**, [s.l], n.p, 18 fev. 2011. Disponível em: <https://exame.com/revista-exame/o-poder-do-bunge-m0050281/>. Acesso em: 13 set. 2022.

SADIA vende quadro fábricas. **Folha de Londrina**, [s.l], n.p, 17 dez. 1997. Disponível em: <https://www.folhadelondrina.com.br/economia/sadia-vende-quatro-fabricas-55005.html?d=1>. Acesso em: 13 set. 2022.

SPOSITO, M. E. B. Globalização, consumo e papéis intermediários de cidades médias no Brasil. In: SANFELIU, C. B.; SPOSITO, M. E. B. (Org.). **Las ciudades medias o intermedias en un mundo globalizado**. Lleida: Universitat de Lleida, 2009. p. 41-69.

SPOSITO, M. E. B. Novas redes urbanas: cidades médias e pequenas no processo de globalização. *Revista redes urbanas: cidades médias e pequenas no processo de globalização*. **Revista Geografia**, Rio Claro, v. 35, n. 1, p. 51-61, 2010. Disponível em: <http://www.periodicos.rc.biblioteca.unesp.br/index.php/ageteo/index>. Acesso em: 15 mar. 2020.

SPOSITO, M. E. B.; GOES, E. M. Metropolização do espaço: cidades médias, lógicas econômicas e consumo. In: FERREIRA, A.; RUA, J.; MATTOS, R. C. (Orgs.). **Desafios da metropolização do espaço**. Rio de Janeiro: Editora Consequência, 2015, p. 125-151.

SPOSITO, M. E. B. Reestruturação econômica, urbana e da cidade: os papéis intermediários de cidades médias em múltiplas escalas. In: LAN, D.; ADRIANI, L.; SPOSITO, E. S (Coords). **Reestructuración productiva e industria, en ciudades intermedias de Argentina y Brasil**. Tandil: Universidad Nacional del Centro de la Provincia de Buenos Aires, 2018. p. 189-208.

SPOSITO, M. E. B. La nueva arquitectura de las redes urbanas, el comercio y el consumo en Brasil. In: SILVEIRA, M. L.; BERTONCELLO, R.; DI NUCCI, J. (Coods). **Ciudad, comercio y consumo**: nuevas perspectivas para su estudio geográfico. Ciudad Autónoma de Buenos Aires: Café de las Ciudades, 2020. p. 177-195.

SPOSITO, M. E. B.; SPOSITO, E. S. Lógicas e estratégias espaciais. In: SPOSITO, M. E. B.; SPOSITO, E. S. (Orgs.). **A construção de uma pesquisa em Ciências Humanas**. Rio de Janeiro: Editora Consequência, 2022, v. 1, p. 71-90.
