

**DEVELOPMENT AND INTEGRATION PLAN OF MATO GROSSO DO SUL'S  
BORDER STRIP: A VIEW FROM THE ECONOMIC INDICATORS**

PLANO DE DESENVOLVIMENTO E INTEGRAÇÃO DA FAIXA DE FRONTEIRA  
DE MATO GROSSO DO SUL: UM OLHAR A PARTIR DOS INDICADORES  
ECONÔMICOS

PLÁN DE DESARROLLO Y INTEGRACIÓN DE LA FRANJA FRONTERIZA DEL  
MATO GROSSO DEL SUL: UNA MIRADA DESDE LOS INDICADORES  
ECONÓMICOS

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**Abstract:** The Development and Integration Plan of the Border Strip of the State of Mato Grosso do Sul - PDIF/MS (2012) was developed. This Plan presented seven strategic axes and the purpose of this paper is to specifically analyze the axis "economic development" to verify the monitoring of the results concerning the established goals. For this, data and socioeconomic and development indicators will be collected. The method will be based on the analysis of descriptive statistics as well as stylized facts. After analyzing the data and indicators, it was pointed out that important improvements occurred in the agricultural sector and storage. But on the other hand, few advances were observed in industrial diversification. Regarding tourism, trade, and services, there have been advances concerning the goals, however, it is important to emphasize that the goals established in the PDIF/MS are not specific, measurable, achievable, relevant, and temporal (SMART), consequently, performance evaluation is difficult. However, it is essential to develop a new Development and Integration Plan for the State of Mato Grosso do Sul's Border Area that in fact will be able to provide SMART goals, for effective monitoring and of the Plan, and for its results to be robust and significant.

**Keywords:** Development; Border; Mato Grosso do Sul; Geography.

**Resumo:** Foi elaborado o Plano de Desenvolvimento e Integração da Faixa de Fronteira do Estado de Mato Grosso do Sul – PDIF/MS (2012). Este Plano apresentou sete eixos estratégicos e o propósito deste trabalho é analisar especificamente o eixo “desenvolvimento econômico”, a fim de verificar o acompanhamento dos resultados em relação às metas estabelecidas. Para tal, serão levantados dados e indicadores socioeconômicos e de desenvolvimento. O método será baseado na análise de estatísticas

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descritivas, bem como, fatos estilizados. Após as análises, foram apontadas que ocorreram melhorias importantes no setor da agropecuária e armazenagem. Mas por outro lado, foram observados poucos avanços na diversificação industrial. Já no que se refere ao turismo, comércio e serviços, ocorreram avanços em relação às metas, contudo é importante ressaltar que as metas estabelecidas no PDIF/MS não são específicas, mensuráveis, atingíveis, relevantes e temporais (*SMART*), isso dificultou a avaliação do desempenho. Portanto, temos elementos e indícios de que tivemos, ao menos parcialmente, o cumprimento das metas. Entretanto, é fundamental o desenvolvimento de um novo Plano de Desenvolvimento e Integração da Faixa de Fronteira do Estado de Mato Grosso do Sul que de fato apresente metas *SMART* para que ocorra o efetivo monitoramento e acompanhamento do Plano.

**Palavras-chave:** Desenvolvimento; Fronteira; Mato Grosso do Sul; Geografia.

**Resumen:** Se elaboró el Plan de Desarrollo e Integración de la Franja Fronteriza del Estado de Mato Grosso do Sul – PDIF/MS (2012). Este Plan presentó siete ejes estratégicos y el propósito de este trabajo es analizar específicamente el eje “desarrollo económico”, a fin de verificar el seguimiento de los resultados en relación con las metas establecidas. Para ello, se recopilarán datos e indicadores socioeconómicos y de desarrollo. El método se basará en el análisis de estadísticas descriptivas así como de hechos estilizados. Luego de los análisis, se señaló que hubo mejoras importantes en el sector agrícola y de almacenamiento. Pero por otro lado, se observaron pocos avances en la diversificación industrial. En materia de turismo, comercio y servicios se han producido avances en relación a las metas, sin embargo es importante resaltar que las metas establecidas en el PDIF/MS no son específicas, medibles, alcanzables, relevantes y temporales (*SMART*), las cuales dificultó la evaluación del desempeño. Por lo tanto, tenemos elementos e indicios de que hemos logrado, al menos parcialmente, las metas. Sin embargo, es fundamental desarrollar un nuevo Plan de Desarrollo e Integración de la Franja Fronteriza del Estado de Mato Grosso do Sul que presente metas *SMART* para un efectivo monitoreo y seguimiento del Plan.

**Palabras-clave:** Desarrollo; Frontera; Mato Grosso do Sul; Geografía.

## Introduction

The national states have already received a divided space when created, given that territorial spatial separation of labor and a political division pre-existed. "With the development of capitalism, the division of the world into national territories settle, and based on this structure, societies politically fit" (CATAIA, 2007, p.3).

Borders have the role of demarcating the boundaries of different sociopolitical projects. Thus, "Border is the space where the states' influences in contact are intertwined. Economic, social, and cultural activities meet there, creating shared practices that can build a border identity" (DORFMANN; ROSES, 2005, p.195).

Therefore, it should be noted that, at the end of the nineteenth century, the border strip was defined for the first time as a geographical area with a particular legal regime,

by law 601 of 1890 (NUNES, 2013). According to this law, the use and property of land in the extension of the border strip were subject to conditions distinct from other parts of the territory, given its extension along the boundaries of the national territory, and the possibility to be freely granted. In 1891 the Constitution established that all vacant lands located in their respective territories belonged to the State and that only the portion of the territory that was indispensable for the defense of borders, fortifications, military buildings, and federal railways, was the Union's responsibility.

In the 1930 constituent, the strip delimitation changed to 100 Km, and no concession could be made in order to provide land in the border areas for productive activities. In contrast, land could be granted for the implementation of infrastructure, and this could occur without a prior hearing from the Superior Council of National Security (SCNS). The most significant change in the Constitution occurred in 1937, by the government of Getúlio Vargas, when the border strip was extended to 150 km. In 1939, the Special Committee for the Review of Land Concession was created, which became responsible for conducting studies and issuing opinions on the installation of companies and the developed activities, in addition to the implementation of transport routes and communication networks.

From this perspective, it should be noted that Brazil has 588 municipalities in the border area, with 19 cities that are in border agglomerations (BRAZIL, 2005). According to Oliveira (2009), agglomerations of this nature have articulated the landscape in the Americas' border regions to strengthen them as urban centers, and to advance infrastructure, and economic relations, the formal, functional, and illicit. These elements allow the creation of networks of varied exchanges based on different labor and environmental laws in different currencies, workers, etc.

The state of Mato Grosso do Sul's creation occurred through the Complementary Law nº 31, of October 11, 1977 (BRAZIL, 1977), by President Ernesto Geisel. This new configuration implied a state with 79 municipalities, of which 44 make up the border strip, totaling 1,578 kilometers in length on the line that it shares with Bolivia and Paraguay. The state is the second one with the largest number of cities that border other countries, most with Paraguay. Of the 44 municipalities, 12 are specifically on the border strip and of these, seven have urban agglomerations, also known as twin cities, as shown in the following map:

**Map 1 - Twin Cities**

Source: MI/SPR/PDFF (2005).

Based on studies conducted by the Interfederative Working Group on Border Integration, with representatives designated by Ordinance of the Ministry of National Integration (2009), The Development and Integration Plan of the Border Strip of the State of Mato Grosso do Sul - PDIF/MS (2012) was developed. This Plan presented seven strategic axes: security, health, infrastructure and logistics, education, economic development, socio-environmental development, and integrated customs. For each axis, general and specific objectives, goals, and expected results were established.

Given the context, the purpose of this work is to specifically analyze the axis "economic development" to verify the monitoring of the results concerning the established goals. For this, data and socioeconomic and development indicators will be collected. The method will be based on the analysis of descriptive statistics as well as stylized facts. The results will be presented through graphs and tables. This work hypothesizes that the goals were at least partially achieved and that it is always necessary to create new Development Plans, considering the dynamic reality of socioeconomic processes at the border. We also stress that for this work, the twin cities belonging to the state of Mato Grosso do Sul were elected.

Therefore, this chapter is divided into two parts, in addition to this introduction, and the final considerations. First, a brief approach is carried out on the process of border

formation, its elements, and characteristics, and second, an analysis of the economic data object of this study is conducted.

### **Border: brief notes**

The border has historically become the object of constant concern for States regarding control and bond. Under this perspective, one of the objectives of the system of national states, in force for almost two centuries, was to encourage the coincidence between limit and border aiming for a conceptual convergence, given that in many cases they are considered synonymous in the literature (MACHADO, 2009).

Ferrari (2012) explains that the main debate on borders lies in Gottman's questioning of the doubt regarding whether the border constitutes a line or an area. For Gottman (2007) the line is a political and legal concept, while the area is a geographical concept.

In this sense, Ferrari (2012, p.17) also points out that, "[...] if the border is a geographical zone, its universally widespread notion as a line separating two sovereignties would be mistaken, because the lines are nothing more than an abstraction without real existence except within cartography". Raffestin (1993) also relies on the idea of the zone, since for him the border constitutes a camouflaged zone in line, with precise linear demarcation, thus corresponding to a geographical zone.

The term border derives from Latin, indicating a portion of the territory situated ahead (FERRARI, 2012). In France, the word border (*frontière*) appeared at the beginning of the 14th century, and its use was through the military who went to the front to defend the territory against possible invaders. For this purpose, military fortifications were built, which were later called "border".

As a result, the expression encompasses double meaning, the movement of conquest and establishment of demarcation and delimitation of the conquered areas. The formation of national states in Europe has helped to recognize the term border as their political limits. Machado (1998, p. 41) states that:

The historical origin of the word shows that its use was not associated with any legal concept and that it was not, essentially, a political or intellectual concept. It was born as a phenomenon of spontaneous social life, indicating the margin of the inhabited world. As the patterns of civilization developed above the subsistence level, the boundaries between the areas that are being or will yet be occupied by man became places of communication and, therefore, acquired a political character.

The national states have already received a divided space when created, given that territorial spatial separation of labor and a political division pre-existed. "With the development of capitalism, the division of the world into national territories settle, and based on this structure, societies politically fit" (CATAIA, 2007, p.3).

Therefore, it is essential to understand that "[...] the identification between international limit and border probably takes place from the mobility and cartographic imprecision that most of the time accompanied the societies development" (MARTINS, 1997, p.47). From then on, linear demarcations manifested through a distinct territorial political reality would be linked to the notion of the border. Therefore, it agrees with Ferrari (2012, p.19):

Linear demarcation is understood as the setting of the boundary line with the implantation of landmarks on the ground, allowing to identify the end or beginning of a territorial political domain, the limit now comprises the line of legal control of a state nation, while the border is understood as a geographical area between two distinct state systems.

Under this perspective, borders have the role of demarcating boundaries of different sociopolitical projects. Dorfmann and Rosés (2005) point out that the border is a characteristic of any object or phenomenon, whose existence has extension and end. Dorfmann and Rosés (2005) point out that the border is a characteristic of any object or phenomenon, whose existence has extension and end. The end or border concerns the contact if there is an object or phenomenon of a similar nature adjacent to the first. Concerning nation-states, the border is considered an international border. Therefore, "Border is the space where the influences of the states in contact are intertwined. Economic, social, and cultural activities meet there, creating shared practices that can build a border identity" (DORFMANN; ROSES, 2005, p.195).

With the development of humanity, borders became places of communication, acquiring political connotations. While the border is considered dangerous due to its capacity to articulate and develop different interests concerning the central government,

the legal limit of the state is created and maintained by the central government, not counting on its existence. The extent to which the border can be an element of integration, given the possibility of being an area of mutual interpenetration and possible manipulation of political, social, and cultural structures, the boundary is an element of separation, separating sovereign political units and remains an obstacle (MACHADO, 1998).

In this discussion, it should be considered that the boundary is plural, especially concerning relations. For Oliveira (2005), the fact that borders are plural also makes them singular, and they are singular regarding the nation and among themselves because each border is a border, and this situation of singularity reflects in the population living in these spaces. Therefore, this study agrees with the author (2005) in the sense that the border is not one, and to unveil it one must infer the specificities of its connections and its flows.

Albuquerque (2010), on the other hand, shows that the notion of border, in the contemporary world, is imbued with different meanings, such as demarcations of territories or as metaphors of social life, as porous and rigid borders, as barriers or crossings or as boundaries and paths. Martins (1997,13), in turn, addresses the border from the human element:

[...] border in no way reduces and comes down to the geographical border. It is the border of many different things: the border of civilization (demarcated by the barbarity that hides in it), the space border, the border of cultures and worldviews, the border of ethnicities, and the border of History and historicity of man. And, above all, the human border.

Although borders are defined on an intranational scale, as a national subspace, they can be in different phases of integration with the territory and with the national dynamics. Arroyo (1997) explains that borders are part of an area that is not homogeneous, but contiguous, permeated by a legal and political division that distances them, but at the same time transforms them into a contact zone. Formal boundaries express the power that consequently gives them mobility through expansion or compression of domains.

The border areas have a spatial organization, in which the origin is permeated by a logic of economic flows of different natures, i.e., one with structural implications and another with conjunctural implications. The structural implications are characterized

temporally as permanent, regarding the exchange of information, goods, services, etc., between spaces with different actions and specializations, which can be caused by "regional compensations", in addition to complementarity in the countries' productions. Economic flows, in turn, are related to the specificities of economic policy, such as monetary and exchange rate policies (Pébayle, 1994).

The territorial political limit defines the field of action that pairs the power to govern, control, and restrict certain social actions in the defined space. The conjunctural spectrum that is present and that reaches everywhere on the border is more intense and immediate, having constant changes in the political oscillations and the economy of each country.

Every time that the exchange rate correlation changes (usually between the local currency and the US dollar), the direction of trade flows changes significantly at the border; any change in the political stance of governments towards the neighboring state, immediately, at the border, manifestations are ordered according to this posture, i.e., this logic has, as a principle, the oscillation and the pendular condition of investments (Oliveira, 2009, p. 22).

The proportions are higher when this situation triggers, on the border, attractive processes of industrial insertion and new offers of services and trade. In the case of industrial insertion, which is often attracted by comparative advantages such as re-export trade, it affects the daily life and production of borders. They also interfere with illicit forms of drug trafficking and other forms of smuggling.

Oliveira et al. (2004) point out that the multiform condition of the border territory makes economic organizations develop their models of exchange, increasingly porous in the circulation of services, goods, and people. On the one hand, economic organizations lead the population to experience various interactions, which generates and intensifies horizontal relationships. On the other hand, the same conditions allow political organizations to follow the same path, however without an idea of interaction.

A considerable part of the dynamics that occur at the borders occur in urban border agglomerations. The conceptions, associated with urban agglomerations, began to be discussed in more depth when large urban centers went through strong transformations, from the population growth and increased industrial production, and from the development of transport systems, which allowed the city dispersion, generating, in many cases, agglomerations of urban centers of different municipalities.



Beaujeu-Garnier and Chabot (1970, p.21) explained that urban agglomeration is "[...] a notion more extensive than that of city and more precise than that of suburban area", given that it comprises a join between two or more cities, by the intensification of bonds or by urban territorial expansion.

An important part of studies on urban agglomerations addresses metropolitan regions of large cities, but it is important to highlight that this process also occurs in small and medium-sized cities, on national and international scales. In border agglomerations, it is a process intensified by the expansion and complexity of urbanization, however, flows and displacements occur from their genesis. In addition, it should be considered that urban agglomeration does not necessarily need continuity of the urban fabric, because it is the intensity of relations that thus conceptualizes it.

Lima (2007) classifies urban agglomerations in two ways: the first covers those of continuous urbanized space, which may result from the expansion of the central city, the simultaneous expansion of two or more cities, or an integration of the urban site itself (twinned cities); the second is that of agglomerations without continuous urbanized space, consisting of contiguous municipalities, whose integration is carried out by complementarity of functions.

Urban agglomeration represents an area of daily mutation between cities, i.e., the development of interdependent relationships between two or more urban areas, composing a unique phenomenon. This connection between urban centers, which characterizes spatial continuity, is related to the flows of people, goods, information, capital, etc.

From this brief discussion on the concept and characteristics of the border, the next section will present the analysis of the economic indicators of the state and the twin cities of Mato Grosso do Sul.

### **Evaluation and analysis of the Development and Integration Plan of the State of Mato Grosso do Sul's Border Strip in relation to Economic Development**

The border strip region has particularities, as presented in the previous sections. Certainly, this region needs a particular analysis, especially in relation to the large centers. It is no different in the State of Mato Grosso do Sul, and with this view, the Border Strip Development, and Integration Plan (PDIF/MS) was prepared and published in 2012.

Regarding the axis that addresses economic development, the plan brought some goals such as:

Promote the sustainable economic development of border production and commercialization, induce productive diversification through integrated sectoral public policies, with differentiated tax incentives that aim to provide this region with adequate infrastructure and logistics for tourism and the densification of production chains, supporting the organization and strengthening of local productive arrangements - LPAs - and the production flow and internalization of inputs at the border. (PDIF/MS, 2012, p. 42).

The overall objective is very much in line with the guidelines of sustainable development and good practices in relation to the diversification of production and infrastructure improvement. However, the obstacles to the diversification of production are not negligible. Specifically, the Plan sets out several targets to achieve this objective:

- i) **Agriculture/Livestock** – To expand, diversify, and add value to the Region's Productive base.
- ii) **Tourism** – to expand ecotourism seeking new knowledge and cultural integration with infrastructure and services improvement; structure and signal tourist routes, setting up a Marketing structure to attract new ventures; strengthen the Regional Tourism Forums in the Border Strip and its Tourist Regions.
- iii) **Industry** – To create differentiated incentives for the implementation of new industries and benefit existing ones.
- iv) **Commerce** – To simplify and speed up the formalization of commercial ventures in the Border Strip, encouraging the creation of new shopping centers and Free Shopping in the Twin Cities.
- v) **Service s-** To promote events such as business rounds, seminars, and citizenship actions in the cities of the Border Strip.

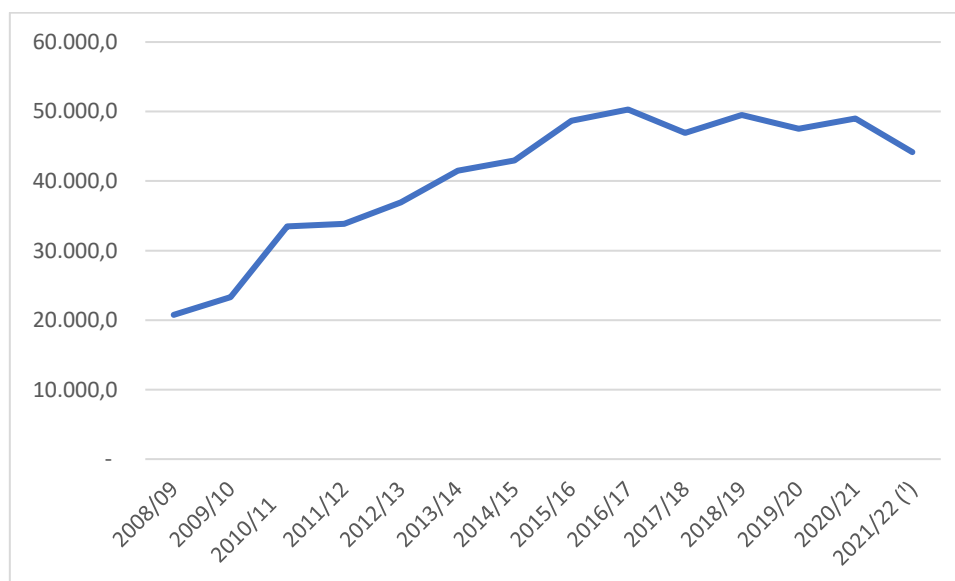
Therefore, the objective of this section will be to analyze some results in the scope of economic development in the light of the goals and objectives of the PDIF/MS, to verify whether they were achieved. The goals do not follow the logic of being specific, measurable, attainable, relevant, and temporal, this makes performance evaluation

difficult. Another challenge lies in the constraints of data and indicators specific to the border region.

Given this context, analyses will be performed based on indicators that give evidence about the dynamics of the border. The data used in the survey were obtained from primary sources of the Federal Government of Brazil. Data from the Ministry of Labor's Labor Statistics Dissemination Program (PDET) were used, referring to the Annual Social Information Report (RAIS) (see RAIS, 2022) as well as the classification of these data according to the major sectors of economic activity of the Brazilian Institute of Geography and Statistics (IBGE), namely: Industry, Construction, Trade, Services, and Agriculture. Other data sources were CONAB (2022), IBGE (2022), CNI (2022) and the Tourism Observatory of Mato Grosso do Sul (2021).

Concerning the first goal, which refers to the expansion, diversification, and aggregation of value in agriculture and livestock, we can observe the evolution of crops and livestock production in the state of Mato Grosso do Sul (MS):

**Graph 1 - Sugarcane production (in thousand tons) in MS**

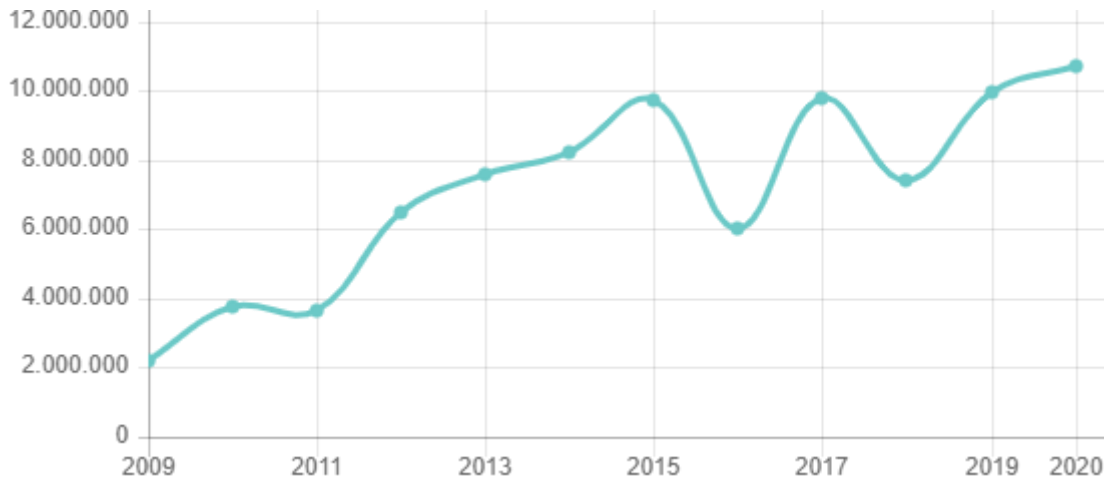


**Source:** Conab (2022)

It is possible to observe (Graph 1) the evolution in the amount of sugar cane produced in the state of Mato Grosso do Sul between 2008 and 2022. In the border region, the municipality of Dourados-MS emerges as a major exponent of this sector. In this period, production more than doubled. Another important item of Agribusiness in the

border region is the corn crop. This product presented a negative situation, as can be seen in Graph (2) below:

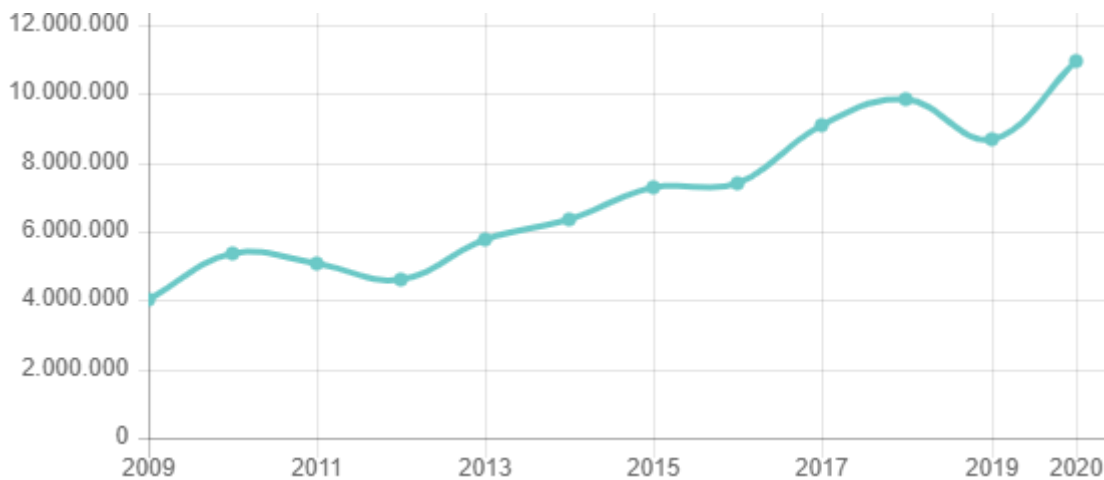
**Graph 2 - Corn production (tons) in MS**



Source: IBGE (2022)

Corn production showed an important advance from 2009 to 2020. This is relevant to demonstrate the gain of this crop, which is important for basic food, food industry, feed, and other sectors that serve as the basis for the state economy, especially livestock. Below, in Graph (3), we can verify the evolution in tons of soybean production in the state of MS.

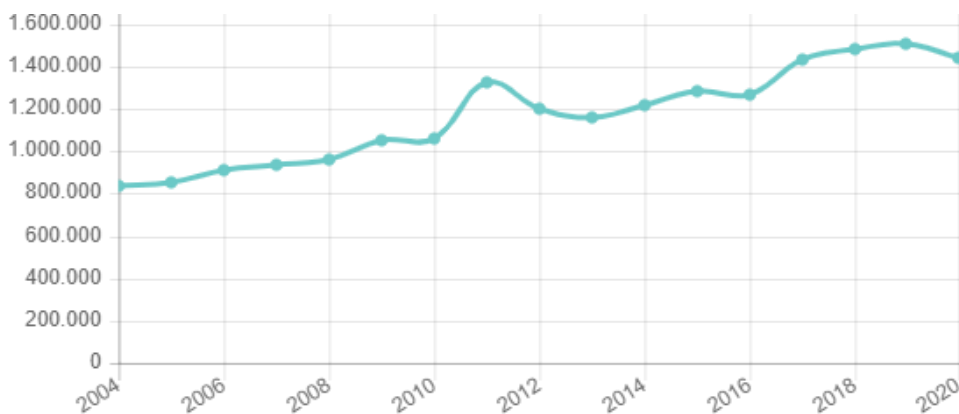
**Graph 3 - Soybean production (tons) in MS**



Source: IBGE (2022)

The advance in soybean production in MS was a substantial increase of almost three times in the period from 2009 to 2020. Therefore, concerning grains, the state had a substantial advance in the amount produced. However, in livestock, the situation is not the same. In Graph (4) we can verify the actual herd of pigs:

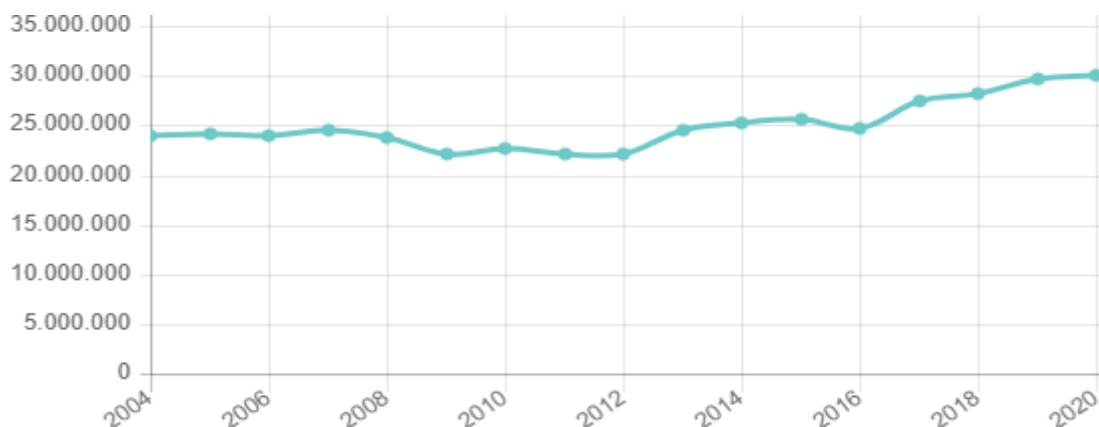
**Graph 4 – Effective Swine herd (Unit: heads) in MS**



**Source:** IBGE (2022)

Pig farming showed a significant advance in the period from 2004 to 2020. The state of MS has been consolidating itself as an important producer in this industry. The data show this increase, which went from eight hundred thousand pig heads at the beginning of the historical series to one million four hundred thousand at the end. A substantial advance. In contrast, we can observe the situation of another important livestock sector in Graph (5), the effective chicken herd:

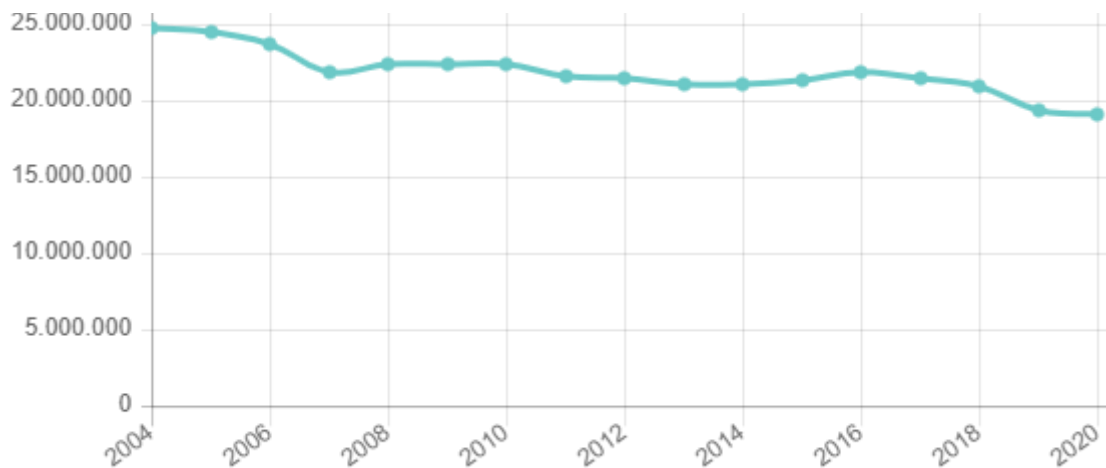
**Graph 5 – Effective Chicken Herd (Unit: heads) in MS**



**Source:** IBGE (2022)

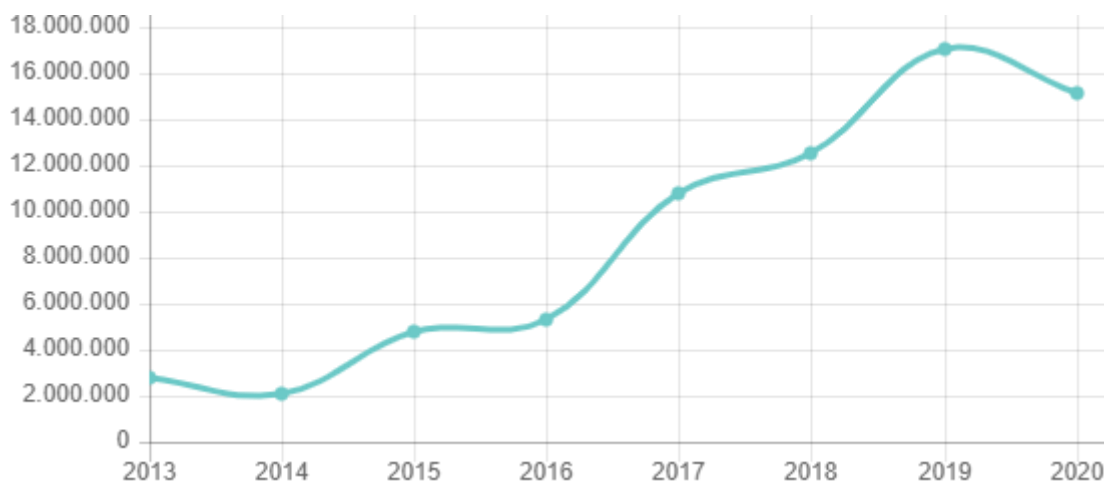
We can observe that there was a positive evolution in the period from 2004 to 2020 in the effective herd, however, the progress was more modest in comparison with the swine sector, that is, the effective herd of chicken in MS went from just under twenty-five million units to a value around thirty million, nevertheless, under any circumstance, it is an important evolution. This reality of positive advances is reversed when dealing with the bovine herd. In Graph (6), we can observe the effective herd in heads in MS:

**Graphic 6 - Cattle herd (Unit: heads) in MS**



Source: IBGE (2022)

From 2004 to 2020 there was a decline in the total effective herd of cattle in MS. In 2004 the state had a value of around twenty-five million heads, however, in 2020 the value decreased to a value of around twenty million heads. This movement does not necessarily mean something harmful to the MS economy, as this may be related to the advancement of soybean and corn crops on pastures, due to advances in science and technology, as well as new adapted varieties. However, this could have been compensated by advancing productivity by area. In Graph (7), we can verify the situation of tilapia production in MS.

**Graph 7 - Amount of Tilapia (Unit: Kg) produced in MS**

Source: IBGE (2022)

The state of MS has been consolidating as an important producer in the fish farming sector. The data show an incredible increase in the amount of tilapia produced in kilograms. In 2013 the production was around two million kilos, and in 2020 this value increased to a value close to fifteen million. It should be noted that in 2019 the series had a peak of more than sixteen million kilograms produced.

Therefore, grain production and livestock had significant advances in the state, which gives evidence of a great advance also in the border region, because the municipalities of this strip are notorious producers in the agricultural sector as will be demonstrated in the data at the end of this section. Another positive aspect is storage. According to Conab (2022), storage data showed advances. The state moved from a static storage capacity (t) of 7,854,403 to 10,697,119 in 2022. It also showed an average growth rate of 2.603%.

However, concerning the diversification within the industrial sector, a large concentration can still be observed in a few sectors, that is, a little diversified production structure:

**Table 1-** Percentage share of the sector in industrial GDP (Industrial Profile of MS by sectors) in MS

Public Utility Industrial Services	26.10%	Non-Metallic Mineral Extraction	0.30%
Construction	20.60%	Maintenance and Repair	0.30%
Food	15.70%	Electrical Machinery and Materials	0.30%
Pulp and Paper	14.70%	Wood	0.20%
Petroleum Derivatives and Biofuels	12.20%	Furniture	0.10%
Chemical	1.50%	Pharmaceutical	0.10%
Leather and Shoes	1.10%	Printing and Reproduction	0.10%
Clothing	0.80%	Automotive Vehicles	0.00%
Machinery and Equipment	0.80%	Extraction Of Metallic Minerals	0%
Metallurgy	0.80%	Computer, Electronics, and Optical	0%
Metal Products	0.70%	Support Activities for the Extraction of Minerals	0%
Non-Metallic Mineral	0.70%	Other Transportation Equipment	0%
Beverage	0.60%	Tobacco	0%
Rubber and Plastic Material	0.50%	Oil and Natural Gas Extraction	0%
Textiles	0.50%	Mineral Coal Extraction	0%
Diverse Products	0.40%		

**Source:** CNI – Industry Portal (2022)

In Table (1), we can observe that the industry of MS is strongly concentrated in only five sectors. Together, public utility industrial services, construction, food, pulp and paper, and petroleum and biofuel products account for 89.3% of the state industry. This item is fundamental to a new plan for the development of the border area of Mato Grosso do Sul, which goes through a strategic project to strengthen and diversify the industrial activity in this region.

Another relevant point highlighted in the goals of the PDIF/ MS is the issues of progress in infrastructure. In this context, in addition to the advancement of paving, point construction, and bidding for railways, there is the important project of the Bioceanic Route. This is a major project under implementation in the state called the Bioceanic

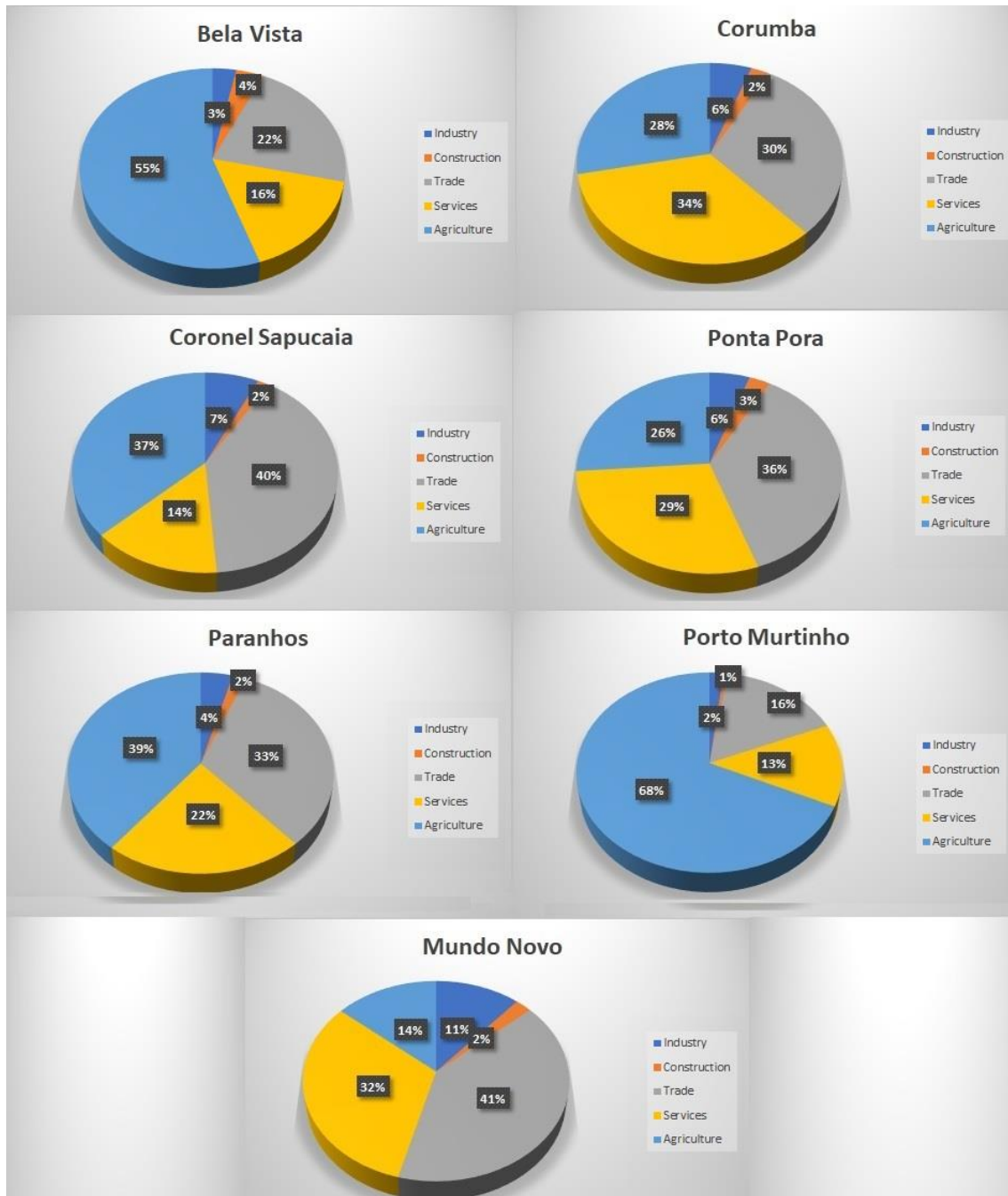


Corridor (CB), Bioceanic Route (RB), or Latin American Integration Route (RILA). This project consists of an international road transport corridor in implementation, linking the Port of Santos, in the State of São Paulo, Brazil, to the ports of Antofagasta and Iquique in Chile, through the State of Mato Grosso do Sul (MS), Paraguay and Argentina. This project is expected to start operating in 2024 and can shorten up the maritime route to 8,000 kilometers. The project has led to debates in the academic and business spheres, especially in MS, due to the effects on material and immaterial circulation, in addition to issues of economic development and/ or, consequently, territorial planning (CAMILO PEREIRA; ABRITA; FONSECA, 2019).

This corridor should contribute mainly to the flow of production in the agricultural sector favoring access to Asian markets in terms of logistics costs and reduced time.

In order to verify the productive structure of the municipalities in the border region, the economies of seven twin cities of Mato Grosso do Sul were analyzed. Bela Vista, Corumbá, Coronel Sapucaia, Mundo Novo, Ponta Porã, Paranhos, and Porto Murtinho. As there are no specific data available, data were collected through RAIS (2022), with the number of establishments and jobs in each sector according to the classification of these data, according to the major sectors of economic activity of the Brazilian Institute of Geography and Statistics (IBGE), namely: Industry, Construction, Trade, Services, and Agriculture. In Figure (1), this information on the productive structure of these municipalities can be verified:

**Figure 1** - Economic sectors in the municipalities of the MS border - Twin Cities.



Source: RAIS (2022)

The data indicate that these municipalities of the MS border have a low diversification in the productive structure. The majority with a great representation of agriculture, and a special highlight is in Porto Murtinho which concentrates 68% in this sector. The municipalities of Ponta Porã and Corumbá have a slightly greater diversification in this sample, however, the percentage of participation in industry and

construction is still small. The industrial participation of this sample is almost null in Paranhos, Coronel Sapucaia, Porto Murtinho, and Bela Vista. A new Development Plan for the Region that would go through a major industrial strengthening program is essential. The municipality of Mundo Novo has a slightly more diversified productive structure compared to the other twin cities, with the predominant trade and services sector. It is also the municipality with the lowest direct dependence on the agricultural sector.

Considering trade, tourism, and services, we have goals that are not objective and difficult to measure. However, the implementation of the free shop project was not consolidated in the twin cities, therefore, the service sector lacks greater investments in sophisticated services with higher added value and Tourism, according to the Mato Grosso do Sul Tourism Observatory (2021), advances occurred especially in the region of Bonito - MS.

Therefore, in general, we have significant advances in agriculture and storage, few advances in industrial diversification, and advances in tourism, trade, and services, although the goals set in PDIF/ MS are not specific, measurable, achievable, relevant, and temporal, consequently, performance evaluation is difficult.

## **Conclusion**

The aim of this study was to analyze the axis "economic development" in order to verify the monitoring of the results in relation to the goals established in the Development and Integration Plan of the State of Mato Grosso do Sul's Border Strip-PDIF/MS (2012). Socioeconomic and development data and indicators were collected, using as a method the analysis of descriptive statistics and stylized facts, the results were presented through graphs, and tables.

After analyzing the data and indicators, it was pointed out that important improvements occurred in the agricultural sector and storage. But on the other hand, few advances were observed in industrial diversification. Regarding tourism, trade, and services, there have been advances concerning the goals, however, it is important to emphasize that the goals established in the PDIF/ MS are not specific, measurable, achievable, relevant, and temporal, consequently, performance evaluation is difficult.

Therefore, we have elements and indications that we have, at least partially, met the goals. However, it is essential to develop a new Development and Integration Plan for the State of Mato Grosso do Sul's Border Area that in fact will be able to provide specific,

measurable, attainable, relevant, and temporal goals, for effective monitoring and of the Plan, and for its results to be robust and significant.

## References

ALBUQUERQUE, J, L, C. **A dinâmica das fronteiras: os brasiguaios na fronteira entre o Brasil e o Paraguai**. São Paulo: Annablume, 2010.

ARROYO, M. A internalização do externo no ambiente dos negócios: novos elementos na dinâmica territorial. In; CASTELLO, I, R et al., (Orgs). **Fronteiras na América Latina: espaços em transformação**. Porto Alegre; UFRGS/ FEE, 1997.

BEAUJEU-GARNIER J; CHABOT, G. **Tratado de geografia urbana**, n.711. Buenos Aires, 1970.

CAMILO PEREIRA, A. P., ABRITA, M. B.; FONSECA, R. O. Circulação, desenvolvimento econômico e ordenamento territorial: elementos teóricos para análises de pesquisas sobre a Rota de Integração Latino Americana, **Confins**, n. 50, 2021. Disponível em: <https://journals.openedition.org/confins/37445> . Acesso em: 26 mar. de 2022.

CATAIA, M. A relevância das fronteiras no período atual: unificação técnica e compartimentação política dos territórios. **Scripta Nova**, v. XI, n.245, Barcelona, 2007.

COMPANHIA NACIONAL DE ABASTECIMENTO, Conab. Portal de armazéns no Brasil. Disponível em: < <https://www.conab.gov.br/armazenagem> >. Acesso em: 19 ago. 2022

CONFEDERAÇÃO NACIONAL DA INDÚSTRIA. **Perfil da indústria: portal da indústria. Portal da indústria**. 2022. Disponível em: <https://perfildaindustria.portaldaindustria.com.br/estado/ms#:~:text=A%20ind%C3%B3ria%20do%20Mato%20Grosso,do%20total%20exportado%20em%202021>. Acesso em: 25 ago. 2022.

DORFMAN, A; ROSES, G, T, B. **Regionalismo fronteiriço e o acordo para os nacionais fronteiriços Brasileiros Uruguaios**. In: OLIVEIRA, T. C. M de (org.). Campo Grande: Ed. UFMS, 2005.

FERRARI, M. As noções de fronteira em Geografia. **Perspectiva Geográfica**, v.9, n.10, Marechal Candido Rondon, 2012.

GOTTMAN, J. A urbanização e a paisagem americana: o conceito de megalópole. In: COHEN, S. B. (Org.). **Geografia humana nos Estados Unidos**. Rio de Janeiro: Fórum, 1970.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, IBGE. **IBGE Cidades**. Disponível em: <https://cidades.ibge.gov.br/brasil/ms/pesquisa/18/16532?tipo=grafico&indicador=16552>

Acesso em: 25 ago. 2022.

MACHADO, L, O. Limites, Fronteiras, Redes. In: STROHAECKER, T, et al. (Org.). **Fronteiras e Espaço Global**. Porto Alegre: AGB-Seção Porto Alegre, 1998.

MARTIN, A, R. **Fronteiras e Nações**. São Paulo: Contexto, 1997.

MATO GROSSO DO SUL. **Plano de Desenvolvimento e Integração da Faixa de Fronteira do Mato Grosso do Sul-PDIF/MS**. Núcleo Regional de Integração da Faixa de Fronteira. Campo Grande, 2012.

OBSERVATURMS. Observatório do Turismo de Mato Grosso do Sul: estudos e pesquisas. Campo Grande: **Observatório de Turismo de MS**, 2020. Disponível em: <https://www.observatorioturismo.ms.gov.br/estudos-e-pesquisas>. Acesso em: 17 jul. 2022.

OLIVEIRA, T, C, M. (Org.) **Território sem limites: estudos sobre fronteiras**. Campo Grande: UFMS, 2005.

\_\_\_\_\_, T. C. M. “Os elos de integração: O exemplo da fronteira Brasil-Bolívia”. In: COSTA, E. A & OLIVEIRA, M. A. M (Org.). **Seminário de Estudos Fronteiriços**. Corumbá: UFMS, 2009.

\_\_\_\_\_. T. C. M ; HIGA, T, C, C, S de; PAIXÃO, R, O; MOURA, R; CARDOSO, N, A. Cidades de fronteiras e a rede urbana. In: **Dinâmica urbano-regional, rede urbana e interfaces**. PEREIRA, R, H, M; FURTADO, B, A (org.). Brasília: IPEA, 2004.

PÈBAYLE, R. As regiões de fronteira e o projeto de integração no Mercosul. in: LEHNEN, A. (et. al) (Orgs). **Fronteiras do Mercosul**. Porto Alegre: UFRGS, 1994.

RAFFESTIN, C. **Por uma Geografia do Poder**. São Paulo: Ática, 1993.

RAIS. **Relação Anual de Informações Sociais**. 2022. Disponível em: <http://pdet.mte.gov.br/microdados-rais-e-caged> . Acesso em: 22 abr. 2022.

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