White Rose Research Online

eprints@whiterose.ac.uk
https://eprints.whiterose.ac.uk
Universities of Leeds, Sheffield and York

Deposited via The University of York.

White Rose Research Online URL for this paper:
https://eprints.whiterose.ac.uk/id/eprint/247224/

Version: Published Version

Article:
Wesz Junior, Valdemar, Leite, Sergio, Kato, Karina et al. (2026) Rural credit and soybean financing in Mato Grosso (1960-2025): expansion, selectivity, and hybrid arrangements. Revista de Economia e Sociologia Rural. e308807. ISSN: 1806-9479

https://doi.org/10.1590/1806-9479.2026.308807en

Reuse
This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here:
https://creativecommons.org/licenses/

Takedown
If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

UNIVERSITY OF LEEDS
University of Sheffield
UNIVERSITY of York

RESR Revista de Economia e Sociologia Rural
ISSN 1806-9479
ARTICLE

Rural credit and soybean financing in Mato Grosso (1960-2025): expansion, selectivity, and hybrid arrangements

Crédito rural e o financiamento da soja em Mato Grosso (1960-2025): expansão, seletividade e arranjos híbridos

Valdemar João Wesz Junior[1,2], Sergio Pereira Leite[3], Karina Yoshie Martins Kato[3], Tomaz Mefano Fares[4], Julia Rensi[5]

[1]Instituto Latino-Americano de Economia, Sociedade e Política, Programa de Pós-graduação em Economia (PPGE), Universidade Federal da Integração Latino-Americana (UNILA), Foz do Iguaçu (PR), Brasil.
[2]Instituto Latino-Americano de Economia, Sociedade e Política, Programa de Pós-graduação em Políticas Públicas e Desenvolvimento (PPGPPD), Universidade Federal da Integração Latino-Americana (UNILA), Foz do Iguaçu (PR), Brasil. E-mails: jwesz@yahoo.com.br; valdemar.junior@unila.edu.br
[3]Programa de Pós-graduação de Ciências Sociais em Desenvolvimento, Agricultura e Sociedade (CPDA), Departamento de Desenvolvimento, Agricultura e Sociedade, Universidade Federal Rural do Rio de Janeiro (UFRRJ), Rio de Janeiro (RJ), Brasil. E-mails: sergiopereiraleite@uol.com.br; anirakato@yahoo.com
[4]Department of Politics and International Relations, University of York, York, United Kingdom. E-mail: tomaz.fares@york.ac.uk
[5]Programa de Pós-graduação em Ciência Política, Departamento de Ciência Política, Universidade Federal de Pernambuco (UFPE), Recife (PE), Brasil. E-mail: juliarensi@gmail.com

How to cite: Wesz Junior, V. J., Leite, S. P., Kato, K. Y. M., Fares, T. M., & Rensi, J. (2026). Rural credit and soybean financing in Mato Grosso (1960-2025): expansion, selectivity, and hybrid arrangements. Revista de Economia e Sociologia Rural, 64, e308807. https://doi.org/10.1590/1806-9479.2026.308807en

Abstract: This article analyzes the trajectory of rural credit in the state of Mato Grosso between 1960 and 2025, focusing on the financing of soybean production. The methodology is based on the analysis of secondary data, particularly Agricultural Censuses and the National Rural Credit System (SNCR), complemented by a literature review and qualitative evidence from 65 semi-structured interviews. The results show that rural credit played a central role in the expansion of the agricultural frontier and in the consolidation of large-scale commercial agriculture in the state of Mato Grosso, especially in the Cerrado region. Despite the significant increase in the volume of resources over time, access to credit has remained selective and concentrated among larger farms and more dynamic regions. In the case of soybean production, the SNCR was decisive in the early stages of production expansion, while in recent decades there has been a growing participation of private financing mechanisms. This process does not indicate a substitution of public credit, but rather its articulation with private sources, resulting in a hybrid financing arrangement. The article highlights the structural role of rural credit in Mato Grosso, and how the recent diversification of agricultural financing mechanisms amplifies its selectivity.

Keywords: agricultural frontier, agricultural finance, SNCR, soybean production, Mato Grosso.

Resumo: Este artigo analisa a trajetória do crédito rural no estado de Mato Grosso entre 1960 e 2025, com foco no financiamento da produção de soja. A metodologia baseia-se na análise de dados secundários, com destaque para os Censos Agropecuários e para o Sistema Nacional de Crédito Rural (SNCR), complementada por revisão bibliográfica e evidências qualitativas oriundas de 65 entrevistas semiestruturadas. Os resultados indicam que o crédito rural desempenhou papel central na expansão da fronteira agrícola e na consolidação da agricultura empresarial no estado de Mato Grosso, especialmente no Cerrado. Apesar da ampliação do volume de recursos ao longo do período, o acesso ao financiamento permaneceu seletivo e concentrado em estabelecimentos de maior escala e em regiões mais dinâmicas. No caso da soja, o SNCR foi decisivo nos estágios iniciais de expansão da produção, enquanto, nas últimas décadas, observa-se uma crescente participação de mecanismos privados de financiamento. Esse processo não implica na substituição do crédito público, mas aponta para a sua articulação com fontes privadas, configurando um arranjo híbrido de financiamento. O artigo evidencia o papel estruturante do crédito rural em Mato Grosso e como a diversificação recente dos mecanismos de financiamento na agricultura amplifica sua seletividade.

Palavras-chave: fronteira agropecuária, financiamento agrícola, SNCR, produção de soja, Mato Grosso.

This is an *Open Access* article distributed under the terms of the *Creative Commons Attribution* license (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1 Introduction

The formation and consolidation of the state of Mato Grosso as one of Brazil's principal agricultural regions are the result of a long historical process, deeply rooted in public policies and state-led initiatives aimed at territorial occupation, productive modernisation, and the integration of the regional space into national and international circuits of the agricultural economy. From the *March to the West*, launched in 1937, to the programmes implemented during the military regime, the Brazilian state played a decisive role in transforming the territory of Mato Grosso, driving the expansion of the agricultural frontier, land reorganisation, and the incorporation of new technical foundations into rural production (Pires, 2000; Fernández, 2007; Moreno, 2007; Barrozo, 2008; Wesz Junior, 2017).

Throughout this process, rural credit became one of the principal instruments of public policy. In particular, the creation of the National Rural Credit System (SNCR) in 1965 marked a turning point in the modernisation of Brazilian agriculture by providing subsidised resources, primarily directed towards the adoption of technological packages, the expansion of production, and the consolidation of agro-industrial complexes (Coelho, 2001; Leite, 2001; Delgado, 2012). In the case of Mato Grosso, this policy played a central role in enabling large-scale agriculture, particularly in the Cerrado, with the expansion of soybean cultivation being especially significant (Fernández, 2007; Leite & Wesz Junior, 2015; Castro, 2018).

Today, Mato Grosso occupies a leading position in national agricultural production, accounting for approximately one quarter of Brazil's grain output and significant shares of the country's soybean, maize, cotton, and beef production (Brasil, 2026; Instituto Brasileiro de Economia e Estatística, 2026). Agribusiness accounts for more than half of the state's Gross Domestic Product (GDP), while soybeans stand out as the principal economic activity within Mato Grosso's agricultural sector, both in terms of cultivated area and gross production value (Instituto Mato-grossense de Economia Agropecuária, 2026). We argue, however, that the consolidation of this economic activity has occurred alongside the availability and recent combination of different forms of financing, bringing together public resources, private capital, and diversified financial strategies adopted by producers.

Thus, the guiding question of this research is: what role has rural credit played in the expansion of soybean production in Mato Grosso, and to what extent has the diversification of financing sources altered, or not, the pattern of selectivity in access to credit? To address this question, this article analyses the trajectory of rural credit in Mato Grosso between 1960 and 2025, a period marked by the profound productive reconfiguration of the state from the mid-1980s onwards. It focuses on the financing of soybean production and seeks to demonstrate that credit does not merely accompany productive expansion, but plays a structuring role in shaping the state's economic hierarchies. Specifically, the article: (i) examines access to financing among agricultural establishments in Mato Grosso according to their productive, landholding, and territorial characteristics; (ii) analyses the trajectory of the SNCR in the state, considering the volume of resources, number of contracts, financing modalities, and funded activities; and (iii) develops a more in-depth analysis of the financing of soybean production, exploring the interplay between public credit and private mechanisms. The article argues that, although the volume of resources has expanded and financing sources have diversified over recent decades, access to credit remains highly selective, primarily benefiting large establishments and consolidated agricultural regions. Furthermore, it argues that the expansion of private financing does not represent a substitution of public credit, but rather a reconfiguration of financing arrangements, characterised by the articulation of the SNCR, agribusiness firms, and the financial system.

In addition to this Introduction and the Concluding Remarks, the article is organised into six sections. The first provides a brief review of the literature, followed by a discussion of the methodological procedures and data sources employed in the research. The subsequent section examines access to financing among agricultural establishments in Mato Grosso using data from the Agricultural Censuses, with particular emphasis on its distribution according to productive, landholding, and territorial characteristics. The next section analyses the trajectory of the SNCR in the state, highlighting the volume of resources, number of contracts, financing modalities, and funded activities. The fifth section provides a more detailed analysis of the financing of soybean production based on the SNCR and, finally, examines the combination of public credit and private financing in soybean production in Mato Grosso.

2 Theoretical Foundation

Rural credit constitutes one of the main instruments of state intervention in agriculture, playing a central role in processes of productive modernisation, the incorporation of new areas, and the structural transformation of the agricultural sector. In the literature, credit is understood not merely as a financial mechanism, but as an element that conditions the capacity of agricultural establishments to invest, adopt technologies, and participate in productive activities (Schultz, 1964; Binswanger and Rosenzweig, 1986; Bacha, 2003; Alves & Bacha, 2018). In contexts of agricultural modernisation, access to financing is particularly important because it enables investment in machinery, inputs, and infrastructure, the costs of which frequently exceed producers' capacity for self-financing (Santos, 1988; Palmeira, 1989; Delgado, 2012; Amaral & Bacha, 2025a).

In Brazil, rural credit assumed a structuring role following the creation of the SNCR in 1965, which institutionalised a financing system based on subsidised resources and strong state coordination (Sayad, 1984; Coelho, 2001). Over the following decades, the SNCR consolidated a public financing infrastructure that remains one of the principal pillars supporting the expansion and development of agribusiness complexes in Brazil (Dornelas, 2020). This system played a decisive role in transforming the technical foundations of agricultural establishments, increasing productivity in the sector, and integrating agrarian capital into the circuits of financial capital accumulation (Santos, 1988; Leite, 2001; Delgado, 2012).

In this process, we recognise that the expansion of production has occurred alongside the consolidation of a selective geography of financing, meaning that rural credit is not distributed uniformly. From a broader perspective, financing is not merely a means of enabling economic activity, but also a mechanism that organises capital flows and establishes investment priorities. More than a simple instrument for supporting production, credit forms part of mechanisms of uneven geoeconomic development (Werner, 2019). This selectivity means that, in the case of Brazilian agribusiness, financial resources tend to be concentrated among establishments with greater productive scale, greater capacity to provide collateral, and stronger integration into markets (Leite, 2001; Belik & Paulillo, 2001). As a result, processes of productive differentiation are reinforced, favouring more highly capitalised segments and increasing their capacity for expansion and accumulation.

This role is particularly evident in agricultural frontier regions, where financing plays a decisive role in enabling productive occupation and consolidating new agricultural centres. In these areas, credit contributes to overcoming initial constraints associated with opening new areas, developing productive infrastructure, and adopting technologies suited to local soil and climatic conditions. At the same time, access to financing tends to favour producers with greater capacity to mobilise resources and assume risks, contributing to the formation of highly capitalised production systems (Graziano da Silva, 1982; Mueller, 1992; Sousa et al., 2020).

This process forms part of a broader dynamic of financialisation in agriculture, understood as the growing influence of financial actors and instruments over the organisation of production and accumulation within global agri-food systems (Clapp, 2014; Fairbairn, 2014; Gertel & Sippel, 2016; Clapp & Isakson, 2018). The literature has shown that this development involves increasingly complex forms of interaction between financial capital, the state, and productive actors. On the one hand, the growing importance of private financing mechanisms in agriculture is particularly evident in production chains integrated into global markets, such as soybeans (Bertrand et al., 2005; Frederico, 2013; Schedenffeldt et al., 2021; Souza et al., 2024; Amaral & Bacha, 2025b). Input suppliers, trading companies, and private financial institutions have come to play an increasingly important role in financing production through instruments such as trade credit, supply contracts, and structured financial mechanisms.

On the other hand, financialisation does not imply the withdrawal of the state, but rather a reconfiguration of its functions, which increasingly involve creating the institutional and regulatory conditions for the expansion of financial mechanisms (Christophers, 2015; Konings, 2018; Fares, 2023). In the agricultural sector, this process does not replace traditional forms of state intervention and financing, but instead builds upon previously established public structures and governance mechanisms that enable coordination between public and private actors (Ouma, 2016). In this context, state credit operates in conjunction with market-based mechanisms, forming a hybrid system for financing agricultural production (Leite & Wesz Junior, 2015). This process reflects broader transformations in the organisation of agro-industrial chains, characterised by increasing private coordination and the diversification of financing sources (Delgado, 2012; Belik, 2015; Chaddad & Lazzarini, 2003).

In this sense, the study of rural credit in Mato Grosso provides a particularly relevant opportunity to understand the relationship between financing and the expansion of the agricultural frontier and the consolidation of commercial agriculture. As Brazil's leading soybean-producing state, Mato Grosso represents an emblematic case of recent agricultural transformation, characterised by rapid productive expansion, strong integration into international markets, and growing coordination among different sources of financing. Analysing this trajectory can therefore contribute to understanding the role of rural credit in structuring contemporary agricultural systems and consolidating new dynamic regions of agribusiness.

3 Methodology

The methodological strategy combines longitudinal analysis of secondary data with qualitative triangulation, allowing the study to capture both long-term structural patterns and the concrete financing practices employed by different actors. While analysis of the Agricultural Censuses and the SNCR makes it possible to identify historical trends in the volume of resources, the profile of beneficiaries, and the territorial distribution of credit, the semi-structured interviews contribute to an understanding of the mechanisms, strategies, and rationales that shape access to and use of financing at the level of individual actors. By combining these approaches, the research seeks not only to map aggregate trends, but also to understand how these trends are produced and mediated at the local level, with particular emphasis on the articulation between public and private financing.

With regard to data sources, the analysis is based predominantly on secondary information from the Agricultural Censuses conducted by the Brazilian Institute of Geography and Statistics (IBGE) (1960, 1970, 1975, 1980, 1985, 1995, 2006, and 2017)[1]. and the National Rural Credit

[1] In the case of the Agricultural Censuses, the same variables were not always available for all years. For example, the value of financing is not reported in the 1960 and 2017 Censuses, while the source of funds is not reported in 1995; information on the producer's status is available only from 1995 onwards, among other changes. Consequently, the variable most frequently used will be the number of establishments that accessed financing and the degree of coverage across all establishments, as these data are available in all Censuses conducted after 1960. In addition, the 1995/1996 Agricultural Census presents some methodological differences compared with the other census surveys, particularly regarding the reference period, which calls for caution when directly comparing certain indicators across the historical series (Vieira Filho & Gasques, 2020).

System (SNCR) yearbooks published by the Central Bank of Brazil (Bacen), which began in 1969 and run through 2012 and were consulted in PDF format. From 2013 onwards, Bacen made available the Rural Credit Data Matrix, which allows access to and analysis of a larger number of variables and cross-tabulations. These data were accessed in February 2026 and, because the database is dynamic and subject to periodic updates, may present minor variations over time, particularly for the most recent years. Finally, all monetary values were deflated to constant 2025 prices using the General Price Index – Internal Supply (IGP-DI), calculated by the Getulio Vargas Foundation (FGV), in order to ensure the temporal comparability of the information.

Although the state of Mato Grosso do Sul was separated from the state of Mato Grosso in 1977, this study sought to maintain, throughout the historical analysis, the territorial scope corresponding to the present-day state of Mato Grosso, including for periods preceding the division. To this end, Agricultural Census data were recalculated to preserve the same spatial unit of reference, considering only municipalities, zones, or microregions belonging to the currently defined territorial area[2]. In the case of the SNCR, however, Mato Grosso and Mato Grosso do Sul continued to be reported as a combined figure until 1978, and it was not possible to disaggregate the data because there was no municipal or microregional-level information that would allow the territory corresponding to present-day Mato Grosso to be reconstructed. Thus, SNCR data for the period from 1969 to 1978 refer to the two states combined. For information at the municipal level, given the limitations in accessing complete data for the periods before 1998 and after 2019, the analysis was restricted to this interval. Finally, it should be noted that the maps produced use the municipal boundaries in force in the respective reference year of the data presented.

In addition, information from field research conducted in Mato Grosso between 2012 and 2026 was used to complement the analysis. The research covered the Northern region (the municipalities of Lucas do Rio Verde, Sorriso, Sinop, Cláudia, Tabaporã, and Feliz Natal), the Southeast (Campo Verde, Primavera do Leste, Rondonópolis, Poxoréu, Jaciara, and Cuiabá), and the West (Sapezal, Diamantino, and Campos de Júlio). A total of 65 semi-structured interviews were conducted with a diverse range of social actors. Although soybean producers were prioritised, the study also included representatives from different levels of government (municipal, state, and federal), public institutions (environmental, agricultural research, and agricultural extension agencies), soybean purchasing companies and input retailers (both transnational and local), producer associations and rural unions, as well as producer organisations and bank branches[3]. Chart 1 presents the number of interviews conducted with each group of actors.

Chart 1 – Number of interviews conducted in Mato Grosso by group of actors

Group of actors	N. of interviews
Soybean producers	26
Agribusiness companies	14
Producer organisations and rural unions	12
Public institutions	7
Bank branches	6
Total	**65**

Source: Field research.

[2] In 1960, the territorial delimitation followed the Zones of Aripuanã, Chapada, Poxoréu (East), Northern Slope, and Northern Lowlands. In 1970, the following microregions were considered: Alto Guaporé-Jauru, Alto Paraguai, Baixada Cuiabana, Garças, Northern Mato Grosso, and Rondonópolis. In the 1975 records, although the division between Mato Grosso and Mato Grosso do Sul had not yet been formally implemented (which occurred in 1977), the data were already presented separately.

[3] It should be noted that the field research referred to here was not designed exclusively to analyse rural credit. However, since all of the surveys included questions concerning production financing, it was possible to use this material in a cross-cutting manner in accordance with the analytical objectives of this article.

4 Results and Discussion

4.1 Access to Financing among Agricultural Establishments in Mato Grosso (1960–2017)

An analysis of the Agricultural Censuses[4] reveals that access to rural financing in Mato Grosso has historically remained restricted to a minority of agricultural establishments, even during periods of substantial expansion in rural credit and agricultural production. In 1960, only 666 establishments obtained loans (5.2% of the total). Following the creation of the National Rural Credit System (SNCR) in 1965, coverage increased in subsequent years, reaching 12.3% in 1980. The sharp reduction in resources allocated through the SNCR led to a substantial decline in the number of producers with access to financing in 1985, when they accounted for 8.1% of agricultural establishments. This trend intensified in 1996, when only 7.5% of establishments had access to financing. In more recent years, there has been a renewed expansion of public rural credit in Brazil. Data from the 2006 Census indicate an increase in access to financing, which reached 13.8% of producers. However, the highest level of coverage was recorded in the most recent Agricultural Census (Instituto Brasileiro de Economia e Estatística, 2017), when 20,237 establishments accessed financing services, representing 17.1% of the total (Figure 1). Despite this expansion, access to financing remains limited, covering only approximately one in every five agricultural establishments[5] in the state.

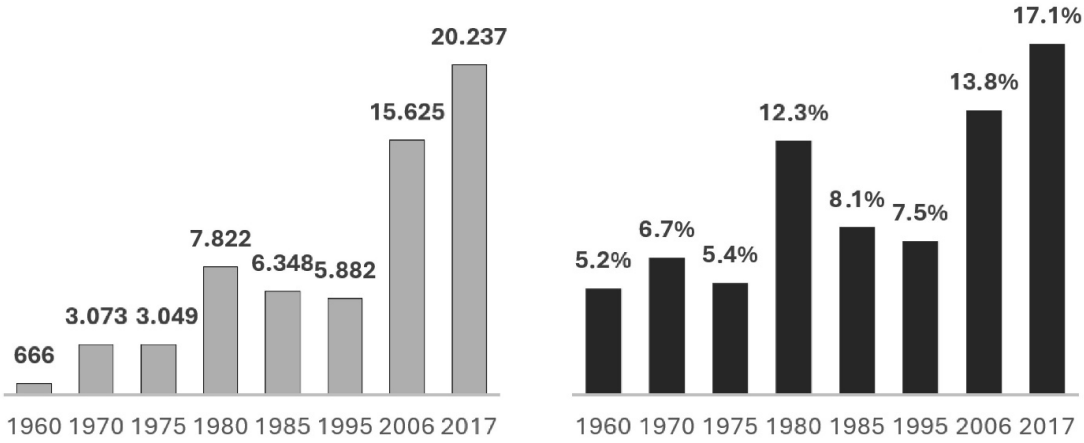


Figure 1. Number and percentage of agricultural establishments with access to financing in Mato Grosso.
Source: Agricultural Censuses (various years) – IBGE. Prepared by the authors (2026).

With regard to the origin of resources, in 1960, two-thirds of the agricultural establishments that accessed financing relied on public sources and government programmes. This share reached 76.1% in 1970 and 89.3% in 1975, its historical peak. This high level remained relatively stable in the following decades: between 70% and 80% of agricultural establishments still accessed resources from public credit programmes (federal, state, or municipal) in 1985 and 2006. The most pronounced shift is recent and is clearly evident in the 2017 Census: that year, only one-third of establishments that obtained financing relied on public credit programmes.

[4] The Agricultural Censuses consider as financing all external resources allocated to the agricultural holding, in the forms of operating expenses, investment, and marketing. In addition to capital obtained from public sources and government programmes, resources provided by companies, non-governmental organisations (NGOs), family members, etc., are also considered financing.

[5] It is worth noting that, from 1960 to 2006, Mato Grosso had a lower percentage of agricultural establishments accessing financing than the national average (Leite & Wesz Junior, 2015). However, the 2017 Census shows a change in this situation, albeit a small one: 17.1% of establishments in Mato Grosso accessed financing, compared with 15.5% nationally (Instituto Brasileiro de Economia e Estatística, 2026).

In other words, 63.0% of establishments receiving financing in 2017 did not access programmes such as the National Programme for Strengthening Family Farming (Pronaf), the National Programme for Supporting Medium-Sized Rural Producers (Pronamp), the Programme for the Modernisation of the Fleet of Agricultural Tractors and Associated Implements and Harvesters (Moderfrota), among others.

The incidence of financing among agricultural establishments by total land area strata in Mato Grosso indicates that, over the years, access was greater among larger units. Establishments with more than 1,000 hectares consistently had the highest coverage of loans. By contrast, units with less than 100 hectares had the lowest levels of access between 1975 and 2017, with this pattern being even more pronounced among establishments with less than 10 hectares. Nevertheless, in absolute terms, it is important to note that the data for 2006 and 2017 indicate an expansion in this coverage, with units of up to 100 hectares reaching 13%. These data partly reflect the consolidation of Pronaf (Moreira, 2012). These results are presented in greater detail in Table 1[6]. Particularly striking in the most recent Census is the fact that the larger the establishment, the higher the incidence of financing. Whereas among establishments of up to 10 hectares one in every 16 producers accessed credit, among establishments with more than 1,000 hectares this figure rose to one in three. This finding corroborates the argument made by Amaral & Bacha (2025a) at the national level, namely that, in the twenty-first century, the main group of establishments benefiting from rural credit has been precisely those with the largest land areas.

Table 1. Percentage of agricultural establishments with access to financing by total land area strata in Mato Grosso (1975–2017)

Estratos de área total	1975	1980	1985	1995	2006	2017
< 10 ha	0,6%	2,3%	0,9%	2,0%	7,1%	6,1%
> 10 < 100 ha	5,0%	12,2%	6,5%	6,5%	14,2%	14,9%
> 100 < 1.000 ha	17,6%	26,0%	17,4%	9,5%	15,1%	23,5%
> 1.000 < 10.000 ha*	27,2%	27,2%	22,4%	12,9%	19,8%	33,8%
> 10.000 ha*	31,7%	21,2%	17,5%	8,3%		36,7%
Total	5,4%	12,4%	8,1%	7,5%	13,8%	17,1%

Source: Agricultural Censuses (various years) – IBGE. Prepared by the authors (2026).
Note: *For 2006, it is not possible to distinguish between the strata above 1,000 hectares.

In Mato Grosso, at the municipal level (Figure 2), there was a progressive expansion in the coverage of rural financing between 1960 and 1985, accompanying the advancement of the agricultural frontier and the consolidation of credit policies. In 1960, access to financing was still highly localised, with a greater incidence in municipalities in southeastern Mato Grosso, such as Dom Aquino and Jaciara. This pattern persisted in 1970 and 1975, when this region recorded the highest percentages of financed establishments, reflecting its status as a pioneering area in agricultural modernisation and the introduction of large-scale grain production in the Mato Grosso Cerrado. A soybean producer from the region commented: "When we arrived here, the money we had was used to buy the land, so credit was essential for us to clear the land, purchase machinery and inputs, and start production" (Interview with soybean producer, Jaciara, 2012).

[6] It should be noted that the data presented in Table 1 capture the incidence of financing but do not allow for the measurement of the volume of resources obtained relative to the value of production generated by these units. This limitation is relevant because the literature on agrarian structure points to an inverse relationship between the size of establishments and productivity per unit of area, with smaller units generally generating a higher value of production per hectare, associated with more intensive use of labour and production arrangements distinct from those employed on large properties (Guanziroli et al., 2012). Therefore, the disparity in access to credit between small and large establishments may be even greater than that evidenced in Table 1, since the former, despite generating proportionally higher production values per unit of area, remain underrepresented in access to financing. The absence of a financing-value variable in the 2017 Agricultural Census, precisely in the year with the highest credit coverage, prevents a more in-depth empirical examination of this relationship in the present article.

In 1985, when access to credit reached its highest level, financing experienced its greatest territorial diffusion, encompassing municipalities such as Canarana, Água Boa, Diamantino, and Itiquira, regions that would subsequently become important centres of soybean production. From the 1990s onwards, the spatial distribution of financing increasingly reflected the consolidation of new dynamic agricultural regions in Mato Grosso. Municipalities located in the Chapada dos Parecis and Alto Teles Pires, such as Sapezal, Campo Novo do Parecis, Sorriso, Lucas do Rio Verde, and Tapurah, began to exhibit the highest levels of coverage. This pattern persisted in the 2006 and 2017 Censuses, with additional prominence given to localities such as Campos de Júlio, Santa Rita do Trivelato, and Ipiranga do Norte, where approximately two-thirds of producers accessed rural credit. This spatial shift highlights the strong association between access to credit and the expansion of commercial agriculture, particularly soybean production, indicating that agricultural financing accompanied and reinforced the consolidation of new agricultural frontier areas that would subsequently become the state's most dynamic production core.

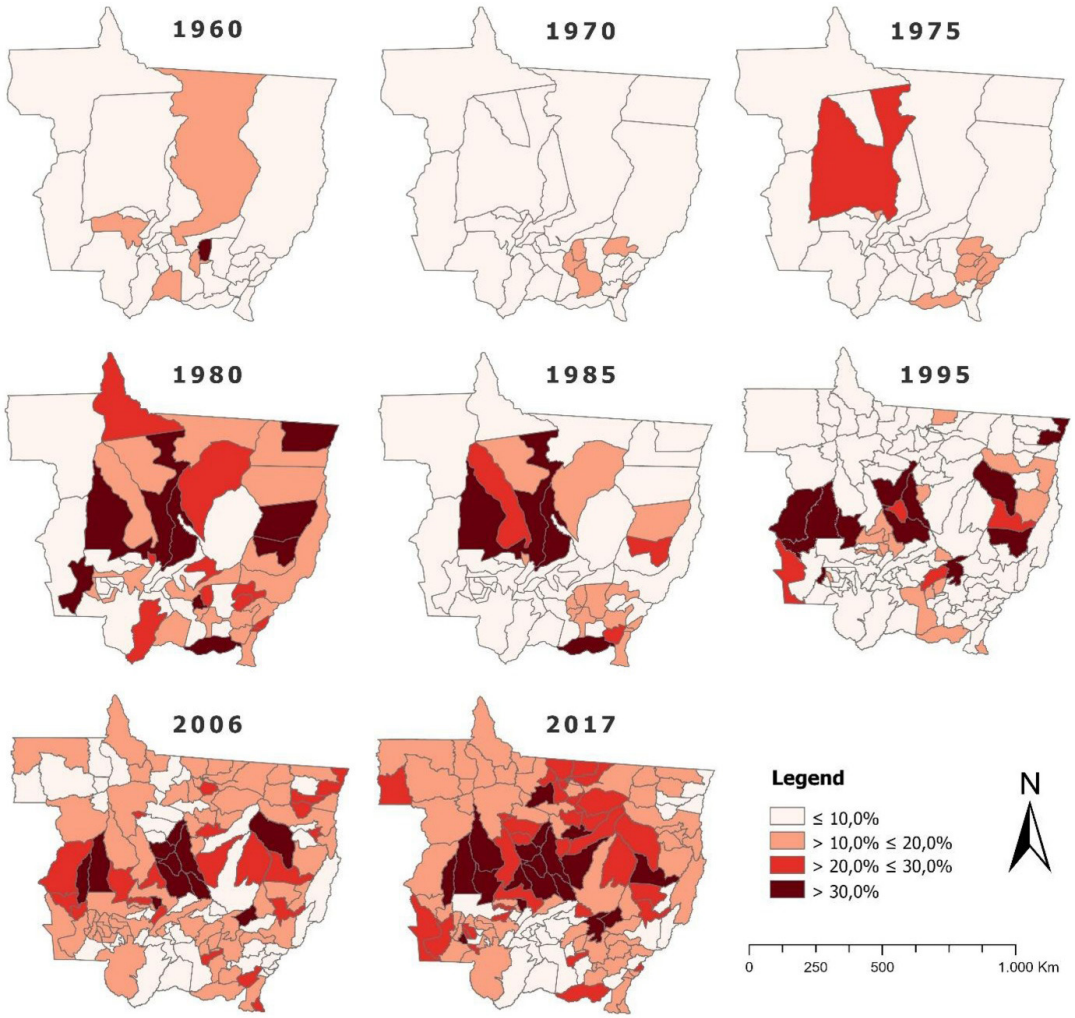


Figure 2. Percentage of agricultural establishments with access to financing by municipality in Mato Grosso (1960–2017).
Source: Agricultural Censuses (various years) – IBGE. Prepared by the authors (2026).

Thus, the census data suggest that rural credit played a fundamental role in the structuring and expansion of agriculture in Mato Grosso, but access remained selective and concentrated. Rather than constituting an instrument widely available to agricultural establishments, financing contributed to enabling the consolidation of a specific segment of agriculture, characterised by larger scale, greater investment capacity, and stronger integration into the dynamic circuits of agribusiness. This finding is central to understanding the recent dynamics of soybean production financing in the state, analysed in the following sections, which have been marked by the growing articulation between public credit and private financing mechanisms.

4.2 The SNCR in Mato Grosso (1969–2025)

At the national level, the SNCR went through different phases throughout its trajectory (Coelho, 2001; Búrigo et al., 2021; Wesz Junior et al., 2025; Amaral & Bacha, 2025a). The first phase was characterised by an expansion of the resources allocated, which lasted from its creation until the mid-1980s, with high resource availability and negative real interest rates, providing generous subsidies to rural producers. At this time, the institutional environment was favourable to an interventionist state policy, with the SNCR oriented towards the modernisation of agriculture. Rural credit did not operate in isolation: it was articulated with the expansion of technical assistance and rural extension, led by Embrater (Brazilian Company for Technical Assistance and Rural Extension) and the state Ematers, as well as with investments in agricultural research, notably through Embrapa (Brazilian Agricultural Research Corporation), established in 1973. This credit-extension-research triad constituted an integrated model for promoting entrepreneurial agriculture, oriented towards the adoption of modern technologies, productive specialisation, and integration into agro-industrial chains (Graziano da Silva, 1982; Delgado, 1985; Gonçalves Neto, 1997).

The second phase extended from the mid-1980s to 1994 (the Real Plan), a period marked by intense economic instability, with a severe crisis in the national accounts amid low investment and inflation. During this period, the SNCR was characterised by a scarcity of credit compared with the preceding period, with the amounts available being substantially reduced and several restrictions imposed on credit, including higher interest rates and the introduction of credit limits for operating expenses. The third phase began with macroeconomic stabilisation following the implementation of the Real Plan, which enabled virtually uninterrupted growth in rural credit between 1995 and 2014, a reduction in interest rates, and the creation of new credit programmes and lines. From 2014 onwards, amid the economic and political crisis, a new phase began, marked by greater fluctuations in SNCR resources at the national level (Figure 3). Although rural credit reached a record national level in 2023 – amounting to almost R$450 billion in 2025 values – the following years saw a significant decline in available resources, which fell by approximately R$100 billion between 2023 and 2025 (Banco Central do Brasil, 2026).

In Mato Grosso, the volume of resources allocated through the SNCR differs, in part, from the national trajectory, given that during the first phase of expansion of the national rural credit system, many regions of the state were still in the initial stages of colonisation. Although Figure 4 indicates a significant increase in resources during the 1970s, it is worth noting that the figures combine the values for Mato Grosso and Mato Grosso do Sul until 1978. Interestingly, this process was driven by the division of the states, colonisation programmes, and the rapid expansion of the agricultural frontier in the Cerrado (Moreira, 2012). The 1990s followed the national trend of low levels of resources allocated, with the exception of 1994 in the state (Figure 3).

From the 2000s onwards, we observe a new expansionary movement in SNCR resources, which continued until 2004. This initial surge, however, was followed by a contraction resulting from the crisis in the agricultural sector during this period, "characterised by falling prices, the proliferation of Asian soybean rust, climatic variability, rising production costs, exchange-rate lag, producer indebtedness, and environmental tensions" (Wesz Junior, 2014, p. 21). From 2006 onwards, as shown in Figure 3, the volume of SNCR resources began an unprecedented growth trajectory in Mato Grosso, rising from R$8.3 billion in 2006 to an impressive R$50.9 billion in 2023, the year with the highest amount allocated in the state. This period was also marked by the growing share of Mato Grosso in the national volume of SNCR resources, reaching 10% from 2018 onwards (Banco Central do Brasil, 2026).

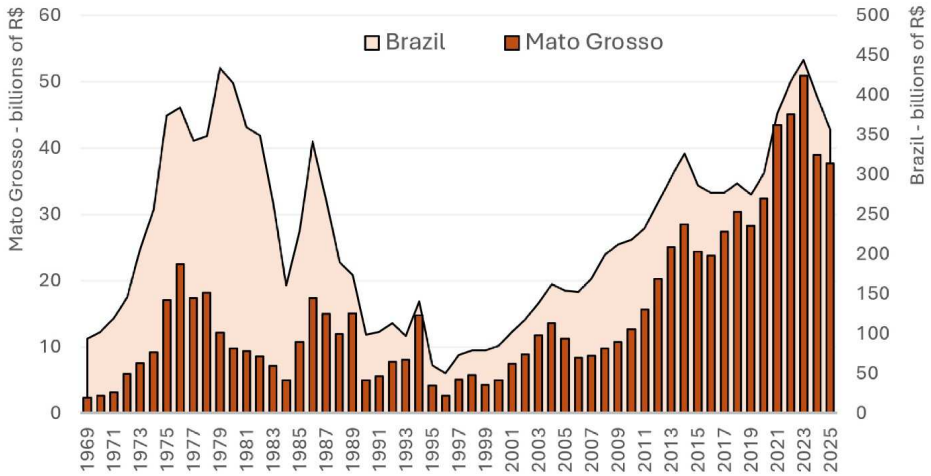


Figure 3. Volume of resources allocated through the SNCR in Brazil and Mato Grosso between 1969 and 2025 (constant values in billions of 2025 Brazilian reais).
Source: Bacen (various years). Prepared by the authors (2026).
Notes: Data for 1969 to 1978 combine the current states of Mato Grosso and Mato Grosso do Sul.

SNCR contract volumes in Mato Grosso showed pronounced volatility over the 50year period analysed. After reaching approximately 40,000 contracts in the mid-1980s, the volume fell sharply, reaching fewer than 10,000 contracts in 1989 and 1990, amid an economic crisis and a contraction in credit. From the second half of the 1990s onwards, a gradual recovery was observed, which intensified after 2008, when the number of contracts increased from 34,500 to 60,800 in 2014. In more recent years, however, there was a renewed decline, with a total of 35,600 contracts recorded in 2025. It is worth noting that Pronaf, a programme specifically aimed at family farming, accounted for 39.0% of all contracts between 1996 and 2025, although it represented only 5.1% of the total financial volume. This highlights the strong concentration of resources in higher-value contracts associated with commercial agriculture (Banco Central do Brasil, 2026).

The average value of contracts increased significantly over the period, corroborating the concentration described above and indicating a greater scale of the operations financed. While contracts in the earlier decades of the historical series involved relatively modest amounts, from 2013 onwards the average value exceeded R$400,000 per operation. If we exclude the amounts associated with Pronaf in the state from 1996 onwards (Figure 4), thereby avoiding distortions in the analysis of this process, we observe the predominance of a smaller number of contracts involving increasingly larger amounts. In 2025, for example, 22,085 contracts were recorded, with an average volume per operation of more than R$1.6 million—substantially higher than the national average

of R$653,300. This pattern reflects the consolidation of a capital-intensive agricultural model based on large-scale productive units and a high demand for larger volumes of financing.

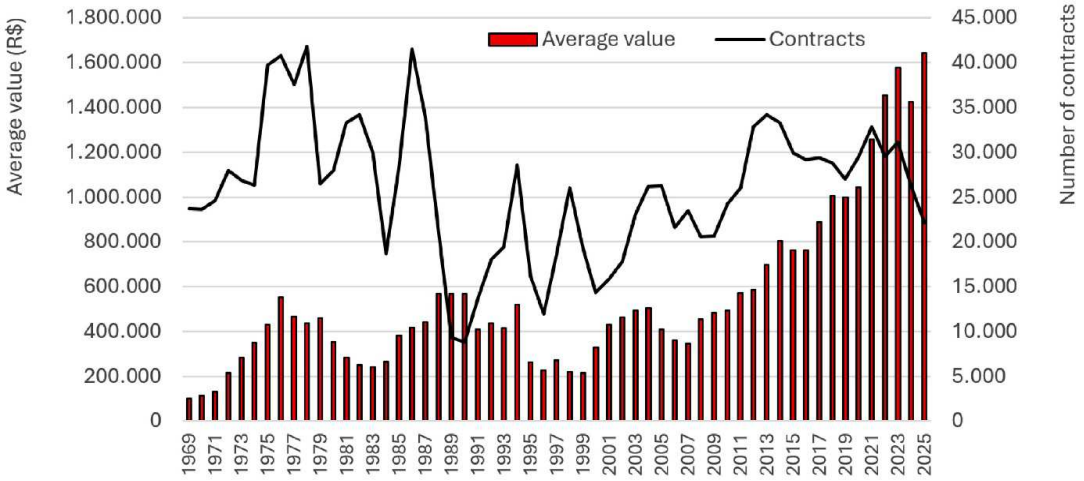


Figure 4. Number of contracts and average value per contract under the SNCR (excluding Pronaf) in Mato Grosso, 1996–2025 (constant 2025 Brazilian reais).
Source: Bacen (various years). Prepared by the authors (2026).
Note: Data for 1969–1978 aggregate the present-day states of Mato Grosso and Mato Grosso do Sul.

From a sectoral perspective, agriculture began to account for the largest share of resources from the 1980s onwards, absorbing approximately 70% of credit in recent decades. In terms of the purpose of rural credit, working capital predominated in most years in Mato Grosso, accounting for more than 50% of the resources allocated in most agricultural seasons. Agricultural working capital predominates in the state, particularly crop financing, which in most years absorbs more than 95% of agricultural working capital resources. Among the products covered, soybeans, maize, and cotton are the main ones. Whereas these three crops alone accounted for 81.3% of the total in 1999 – a level that can already be considered highly concentrated – they reached 98.3% in 2025 (Banco Central do Brasil, 2026).

Investment only emerged as the main purpose of credit during the 1970s. In the 1980s and 1990s, its share declined substantially. From 2000 onwards, it generally accounted for around one-third of rural credit resources in the state. This renewed momentum was supported by significant participation from programmes operated by the Brazilian Development Bank (BNDES), particularly Moderfrota, which provides long repayment periods for financing and maintains fixed interest rates (Leite & Wesz Junior, 2015). Within this category, agricultural activities generally absorb 60% of resources, while livestock accounts for 40% in the state. In the case of agricultural investment, expenditure is predominantly directed towards the purchase of combine harvesters, tractors, other machinery and equipment, and soil improvement, as well as the construction of warehouses and silos.

The marketing purpose, in turn, has always accounted for a relatively minor share, exceeding 20% of resources in only a few years (1970, 1971, 1994, 1995, and 2005). In the state, this category focuses on the storage of agricultural products, with loans directed primarily towards soybeans and maize, each accounting for around 40% of the amounts between 2013 and 2025, as well as cotton; together, these products absorbed 96.8% of the resources allocated under this category (Banco Central do Brasil, 2026).

The territorial distribution of credit tended to follow the expansion of the agricultural frontier and the consolidation of the main grain-producing regions. Initially concentrated in a small number of municipalities, financing progressively spread to other areas, but remained more significant in regions dominated by commercial agriculture, particularly the Médio-Norte, Chapada dos Parecis, and Southeast regions of the state (Figure 5). Municipalities such as Sorriso, Lucas do Rio Verde, Nova Mutum, and Sapezal stood out among the main recipients of resources, reflecting their centrality to soybean production. Although other localities also managed to increase the amounts received, credit remained strongly associated with the most dynamic and capitalised regions of the Cerrado.

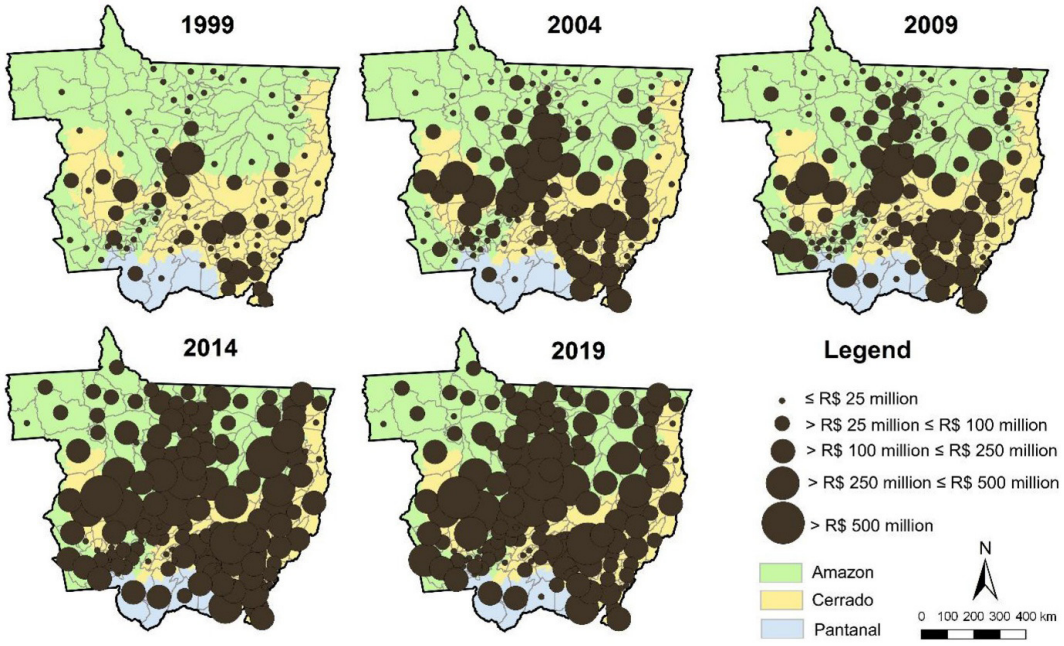


Figure 5. Volume of resources allocated through the SNCR across municipalities in Mato Grosso in 1999, 2004, 2009, 2014, and 2019.
Source: Bacen (various years). Prepared by the authors (2026).

Taken together, these elements demonstrate that the trajectory of the SNCR in Mato Grosso played an active role in shaping a highly capitalised and territorially concentrated agricultural model. The substantial growth in the volume of resources, combined with the relative decline in the number of contracts and the significant increase in the average value of operations, indicates a process of increasing credit selectivity, favouring establishments with greater production scale and greater capacity to mobilise financial resources. At the same time, the predominance of agricultural working capital and the concentration of resources in crops such as soybeans, maize, and cotton reveal the strong articulation between public financing and the consolidation of production systems geared towards commodity production.

Its territorial distribution, in turn, followed and reinforced the formation of the state's main agricultural regions, particularly in the Cerrado, contributing to the establishment of highly specialised hubs integrated into national and international agribusiness circuits. In this sense, rural credit operated not merely as an instrument to support production, but as an institutional driver of productive and territorial transformation in Mato Grosso, contributing to the strengthening of commercial agriculture in the state.

4.3 Financing Soybean Production in Mato Grosso through the SNCR

As discussed above, public rural credit, provided through the SNCR, was a substantial instrument in promoting agriculture and livestock production in Mato Grosso. Initially, rice was the crop that absorbed the largest share of public lending (Banco Central do Brasil, 2026), as it was a pioneer crop in the Cerrado, used to correct soil acidity (Fernández, 2007). In 1979, the first year for which data are available without Mato Grosso do Sul, soybean production received a very small amount (R$249,000 in 2025 values) and accounted for a relatively insignificant share (5.7% of the total). However, from that year until 1989, there was exponential growth, reaching R$10 billion (in inflation-adjusted values) and accounting for 78.3% of crop working capital financing in 1989 (Banco Central do Brasil, 2026). This growth accompanied the various settlement and colonisation programmes being implemented in Mato Grosso, as well as the expansion of soybean production itself in the state (Wesz Junior, 2014).

The account of a farmer who participated in this process in the southern part of the state helps to illustrate the initial conditions underlying this expansion and the role played by public policies in a context of considerable uncertainty:

> I was the first person to plant soybeans here [Primavera do Leste]. That was in 1976–1977. At first, yields were poor. It wasn't easy! Everything had to be done from scratch! We had to clear the land, correct the soil, test different varieties, and those who did not arrive with machinery had to buy it. These colonisation and credit programmes were very important because most people did not have the [own] resources to do this. There were not even any companies here, and when they eventually arrived, none of them wanted to invest money... it was a major risk! (Interview with soybean producer, Primavera do Leste, 2012).

As indicated by the interviewee, and also by the literature (Sousa, 1990; Bertrand et al., 2005; Moreira, 2012), during the early stages of the agricultural frontier, the state played a decisive role in enabling production by absorbing a significant share of the risks associated with the introduction of the crop. At the same time, companies within the agro-industrial chain had only a limited presence or were reluctant to finance the activity in view of the uncertainties surrounding production and market conditions. They became more actively involved only later, once production had demonstrated greater economic viability, alongside the declining availability of SNCR budgetary resources.

In the following decades, although the volume of resources varied considerably between harvests, soybean remained central to the allocation of rural credit in Mato Grosso. Between 1990 and 2006, there was substantial variation in the resources available, but soybean's share of agricultural production costs remained between 50% and 80%. This suggests that, in addition to specific sectoral conditions, these fluctuations were also driven by changes in the volume of resources available through the SNCR in Mato Grosso.

From 2006 onwards, SNCR resources allocated to soybean production costs increased from R$1.4 billion to R$7.6 billion in 2014 (in constant values), representing a 429.0% increase (Banco Central do Brasil, 2026) – far exceeding the expansion of the area planted with soybeans, which increased by 48.2% over the same period (Instituto Brasileiro de Economia e Estatística, 2026). The period from 2014 to 2020 was characterised by greater stability, with resources remaining at around R$7 billion. In 2023, the series reached its highest level, at R$10.4 billion. However, as the volume of resources available through the SNCR declined in subsequent years, the amount allocated to soybean production also fell substantially, decreasing by 34.8% between 2023 and 2025. Soybean's share of total agricultural crop production costs remained relatively stable over the past two decades, accounting for approximately two-thirds of the total, despite the figures for 2025, when it reached its lowest level since 2000 (Figure 6).

The number of contracts reached its peak in the late 1980s, when it exceeded 7,000 per year. During the 1990s, the number of producers able to access credit for soybean working capital declined,

fluctuating between 2,000 and 4,000. From 2006 onwards, however, there was an increase, reaching more than 6,000 contracts by 2014. Thereafter, the number declined, reaching 3,833 contracts in 2025 – a reduction of more than 42.1% compared with 2014. At the same time, average financing amounts increased almost continuously from 2006 onwards, exceeding R$2 billion in 2022 and 2023 – values six times higher than the national average (Banco Central do Brasil, 2026).

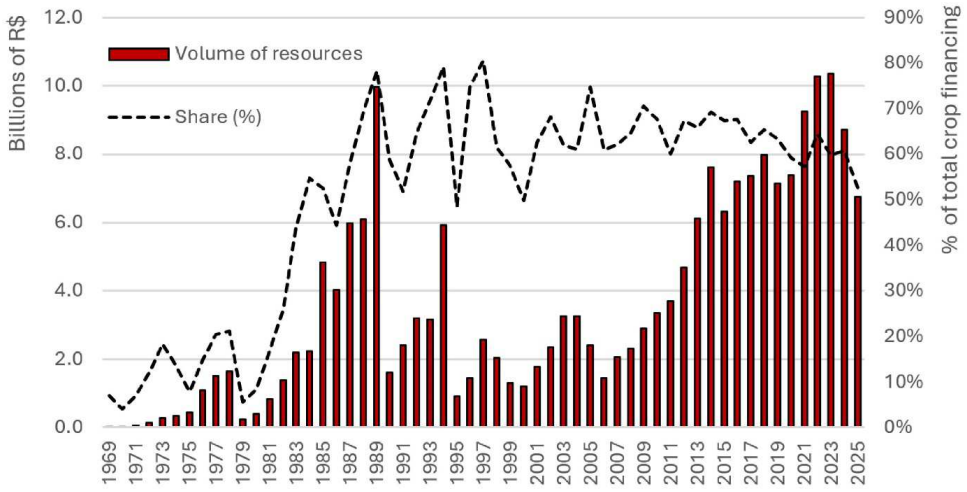


Figure 6. Volume of resources allocated to soybean working capital financing in Mato Grosso through the SNCR (constant 2025 values, in billions of Brazilian reais) and its share of total crop financing between 1969 and 2025.
Source: Bacen (various years). Prepared by the authors (2026).
Note: Data for 1969–1978 aggregate the present-day states of Mato Grosso and Mato Grosso do Sul.

Therefore, since 2014 there has been a trend towards a reduction in the number of beneficiaries, with financing becoming increasingly concentrated among more capitalised soybean producers capable of absorbing larger volumes of credit. A farmer cultivating 600 hectares of soybeans reported that he had previously accessed public financing for soybean production but had been unable to do so more recently: "Yes, I had government financing, but then there was a cut [in the volume of SNCR resources in 2024], and I couldn't get it anymore. You know how it is: when things get tight, the bank gives the money to the big producers, those with more land, collateral, and influence" (Interview with soybean producer, Tabaporã, 2026). The account of another interviewee points in the same direction:

> There is a bit of, let's say, the bank selecting certain clients to serve first, while the vast majority are left out. Sometimes the small producer, who actually needs the financing, is not served because a large producer has a better relationship with the bank and manages to secure the line of credit, taking a large share of it, while the small producer, the one who really needed to be served, often cannot access it (Interview with soybean producer, Sinop, 2022).

The localities accessing larger volumes of rural credit for soybean cultivation correspond to the main producing regions, namely the Southeast, the area surrounding the BR-163 highway, Parecis and, more recently, the Vale do Araguaia. Figure 7 makes this correlation particularly clear. In terms of the volume of credit allocated between 2013 and 2019, the municipality of Sorriso was the leading recipient. Sorriso describes itself as the "world's largest soybean producer", followed by Nova Mutum, Diamantino, Nova Ubiratã, Primavera do Leste, Campo Novo do Parecis, and Querência. The average value of contracts also varies considerably across municipalities, but the

localities where soybean cultivation is well established are those that receive the largest amounts (Banco Central do Brasil, 2026).

In the case of investment financing, which is used to purchase machinery (tractors, planters, sprayers, combine harvesters, trucks, etc.) or to construct or improve infrastructure (silos, warehouses, dryers, weighing facilities, etc.), rural producers tend to prioritise banks that operate public financing programmes, as the credit conditions are more favourable, with lower interest rates and longer grace and repayment periods. In addition, collateral requirements are often more flexible because the asset purchased with the loan itself serves as collateral.

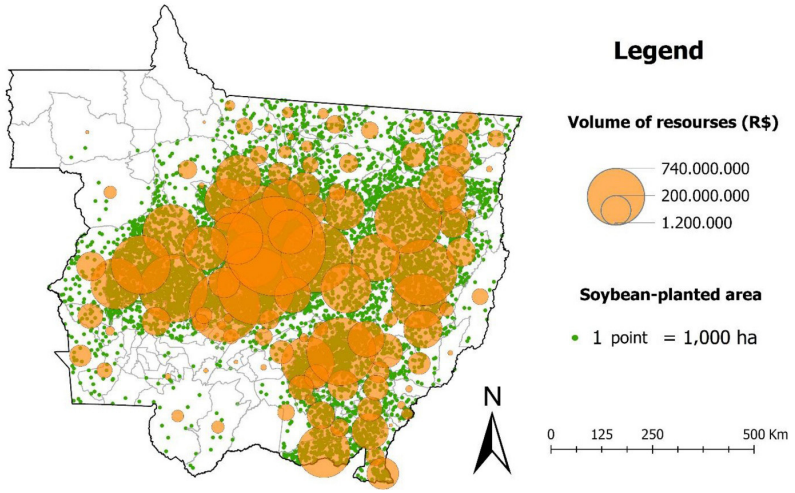


Figure 7. Soybean-planted area (ha) in Mato Grosso (2019) and volume of resources allocated (R$) to soybean working capital financing (total for 2013–2019).
Source: Bacen (various years) and Instituto Brasileiro de Economia e Estatística (2026).
Prepared by the authors (2026).

> Tractor, combine harvester, silo, whenever possible, when the bank has funds available and the credit line allows it, we finance them through government programmes. [...] Interest rates are higher today than they were before, but they are still better than if we went outside [the SNCR]. The repayment period is also good, and the machinery itself serves as collateral (Interview with soybean producer, Campos de Júlio, 2026).

> We have been financing soybean production. For working capital, there are credit lines under government programmes, but there are also the bank's own credit lines, which are generally more flexible and provide more resources per CPF [individual taxpayer identification number] than government programmes. For investment, however, we have not been providing financing [using the banks' own resources], because it is difficult to mobilise such a large amount for a long-term loan. In that case, a programme such as Moderfrota is a better option. Alternatively, those with sufficient financial resources can purchase the equipment with their own funds, paying in full upfront (Interview with bank manager, Campo Verde, 2013).

Finally, it is worth noting that, in addition to providing resources through different financing modalities, the SNCR incorporates important indirect subsidies, since the interest rates charged are lower than those prevailing in the market. For example, during the 2024/25 agricultural season, while the Selic rate reached 14.25% per annum, interest rates for working capital and investment operations for large producers ranged from 7% to 12% per annum, depending on the programme and the practices adopted. As noted by Delgado (2012), these operations involve interest-rate equalisation mechanisms and other forms of public subsidy, which have represented substantial amounts over recent decades.

4.4 Different Sources of Financing for Soybean Production in Mato Grosso

The expansion of soybean production in Mato Grosso has been sustained by a complex financial arrangement. Although the SNCR has historically played a central role in financing the activity, its relative contribution to the cultivated area has varied considerably over time and, proportionally, has declined in recent decades. Between 1999 and 2025, the area financed through the SNCR ranged from 72.9% of the area planted with soybeans in 2001 to just 11.4% in 2025, with an average of 27.3% over the period (Banco Central do Brasil, 2026)[7]. Although this percentage remains significant, particularly in a state that accounts for the largest soybean-planted area in the country, the data suggest that an increasing share of production has relied on financing mechanisms outside the public system.

Indeed, soybean production in Mato Grosso constitutes a hybrid financing arrangement in which private actors play an increasingly important role in providing capital for the activity. These include companies that operate as a short-term financing system through two main modalities. The first involves the exchange of products and services, particularly seeds, agrochemicals, fertilisers, and technical assistance, for grain produced and delivered at harvest. Known as *barter*, or, when it involves more than one product, locally as a "package", this type of operation is conducted primarily by input retailers, which provide the inputs, while payment is generally made after harvest in an amount equivalent to a specified number of bags of soybeans. "It is a simple system, because I put together a 'package' [for the producer] and advance fertiliser, seed, herbicide, insecticide, and fungicide, basically all the inputs they need, and then they pay me with grain" (Interview with input retailer representative, Campo Verde, 2012).

The second modality involves the provision of financial resources to producers by *trading companies*, agro-industrial firms, and exporters, in the form of a loan to be used during the agricultural season. Repayment of the principal, plus interest, may be made either in grain or in cash. "We also provide the cash financing, lending as if we were a bank, but then we always prioritise, let's say, having them repay us in soybeans" (Interview with trading company representative, Sinop, 2022). Thus, companies also operate as financial agents, making it more difficult to determine "to what extent the good performance of traders is based primarily on their financial activities or on their traditional physical commodity trading. In reality, it is a combination of both" (Murphy et al., 2012, p. 26).

Although public rural credit generally offers lower interest rates and longer repayment periods, interviews indicate that producers frequently turn to private financing when they are in default within the public system or face difficulties in meeting access requirements, including land documentation and compliance with environmental criteria. Other factors were also identified in the field research: lower collateral requirements, less bureaucracy, faster release of funds, almost automatic renewal of operations once previous loans have been repaid, and greater availability of credit. In some cases, producers also regularly access financing from multinational companies in order to maintain their credit lines with these firms, thereby avoiding restrictions on access to these resources in future agricultural seasons.

Moreover, under more favourable sectoral conditions, when producers are better capitalised, they may mobilise their own resources to purchase inputs or even undertake certain investments. At the same time, many producers have turned to unrestricted resources within the financial system, that is, resources that do not pass through the SNCR. These include proprietary credit lines offered by private banks and financed through funds raised in capital markets, such as

[7] However, this figure is underestimated because the Rural Credit Data Matrix (Banco Central do Brasil, 2026) contains contracts with high values that indicate zero or one hectare.

Agribusiness Credit Bills (LCA), debentures, Agribusiness Receivables Certificates (CRAs), and the Agro-Industrial Production Chain Investment Fund (FIAGRO), as well as resources from the banking institutions themselves, foreign-currency funding, and other sources. Depending on the macroeconomic context, particularly during periods marked by a reduction in the Selic rate, this modality becomes more attractive to rural producers, either because there are no limits on the amount of resources available per CPF, because fewer documents and/or certificates relating to properties are required, or because credit approval is faster (Instituto Mato-grossense de Economia Agropecuária, 2019).

This characteristic points to a process of financialisation of rural credit, insofar as the mobilisation of resources increasingly depends less on state intermediation and more on instruments traded in capital markets. This pattern is identified in the international literature as part of a broader process of the financialisation of agriculture (Gertel & Sippel, 2016), in which the retrenchment of public support creates space for private financial actors and mechanisms to assume a central role in mediating agricultural finance (Clapp, 2014; Clapp & Isakson, 2018). In the Brazilian case, this process accompanies the growing incorporation of land and agricultural production as attractive assets for financial capital (Fairbairn, 2014; Leite, 2024; Santos et al., 2022). When soybean producers were asked about their sources of financing, it became clear that they combine multiple sources within the same agricultural season. They generally combine their own resources with public and private sources simultaneously. Although this varies according to the producer's profile, including the size of the area, location, social standing, ability to engage with different actors such as banks, *trading companies*, and input retailers, and propensity to take risks, the combination of resources from multiple sources was a characteristic observed among different soybean producers.

> Crop protection products are purchased from [transnational] companies, with payment due at harvest. Fertiliser is normally purchased upfront using the farmer's own funds. When the harvest income comes in, they then purchase fertiliser. Lime, when possible, is financed. Since it is a mix [of different sources of finance], it is even difficult to know where the money comes from and where it goes. [...]. Trucks today are all owned outright because of the favourable conditions provided by government programmes, but previously that was not the case (Interview with the manager of a large soybean-producing group, Cuiabá, 2013).

> Well, it depends a lot on the year, on the harvest. If it is a good year, with a good yield and a good soybean price, there are more own funds available. Otherwise, you have to take out more financing, obtain more products [inputs] to be paid for at harvest. So, it depends! [...] But it is never just one option; there are always own funds, government programmes, and exchanges of products with companies (Interview with a soybean producer, Sapezal, 2019).

> We are able to cover a good part of the soybean production costs through government programmes. It is not enough, but it helps a lot. With this government funding, we can manage. And the remaining production costs and working capital are supplemented with money or products from companies, and there are also some credit lines from the banks themselves. For example, today it is possible to borrow [funds] from the banks here in dollars. It is at 8.5 or 9.0% per year, while government financing is at 10 to 12% per year. In the case of dollar-denominated financing, there is no adjustment [to the principal]; there is only the variation in the exchange rate, so there is this risk that does not exist with government money. [...] For investment, such as storage facilities and machinery, there is BNDES financing, with an interest rate of 10 to 12% per year. [...] Agriculture here is very strong and requires a lot of expenditure, so you have to find a way, raise a substantial amount of money in order to plant (Interview with a soybean producer, Campo Verde, 2026).

In summary, soybean production financing in Mato Grosso is the result of the articulation of multiple financial mechanisms involving the state, the financial system, and companies within the agribusiness chain. Although the relative importance of public credit has varied over time, with a tendency towards decline in the more recent period, particularly in relation to crop production costs, it remains an important component of this arrangement, coexisting with forms of private financing that have expanded over recent decades.

5 Conclusions

This article has analysed the trajectory of rural credit in Mato Grosso between 1960 and 2025, with particular emphasis on the financing of soybean production. The results demonstrate that credit not only accompanied agricultural expansion but also revealed a selective geography of financing, shaping patterns of access to productive resources and establishing hierarchies among economic agents. By selecting beneficiaries, modulating risks, and directing capital flows, rural credit actively contributed to the production of productive and land-based differentiation, proving decisive both in enabling the expansion of the agricultural frontier and in consolidating a highly concentrated model of corporate agriculture. This pattern is reflected in the greater incidence of financing among larger-scale establishments, the increase in the average value of contracts, and the relative decline in the number of beneficiaries, particularly in the recent period. Thus, rural credit has contributed to reinforcing processes of productive differentiation, favouring more highly capitalised producers and regions where agriculture is already well established in Mato Grosso.

With regard specifically to soybeans, the article demonstrates that the National Rural Credit System (SNCR) played a central role in the early stages of crop expansion, assuming risks and enabling investment under conditions of considerable uncertainty. In more recent decades, however, there has been a reconfiguration of the financing system, marked by the growing participation of private mechanisms. Rather than a process of substitution, what has emerged is a hybrid financing arrangement in which public and private resources interact in a complementary manner to sustain agricultural production. This arrangement reflects broader transformations in the organisation of agro-industrial chains and the increasing financialisation of agriculture, characterised by the diversification of financial instruments and the expanding role of private actors in the provision of capital.

This reconfiguration calls for closer attention to the relationships between the state, the financial system, and large agribusiness corporations. Private financing has developed upon an institutional and financial infrastructure historically constructed by the state and sustained by public credit. At the same time, the growing participation of private credit mechanisms demonstrates the consolidation of an integrated agro-industrial complex in which companies – predominantly multinational conglomerates operating upstream and downstream of production – establish contractual relationships with producers through the provision of inputs, advance purchases of agricultural output, and other financial instruments. Within this configuration, financing ceases to represent merely a form of support for production and also becomes an important source of accumulation for the private actors providing it.

Although these mechanisms expand access to credit, they also deepen relations of dependence between producers and financing companies. At the same time, they favour producers with greater capacity to mobilise resources, provide collateral, and operate at scale, thereby reinforcing processes of productive differentiation and capital concentration, as documented by studies pointing to the existence of specific records for soybean suppliers selected by trading companies (Fernández, 2007; Wesz Junior, 2014). In this sense, the provision of public credit to already consolidated segments of agribusiness reveals a hybrid financing system that reinforces dynamics of economic concentration.

These findings also invite reflection on the current limits of this model of public financing. Rural credit was historically decisive in enabling the occupation of agricultural frontiers under conditions of high risk. Its continued provision, supported in part by tax expenditures and expenditure on interest-rate equalisation (Delgado, 2010; Goldfarb & Mitidiero Junior, 2025), therefore deserves greater scrutiny. The benefits of credit remain concentrated in the most highly modernised regions and among the most capitalised producers, as demonstrated in this article, leaving other segments, sectors, and territories at the margins. This pattern is not merely the result of institutional inertia. It

also reflects the capacity of a group of actors, including large producers, agro-industrial firms, the financial system, and their parliamentary representatives, to preserve the terms of rural credit policy under different political contexts. This has occurred from the military regime to redemocratisation and through successive governments with divergent political orientations, even in the face of significant transformations in the sector's productive and financial structure.

This study opens avenues for future research into the institutional and economic arrangements that sustain the complementarity between public and private financing mechanisms and their effects on the configuration of productive and territorial hierarchies in agriculture. In particular, the growing influence of agribusiness within political power structures, expressed, for example, through the activities of the Parliamentary Front for Agriculture (Frente Parlamentar da Agropecuária), calls for further investigation into how economic interests shape the formulation of public credit policies and regulatory frameworks governing agricultural finance. At the same time, questions remain regarding how credit, in both its public and private forms, contributes to sustaining and expanding processes of financialisation in agriculture, functioning not only as an instrument for financing production but also as a structuring element in the expansion of private accumulation, the reorganisation of agro-industrial complexes, and the emergence of new and established actors within the financial system – including private banks, brokerage firms, investment firms, and others – that are now playing an increasingly decisive role in the agricultural sector.

Authors' contributions:

VJWJ: Conceptualization, Data curation, Formal analysis, Writing – original draft, Writing – review & editing. SPL: Conceptualization, Formal analysis, Writing – review & editing. KYMK: Data curation, Formal analysis, Writing – review & editing. TMF: Formal analysis, Writing – original draft, Writing – review & editing. JR: Formal analysis, Writing – original draft, Writing – review & editing.

Financial support:

Valdemar João Wesz Junior: CNPq – PDE (Process nº 200624/2025-3).

Conflicts of interest:

Nothing to declare.

Ethics approval:

Nothing to declare.

Data availability:

Research data is not available.

Corresponding author:

Valdemar João Wesz Junior. jwesz@yahoo.com.br

6 References

Alves, L. R. A., & Bacha, C. J. C. (2018). *Panorama da agricultura brasileira: estrutura de mercado, comercialização, formação de preços, custos de produção e sistemas produtivos.* Alínea.

Amaral, F. J. G., & Bacha, C. J. C. (2025a). Evolução do crédito rural no Brasil de 1969 a 2023. *Revista de Economia Contemporânea*, *29*, e252903. https://doi.org/10.1590/19805527252903

Amaral, F. J. G., & Bacha, C. J. C. (2025b). Determinants of Rural Credit Access in Brazil. *Journal of Developing Areas*, *59*(4), 227-250. https://doi.org/10.1353/jda.2025.a970240

Bacha, C. J. C. (2003). *Economia e política agrícola no Brasil.* ESALQ/LES.

Banco Central do Brasil – Bacen. (2026). *Matriz de dados do crédito rural.* Recuperado em 20 de maio de 2026, de https://www.bcb.gov.br/estabilidadefinanceira/micrrural

Barrozo, J. C. (2008). *Mato Grosso: do sonho à utopia da terra.* EdUFMT.

Belik, W. (2015). *O financiamento da agropecuária brasileira no período recente* (Texto para Discussão, No. 2028). Brasília: Ipea.

Belik, W., & Paulillo, L. F. (2001). O financiamento da produção agrícola brasileira na década de 90: Ajustamento e seletividade. In S. P. Leite (Ed.), *Políticas públicas e agricultura no Brasil* (pp. 53-94). UFRGS.

Bertrand, J.-P., Cadier, C., & Gasquès, J. G. (2005). O crédito: Fator essencial à expansão da soja em Mato Grosso. *Cadernos de Ciência & Tecnologia*, *22*(1), 109-123.

Binswanger, H. P., & Rosenzweig, M. R. (1986). Behavioural and material determinants of production relations in agriculture. *The Journal of Development Studies*, *22*(3), 503-539. https://doi.org/10.1080/00220388608421994

Brasil. Companhia Nacional de Abastecimento – Conab. (2026). *Série histórica de produção.* Recuperado em 20 de maio de 2026, de http://www.conab.gov.br

Búrigo, F. L., Wesz Junior, V. J., Capellesso, A. J., & Cazella, A. A. (2021). O Sistema Nacional de Crédito Rural no Brasil: principais continuidades e descontinuidades no período 2003-2014. *Estudos Sociedade e Agricultura*, *29*(3), 635-668. https://doi.org/10.36920/esa-v29n3-6

Castro, R. R. V. (2018). *Impacto das políticas de crédito rural no crescimento econômico do estado de Mato Grosso: 1999 a 2015* (Dissertação de mestrado). Universidade Federal do Rio Grande do Sul.

Chaddad, F. R., & Lazzarini, S. G. (2003). Relações contratuais de crédito agrícola e o papel dos agentes financeiros privados: teoria e evidências dos EUA. *Revista de Economia e Sociologia Rural*, *41*(3), 29-52. https://doi.org/10.1590/S0103-20032003000300002

Christophers, B. (2015). The limits to financialization. *Dialogues in Human Geography*, *5*(2), 183-200. https://doi.org/10.1177/2043820615588153

Clapp, J. (2014). Financialization, distance and global food politics. *The Journal of Peasant Studies*, *41*(5), 797-814. https://doi.org/10.1080/03066150.2013.875536

Clapp, J., & Isakson, S. R. (2018). *Speculative harvests*: Financialization, food, and agriculture. Fernwood Publishing.. https://doi.org/10.3362/9781780449920.

Coelho, C. N. (2001). 70 anos de política agrícola no Brasil (1931–2001). *Revista de Política Agrícola*, *10*(3), 3-58.

Delgado, G. C. (1985). *Capital financeiro e agricultura no Brasil, 1965-1985.* Ícone Editora.

Delgado, G. C. (2010). Especialização primária como limite ao desenvolvimento. *Desenvolvimento em Debate*, *1*(2), 111-125.

Delgado, G. C. (2012). *Do capital financeiro na agricultura à economia do agronegócio: mudanças cíclicas em meio século.* UFRGS.

Dornelas, L. N. D. (2020). Evolução da política de crédito rural no Brasil: uma análise histórica. *Extensão Rural*, *27*(2), 25-39. https://doi.org/10.5902/2318179637583

Fairbairn, M. (2014). 'Like gold with yield': evolving intersections between farmland and finance. *The Journal of Peasant Studies*, *41*(5), 777-795. https://doi.org/10.1080/03066150.2013.873977

Fares, T. M. (2023). China's financialized soybeans: The fault lines of neomercantilism narratives in international food regime analyses. *Journal of Agrarian Change*, *23*(3), 477-499. https://doi.org/10.1111/joac.12536

Fernández, A. J. C. (2007). *Do Cerrado à Amazônia: as estruturas sociais da economia da soja em Mato Grosso* (Tese de doutorado). Universidade Federal do Rio Grande do Sul.

Frederico, S. (2013). Agricultura científica globalizada e fronteira agrícola moderna no Brasil. *Confins*, *17*, 8153. https://doi.org/10.4000/confins.8153

Gertel, J., & Sippel, S. R. (2016). The financialisation of agriculture and food. In M. Shucksmith & D. L. Brown (Eds.), *Routledge international handbook of rural studies.* London: Routledge.

Goldfarb, Y., & Mitidiero Junior, M. A. (2025). *Agro, um bom negócio para o Brasil?* Friedrich-Ebert-Stiftung.

Gonçalves Neto, W. (1997). *Estado e agricultura no Brasil: política agrícola e modernização econômica brasileira 1960-1980.* São Paulo: Hucitec.

Graziano da Silva, J. (1982). *A modernização dolorosa: estrutura agrária, fronteira agrícola e trabalhadores rurais no Brasil.* Zahar.

Guanziroli, C. E., Buainain, A. M., & Di Sabbato, A. (2012). Dez anos de evolução da agricultura familiar no Brasil: 1996 e 2006. *Revista de Economia e Sociologia Rural*, *50*(2), 351-370. https://doi.org/10.1590/S0103-20032012000200009

Instituto Brasileiro de Economia e Estatística – IBGE. (2017). *Censo Agropecuário 2017.* Recuperado em 20 de maio de 2026, de https://censoagro2017.ibge.gov.br/

Instituto Brasileiro de Economia e Estatística – IBGE. (2026). *Banco de dados agregados.* Recuperado em 20 de maio de 2026, de http://www.sidra.ibge.gov.br

Instituto Mato-grossense de Economia Agropecuária – IMEA. (2019). *Composição do funding do custeio da soja para safra 2019/20 em Mato Grosso.* Recuperado em 20 de maio de 2026, de http://www.imea.com.br/imea-site/relatorios-mercado-detalhe?c=4&s=21

Instituto Mato-grossense de Economia Agropecuária – IMEA. (2026). *Mato Grosso: o estado do agro.* Recuperado em 20 de maio de 2026, de https://www.imea.com.br/imea-site/relatorios-me

Konings, M. (2018). *Capital and time.* Stanford: Stanford University Press.

Leite, S. P. (2001). Padrão de financiamento, setor público e agricultura no Brasil. In S. P. Leite (Ed.), *Políticas públicas e agricultura no Brasil*. UFRGS.

Leite, S. P. (2024). Estado e Financeirização da Agricultura Brasileira: transformações em curso e implicações sociais, políticas e econômicas. In L. Lavinas (Ed.), *Financeirização: crise, estagnação e desigualdade.* São Paulo: Contracorrente.

Leite, S. P., & Wesz Junior, V. J. (2015). Estado, políticas públicas e agronegócio no Brasil: Revisitando o papel do crédito rural. *Revista Pós Ciências Sociais*, *11*(22), 83-108.

Moreira, M. C. (2012). *O crédito agropecuário como um elemento da questão agrária: análise do crédito agropecuário público no estado de Mato Grosso* (Dissertação de mestrado). Universidade Federal de Mato Grosso.

Moreno, G. (2007). *Terra e poder em Mato Grosso: política e mecanismo de burla (1892-1992).* Entrelinhas/EDUFMT.

Mueller, C. C. (1992). Dinâmica, condicionantes e impactos socioambientais da evolução da fronteira agrícola no Brasil. *Revista de Administração Pública*, *26*(3), 64-87.

Murphy, S., Burch, D., & Clapp, J. (2012). *Cereal secrets: The world's largest grain traders and global agriculture.* Oxfam.

Ouma, S. (2016). From financialization to operations of capital: Historicizing and disentangling the finance–farmland nexus. *Geoforum*, *72*, 82-93. https://doi.org/10.1016/j.geoforum.2016.02.003

Palmeira, M. (1989). Modernização, Estado e questão agrária. *Estudos Avançados*, *3*(7), 87-108. https://doi.org/10.1590/S0103-40141989000300006

Pires, M. O. (2000). Programas agrícolas na ocupação do Cerrado. *Society and Culture*, *3*(1-2), 111-131.

Santos, A. B., Gonçalves, B. F., Gomes, C. M. P., Vicente, J. S., Barros Junior, O. A. D., Leite, S. P., & Wesz Junior, V. J. (2022). *Financeirização da agricultura e da terra no Brasil: dinâmicas em curso e disputa em jogo.* Fundação Heirich Böll.

Santos, R. F. (1988). O crédito rural na modernização da agricultura brasileira. *Revista de Economia e Sociologia Rural*, *26*(4), 393-404.

Sayad, J. (1984). *Crédito rural no Brasil: avaliação das críticas e das propostas de reforma.* Livraria Pioneira.

Schedenffeldt, B. F., Lima, A. T., Levrero, G. R. R., Pinto, M. R., & Montebello, A. E. S. (2021). Instrumentos privados de financiamento do agronegócio. *Revista de Política Agrícola*, *30*(1), 70-84.

Schultz, T. W. (1964). *Transforming traditional agriculture.* New Haven: Yale University Press.

Sousa, I. S. F. (1990). Condicionantes da modernização da soja no Brasil. *Revista de Economia e Sociologia Rural*, *28*(2), 175-212.

Sousa, S. B., Ferreira Junior, L. G., Miziara, F., & Morais, H. U. (2020). Crédito rural no Brasil: Evolução e distribuição espacial (1969-2016). *Confins*, *45*, 29836. https://doi.org/10.4000/confins.29836

Souza, A. R., Martinelli, G. C., Garcia, D. C., & Gimenes, R. M. T. (2024). Títulos de crédito privado: Alternativa de financiamento ao agronegócio. *Revista de Política Agrícola*, *33*, e01995.

Vieira Filho, J. E. R., & Gasques, J. G. (Ed.). (2020). *Uma jornada pelos contrastes do Brasil: cem anos do Censo Agropecuário.* Brasília: Ipea.

Werner, M. (2019). Geographies of production I: Global production and uneven development. *Progress in Human Geography*, *43*(5), 948-958. https://doi.org/10.1177/0309132518760095

Wesz Junior, V. J. (2014). *O mercado da soja e as relações de troca entre produtores rurais e empresas no Sudeste de Mato Grosso (Brasil)* (Tese de doutorado). UFRRJ.

Wesz Junior, V. J. (2017). Transformações agrárias em Mato Grosso (Brasil): um olhar a partir dos Censos Agropecuários (1940-2006). *Historia Agraria*, *72*, 167-194. https://doi.org/10.26882/HistAgrar.072E06w

Wesz Junior, V. J., Grisa, C., Niederle, P. A., & Sabourin, E. (2025). Trajectoire de la politique agricole au Brésil: une analyse à partir du crédit rural. In V. Chatellier, M. Pidoux, T. Pouch & M. Raffray (Eds.), *Politiques agricoles: théories, histoires, réformes, expériences* (pp. 1009-1032). Classiques Garnier.

Received: May 20, 2026;
Accepted: September 7, 2026.
JEL Classification: Q14; Q18.
Associate Editor: Mateus Neves