RBGDR

LAND FOREIGNIZATION: PRODUCTIVE USE IN DIFFERENT BRAZILIAN REGIONS

ESTRANGEIRIZAÇÃO DE TERRAS: A DESTINAÇÃO PRODUTIVA NAS DIFERENTES REGIÕES BRASILEIRAS

RBGDR

REVISTA BRASILEIRA DE GESTÃO E DESENVOLVIMENTO REGIONAL
V.19, N°3, Set-Dez/2023 | Taubaté/SP - Brasil | ISSN 1809-239x

LAND FOREIGNIZATION: PRODUCTIVE USE IN DIFFERENT BRAZILIAN REGIONS

ESTRANGEIRIZAÇÃO DE TERRAS: A DESTINAÇÃO PRODUTIVA NAS DIFERENTES REGIÕES BRASILEIRAS

Tailini Soares Botene[1] | Rosani Marisa Spanevello[2]

Letícia Maiara Schu[3] | Tanice Andreatta[4]

Received: 04/03/2023
Accepted: 10/30/2023

[1] Master in Agribusiness (UFSM).
Palmeira das Missões – RS, Brazil.
Email: tailini.botene@acad.ufsm.br

[2] PhD in Rural Development (UFRGS).
Professor at the Federal University of Santa Maria.
Palmeira das Missões – RS, Brazil.
Email: rspanevello@yahoo.com.br

[3] Graduate in Animal Science (UFSM).
Palmeira das Missões – RS, Brazil.
Email: leticia.schu@acad.ufsm.br

[4] PhD in Rural Development (UFRGS).
Professor at the Federal University of Santa Maria.
Palmeira das Missões – RS, Brazil.
Email: tanice.andreatta@ufsm.br

ABSTRACT

Land acquisition by foreign investors has been debated by several educational institutions and by Brazilian government bodies. As a result of this recent debate, the academic literature has been using the term 'land grabbing' to encompass the types of land appropriation by foreign investors around the world, since it presupposes different types of control over land: acquisition, lease, ownership, steward, company merge, capital quotas investment, investment funds, natural resource appropriation, etc. Since Brazil is a developing country with an extensive territorial area and capacity to expand the agricultural frontier, it has been targeted by several types of foreign investors. Thus, the present paper aims to analyze the occurrence of the land foreignization phenomenon in Brazil, especially with regard to the productive use of the land acquired by foreign legal entities. Based on the analysis of data provided by the National Institute of Colonization and Agrarian Reform (INCRA), it was possible to identify that legal entities holding foreign capital own land areas in almost all states of the federation and that the main productive use disclosed by investors is reforestation, followed by permanent agriculture and animal husbandry.

Keywords: Land grabbing. Productive use. Brazilian land.

RESUMO

A aquisição de terras por investidores estrangeiros vem sendo debatida por diversas instituições de ensino e por órgãos do governo brasileiro. Em decorrência desse recente debate, a literatura acadêmica vem utilizando o termo 'land grabbing' para englobar as formas de apropriação de terra por investidores estrangeiros no mundo todo, uma vez que esse termo pressupõe diversos tipos de controle sobre terras: aquisição, arrendamento, posse, fusão de empresas, investimento em quotas capitais, fundos de investimento, apropriação de recursos naturais etc. O Brasil, por ser um país em desenvolvimento e com extensa dimensão territorial e capacidade de expansão da fronteira agrícola, vem sendo visado por investidores estrangeiros de diversas origens. Em razão disso, o presente trabalho objetiva analisar a ocorrência do fenômeno da estrangeirização de terras no Brasil, especialmente no que se refere à destinação produtiva dada às terras adquiridas por pessoas jurídicas estrangeiras. A partir da análise de dados disponibilizados pelo Instituto Nacional de Colonização e Reforma Agrária (INCRA) foi possível identificar que pessoas jurídicas de capital estrangeiro possuem áreas de terras em quase todos os estados da federação e que a principal destinação produtiva declarada pelos investidores é o reflorestamento, seguida pela agricultura permanente e pela pecuária.

Palavras-chave: Land grabbing. Destinação produtiva. Terras brasileiras.

INTRODUCTION

Transnational land appropriations have expanded since the year 2008, within the context of a financial, energy and food crisis that arose in this period. The sudden rise in the commodity prices prompted food-importing countries to seek land in other territories, as a mean to ensure food security for their population and, thus, gain direct control over agricultural production, even if in another territory. Furthermore, the volatility of the financial market was also an influent factor in the decision of nations to transfer investments to more stable assets, such as land (Sousa; Leite, 2017, p. 2).

According to Castro (2014, p. 9), the land, as a mean of production, is different from other means, such as labor and financial capital, due to its multifunctionality: it is both "a natural resource, a living space, a mean of production and a durable asset, that is, an asset that can be used as store of value".

The search for international land has been called, in the academic literature, land grabbing or land foreignization (Borras Jr.; Franco, 2020). Andreatta *et al.* (2020, p. 3) point out that the term may encompass "a cycle of expropriation, promoted by foreign capital" or may be used to

define transactions that concern “appropriation of land and natural resources”. Borras Jr. and Franco (2012), in turn, state that land grabbing may be conceptualized also as control over land.

Land foreignization, thus, seems to be linked to an objective, as international transactions increased within a period of search for commodities. Within this context, the present paper analyzes the use of Brazilian land by legal entities that hold, at least in part, foreign capital, based on data provided by the National Institute of Colonization and Land Reform (INCRA), registered on the National Rural Registry System (SNCR), in the aim of demonstrating the use these companies make of the acquired areas in Brazil.

LITERATURE REVIEW

LAND GRABBING AND LAND FOREIGNIZATION

Currently, it has been reported the rise in the number of transnational land transactions, whose interest revolves mainly around capital accumulation and the production and exportation of fiber, food, animal food and biofuel. Such transactions tend to be directly related to the search for land, especially in developing countries with great natural resource availability (Andreatta *et al*., 2020).

Based on the identification of great investments tied to large-scale land areas, coupled with the perception that many of these investments originate from foreign actors and capital, the land grabbing or foreignization phenomenon has become the subject of studies and debates (Wilkinson, 2017).

Reydon and Fernandes (2017) state that there are two groups of countries that gain prominence in the search for acquiring land in foreign territories, namely, capital-rich countries facing water and land scarcity, identified by the authors as Golf countries; and countries that face significant population growth and, thus, are concerned with food security, such as India, China and South Korea.

The Food and Agriculture Organization of the United Nations (FAO) published a document organized by Eco Ruralis – a peasant farmers’ organization from Romania, a European country, which works internationally in advocating for the rights of peasant farmers and promotes actions against land grabbing – in the aim of defining such term. The organization considered factors such as land size, individuals involved in transactions, control methods, transaction legitimacy, and land use. Based on these factors, the following concept was defined and documented in publication by the FAO:

> *Land grabbing* can be defined as being the control (whether through ownership, lease, concession, contracts, quotas, or general power) of larger than locally-typical amounts of land by any person or entity (public or privatwm foreign or domestic) via any means ('legal' or 'illegal') for purposes of speculation, extraction, resource control or commodification at the expanse of peasant farmers, agroecology, land stewardship, food sovereignty and human rights (FAO, 2016, p. 2).

Borras Jr. and Sauer (2016, p. 13), influent authors in the academic discussion regarding the definition of the land grabbing concept, report that the phenomenon is also associated with control over the chain of value or control over the labor relations in the field; or, sometimes, it is defined as the acquisition of land in large scale; or, even, it is associated with the concept of "grilagem", which is understood as the illegal privatization of public land or illegal appropriation. The authors have given the term a relatively broad definition, arguing that the most adequate translation to Brazilian Portuguese for land grabbing would be "*apropriação de terras*" (land appropriation), as it encompasses the ideas not only of transference of property but also of rights concerning the use of the land or the control over land or resources.

Reydon and Fernandes (2017), in their study on land grabbing in Brazil, provide insights into both criticisms and endorsements of the practice in general. The authors report that, for the critics, who have already adopted the term "land grilagem" to address the issue, there are several concerns, which involve the sole purpose of investors for capital appreciation and real estate speculation; potential inadequacy in providing sufficient food to poor and vulnerable populations, given that investments come from wealthy countries aiming to accumulate land in poorer nations; the dissolution of peasant farmer communities, due to wealth appropriation from both land and land income; and the depletion of natural resources, given the need for fuel production etc.

Kato and Leite (2020) point out that land and agricultural projects have emerged as a relevant alternative in the decision-making process for financial investments. They have been considered attractive assets since the 2008 financial crisis precisely because they are not tied to the traditional financial market. This promotes diversification in investors' portfolio that enables better risk management.

According to Reydon *et al.* (2006, p. 182), diversification strategies in financial investments aim to reduce the risk of losses and target assets that can ensure, at the very least, the non-occurrence of decreased profitability and coverage of opportunity costs. In regard to the land

market, the authors state that the land is “a permanent, low-depreciation and safe asset” and, thus, “offers favorable conditions and, under certain circumstances, can compete with the stock market”.

Taking into consideration this broadening of investment possibilities, there is also the attraction of new and diverse entities interested in land: various types of capital-holding investors; firms specialized in managing assets, which create financial instruments such as funds; and companies already operating in agribusiness, such as producers and production managers (Kato; Leite, 2020).

Within this same context, Wilkinson (2017, p. 16) explains that Brazil and the southern cone of Latin America have become the target of a vast number of investors interested in applying their capital in land and the agricultural activity developed in this territory. Among them, the author mentions various types of capital and investors: leading companies in the agribusiness, leading companies in related and synergistic chains; companies interested in mining; states holding capital but insecure about energy and food; investment funds; real estate businesses etc.

Considering the territorial extension of Brazil, which is perceived as a potential area to expand the agribusiness frontier, along with its ideal weather conditions conducive to commodity production, the country has positioned itself internationally as a major producer and exporter of raw material. Additionally, it is possible to understand the international interest for Brazilian land given the political and governmental encouragement provided so that the country develops financially and economically based on the expansion of agribusiness, with the numerical data to be collected and analyzed during this study.

The Brazilian legislation that regulates transactions such as the purchase and lease of land by foreigners dates back to the 1970s. In effect, Statute n. 5.709/71, still in force, imposes some restrictions on the acquisition of Brazilian land by foreigners. The land can be acquired by: a) foreign individuals residing in Brazil (Art. 1); b) foreign legal entities authorized to operate in Brazil (Art. 1); and c) Brazilian legal entities in which, in any capacity, foreign individuals or legal entities hold the majority of the share capital and reside or have their headquarters abroad (Art. 1, § 1).

Flexor and Leite (2017, p. 24) state that the increase in commodity prices in the 2000s heavily influenced the land market dynamics in Brazil, as it also impacted “the behavior of land assets, grain production and agribusiness territorial expansion”. For the authors, these effects show

the agriexport tendency of the country and its geopolitical stance, which explains the expansion of foreign, financial or agrarian capital interest in land grabbing in Brazil, even though it is not possible to presume a direct relation between the receiving of direct foreign investments and the increase in rural real estate prices.

Within this context, the present paper analyzes the use of Brazilian land by legal entities who hold, at least partially, foreign capital, based on data provided by the National Institute of Colonization and Land Reform (INCRA), registered on the National Rural Registry System (SNCR) in the aim of demonstrating the use these companies make of the acquired areas in Brazil.

METHOD AND METHODOLOGICAL PROCEDURES

This is a bibliographic and documental study, since, in order to develop the literature review, we gathered information on the topic from journals, papers, statutes and public documents; it is also descriptive, as we sought to analyze the database provided by the National Institute of Colonization and Land Reform (INCRA) in the aim of observing and registering, via research, data referring to the phenomenon of land acquisition by foreign companies in Brazil.

The data analyzed in the present study are from INCRA. The data are in reference to land acquisition by legal entities holding, partially, foreign capital. The contact with the Institute was made via e-mail, taking into consideration the restrictions found to get the data via public access. In response to the request made via e-mail, INCRA forwarded the electronic spreadsheets organized on the Microsoft Excel® program, which contain the following data (Image 1):

Image 1 | Data provided by INCRA

Source: Prepared by the authors.

In the aim of achieving the objective of this paper, that is, to verify the productive use of Brazilian land areas registered by legal entities that hold foreign capital in Brazil, we initially identified the number of transactions registered in each state of the federation and then we sought information regarding the exploratory/productive use declared by the owners or stewards of each registered area. After, data were organized according to the regional geographic division of Brazil.

In regard to the timeframe of this study, it is important to clarify that the data in the INCRA spreadsheets on rural real estate acquisition by legal entities holding foreign capital do not reflect the acquisition date but the date in which the state was registered on SNCR or the date for the last registry update. In that sense, by using the types of classification of data available in the Microsoft Excel program, it was possible to classify the last-updated dates registered on SNCR from oldest to most recent, which allowed us to verify that the oldest registry in the spreadsheets dates back to 7th May, 1993 and the most recent is from 30th August, 2021.

DISCUSSION AND RESULTS

Amidst the global trend of seeking land on an international scale, Brazil is targeted by foreign investors due to its significant productive and economic potential, according to Martins *et al.* (2021). The authors suggest that foreign investments directed towards Brazil, beyond its food production capacity, also target its energy and natural resource availability, biofuel production and environmental resources. With this increasing race for land, the land market becomes more valuable, further attracting financial and real estate investments.

The Land Matrix organization estimated that 6,367,825 hectares (ha) are the subject of 162 transactions concluded in Brazil, identified up until 2020. This represents less than 1% of the total area of the country and is equivalent to 7.7% of all the arable land in the national territory, given that, according to the World Bank, only 9.7% of the territorial area of the country falls under the arable land category. Despite the data presented by the organization, a review of indicators available on the World Bank webpage reveals that in the year 2018 the estimate was that 6.6716% of Brazil's territorial area was arable.

On the other hand, according to data from the National Aeronautics and Space Administration (NASA) in 2017, disseminated by the Brazilian Agricultural Research Corporation (EMBRAPA) (Lima, 2017), Brazil encompassed 63,994,479 ha of cropland, representing 7.6% of its territorial extension. Similar data were reported by EMBRAPA Territorial in 2016, indicating that 7.8% of Brazil's territorial area is occupied by cropland. It is important to highlight, though, that the data from NASA that was disseminated by EMBRAPA specifically pertains to areas designated for crops (arable land).

In addition to cropland, the Brazilian Association of Agribusiness from the Region of Ribeirão Preto (ABAGRP) released a study on the use of Brazilian land based on data from NASA, concluding that 30.2% of the national territory is used for farming activity development, out of which 7.8% is designated for the production of grain, fruit, greenery and perennial crops; 1.2% is covered by planted forests; and 21.2% is used for pasture, out of which 8% is native and 13.2% is planted.

In fact, the Land Matrix organization (2020) indicates that the majority of Brazilian land transactions are designated for silviculture, including wood production, and for food and fiber production, especially soy, sugarcane, cotton and corn. According to the organization, these two production categories alone account for more than 70% of all the land use intentions in the country, followed by biofuel, animal husbandry and non-food agricultural products.

When classifying the land transactions by production categories, the organization reached the estimate that 45.1% of transacted areas are designated for forestry activities; 26.8% for food crops; 22.0% for biofuel production; 3.0% for animal husbandry; 1.6% for non-food agricultural products; and 1.7% for other diverse activities.

Getúlio Vargas Foundation (FGV, 2015, p. 111), when analyzing data made available by the Central Bank of Brazil, concluded that foreign investments between 2003 and 2008 were destined to a limited group of products, namely cotton, meat, soy, oil, ethanol, sugar and fruit juice, which have a large share in international trade. The foundation also points out that Brazil's abundance of land and productive capacity, in relation to the aforementioned products, attract even more foreign investments.

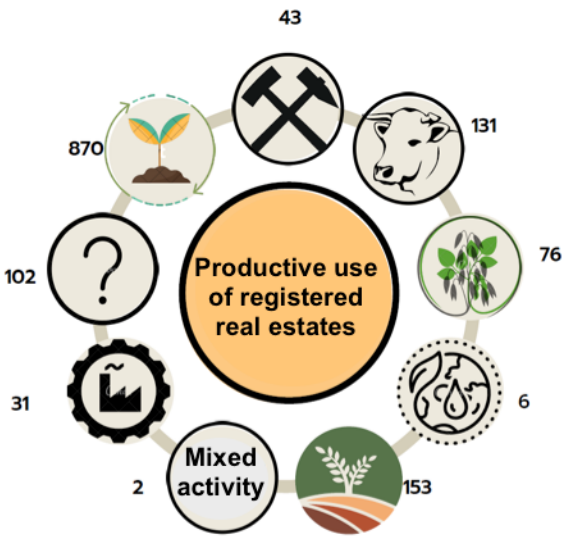
INCRA, when creating the registration system of Brazilian land areas that are stewarded/owned by legal entities holding foreign capital, via the SNCR, made a field available for owners to register the 'use' of the area. On INCRA's database, however, this field is left blank in innumerous registries.

In consultation to the guide manual to fill the Electronic Declaration for Registration of Rural Estates (DCR), created by INCRA in November 2020, we can verify that there are orientations to fill the tab 'use', in reference to data on land exploitation and use. However, the manual indicates that this tab "refers to the information concerning production, types of exploitation, areas of restriction, among others, which allow for the obtaining of additional information on land use and allocation of the rural estate" (INCRA, 2020, p. 26). That allows us to conclude that the field is not mandatory in the system, but allows the user to give additional information on the property.

Thus, despite the Estatuto da Terra (Land Statute) itself – Statute n. 4.504/1964 stating the obligation to "disclose information for registry" (art. 49, §1), according to Laskos *et al.* (2016), "the statute does not impose that owners of real estates with less than four fiscal modules update the types of use". According to the spreadsheets provided by INCRA, a total of 102 estates do not have their activities disclosed on SNCR.

On the other hand, Figure 2, below, shows the productive/exploratory use present on INCRA's database according to each transaction disclosed by foreign legal entities in Brazil. The activities with the highest number is reforestation (870), followed by permanent agriculture (153), animal husbandry (131), non-registered intentions (102), grain production (76), mining (43), industrial exploitation (31), environmental conservation (5) and mixed activities (2).

Figure 2 | Productive use of real estates registered on INCRA



Source: Prepared by the authors based on data from INCRA.

In smaller numbers, other intentions were registered in Brazil, as shown in Figure 3. Among them are: fishing (40), extractivism (8), horticulture (7), recreation (7), commercial activity (6), agriculture (5), bank entities (5), research (5), dam/reservoir (4), assistance/hospital (1), readjustment (1), education/training (1), transmission line/repeater station (1).

Figure 3 | Productive use of real estates registered on INCRA

Source: Prepared by the authors based on data from INCRA.

We verify, thus, that reforestation, permanent agriculture and animal husbandry are among the main productive uses registered by owners that are foreign legal entities on SNCR, database used by INCRA for control.

The information held by INCRA, thus, corroborate that gathered by the Land Matrix organization, as it reports that 45.1% of transacted land is designated for forestry activities; 26.8% for food cultivation; 22.0% for biofuel production; 3.0% for animal husbandry etc. Obviously, the numbers of both public and private organizations do not correspond exactly to each other, but they are able to demonstrate a pattern in the intentions of foreign investors in their search for Brazilian land.

Borras Jr. and Franco (2012) indicate four classifications on the interest of foreign investors, namely, demand for food, animal food and fuel; demand for minerals and wood products; increase in the allocation of areas for environmental conservation, driven by the need to retain carbon and manage areas for deforestation reduction; and the need for globalized financial capital, turning land into an asset.

Data provided by INCRA also allows for the visualization of what was disclosed by owners or stewards as productive use of registered areas. Table 1 shows the number of transactions registered in each state in the north of Brazil and the productive use registered for each transaction.

Table 1 | Uses of rural real estates in the northern region

State	Number of registered areas	Productive use	Hectares
Acre	No registered areas	-	-
Amapá	37 registered areas	37 destined to reforestation	55,947.3838 ha
Amazonas	No registered areas	-	-
Pará	1 registered area	1 animal husbandry	4.8400
Rondônia	No registered estate	-	-
Roraima	1 registered area	1 temporary/grain production	1,494.4306 ha
Tocantins	4 registered areas	3 animal husbandry 1 reforestation	2,023.8859 ha 419.8 ha

Source: Prepared by the authors based on data from INCRA.

Within the data provided by INCRA on the northern region of the country, we verify that there is nothing registered in the states of Acre, Amazonas and Rondônia. As highlighted previously, the legislation imposes the disclosure of information for the registry of all landowners and stewards. However, the fact that the database provided by INCRA does not show the information referring to these three states does not mean that there is no registry on SNCR about them but that this information was not made available.

Within this context, Martins *et al.* (2021, p. 35) indicate that the enactment of Statute n. 5.709, from 7th October, 1971, addressing the acquisition of land by foreigners in Brazil, and to Decree n. 74.965/74, which regulates it, occurred in response to "scandals related to illegal land grabbing in the Amazon (15 million hectares) by foreigners in the 1960s, especially by North-Americans through the intermediation of officials from the Brazilian government" (Martins *et al.,* 2021, p. 9). This marked a historical milestone in the legal regulation of land grabbing in Brazil.

Conversely, authors Reydon and Fernandes (2017, p. 28), in their study on land grabbing in Brazil, state that, in the country, there is no reliable control or registration of foreign-owned land, nor of land in general. They indicate that the lack of land regulation in Brazil has historical roots, having begun with the land conquest movement between 1890 and 1900, characterized by extensive financial speculation. They argue that, even today, there are limitations in the registration system for identifying processes

of land concentration and foreignization in Brazil. Additionally, Wilkinson (2017, p. 19) asserts that "in the Brazilian case, the degree of capital transnationalization, whose composition is mixed and *en flux*, hinders the type of control currently in force".

Another factor aggravating the situation of Brazilian land regulation is the enactment of Statute n. 13.465, from 11th July, 2017, which provides for "rural and urban land regulation, the settlement of credits granted to agrarian reform settlers, and the land regulation within the scope of Legal Amazon" and establishes "mechanisms to improve the efficiency of Union estate disposal procedures" (Brazil, 2017). This statute, coined by some authors as the "Grilagem Statute", increased from 1500 to 2500 hectares of public area illegally occupied within the scope of Legal Amazon that can be regulated; authorized the regulation of more recent occupations; and enabled legal entities to benefit from the regulation authorization, among other hypotheses that increase the possibilities of private property regulation on public and unoccupied land of the Union (Grain, 2020).

We aim to clarify that beyond the institutionalization of transference of public land to the private domain, this public and unoccupied land of the Union may also end up being regulated by foreign owners, which is why it is necessary that the country prioritizes the creation of an effective registry on the transactions involving land acquisitions given all the factors involved in this process, as per what has been previously discussed.

However, Reydon and Fernandes (2017, p. 4) point out that the study conducted by INCRA entitled *Livro Branco da Grilagem de Terras* (Land Grilagem White Book) mentions the situation of cancellation of rural real estate registrations in the amount of 48.5 million hectares by the Court of Amazonas in 2001, which suggests that jurisdictional protection had to be sought in order to cancel irregular acquisitions in the state.

Having made these records, what is verified in the northern region of Brazil is that, among the activities disclosed on SNCR, reforestation predominates with 38 registered areas within the region, from a total of 43 disclosed areas. Reforestation occupies 56,367.1838 hectares of the northern region, whereas other registered activities occupy less than 4 thousand hectares.

In the northeastern region of the country, in turn, it is possible to find greater diversification of the areas of disclosed activities developed by foreign legal entities in Brazilian land, as we can see in Table 2.

Table 2 | Uses of rural real estates in the northeastern region

State	Number of registered areas	Productive use	Hectares
Alagoas	20 registered areas	11 to industrial exploitation 4 other non-registered activities 3 permanent agriculture 2 mixed activity	No registry 1,118.3789 ha 32.7940 ha No registry
Bahia	106 registered areas	32 permanent agriculture 25 reforestation 21 other non-registered activities 11 temporary/grain production 10 animal husbandry 4 mining 2 industrial 1 environmental conservation unit	62,969.4798 ha 21,476.7727 ha 67,433.9323 ha 69,921.9747 ha 2,024.9089 ha 951.3000 ha 69.9600 ha 2,380.1949 ha
Ceará	9 registered areas	4 other non-registered activities 2 permanent agriculture 2 temporary/grain production 1 animal husbandry	889.6602 ha 347.0797 ha 701.1514 ha 187.2000 ha
Paraíba	2 registered areas	1 permanent agriculture 1 mining	11.0000 ha 93.0000 ha
Pernambuco	10 registered areas	5 bank entity 2 permanent agriculture 1 fishing 1 temporary/grain production 1 research	5,918.2285 ha 744.6295 ha 13.618 ha 23.9944 ha 32.4 ha
Piauí	11 registered areas	7 temporary/grain production 2 other non-registered activities 1 permanent agriculture 1 animal husbandry	62,931.5026 ha 1,339.5805 ha 77.7224 ha 5.0000 ha
Maranhão	15 registered areas	4 temporary/grain production 4 agricultural activities 3 animal husbandry 1 permanent agriculture 1 commercial 1 extractivism 1 industrial	11,039.8066 ha 4,025.9500 ha 2,109.4552 ha 704.9499 ha 10.0000 ha 2,725.9695 ha 9.9950 ha
Rio Grande do Norte	23 registered areas	13 other non-registered activities 3 horticulturalism 3 temporary/grain production 2 permanent agriculture 1 readjustment 1 recreation	2,111.2633 ha 2,327.0683 ha 298.6811 ha 556.3000 ha 4.3674 ha 19.4100 ha
Sergipe	No registered areas	-	-

Source: Prepared by the authors based on data from INCRA.

The activity that predominates in terms of number of registered areas is permanent agriculture, with 44 registries (65,443.9553 hectares in total); reforestation appears in second place, with 25 registries (21,476.7727 hectares in total); and grain production/temporary agriculture comes in third, with 24 registries, but it surpasses other activities in terms of land extension, adding up to 144,917.1110 hectares in total. Animal husbandry appears with 15 registries and 4,326.5641 hectares.

Regarding the Maranhão, Tocantins, Piauí e Bahia (MATOPIBA) region, we verified that the state of Bahia ranked 2nd among the Brazilian states with the most land transactions with foreign companies. Piauí is 7th, Maranhão is 12th and Tocantins is 16th. Piauí has 11 registered estates, 7 are used for temporary production of grains; 1 for permanent agriculture; 1 for animal husbandry; and 2 do not have a registered use. Maranhão has 15 registered estates, 4 are used for temporary production of grains, 4 for agricultural activities; 3 for animal husbandry; 1 for industrial activities; 1 for extractivism; 1 for commercial activities e 1 for permanent agriculture. Tocantins, in turn, has 4 registered estates, 3 are used for animal husbandry and 1 for reforestation.

Pereira and Pauli (2016) suggest there are at least 26 companies holding foreign capital directly exploiting land areas located in the states of Maranhão, Piauí, Tocantins and Bahia, and that, among the productive uses disclosed by these companies that invested in land acquisition in the referred region, there are: cotton, sugarcane, corn and soy production, especially, despite there still being registries of companies interested only in mining and the land market.

According to Castro *et al*. (2017), the expansion of transnational transactions in the MATOPIBA contributes to the commoditization of agriculture, which may be inferred based on the identification of the increase of foreign investments in activities such as the cultivation of sugarcane and soy and the production of agrifuels, which require great land expanses in order to be carried out.

In the middle-western region, in turn, we also find a great variety of disclosed activities. Table 3 shows, however, that the activities that predominate are animal husbandry, with 58 registries and 118,364.4010 hectares, and reforestation, with 63 registries and 76,425.1419 hectares.

Table 3 | Uses of rural real estates in the middle-western region

State	Number of registered areas	Productive use	Hectares
Distrito Federal	10 registered areas	9 animal husbandry 1 permanent agriculture	119.9868 ha 3.6000 ha
Goiás	68 registered areas	27 reforestation 14 mining 11 animal husbandry 8 temporary/grain production 3 industrial 3 other non-registered activities 1 permanent agriculture 1 extractivism	25,646.6381 ha 7,533.1655 ha 34,610.2081 ha 12,778.7335 ha 48.5606 ha 545.1303 ha 2,425.3510 ha 82.5000 ha
Mato Grosso	16 registered areas	7 permanent agriculture 4 animal husbandry 4 temporary/grain production 1 other non-registered activity	6,154.4957 ha 10,299.4186 ha 11,874.2742 ha 30.0000 ha
Mato Grosso do Sul	69 registered areas	36 reforestation 34 animal husbandry 4 permanent agriculture 3 agricultural activities 1 other non-registered activity 1 environmental conservation unit	50,778.5038 ha 73,334.7876 ha 12,112.8000 ha No registry 21.3864 ha 39.4839 ha

Source: Prepared by the authors based on data from INCRA.

The southeastern region, however, has the state with the greatest number of registries of land transactions with foreign capital legal entities: Minas Gerais. We verify that Minas Gerais has 355 registered areas under legal entities holding foreign capital, with most of the registries disclosing reforestation activity, in a total of 238 and 515,658.6052 hectares destined to this activity. Permanent agriculture, grain production and animal husbandry also appear prominently in the state, with 277,758.6341, 9,566.5335 and 6,479.2157 hectares, respectively.

The southeastern region also presents the registration of 16 areas whose disclosed activity is mining, whereas the middle-western region presented 14 registries of this activity. In other regions, this activity appears in smaller numbers. See Table 4 in reference to rural real estates registered in the southeastern region.

Table 4 | Uses of rural real estates in the southeastern region

State	Number of registered areas	Productive use	Hectares
Espírito Santo	15 registered areas	9 other non-registered activities 2 industrial 2 animal husbandry 1 permanent agriculture 1 commercial	898.9679 ha 42.2925 ha 40.8800 ha 42.7128 ha 2.0400 ha
Minas Gerais	355 registered areas	238 reforestation 38 permanent agriculture 31 animal husbandry 16 mining 12 other non-registered activities 6 temporary/grain production 3 industrial 3 extractivism 2 dam/reservoir 2 commercial 2 agriculture (sugar) 1 horticulturalism 1 environmental conservation unit	515,658.6052 ha 277,758.6341 ha 6,479.2157 ha 723.5637 ha 9,161.6441 ha 9,566.5335 ha 544.1236 ha 74,178.9978 ha 338.3900 ha 30.8950 ha No registry 17.7818 ha 2.2000 ha
Rio de Janeiro	17 registered areas	10 animal husbandry 5 other non-registered activities 1 industrial 1 recreation	4,697.0191 ha 67.8325 ha 95.8400 ha 29.0000 ha
São Paulo	116 registered areas	35 reforestation 33 permanent agriculture 29 other non-registered activities 8 animal husbandry 4 industrial 2 horticulturalism 2 temporary/grain production 2 recreation 1 environmental conservation unit	38,530.9156 ha 14,040.4162 ha 603.4795 ha 716.1778 ha 235.8831 ha 635.0286 ha 1,798.3058 ha 12.0700 ha 557.6805 ha

Source: Prepared by the authors based on data from INCRA.

Finally, by analyzing the data from the southern region, shown in Table 5, it is possible to notice that the state of Rio Grande do Sul has 39 registries of animal husbandry activity, which occupies 6,385.4779 hectares in the state, in contrast with only 3 registries in Santa Catarina (89.9592 hectares) and 2 in Paraná (266.7941 hectares). However, the predominant activity disclosed by foreign capital legal entities that registered Brazilian land under their possession is reforestation, with 469 registries in the region and 255,650.0960 hectares, with other activities not appearing so prominently, as illustrated in Table 5.

Table 5 | Uses of rural real estates in the southern region

Estado	Number of registered areas	Productive use	Hectares
Paraná	215 registered areas	176 reforestation 8 permanent agriculture 8 temporary/grain production 5 other non-registered activities 4 mining 3 extractivism 3 recreation 2 industrial 2 animal husbandry 2 research 1 assistance/hospital 1 horticulturalism	121,599.0420 ha 6,333.5707 ha 136.5711 ha 82.8651 ha 279.4000 ha 70.6640 ha 14.3475 ha 6.1000 ha 266.7941 ha 577.7867 ha 33.8000 ha 24.2000 ha
Rio Grande do Sul	203 registered areas	136 reforestation 39 animal husbandry 11 temporary/grain production 8 other non-registered activities 6 permanent agriculture 2 research 1 education/training	42,963.7566 ha 6,385.4779 ha 323.3324 ha 565.4832 ha 139.4489 ha 6.7200 ha 82.2000 ha
Santa Catarina	192 registered areas	157 reforestation 10 other non-registered activities 5 temporary/grain production 4 mining 3 animal husbandry 3 permanent agriculture 2 dam 2 commercial 2 industrial 2 environmental conservation unit 1 transmission line/repeater station 1 residue treatment	91,087.2978 ha 1,741.0342 ha 61.7668 ha 1,045.1000 ha 89.9592 ha 464.7800 ha 45.7139 ha 3.4000 ha 123.8127 ha 290.5943 ha 0.3805 ha 63.212 ha

Source: Prepared by the authors based on data from INCRA.

Studies such as the one conducted by Barbanti Júnior (2017) indicate that in the states of Minas Gerais, Paraná and Santa Catarina 75% of the land acquired by foreign legal entities is used for reforestation; whereas in the state of Rio Grande do Sul only 45% of rural real estates owned/stewarded by foreign companies are used for the same purpose. These data are similar to the data presented in this study.

According to Sauer and Leite (2012), productive and speculative investments consequently lead to increase in transactions and demand for land, as well as growth of agricultural production. Also according to the authors, this search "focuses on the expansion of eight commodities: corn, soy, sugarcane, palm oil, rice, rapeseed, sunflower and planted forests", as also demonstrated in this study.

CONCLUSION

The study showed that the acquisition of Brazilian land by legal entities holding foreign capital, besides being a reality all over the country, as it is present in all Brazilian regions, is also associated with an intention, generally of production, aiming to sell products and, consequently, obtain financial profit.

Data provided by the National Institute of Colonization and Land Reform (INCRA) showed that the main activity developed by legal entities holding foreign capital in the country is reforestation, which, in turn, is linked to paper and cellulose production and wood extraction from planted forests. In fact, reforestation occupied the first place, in numbers, among the productive uses disclosed by foreign companies on the National Rural Registry System (SNCR) for Brazilian land.

In second place in registration numbers of productive activities disclosed by foreign companies on SNCR, is permanent agriculture. Animal husbandry is third and grain production comes immediately after. Besides, other activities were disclosed on SNCR, though in smaller numbers, such as mining, extractivism, horticulturalism etc.

Within this context, it is possible to state that legal entities holding foreign capital that sought to own or steward Brazilian land and that registered their data on SNCR target Brazilian land for the development of several activities within the agribusiness area.

Although the study confirms the effective occurrence of land grabbing by foreigners in Brazil based on data registered by landowners and stewards on SNCR, it is verified that the database does not provide important information such as, for example, those referring to production allocation, that is, whether it is sold internally or destined to exportation. This subject is relevant and necessary to continue the studies in the area, as it may show other aspects of the search for Brazilian land, even involving risks to the food sovereignty of the country.

DECLARATION OF COMPETING INTEREST

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Rosani Marisa Spanevello reports financial support provided by Coordination for the Improvement of Higher Education Personnel (CAPES/Brazil).

REFERENCES

ANDREATTA, T.; RODRIGUES, S. S.; CÂMARA, S. B.; ZUCATTO, L.C. **Especificidades da produção científica sobre o "*Land Grabbing*": um estudo bibliométrico**. Revista Economia e Desenvolvimento, Santa Maria, v.32, 2020.

ASSOCIAÇÃO BRASILEIRA DO AGRONEGÓCIO DA REGIÃO DE RIBEIRÃO PRETO – ABAGRP. **Uso das terras.** Disponível em: https://www.abagrp.org.br/uso-das-terras. Acesso em: 23 mar. 2022.

BARBANTI JÚNIOR, O. **Internacionalização de terras no Brasil:** perspectivas para o setor de plantações de madeira. Revista de Relações Internacionais, Belo Horizonte, 2017.

BORRAS JR, S. M.; FRANCO, J. C. ***Global Land Grabbing and Trajectories of Agrarian Change: A Preliminary Analysis.*** Journal of Agrarian Change, Vol. 12 No. 1, January 2012, pp. 34–59.

BRASIL. **Lei nº 5.709, de 7 de outubro de 1971.** Regula a Aquisição de Imóvel Rural por Estrangeiro Residente no País ou Pessoa Jurídica Estrangeira Autorizada a Funcionar no Brasil, e dá outras Providências. Brasília, 7 out. 1971. Disponível em: http://www.planalto.gov.br/ccivil_03/LEIS/L5709.htm#art1%C2%A71. Acesso em: 3 jan. 2021.

BRASIL. **Manual de orientação para preenchimento da Declaração para Cadastro de Imóveis Rurais Eletrônica – DCR.** Instituto Nacional de Colonização e Reforma Agrária – INCRA. Nov. 2020. Disponível em: https://www.gov.br/receitafederal/pt-br/assuntos/orientacao-tributaria/cadastros/portal-cnir/manuais/manual-cnir-versao-1-7.pdf. Acesso em: 27 set. 2023.

BRASIL. **Plataforma de Governança Territorial.** Disponível em: https://pro-pgt-incra.estaleiro.serpro.gov.br/pgt/indices-basicos. Acesso em: 27 set. 2023.

CASTRO, G. D. B. **Influência do mercado e preço da terra nos sistemas de produção familiares pecuaristas no Uruguai.** Dissertação de Mestrado. Universidade Federal de Santa Maria – UFSM, RS, 2014.

CASTRO, L. F. P. de; HERSHAW, E.; SAUER, S. **Estrangeirização e internacionalização de terras no Brasil: oportunidades para quem?.** Revista de Relações Internacionais, Belo Horizonte, 2017.

LIMA, Janete. **Lavouras são apenas 7,6% do Brasil, segundo a NASA.** Embrapa Territorial. 29 dez. 2017. Disponível em: https://www.embrapa.br/busca-de-noticias/-/noticia/30972444/lavouras-sao-apenas-76-do-brasil-segundo-a-nasa. Acesso em: 26 set. 2023.

FLEXOR, G.; LEITE, S. **Mercado de terra, *commodities boom* e *land grabbing* no Brasil.** *In:* Questões agrárias, agrícolas e rurais: conjunturas e políticas publicas. Org. Renato S. Maluf e Georges Flexor. 1. ed. Rio de Janeiro: E-Papers, 2017.

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO). ***What is land grabbing?*** Disponível em: http://www.fao.org/family-farming/detail/en/c/1010775/. Acesso em: 23 mar. 2023.

FUNDAÇÃO GETÚLIO VARGAS – FGV. **Comércio internacional e o agronegócio brasileiro.** Relatório completo. 2015. Disponível em: http://gvagro.fgv.br/publicacoes. Acesso em: 21 nov. 2022.

GRAIN. **Operações no mercado de terras do fundo de pensão TIAA e da universidade de Harvard são julgados ilegais.** Disponível em: https://grain.org/e/6589. Acesso em: 31 out. 2021.

KATO, K.; e LEITE, S. **Land grabbing, financeirização da agricultura e mercado de terras:** velhas e novas dimensões da questão agrária no Brasil. *In:* Revista da ANPEGE. v. 16. nº. 29, p. 458 - 489, ANO 2020. e-ISSN: 1679-768X.

LASKOS, A. A.; CAZELLA, A. A.; REBOLLAR, P. B. M. **O Sistema Nacional de Cadastro Rural: história, limitações atuais e perspectivas para a conservação ambiental e segurança fundiária.** Revista Desenvolvimento e Meio Ambiente. Vol. 36, abr. 2016, DOI: 10.5380/dma.v36i0.39124.

MARTINS, S. P.; RABAIOLI, A.; SPANEVELLO, R. M.; ANDREATTA, **T. Tendências globais e motivações da apropriação de terras ou "*land grabbing*" no Brasil.** Desenvolvimento em Questão. Editora Unijuí. ISSN 2237-6453. Ano 19. n. 57, out./dez, 2021.

PEREIRA, L. I.; PAULI, L. **O processo de estrangeirização da terra e expansão do agronegócio na região do Matopiba.** Campo-Território: Revista de Geografia Agrária, Uberlândia, Minas Gerais, Edição especial, v.11, n. 23, p. 196-224, 2016.

REYDON, B. P.; ANÃNÃ, E. S.; KLOECKNER, G. O.; e CORNÉLIO, F. N. M. **Ativo terra agrícola em carteiras de investimento.** *In:* Mercado de Terras no Brasil, Estrutura e Dinâmica. Org. Bastiaan Philip Reydon e Francisca Neide Maemura Cornélio. Brasília: NEAD, 2006.

REYDON, B. P.; FERNANDES, V. B. ***Financialization, land prices and land grab: a study based on the Brazilian reality.*** Economia e Sociedade, Campinas, v. 26, Número Especial, p. 1149-1179, dez. 2017.

SAUER, S.; LEITE, S. P. **Expansão agrícola, preços e apropriação de terra por estrangeiros no Brasil.** RESR. Piracicaba, SP, Vol. 50, N° 3, p. 503-524, Jul/Set, 2012.

SAUER, S.; BORRAS JR, S. **"*Land grabbing*" e "*Green grabbing*": Uma leitura da "corrida na produção acadêmica" sobre a apropriação global de terras.** Campo-Território: revista de geografia agrária, 2016. Disponível em: https://www.researchgate.net/publication/308265152. Acesso em: 28 dez. 2020.

SOUSA, M. E.; LEITE, A. C. **O dinamismo das aquisições transnacionais de terra: aproximando o fenômeno das relações internacionais e da economia política internacional.** Revista Estudos Internacionais. Belo Horizonte, ISSN 2317-773X, v.5 n.2. 2017, p.13-33.

THE LAND MATRIX LAC – ***Latinoamérica y Caribe.*** Disponível em: https://landmatrix-lac.org/. Acesso em: 9 nov. 2021.

WILKINSON, J. ***Land grabbing* e estrangeirização de terras no Brasil.** *In:* Questões agrárias, agrícolas e rurais: conjunturas e políticas publicas. Org. Renato S. Maluf e Georges Flexor. 1. ed. Rio de Janeiro: E-Papers, 2017.