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FRONTIER TERRITORIES: COUNTERING THE GREEN REVOLUTION LEGACY IN THE BRAZILIAN CERRADO

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Notes on Contributors	iii
Introduction: Reclaiming the Cerrado – A Territorial Account of a Disputed Frontier Lídia Cabral, Sérgio Sauer and Alex Shankland	1
Transformations of the Agricultural Frontier in Matopiba: From State Planning to the Financialisation of Land Cássio Arruda Boechat, Fábio Teixeira Pitta, Lorena Izá Pereira and Carlos de Almeida Toledo	17
Matopiba's Disputed Agricultural Frontier: Between Commodity Crops and Agrarian Reform Estevan Coca, Gabriel Soyer and Ricardo Barbosa Jr	33
Green Grabbing in the Matopiba Agricultural Frontier Anderson Antonio Silva, Acácio Zuniga Leite, Luís Felipe Perdigão de Castro and Sérgio Sauer	57
Brazilian Agricultural Frontier: Land Grabbing, Land Policy, and Conflicts Matheus Sehn Korting, Débora Assumpção e Lima and José Sobreiro Filho	73
Environmental Policy Reform and Water Grabbing in an Agricultural Frontier in the Brazilian Cerrado Andréa Leme da Silva, Ludivine Eloy, Karla Rosane Aguiar Oliveira, Osmar Coelho Filho and Marcos Rogério Beltrão dos Santos	89
Mapping Fire: The Case of Matopiba Dernival Venâncio Ramos Júnior, Vinicius Gomes de Aguiar and Komali Kantamaneni	107
Brazilian Civil Society and South–South Cooperation: Countering the Green Revolution from Abroad Laura Trajber Waisbich and Lídia Cabral	127
Glossary	145

Brazilian Agricultural Frontier: Land Grabbing, Land Policy, and Conflicts*†

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Abstract This article sheds light on the forms of land appropriation in the agricultural frontier regions of Brazil in line with the concepts of land and green grabbing. With less stringent environmental laws, the Cerrado presents itself as a 'sacrifice zone', where grabbers and large agricultural producers have sought to register lands of the Amazon biome as 'Cerrado' or an undefined biome zone land. It seeks to understand what happens in territories when power technologies, that is, disciplinary mechanisms such as the Rural Environmental Cadastre (CAR), are activated and how the state has regulated land appropriation and green grabbing as a new meaning of appropriation of nature. This has created obstacles for the struggle and resistance of socio-territorial movements for land distribution, as confirmed by the growing lethality of conflicts in Brazilian frontier zones that are coveted by the grabbers.

Keywords land grabbing, green grabbing, land cadastre, socioenvironmental conflicts, frontier, Brazil.

1 Introduction: the frontier and the appropriation of nature

The Amazon and the Cerrado are biomes where the appropriation of different forms of nature has occurred since colonial times. The forms of accumulation, plunder, and control have deepened with the recent expansion of financialised agribusiness. In these biomes, there are constant civilisational conflicts between different models of use and appropriation of human⁴ and non-human assets. The colonial system of commodity production in the Americas marked a turning point in history between humanity and the rest of nature. It created relationships that form modern patterns of evolution, cyclical development, and global crisis (Moore 2010).

The contradiction between extractive/monocultural forms of appropriation and traditional peoples and communities is

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embedded in the perspective of the crisis of the binomial ecology and economy. This contradiction transforms land into an asset in which the financial world can invest (Li 2014). As an asset, the land usually carries out activities related to agribusiness, which requires a certain combination of technologies, social relations, discursive and non-discursive practices, and forms of violence to legitimise certain uses and users of the land.

The multidimensional crisis – including economic, political, health, environmental, and social aspects – is driven by the tendency to over-accumulate capital. The ecological crisis created by the forms of appropriation of natural resources, 'free fruits' (Marx 2017: 745), or the 'gifts of nature' (Moore 2010) also creates enclaves and conflicts associated with the different forms of capital accumulation. This exploitation and appropriation takes place through mega-projects of energy, infrastructure, and mining (Giarracca and Teubal 2008), agricultural monocultures (Giraldo 2019; Lima 2019), extensive cattle ranching, exploitation of native forests – timber and deforestation – and numerous biopiracy products for medicines, food, and cosmetics (Ravena and Marin 2013).

Resources-frontier expansion (Kröger and Nygren 2020) takes place where natural resources are considered 'free' and the land structure is poorly developed in its legal aspects, being 'conjured' when it finds opportunities for regularisation (Campbell 2015). The land grabbers work in a strong relationship between law, bureaucracy, and violence, which favours the concentration of land into a few hands (Foweraker 1981: 40). In recent decades, the Rural Environmental Cadastre (CAR) and the idea of regularisation promotes, through digital land bureaucracy, forms of land grabbing and overlapping land registration, using virtual technologies and self-declaration by alleged landowners. This form of agribusiness expansion of the frontier brings new pressures on land and violence against small producers and traditional communities that do not have access and knowledge of how to use and register their lands, especially in the region between the Cerrado and the Amazon.

The agricultural frontier, particularly in the states of Maranhão, Tocantins, Piauí, and Bahia (otherwise known by the acronym Matopiba), received incentives from the state in the form of public policies to economically modernise the territory, mainly via agricultural and mineral production, and extracting and supplying other types of natural resources, such as solar and wind energy.

The control of territory is central to the processes of speculation and accumulation and for the advance of capital over nature. 'Appropriation' is a key term for understanding changes in the land market and control, particularly the growing presence and investment of financial funds. The transfer of property rights, but also other forms of control over a large part of rural land ownership, is done illegally by large business groups or in

conjunction with false titles (land grabbing), shaping processes of legal and illegal land accumulation (Sassen 2014; Harvey 2003).

Land grabbing, investments, and speculation stimulate and create a huge global land market. The development of infrastructure and services is essential to enable sales and purchases, obtain ownership, or 'lease rights, develop appropriate legal instruments, and even push for the creation of new laws to enable these purchases' (Sassen 2014: 100). Leases and purchases of land for speculation and overlapping land registration are also strategies for the spatial adaptation of foreign capital. In addition, most foreign capital is present in various branches of the agribusiness production chain, such as the seed and fertiliser industries and trading companies.

To show the forms of land appropriation in the agricultural frontier regions of Brazil in line with land and green grabbing, concepts about frontier, state regulation, and conflicts are articulated in this article, combined with data analysis from fieldwork in the Amazon and Cerrado biomes conducted by the authors between 2012 and 2021; the Pastoral Land Commission's database on rural murders from 1985 to 2020; the CAR database; the Brazilian 2012 Forest Code legislation and the regularisation of land titles; analysis of key actors' speeches and legislation on the topic; and database retrieval and analysis using qualitative and quantitative methods.

The remainder of this article is organised as follows. Section 2 explores how the CAR system is important to see how the state regulates the appropriation of land, triggering new forms of appropriation of nature through the use of governance technologies to produce and control territory and the environment. Section 3 reveals CAR as the neoliberalisation of nature, relating self-control and/or common concerns to private markets and flexible agreements in transnational or translocal processes and laws. At the same time, traditional peoples and communities who have the right to self-determination and self-declaration to the state face major legal and political obstacles in demarcating their land and the rise of conflicts and assassinations. Section 4 concludes.

2 The CAR and land grabbing

Regarding the involvement of the state as an actor in land grabbing, Dwyer (2013) has systematised different ways of managing enclosures. While the political machinery provides transnational corporations with access to land, it is up to the state to plan formalisations and legislations that do not touch the inevitable social complexity and the land problems on the ground. The political-geographical role of the state is evident in its historical capacity for spatial predictability and territorial reinvention, linking remote rural regions to transnational investment through concessions of thousands of hectares (*ibid.*).

The term 'land grabbing' refers to a series of actions to appropriate large extensions of land, including land and natural resources (forest, water, and mineral resources). Appropriation by foreign and national institutions aims at extracting resources and accumulating. It is important to bear in mind that this economic phenomenon of land acquisition by foreign corporations in territories dominated by national states is also one of the dimensions of the process of the advance of capital in frontier areas at the present historical juncture. The race for land grabbing, also addressed theoretically by the concept of land grabbing (Sauer and Borras Jr 2016), refers to the process of recent forms of capital accumulation.

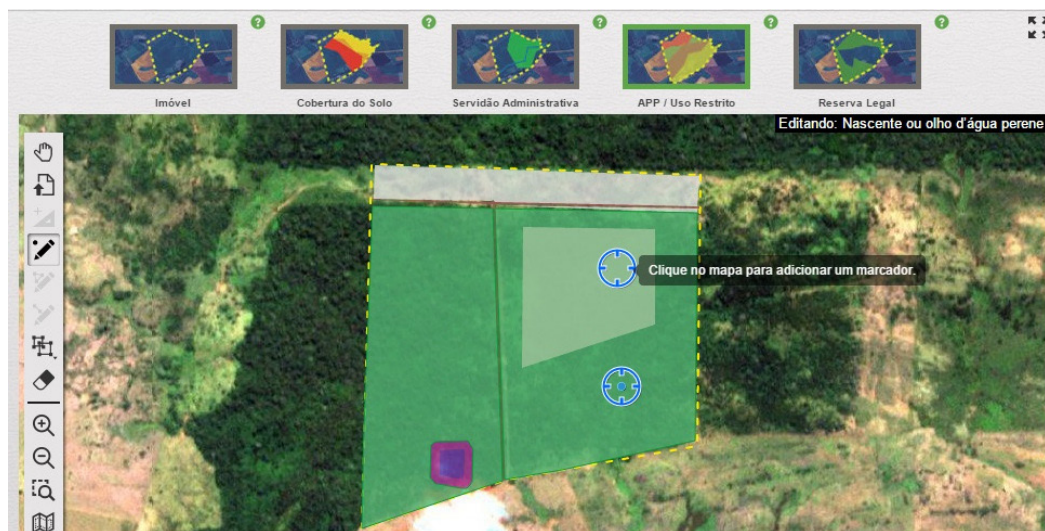
The National System of Rural Environmental Cadastre (Sistema Nacional de Cadastro Ambiental Rural, SICAR, or simply CAR), established in 2012, is a national electronic cadastre that is mandatory for all rural properties to access agricultural and environmental public policies. The aim is to integrate environmental information from rural estates, composing a database for controlling, monitoring, planning, and combating deforestation. Although it is an environment cadastre and does not have the legal aspect of a land registry or a land title confirmation, it has received much public acclaim for its scale and scope. It has been common to find land being sold with only CAR documents and land lawsuits that use the CAR as the main element to claim land ownership, but the CAR was not created for that purpose. However, its self-registration nature weakens its environment control capacities, and it is worsening land grabbing. Its use has diminished the requirements of ownership, especially through simplifying the need for proof of tenure.

The main institutions that manage the CAR system are the Ministry of the Environment and the Brazilian Forest Service (SFB). SFB is responsible for supporting the implementation, management at the federal level, and integration of environmental databases with the state's environmental bodies. State and municipal technicians receive self-declaratory registration from landowners and squatters, who should be responsible for checking on the ground and validating these registrations.

The main instrument based on mapping for institutionalising the new Forest Code is the CAR (Packer 2017). To implement it, Brazil applied georeferenced satellite images of the national territory through a partnership between the Brazilian government, the German Development Bank (KfW), and the German Cooperation Agency (GIZ). The main purpose is to expand the use of cartographic records using the Global Positioning System (GPS), opening up new ways for the inspection, control, and planning of environmental conservation and use through georeferencing.

In a context of land and environmental chaos, georeferencing changes the way in which areas of Legal Reserves within

Figure 1 Registering a property in the CAR Module



Source CAR Module, reproduced under the CAR transparency policy and Brazilian 'Right to Information' Law (12.527/2011).

properties are monitored. There are many registries and little technical structure, so the cadastres are analysed only through computer programmes such as the 'Analysis Module', which reduces the bureaucracy of the registry. However, there are no field inspections, weakening the environmental policy and the aims of controlling deforestation and degradation of nature.

The registrant needs the identification of the rural owner/ possessor, proof of possession or ownership, and the identification of the property through a plant and descriptive memorial containing the indication of the geographical coordinates with at least one point of mooring of the perimeter of the property. The registrant also needs to provide details of the location of remnants of native vegetation, Permanent Preservation Areas, Restricted Use Areas, Consolidated Areas, and also the location of Legal Reserves, if any (see Figure 1).

In the states of Maranhão, Tocantins, Piauí, and Bahia (Matopiba), the number of registered areas exceeded the number of areas subject to registration, indicating overlaps with public and common lands, such as nature reserves, indigenous lands, agrarian settlements, and traditional territories. These self-cadastre overlapping lands are facilitating the digitisation of land grabbing. The registered areas were not effectively analysed by the state's bodies and technicians (Korting 2021).⁵ The SICAR national data in 2021, for example, showed several overlaps on indigenous land (involving 1,238,347,311 hectares and 6,780 properties) as well as in the case of conservation units (562,818,569 hectares and 2,883 properties).

The CAR assumes a similar role to the Terra Legal Programme,⁶ a land title regularisation programme that extends the original functions through environmental mapping. In the Terra Legal Programme (which is similar to CAR, having the cooperation of GIZ), either conservation or degradation were stimulated, and the intended objectives of legal environmental measures were never fulfilled (Lipscomb and Prabakaran 2020; Terra *et al.* 2014). The CAR is still dealing with similar issues; namely, the legal uncertainty that undermines the implementation of measures to protect the forest in the long term (such as the establishment of conservation units or territories for indigenous peoples) and the favouring of georeferencing systems for land propriety and not for collective lands, leading to new areas for the speculation of land grabbers.

First, it is the CAR itself that, through the appropriation of georeferenced information provided by registrants and consolidated by the state, directly metricates the lands, their permanent protected areas, and their Legal Reserve,⁷ thus enabling placement on carbon markets, payments for environmental services, and quotas for Legal Reserves (green grabbing). In addition, through the misuse of the federal registry and its georeferencing, it promotes sales and land grabbing in the land market.

Second, it becomes the new mechanism for legalising land titles, as CAR is now used to legalise tenure as a land title. The CAR is the main evidence in the new legislation in progress – PL 510/2021⁸ – where the temporal marker for land tenure has been renewed, land regularisation has been made more flexible in terms of the beneficiaries, and the limit of hectares that can be applied for in a simplified form has been increased. It is on these virtual territories regulated by the system that the main agents that organise the agribusiness value chain begin to sell the idea of sustainable global chains, whose production would be free from deforestation (free deforestation).

With the erasure of crimes of invasion of public lands and deforestation (as in the case of CAR in Brazil), starting from registration at the registry office, the origin of the products of the value chain – soy and meat, mainly – is now perceived to be 'legal and green'. These products are now considered sustainable by the new technological infrastructure of the verification and reporting system of the traceability systems of these long commodity chains (blockchain technology). On the other hand, what is not on the map is no longer in the world, and the same satellite images that guarantee the land and environmental compliance of private properties become surveillance systems and sanction the criminalisation of 'erased' peoples and communities in their own territories, whose way of life becomes a crime against property.

The CAR is presented as an instrument of environmental mapping that promotes the control of territory by deviating from its ecological purpose. This prompts squatters, profiteers, and land grabbers to use the green instrument to consolidate domination and control, even if it is legally uncertain. Moreover, it is the 'first step' for land regularisation processes – even titling – which increases access to agricultural credit with state subsidies through current legislation and programmes such as Titula Brasil⁹ or programmes with World Bank participation, such as the Environmental Regularization of Rural Properties in the Cerrado (Projeto Car-Fip 2013), and access to agricultural credit policies with government subsidies.

Land grabbing is made possible by an ecological instrument that was not originally intended for land use and opens up a different path where green grabbing makes land grabbing possible. Such a dynamic can be observed in the Land Management System (Sistema de Gestão Fundiária, SIGEF) of the National Institute for Colonization and Agrarian Reform (Instituto Nacional de Colonização e Reforma Agrária, INCRA), where land in areas where indigenous lands, traditional communities, and integral protected areas such as Mirador Park are being privatised for Legal Reserve quotas, land speculation, and commodity production – soybean, eucalyptus, and meat, according to reports and field research by FIAN International in 2021 in Maranhão (FIAN International 2020).

It is important to see how the state regulates the appropriation of land (Wolford *et al.* 2013), triggering new forms of appropriation of nature (Fairhead, Leach and Scoones 2012; Filer 2012) through the use of governance technologies to produce and control territory and the environment (Agrawal 2005; Li 2007). According to the authors, green grabbing is an appropriation of land and resources for environmental purposes and a process of deep and growing significance. Debates on land grabbing have shown that 'green' arguments have served as justification for appropriating land for more efficient farming, food security, or even forest relief. In other cases, environmental agendas become motives for appropriation, for example, through biodiversity conservation, carbon sequestration, biofuels, ecosystem services, ecotourism, or related 'offsets' (Fairhead *et al.* 2012).

The issuance of new securities such as the Environmental Reserve Quotas (Cotas de Reserva Ambiental, CRAs)¹⁰ backed by areas of native vegetation georeferenced by CAR; the carbon credit market; and the reformulation of existing agribusiness securities as financial assets or securities also issued on environmental services, including in foreign currency (Law 13.986/2020), make it possible to guarantee profits not only from traditional agricultural services but also through 'environmental services' through the capital market. The CRA, as well as the numerous agribusiness securities – Certificate of Agribusiness Receivables (Certificado

de Recebíveis, CRA); the Rural Product Certificate (Cédula de Produto Rural, CPR); the Financial Rural Product Certificate (Cédula de Produto Rural Financeira, CPRF); and the Rural Real Estate Certificate (Certificado de Imóvel Rural, CIR), among others – are now traded in the financial markets, such as stock exchanges, and over-the-counter derivatives, thus facilitating the entry of non-bank institutional investors into the environmental financial stock market. Such financial securities guarantee the reserve of 'rural assets', such as land (or fraction thereof), future crops, or even environmental services, to pay off agribusiness debts, placing land and natural resources in the hands of a few investors in the labour market, mainly foreign.

Franco and Borras Jr (2019) problematise green grabbing by explaining interconnections with climate issues, pointing out that there is appropriation of resources in the name of the environment, while developing other ways of analysing the concept. For example, they consider large conservation projects, reducing emissions from deforestation and forest degradation in developing countries (REDD+), and projects that restrict or prohibit the actions of traditional communities – looking at alternative practices such as agroforestry, extractivism, and others – in the name of climate change and investor security, pushing monocultures in agriculture by expropriating communities and integrally protecting forests; and policies that use narratives of climate issues – such as biofuels through palm oil – to justify highly extractive activities such as timber.

They also cite as an example the creation of climate-smart agriculture (CSA), a project based on merging two key obsessions of the economic mainstream – economic efficiency and environmental sustainability – attempting increased productivity and resilience and yet reducing carbon emissions. However, social inequality, unequal power relations, and redistributive reforms are not addressed in CSA (Borras Jr and Franco 2013; Clapp 2014).

Hacon (2018), who analysed the emergence of REDD+ in the agricultural frontier of southeastern Pará, found that territories consolidated through land policies have greater credibility for REDD+ policies. Other areas must first go through a land planning policy for their consolidation, and for this purpose, compliance with CAR was promoted. Under the pretext of not losing the efforts of the REDD+ initiatives and the registry, land regularisation was started in Pará. This went so far as to advance carbon credits on properly demarcated indigenous land in the region, as they guaranteed forest carbon property rights and security for financial market investors. The links between land appropriation and green appropriation are reinforced and help to understand some land and environmental issues in a very profound way. At the same time, what is happening on the ground is different from what is written in the registry applications.

3 Remote environmental and land governance at the agricultural frontier

The new forms of regulation are subject to processes of self-regulation through increasingly powerful, interactive, and non-bureaucratic tools. The National System of CAR (or SICAR) intended to establish a new relationship between productivity and environmental protection, historically seen as a rivalry and with fines or punishments being the only mechanism to slow down unsustainable agricultural production. Intelligence refers to the reconciliation between agricultural productivity and environmental protection, particularly in the discourses on zero deforestation, agricultural and livestock productivity, and certification of non-deforestation products, such as global commodity chains and the soybean moratorium. In addition to the amendment of the Forest Code, tools and technologies have been used to shift the paradigm. The change in technology has moved from a system of surveillance and discipline to self-control through a georeferenced, self-explanatory, and transparent 'data centre' and 'government from afar' (Miller and Rose 1990).

Miller and Rose (1990) stated that governing from afar means extending domination but replacing the disciplinary paradigm and panoptic ideology with data centres and self-governance. According to them, 'domination involves the exercise of a form of intellectual rule facilitated by those at a center with information about people and events far away from them' (*ibid.*: 9). It is noteworthy that the CAR has its punitive and disciplinary role, but it seems clear to several scholars on the subject that the New Forest Code (Novo Código Florestal, NCF) has reduced its restrictions on agricultural practices and that the new technological system has enabled new regulation forgiving old environmental fines and that the success in the number of registrations is due to an exhaustive relaxation of the rules (Rajão *et al.* 2020).

Castree (2008) refers to CAR as the neoliberalisation of nature, relating self-control and/or common concerns to private markets and flexible agreements in transnational or translocal processes, mechanisms, and laws. The CAR created the category of 'squatters/rural landowners' as the new subject of environmental protection. The 'population' eligible for legalisation has been expanded. Now both squatters and landowners can register, replacing the restricted category of 'owner' in the previous Forest Code. The rural squatter does not have to prove ownership of the land or register the protected areas in the registration of the property. This feature determines much of the existing registrations today, as it was only after the Forest Code that Legal Reserves (*Reservas Legal*, RLs) and Permanent Preservation Areas (PPAs) (*Áreas de Proteção Permanente*, APPs) could be registered in the property. Although the law and the markets oblige the farmer to register with the CAR, the participation of the squatters/landowners has been surprising and calls for an

investigation as to the reasons. At the same time, it has led to an 'abnormality' of settlers, traditional peoples, and communities in the registration process as it hinders the registration of collective lands as well as their access to public policies (FIAN International 2020).

The squatter/landowner feels compelled to do this and has no difficulty because the new registry format has a low capacity for data verification and apparently little or no consequences for non-compliance, and takes advantage of the state's failure due to excessive data and uncertain verification 'at a distance' to inaugurate new digital enclosures over land, increasing rural violence and exacerbating land disputes. The entry of data and the transparency of this information are an important step on the road to the 'neoliberalisation of governance' by reducing control and increasing the possibility of negotiation. In this context, it is important to note that the 'neoliberalisation of governance' is a step towards a less punitive process with internal coercion and self-responsibility (Dardot and Laval 2016). What we want to reinforce here is the idea that if there is a neoliberal rationality, there are also neoliberal public policy instruments. The 2012 Forest Code legislation is less restrictive and beneficial to rural producers, alongside performing the function of collating a lot of information for international market chains. The legislation also demands transparency and seeks 'green' certificates that legitimise the circulation of commodities.

Registration in the CAR is mandatory and has a self-declaratory nature. It is the rural owner him/herself who declares the farm's native environment (Legal Reserve, areas of full protection). Once the registration is made, the cadastre is automatically activated, allowing the producer to access incentives and benefits provided by public policies, such as subsidised credit and land regularisation policies. The CAR's self-declaration policy has a low capacity for data verification and inspection by the state, bringing a large amount of information about Brazilian properties and possessions, but which does not necessarily resolve the environmental regularisation policy in an effective way. The auto-registration policy captures information in excess of its network, even if this information is not true and is not in the territory precisely because it is a 'virtual environment', where registrations are carried out without local verification on the property.

At the same time, traditional peoples and communities who have the right to self-determination and self-declaration to the state face major legal and political obstacles in demarcating their land, which weakens their struggle for collective rights and recognition of their identity, as they often must remain informal in relation to the state authorities. The number of ways to prove ownership using a record in the CAR system, including self-declaration of land ownership, is impressive. The paradigm of 'land chaos' has the ally of self-declaration and self-management as the

regulator of chaos itself. While the number of alternatives for 'suitable' tenure/ownership situations show the problematic land structure issues, it is surprising that the registrant can choose the property typology, that is, the registrant chooses which biome the property is in, thereby defining which type of legislation each property/ownership must follow.

Regarding the erasure of collective territories and the digital redrawing of land as private property through the CAR: by March 2019, only 6 per cent of the registrable territory or 34.5 million (m) hectares were declared as indigenous lands, *quilombola*¹¹ territories, and territories of traditional peoples and communities in the National System of Rural Environmental Cadastre (SICAR), although official data indicates that from only indigenous territories, there are 117m hectares or 13.7 per cent of the national territory (GRAIN 2020).

On the other hand, although the official government databases show that about 43 per cent of the country's territory is made up of private areas, they were declared private rural properties in the land registry of the National Rural Registry System (SNCR), 91 per cent of the national territory, an increase from one-third from 2016 to 2018, since the approval of the so-called 'Law of *grilagem*'.¹² According to GRAIN (2020), there are 9,469 settlements in the country covering an area of almost 88m hectares. Of the total settlements implemented since 1970, 5 per cent were consolidated in this period and only 15 per cent of the settlers received definitive titles to the land. More than 700,000 families do not have titles and therefore do not have access to public policies to stimulate production, such as rural credit.

The self-declaration of the biome directly affects the level of protection that the properties should have, as there are specific rules for APPs and RLs depending on the biome. Any rural property located in the Legal Amazon¹³ must maintain an area of native vegetation as a Legal Reserve of 80 per cent for properties in forest areas and 35 per cent for properties in Cerrado areas, without prejudice to the application of the regulations for permanent protected areas. It is striking that in this agricultural frontier between Pará, Tocantins, and Maranhão, even though the Amazon biome is mostly affected, registrants usually choose the transitional or Cerrado typology, taking into account the advantages of registering in the Cerrado biome, the consolidation of livestock farming in the region, and the historical deforestation starting from the chestnut plantations, creating new forms of appropriation of nature as well as lack of environmental and land protection (Rajão *et al.* 2020).

With less stringent environmental laws, the Cerrado is presented as a 'sacrifice zone' (Oliveira and Hecht 2016): rural producers have fewer legal restrictions and can declare themselves as landowners and claim ownership rights simply by completing

online forms; and grabbers and large agricultural producers have sought to register lands of the Amazon biome as 'Cerrado'.

With actions like these, the state adopts a policy of 'letting die', ceasing to act in areas with agricultural frontiers and high social and environmental value, and instead encouraging a policy of violence and acquiescence to speculators and land grabbers who act with the help of militias that exploit the loopholes in the legislation. In the current political scenario, the state promotes the looting of lands in order to deprive the areas of their properties and consequently decimates current sociological diversity.

The Pastoral Land Commission (Comissão Pastoral da Terra, CPT) database demonstrates that the most frequently murdered are landless people, land union leaders, and agricultural workers. The data recorded 110 landless people murdered between 1995 and 2020, with special attention to 18 people murdered by police in the 1996 Eldorado dos Carajás massacre, and another ten murdered by police in the 2017 Pau D'Arco massacre, both in Pará State; 88 land union leaders were murdered between 1985 and 2019 and in more than 30 different municipalities; and 59 agricultural workers were murdered between 1985 and 2019. This politics of violence plays a role in the Brazilian agrarian question, contributing to the process of the appropriation and looting of resources and land.

4 Conclusion

This article highlights the impact of the National System of Rural Environmental Cadastre (CAR) in the Cerrado and the Amazon, understanding self-declaration to be a strategy of misappropriation of nature and land, consistent with the concepts of land and green grabbing. Digitalisation and management technologies to control territories and regularisations are highlighted to favour and incentivise the expansion of the agricultural frontier and land grabbers. However, through the idea of self-governance, the self-declaration and georeferencing techniques of CAR appear to be 'silent alternatives' that entail mechanisms that open up new agricultural frontiers to the market, allowing public land to be opened up to the market, and even allowing registrants to choose in which biome their land ownership or property is located, which has implications for which regulations their land ownership/property should follow.

The process of state mapping can also be seen as a form of land appropriation and green appropriation, as the CAR maps the entire national territory and renders it visible through the self-declaration and georeferencing of rural properties. The CAR enables the appropriation of land and the measurement of impacts on nature for the ecological regulation of rural properties.

With less stringent environmental laws, the Cerrado is presented as a 'sacrifice zone', where grabbers and large agricultural

producers register lands in the frontier of the Amazon biome as 'Cerrado' to earn the benefits of the legislation or an undefined/transition biome zone land. Through the anthropology of public policy, we have sought to understand what happens in territories when technologies of power are triggered – in this case, the CAR – and to analyse how the state has regulated land appropriation and green grabbing as a new meaning of the appropriation of nature.

Notes

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- 3 José Sobreiro Filho, Professor, University of Brasília, Brazil.
- 4 Although not the focus of the article, agricultural frontier regions such as Pará and Maranhão are also hotbeds of slave labour and overexploitation of labour in commodity production chains, especially in the meat export chain. The cheapest meat on the world market is Brazilian meat, based on illegal land appropriation and very low wages (Brandão 2021; Lima 2019; Phillips and Sakamoto 2012).
- 5 The federal government is not disclosing data, despite a history of transparency since the beginning of the implementation of the CAR.
- 6 The Terra Legal Programme covers the states of Acre, Amapá, Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima, and Tocantins. The work of the programme consists of georeferencing, registering, legalising, and titling these areas (Lipscomb and Prabakaran 2020; Terra, dos Santos and Costa 2014).

- 7 According to the 2012 Forest Code, the Legal Reserve is a proportion of land that must remain native vegetation for the maintaining and restoring of ecological processes. The permanent protected areas are areas that must be preserved around water resources, riverbanks, water springs, and so forth.
- 8 PL 510/2021 proposes to amend Law 11.952 of 25 June 2009, which provides for the legalisation of occupations on land in state territories and other provisions.
- 9 See **Titula Brasil** website.
- 10 The Cotas de Reserva Ambiental (CRA) represents 1 hectare of native vegetation at any stage of regeneration (not necessarily forest) that: exceeds the legal minimum of the *Reserva Legal* (Legal Reserve, RL) of the property; must necessarily be traded on the stock exchange – to offset RL in the same biome or as a new environmental asset. In Brazil, the market on native vegetation aims to recover 175m hectares from RL (SICAR database), a market that will trade at least R\$9bn. Private properties registered with INCRA (SIGEF) and Terra Legal Programme areas can access the CRA, and represent 43.8 per cent of the national territory.
- 11 *Quilombolas* are peasants of *quilombo* remnant regions, which were communities formed by runaway slaves at the time of slavery in Brazil.
- 12 *Grilagem* is a Brazilian term that refers to land grabbing and the falsification process of public lands in historical and contemporary Brazil.
- 13 The Legal Amazon is a regionalisation based in the operation area of the Superintendency for the Development of the Amazonia (SUDAM). It is defined by nine states/provinces: Acre, Amapá, Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima, and Tocantins.

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