The production of development expectations and the pace of agricultural expansion: analysis of land-use practices by small farmers in northern Mato Grosso State – Brazil

A produção de expectativas de desenvolvimento e o ritmo da expansão agrícola: Análise das práticas de uso da terra por pequenos agricultores no norte do Mato Grosso

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Abstract
In recent decades, soybean has become one of the most important agricultural food crops worldwide. Brazil has been expanding its share in this market, especially since the 2000s when the soybean became its largest export in volume and occupied most of the farming land in the country. That occurred not only due gains in productivity but also through the expansion of mechanized farming into "new land" of the Brazilian Cerrado and Amazon biomes incentivized by countless public policies. The mid-north portion of the state of Mato Grosso greatly contributed to soybean reaching such position, particularly after the 1990s, when the crop experienced a boom in its expansion. As reported in several studies, the crop is predominantly developed in large agricultural enterprises. However, the areas where expansion is ongoing feature various agents – small farmers, squatters, workers, and agrarian reform settlers – who move to these "new lands" and take part in the process of social-ecological transformation motivated by personal and family expectations of achieving better living conditions and who, therefore, actively contribute to the "movement for land."

Keywords: Soybean; Modernization of Agricultures; Agricultural Practices.

Resumo
Nas últimas décadas, a soja tornou-se uma das culturas agrícolas mais importantes do mundo. O Brasil vem ampliando sua participação nesse mercado, principalmente desde os anos 2000, quando a soja se tornou sua maior exportação em volume e ocupou a maior parte das terras agrícolas do país. Isso ocorreu não apenas pelos ganhos de produtividade, mas também pela expansão da agricultura mecanizada em "novas terras" dos biomas do Cerrado e da Amazônia brasileira incentivados por inúmeras políticas públicas. A porção centro-norte do estado de Mato Grosso contribuiu muito para que a soja chegasse a essa posição, principalmente após a década de 1990, quando a colheita experimentou um boom em sua expansão. Conforme relatado em vários estudos, a cultura é predominantemente desenvolvida em grandes empresas agrícolas. No entanto, as áreas onde a expansão está em andamento incluem vários agentes - pequenos agricultores, posseiros, trabalhadores e colonos da reforma agrária - que se mudam para essas "novas terras" e participam do processo de transformação socioeconômica motivado pelas expectativas pessoais e familiares de alcançar melhores condições de vida e que, portanto, contribuem ativamente para o "movimento da terra".

Palavras-chave: Soja; Modernização da Agricultura; Práticas Agrícolas.

1. INTRODUCTION

In recent decades, soybean has become one of the most important agricultural food crops worldwide. Brazil has been expanding its share in this market, especially since the 2000s when the soybean became its largest export in volume and occupied most of the farming land in the country (WESZ, 2014). That occurred not only due gains in productivity but also through the expansion of mechanized farming into "new land" of the Brazilian Cerrado and Amazon biomes incentivized by countless public policies (HEREDIA; PALMEIRA; LEITE, 2010). The mid-north portion of the state of Mato Grosso greatly contributed to soybean reaching such position, particularly after the 1990s, when the crop experienced a boom in its expansion (DESCONSI, 2011; ALMEIDA, 2013). As reported in several studies, the crop is predominantly developed in large agricultural enterprises (FERNANDEZ, 2007). However, the areas where expansion is ongoing feature various agents – small farmers, squatters, workers, and agrarian reform settlers – who move to these "new lands" and take part in the process of social-ecological transformation motivated by personal and family expectations of achieving better living conditions and who, therefore, actively contribute to the "movement for the land."

In northern Mato Grosso, a number of these subordinate agents live in countless agrarian reform settlements created between the mid-1990s and 2000[1] and have furthered the occupation of land and incorporation of agricultural areas that have been in effect for many decades (DESCONSI, 2011). When wandering through the lands of this region, one can hardly distinguish in the landscape the lands of large agricultural enterprises ("farms") and the lands of rural settlements since soybean plantations prevail in both.

This paper aims to analyze how development expectations are produced that guide land-use practices by small farmers located in agricultural expansion areas in the northern portion of the state of Mato Grosso. Based on ethnographic data obtained during fieldwork between 2013 and 2017 in agricultural expansion areas and on information updated through contacts, social networks, and media of the region, the study seeks to examine the signs that activate or update their expectations regarding the ongoing social-ecological transformations in the region.

The region studied is located at the fringes of what has been, since the military dictatorship (1964-1985), conventionally called Legal Amazon. The landscape features dense forests typical of dry land in the Amazon biome, areas of the Cerrado biome, and transition areas (JOANONI NETO; GUIMARÃES NETO 2017, p. 147). The Cerrado vegetation is less dense than in the Amazon and is very similar to tropical savannas. In general, it has two tree layers: One formed by small and

[1] According to data from the National Institute of Colonization and Agrarian Reform (INCRA), 38 projects were created between 1992 and 2004 with 8,080 individual parcels, amounting to 554 thousand hectares in mid-northern Mato Grosso. It is estimated that over 90% of those lands were occupied by native vegetation of the Cerrado or Amazon biomes since their private owners kept the areas as a store of value up until the 2000s.

medium-sized trees (between 1 and 10 m) with twisted trunks and branches, thick bark, and hard and shiny leaves and the other comprising grassy-woody plants (FERNANDEZ, 2007, p. 120). In the 13 rural settlements studied, covering over 550 thousand hectares, soybean crops occupied, in 2015, between 80 and 90% of all land according to field data (DESCONSI, 2017, p. 25). Settlers plant soybean in areas between 70 and 300 hectares in a region where most agricultural enterprises consist of farms above 2,000 hectares (FERNANDEZ, 2007) and where some agricultural technicians and economists state 1,000 hectares as the minimum to achieve economic viability of this crop. These small farmers expected to become soybean producers by setting up modern farms when turning native vegetation into agricultural land.

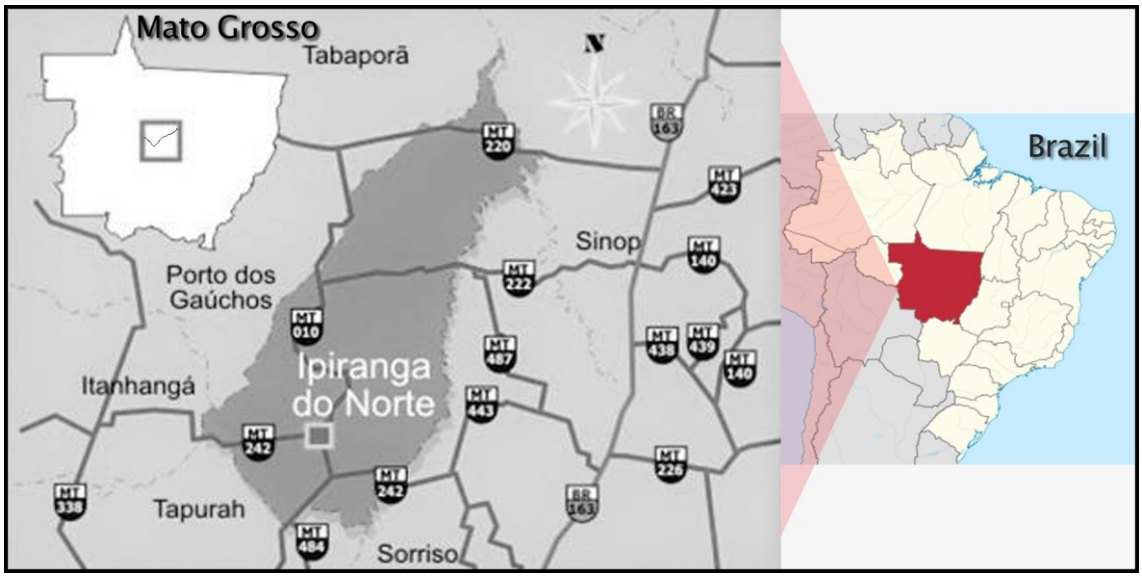

Figure 1 - Map of the location of the state of Mato Grosso in Brazil and the area of study within the state.
Source: Created by the author from IBGE maps.

Figure 2 - Areas defined as "new land" and "old land" and agrarian reform settlements.
Source: Created by the author from Google Earth image.

The expectations and transformations underway could be understood by mapping the networks of individuals who articulated around soybean crops and land expansion frontiers. Soon after the beginning of fieldwork, it was noticed that a significant part of small farmers in Ipiranga do Norte – who was completely involved in soybean farming – also had afoot at the Mercedes settlement, in the municipality of Tabaporã, where "soybean was coming." This circulation of settlers between "old land" and "new land" that marked the daily lives of many was not only physical by travelling the 140 km between the sites, but a journey between temporalities that reflects in land-use practices and production strategies adopted. In a way, in social universes such as this one, understanding the control of production should be based on the relation between more consolidated areas and those under agricultural expansion, with the remark that, in that context, the social relations interspersed through the two spaces were a prime condition for analysis. The approximation with some individuals based in Ipiranga do Norte – settlers or their family members – provided conditions to follow these operations between "old land" and "new land" while not delving on the relation between the past and the present, but based on two timelines in distinct geographic areas that are part of the same range of relations (DESCONSI, 2017, p. 23).

In order to expose the reflection on the matter, this paper is divided into three sections, in addition to the Introduction and Final Considerations. The first emphasizes the existence of a unilinear view on what one intends to build in the "new land," which is associated with the experiences by the agents of the "old land." I point out the prevailing narratives used to praise the expectations of "growth," translated into observable references such as the increase in urban clusters, the pace of deforestation, road building, people movement, the establishment of businesses, and the areas occupied by soybean crops. The second section details land-use practices from the viewpoint of small farmers. The qualitative attributes assigned to the land – "new" and "old" – are associated with the time of use, having as a starting point the native vegetation and the time of occupation, according to certain patterns. The set of tasks that comprise "land expansion," with the several activities that characterize it, not restricted to deforestation or slash-and-burn practices, are evidenced in this plane. The third section suggests the existence of activators of the pace of agricultural expansion through devices that emit signs that authorize, motivate, and legitimize or not small farmers to intensify their land-use practices. To that end, it presents examples of changes in environmental legislation and statements from politicians who intend to revise the demarcation of indigenous lands in the country.

2. MOVEMENT OF LAND AND MOVEMENT OF PEOPLE: PRODUCING EXPECTATIONS

In Brazil, several studies have shown there is a contingent of peasants and small farmers whose reproduction strategies are associated with the occupation of new land. Previous studies carried out in consolidated areas in mid-northern Mato Grosso found that the dynamic of "old land" was directly related to ongoing processes in "new land" (DESCONSI, 2011). It was not difficult to see that businessmen, farmers based in cities along the BR-163 highway, had business, investments, and land away from where they were headquartered. Likewise, peasant workers, who had limited space amidst the expansion of farms, could be found in villages and settlements in areas away from large agribusiness centres. Mapping, following, knowing the "new places," or, as frequently stated in local and regional media, "the new agricultural frontiers" is part of the daily life of anyone living in those lands. The sites where the "movement of land and people" is occurring and the possibilities that could be assigned to each individual inserted into this context are constantly assessed according to their conditions.

Understanding what is at stake in the agricultural expansion process requires examining the temporal perceptions of the several agents that take part in such occupation of areas. Their assessment of the pace of the social-ecological transformations underway in the so-called "new" areas is noteworthy. Ferguson (1999) considers that modernity seems to be a theological process, a movement towards a known final stop that would be nothing less than industrial modernity beyond general time. Although such point of view of Western modernity can be verified, studies carried out in this region suggest the model defining the expectations of most agents entail a territory composed of farms structured to produce soybean, corn, and cotton or cattle in modern enterprises that lay bases for the establishment of medium-sized urban clusters, with roadways designed even before any construction, marked by social segmentation and by an economy based on storage and low-value-added transformation allied with agricultural and livestock services (ALMEIDA, 2013). Joanoni Neto and Guimarães Neto (2017) note that this is a historical process of fabricating modernity in the Center-West and North regions of Brazil that persists being updated to this day by always indicating the existence of "new agricultural frontiers."

In Mato Grosso, it is easy to see that cities such as Sinop, Sorriso, Lucas do Rio Verde, and Nova Mutum serve as models and that the constitution and development of such modern societies will inspire the models for the occupation of land in agricultural expansion areas. Such cities are the result of occupation and expansion carried out over the past four decades and whose growth is indirectly linked to what happened in more isolated areas since they are centres of services for production chains that grow with the agricultural expansion into new areas. The term "agribusiness society" denotes that it is not the city, from the urban and industrial viewpoint, that informs the

agrarian space and makes it dependent, but, instead, it is the space of the farms and agricultural companies and their relations that produce the cities and the social relations they comprise. The cities, in turn, are directly aligned, through international corporations and financial and economic networks, with the international context (HEREDIA; PALMEIRA; LEITE, 2010).

Agricultural expansion assumes the existence of a "movement of land and movement of people all the time," as stated an interviewee. Associated with these models, each agent part of the movement that characterizes agricultural expansion harbours expectations of improving their social position, thus contributing to and enjoying the dynamics in effect at the new places. The native categories "idle," "slow," "accelerated," or "rapid" linked to oppositions of the "new" and the "old" constitute temporal categories employed by small farmers to refer to the pace of a "place" and are added to qualify private experiences by the individuals and family members in their life cycles and investment and business strategies (DESCONSI, 2017, p. 25). The native vegetations of the Cerrado and Amazon are perhaps the main indication of the lack of movement as a product of human action over nature. Thus, the existence of residents in the area and the tasks underway – such as deforestation, slash-and-burn, clearing paths in vegetation, the formation of small crop areas, opening roads – were some of the signs denoting human presence and some land movement.

In the "new land," the signs that indicate such development process is active must be identified, as well as the pace at which it may occur. In areas with predominant Cerrado or Amazon native vegetation, such signs are i) increase in the number of residents taking possession of land; ii) tasks such as deforestation, slash-and-burn, path clearing, and the formation of small crop areas underway; iii) opening of roads; iv) the construction of homes and other buildings; v) the movement of large farmers and prestige businessmen and their investments in the "new places." Such signs, among others, denote human presence and indicate movement over the land. Not by chance, an overview of what is occurring always incorporates a relational dimension regarding both a previous moment and the pace of the transformation that took place in areas where expansion occurred in past decades. "When we came here, there was nothing," as an interviewee reported. The reference to this previous time allows establishing the cognitive elements employed to locate oneself in a space perceived as "new," where "everything is to be done."

In the context studied, the Mercedes settlement (see Figure 2) was the concrete expression of what was understood as "new land." There, the most striking feature in the landscape was precisely the clearing of new land, advancing at a fast pace, with several areas already hosting soybean crops. Moreover, a "village" was present that was designed by the National Institute of Colonization and Agrarian Reform (*Instituto Nacional de Colonização e Reforma Agrária* – INCRA) based on the outline of the main streets and avenues, future commercial and residential areas, public buildings, etc. The growth of said village fed the expectation that the site could turn

into a medium-sized city as the surrounding land was transformed into soybean crops. In 2013, a settler, after observing the situation of the settlement and the village, stated: "This is just like Ipiranga some 12 years ago."[2] He, then, expressed his temporal perception, somewhat unilinear, of the development, using his own experience in Ipiranga do Norte, which had undergone a similar process a decade earlier, as a reference to classify the temporality of the "new place."

The expectations on the urbanization to be built "from scratch" entail a sequential movement of investment and real estate valuation incorporated into the practices by the agents. Such device not only guides their actions, in the sense of building homes and enhancing their parcels of land, for example but, rather, imposes social pressure on those who fail to follow the pace and practices carried out by most agents, as reported by a settler:

> Then, what happens,... the people who only bought a parcel and did not invest thinks they'll make money just by waiting for valuation without doing anything, but they don't. Why does the city value up? If you're my neighbour and you build a nice house next to mine, I get happy. If you're going to erect there a two- or three-story building, oh, my little house next to it is going to value up, of course. And what will I have to do? I have to improve mine or do something beside it. If you have land only with weeds and I turn mine all into a plantation, very quickly, you'll have to do the same to be at ease. That's how the city values up, and the place grows (Ademir, settler, October 27th, 2013).

To strangers arriving at that place, like us, people used to praise the expectations of "growth," translated into observable references such as the increase in constructions at the village (number of homes, new commercial establishments), the arrival of major producers from other regions, and the increase in the area occupied by soybean at the settlement. Concerning the latter, they proudly pointed out that, in the 2013 harvest, the warehouses of both firms installed at the settlement could not hold the entire soybean production.

The movement produced, characterized as "rapid" by the people heard, may also abruptly decrease or cease. The signs of optimism found during fieldwork in 2013 did not repeat in 2014, when we returned to the Mercedes settlement. Accountant and son of settlers Fabrício assessed to the researcher: "Nothing has changed." He manifested his outrage with the pace of the site, pointing out that only a single new building had been constructed since the previous year. It seemed a consensus among the several people contacted that, within that year, the settlement "had taken a break," which produced visible effects not only on the space of the "village," as Fabrício remarked but on the overall pace of the location, whose greatest expression was the slower clearing of land and implementation of crops. In addition to the end of the expectation of emancipation caused by a federal law that disallowed the creation of new municipalities[3], which weaned the hopes of the

[2] Laércio, Mercedes settlement (September 13th, 2013).

[3] In 2013, a bill was being discussed at the Federal Senate on the creation of new municipalities in Brazil. According to the rules proposed, the district of Nova Fronteira could request emancipation. However, changes to the project and

formation of a city at that site, settlers mentioned an operation by the Federal Prosecutor's Office and the Federal Police in the settlements of the region, particularly in the neighbouring municipality of Itanhangá, aiming to bust alleged fraud in the access to plots of land, as well as inhibit deforestation in those areas. Those actions limited for some time (two to three years) the pace of transformation of the vegetation and, consequently, the expectations over those lands. Note that deforestation, the suppression of woods and wetland, is understood as a basic condition for development as the product of work on the land, as reported by a settler:

> To open land, the poor get by only with their strength. In my case, it was the wife and me, and sometimes the boy helped. Here, if you go over to the other side of the settlement, you see the old man working, the wife, girl, boy, and also the kids who don't even go to school, four to five years old with a little bran and diesel setting fire to help. Then IBAMA (Brazilian Institute of Environment and Renewable Natural Resources) came and fined me at BRL 7 thousand. Then we had to have a TV filming to show people like that are heartless. Didn't INCRA give the land to work? Then you got to deforest and make your plantation. How can you work with the woods standing? (Laudemar, settler, October 17th, 2014).

It is not conceived, at least by some settlers, that we know of another way to work and ensure the development and sustenance of their families. Their perceptions of time will be explored in the next section.

3. NEW LAND AND OLD LAND: USE PRACTICES

In 2014, the region studied was located in the so-called agricultural expansion zones, which was occurring at different intensities and paces over new areas (BERNARDES, 2005; WESZ Jr, 2011). In this sense, the importance of time of land use increases as the practices and perceptions of the different social agents are structured in association with it. Thus, this section details land-use practices according to the perceptions of the group studied.

The qualitative attributes assigned to the land – "new" and "old" – are associated with the time of use, having as a starting point the native vegetation and the time of occupation, according to certain patterns. As a rule, land in Tabaporã, MT (see Figure 2) was considered by the interviewees "new land" in 2013/14 when compared with Ipiranga do Norte, referred to as "old land." The transit of small farmers between areas considered "new land" and "old land" has become visible as differences in the annual agricultural calendar and the pace of tasks linked to land use are identified. Figure 3 presents the annual calendar, based on a dataset, which highlights the specificities of social practices concerning land-use time.

In the areas where "old land" prevailed, the annual calendar was marked by moments defined by those heard as of "a lot of rush," who mentioned the beginning of the wet season

some presidential vetoes made the possibility of emancipation more strict, which frustrated expectations it would take place.

between September and October, when soybean crop preparations and planting were carried out, thus leading to a peak in labour required in the agricultural cycle. Those "rushing moments" intensified again by late January and throughout February, when both soybeans are harvested, and corn is planted. That allows defining that, regarding "old land," the wet season was marked by intense movement, in contrast with the dry season, when the pace of activities, particularly those developed directly in crops, decreased or ceased. In the "old land," the prevailing activities during the dry season referred to business and preparations for the coming agricultural cycles, centred around villages or cities.

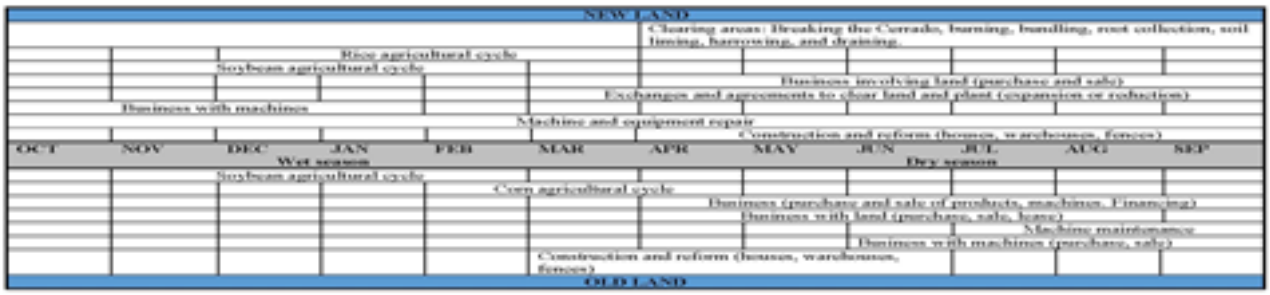

Figure 3 - Annual calendar in new and old lands.
Source: Created by the author based on field data.

Those characteristics help understand the daily life of most inhabitants directly linked to the activities in the agricultural calendar. Very early in the wet season, intense movement of people (usually men) was observed, with vehicles and machinery moving over for agricultural tasks or other purposes in the plots and farms. Such movement halted between 9 a.m. and 4 p.m. when the city streets were extremely calm. During the dry season, more intense circulation was seen in the firms, banks, retailers, and offices as the activities on the agricultural cycles of soybean and corn ceased throughout the region.

In the settlements examined, the prevailing crops were soybean, corn, and rice, especially the first two. Rice was found in "new land," usually during the first or second year of agriculture implementation, whether after opening new areas or after turning pasture into crops. Over time, the areas of rice crops decreased, and the product was effectively not seen in "old land." Corn was grown in the same area immediately after soybean harvest, although it did not occupy all areas available and many fields remained free of crops, particularly in "new land." The agricultural tasks linked to corn and soybean crops are identical and even the same machinery and implements, with small adjustments, are used.

The prevailing activities in "new land" extended throughout the annual calendar. The dry season, which entailed calm times in "old land" was, according to interviewees, the period of the greatest movement in "new land," especially due to the tasks related to clearing new areas. Thus,

the "rush" seemed more related to those tasks than to the agricultural cycles of soybean and corn themselves. That changed the year when machinery sales and/or the search for new land to "clear or plant" took place. Likewise, the labor needs changing over the year, intensifying during the dry season. The higher intensity of activities underway in the dry season ended up contributing to strengthening the perceptions that associated "new land" with movement and "old land" with "idleness," as reported in the previous sections.

When considering that the distinction between the annual calendars guiding the practices in "new land" concerning "old land" is related to the set of tasks that comprise the so-called "clearing of areas," it is worth detailing such activities. Box 1 presents the set of tasks and their characteristics based on information obtained in fieldwork.

Box 1 - Clearing of areas: tasks and characteristics.

TASKS	CHARACTERISTICS	
1. "Breaking" (the Cerrado)	Carried out with two tracked tractors 20 to 30 m apart. A heavy chain ("big chain") is extended between them. The tractors move together and the chain "breaks" and fells the vegetation.	Mechanized
2. Slash-and-burn	Burning the existing vegetation to clear the area.	Manual
3. Bundling	Carried out with wheeled tractors equipped with a "fork" in the front. It consists of piling up small trunks, branches, and roots in large bundles. Those "bundles" will be burned multiple times until they disappear.	Mechanized
4. Root collection 1	Consists of removing from the area all roots found after bundling. The task is manual and usually performed by groups of people who "collect the wood" and pile them up in bundles to be burned.	Manual
5. Harrowing	After the first root collection, heavy harrowing is performed to remove all roots still in the ground.	Mechanized
6. Root collection 2	Equal to item 4. Each time the ground is turned by tractors, roots appear that must be removed, piled up, and burned.	Manual
7. Bundling 2	Equal to item 3.	Mechanized
8. Harrowing	Equal to item 5.	Mechanized
9. Root collection 3	Equal to item 4. In general, two or three root collections are performed, with smaller amounts of roots in each.	Manual
10. Liming and chemical fertilizer application	Lime is spread over the soil to correct acidity. Next, harrowing is performed again in a "finished area" for the first crops.	Mechanized
11. Drainage (in wetlands)	In wetlands, the task of digging deep trenches to drain water is also carried out.	Mechanized

Source: Created by the author based on field data.

The task of "breaking the Cerrado" was usually carried out by hired specialized service providers, who have the heavy machinery needed. In areas where "dense forest" exists, the task of "breaking the woods" may be associated with selective felling of the thicker trees with the use of chainsaws. In the areas studied, loggers usually had already carried out this task in most areas near the Arinos River and around the Mercedes settlement.

The other mechanized activities used old small or medium-sized tractors. The slower the "area clearing" process, the fewer people had to be hired for this task. One or two men managed to carry out the mechanized tasks. For root collection, seasonal labour was hired, although, in many

cases, "area clearing" involved manual labour of only family members, especially among small farmers.

The information in Box 1 helps understand what is officially called deforestation. An area was considered deforested when it had undergone tasks 1 and 2 in the Box. When cattle farming was the goal, grass seeds were sowed after slash-and-burn and fences were erected around the area. It was observed that pasture sowing not always led to cattle farming in that area as the grass has a second purpose in "new land." Within a year with no grazing, the grass reached over a meter in height. That grass enabled more aggressive fire in the following season, which further limited the remaining Cerrado vegetation. It facilitated clearing the area, thus speeding up, with little effort or resources, the goal of taming the land.

It is noteworthy that the "area clearing" process was not always fully carried out, as shown in Box 1. Many areas were "broken" and "burned" and lied idle for several years. In this case, "passing the fire" was usually done once a year to prevent the regeneration of native vegetation. All areas that underwent tasks 1 and 2 in recent years were termed "degraded areas" or "degraded pastures," particularly by technicians, to justify the implementation of soybean and corn crops as devices to "recover" or "produce the soil."

The tasks of "area opening" were carried out between April and September, characterized by the lack of rainfall. That period facilitated performing tasks aiming to eliminate native vegetation. Turning the soil, collecting roots, and burning the entire area or only the bundles were hampered by wet weather. Furthermore, those months did not require labour in the crops.

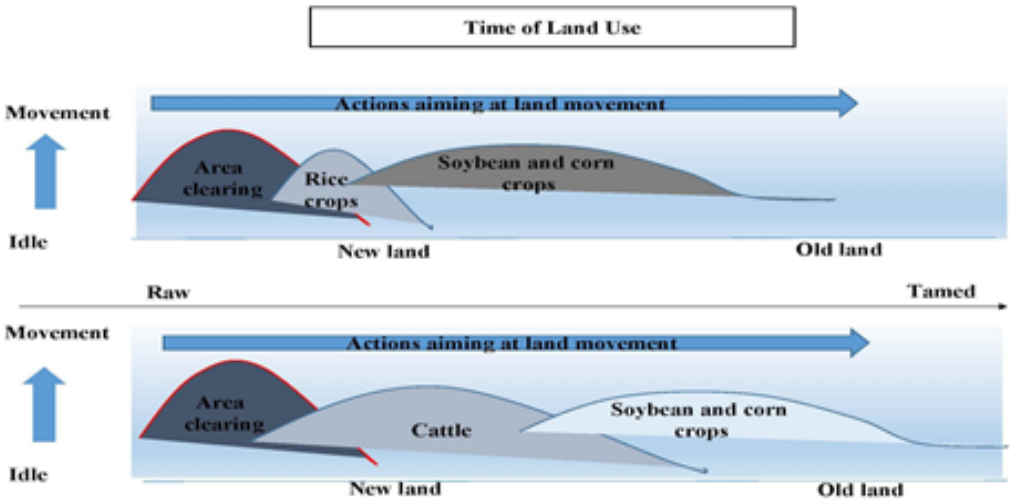

Figure 4 - Land-use time.
Source: Created by the author based on field data.

Figure 4 shows that, based on the perception of small farmers, "moving the land" through use practices is required. The area opening tasks consist of a sort of the first wave that generated

movement and took the land from its stagnate ("idle") and natural state. Next came the activities related to agricultural rice cycle, followed by soybean and corn crops. In many areas, cattle also played the role of generating land movement (see the second illustration in the same figure). Hence, the movement of each of these steps is more intense in the first years and then tends to decrease and stabilize. In any way, the act termed by settlers as "planting" was the way to maintain both new and old land in permanent movement.

"Raw land" was the term used for land that had undergone some type of human intervention on the native vegetation, such as i) Areas burned once or more times; ii) "broken" areas, i.e., where native vegetation was felled with two tractors and a chain; iii) areas with pasture amidst felled and charred trunks. The adjective "raw" brought along its opposite, "tamed," to refer to areas with over ten years of soybean crops. "Tamed" seemed to be more related to "old land," implying the time of mechanized agricultural production. The "new land" comprised the intermediate time between the "raw" and the "old." The area was called "new land" from the first year of agriculture to approximately the sixth or seventh year of uninterrupted use (also for cattle farming).

Great variation was seen between the pace of area cleaning tasks carried out by different social actors. During fieldwork in 2014, an area covered with native vegetation in a farm near the MT-010 road was seen. Precisely 30 days later, the entire area featured a rice crop, which suggested that, in under four weeks, all steps had been carried out. But, in the case of small farmers, despite variations in the pace and way the tasks were performed, the area clearing process took between two and five years. In general, during the dry season (preferably between April and June) the task of "breaking the Cerrado" was performed as that allowed the first "burning of the area" to be performed by the end of the dry season (August to September). In the next season, bundling, root collection, and harrowing were performed to have the land ready for rice sowing in the first months of the wet season. Since "breaking the Cerrado" or "clearing the woods" was usually performed by hired labour, many settlers executed the task at once in a larger area. For example, Mr. De Carli broke 60 hectares of Cerrado in a single event. The other tasks were carried out in just 20 hectares at a time. That means he cultivated 20 hectares of rice in the second year, 20 more in the third year, and the last 20 in the fourth year. Broken areas where the subsequent tasks were not performed experienced annual burning during the dry season to prevent the regeneration of native vegetation.

Such differences are related to the pace adopted (or that could be adopted) and to the control of resources (whether material or immaterial) available to small farmers. That means the differences are less related to the type and sequence of tasks and more to the way each settler carried each of them out.

4. ACTIVATORS OF AGRICULTURAL EXPANSION PACE

This section suggests the existence of activators of the pace of agricultural expansion through devices that emit signs that authorize, motivate, and legitimize or not small farmers to intensify their land-use practices. Governmental programs, bills, the discourse of government leaders, strategies by large companies and farmers, among others, are some examples of such activators. Two of the most relevant activators in the last decade are presented below.

i) Changes in environmental legislation: In Brazil, the agenda of rural producers, environmentalists, and society as a whole in the last decade pivoted around the new Forestry Code, changed in 2012. Since the matter was brought to discussions in 2006, the bill that would alleviate the norms then in effect activated deforestation since the proposal was to provide "amnesty" to the agents who had deforested Brazilian biomes in prior decades. The fieldwork between 2013 and 2015 found no large areas being deforested, but, instead, the subsequent tasks being carried out. The mere existence of a bill with more flexible norms generated expectations of faster agricultural expansion.

Between 2007 and 2010, with the expectation of "amnesty to deforestation" up until that moment, producers, settlers, loggers, and squatters took to the native vegetation areas and carried out the first two tasks in the area opening process. "Everyone opened it more or less; they passed the big chain or a tractor, or set fire; it laid more or less broken. Some even cast grass seeds."[4] In the next years, the landscape featured the subsequent tasks underway to conclude the transformation of land into large soybean crops. The areas were burned, with signs of clearing, but also with some grass. However, many areas were not used for cattle farming, which could be noticed by the lack of fences and animals. All these areas were exempted of environmental fines or the need for recovering the forest. They are the so-called degraded areas, which are today occupied by large-scale soybean crops. "Now, the folks are dealing with these lands they call degraded because deforesting the actual woods is not allowed anymore, but what is not woods anymore is." "Now, everyone is bundling and planting."[5]

A new moment of "authorization" comes between 2018 and 2019, when a process of destructuring the state norms and institutions used to regulate conservation units, extractivist reserves, and the environmental licensing process of infrastructure works, mining, and farming begins. Again, the indication that managers and authorities prioritize "production," agribusiness, and that the regulation that prevents expansion must be eliminated, the expectations of agricultural expansion are resurrected. The use of fire has become one of the main resources to speed up land movement. Areas impacted by fire, with little flora or fauna, lose their main asset that could

[4] Vilson, settler in Ipiranga do Norte (October 23rd, 2013).
[5] Idem.

delegitimize those who seek to continue land clearing tasks. “Since there are no more woods, now you got to turn it all into crops or pasture so that this land has any value.”[6]

ii) The discourse of revising indigenous land demarcation: The federal administration inaugurated in 2019 has already indicated it intends to revise all demarcations of indigenous lands done in recent years. In Mato Grosso, specifically in the Alto Araguaia region, politicians linked to farmers articulate for the area of the Xavante Marãiwatsédé people, former Gleba Suiá Missu, with an area of 165 thousand hectares, to return to the squatters there installed before their removal by the previous administration in 2012. That area had belonged to the indigenous people, but, during the military dictatorship in the 1970s, it was reclaimed by the federal government and assigned to businessmen and rural producers. Since the 1990s, it began being occupied by producers, loggers, and peasants who moved to the area in an occupation not officially authorized but never prevented.

Their removal in 2012 impacted the expectations of several social agents. It frustrated the settlers in the area of study, although they have located nearly 400 km from Gleba Suiá Missu. That is because, at that moment, the northeast region of Mato Grosso was pointed as the “new agricultural frontier” of the state and, indeed, many families of different social strata were moving to the region in search of “new land.”

At the same time, the removal was understood as a warning sign of what could occur in other areas that were being solicited by other indigenous groups in the state. Hence, moving into new land meant a great risk of legal possession not being assured over time. It is noteworthy that, historically, the principle that guides the occupation of expansion areas assumes action over the land to establish some type of presence of those who claim it (deforestation, home construction, habitation, etc.). The legitimacy of possession and use over long periods cannot be dissociated from the acknowledgement of the presence of land claimants or holders considered legitimate by the social group (BARROZO, 2010).

However, it must be considered that the very legal legitimacy in Mato Grosso has historically been based on the acknowledgment of possession through the presence of claimants by at least a year or residence and cultivation. The presence had to be acknowledged by the social group (neighbours and influent people living in the area) as proof in notary offices or before state organs (MORENO, 2007, p. 204). Therefore, the change in government in 2018 with a discourse against indigenous groups has served as an activator for the lands under legal dispute and being claimed by certain ethnic groups or even already acknowledged to be “invaded” by other social groups. It is important that the government may not carry out its project of revising land demarcations. However, it is public intent is fuel for the families in the settlements studied in 2013

[6] Statement of a settler (December 23rd, 2015).

and 2014 to be now installed in “new land” and living in direct conflict with the ethnic groups that seek to ensure control over their territory (MUELLER, 2012).

The indication by influent politicians regarding the possibility of revising demarcations served as an activator for settlers and small squatters (including in the settlements studied) to pounce on these lands since the historical practice of land occupation entails taking possession, moving to the area, and beginning the clearing cycle. This is the path that allows squatters to reach social legitimacy and, finally, claim their legal rights over the occupied land. Thus, even before any change in legislation, the effect was a movement of people who settled these assigned indigenous lands and started transforming the native vegetation. Through that, among other issues, they contribute to that environment not providing the same land-use conditions previously found. What calls attention in the two examples is their potential of generating expectations by agents, particularly among small farmers, of continuity and acceleration of agricultural expansion.

5. FINAL CONSIDERATIONS

It is not news that changes in legislation towards the use of land, forests, water, and mineral resources directly impact the social-ecological transformations in this region of the Cerrado and Amazon biomes. However, when it comes to the production of expectations as a principle that guides the actions of agents, one must reflect and observe these effects as deriving from a broader process that takes place, in most situations, even before the changes are enforced, remaining as bills not yet turned into law or even as intentions by politicians expressed in their public discourse.

It is concluded that agricultural expansion is not limited to the analysis of the growth of the planted area, but rather comprehends a movement of transformation and production of the social-ecological space, of specific forms of land occupation and use, and the construction of social relations. The meaning of the temporal categories of a specific social group allows questioning the subjectivity of agents and identifying their expectations as to what they intend to happen in the “new land”, and that contributes to establishing the pace and intensity of agricultural expansion in the region. It seems evident that there is a unilinear pathway of “movement” that constitutes agricultural expansion, whose variations are more associated with the pace and intensity with which they occur or will occur than with possible alternatives that could counteract it.

The agents that take part in such movement are alert to land and people movements while the signs simultaneously nurture the expectations of small farmers and turn them into agents of deforestation who take possession of the land. If the land does not allow for better living conditions for all, that does not mean a frustration of expectation, as suggested by Ferguson (1999). On the contrary, with a liberal spirit, the frustration is seen by individuals, their family members, and

related people as a sort of trajectory error that must be corrected by themselves or their descendants wherever the inherent movement of agricultural expansion is found. Hence, the frustrations contribute to nurturing the constant creation of new frontiers, which are presented to the agents as a "new opportunity" for those who shall become pioneers, success stories, trailblazers whose power is based on the farm as a structured land unit for the production of agricultural commodities.

Both in the past and the present, agricultural expansion never ceased to be invented. It is in that inventive process that expectations are produced, activators of movement are mobilized, and social-ecological transformation practices are carried out as a kind of more or less known itinerary towards supposed modernity. In the case of the Brazilian Center-West and North regions, the images of a form of occupation based on "modern" soybean or cattle farms become models of social and territorial units that shape the lifestyle, production of geographic space, social and economic segmentation ensured by cultural precepts, and, finally, the very type of urbanization to be built.

REFERENCES

ALMEIDA, L. S. **Gaúchos, festas e negócios:** o agronegócio da soja no Meio-Norte mato-grossense. 2013. Tese (Doutorado em Sociologia e Antropologia) - Instituto de Filosofia e Ciências Sociais, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2013.

BARROZO, J. C. A questão agrária no Mato Grosso: a persistência da grande propriedade. In: _____(Org) **Mato Grosso**: (re) ocupação da terra na fronteira amazônica (século XX). Cuiabá, EdUFMT, 2010

BERNARDES, J. Circuitos espaciais da produção na fronteira agrícola moderna. In: BERNARDES, J; FREIRE FILHO, O. L (Orgs.). **Geografia da Soja: BR-163 fronteiras em mutação.** Rio de Janeiro, Arquimedes Edições, 2006. p. 13-38.

DESCONSI, C. **A marcha dos pequenos proprietários rurais: trajetórias de migrantes do Sul para o Mato Grosso**. Rio de Janeiro, Coleção Sociedade e Economia do Agronegócio I, 2011.

_____. **O controle da lavoura:** a construção de relações sociais e a produção de soja entre assentados do meio norte do Mato Grosso. 2017. Tese (Doutorado em Ciências Humanas) – Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2017.

FERGUSON, J. **Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt**. Berkeley: University of California Press, 1999. 328p.

FERNANDEZ, A. J. C. **Do Cerrado à Amazônia:** das estruturas sociais da economia da soja em Mato Grosso. 2007. 262 f. Tese (Doutorado em Desenvolvimento Rural) – Faculdade de Ciências Econômicas, Universidade Federal do Rio Grande do Sul, Porto Alegre, 2007.

HEREDIA, B.; PALMEIRA, M.; LEITE, S. Sociedade e Economia do Agronegócio no Brasil. **Revista Brasileira de Ciências Sociais***,* v. 25, n. 74, p. 159-176. 2010

JOANONI NETO, V.; GUIMARÃES NETO, R. A. Amazônia e a política de Integração Nacional: o discurso da modernização entre o passado e o presente. Dossiê Amazônia, modernização e desenvolvimento. **Diálogos Latinoamericanos**, n. 26, p. 144-157, 2017.

MORENO, G. **Terra e poder em Mato Grosso:** política e mecanismos de burla 1892-1992. Cuiabá: EduUFMT, 2007. 312p.

MUELLER, C. C. 'Regional Development and Agricultural Expansion in Brazil's Legal Amazon: The Case of the Mato Grosso Frontier'. In: BAER, W. (Ed.) **The Regional Impact of National Policies:** The Case of Brazil. Cheltenham: Edward Elgar, 2012. p. 184-203.

WESZ JR. V. J. **O mercado da soja e as relações de troca entre os produtores rurais e empresas do sudoeste do Mato Grosso**. 2014. 220 f. Tese (Doutorado em Ciências Sociais) – Instituto de Ciências Humanas, Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro, 2014

_____. **Dinâmicas e estratégias das agroindústrias de soja no Brasil.** Rio de Janeiro, E-Papers, 2011. 142p.