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Seeding a Narrow Future and Harvesting an Exclusionary Past: The Contradictions and Future Scenarios of Agro-neoliberalism in Brazil

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Abstract: The prospects of agro-neoliberalism in Brazil are analyzed through a critical reading of tendencies, techno-economic strategies and political disputes. Qualitative information, obtained in successive fieldwork campaigns, was used to assess trends and structure uncertainty. Empirical data also helped to describe three future scenarios that oscillate between the continuation of current agro-neoliberal trends (facilitated by the appropriation of sustainability and innovation agendas), the return of strong state interventions or the decline and eventual collapse of the agribusiness sector (due to sanitary risks or politico-economic reactions). The overall conclusion is that it is difficult to envisage the emergence of any radical alternative focused on agrarian justice or the production of basic food. Alternative developments would require a strong coordination of national and international social groups and political will to construct a different future for farmers, consumers and wider society.

Keywords: agribusiness, Mato Grosso, future scenarios, soybean, lock-in future, colonial past

1. Agro-neoliberalism as the emerging force of agribusiness expansion

The article deals with the recent past of Brazilian agriculture, its current configuration and structural trends and, finally, some plausible future scenarios. This analysis is particularly relevant taking into account the need to feed and nourish a growing population, as well as the wide range of conflicting interests associated with the expansion of agri-food production and export (Ioris, 2015). There is growing understanding that the modernization and intensification of agriculture are key factors of modern-day capitalism (Busch & Bain, 2004). In particular, agricultural development has been affected by the transition to post-Fordist modes of production under the sphere of influence of neoliberalism (McMichael, 2009). That has been especially evident in so-called New Agricultural Countries, such as Brazil, that have occupied an increasing market share and now compete with traditional agro-exporting nations of Western Europe and the United States. To a large extent, it has represented a conversion of food production to agriculture as business (that is, agribusiness or commercial agriculture). One of the striking features of this debate is that, although agricultural production and productivity (OECD, 2016), as well as agribusiness activities (Alexandratos and Bruinsma, 2012) have increased considerably in the last few years, various problems still affect the reliability of food supply and undermine the food security prospect of rural and urban populations (Hubert et al., 2010).

Changes in government and market structures have been promoted under the promise of higher efficiency and globalized trade, but in that process existing and new contradictions seem to undercut the possibilities of fair development and a better life to all.

Here we offer a critical investigation into the implementation of neoliberal agricultural policies, using Brazil as a relevant case study, considered as the realization and culmination of the encroachment of capitalist relations of production upon agri-food systems. The need to feed a large, hungry population has been on the agenda of international development for many decades (see Borgstrom, 1969), although in the 1970s it became evident that the problem was not merely quantitative, but significant reforms were required (Rush et al., 1978). Since the end of the 1980s, the work led by multilateral agencies such as the World Bank has tried to reconcile agricultural economic growth and the reduction of rural poverty with incentives and institutional adjustments aimed to increase land productivity and the promotion of free trade and land markets (Pereira, 2015). Gradually, and related to wider politico-economic reforms, instead of pursuing ecological and collectivist strategies, the politico-economic circumstances favoured a neoliberalizing pathway, translated in processes ranging from adjustments of small-scale farming and local economies to the escalation of agro-industrial production, the monopolization of trade (upstream and downstream to the farm gate and the household), the widespread financialization of agriculture (including future markets and agriculture derivatives) and the subjugation of public policies to strong market pressures (Clapp & Fuchs, 2009). As a result, contemporary agri-food systems under neoliberalizing pressures are increasingly focused on short-term economic gains, land concentration, environmental impacts and the legitimization of political hegemonies at the expense of issues of nourishment and health (Shiva, 2004). Neoliberalism's influence on agriculture is a highly idiosyncratic phenomenon that combines free-market pressures and flexibilization approaches with renewed forms of protectionism, trade barriers and labour movement restrictions (Potter & Tilzey, 2005).

Agri-food has certainly become one of the most globalized sectors in the modern-day economy, as the production and consumption of products are now truly global affairs (Bonanno & Constance, 2008). Nonetheless, most of the critical literature on agriculture and neoliberalism has so far focused on the more readily identifiable features, such as the intensification of trade and financial flows or the evident influence of transnational corporations (TNCs), but left rather too implicit the geographical specificities and contested materialization of what can be described as 'agro-neoliberalism'. Although agro-neoliberalism is a sectoral expression of state and market reforms under the influence of flexibilization and financialization pressures (Harvey, 2005), it is necessary to further theorize and examine its consequences and ramifications. The

neoliberalization of agriculture is a contingent, place-specific convergence of various production and commercialization practices organized according to an ideological construct that privileges market-based policies and the intensification of capital circulation and accumulation without ever removing the state from the spheres of production, commercialization and legitimization. It largely follows the fetishism of free-market relations while at the same time perpetuates calls for state interventions aimed, for instance, to mitigate price oscillations and avoid over-production. More importantly, agro-neoliberalism seems to offer the prospect of a bright future based on the intensification of market exchange and rapid accumulation of capital. It is permeated by the promise of shared progress, while in effect it reinforces mechanisms of exclusion and exploitation. As the analysis below will show, the result is the contamination of the present with the mythic announcement, and tacit locking-in, of a future shaped by present day agribusiness.

In that challenging context, with new production areas and growing productivity, Brazil has consolidated its position as a global leader, and even as a 'model' of commercial, integrated crop production (Collier, 2008). Unlike other economic sectors (such as industrial activity and retail markets), neoliberal agribusiness is considered an island of prosperity and economic dynamism. It should be noted that, due to promotional campaigns and assertive public policies, the term 'agribusiness' has a particularly positive, and strategic, connotation in Brazil, where it is commonly used in reference to large plantation farms. More importantly, although the expansion of agribusiness has proved to be central to Brazil's participation in globalized markets, it has revealed a peculiar amalgamation of tradition and modernity, evolving through new social orders and old political structures. In practice, the sustained claims of the success of agribusiness have paved the way for the consolidation of the hegemony of agro-neoliberalism in the country, as a highly idiosyncratic phenomenon that evolved through numerous and innovative associations between the state apparatus and the national and international private sector.

The research project that informed our discussion, carried out between 2013 and 2015, comprised repeated visits to cropping areas, private companies, research centres, farming communities, attendance at public meetings and semi-structured interviews carried out in the Brazilian states of São Paulo and Mato Grosso. The focus was on the neoliberalization and intensification of agribusiness in Brazil, as an entry point into the politicized geographies of globalized agri-food and into the complexity of agro-neoliberalism at national and sub-national levels. What follows in the next pages is a space-sensitive assessment and theorization of social relations and socio-economic trends across different scales and times, which, according to Callinicos (2007), should concentrate on the main dimensions of power, especially economic activity, ideologies and various patterns of political domination. The study particularly considered

the emblematic situation of Brazilian agribusiness and particularly its evolution in Mato Grosso, in the Centre-West region, which since the 1990s has become one of the main hubs of agro-neoliberalism in the world. From being a region with relatively low levels of isolated economic activity, Mato Grosso is now at the core of national economic life and plays a key role in Brazilian exports and global agri-food markets.

Our fieldtrip campaigns were particularly concentrated in the main soybean production areas in the Upper Teles Pires River Basin, around the main cities of Sorriso, Lucas do Rio Verde and Sinop, in the north of Mato Grosso. The research included prospective visits to farms, government agencies and private companies, followed by formal interviews and follow up discussions. It also involved spending time in the farms interacting with landowners, their families and farm workers. The aim was to contrast the perspective of different stakeholder groups, such as long-term residents and new arrivals, small- and large-scale farmers, policy-makers and private company managers, social and biophysical scientists (especially at Embrapa, the national agricultural research facility) and representatives of economic sector and organized civil society. Two sets of questions were prepared, one for national players in São Paulo and one for farmers and local authorities in Mato Grosso (all participants in those two groups were asked the same questions about the process of change, about risks, conflicts and difficulties, and about impacts, possibilities and prospects). With the help of local academics, interviewees and informants were identified, initial contacts were set up, and the research then followed a snowball approach. Based on preliminary information, a database was developed to guide further interviews, documentation analysis and the collection of background information. With the mapping of sectors and organizations, their discourse and stated aims, it was possible to compare intra- and inter-group differences and the range of alliances or disputes. Interviews were complemented with analysis of documents, statistics, websites, leaflets, presentations and newspaper articles found in university libraries and in the archives of public agencies and private entities.

The information and the material accumulated through the research were then used to build future scenarios of agribusiness and agro-neoliberalism in Mato Grosso. The goal here was to produce a foresight study that takes a systematic look at the future in order to draw conclusions about current problems and subtle tensions (as suggested by Schwab et al., 2003). It is consistent with the observation by Bourgeois (2016) that futures studies in agriculture should focus on social and political forces as potential sources of discontinuities, paying particular attention to food insecurity and addressing ruptures and discontinuities rather than simply trends. That also meant developing a critical analysis of long-term developments and considering

the likely barriers to shape a more democratic and inclusive future at local and national levels. The next pages contain a qualitative analysis of existing policies, the influence of previous experiences and macroeconomic assumptions influencing the future of the agricultural farming sector. In addition, scenario analysis was employed as a tool for dealing with complexity and uncertainty, which requires a methodical and internally consistent approach for building narratives about the future of food and agriculture (Dijk, 2012; Giaoutzi et al., 2012). The approach used here also followed the observation of Folhes et al. (2015) that most scenario studies in the Amazon have been limited to deforestation trends at a broad scale and less is known about communities and the exercise of authority. In the present case, future scenarios informed the assessment of factors that are rarely included in the discussion about agro-neoliberalism in Mato Grosso, such as sustainability and justice. Dias et al. (2016) further emphasize that scenarios can help to reveal the key role of territorialized processes and social, political and environmental aspects of agriculture and the rural economy. Finally, a foresight process helps to understand ongoing transformations and expose the inadequacies of policies and the demand for better, more inclusive agriculture production systems (Maggio et al., 2016). It is to the contentious experience of agro-neoliberalism in Mato Grosso and in South America that we now turn.

2. The present and the recent past of Brazilian agro-neoliberalism

Brazilian agriculture has famously evolved, since colonial times, through the strategic association of export crops and staple food produced by subsistence farming, as a politico-economic compromise dominated by powerful rural elites in strong alliance with the apparatus of the colonial and, later, national state (Oliveira, 2007). Agricultural modernization and rural development received an important stimulus during the twenty-one year military dictatorship (1964-1985), with the incorporation of different forms of capital, new methods of production and the formation of agro-industrial chains along the lines of the so-called 'Green Revolution' (Gonçalves Neto, 1997). Priority was given by the authoritarian governments of the time to national-developmental policies inspired by Keynesian ideas; these policies involved fiscal incentives, subsidized credit, efficiency measures and the integration of farming and industry (Delgado, 2012). Crop production was promoted by the federal government throughout the country (Oliveira & Stédile, 2005), as an 'anti-agrarian' reform that further concentrated land ownership and reinforced old agrarian trends. The transition to agro-neoliberalism in the 1990s happened because of the insufficiencies of developmentalism (led for several decades by a highly

interventionist state) and also to benefit from the new opportunities opened by market globalization.

After achieving remarkable rates of production growth in the 1970s, the state-centralized mode of agricultural intensification started to show serious limitations, particularly as Brazil was suffering from a public debt crisis, escalating rates of inflation and macroeconomic instability. The Brazilian agriculture sector went through a period of turbulence and uncertainty beginning in the mid-1980s, due to the reduction of support schemes (e.g. guaranteed prices), significantly higher interest rates and a paucity of bank loans. That prompted the transition to what is described by Campanhola & Graziano da Silva (2000) as a 'new rural model', characterized by higher levels of agroindustrial integration, more direct intervention from large corporations (including production funding) and multipurpose technologies. This new model was directly associated with neoliberal reforms to the state and economy during the 1990s. Inflation reduction and macroeconomic stabilization policies – known as the Real Plan, launched in 1994 and maintained by President Cardoso (1995-2002) – strengthened the national currency, the real (R\$), and facilitated agro-industrial imports, while at the same time creating circumstantial barriers to the export of Brazilian goods for most of the decade (Ioris & Ioris, 2013). A serious trade imbalance, together with higher interest rates, led to a temporary reduction in agricultural profitability and a lowering of land prices; nonetheless, it also paved the way for the advancement of agro-neoliberalism as an alternative strategy for the revitalization of national agriculture. Production of crops for export was also encouraged by more favourable exchange rates following the 1999 devaluation of the Brazilian currency and by extraordinarily favourable commodity prices in global markets during the early 2000s (Richards et al., 2012).

The speedy recovery of Brazilian agriculture, following neoliberalizing priorities, was enabled by a combination of public and private measures (Petras & Veltmeyer, 2003). The state remained firmly in charge of rural development (Schneider, 2010), but at the same time forged close partnerships with an ever-stronger private agribusiness sector. Since then, both transnational (Monsanto, ADM, Bunge, Cargill, Dreyfus, etc.) and new national corporations (Amaggi, BR Foods, JBS, Marfrig, etc.) have played an increasingly decisive role in terms of policy planning and efforts to grow business. Under the populist, neo-developmental administrations of Presidents Lula (2003-2010) and Dilma (2011-2016), agro-neoliberalism became, paradoxically, more deeply entrenched and represented a dialectical return to some of the state-led policies of the military, but adopted within the neoliberal frame. The main consequence is that in the last decade, while national exports fell significantly due to deindustrialisation and an overpriced currency, agribusiness exports maintained an impressive

growth. Agricultural exports in 2013 reached a value of US\$ 99.97 billion (4.3% more than the previous year) with a net surplus (i.e. minus imports) of US\$ 82.91 billion (including US\$ 30.96 billion from soybean exports alone). In 2014 the trade balance showed the worst performance since 1998 (a deficit of US\$ 4.036 billion in 2014, according to the MDIC database) with agribusiness appearing as one of the few sectors with positive foreign exchange results. The country continues to depend on the financial performance of agribusiness (Valor Econômico, 2017) and, according to the electronic page of the Ministry of Agriculture, in 2016, Brazilian trade produced a surplus of US\$ 47.683 billion only because of the contribution of agribusiness (the sector produced a surplus of US\$ 71.307 billion and the rest of the economy had a deficit of US\$ 23.624 billion).

The results of neoliberalized agribusiness were enhanced by supplementary rural credit offered by official banks (with annual interest rates of around 5%, significantly lower than the standard rates offered by commercial banks). As a somewhat surprising, but integral, element of agro-neoliberalism, public credit increased from R\$ 15 billion per year in the 1990s to R\$ 133 billion in 2013 and R\$ 156 in 2014 (O Estado de São Paulo, 2014). Nonetheless, such public funding was overwhelmingly directed to the agribusiness sector, despite the discourse that aims to please both agribusiness and family farming. It should also be mentioned new public-private alliances (that replaced previous forms of collaboration), techno-economic modernization and the reinvention of developmentalist discourses by populist administrations in order to justify neoliberalizing policies and prevent opposition. An interesting demonstration of legitimization strategies is the appropriation of environmental goals by the agribusiness sector, as in the case of the Low Carbon Agriculture Programme [*Programa ABC*], launched by the federal government in 2010 to fund the recovery of degraded pastures, cattle-crop integration, forest plantations, etc. Another example is the significant proportion of rural credit that has been provided by transnational corporations and by a massive increase in bank-like transactions, instead of the conventional forms of subsidized rural credit provided by state-owned banks. Since the early 2000s, various new financial instruments have been available, such as self-financing, financial cooperatives, input supplier companies and trading companies, filling the gap created by the inadequacies of previous federal government-administered schemes (Serigati, 2013). A notable illustration of the widespread financialization of neoliberalized agriculture was the 2004 legislation that created the Agribusiness Receivables Certificate (CRA), among other titles traded on the São Paulo stock exchange. The CRA is a registered credit instrument which links a future payment in cash to the debt claim issued by the securitization company.

Fuchs et al. (2013) argue that neoliberalized agribusiness logically entails, among other adjustments, the increasing use of financial instruments and the pervasive financialization of the agri-food sector. In the case of Brazil, the increased financialization of crop production and distribution affected not only the relations of production, but directly transformed the nature and destination of what is produced. Government investments in agriculture-related infrastructure and technological development have become more selective, targeting primarily biofuel and export commodities (Bernardes, 1996). Related to policy adjustments, there has been a partial replacement of the previous North-South trade priority (especially with the European Union) with a growing South-South interconnection, particularly between Brazil and Asia (FIESP, 2008). Soybean is by far the most important agricultural commodity in Brazil and the 'soybean complex' accounts for 80% of agricultural exports to China. Soybean is not only an emblematic symbol of Brazilian agro-neoliberal modernity and of the success of production reorganization.

An intriguing aspect of the ideological construct of the success of agro-neoliberalism is a tendency to systematically blame the government for both large and small adversities (while attribute most of the success to the 'bravery' of the private sector). Despite the fact that agribusiness is in the pockets of transnational corporations – in terms of financing production and acquiring most of the goods produced – farmers often call on the state to correct market failures and, in bad years, to provide bailout funds. Most farmers tend to accept the legitimacy of corporations and focus their criticism on the state for excessive social and environmental regulation or for its inability to understand their needs. A key concern in the region, repeated in many of our interviews, is 'logistics', which means a demand for improved and more reliable means of transportation. In the main production areas in the Centre-West of roads are every year affected by tropical rains, aggravated by the heavy traffic load. Agribusiness farmers have repeatedly attacked the federal government for insufficient investment in roads and, in particular, exerted pressure for privatization, which led to 851 kilometres of the federal motorway BR-163 transferred to a private operator (Odebrecht, a company heavily involved in corruption scandals revealed through the Operation Car Wash [*Operação Lava Jato*] carried out by the Federal Police and the Public Attorney Office), following the public-private collaborative strategy of President Dilma's administration.

Although farmers complain about the price of road transporting grains from the central Brazilian states to the international ports in the southeast of Brazil (around R\$ 330 or US\$ 110/ton), transportation has not undermined the profitability of soybean or the perennial search for new, more distant production areas further afield. One main reason for this is that logistical

difficulties have been overcome with inexpensive land in new agricultural frontiers in the centre and north of the country, abundant natural resources and cheap labour (it should be noted that even though agribusiness farms pay higher median wages than other comparable economic sectors, the labour-to-capital ratio is markedly low). The rate of cropland area per employee increased significantly between 1970 and 2006 and, because of heavy machinery, it is now possible to cultivate very large tracts of land (many thousands of hectares in some farms) with a handful of permanent and temporary workers. This is obviously part of the extraction of surplus value, and mitigates the increasing tendency to acquire capital in the form of additional farmland (Ioris, 2016). This is undeniably a demonstration of the neoliberal nature of present-day agribusiness, which aims to produce more and more food, energy and raw materials using less and less labour (Moore, 2010).

3. Near-developments and some surprising trends of agro-neoliberalism in Mato Grosso

Considering the trajectory of agribusiness, briefly discussed above, Brazilian agro-neoliberalism has evolved through an intricate process of economic gain and aggressive modernization intermingled with systematic attempts to conceal strategic alliances between populist authorities and market-friendly ideologies. The sector has maintained steady rates of expansion not only due to constant technological improvements (e.g. new agrochemicals, genetically modified seeds and more sophisticated machinery and digital equipment), but also because of further land grabbing and incursion into new production areas (Borras et al., 2012). The result is a paradoxical combination of circumstantial profitability and positive results with mounting socio-ecological risks and power concentrated in the hands of corporations and rural political leaders. The overall impacts and repercussions of the agro-neoliberal experience in Brazil can be summarized as four basic ‘near-future developments’, that is, possible prospects largely determined by the present (excluding unforeseeable) events and circumstances.

First, despite positive results in terms of increased production, financing and commercialization, the success of neoliberalized agribusiness has left the country dangerously over-reliant on primary commodities and on the appetites of distant markets. On the one hand, Brazil has become the main global exporter of soybean. On the other hand, the Brazilian economy has faced progressive deindustrialization, increased dependence on foreign investments, and rising imports of intermediate inputs and capital goods. After the 2008 global financial crisis, the dependence of the Brazilian economy on the success of agribusiness extended even further as the export of agricultural commodities became the ‘green anchor’ of the

economy. While agribusiness grew proportionally less than the national economy in some years, its contribution to the national surplus (in dollar terms) remained critical.

Second, while the difference between export and import values is dwindling in Brazil and even tending towards a negative result, the surplus (gross income, i.e. total exports minus total imports) produced by the agribusiness sector is positive and constantly growing. One of the most perverse consequences of the steady expansion of agribusiness surpluses is that the activity of the contemporary Brazilian state, which combines neoliberalizing priorities with elements of populism and neo-Keynesianism, itself depends on agriculture to help manage the monumental public debt (around US\$ 1 trillion in 2015) and to sustain politically relevant welfare-related programmes (such as the important cash transfer scheme known as *Bolsa Família*). The subaltern insertion of Brazil into the globalized economy, beyond the rhetoric of ‘emerging markets’, is fraught with inequalities and tensions (Burity, 2008).

Third, the positive economic results produced by agribusiness have served to unify the interests of rural conservative groups and renew processes of political hegemony and class domination (Bruno, 2009). Because of its political significance, the agribusiness sector has actively managed to protect its interests, especially with an organized and prominent presence in the National Congress, where around one third of the senators and deputies belong to, or support, the Parliamentary Farming and Cattle Raising Front [*Frente Parlamentar da Agropecuária*].

The fourth ‘near-future development’ is related to the fact that there have been growing tensions between global commodity chains led by Brazilian agribusinesses and social, grassroots movements that call for corporate responsibility, environmental protection, quality food and labour rights (Wilkinson, 2011). However, due to the vital role played by agribusiness in maintaining macroeconomic stability, and thanks to the political legitimization of populist governments, the sector has managed to secure increasing regulatory concessions (such as more flexible labour and forestry legislation) and its political capital has served to mitigate bad publicity generated by environmental impacts and the regressive social agenda advanced by representatives of agribusiness. Systematic campaigns orchestrated by representative entities (for instance, the Brazilian Agribusiness Association, the Brazilian Confederation of Agriculture and Livestock, and the Federation of Industries of the State of São Paulo) have tried to counter the prevalent image of large-scale farmers as perpetrators of injustice against small-scale farmers and indigenous groups and as major contributors to environmental damage in old and new production areas.

The Brazilian region where the controversies related to agro-neoliberalism are most evident is the State of Mato Grosso (henceforth ‘MT’), where more than half the economy is

now based on agribusiness. The intensification of agriculture in the state since the 1990s has revealed an idiosyncratic fusion of old habits and new, market-centred approaches, employed by the agribusiness sector in an attempt to consolidate the agriculture frontier (initially opened in the 1970s). The neoliberal frontiers of agriculture in Brazil have become 'export oriented farming areas' with a distinctive influence of farming organizations since the 1990s, especially in terms of environmental regulation (Brannstrom, 2009). During our research it was possible to verify that agro-neoliberalism is being applied in the localized context of farms and regions, but management, technologies and trade relations increasingly happen in accordance with globalized, transnational interactions and priorities. However, what is still missing in most available publications is a critical examination of the achievements, failures and prospects of agro-neoliberalism at the geographical frontier of agribusiness; the goal of the next section is to provide such an examination.

The reconfiguration of the patterns of agricultural production in MT constitutes an emblematic example of the articulation of public and private agendas that shape agro-neoliberalism. MT, in the hinterland of Brazil, is one of the most active areas of agricultural production for export in the world today, representing the culmination of the rural frontier fostered by the government over the past few decades. Since the post-World War II years, MT's state government has been selling large plots of relatively cheap land (typically around 200,000 hectares) in order to secure revenues to run the public sector and to compensate for the limited financial support received from the federal authorities (Moreno, 2007). The agrarian transition took a new turn during the military dictatorship, which intensified the occupation of new areas in MT through the construction of roads (e.g. the motorways BR-163 and BR-364), warehouses and other related infrastructure. Direct federal interventions prompted a number of colonization projects in the 1970s and 1980s, which attracted thousands of small farmers and landless labourers from the south and northeast of Brazil.

Despite the enthusiasm of the newcomers, the first two decades of the new agriculture frontier could be hardly considered a success. On the contrary, farmers struggled to produce due to the lack of adapted technology, insufficient preparation for different agro-ecological conditions, difficulty selling their products and erratic government support (Barrozo, 2010). Technical and socio-ecological barriers faced by the new farmers coincided with the national economic crisis of the 1980s, when the government ran out of cash and defaulted on its payments. Many had to leave MT, either returning to their original home states or moving further into the Amazon region. The late 1980s and early 1990s was a period fraught with turbulence and uncertainty about the future of the agriculture frontier. Crucially, it was through

the reinvention of the agriculture frontier along the lines of agro-neoliberalism that production managed to recover and ended up expanding at an unanticipated pace. MT has been the main producer of soybean in Brazil since 1999. Interestingly, the relentless increase of soybean production in the state was initially underestimated in most public and private projections, which did not anticipate the measures taken to overcome technical, economic and socio-political difficulties (Warnken, 2000).

The celebrated success of agricultural recovery in MT is the result of a convergence of the determination in the farming sector and their political influence, the renewed interest of transnational corporations in the region, favourable commodity prices and, critically, the growing macro-economic importance of crop exports for the national balance of trade. That has required the affirmation of a complex institutional pattern, in which continuity and change operate at different scales – farm, state and nation – and combine old patterns of socio-ecological exploitation with modern production and well-crafted justification approaches. On the one hand, continuity is related to the concentration of agribusiness in the hands of MT's large proprietors. Agrarian inequalities only exacerbate tensions relating to the ethnic origins of different groups of farmers. While the symbolic component of agribusiness is praised by political and economic leaders (most of whom have German and Italian heritage) as the belated redemption of the region from a past of isolation and backwardness maintained by a (non-white) regional population, there is evidence of racism, escalating hostilities and harassment of subsistence farmers and landless groups seeking to legalize their land. Mato Grosso was the state with the second highest level of rural violence in Brazil in 2014 (a trend that has persisted for many years), with 30 serious incidents involving 1,618 families, as well as six cases of water-related conflicts (CPT, 2015).

On the other hand, the agribusiness sector has demonstrated a great ability to dilute and deny its responsibility for mounting negative socio-ecological impacts. While neoliberalized agriculture maximizes the use of fossil fuels, biotechnology and agrochemicals, it also necessarily has to respond to environmental concerns and customer expectations (Otero, 2012). In MT the response has come in the form of a belated fondness for claims of sustainability and ecological modernization. The association of soybean producers published a bilingual booklet, *On the Road to Sustainability*, which emphasizes the environmental consciousness of soybean producers, citing in particular the concentration of production in savannah areas (rather than in the Amazon forest) and the adoption of integrated technologies. According to the association, “there is a strong correlation between soybean yield and macro socio-environmental indicators, such as the Human Development Index (HDI). The ten cities with the largest soybean production have rates

above the state and the country averages” (Aprosoja-MT, n/d: 11). In this way, agribusiness in MT has tried to reinvent itself as an environmentally sensitive sector, deeply concerned about the impact of its activity on the wellbeing of wider society.

The surprising ‘environmental turn’ of the agribusiness sector has been accompanied by a search for national and, crucially, international recognition. In a talk at a workshop in the Wilson Center in Washington DC on 04 December 2008, the then governor Blairo Maggi (2003-2010) provided a textbook defence of Mato Grosso’s ecological prerogatives. Leader of a family business established by his father a few decades earlier, when the clan moved from the south of Brazil to Mato Grosso, Maggi is the owner of one of the largest soybean companies in the world, responsible for around 5% of the total amount of soybean produced in the country, and increasingly involved in large public infrastructure, transnational trade and financial services. (Maggi was elected senator in 2010 and eventually replaced Senator Abreu in May 2016 as the new Secretary of State for Agriculture of the Michel Temer government.) At the Wilson Center, Maggi used his training as an agronomist to explain how technology helps to protect the environment, talked about the risks of anthropogenic climate change and the need to act “not because of the environmentalists, but because the scientists are now telling us the urgency and relevance of such issues”.

Maggi articulates a passionate defence of market-friendly solutions, especially the role of payment for ecosystem services, carbons markets and the Reducing Emissions from Deforestation and Forest Degradation (REDD) scheme. “We must find a way to ensure that forests are more valuable standing than destroyed”, said Maggi (Wilson Center, 2009: 2). Governor Maggi stressed the urgency of creating such a mechanism. “Global warming has been scientifically proven; we no longer have the right to ignore climate change”. The appropriation of environmental claims to serve business and political interests is also evident in Maggi’s trajectory as a congressman. After becoming a senator in 2010, Maggi was one of the main advocates for the reform of the Forest Code, which was eventually approved in 2012 after a lengthy controversy and with detailed regulation introduced in 2014. The aim of the reform was to flexibilize the previous requirement to maintain a certain percentage of the natural vegetation on rural land. The reform means that it is now possible to compensate for deforestation on a rural property with another forested area elsewhere, which in practice ‘creates’ more cropland. The rationalization of socio-environmental regulation has followed specific economic interests and the logic of agro-neoliberal policies. It reveals the ‘agro’ being transformed and reshaped according to a powerful business rationality, which, as argued by Oliveira (2003), reproduces and

invigorates outdated features from previous stages of the long trajectory of the Brazilian capitalism.

4. Future scenarios of agro-neoliberalism in Mato Grosso

The evolution of agro-neoliberalism in Brazil, and particularly in MT, has been permeated by undeniable achievements in terms of the expansion of the areas under cultivation and the increasing circulation of capital. Under the influence of a neoliberalizing platform, the sector is now one of the pillars of the national economy and the main driving-force of the Mato Grosso economy, particularly because of the export of soybean to Asian countries (Ioris, 2017). At the same time, the success of agribusiness is also counterbalanced by the extension of social and ecological impacts, the violence associated with the consolidation of the agricultural frontier and the need to constantly justify the concentration of land and opportunities. Considering the evidence available and the reaction of those contacted during the research, it is possible to expect that the evolution of the agro-neoliberalism in MT will either maintain its current trajectory of intensification and high profitability (possibly with the mitigation of the most evident impacts through the adoption of new technologies and the enforcement of the existing labour and environmental legislation), require more determined state interventions to mitigate mounting tensions, or that the sector will gradually decline with a reduction of productivity and production areas (possibly due to higher costs, phytosanitary risks or logistical difficulties). It is obviously not possible to predict what will happen in the next decades, but the development of neoliberal agribusiness will certainly unfold according to the balance of power and other socio-ecological factors that simultaneously, and contradictorily, attempt to either promote or restraint crop production. If no significant problems occur, and given the macroeconomic relevance of primary exports for the Brazilian economy, agribusiness activity tend to retain its decisive position; however, there are signs of a growing reaction and discernible sources of risks that can also impose major difficulties for the persistence of current trends.

The majority of our interviews revealed this central dilemma between the accomplishments and the limitations of agro-neoliberal trends in Mato Grosso. Some respondents emphasized the negative aspects, while others were clearly impressed by the economic and social transformation of the region. Taking into account such diversity of opinions (note that the interviews had specific questions about current conditions and possible future developments) and the characteristics of an economic sector that depends so heavily on the cultivation of a few crops (soybean, cotton and maize, in special), it was possible to summarize the future of agribusiness in Mato Grosso under three main scenarios with a time horizon of 8-

16 years (over the next one or two presidential mandates, including re-elections after 4 years), considering key reinforcing processes and potential disrupting events (also in Table 1):

Scenario 1 – Expansion and consolidation of agro-neoliberalism

Because of the profitability and favourable prices in global markets, the production of soybean and other crops has continued to expand, though at lower rates than earlier when it reached 6% a.a. The sector managed to overcome the reduction of government funding and difficult market situations (as in the year 2005) through a successful mobilization of political forces, strategic alliances with transnational and national corporations (which are increasingly responsible for financial support), and the adoption of new technologies (such as genetically modified soybean and more efficient machinery). The agribusiness industry of Mato Grosso has occupied an important space in the environmental debate and appropriated the rhetoric of sustainability – although through a highly technocratic and non-political angle – what has helped to improve its image nationally and internationally. Instead of fighting the environmental regulators, the agribusiness sector has claimed to obey and to be a major ally of those concerned with ecological conservation. A stronger and less controversial agro-neoliberalism has echoed the calls for innovation and sustainable development put forward by Alegria (2005), which was considered an impetus toward greater collaboration between groups and organizations in more constructive and spirited ways. At the global level, it corresponded to the New Vision for Agriculture, defined by World Economic Forum partners in 2009, as technological and institutional adjustments sufficient to increase agriculture by 20% per decade until 2050; according to this vision, the main strategy was the leveraging of market-based approaches through coordinated efforts by all stakeholders, including farmers, government, civil society and the private sector.

Scenario 2 – Return of strong government interventions

This second scenario is actually a variation to the previous one, given that the apparatus of the Brazilian state has never really left the stage. On the contrary, the state remained the main player of agriculture production and regional development, as well as the main promoter of neoliberalizing policies, such as the integration with global markets, support to individual farmers and the privatization of roads and infrastructure. However, it was possible to envisage that because of acute market turbulence, reduced appetite of transnational corporations for the region or strong political pressure by the agribusiness community the state were again required to exercise more leadership and intervene more directly. As demonstrated in the global report

published by McIntyre et al. (2009), the state could resume its developmentalist role if necessary to overcome difficult situations and to coordinate efforts of different groups and sectors. That was proved indispensable particularly when local or national political groups questioned the political settlement that underpins the growth of agribusiness in Mato Grosso. In any case, such periods with stronger state initiatives did not necessarily cancel the wider evolution of agro-neoliberalism, but represented a correction of excesses and transition to a new phase.

Scenario 3 – Containment and decline of agro-neoliberalism

Contrasting with the previous scenarios, the internal contradictions and negative reactions to the elitist basis and uneven development of agro-neoliberalism in Mato Grosso (see Vieira et al., 2014) led to its weakening and even collapse. Similar disruptive situations had happened before in the environmental history of Brazil, as in the case of rubber, cocoa and (in recent years) orange production. There were many phytosanitary and environmental risks associated with the cultivation of large extension of land with a single crop and, in the case of soybean, almost a single variety of genetically modified plants. The biological vulnerability of monoculture were greatly aggravated by climatic changes that resulted in pronounced droughts, more intense rains and hotter growing seasons. In addition, there were unresolved and widespread conflicts in the main production areas of Mato Grosso related to land tenure, demands of indigenous tribes and uncertain conservation reserves. Those tensions re-emerged and intensified when new roads and hydropower schemes are proposed, which have been a regular occurrence (especially because of the attempt to reduce transportation costs through the improvement of roads and river navigation, as well as the construction of hydropower projects to respond to local and national electricity demands). Related to local disruptive events, national and international pressures for the reduction of deforestation, for a more stringent environmental regulation and for agro-ecological alternatives contributed for the decline of the agribusiness appeal.

Table 1 about here

The above three main scenarios – as narratives or images of the future – were developed independently, but these have important points of convergence with some of the scenarios developed by the Global Scenario Group (see Raskin et al., 2002) or comparable exercises, as the one conducted by Bourgeois (2015). Such international experts tried to envision possible directions of global change through a detailed assessment of key driving-forces, quantifiable

indicators, critical barriers and also desired outcomes (as in the case of a transition to higher levels of sustainability). The final report summarized their findings under three classes of scenarios, namely Conventional Worlds (no major changes in current market and policy trajectories), Barbarization (problems are not managed and crises are amplified) and Great Transitions (involving profound transformations of values and the organizing principles of society). Those overarching classes are further expanded into six scenarios, of which three seem to have relevance to the interrogation of the future of agribusiness in Mato Grosso. One is the scenario 'Market Forces' which is optimistic about market-based solutions and is fundamentally related to the self-correcting logic of competitive markets; this is closely connected with Scenario 1 described above, that is, the continuous expansion of agro-neoliberalism. A second scenario put forward by the Global Scenario Group is 'Policy Reform' which entails stronger policy guidance and renewed government actions; this has correspondence with Scenario 2, which describes the return of direct interventions by the state apparatus.

Finally, the international report presents a future scenario described as 'Breakdown', basically the collapse market forces and the systemic failure of government initiatives, leading to conflicts and fragmentation. This last scenario has disturbing parallel with Scenario 3 above, which projects the rapid decline of agribusiness in Mato Grosso due to mounting management contradictions and the barriers offered by nature. It is an aim of the scenario community to determine which scenario is more likely (Öborn et al., 2011), but perhaps it should be pointed out that, since the early days of conquest and exploitation, the Amazon region has been marked by violent transformations shaped by mercantile dynamics and the exploitation of its socio-ecological features (Little, 2001). If the experience of the past four centuries can be used to speculate about the future, it may be possible to expect that in the next decades neoliberalized agribusiness in the southern Amazon region, as in Mato Grosso, would be compromised and perhaps collapse due to its intrinsic vulnerabilities and the impossibility to harmonize clashes and tensions through market or state mediation. This third, distressing scenario will essentially be the actualisation, through the advance and downfall of agro-neoliberalism, of this long-lasting tradition of violence against local peoples and their socionatural relations that has long marked the geography of the Amazon.

5. Conclusions: The frontiers and the prospects of agro-neoliberalism

The previous pages discussed the transition from the Fordist-development intensification of agriculture in the post-World War II decades to a post-Fordist, agro-neoliberal model of agribusiness production since the 1980s in Brazil. Based on the evidence, it can be concluded

that this transition follows the introduction of new forms of public-private association, novel forms of socio-ecological exploitation and the suppression of alternatives to hegemonic agribusiness production. The Brazilian experience illustrates how agro-neoliberalism flourishes in a context of market-centred solutions and regulatory flexibility, but also that it demands novel forms of government support and relies on some of the oldest political traditions (e.g. aggressive manipulation of party politics, lack of transparency, deceitful claims of progress and elements of racism). The image of success is daily reaffirmed by sector representatives and endorsed by the national government in its effort to gain political support and maintain the export revenues generated by agribusiness. The various techno-economic innovations adopted by agribusiness players – including land and gene grabs, biotechnology and genetically modified organisms, dispossession of common land, financialization and administration of production by TNCs – are all strategies that emerge from business and political interactions, which combine old and new features of the capitalist economy. The result is a nuanced and highly contested situation that connects, often in unexpected ways, different scales, sectors and public policies articulated around agro-neoliberalism.

Taking into account the complexity of achievements and failures, it is possible to verify that the true extent of agro-neoliberalism's success is highly questionable. The problems associated with the neoliberalization of agriculture include a lack of access to affordable, nutritious food; the impacts of agro-chemicals on communities and ecosystems; and the enormous concentration of power held by a small number of mega-supermarkets and agri-food corporations to control food production, distribution and consumption. While the neoliberal agribusiness sector has succeeded in crafting a positive image of technological and economic success, the federal government and the wider business community have become highly dependent on the export of primary commodities (to safeguard the national currency and avoid trade deficits, for example). Agro-neoliberalism evolves not only through attempts to influence the government, but also through further modification to the structure and rationale of the state. As part of this turbulent and controversial process, new production areas are being incorporated with the employment of old and new practices of socio-environmental management and political legitimization. It is particularly in agricultural frontier areas, such as Mato Grosso, that the rationale of agro-neoliberalism is used to combine populist and neo-developmental traditions in order to disguise mounting impacts and inequalities. Ironically, when facing criticism from other social forces in the country, the agribusiness sector reacts with a pre-established rhetoric of heroism and entrepreneurialism that, in the end, serves the corporations and national politicians more than the farmers themselves. Agro-neoliberalism has been especially successful at the

agriculture frontier because it is in itself an economic, ecological and ethical frontier, in which interpersonal and intersectoral relations have a particular configuration and impose undemocratic measures due to the primacy of production and the emphasis on rapid capital accumulation.

The first of the three future scenarios examined above – synthetically generated from the information acquired during the research in the country – suggest that agribusiness can continue to expand and further consolidate its influence as a strategic economic sector. This scenario echoes the current trend of growing soybean exports, conversion of pastures into monoculture grain fields and concentration of opportunities in the hands of large-scale farmers and associated transnational corporations. It basically represents the affirmation of a pre-cooked future that is politically used to justify the distortions and inequalities of the present. This mythical future, which is prearranged according to the opportunities and conveniences of agri-neoliberal agendas, has locked-in the narrow, anti-ecological production system. Furthermore, the rhetorical and material practices of agro-neoliberalism in Brazil represent the promise of a future that can never be fulfilled, as it brings back the worst features of the past (including legacies of slavery, over-exploitation of labour and resources, socio-ecological degradation and systemic violence used as a political tool). In the context of this scenario it is difficult to envisage the emergence of any radical and genuine alternative that privileges social justice and the production of basic food. It seems that the two other plausible scenarios either comprise the return of more direct state interventions (to some extent, maintaining elements of agro-neoliberalising trends), or the collapse of agro-neoliberal agribusiness due to environmental and social tensions. Any other development would require a strong coordination of national and international social groups and political will to construct a different future for farmers, consumers and wider society. The future is wide open and will necessarily unfold according to complex social and socio-ecological interactions and to the evolution of the balance of power. Nonetheless, if in the end something like the first scenario prevails, it will be a disturbing demonstration that, because of the serious impacts of agro-neoliberalism in Brazil, the country will continue to harvest its exclusionary past and will be planting a narrow future for most.

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Appendix

The empirical data used for the development of the scenarios and overall analysis were obtained during three fieldwork campaigns conducted between 2013 and 2016, which comprised repeated visits to cropping areas and plantation farms, private companies, research centres and indigenous and subsistence farming communities, as well as attendance at public meetings and semi-structured interviews carried out in the city of São Paulo (where the representatives of the main agribusiness entities, social movements and corporations are based) and in the state of Mato Grosso (in the municipalities of Cuiabá [the state capital], Rondonópolis, Sinop, Cláudia, Campo Novo do Parecis, Porto dos Gaúchos, Juína, Lucas do Rio Verde and Sorriso). Two sets of questions were prepared, one for national players in São Paulo and one for farmers and local authorities in Mato Grosso (all participants in those two broad clusters of social groups were asked similar questions about the process of change, about public policies and the negotiation of conflicts, and about impacts and future trends, although the wording of the questions differed according to the national or regional geographical focus). With the tacit help of local academics, interviewees and informants were identified, initial contacts were set up, and the research then followed a snowball approach. With the mapping of sectors and organisations, their discourse and stated aims, it was possible to compare intra- and inter-group differences and the range of alliances or disputes (ranging from those strongly against to others fiercely in favour of the prevailing agri-food system among agribusiness farmers, subsistence farmers, urban populations, agro-industrial entrepreneurs, policy-makers and politicians, representative agents, and the general population). Semi-structured interviews were complemented with analysis of documents, statistics, websites, leaflets, presentations and newspaper articles found in university libraries and

in the archives of public agencies and private entities. Interviews and other qualitative material were transcribed, coded and assessed in Portuguese (only the extracts reproduced in the book were translated into English). Empirical data were analysed, searching for evidence of the configuration and advance of agro-neoliberalism, rhetorical and material manifestations of power relations, and signs of problems, tensions and subtle evidences of change.