



## Amazon, Frontier and Protected Areas: dialectic between economic expansion and nature conservation

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Abstract: The territorial dynamics of the frontier in the Brazilian Amazon region indicates that land and natural resources continue to be incorporated into the mechanisms of capital accumulation. This process has largely spread into Protected Areas (Conservation Areas and Indigenous Lands), reaching natural spaces and traditional territories inhabited by indigenous peoples and Amazonian communities. Thus, the expansion of the frontier in the south of the state of Amazonas is analyzed, in view of the pressures of the Government and extractive economies to convert Protected Areas into a space of capital. Such expansion is not supported solely by economic agents and society, but has the Government as the main inducing agent. The results indicate an increase in deforestation and disruption of the environmental policy, configuring the restructuring of the frontier.

*Keywords:* Amazon; Protected Areas; Traditional Communities; Territory.

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#### Introduction

For seven decades, there have been records of more incisive public policies applied to stimulate the economic growth of the Brazilian Amazonia (1960/2020). These government actions directed the region to the production of commodities, converting its exuberant nature into a field of accumulation and primitive accumulation of national and international capital.

The environmental impacts and deterritorialization gained national and international scales. In the 1990s, the Brazilian Government assumed a posture directed to environmental conservation and preservation and of acknowledging the Amazonian traditional territories, responding to the pressures of international organizations, of social movements, environmentalist groups, research centers and universities. The government started to adopt nature conservation mechanisms in the ambit of public policies, especially as regards structural initiatives applied to Amazonia, as exemplified by the Our Nature Program (1988), which prioritized the territorial planning of the region by institutionalizing the Socio-Economic-Ecological Zoning and by reducing the high level of deforestation (BECKER; EGLER; 1997; KOHLHEPP, 2002; MELLO, 2006; BECKER, 2007).

The governmental effort meant to adapt the extractive productive/economic activities to nature conservation, as far as possible. However, in the context of capital reproduction marked by the globalization stage, two conflicting conditions are perceived: the (i) growing expansion of the agricultural frontier has a direct effect on (ii) the frailty of the Protected Areas (PA). Supposedly, the establishment of APs was believed to be able to restrain the drive of the economic flow for land and natural resources. Yet the frontier is characterized by the incorporation and transformation of nature into assets of the agricultural, industrial and financial capital, eroding the pacts and territorial planning in force when these were perceived as barriers to the bases of regional development (BECKER, 2007; COSTA SILVA, 2018). Such contradictions are evidenced in the south of the state of Amazonas, a region gradually being converted into expansion of the frontier.

Therefore, this article discusses the expansion of the agricultural frontier in Eastern Amazonia, specifically in the south of the state of Amazonas, where there are areas institutionalized in Conservation Units (UCs¹) and Indigenous Lands (TIs). It is an Amazonian sub-region comprising seven municipalities hit by the flows of extractive economies in recent years. The restructuring of the frontier in the south of the state of Amazonas is analyzed, together with its territorial elements related to the the Government initiatives and those of economic groups, and their impacts on the Protected Areas (Conservation Units and Indigenous Lands). In this case, there is a central contradiction in the Government initiative: concurrently with implementing an environmental policy in Amazonia, it fosters the destructive economies of these protected spaces.

The methodology adopted here is supported on a qualitative approach centered on the study into the agrarian territorial dynamics, frontiers, environmental conservation and socio-territorial conflicts, added to the field works and direct observation in the study

<sup>1 -</sup> The Brazilian abbreviations were not translated; the original abbreviations were kept.

area, documental and mapping analysis. For this, the geographic area encompasses the municipalities of the south of the state of Amazonas (Figure 1). The mapping works were operationalized from geospatial data ("shapefiles") from the databases of the Brazilian Institute of Geography and Statistics (IBGE), Chico Mendes Institute for Biodiversity Conservation (ICMBIO), National Department of Mineral Research (DNPM) and National Institute for Spatial Research (INPE). From this set of information, we elaborated a geospatial database, by means of the Geographic Information System, integrating geospatial information of the Protected Areas, which encompass both Conservation Units and Indigenous Lands, with information regarding deforestation, applications for mining areas and hydropower plants. These procedures allowed organizing the data into qualitative information, so as to build an interpretation of the territorial configuration of the frontier of Amazonia.

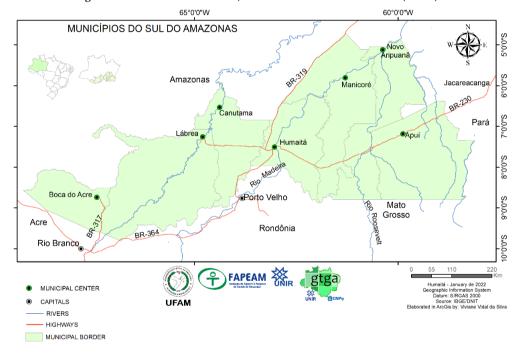


Figure 1: South of Amazonas, location of the area studied (2020)

Source: IBGE/DNIT/IBAMA; Organization: the Authors.

For a better systematization, the study is divided into four parts: i) the transformation of Amazonia is qualified as an agricultural frontier; ii) we then discuss the environmental policies as a possible reversal of the frontier; iii) next indicating the formation of the new agricultural new agricultural frontier in the south of the state of Amazonas; iv) problematizing the contradictions in the logics of the extractive economies and of the

environmental policy manifested in the region studied, following with indications in the final considerations.

### The transformation of Amazonia into an agricultural frontier

The economic development and the migration of people in the Brazilian Amazonia were more marked as from the 1960s, when a set of territorial policies of the Brazilian Government allowed the intensive exploration of the natural resources in the region, configuring it as a national and international capital frontier (BECKER, 2007; MELLO, 2006; COSTA SILVA, 2018). In that period, under the auspices of the Government, the region turned into a frontier of mercantilization of nature, causing environmental impacts that currently keep affecting the regional peasantry, the indigenous peoples and the traditional communities in their different traditional territories (MARTINS, 1997; PORTO-GONÇALVES, 2001; CONCEIÇÃO; RIBEIRO, COSTA SILVA, 2019).

During the Military Dictatorship (1964/1985), Amazonia was structured as an agricultural frontier by applying developmentalist occupation policies and territorial integration. The I National Development Plan (PND 1970/1972) generated means for expanding the economic frontier in Brazil, prioritizing the Central-West, Northeast and North regions. Within the PND, the Program for National Integration (PIN), established by Decree-Law No 1106 of June 16, 1970, provided the construction of roads and agricultural colonization, which were concentrated in the states of Rondônia, Mato Grosso and along the BR-230 (Transamazônica) highway. At the time, the territorial policies were composed of a mosaic of structuring projects formed by the Program for National Integration (PIN), Program PolAmazonia, Programs for Integrated Rural Development, Program Great Carajás and, in the democratic period (following the Dictatorship, started in 1985), the projects Advance Brazil and Growth Acceleration Project (KOHLHEPP, 2002; CASTRO, 2005; BECKER, 2007; WANDERLEY, 2016).

In this context, the agricultural colonization was a strategic territorial policy, especially as an alternative to the agrarian reform demanded by the social movements, pari passu the expansion of agricultural areas, a process that configured Amazonia as a spatial reserve for capital reproduction. In the II PND (1975-1979), by means of lavish tax incentives to the large agricultural companies, the Government also guaranteed private colonization – to medium and large land owners - and adopted the productive occupation strategy in Amazonia, with a marked action in Mato Grosso. The tax incentives managed by SUDAM – the main governmental agency – allowed the large agricultural, mineral and agro-industrial projects to insert the mercantilization of nature in the region as the rationality of the new society then being formed by the migration of people. These new migrants of colonization, mainly coming from the states of São Paulo, Paraná, Santa Catarina, Rio Grande do Sul, Minas Gerais and Espírito Santo, populated Mato Grosso, Rondônia and the southeast of Pará, obtaining from cattle breeding, timber extraction, land market and later agribusiness (soybean and corn) the economic nexus of social reproduction on the frontier, "disharmonized" (COSTA SILVA, 2022). from its very beginning.

Fifteen regional poles were established at the time, counting on improvements in

infrastructure, besides financial and human resources from PolAmazonia. By means of the II PND, the federal government planned to recompose the Brazilian economy after the imbalances caused by the international crisis, such as the oil crisis in 1974, opening the region to intensive fluxes of exploration of nature (MELLO, 2006).

These productive and territorial strategies met their objectives as regards national and international companies, to the extent that they provided capital accumulation, intensifying socio-territorial conflicts among the different social subjects involved in the integration projects. Areas occupied by traditional communities were pressed and displaced by the new subjects of the frontier, such as the large rural land owners and their practices of land grabbing in public lands, using contract killing. As regards indigenous peoples, the conflicts and invasions in Indigenous Lands (TIs) turned more frequent, and one of the most severe conflicts was known as the Massacre do Paralelo 11 (Parallel 11 Slaughter), which occurred in 1963, causing the death of 3,500 Cinta Larga, poisoned by arsenic, in the Roosevelt indigenous reserve, on the border of the state of Mato Grosso (BRASIL, 1968).

As a result, environmental degradation and socioeconomic inequalities were expanded, since the region was configured as a resource source for foreign economic flow, particularly marginalizing the rural population in their multiple territories. Therefore, in the late 1980s, the discourses regarding the environmental problem were intensified; their concern with nature conservation and preservation, to a large extent, were incorporated in the public territorial policies in the region. One of the relevant results was the implementation of the Program Our Nature (Decree 96,944/88), an important instrument for reducing the environmental impacts and for imposing order on the occupation, together with sustainable economic exploration in the Legal Amazonia.

In the ambit of the Program Our Nature, there was an increase in the debates regarding territorial ordination and the instrumentalization of the Socio-Economic-Ecological Zoning, serving as a modern mechanism of environmental conservation and territory management. Also defined were the Government attributions in the environmental sector, with the establishment of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), the National Environment Fund (Law 7,797 of July 10, 1989), the National Environment Program, with external support from the International Bank for Reconstruction and Development - IBRD, the establishment of new Conservation Units (UCs), the National Center to Prevent and Combat Forest Fires (Prevfogo) and the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (MELLO, 2006).

From the environmental debates at international scale, particularly ensuing the II United Nations Conference on the Environment - Eco-92 or Rio-92 - the environmental issue was steadily incorporated to the public territorial policies of the country, with a marked action in Amazonia. Along this trajectory, at least two opposing fields of economic projects active in the region were crystallized incorporating nature in different ways. The indigenous peoples, traditional communities, environmentalists and part of the traditionally Amazonian peasantry advocate the protection of nature and of the tra-

ditional territories in their socio-economic projects as ways of collective life; in turn, the agricultural, mineral, hydropower, industrial capital, added to part of the migrant society, advocate an intensive economic relation with the extraction of natural resources, with a consequent deterritorialization of the Amazonian peoples, a process currently updated by the agribusiness (RIBEIRO; COSTA SILVA; CORREA, 2015).

# The reverse of the frontier: environmental policies and territorial protection in Amazonia

Taking into account the contradictions of the economic development, the federal government, together with the organized society and international organizations, implemented the Pilot Program to Conserve the Brazilian Rain Forests (PPG-7) in 1990. This was an initiative of the world's largest developed economies (The Group of Seven or G-7) and of the World Bank. The aim of PPG-7 was to reduce the rate of deforestation in Amazonia, starting from five lines of action: experimentation and demonstration of activities that sought to conciliate environmental conservation and development; conservation and establishment of Protected Areas; demarcation of indigenous lands; consolidation of public institutions accounting for environmental policies; scientific cooperation and research. As to the environmental issue in the ambit of o PPG-7, the major contribution can certainly be attributed to the establishment of the Socio-Economic-Ecological Zoning and of new priority strategies and policies, focusing on the deforestation arc (Central Amazonia) and on the integration axes (Eastern Amazonia).

Even though the ecological, environmental sustainability and sustainable development perspectives have influenced the parameters of public policies, the territorial policies in Amazonia kept following a political agenda of the global economy, of the transnational capital, ensuring a new way of production introduced by the market globalization (AN-TONI, 2010). In this sense, Decree 1,541 of June 27, 1995, which regulated the National Council of Legal Amazonia, according to Madeira (2014), was the "model" for inserting Amazonia in the "competitive insertion model".

The Brazilian government policies provided in Decree 1,541/95 which integrated the Pluriannual Plans in Fernando Henrique Cardoso's administration (1996/1999) were the Brazil in Action Program and Advance Brazil Program (2000/2003), the National Axes of Integration and Development (ENIDs) being the reference of regional ordination in Brazil, with dramatic territorial impacts in Amazonia, taking on a strategic function to integrate areas of Brazil with South America. Hence, the integration axes became the Brazilian government basis for the "competitive insertion model", influencing all the other government programs (MADEIRA, 2014).

Under Lula's administration (2003/2010), Amazonia was rethought in the ambit of the Sustainable Amazonia Plan (PAS), keeping the previous territorial and environmental policies. In the Plan, launched in 2008, the goals presented were the consolidation of the sustainable development model, combating environmental degradation processes, establishing guidelines for territorial ordination and environmental management, besides integrating territorial ordination policies with sustainable development policies (BRASIL,

2008).

In the ambit of o PAS, the government forwarded the Action Plan to the Prevention and Control of Deforestation in Legal Amazonia (PPCDAm), which congregated the Ministries of the Environment, Defense, National Integration, Ministry of Agriculture, Livestock and Food Supply, among others. In Stage I (2004-2008), the Plan had relevant guidelines, such as the valuation of the forest for conservation and sustainable use, land and territorial ordination to combat the grabbing of public lands, establishment of conservation units and homologation of indigenous lands. Stage II (2012-2015) counted on the addition of shared decentralized management of public policies, in a partnership among the Federal, State and Municipal governments, stimulus to the participation of different sectors of the Amazonian society and incentive to the commitment of productive sectors to the conservation of forests (MELLO; ARTAXO, 2017). Under PPCDAm, new APs were established and the Near Real-Time Deforestation Detection System (Deter/INPE) was implemented, contributing to reduce the deforestation rates between 2002 and 2012. The APs were thus incorporated in the territory ordination and planning as an instrument for nature conservation, environmental protection and formation of traditional territories.

The PPCDAm still underwent two more stages and, in 2020, the fourth stage was concluded. The current government seems to have discontinued the program by launching the National Plan for Controlling Illegal Deforestation and for Recovering the Native Vegetation, nevertheless without concrete actions towards meeting the Plan goals.

Still as a part of the territorial management, and supported on Law 9,985 of July 18, 2000, which established the National System of Conservation Units, Article 26 provides a new management instrument, called units mosaic, which consists of a set of Conservation Units of different categories or not, juxtaposed or overlapped, public or private APs, so as to compatibilize the presence of biodiversity, valuation of socio-diversity and sustainable development in the regional context, with integrated and participative management.

Owing to that, the Ministry of the Environment (MMA), according to directive n. 332 of August 25, 2011, acknowledged the Southern Amazon Mosaic (MAM), formed by forty (40) Conservation Units of federal and state level, comprehending areas of the states of Amazonas, Rondônia and Mato Grosso, under the management of the Chico Mendes Institute for Biodiversity Conservation (ICMBio) and of the Secretariats of Environment of the three States concerned. MAM aims to prevent the expansion of deforestation by the productive/extensive activities of the frontier, that is, the pressures of livestock, prospection, mining, invasion of public areas (land grabbing), timber exploitation and soybean plantations. With the application of the environmental and territorial policy, the Apuí Mosaic is an initiative of the State of Amazonas Government to control the expansion of deforestation, and to integrate state Conservation Units, in parts of the municipality of Apuí and Novo Aripuanã (the region is the object of the present text).

Following the environmental directive of the federal government regarding territorial management in the Amazonian region, according to Law n. 3,417 of July 31, 2009, the State of Amazonas introduced the Macro-zoning of the State of Amazonas (MZEE), ordinating areas of the municipalities in the south frontier of Amazonas as productive

agricultural areas, Protected Areas (Conservation Units and Indigenous Lands) and potential areas for establishing Conservation Units. This territorial policy meets the proposal and foundations of the Legal Amazon Ecological-Economic Macro-zoning, established by Decree 7,378/2010 as a guiding instrument for formulating and spatializing the public policies of development, territorial ordination and environment, as well as for decisions concerning private agents.

Three ordination mechanisms were established in the territory in the ambit of the Legal Amazon Ecological-Economic Macro-zoning: network-territories, frontier-territories and zone-territories. The network-territories comprehend the Amazon-Caribbean integration corridor, the coastal capitals, mining and other productive chains, the Pará-Tocantins-Maranhão junction, the Araguaia-Tocantins axis, the agro-industrial complex and the logistic pole. The frontier-territories encompass the agricultural-forest and livestock frontier and the expansion fronts, where the municipalities of the south of the state of Amazonas are located. The zone-territories correspond to dense ombrophilous forest areas and other continuous plant formations and with low degree of anthropism (BRASIL, 2010).

The territorial ordination, as from the Macro-zoning of Legal Amazonia and of the State of Amazonas Zoning, indicates the perspective of conservation/nature conservation and of agricultural frontier for the region. Therefore, even though the territorial ordination for Amazonia has incorporated the environmental perspective and protection of the traditional territories, the Brazilian Government has fostered economic projects directed to the intensive exploitation of nature, which compromise the socio-biodiversity of the region, potentializing the reconfiguration of the frontier in the south of the state of Amazonas, as analyzed in the next section.

# South of the state of Amazonas: new agricultural frontier and threats to Protected Areas

The current territorial ordination in the south of the state of Amazonas derives from the federal and state environmental-territorial policies, which conferred the region an emphasis on nature conservation and protection to the ways of life of the original peoples and traditional communities, materialized both in Protected Areas (Conservation Units and Indigenous Lands) and in new modalities of rural settlements of sustainable use (SILVA; COSTA SILVA; LIMA, 2019; AMAZONAS, 2009).

For some authors, this context would indicate a post-frontier condition (COY; KLINGLER; KOHLHEPP, 2017; DROULERS; LE TOURNEAU, 2000); for others, the same post-frontier condition would occur when the supply of free land and of natural resources had been exhausted (BROWDER; PEDLOWSKI; WALKER, 2008; COSTA SILVA et al, 2021). However, this region is still an intermediary fringe in an indefinite condition of expansion for pioneering fronts; this makes it possible to imagine different scenarios due to the focus intended for the public policies (THÉRY, 2005). From the perspective of the political and economic powers of agribusiness, especially in the Parliamentary Agricultural Front in the Brazilian Congress, the land market is the reference

for the global agricultural frontier condition, seeing the pressures for large-scale transfer of public lands to the private sector, which has resulted in systematic actions for reducing and/or obliterating Protected Areas and Traditional Territories (COSTA SILVA, 2016; RIBEIRO et al., 2018).

In a broad sense, the frontier can be designated as the transfer of public land to the private sector, the conversion of natural areas to extractive capital space. This means that the historical process conditions the advent of economic projects that may reconfigure the socio-territorial elements of the regions with "supplies of lands", very often represented by the mercantilization of nature, its consequent intensive exploitation and a field of social conflicts (MARTINS, 1997; CASTRO, 2005; MELLO, 2006; BECKER, 2007). Therefore, the restructuring of southern Amazonas is observed from elements that contradict the perspective of environmental sustainability and nature conservation, such as livestock, illegal timber exploitation, mining, prospection, electric power projects, land grabbing that harass the Protected Areas (Conservation Units and Indigenous Lands), the latter forming a corridor exactly for preventing the advance of deforestation (SILVA; COSTA SILVA, LIMA, 2019). The restructuring comprehends different frontiers directed to exploring a number of physical elements of nature, of the land (plantations and pasture) and areas at a post-frontier stage (WANDERLEY, 2016).

Differently from past decades, when the Amazonia frontier expanded into the so-called vacant public lands and government projects, with the territorial ordination, the restructuring of the frontier currently expands into APs and non-directed public forests, causing deforestation and conflicts against those who resist to all of this plundering process (indigenous peoples, riverside and extractive communities, *quilombolas* - descendants of enslaved Africans -, among other social subjects).

The Protected Areas were established in the south of the state of Amazonas (Figure 2), associated to the environmental perspective of sustainable development, especially after the II United Nations Conference on the Environment (Eco-92). Besides aiming to conserve/preserve nature, for a while, the UCs also prevented the expansion of the frontier into the extreme north of the country. These new elements, incorporated into the region by the Government, currently total thirty-two (32) federal and state Conservation Units, with a predominance of units of sustainable use (RESEX, RDS, FLONA, among others), which allow the economic use of natural resources, conciliating the support of economic agents in their sustainable institution and implementation.

The establishment and implementation of Extractive Reserves (RESEX) and Sustainable Development Reserves (RDS) are related to the pressures of the riverside and extractive communities to protect their ways of life and their traditional territories; the National Forests (FLONAS) are boosted by the Government itself focusing on the ordination of timber exploitation. Thirty-two (32) Indigenous Lands (TI) are located in southern Amazonas; thirty (30) of them are regularized, one (01) is homologated and one (01) is under study, overlapping the Mapinguari National Park and the Ituxi Extractive Reserve.

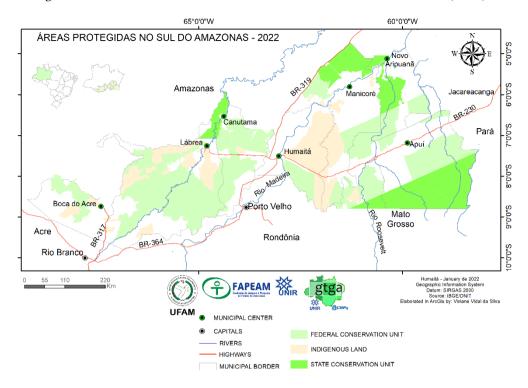


Figure 2: Protected Areas in the south frontier of the state of Amazonas (2020)

Source: IBGE/DNIT/IBAMA/MMA; Organization: the Authors

In the military government (1964-1986), the circulation axes formed by the BR-230 (Transamazônica) and BR-319 (Porto Velho/Manaus) highways crossed the municipalities in the south of the state of Amazonas and reconfigured the regional space for the colonization, agricultural production and logging projects. These structuring axes transformed and still significantly transform the regional space of Southeastern Amazonia, especially as regards the intensification of deforestation in areas which were not in the "radar" of the territorial pressures of extractive capital a few years ago (SILVA; COSTA SILVA; LIMA, 2019)

Different structuring axes are thus verified in the south of Amazonas, stressing that the Transamazônica highway emerges as a propelling drive of the economy of the frontier, stimulated by the territorial dynamics of the states of Pará, Mato Grosso, Rondônia and Acre. All these processes of expanding the economic activities of intensive exploitation of nature and the establishment of new APs configure the regional space, qualifying the differences and the dialectics on the frontier of the south of the state of Amazonas (COSTA SILVA, et al, 2021).

# Extractive economies and environmental conservation in southern Amazonas

The movement for restructuring the frontier increasingly affects the APs by the same economic mechanisms that transformed the remotest areas of the Amazonian region: timber exploitation, livestock, agribusiness, mineral exploration, hydropower plants, land grabbing and deforestation. Standing out from Apuí to Humaitá (400km away) are the mineral exploitation, hydropower plants and agribusiness (soybean) fronts. From Humaitá to Boca do Acre, timber exploitation, livestock, land grabbing and deforestation are greatly intensified (Figure 3).

Timber exploitation is usually the first illegal activity to appear on the frontier, constituting the basis of the economy in the region affected. According to the environmental regulation, it is currently an environmental crime. It is structured on a complex system, starting from traditional processes, going through more aggressive ways, such as the use of chainsaws, up to the industrial processes of legal and illegal processing (CASTRO, 2005). At the current moment, the unlawfulness of the timber economy permeates even the sectors supposedly parameterized by environmental sustainability indicators, as verified by the IBAMA inspection actions when illegal timber is seized from the custody of lumber companies that conduct "forest management".

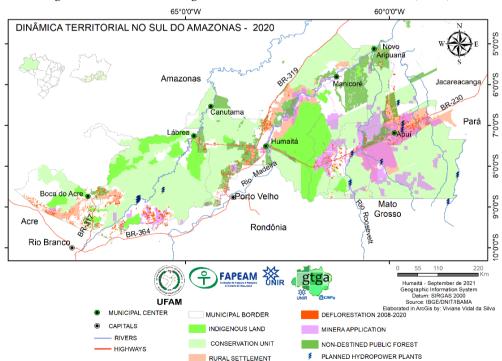


Figure 3: The restructuring of the frontier in southern Amazonas (2020)

Source: IBGE/DNIT/IBAMA/MMA/INPE/SIGMINE/ANEEL; Organization: the Authors

As a consequence, the growth of livestock, founded on the economic perspective of profitability and of safety, has caused a fierce "rush" for land, land concentration and, mainly, deforestation. Such a process also affects the rural settlements of the traditional modality, which has contributed to increase livestock, deforestation and, given the institutional weaknesses, to land concentration (CARRERO; FEARNSIDE, 2011; LEAL et al., 2017). In 2019, the deforestation in the settlements located in the area studied corresponded to 36.54% of the total of deforested areas in southern Amazonas, the Rio Juma and Acari Settlement Projects standing out among them.

Deforestation, especially that associated to timber exploitation and to livestock (Figure 4), is another characteristic of the frontier that spreads out in the region object of this analysis, whose indicators present the Lábrea, Boca do Acre and Apuí municipalities as having the vastest deforested areas deforested and the greatest livestock assets in 2020, contributing for Amazonas to take the fifth position in the number of livestock assets in the North region (IBGE, 2020).

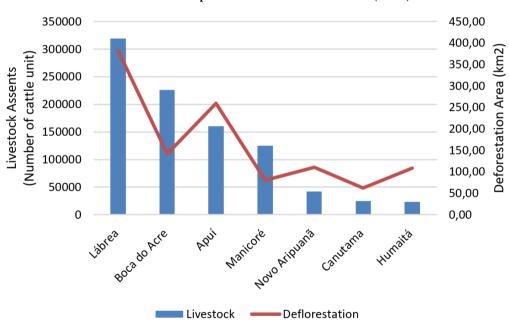


Figure 4: Ratio between the livestock assets and deforestation in the municipalities of southern Amazonas (2020)

Source: IBGE (2020), INPE/PRODES, (2020).

The action of the soybean agribusiness in the states of Mato Grosso and Rondônia imposed the displacement of livestock and timber exploitation to Southeastern Amazonia. Particularly in the state of Amazonas, the low price of land and of the transportation costs (RIVERO et al, 2009) related to the increase in the domestic and foreign demand for beef,

besides the geographic proximity to the municipalities that concentrate large numbers of cattle herds in the states of Rondônia (Porto Velho, Nova Mamoré, Ariquemes) and Mato Grosso (region concentrated in the north-northwest), also contributed to transfer the livestock of these regions to the south of the state of Amazonas, indicating the expansion of the frontier into the preserved regions and Protected Areas. In this context, there are stronger political-economic pressures to open these natural areas, seeking their supposed integration into the productive process of the globalized agricultural capital, thus causing competitions for territories among the different agents, that is, Government, capital, Amazonian peoples and social movements.

As regards mineral exploitation, according to the National Mining Agency (ANM) data, between 1962 and 2020, there were 815 applications for registration of activity in the municipalities of the south of Amazonas. From these, 470 are located in areas of Conservation Units or in the zone surrounding UCs, such as National and State Parks, National and State Forests, Sustainable Development Reserves, Areas of Environmental Conservation and of Extractive Reserves, and thirteen (13) are in the vicinity of Indigenous Lands, markedly in the municipalities of Manicoré, Novo Aripuanã and Apuí (Figure 5).

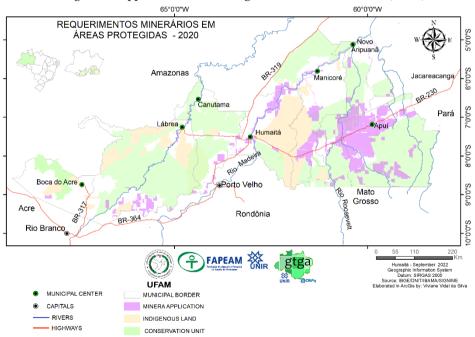


Figure 5: Applications for mining within Protected Areas (2020).

Source: IBGE/DNIT/IBAMA/SIGMINE; Organization: the Authors.

A number of these applications were made to the National Department of Mineral

Production (DNPM) before the UCs were established, indicating that the mineral frontier tends to spread out, even if now these areas are protected. Even though most of these applications have not been authorized, owing to the establishment of the UCs, in 2020, the database of the agency had thirty-one (31) processes of mining interests, such as application for research and application for mineral extraction within the conservation units.

It must thus be admitted that the UCs face a programed political vulnerability. Considering the policies for integration to the international market, the federal government, obliging the BBB (Bible, Bull [=cattle] and Bullet) caucus, currently proposes alterations in the typologies and the reduction of Protected Areas, signaling to the incorporation of these areas to the supply of private lands on the frontier. The institutional scale of this deterritorialization logic finds a fertile ground for these proposals in the state legislative houses. An example to be mentioned is the proposition of a group of Amazonian congressmen that suggested the reduction of Protected Areas from 2.83 million to 1.18 million hectares, directly affecting the Environmental Conservation Area of Campos de Manicoré, the National Forests of Aripuanã and of Urupadi, the Manicoré Biological Reserve and the Acari National Park. Studies conducted by the Socio-Environmental Institute identified that the reduction of areas coincided with the areas requested for mineral exploitation before the establishment of these units (Instituto Social Ambiental, 2017).

Outro legal instrument that materializes this process was Federal Law n. 12,678, of June 25, 2012, which altered the borders of the National Parks of Amazonia, of the Campos Amazônicos and Mapinguari, of the National Forests of Itaituba I, Itaituba II and of Crepori and of the Environmental Conservation Area of Tapajós, located in the states of Amazonas, Pará and Rondônia. The areas excluded from these UCs were destined both to land regularization and to flooding area for hydropower plants.

Moreover, the Brazilian National Congress analyzes the flexibilization of the legal ordination of the Indigenous Lands to allow economic activities such as mining, timber exploitation, hydropower plants, leasing, agricultural and others. Therefore, the way has been paved for a conflict space in the Protected Areas and their borders, and an institutional conflict space in the ambit of the Brazilian Congress, forming two action fronts of agricultural, mineral and hydropower capital and other fractions interested in the legal dismantling of the Protected Areas and of the Traditional Territories.

Projects for electric power production are also found on the south frontier of the state of Amazonas. Lima and Costa Silva (2018) called these projects hydro-strategies, consigned in Government initiatives associated to the industrial capital. These project to Amazonia a space of accumulation, intense mercantilization and privatization of water resources. According to data from the National Electric Power Agency, eleven (11) hydropower plants, six being (06) hydropower plants and five (05) small central hydropower plants, are planned to be built on the south frontier of Amazonas, which fosters the formation of political-territorial pressure field to relax or to convert natural areas into hydropower plant territories. This strategy, coupled to the circulation axes, especially of highways BR-230 and BR-319, favor the expansion of capital on the frontier, leading to the expropriation of the Amazonian peoples, thus strengthening the agribusiness narrative

that the Protected Areas hamper the economic development of the region<sup>2</sup>.

In the agricultural frontier of the south of Amazonas, we can currently observe what Santos (2008) denominated objects and actions systems that reconfigure Humaitá, the major municipality in the region. This geography materializes in the construction of new river ports on River Madeira to help flow the soybean production (Grain Port of the Masutti Group) and in the construction of the Beltway, to allow the flow of the road haulage of grains from Rondônia and Mato Grosso. Additionally, there is the recent construction of a bridge over the River Madeira, connecting Porto Velho (RO) to Humaitá (AM), which tends to accelerate the flow of transport and storage of soybean and corn grains in the grain port of Humaitá. It also helps the displacement of livestock to the Humaitá and Canutama region, as observed in a field research (SILVA; COSTA SILVA; LIMA, 2019; COSTA SILVA et al, 2021).

The spread of livestock, timber exploitation and of mineral extraction and power projects converge as a set of political-territorial pressures related to the changes in environmental and territorial management policies, as exemplified by the alterations in the Forest Code (2012), alterations in the Mining Code (2018), alterations in the Legal Land Project (Law 11,952/09 and Law 13, 465/2017), known as the "Land Grabbing Provisional Measure" (Ribeiro et al., 2018). The alterations in the legal and normative instruments of territory management allowed the different capitals/companies to seize nature, many times legalizing grabbed land, thus expanding the frontier into APs under the banner of violence.

The reaction of the Brazilian Government to refrain the expansion of deforestation in the Amazonian region and the invasion of vacant public lands, among different legal instruments, and certainly the institutionalization of Protected Areas – understood as Conservation Units, Indigenous Lands and *Quilombola* Areas – and a broader interinstitutional inspection were the mechanisms of greater efficacy in the region. This allowed reducing the rate of increase in deforestation between 2005 and 2012; yet deforestation increased between 2013 and 2018 (INPE/PRODES, 2019).

However, in the internal plan of the government action, despite the inclusion of Protected Areas in the management context and territory ordination by the Government, there is perceptible endogenous fragility that has kindled the generation of conflicts in southern Amazonas. Particularly, some UCs, be it of integral protection or of sustainable use, do not count on their full land regularization; some do not have a management plan or a management board, besides presenting a lack/scarcity of public officers to manage the Conservation Units.

<sup>2 - &</sup>quot;During his participation in the Seminar on the Challenges to the Brazilian Agricultural Expansion, promoted by the Agriculture, Livestock and Supply Commission and Rural Development and by the Council for High Studies and Technological Assessment of the Chamber of Deputies, the chair of the Environment Commission of the Brazilian Agriculture and Livestock Confederation (CNA), Assuero Doca Veronez, stated that the constraints imposed on the agribusiness in the name of environment conservation, especially in Amazonia, are excessive and hamper the Brazilian growth" [free translation]. Source: Agência Câmara de Notícias, 2006. Link: https://www.camara.leg.br/noticias/91922-agronegocio-se-ressente-de-amarras-da-legislacao-environmental/ Accessed on: June 7, 2022.

In the external plan, these weaknesses allowed the overlapping of areas of different uses, invasion by livestock breeders, miners, loggers, land grabbers and, as a consequence, fronts of deforestation that increasingly tend to reconfigure the frontier on the vicinity and within the territory of some Protected Areas. According to INPE data, in 2020, the UCs in the state of Amazonas had 42.78km² of deforested areas within them and the TIs, 19.09km². In southern Amazonas, the deforestation is particularly concentrated in the PARNA of Mapinguari, located in the states of Amazonas (Lábrea and Canutama) and Rondônia (Porto Velho) and in the TI Tenharim do Igarapé Preto (Novo Aripuanã).

Such a scenario has intensified the conflicts for land, conflict being one of the factors that also qualifies the frontier in Amazonia (MARTINS, 2018). In southern Amazonas, conflicts involving land grabbers, extractivists, indigenous peoples and small producers move to municipalities that did not relatively count as regions of agrarian conflicts. One example is the municipality of Boca do Acre, which in recent years stood out with one of the most expressive growths in conflicts for land (CPT, 2018).

Therefore, the expansion of the frontier in southern Amazonas tends to conceive the Protected Areas as an agrarian space in dispute. The government, in its different spheres and agencies, can either restrain the frontier or favor its expansion, also constituting a field of institutional dispute, suggesting that the frontier is not only founded on the society and on the economic agents, but also on the government spheres that impose the transformation on the south of the state of Amazonas.

#### Final considerations

The period of economic modernization of Amazonia (1960/1980), created in the military dictatorship, transformed the region in an intense frontier of extractive economies, supported by large projects involving hydropower, highways, mining, agribusiness and migration of people.

The mapping of these territorial dynamics was expressed in an increase in population, be it in the cities, in fields and forest, environmental and territorial impacts, deforestation and land grabbing, added to the innumerous socio-territorial tensions that imposed a conflict frontier on Amazonia. In the ambit of the frontiers expansion, the processes already experienced in past decades in the states of Pará, Mato Grosso and Rondônia, currently gain momentum in the Southeastern Amazonia, particularly in the south of the state of Amazonas.

Generally, the expansion of the south frontier of Amazonas consists of a conflict geography, exactly for presenting contradictory elements related to the mercantilization of nature, namely: livestock, legal and illegal timber exploitation, mining, hydropower plants, soybean and invasions of Protected Areas. The environmental policy, formerly praised by international institutions, mainly for the environmental and social relevance of the Protected Areas, in the current political situation of Brazil, are indicated as barriers to economic development, the central argument of the political forces of agribusiness and of the other extractive economies.

What is presented as new elements in the Amazonian agricultural frontier dynamics seems to us to be the pressures of the economic agents, supported by state agencies, to erode the legal status of the Protected Areas and the disruption of the whole environmental policy and of territorial rights. In this reading, the land issue is indicated to have moved to the normalized territories (Protected Areas) and vacant public areas under the management of the federal government, a common characteristic in the state of Amazonas, in which the territory management has not yet reached all the sub-regions, or in sub-regions in which the presence of the Government is still incipient to refrain the expansion of the frontier.

In sum, the expansion of the Amazonia frontier moves into demarcated areas, vacant public lands destined to conservation/environmental conservation and to the traditional territories of the Amazonian peoples and communities. In those protected spaces, the different economic groups impose violence and environmental crime as a pressure mechanism on which to found the nature mercantilization projects connected to the economic reproduction of capital. The expansion of the frontier currently seeks the deterritorialization of the original peoples and traditional communities, ignoring the meagre original and territorial rights guaranteed in the 1988 Federal Constitution.

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# Amazônia, Fronteira e Áreas Protegidas: dialética da expansão econômica e proteção da natureza

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Resumo: A dinâmica territorial da fronteira na Amazônia brasileira indica que a terra e os recursos da natureza continuam sendo incorporados aos mecanismos de acumulação do capital. Na atualidade, esse processo se expande em Áreas Protegidas (Unidades de Conservação e Terras Indígenas), atingindo espaço naturais e territórios tradicionais habitados por povos indígenas e comunidades amazônicas. Assim, analisa-se a expansão da fronteira no sul do estado do Amazonas, dadas as pressões do Estado e das economias extrativas para converter Áreas Protegidas em espaço do capital. Tal expansão não está apoiada apenas nos agentes econômicos e na sociedade, mas tem o Estado como principal agente indutor, cujo resultados indicam aumento do desmatamento e desestruturação da política ambiental, configurando a reestruturação da fronteira.

**Palavras-chave:** Amazônia; Áreas Protegidas; Comunidades Tradicionais; Território.

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## Amazonía, Frontera y Áreas Protegidas: dialéctica de expansión económica y protección de la naturaleza

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**Resumen:** La dinámica territorial de la frontera en la Amazonía brasileña señala que la tierra y los recursos de la naturaleza continúan siendo incorporados a los mecanismos de acumulación de capital.

Proceso que en la actualidad se extiende hacia las Áreas Protegidas (Unidades de Conservación de Tierras Indígenas) alcanzando no solo espacios naturales, sino los territorios habitados tradicionalmente por los pueblos indígenas y las comunidades amazónicas. Tal es el caso de la expansión de la frontera al sur del estado de Amazonas debido a las presiones del Estado y a las actividades extractivas para convertir las áreas protegidas en espacios de capital. Expansión que apenas encuentra apoyo en los agentes económicos y en la sociedad, pero que tiene al Estado como el principal agente inductor con resultados, tales como el aumento de la deforestación y la desestructuración de la política ambiental, configurando, en consecuencia, la reestructuración de la frontera.

**Palabras-clave:** Amazonía; Áreas protegidas; Comunidades tradicionales; Territorio.

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