

## WHILE REGULATION SLEEPS: BENEFITS OF REDD+ AND STATE-OWNED COMPANY'S PERFORMANCE IN THE VOLUNTARY CARBON MARKET



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### ABSTRACT

Based on the urgent need to curb climate change and create an instrument aimed at repairing the environment, the study highlights the potential of Maranhão, a state in Brazil on the one hand rich in biodiversity, a component of the Legal Amazon and, on the other, with events of environmental degradation and devastation. Thus, the objective of the research is to analyze the movement of the mixed economy company Maranhão Parceria, as a market agency, promotion and financial management of the REDD+ and PES policy, on the possible benefits found in the decarbonization market. The methodology is exploratory and documental with a qualitative approach. The research strategy adopted the case study: Maranhão Partnerships (MAPA), with a time frame from 2021 to 2023 of the actions in decarbonization managed by the company. The theoretical framework is based on the idea that the creation of environmental policies headed by the State, as an agent to supervise and save the interests of its nationals, is little or almost invisible, but the private initiative is present aiming at its interests and needs (Porto-Gonçalves, 2017; Back, 2011). It is observed that the new experience of Maranhão Partnerships, even with a narrow expression, may be at the center of the stage as a relevant fostering agent in the reduction of emissions from deforestation and environmental degradation.

**Keywords:** Climate Change. Voluntary Carbon Market. Maranhao. Maranhão Partnerships (MAPA). Benefits.

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## INTRODUCTION

Considering the decisions on policies and incentives launched in the Bali Action Plan and Decision on REDD, COP-13 and COP-19, of the United Nations Framework Convention on Climate Change (UNFCCC), an international plan was created to articulate financial incentives for developing countries seeking to carry out REDD+. It is a policy that aims to reduce greenhouse gas emissions from deforestation and forest degradation, the conservation of forest carbon stocks, the sustainable management of forests and the increase of forest carbon stocks, the management of environmental assets and payment for environmental services.

With potential eligible to receive "payments for results", Brazil through MMA Ordinance No. 370/2015 established Brazil's National Strategy for REDD+ (ENREDD+). In this route of the "Green Fund" and because it belongs to the Legal Amazon, the state of Maranhão comes in the race presenting ample biodiversity with Amazon forest to the north, caatinga to the east, cerrado in the center east, fields in the central region, sandbanks and mangroves making the state a great potential for tropical forests and other forms of forests, an important ecosystem in the context of climate change.

With these environmental assets, through State Law No. 11,578/2021, the company Maranhão Parcerias (MAPA) was granted the role of Market Agency, Promotion and Financial Management of the REDD+ and PES Policy. (Maranhão, 2021).

The purpose of the company is to create opportunities for Maranhão as a generator of green business in Brazil. Apart from this rich substrate of promises, the study aims to analyze the movement of the State of Maranhão in the race for the decarbonization market, its opportunities and challenges, from the perspective of how Mapa can act. In this way, and from the reported scenario of scientific and social relevance of the theme, the following research problem is reached: to what extent is the improvement of environmental quality and fulfillment of socio-environmental responsibilities carried out through the voluntary carbon market REDD+, based on the case study of the Maranhão Partnerships Market, Promotion and Financial Management Agency (MAPA)?

To try to solve the issue, the research is exploratory and documentary, with a qualitative approach and as a research strategy the case study is adopted. In this bias, the case of Maranhão Parcerias (MAPA), a company located in one of the states of the Legal Amazon, and its recent performance in the administration and promotion of the voluntary carbon market, is brought up as a spatial cut.

The time frame of the research will be between 2021, the year of the creation of the state norm granting rights over MAPA, and 2023, the milestone in which the Conference of the Parties (COP 28) will be held, whose theme will permeate the revisiting of positions and inventories of carbon emissions and respective voluntary markets.

Data collection will be through the electronic website of MAPA, the Legislative Assembly of Maranhão, the Official Gazette of the state of Maranhão and official documents made available by the respective bodies of the official documents of the States that make up the Legal Amazon. In addition to a search carried out directly on the *United Nations website on Climate Change and UN Climate Change Conference*. The search terms used were: "REDD+ Legal Amazon"; "REDD+ Acre", "REDD+ Mato Grosso.

As a theoretical framework, the perspective is adopted that even with the creation of environmental policies headed by multilateral institutions, such as the projects created by the World Bank, in general, the presence of the State, as an agent to supervise and save the interests of its nationals, is little or almost invisible. The participation of the private sector is present and current, but it aims to protect only its interests and needs: neoliberal policies. (Porto-Gonçalves, 2017; Back, 2011).

The study is divided into three sections. In the first, it analyzes what permeates and what counts at the various levels of what the carbon market is. In the second, anticipating the experience of Maranhão, the experience of REDD+ in Acre and Mato Grosso is shown. In the end, it is observed that the new experience of Maranhão Partnerships, even with a narrow expression, can be at the center of the stage as a relevant fostering agent in the reduction of emissions from deforestation and environmental degradation.

## **CARBON MARKET AND ITS PERSPECTIVES: INTERNATIONAL, POLITICAL AND SOCIAL ACCOUNTS**

Much has been said about the voluntary carbon market. These utterances are organized and bureaucratized for some, for others, they are scrambled or even invisible. Perhaps the issue is based on compensating a right that has discussion about the content of pollutants and toxins in the air, water and food, as well as about the destruction of nature and the environment, which in general is still exclusively or predominantly conducted according to categories and formulas of the natural sciences (Beck, 2011).

In this topic, we will seek to report how the carbon market has been treated by actors who dictate its terms and uses. Also, at the domestic level, what are the responsiveness chosen politically in dealing with the carbon market.

## INTERNATIONAL PERSPECTIVE

There are three different environments for carbon credit trading: the international regulated market under the Paris Agreement, which is being structured with the mechanisms of its Article 6, the carbon markets regulated at regional, national and subnational levels, in which companies in sectors follow specific negotiations in each jurisdiction through carbon taxes<sup>1</sup> or Emission *Trading Systems (ETS)*, and the voluntary market, in which companies make their voluntary climate contributions. (ICC, 2023a).

These trading environments mentioned focus on the regulated carbon market and the voluntary carbon market. These are transactions that symbolize the trading of environmental assets related to greenhouse gas (GHG) emissions, with GHG emission being simplified to the name of carbon emission.

In these markets, GHG emission rights are observed through an Emission Trading System (ETS) and Certified or Verified Emission Reduction (CER/VER) linked to an offset mechanism called offset. The proposal is to trade assets demonstrated through certified emissions of tons of carbon dioxide equivalent (tCO<sub>2</sub>e), in which an allowance is seen as a carbon credit. (ICC, 2023a).

Among the certifiers, Lux Carbon Standard (LuxCS) becomes the first Brazilian certifier, with the prospect of being the fourth in the world in the carbon credit certification segment. The proposal is to reduce the costs of decarbonization projects, a situation seen as an impediment to carbon market opportunities, in addition to targeting opportunities in other Brazilian biomes beyond the Legal Amazon, which focuses on strategies such as REDD+ (Folha de S. Paulo, 2023).

Being a regulatory framework at the international, national or regional level, the Emissions Trading Systems (ETS) are systems that indicate a maximum GHG emission limit (called cap) in which agents that emit below this limit can trade their emission rights (called allowances) with the participants of the system that emit above this limit. (ICC, 2023a).

The ETS are present under the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC's trading environment was regulated by the Kyoto Protocol until 2020 and now moves into the rules of the Paris Agreement.

It should be noted that the Kyoto Protocol established ETS among Annex I countries and indicated two compensation mechanisms: the Clean Development Mechanism (CDM) and Joint Implementation. The CDM technique ensures that emission reduction projects in developing countries can obtain certified emission reduction credits. In this sense, credits become saleable can be used by industrialized countries to meet a portion of their emissions reduction targets under the Kyoto/Paris Protocol (United Nations, 2023b).

## NATIONAL PERSPECTIVE

Within the perspective of the regulated market of the United Nations Framework Convention on Climate Change (UNFCCC), Brazil meets the demands of the CDM and the so-called Nationally Determined Contributions (NDCs). These are efforts by each country to reduce national emissions and adapt to the impacts of climate change by achieving the Paris Agreement goal (Article 4, paragraph 2) to limit the increase in the global average temperature to well below 2°C. To this end, each Party must prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. (United Nations, 2023b).

The Brazilian government pointed out in its NDC the reduction of its absolute net target of net greenhouse gas emissions to be treated in 2025 of 1.32 GtCO<sub>2</sub>e, consistent with a reduction of 48.4% compared to 2005. It also committed to an absolute net greenhouse gas emission target in 2030 of 1.20 GtCO<sub>2</sub>e, which will represent a reduction of 53.1% compared to 2005. (Brazil, 2023b)

To achieve the aforementioned goals, the government speaks of the need to adapt national institutional arrangements, greater public participation and involvement with local communities and indigenous peoples, with a vision sensitive to this agenda. Thus, it created the Interministerial Commission on Climate Change (CIM), through Decree 11,550/2023, with the goal of preparing and implementing public policies on climate change. (Brazil, 2023a).

Also, to comply with its NDC, commit to achieving zero deforestation by 2030, according to the Action Plan for the Prevention and Control of Deforestation in the Legal

Amazon (PPCDAm) under the command of the Permanent Interministerial Commission for the Prevention and Control of Deforestation. On the other hand, it talks about having leeway in not ruling out the use of internationally transferred mitigation results (ITMOs), along the lines of Article 6 of the Paris Agreement, to complement the objectives of the NDC. (Brazil, 2023b).

Brazil may also consider the possibility of transferring international mitigation results generated within its national territory. Any international transfers of mitigation results obtained within the Brazilian territory will be subject to the prior and formal consent of the federal government, in accordance with the terms and conditions, including the legislation, to be developed nationally for this purpose.

Despite the actions in CDM and NDC instruments within the UNFCCC, other recommendations to the Brazilian government appear in the sense of increasing the country's climate reduction ambition. The idea is to avoid regressive effects on the most vulnerable social groups and ensure a fair transaction for a low-carbon economy (ICC, 2023 b).

It is about thinking of a Brazilian regulated market as a chain that, if properly implemented, will allow the fulfillment of the goals and opportunities of both the mechanisms of Article 6 of the Paris Agreement and the Voluntary Carbon Market. (ICC, 2023b). Likewise, it is an institutional role to invest in, plan and educate carbon projects that include active participation and generate income for indigenous and traditional populations.

## CIVIL SOCIETY PERSPECTIVE

Seen as a great puzzle, the 2023 Conference of the Parties, COP28 is a source of "turning point, where countries not only agree 'WHAT' stronger climate actions will be taken, but show 'HOW' to deliver them". This is because half of the world's population survives in a place of intense vulnerability in relation to climate change. (United Nations, 2023c).

The United Nations (2023c) points to more than a century of burning fossil fuels causing global warming of 1.1°C above pre-industrial levels. Warming that will contribute to the existence of three factors: intensity, frequency and duration of extreme weather events, such as heat waves, floods, storms and desertification.



Thus, in view of this configuration, there is a shared social risk (Beck, 2011) regarding the effects of the action arising from global warming. As a proposal to cool this situation, the adoption of the Paris Agreement in 2015, on climate change at COP21 in 2015, and the other subsequent conferences hover around reducing the increase in the global average temperature to well below 2°C and pursuing efforts to limit the increase to 1.5°C above pre-industrial levels. (United Nations, 2023c).

In this sense, COP 28 in Dubai represented a substitute for the implementation of this goal. While the agreement emerged in Paris, COP 24 in Katowice and COP 26 in Glasgow created a work plan, COP 27 in Sharm el-Sheikh granted COP 28 the time of implementation, above all, regarding the management of the so-called "loss and damage" fund to assist nations affected by climate action (floods, rising sea levels, reduced agricultural productivity), as well as accelerating countries towards more ambitious and accelerated plans. (United Nations, 2023d).

The creation of the fund, entitled 'loss and damage', comes from COP 27 and already contains leadership contributions first from the United Arab Emirates and Germany (US\$ 100 million), through England and Japan (£ 40 million and US\$ 10 million) and the United States with resources of only US\$ 17.5 million. (United Nations, 2023d).

Meanwhile, many Brazilian communities do not know what measures that mitigate man's action on the climate are, such as the structuring and regulation of the Voluntary or regulated Market of Carbon Credits, formulation and implementation in collective territories. Quilombola communities or traditional peoples do not know that vast forests, which are sacred objects for them, are part of decarbonization projects.

In this view and launching the need for greater inclusion in what is being treated as the carbon market, with the conclusion of COP 27, in 2022, in Egypt, participants from seventeen organizations from indigenous, quilombola, and traditional communities fought for transparency and democratic processes. The position was in the sense that Brazil needs public policies, governance and accessible language for all regarding the contracts signed by private companies with these communities. (Instituto Humanitas Unisinos, 2022).

Through the Center for Operational Support for Human Rights (CAODH) of the Federal Public Prosecutor's Office, the Attorney General's Office of Pará, Technical Note No. 03/2023 was produced on safeguards for traditional peoples and communities in the context of the Voluntary Carbon Market. The demand aimed to monitor the structuring and

regulation of the Voluntary Carbon Market in collective territories, in order to establish socio-environmental safeguards and guarantee the right to Prior, Free and Informed Consultation with Traditional Peoples and Communities. (Federal Public Prosecutor's Office, 2023).

A public hearing was held on Carbon Credit Projects in collective state areas, with ten previous procedures also reaching suspicions of land grabbing of public lands. one of the major elements of disagreement would be those related to the partnership contract for the elaboration of the project to reduce greenhouse gas emissions from deforestation and forest degradation (REDD+). (Federal Public Prosecutor's Office, 2023).

The litigious environment involves "(...) projects related to REED + and the voluntary carbon market refer to the possible lack of respect for the fundamental rights of traditional peoples and communities, regarding prior, free and informed consultation; the sharing of benefits; respect for territorial rights and problems with the illegal appropriation of public lands" (Federal Public Prosecutor's Office; 2023, p. 17).

Subsidizing the procedure of the Federal Public Prosecutor's Office (2023, p. 40), the Coordination of Quilombola Communities of Pará – Malungu, the National Commission for the Strengthening of Marine Extractive Reserves, and the human rights organization Terra de Direitos prepared a Technical Note to the effect that the contractual creation "(...) is inscribed in clauses that can deal with the limitations of the forms of cultivation, the construction of houses, the use of native vegetation and so many other community activities, interfering with traditional ways of life".

Furthermore, the legislation pertaining to the titling of quilombola territories and other extractive reserves is understood as an ethnic right and does not merely deal with real estate titles. The Note presents seven goals for quilombola communities with guidelines to prevent violations of territorial rights or to know how to claim recognition of their rights in the face of harassment by companies on the subject of decarbonization contracts. Among the guidelines is the view that "titled/demarcated territory cannot be reduced to a carbon sink. Forest is not just carbon." (Federal Public Prosecutor's Office; 2023, p. 17).

In the end, the Federal Public Prosecutor's Office (2023) consolidated the recommendations for the rights of traditional peoples and communities within the scope of the carbon market for the protection of the territory; the Free, Prior and Informed Consultation, to be carried out by the Government without suppression and delegation to



third parties; the sharing of benefits; the assessment of social and environmental impacts; the incidence of an administrative law regime with mandatory state monitoring.

It is about this ecosystem of speeches, promises, discussions, exacerbated climatic events in which those directly affected still do not participate much (Porto-Gonçalves, 2017; Beck, 2011) is that we arrive at the next topic to analyze the promises of REDD+ in Acre and Mato Grosso.

### **EXPERIENCES IN THE LEGAL AMAZON: cases of (in)opportunity in REDD+**

The legal Amazon reaches 58.9% of the Brazilian territory, distributed in 772 municipalities, corresponding to all the states of the North region (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima and Tocantins), the state of Mato Grosso (Midwest region) and 181 of the 217 municipalities of Maranhão, in the Northeast region, including the capital São Luís (Sudam, 2020).

The Legal Amazon is the stage for the application of international decarbonization mechanisms and instruments for offsetting greenhouse gas emissions. At this point, the precept known as REDD (Reduce Emissions for Deforestation and Degradation) comes in. The focus is to create economic assets initially from the relationship between standing forest and deforestation is synonymous with carbon trapping.

REDD was created by Brazilian and American researchers at COP-9 in Milan, Italy (2003). It gained momentum at COP-13, in Bali, Indonesia (2007), with the inclusion of the expansion of the term "+" to include REDD+, but it was with the 5th Conference of the Parties to the UNFCCC (COP-15), held in Copenhagen in 2009, that REDD gained importance. (O Eco, 2014).

But with the 19th Conference of the Parties (COP-19) of the United Nations Framework Convention on Climate Change (UNFCCC), with the Warsaw Framework that what is observed with the measurement, reporting and verification (MRV) process for REDD+ of the UNFCCC was designed with the creation of the Architecture of Incentives. The idea is to encourage payment for results or performance, that is, the transfer of international resources to developing countries based on results that they have attested to have achieved. (Brazil, 2016).

Thus, the function of REDD is different from that of the Clean Development Mechanism (CDM), since the latter does not include the remaining natural forests. This means that REDD will supplant the ideas of the Kyoto Protocol, which removed from its

scope policies related to deforestation and degradation because it was seen as complex to measure and monitor the various ecosystems and changes in land use. Its substrate is to propose financial compensation to the owners of natural forests, who are ready to protect their forests. (O Eco, 2008; 2014)

REDD is understood as a fair market and investment of the good by not negotiating any type of carbon sequestration, as the CDM does. It means that REDD does not encourage negotiations for monoculture eucalyptus plantations, it does not deal with sequestrations that in a certain way generate fires in its sequestration chain. It aims to protect the Earth's natural heritage. (The Echo, 2008)

With the inclusion of (a) Reduction of emissions derived from deforestation and forest degradation; (b) Increase in forest carbon stocks; (c) sustainable forest management; (d) Forest conservation, the REDD buffer has been expanded to REDD+. Once the REDD+ projects are submitted to the UNFCCC, the procedure is finalized and the results are measured in tCO<sub>2</sub>e and submitted to the Lima Information Hub platform, where the recipient countries of the projects are able to raise funds to be paid per result. (Brazil, 2016).

Info Hub Brasil includes five active projects whose eligible entities range from the state environment secretariat that is the focus of the project to the Amazon Fund-BNDES (Brazil, 2023):

1. Amazon Fund Project: presents the Amazon Fund-BNDES as the executing entity; national (Petrobras) and international (Germany and Norway) donors; durability of ninety-one years; payment of more than six billion reais;
2. Forest + Amazon Project: executing entity the United Nations Development Program (UNDP) – UNDP; donor the Green Climate Fund  
- Green Climate Fund; term of six years; payment of almost twenty million reais;
3. Test agreement 111: executing entity the Amazonas Department of the Environment; national donor (Petrobras); durability of six years, starting in 2022; has not yet paid amounts.

The two other programs are REM and are focused on the Amazon biome, carried out in the states of Acre and Mato Grosso, which will be unveiled next.

## THE ACRE CASE

The REM Acre program supported REDD+ financing in accordance with UNFCCC guidelines with a focus on forest preservation, climate protection and reduction of greenhouse emissions from deforestation in the state. To this end, the actions were carried out from 2013 to 2022, in phases I and II, with a dispersion of more than two hundred and forty-eight million reais.

In REM Acre Phase I, until 2015, it generated incentives for environmental services that doubled tCO<sub>2</sub> with payments of 16 million euros. The accounting methodology adopted was the one developed by the State itself, the Acre Carbon Standard - ACS, approved by the Scientific Committee of its System of Incentives for Environmental Services (SISA).

With a new stage of REM Acre – Phase II, the focus will still persist on reducing deforestation emissions in the state of Acre and will have the amount of twenty million euros in 2024. At this time, there will be the inclusion of new dynamics to apply the decentralization of resources, with public calls for proposals for terms of collaboration and promotion. (Acre, 2023)

The planned activities included subprograms with facets in indigenous territories, sustainable family production, sustainable diversified livestock territory, and strengthening of SISA and REDD+ instruments. These are actions that propose the implementation of Agroenergy systems, granting scholarships to agroforestry agents, technical training of these agents, differentiated intercultural training, carried out in indigenous schools, Creative economy with Community-Based tourism, Design in wood products and Forest Handicrafts (Brazil, 2023)

REM Acre presents as donors Germany and the United Kingdom, which audit the portfolio of thirty-one projects aimed at sustainable productive inclusion, but without losing the rigor of proposing conditions for the release of resources, such as the adoption of goals of the State Plan for the Prevention and Control of Deforestation and Fires in Acre (PPCDQ/AC). (Acre, 2023)

Within the scope of the Incentive System for Environmental Services (SISA), the Incentive Program for Environmental Carbon Services, ISA Carbono, promotes change to more productive agricultural systems, aiming at reducing deforestation; valuing economic potential and increasing forest conservation and sharing the benefits of environmental services by results. (Acre, 2023)

In this way, the REM Program with the state of Acre also consists of remuneration or "awards" on results (ex-post) of reductions in greenhouse gas emissions from deforestation.

## THE MATO GROSSO CASE

As of 2017, the state of Mato Grosso (MT) had its REM implemented, with results of reducing deforestation in forests by more than 90%. The investments are held by the Government of Germany through the German Development Bank (KfW) and the Government of the United Kingdom of Great Britain and Northern Ireland, through the Secretariat for Business, Energy and Industrial Strategy (BEIS). The resources are made available once the results of reducing deforestation below the 1788 Km<sup>2</sup>/year line are achieved. (Funbio, 2023)

The resources are dispensed in the subprograms of (a) family farming of traditional peoples and communities in the Amazon, Cerrado and Pantanal, (b) indigenous territories and (c) sustainable production, innovation and market about 60% of such values, and the remaining 40% will be allocated to (d) institutional strengthening, structuring public policies of state government entities and (e) application and development of public training policies. (Funbio, 2023)

Among the remaining 40% are actions of command and control actions and land regularization; Environmental regularization; Training of civil servants in REDD+ issues; Studies for the preparation of greenhouse gas emission inventories, sectoral plans for mitigation and adaptation to climate change; Technical assistance for executing agencies of the REM-MT subprograms; and communication and knowledge socialization activities.

Like Acre, Mato Grosso is a pioneer in raising foreign funds for the purpose of planning and executing projects. Even with the transfer of almost fifty million reais to the government of Mato Grosso, the transfer of international money through compensation programs and environmental services became insignificant for its revenues. (Brazil, 2023; The Echo, 2022)

**MAPA (MARANHÃO PARTNERSHIPS) IN THE VOLUNTARY CARBON MARKET MAP:  
FROM THE SUPPLY OF HOUSING UNITS TO THE MARKET AGENCY,  
PROMOTION AND FINANCIAL MANAGEMENT OF THE REDD+ POLICY**

Maranhão, as well as Acre and Mato Grosso is part of the Legal Amazon, The State holds 6,217,877 hectares of forest types (forest, forest transition and forested savannah), which originally covered an area of 18,579,350 hectares.

But in addition to the Amazon biome (34% of the territory), the state holds the Cerrado biome (65%) and Caatinga (1%). Within this biodiversity, the state together with Pará contains the largest continuous area of mangroves acting as a natural sequestrator of carbon dioxide. (Maranhão, 2021; G1, 2022; Folha de S. Paulo, 2022).

With the location of the Port of Itaqui, in São Luís, the state capital, the economy of Maranhão is still strongly boosted by the export of commodities (agricultural and mineral) with intense mining operations by a consortium of transnational mining companies that form the Alumar consortium with the possibility of reaching a production capacity of 447 thousand metric tons of aluminum per year. (Maranhão, 2019; Maranhão, 2023).

Regarding agricultural commodities, Maranhão increased the soybean planted area to 3.4%, compared to the previous harvest, projected at 1.1 million hectares. The expected average productivity is 3,392 kg/ha, representing an expansion of the oilseed planting areas. (Brazil, 2023a).

In addition, the state is the tenth producer of wind energy through the Delta Maranhão Wind Complex, in the municipalities of Paulino Neves and Barreirinhas. In addition, the state highlights Green Hydrogen as an alternative for the decarbonization of sectors with high carbon emissions, enhancing the ethanol production chain and generating jobs. The state has five important industrial ethanol plants in the cities of Campestre, São Raimundo das Mangabeiras, Tuntum, Coelho Neto and Aldeias Altas. (Estadão, 2023; Maranhão, 2023)

## CONTEXTUALIZED: BRAKE OR SURVIVE

Maranhão has already lost 76% of its original forest. 181 of the 217 municipalities are part of the Amazon biome, whose many areas have already been devastated to make way for soy monoculture and cattle raising. Part of the native forest is close to environmental conservation areas, indigenous lands and quilombola communities. (Folha de S. Paulo, 2022).

The areas that are still protected are under pressure from illegal loggers, land grabbers and agro-producers who are out of line with environmental legislation, operating in environments with more than fifty endangered species. Large burned areas were recorded in advance to indigenous lands, placing Maranhão in the fourth state with the most fire outbreaks in 2023. (Folha de S. Paulo, 2022; Inpe, 2023).

Also, in the social sphere, in 2022, Maranhão was the state with the most people murdered as a result of conflicts in the countryside. Among the dead, 99% were indigenous and quilombolas, who are of fundamental importance for environmental protection. It was also in third position in land conflicts, second only to Amazonas and Mato Grosso. (Pastoral Land Commission, 2022)

In addition to the scenario of violence in the countryside, regarding water management in Maranhão, the state currently has only 30% of drinking water in its watersheds. As a result of the process of irregular land occupation without obedience to an environmental management plan or the criteria and norms of a master plan, it ends up aggravating the degradation of the basins and putting coastal ecosystems at risk. The urbanization and irregular occupation of many cities in Maranhão without proper sanitary treatment causes discharge into the aquifers, as occurred with the creation of the gully in Buriticupu, a municipality in the state. (Estadão, 2023). In its ZEE (economic ecological zoning), Maranhão reduced the percentage of vegetation in consolidated rural areas of the Amazon region from 80% to 50% (Folha de S. Paulo, 2022). With this scenario, it remains to restore forests and curb degradation and deforestation actions in order to maintain ecosystems, maintain water, climate, and food security.

## MAP: SCOPE AND INTERACTIONS

Created in 1966 in the midst of the military dictatorship, the first version of what is now a mixed capital company, Mapa was the Popular Housing Company of Maranhão (COHAB) was established by Law No. 2,637/66. The context of creation was to belong to



the Federal Housing System (SFH) and urbanize the cities with the construction of subsidized housing units for the population that received between one and three minimum wages.

With the end of the developmental project that hovered in Brazil and the National Housing Bank (BNH) that subsidized the company, COHAB was extinguished, giving way to Law No. 7,356, of December 29, 1998. A new company emerged that incorporated other state-owned companies in the state that were not economically viable in the privatization process that was present at that time.

Thus, the Maranhão Company of Human Resources and Public Business Administration (EMARHP) was created, incorporating rights and obligations and employees of state-owned companies that would not be able to restructure and remain in the market. Six state-owned companies that worked in agricultural research, agro-industrial, industrial and supply development, tourism promotion and data processing were absorbed.

Through Provisional Measure No. 295/2019, EMARHP was transformed into Maranhão Partnerships (MAPA), a government strategy to modernize the company, changing its mission to act in strategic partnerships with the private sector, based on business opportunities; state real estate management and service provision.

Other legislative changes came (Law No. 11,000, of April 2, 2019 (amended by Laws No. 11,140 of October 23, 2019 and 11,389 of December 21, 2020) to position the company as a S/A, a mixed-capital company, whose mission is to promote the economic and social development of the state of Maranhão, through management, execution of projects and provision of services in partnership with the private sector. A situation that makes it linked to the State Secretariat for Economic Development and Strategic Programs (SEDEPE).

Its scope is (a) development of the real estate business areas (management of real estate, roads, condominiums and rotating parking lots, management and administration of the State Real Estate Fund – FEI); (b) public business and partnerships (realization of strategic partnerships, based on business opportunities, management of the Guarantee Fund for Public-Private Partnerships of the State of Maranhão – FGP, with the allocation of resources from the State Participation Fund – FPE). It also retains the (c) provision of services (areas of conservation, cleaning, cleanliness, sanitation, surveillance, concierge, kitchen, and temporary and outsourced services, engineering works and services, printing,

computer and Information Technology (IT) services, management and monitoring of administrative contracts); (d) to operate the state lottery service.

However, the last offspring of Mapa's action came with Law No. 11,578/2021, in which the Government of the State of Maranhão delegated the function of Market, Development and Financial Management Agency with the objective of managing and disposing of assets and credits resulting from environmental services and products and reducing emissions from deforestation and degradation (REDD+) from programs, subprograms, plans and projects. It will also be able to act in the creation of financial, economic and green investment arrangements and development of strategies aimed at mobilizing and raising financial resources and investments. (Maranhão, 2021).

In the midst of these actions, Mapa completed only four projects. In them, the operation was for the preparation of the public notice, the Term of Reference (Hortomercado and health and leisure space for children from 0 to 12 years old), monitoring of the works (historic building), fiber optic services (legal, economic and technical modeling, in addition to carrying out the consultation and public hearing). (Mapa, 2023).

#### STATE LAW NO. 11,578/2021: EXPOSURES AND SCOPE

The bill that generated Law No. 11,578 of November 1, 2021 was quickly approved by the Legislative Assembly of Maranhão. The political impulse was prominently led by the governor of the state, today the current Minister of State for Justice and Public Security and candidate for minister of the Federal Supreme Court, Minister Flávio Dino.

The law has 36 articles aiming to structure the REDD+ policy, payment for environmental services (PES) and changed the scope of action of Maranhão Partnerships (Mapa). Like most environmental laws, the standard describes what it means by REDD+, environmental services and assets without leaving what is already governed by national laws and international standards. (Maranhão, 2021)

In the REDD+ jurisdiction system, the norm elevates the state of Maranhão as a fomenting agent, instructor, creator and guarantor of policies. In addition to valuing, promoting and carrying out actions that at the same time reduce greenhouse gas emissions, integrate the assets of traditional peoples and communities, indigenous peoples, their traditional knowledge and family farmers into these processes.

The guidelines of the law speak of cooperation between governments, the private sector and other sectors of society, the existence and functioning of transparent and effective management structures. Also, respect for the knowledge, rights and way of life of indigenous peoples, traditional populations and family farmers, including the participation of different segments of Brazilian society in REDD+ and PES actions. (Article 2).

Governance and the institutional arrangement of implementation involve Councils, Bodies and Forums that will act according to thematic relevance, especially adherence to the scope of action of each body or entity. It is incumbent upon the Executive Branch to regulate the structure, operation and other specifications pertinent to the bodies and instances of the institutional arrangement and governance of the REDD+ and PES Jurisdictional System of the State of Maranhão. (Article 15)

Thus, the structure presents: (a) Deliberative Council, (b) three Committees (Coordination Committee; Advisory Committee on Indigenous Peoples, Family Farming and Traditional Populations; Independent Technical and Scientific Committee), (c) three bodies (Regulatory, Control, Monitoring, Inventory and Registration Body; Commercialization, Markets, Development and Financial Management Agency, Execution Bodies of Programs, Subprograms and Projects) and Maranhão Forum on Climate Change. Within this structure, only the Maranhão Forum on Climate Change has already had operational experiences. (Article 6)

The coordination of the work of the Advisory Committee on Indigenous Peoples, Family Farming and Traditional Populations will be exercised by the State Secretariat for Human Rights and Popular Participation (SEDIHPOP) and the State Secretariat for Family Agriculture (SAF). (Article 9)

The Independent Technical and Scientific Committee, of an advisory nature, will have the purpose of advising and subsidizing the instances and governance bodies of the System. Its members will be the exclusive choice of the Governor of the State, composed of national and/or international members of notorious knowledge and specialists in the technical, scientific, economic and legal areas related to the themes and sectors. (Article 10).

The Regulatory, Control, Monitoring, Inventory and Registration Body under the baton of the State Secretariat for the Environment and Natural Resources - SEMA will have as its main purpose to monitor the reduction of greenhouse gas emissions, regulate

the registration of ecosystem services and monitor the fulfillment of the goals and objectives established in each of the programs, subprograms and/or projects. (Article 11)

Mapa will act as a Commercialization, Markets, Development and Financial Management Agency, with the main purpose of managing and disposing of assets and credits resulting from environmental services and products and the reduction of emissions from deforestation and degradation (REDD+). The company may, when it is convenient, due to technical, social, economic or legal circumstances, delegate or grant to third parties the performance of activities of an operational nature, and may also associate itself through the institution of partnerships and other associative, corporate or contractual forms. However, MAPA may not delegate the issuance of normative acts and the decision of administrative appeals (Article 12).

It shall be incumbent upon MAPA, under the terms of this Law and the relevant rules, to manage and dispose of, by itself or by executing agents qualified for such purpose, under conditions and for a determined period, regularly certified credits arising from environmental products and services of which the State of Maranhão is the beneficiary or holder. (Article 21)

The Executive Branch is authorized to transfer to MAPA, as the Commercialization, Markets, Development and Financial Management Body, the environmental assets, credits and other assets arising from the environmental services of which the State of Maranhão is a beneficiary or holder (Article 22).

In addition, the law describes 13 programs with a strong role of the Executive branch in their definitions, purpose and methodologies, such as, among others, Forest Carbon and Native Vegetation; Support and Appreciation of Traditional Peoples and Communities, Indigenous Peoples and Traditional Knowledge Associated with GHG Emission Reduction Activities.

It presents 16 instruments that range from planning, accounting, state reserve, management, inventory, certification and international, National and Subnational cooperation (article 17), the law describes economic and financial mechanisms and instruments for the incentive and fundraising (article 19). To this end, the norm authorized the creation of the State Fund for REDD+ and PES, with the purpose of promoting the mitigation of climate change, adaptation to its impacts and the recovery, maintenance and improvement of environmental services, as well as the execution of programs linked to the System. (Article 20).

It is up to the Executive Branch to regulate the process of Certification of environmental goods and services in accordance with the relevant technical standards, and the regulation may also provide for the delegation of this attribution to third parties, including private entities. (Article 26). Regarding the sharing of benefits, the action between the payer, beneficiary or user of environmental services and the provider of these benefits will be negotiated between the parties, meeting the parameters of clarity, loyalty and transparency in the clauses agreed upon (art. 28).

MAPA may enter into agreements, adjustments or similar instruments with bodies or entities of the Public Administration, directly or indirectly, at the federal, state, district or municipal levels, as well as with legal entities governed by private law, including international organizations, especially with a view to interoperability between Systems and Jurisdictions. (Article 33)

## NOTES AND PROVOCATIONS

Regarding Mapa's performance, there has not yet been the publication of any actions to promote and financially manage assets and credits from environmental services and products and reduce emissions from deforestation and degradation (REDD+) from programs, subprograms, plans and projects.

The company published that a Technical Cooperation Agreement would be in progress between Maranhão Parcerias S/A – MAPA and the Amazon Environmental Research Institute – IPAM. The objective of the agreement was the strategic-organizational, legal-operational and flow and practice improvement to maximize MAPA's efficiency levels in its performance in REDD+ projects. However, there is no information on whether or not it is carrying out the partnership.

Likewise, public call No. 01/2022 was removed from its website, which dealt with the Expression of Interest (PMI) procedure with a focus on calling for individuals or legal entities interested in submitting studies to the company and the Government in order to carry out REDD+. Situation that concludes by the non-occurrence of the public call.

The only REDD+ document carried out by Mapa was a magazine on Maranhão's potential for Green Business. It is a portfolio demonstrating the ecosystem and biomes of Maranhão. In it, the company is presented as innovative and active, demonstrating the measures in progress mentioned above.

On the other hand, there is no news of implementation by the government of the bodies that make up the institutional arrangement for the implementation of the REDD+ and PES Jurisdictional System (Article 6, Law No. 11,578/2021). The composition of the Deliberative Council of REDD+ and PSA was not published in the Official State Gazette; Coordination Committee; Advisory Committee on Indigenous Peoples, Family Farming and Traditional Populations. In addition, the members of the Independent Technical and Scientific Committee must be appointed exclusively by the Governor of the State.

Still, there has not been effective deliberations and leadership of the secretariats that could accelerate the implementation of REDD+ in Maranhão. For example, the State Secretariat for Human Rights and Popular Participation (SEDIHPOP) and the State Secretariat for Family Agriculture (SAF) are managing the coordination of the work to be carried out by the Advisory Committee on Indigenous Peoples, Family Farming and Traditional Populations. Also, the State Secretariat for the Environment and Natural Resources – SEMA, since it would act as a Regulatory, Control, Monitoring, Inventory and Registration Body.

Nor was the regulation of the Certification process of environmental goods and services provided for or resulting from Law No. 11,578/2021 effective, through the Executive. The expectation was that before the COP 28 Conference of the Parties, the government would implement the institutional arrangements of the law and announce measures to reduce climate change, however, nothing happened.

In order for Mapa to act as a development agency, it is necessary to:

To the government, as provocations in the sense of putting into effect the state's climate ambitions and all the positive externalities caused to the Maranhão biomes and the most vulnerable populations:

1. Ensure technical staff at Mapa on the topics of carbon projects and Training of other civil servants on REDD+ issues;
2. Implement effective community participation in the implementation of REDD+;
3. Define and establish deadlines for issuing the acts necessary to guide and ensure faithful compliance with Law No. 11,578/2021;
4. See REDD+ as a state policy and not a government policy;
5. Reconcile the execution of the Law with other political interests and strive to fulfill the commitment to zero illegal deforestation and to reduce legal deforestation in the country.



To the private sector, as an agent that Maranhão, given its ample biodiversity, may have as a substrate capable of having REDD+ projects, pressuring deadlines for the implementation of the system and acting jointly and collaboratively, once the determinations of state law are put into practice. It should also be the goal of this sector to work with technology, prioritize the reduction of illegal deforestation to zero, invest in reforestation and carbon projects that include participation and generate income for indigenous and traditional populations.

## **FINAL CONSIDERATIONS**

The carbon reduction market is complex, requires multidisciplinary knowledge, goes through tough certifications, external audits and pressure from entities that dispense a lot of money. Both the regulation and voluntarisms of carbon reduction require projects, with in-depth studies, metrics and analysis of results for a period of time. It is a great journey that requires proactivity, permanent interest of all actors involved in achieving its goals.

On the other hand, decarbonization should not be seen as a new culture, a new look, if it is seen as such it will take longer for real changes. Governments and the private sector need to put the brakes on new fossil fuel projects, accelerate the early retirement of existing ones, and increase the deployment of renewable energy in a short period of time.

In addition to projects aimed at the so-called carbon sequestration, governments and private entities must deal with the "care of the parties", that is, attention to indigenous peoples, quilombola communities and any and all collectives that see the environment beyond carbon retention. This look, once heard, can anticipate new environmental misfortunes and humanity.

It should be noted that the state of Maranhão has characteristics that qualify it to seek incentives and practices in reducing events harmful to climate change and the production of gases that produce the greenhouse effect. In addition to its biome and the vast expanse of remaining native vegetation, traditional peoples and populations in the state need to stop deforestation and degradation.

The means found was the construction of the REDD+ archetype, but this architecture was only designed in 2021, with more political features than practical and concrete ones. Created within a government policy on the eve of the Conference of the Parties that year, the situation demonstrated that usefulness in the execution of the policy was an old political interest.

The design that was built in Maranhão for the state-owned company Mapa is promising. Maranhão is a storehouse of opportunity, with the urgent need to protect what it presents and restore what no longer exists. However, the varied interests and heterogeneous actions that Mapa has and because it is a state-owned company creates a more complex scenario than private companies, which have interests more focused on results and adapt more easily to the discipline pressures instituted by international promoters, such as Germany and England.

Operating in the carbon market requires constant updating, research, technical staff and strategic consulting. In this sense, Mapa has not yet published a technical composition or search for specialized consultancies. Also, as the design of the REDD+ created requires dialogue with state secretaries, the absence of connection between the agencies causes the non-execution of REDD+ in Maranhão.

Another impediment to Mapa is political uncertainties and lack of leadership. The presidency of the company and the board of directors are positions chosen by the chief executive, with more political than technical features. A situation that can influence its management with more immediate interests.

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