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JEC Assessment: Pará. 2020

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1. Macroeconomic Outlook

Pará is Brazil's second largest State by area (1.2 million km², about the same as France, Germany and Italy combined), home to 8.6 million people (4% of the Brazilian population). The state's demographic density of 6.91 inhabitants/km² reveals an extremely dispersed population comparing to the national average of 24.69, with one third of it living in the rural areas. In 2018, 41.53% of the Pará population lived below the poverty line, with a declared monthly income of up to half the minimum wage. Its GDP-per-capita (as of 2017) is the 18th in the ranking of the Brazilian states at R\$18,549 (58% of the national figure). Around one third of the State's GDP is related to services and another third to industry. The economic activities are concentrated in specific territories: of 144 Pará municipalities, only 10 are responsible for 58% of GDP: Belém, Parauapebas, Marabá, Ananindeua, Barcarena, Santarém, Tucuruí, Castanhal, Paragominas and Altamira¹.

1.1 National context

Brazilian domestic economic activity continued to recover gradually until the end of the second half of 2019, in an environment of historically low interest rates and inflation. The positive scenario observed in the second half of 2019 allowed advances in both bank credit for households and financing for companies in the capital markets. The performance of private banks was crucial in both cases. Public banks opted to retain part of the credit receipt flows and increased liquidity even further².

Under the effects of the new coronavirus pandemic and social isolation, the Brazilian economy recorded a 9.7% retraction in the second quarter of 2020 compared to the first three months of the year. In relation to the second quarter of 2019, GDP fell 11.4%. Both rates represent the most intense retractions in the series started in 1996. With the two record drops, Brazilian GDP returned to the same level as at the end of 2009, when it was impacted by the global financial crisis of 2008. With two consecutive quarters of recession, Brazil is in a technical recession for the first time since 2016³.

In the second quarter, Brazil economy shrank by a record 9.7%. According to the latest update⁴, the Brazil Economy Ministry kept its forecast for a record 4.7%⁵ fall in gross domestic product in 2020, predicting that recovery already underway from the depth of the pandemic-fueled crisis will accelerate.

The third quarter is expected to be led by industry, agriculture and trade, which will help drive an overall GDP expansion of 7.3% from the preceding three-month period. According to the Economy Ministry, **the 2021 GDP growth forecast is of 3.2%, and for the consequent 2022 to 2024 – of 2.50%**⁶. According to the market analysts forecast published in the Central Bank last report Focus, the expected GDP drop in 2020 is of 5.11%.

¹ [Strategic Alignment 2019-2020](#). Pará State Secretary of Planning and Administration, 2020.

² [Financial Stability Report – April 2020](#). Central Bank of Brazil (news dated 01/04/2020, retrieved 16/09/2020).

³ [PIB brasileiro tem queda recorde de 9,7% no segundo trimestre](#) (news dated 01/09/2020, retrieved 16/09/2020).

⁴ [Brazil government keeps 2020 GDP forecast at a record 4.7% fall](#) (retrieved September 15, 2020).

⁵ The contraction of 4.7% is much smaller than the [International Monetary Fund's projection of a 9.1% crash](#).

⁶ [Ministério da Economia mantém em 4.7% projeção para queda do PIB em 2020](#) (retrieved September 15, 2020)

The Economy Ministry also **raised 2020 inflation forecast to 1.83% from 1.6% and lowered 2021's to 2.94% from 3.24%**. Both would still be well below the central bank's official goals of 4.0% and 3.75%, respectively².

According to the latest data of Institute of Applied Economic Research (IPEA), the GDP is expected to drop 5%, instead of 6% as estimated earlier. IPEA explains this revision with “good performance, better than expected for the third semester”⁷.

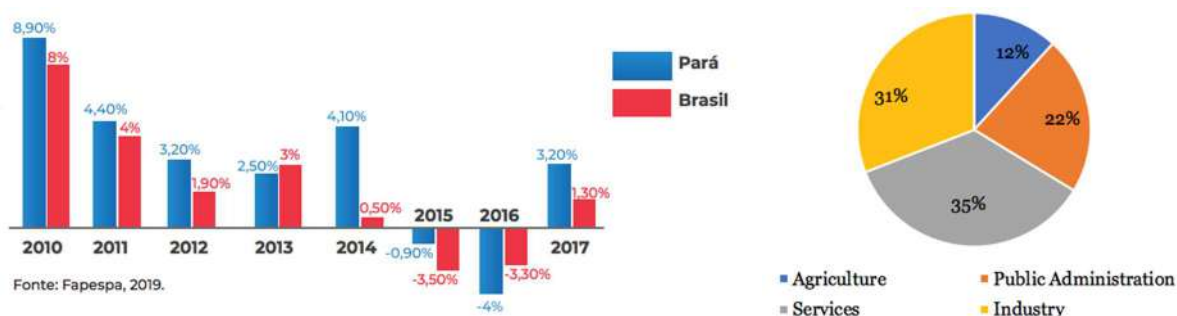
Figure 1. GDP growth rates, % per year. Source: IPEA (Institute of Applied Economic Research) by [Globo](#) (retrieved on October 1).



1.2 State of Pará outlook

After the recession of 2015-2016, both the national and state GDP rates grew, with Pará reaching R\$ 155 billion in 2017.

Figure 2. Real GDP growth rate of Pará and Brazil, 2010-2017. Source: [Pará Strategic Alignment 2019-2022](#)



The state economy is based on mining, agribusiness and trade. In 2020, Pará's economic activity registered growth of 0.58%, while the country suffered a 5.77% decrease. Pará's commerce has a positive sales growth (1.4%), in contrast to the national average (-6.20%). The Trade Balance in Pará (R\$ 11,639 million) represented approximately 32% of the National between January and August 2020⁸.

⁷ [Ipea reduz estimativa de queda do PIB de 6% para 5% em 2020](#). (news dated 01/10/2020, retrieved 02/10/2020).

⁸ [ICMS bate recorde no Pará em agosto; Estado teve o segundo melhor crescimento em julho](#). (news dated 01/10/2020, retrieved 02/10/2020).

During the 2020 pandemic, the State was able to control spending. The only group of expenditures that grew in 2020 was that of investments, since Pará managed to stabilize primary expenditures for 2021 even in the crisis. Just in the first trimester of 2020, the State invested R\$ 900 million of own resources. The need to carry out and maintain investments in the State allowed to save many jobs and generate new ones, mainly in the area of civil construction. The infrastructure works did not suffered disruptions⁹.

Exports of iron ore grew 25% comparing to 2019, benefitting the whole value chain. In agribusiness, the meat exports to China increased, in addition to other products, such as soybeans and cocoa. In addition, there was a considerable growth in revenues from the Tax on the circulation of goods and services (ICMS). It suffered a drop in April, recovering in June and breaking all the historical records in July (R\$ 1.18 billion) and then again in August (R\$1.27 billion).

The 2021 GDP of Pará is expected to be higher than pre-pandemic level.

⁹ [PIB do Pará deve encerrar 2021 acima do nível pré-pandemia](#) (news dated 24/08/2020, retrieved 16/09/2020).

2. Political developments in 2019-2020

The authority of state- and province-level governments (“second-tier governments”) to make decisions related to slowing deforestation independently of national governments varies widely across countries. **Brazil is one of the countries where the state governments have the broadest authority to reduce deforestation**¹⁰. This chapter focuses on the recent developments of forestry-related public policies and institutional developments of the State of Pará, followed by a summary of the federal level developments.

2.1 Political and institutional developments in the State of Pará

During the last two years, the state government of Pará succeeded in implementation of a legal framework of strategic and complementary lines of action to address deforestation – State Program Amazon Now and State Policy on Climate Change, both adopted as state laws in 2020.

The framework contains the implementation mechanisms such as command and control and land tenure regularization programs, in addition to a fundraising agency and sustainable land use incentives. It defines formal targets for deforestation and GHG emissions reduction, intends to comply with the safeguards of the REDD+ mechanism and contribute to the Nationally Determined Contributions (NDCs).

This step brings a long-term institutional resilience for state deforestation strategies, in addition to legal security of participating stakeholders, and is designed to become financially sustainable. It is a major development of the last two years.

2.1.1 Developments in public policies analyzed in the initial assessment

The current Governor, Helder Barbalho, took office on January 1st 2019. Since then he proactively set up, articulated and started implementation of the new strategy Amazonia Agora (known as PEAA, *Programa Estadual Amazonia Agora*). While some of the pre-2019 public policies were incorporated into PEAA, others were discontinued/substituted. This applies to the deforestation reduction mechanisms employed by the State of Pará, as mentioned in the initial assessment: PPCAD, PMV and Pará Sustentável (Pará 2030), as well as the monitoring project *De Olho Na Floresta*.

Pará 2030 (Strategic Plan for Sustainable Development of Pará) established in 2016 existed only for 2 years. With the government change, some of its actions were integrated into the Priority Supply Chains program, coordinated by the Secretary of Economic Development, Mining and Energy (SEDEME), although until the date of this survey the program had not been officially presented. (Gueiros et al, 2020¹¹).

The **State Plan for Prevention, Control and Alternatives to Deforestation in the State of Pará (PPCAD)** was launched in 2009 to reduce deforestation, maintaining forest and promote sustainable development. PPCAD introduced two new elements: goals for the deforestation reduction (reach the annual rate of 1,200 km² by 2020, comparing to 5,600 km²/year in 2008) and synthesized 65 actions divided into three thematic axes (Territorial, Land Tenure and Environmental ordering, Promotion of Sustainable Activities as well as Monitoring and Control). According to Gueiros et al, PPCAD faced challenges due to the difficulty of the state government to

¹⁰ [Authority of Second-Tier Governments to Reduce Deforestation in 30 Tropical Countries](#). Busch. J., Amarjargal, O. 2020.

¹¹ Uma década de construção da agenda climática do Pará, Brasil. Gueiros et al. 2020) unpublished on the moment of the assessment).

implement initiatives that require articulation and coordination among several Secretariats. The PPCAD, with *tempus regit actum* in 2020, was substituted by the new PEAA strategy which continues the proposal for territorial intervention (as described in the initial assessment).

Programa Municípios Verdes (PMV) was the main initiative of the state government dedicated to reducing deforestation and forest degradation in the last decade¹². Created in 2008 by Vale and established by the governor of Pará as a special program in 2011, it received a R\$ 88-million grant from the Amazon Fund in 2014. The funds allowed for setting up the Managing Committee (COGES) to take strategic decisions and action plans, as well as for creating a budgetary unit Executing Nucleus (NEPMV), linked to the Governor's Office, aimed at managing the actions of the Green Municipalities Program¹³. Supported by donor financing, the program has continued to exist despite three governmental changes.

A recent study¹⁴ analyzed the effects of the program over the deforestation rates of Pará municipalities during PMV's first phase, from 2011 to 2014. **It found little evidence that the program reduced municipal deforestation beyond what federal policies achieved, i.e. it did not accomplish its primary stated objective of reducing deforestation by building local environmental governance capacity. However, the study suggests that its positive effects upon local economies may make efforts to conserve forests more socially and politically sustainable in the long run.** The economic benefits could make it politically sustainable to maintain restrictions on deforestation, which are necessary for conservation.

According to Gueiros et al, the attempted decentralization proposed by PMV may not have resulted in quantifiable reductions in deforestation due to implementation problems as well as the design of the program itself. One of the challenges named is the expansion from 12 pilot municipalities to the whole state. In spite of availability of financial and human resources, the volume of work increased significantly thus taking the focus away from the most important municipalities in terms of combating deforestation.

De Olho Na Floresta, the monitoring project referred in the initial assessment, started in 2017, was implemented by the Center for Environmental Monitoring of Pará (CIMAM) and lasted only two years. It used high resolution satellite images acquired from Planet and aimed to generate weekly and monthly alerts of deforestation in the state, to provide information for decision-makers at SEMAS and make it publicly available. After the cost-benefit analysis conducted by the new government, the project was discontinued. Despite the high-quality information, the inspection department didn't have capacity to implement necessary actions. The project cost R\$ 5 million¹⁵ but had the same efficiency in terms inspection measures as it would have had using the free DETER data. In February 2020, the government of Pará launched the State Force to Combat Illegal deforestation, thus considerably improving the State's capacity of command and control. On the moment of this survey, there was no public information on how CIMAM could use the intelligence of DELEMAPH (Federal Police Department of Environmental Crimes) based on daily high-resolution images of Planet, or monthly images of Planet that were recently made publicly available by the Government of Norway. Still, both of these recent developments – command & control capacity and high-quality information – enable more efficiency in deforestation combat.

¹² On the moment of this assessment, the [municipalities monitoring still goes on](#), with 132 municipalities making part of the program and COGES formally existing (the last meeting took place in December 2019 where the new PEAA strategy was presented to the participants).

¹³ [Decree 7.756/2013](#) on creation of NEPMV (retrieved 10/11/2020).

¹⁴ Sills et al. 2020. "[Investing in local capacity to respond to a federal environmental mandate: Forest & economic impacts of the Green Municipality Program in the Brazilian Amazon](#)," World Development, Elsevier, vol. 129(C).

¹⁵ [Planet Contract to acquire satellite images for SEMAS](#) (retrieved 16/09/2020).

2.1.2 Launch of the State Climate Change Policy

In May 2020, Pará launched its Climate Change Policy¹⁶. This new legislation aims at mitigation of the impacts of climate change and builds on the principles of access to environmental information, inspection of environmental quality and sustainable use of natural resources, environmental education, as well as on the principles of polluter-pays and protector-receives.

2.1.3 Launch of the State Program Amazon Now

In 2020, Pará adopted the new state plan PEAA (*Amazonia Agora*) that aims to achieve the SDGs in rural areas. It includes four mechanisms to address deforestation:

- 1) the State Force to combat deforestation,**
- 2) Eastern Amazon Fund**
- 3) the Policy for integrated performance of sustainable territories,**
- 4) the land-use and environmental regulation program.**

Other mechanisms, programs, actions and funds can be considered as Program's tools once they are compatible with its objectives and goals.

PEAA sets quantitative time-binding indicators for CO₂ emissions reduction, linked to annual deforestation rates. Established by Decree No. 941/2020¹⁷, it aims at fostering regional development, with attention to stimulating productivity accompanied by technical assistance, technological innovation together with good socioenvironmental practices, and restructuring of state environmental management to meet the targets set out in international agreements.

PEAA intends to:

- consolidate the instruments to achieve results and comply with the safeguards of the REDD+ mechanism;
- implement Pará's contributions to global sustainable development commitments, incl NDCs;
- encourage activities that promote the prevention and mitigation of greenhouse gas emissions (GHG);
- prevent, control and provide alternatives to deforestation;
- develop environmental, economic, financial and fiscal strategies for environmental protection in the State of Pará, Brazil, according to the State Policy on Climate Change - State Law No. 9,048/2020.

The Plan builds upon structural and across cutting components, as well as the existing tactical mechanisms (new governmental and non-governmental programs, funds and projects provided can be considered once they are compatible with the purposes, guidelines and objectives of the PEAA and the State Policy on Climate Change):

Structural components	Cross-cutting components
<ul style="list-style-type: none"> • Low Emission Socioeconomic Development; • Long-term Environmental Financing; • Inspection, Licensing and Monitoring; • Land, Land Use and Environmental Planning. • The thematic targets for each of the components are under development. 	<ul style="list-style-type: none"> • Communication, data transparency and participatory management; • Infrastructure and logistics for sustainable development; • Information technology, innovation, scientific and technological research.

¹⁶ [Pará institui Política Estadual sobre Mudanças Climáticas](#) (news dated 08/05/2020, retrieved 16/09/2020).

¹⁷ [Decree No. 941/2020](#) (retrieved 11/11/2020).

The Plan consists of four strategic, synergistic, and complementary lines of action. They unite efforts to combat deforestation, reduce GHG emissions in a sustained manner, and implement a new model of economic, social, environmental, and institutional replication:

1. **State Force to Combat Deforestation** established by Decree No. 551/2020, focuses on tackling environmental crimes by planning and monitoring emergency government actions implemented through initiatives of six State agencies. It is a command-and-control axis of PEAA. Its objectives *inter alia* include establishment of environmental ombudsmen to gather complaints on deforestation and exchanging information among agencies on joint surveillance actions.
2. The **Eastern Amazon Fund (*Fundo Amazonia Oriental, FAO*)** is an environmental financing strategy aimed to raise funds from private institutions as well as donor countries in order to strengthen public policies and social initiatives focused on environment and development, in Pará. It was legally recognized by a respective decree issued by the state government at the end of 2019. Its investment guidelines correlate with the SDGs, addressing actions such as strengthening governance and transparency instruments for social control of public policies and sustainable forest management, as well as the management of public forests.

The FAO differs from Fundo Amazonia in a number of characteristics. Unlike Fundo Amazonia managed by a for-profit entity - a bank (BNDES), FAO's manager is obligatory a civil society entity. This way, it only aims on an effective commitment between government, society and business, but also reinforces the art. 225 of the Federal Constitution, i.e. pioneers a model where the leadership for the defence of the environment is not centralized with government, but engages civil society and business as key segments to resolve complex problems that are directly affecting the whole community. **FAO does not imply abandonment of the Fundo Amazonia resources** rather constitutes an additional tool for Pará's strategy in search of its own model of regional development.

3. The **Sustainable Territories Integrated Action Policy (TS)** was instituted by Decree No. 344, of October 10, 2019 in order to build a new model of participatory economic and social low emission development, with the proper management of natural resources and social welfare. The TS aims to increase productivity through technical assistance, rural extension services, technological innovation and access to credit. At the same time, TS is expected to catalyze the creation of jobs and income by enhancing the value of Amazon biodiversity products. It promotes land-use planning and environmental regulation as an incentive to sustainable rural development and a culture of peace in the rural area. It also includes direct actions towards the protection and maintenance of ecosystems, promoting local and traditional communities' participation. The selected seven state agencies¹⁸ execute the Policy, and it is expected that other players from private and public sectors, as well as civil society will join TS as partners.
4. **Pará Land Use and Environmental Regulation Program (Regulariza Pará)**, provided for in Art. 9, IV of Decree No. 941/2020 addresses the recovery of the degraded areas and promotion of decentralization of environmental management instruments in the State. The Program aims at directing efforts to reverse irregularities in rural properties, providing legal security and environmental safety to entrepreneurs and rural producers with incentives to legalize their properties and economic activities. It also looks to stimulate trade, integrating the good practices of legalization, to expand markets, improve credibility for investors and facilitate access to loans.

¹⁸ Agricultural Defense Agency of the State of Pará (Adepará); Technical Assistance and Rural Extension Company of the State of Pará (Emater-PA); Pará Land Institute (Iterpa); Institute for Forestry and Biodiversity Development (Ideflor-Bio); State Secretariat for Agricultural Development and Fisheries (Sedap); Secretariat for Economic Development, Mining and Energy (Sedeme); and the State Secretariat for the Environment and Sustainability (SEMAS).

2.1.4. Results of the Amazonia Viva operation

Operation Amazônia Viva makes part of the command-and-control action line of PEAA. On November 7th, it finished its fifth phase and takes place in 15 municipalities. During the previous four phases, **the Operation resulted in 60% reduction of deforestation in state areas comparing to the same period of 2019**¹⁹. The Secretary of Environment and Sustainability of Pará (SEMAS) coordinates the Operation and determines the focus of action based on INPE satellite monitoring. According to SEMAS, the balance of the three previous phases of the Operation seized 4,400m³ of wood and embargoed ca. 120,000 hectares²⁰.

2.1.5 Cooperation with KfW

The so-called KfW Estruturante Project guarantees investments of EUR 12.5 million and aims at deforestation reduction in Pará, addressing the licensing, monitoring and inspection issues.

The project will allow the implementation of physical and operational infrastructure, aiming at deconcentrating the management of SEMAS and the Institute Forest Development and Biodiversity (Ideflor-Bio), as well as strengthening regional environmental management. This financial cooperation is also expected to directly collaborate with the results of Amazônia Agora.

In March 2020, the government of Pará discussed with the German government and KfW representatives the next investments in the Amazon protection. Two other potential partnerships are under negotiation. One of them, ca. EUR 10 million aims to promote development of socio-biodiversity product chains (bioeconomy). Another, of ca. EUR 21 million focuses on strengthening of illegal deforestation combat in Amazon. The projects are undergoing internal review in Germany, should be carried out in more than one of the states in the Legal Amazon and are expected to start closer to the end of 2020. This is when the final design of the operation along with the monitoring and transparency criteria are to be defined.

Additionally, the State of Pará can apply for REM Phase II. If implemented, this will contribute significantly to the feasibility of the state's strategy in mid- and long-term, quantitative and time-binding targets for deforestation reduction.

¹⁹ [Operação Amazônia Viva divulga balanço parcial de ações](#). (news dated 30/09/2020, retrieved 02/10/2020).

²⁰ [Quarta fase da Operação Amazônia Viva coloca em proteção área maior que a ilha de Mosqueiro](#) (news dated 13/10/2020, retrieved 11/11/2020).

2.2 Relevant developments on the Federal Level

The major developments of the last two years included an updated REDD+ governance and creation of the federal level programs to attract private investment in Amazon conservation and restoration. IBAMA is passing through a crisis resulting in a reduced performance due to financial programming issues and human resources shortage, thus impacting the efficiency of its fiscal operations. In order to contain the growing deforestation trends, the federal government deployed the military until the end of 2022. Another relevant development is planned regulation of mining in the indigenous lands.

2.2.1 REDD+ governance updates

The MMA reestablished the National Commission for REDD+ (CONAREDD+) at the end of 2019, and since July 2020 it has two technical working groups operating: REDD+ Safeguards (GTT-Salv) and REDD+ MRV (GTT-MRV). The MMA will update the ENREDD+ strategy (operational since 2015); the GTT-Salv will (re)conceptualize the REDD+ Safeguards according to the updated national context.

An important resolution approved by CONAREDD+, is the formal recognition of the contribution of the voluntary carbon market to emission reduction from deforestation and native forests degradation. According to the [minutes](#) of the CONAREDD+ meeting, the recognition of the “the contribution” of the voluntary market is due to the fact that it is not an official regulated market, and further details will await the unfolding of the next COP’s meetings.

2.2.2 Programs to attract private investment to conservation of Amazon

FLORESTA+, a National Program of Payment for Environmental Services, launched as GCF pilot project for results based payments.

In July 2020, the Ministry of Environment [established](#) the National Program of Payment for Environmental Services (PSE). It aims at promoting the private market of PSE in areas maintained with native vegetation cover as well as articulation of public policies of conservation and protection of native vegetation and climate change. It also seeks to stimulate the activities of prevention of deforestation, degradation and forest fires through the private financial incentives.

On September 29, 2020 the Ministry of Environment published the Ordinance #518²¹, in order to promote the public and private voluntary markets of carbon credits from native forest, called Floresta+ Carbono. The objective is to create a favorable and effective business environment for environmental services, assuring the native vegetation conservation²². This market will not entail any obligation for the Federal Government to account, adjust or consider the reductions in the National GHG Emissions Inventory. This provision thus allows for the voluntary market to establish its own rules and parameters, with no links to the national commitments of the Federal Government.

In the second semester of 2020, Brazil’s federal government launched one more **financial mechanism aimed to protect the native forest and reduce deforestation. The “Adopt a Park” is the biggest partnership between the government and private sector for conservation of 132 Brazilian parks (15% of Brazil’s portion of the endangered ecosystem)**, with Brazilian and foreign companies and an annual potential of EUR 650 Million dedicated to Amazon protection. It provides that a park can be adopted by a company or a consortium for a period of one year, with possible renovation. BNDES is the program’s manager in cooperation with ICMBio, i.e. the companies don’t need to assume the management over the donated resources.

²¹ [Portaria #518](#), de 29 de Setembro de 2020.

²² [Floresta+ Carbono](#). MMA, 2020.

Currently, 15 Brazilian companies, among them 3 banks, expressed interest to participate. Prices are R\$ 50 per hectare per year for national entities, and EUR 10 per hectare per year for foreign (no interest expressed yet)²³.

2.2.3 IBAMA slower performance

The Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) faces a deficit of human resources, with a total of only 591 environmental agents, of them just 13 forest inspectors in the state of Pará²⁴. In addition, the agency faces financial programming issues, executing the available budget in less than 50%.

According to the data of O Estado de S.Paulo²⁵, in 10 years IBAMA lost 55% of its staff, to now the lowest number of personnel since IBAMA's creation in 1968. In 2019, there was a 24% reduction over the previous year, basically, due to the retirement of civil servants and the lack of public tenders to replace the teams.

Due to financial programming issues, IBAMA spends less than the available budget thus impacting the operations. Until October 21, it had executed only 48.2% of the authorized budget for fires prevention and combat, and 39.7% of the environmental inspection budget. In May, IBAMA received R\$ 50 additional millions to combat and prevent fires, from resources recovered by Operation Lava Jato. Of this amount, just 36.3% was spent²⁶. Part of its funding (R\$ 212 million since 2014), including for forest fires prevention and combatting, IBAMA was sourcing from Fundo Amazonia, funds not available today as Fundo Amazonia is currently on standby under the negotiation with donors²⁷.

2.2.4 Operation Verde Brasil 2

Since May 2020, the military has been working to combat illicit environmental acts in the Amazon as a result of Operation Green Brazil 2, a Law and Order Guarantee (GLO) mission enacted in May this year by President Jair Bolsonaro. The GLO has been extended and is expected to last until the end of 2022²⁸. During the first four months of the Operation, it embargoed 54 million hectares and seized 5,431 cubic meters of wood as well as 8,050 tons of ore, 52 illegal vehicles for transporting wood etc. It also applied R\$ 244 million of fines²⁹.

²³ [Parques florestais da Amazonia recebem propostas de adoção de 15 empresas](#) (news dated 11/09/2020, retrieved 16/09/2020).

²⁴ [Mourão reconhece sucateamento de Ibama e ICMBio](#) (dated 28/09/2020, retrieved 02/10/2020).

²⁵ [Em 10 anos, Ibama perde 55% dos fiscais para combate a crimes ambientais](#) (news dated 14/08/2020, retrieved 16/09/2020)

²⁶ [Crise no Ibama: entenda o que se sabe e o que ainda é preciso esclarecer na decisão que travou combate ao fogo](#) (news dated 22/10/2020, retrieved 11/11/2020).

²⁷ [Em meio à crise financeira, Ibama defende retomada do Fundo Amazônia para reforçar fiscalização](#) (news dated 23/10/2020, retrieved 11/11/2020).

²⁸ [Operação Verde Brasil 2 deve prosseguir até fim de 2022, diz Mourão](#) (news dated 21/10/2020, retrieved 11/11/2020).

²⁹ [PF investiga extração ilícita de madeira da terra indígena do Alto Rio Guamá](#). (news dated 25/09/2020, retrieved 02/10/2020).

2.2.5 Developments at INPE and forest monitoring

During the last two years, two high level professionals of INPE were dismissed by the federal government after the disclosure of deforestation growth rates in 2019 and in 2020. The INPE's budget, already reduced in 2020, will see a 33% drop in 2021, with no budget for scientific research.

In 2019, the President removed from the office Dr Ricardo Galvão, the head of INPE that pointed to the growth of deforestation in the Amazon, claiming the damage of the country's reputation and the veracity of figures. In 2020, after the INPE's monitoring results update in July, Ms Lubia Vinhas, the general coordinator of Earth Observation of INPE, the department responsible for DETER and PRODES systems, was dismissed by the Minister of Science and Technology³⁰.

The annual budget of INPE in 2020 was R\$ 118.2 million, a 33% drop is expected in the budget of 2021. As a consequence, the Brazilian Space Agency decided to cut the research, development and human capital budget of INPE to zero for 2021³¹.

The Planet high-resolution satellite imagery of tropical forests, including Amazon, will be freely available for anyone to view and use through Norway's technology partners like [Global Forest Watch](#). Beginning in mid-October 2020, anyone will be able to download the analysis-ready monthly Basemaps of these regions through Planet's online satellite imagery platform, [Planet Explorer](#). This is expected to have a strong impact on the monitoring procedures in Amazon.

³⁰ [Coordenadora do Inpe é exonerada após dado de devastação desmentir governo](#) (news dated by 13/07/2020, retrieved 16/09/2020).

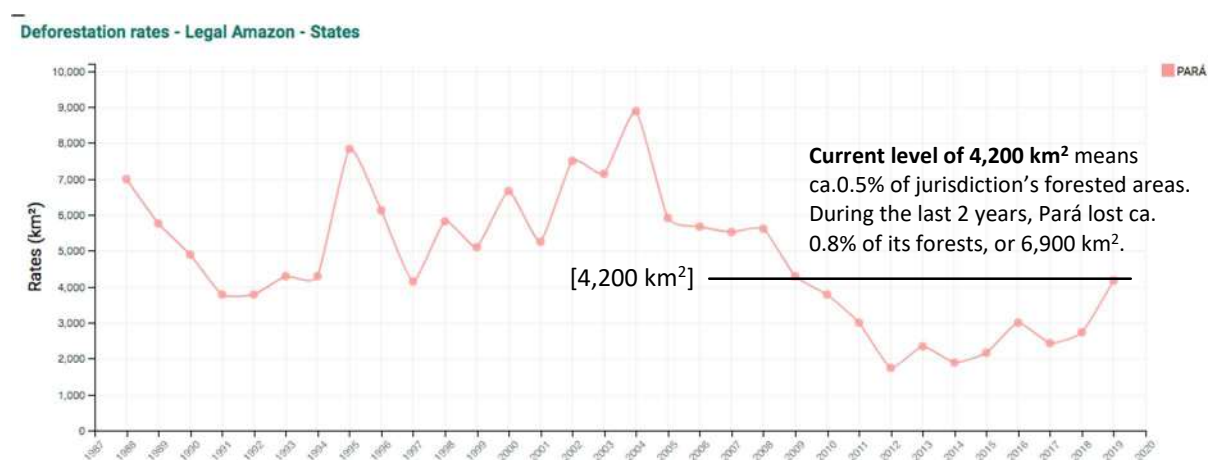
³¹ [Agência Espacial Brasileira zera orçamento do Inpe para pesquisa em 2021](#) (news dated 17/08/2020, retrieved 16/09/2020).

3. Deforestation trends in 2019-2020

3.1 Current trends versus historical and updated targets

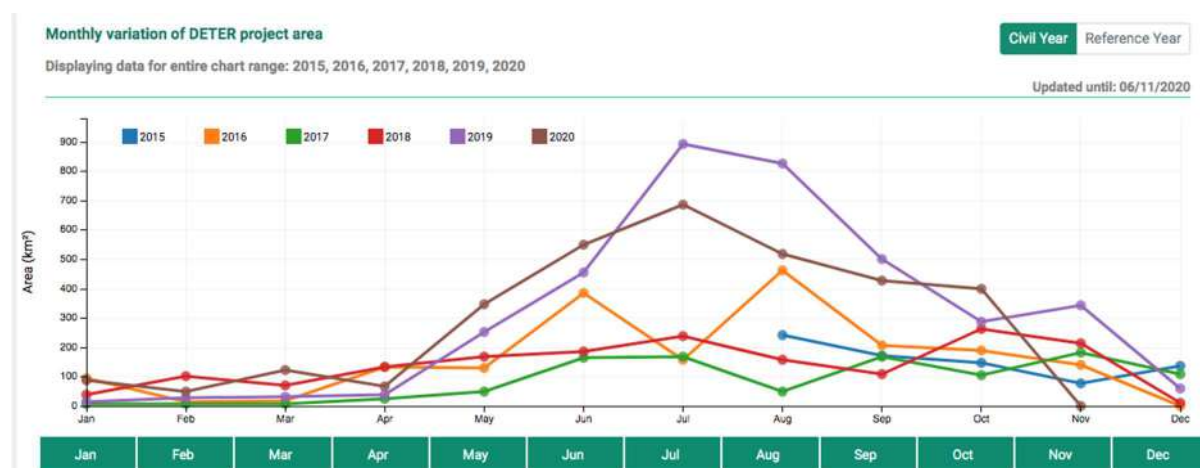
During the last two years, the state of Pará suffered from a growing deforestation trend, with the annual rate increasing from 2,400 km² in 2017 to 4,200 km² in 2019 (Figure 3). The state lost ca. 0.5% of its forests in two years, totaling 6,900 km². In terms of the total area impacted, deforestation occurred on 0.34% of the state lands. According to the preliminary results of INPE, the annual deforestation rate in Pará came back to its 2009 level, a year when the PPCAD target was announced (see Chapter 5 for targets details).

Figure 3. Annual deforestation rate in Pará. Source: [INPE](#).



The monthly deforestation dynamics, based on DETER/INPE data (daily deforestation alerts), shows an extreme growth in 2019 comparing to the previous years, especially between June and October. The 2020 curve is more flat than the 2019 one, though still much higher than historical levels of the last 5-year period (Figure 4).

Figure 4. Comparison of deforestation alerts patterns during the last five years in Pará. The last two years represent the highest figures. While in 2019 there was a higher peak between June and September, the values of 2020 were flattened though still considerably higher than in the previous periods. [INPE 2020](#).



3.2 Deforestation dynamics on the municipality level

The state of Pará is the second-largest state of Brazil in area. It contains some of the largest municipalities in the world, like São Félix do Xingu (the size of Austria) and Altamira (twice the size of Austria). The latter is home to one of the biggest and most controversial hydroelectric dam complexes in the world, Belo Monte. The state has a high potential in mining resources. Such locations often overlap with protected areas and indigenous lands (both legally protected) which constitute almost 60% of the state's area. These characteristics differ the deforestation drivers in this jurisdiction from other Legal Amazon states and should be taken into consideration while analyzing the local deforestation dynamics.

The national annual deforestation rates, based on INPE data, are expressed in absolute values, thus some the largest Para municipalities have the highest accumulated deforested areas in Amazon (Figure 5).

Figure 5. Accumulated deforestation increments per municipality, summed up since the beginning of the monitoring in 1998. The range considers a sum of absolute values of annual increments. It is not normalized per municipality size. The municipalities with the highest accumulated increment value are shown in darker colour. These “darker” municipalities coincide with the persistent deforestation municipalities, analyzed below.

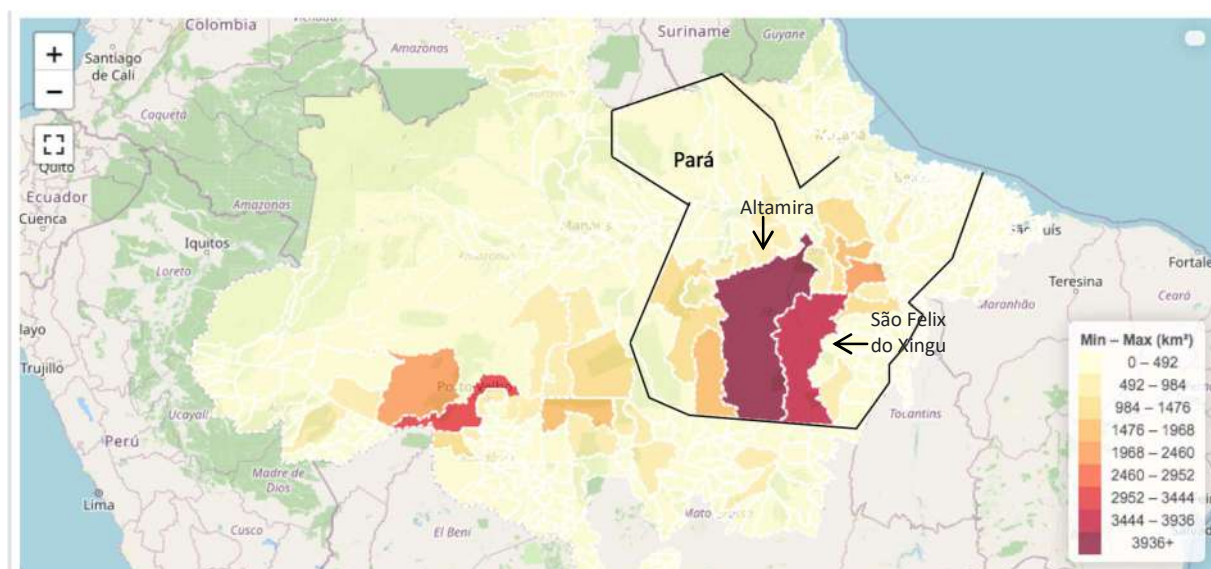


Figure 6. Pará municipalities and primary forest cover. Just 10 out of 144 municipalities of the Jurisdiction contain 65% of the Jurisdiction's forest; 5 out of these 10 are suffering from growing deforestation rate. Source: presentation of Andrea Coelho (SEMAS) at the webinar “Discussing the PEAA” (November 18, 2020).

According to the data presented by SEMAS at the webinar “Discussing the PEAA” (November 18, 2020), just 10 out of 144 municipalities of Pará contain 65% of the Jurisdiction's forest – **Altamira, São Félix do Xingu, Itaituba, Novo Progresso, Portel**, Oriximiná, Almeirim, Jacareacanga, Óbidos and Alenquer. The first five of these, in bold, suffer from a growing deforestation rate.

Box 1. Dynamics of deforestation in “deforestation territories” of Pará

A recent study³² shows that out of all the 144 municipalities of Pará, just 18 compose the “deforestation territories” where deforestation persists during the last years. Other municipalities, including those with the highest deforestation rates in 2008, are following the deforestation-free development. These municipalities represent ca. 30% of the State’s total area. The agriculture plays an important role in their development.

The “deforestation-free” development is not equal to “zero deforestation”, it does not reflect the land use in the municipality in full. In persistent deforestation territories, not all of the areas are taken over by deforestation: there are sectors, neighborhoods, communities that don’t remove vegetation anymore. Likewise, in post-pioneer territories, deforestation may persist, but without enough weight to influence territorial dynamics and the classification of the territory as a whole.

According to the study, **there has been a shift in the geography of deforestation. The largest deforesting municipalities are no longer the same as those before 2008. Out of 22 “deforestation champions” of 2008, only 6 continue to have high deforestation in line with the overall figures of the State** (Figure 7 and

³² Os Territórios de desmatamento na Amazônia. Uma análise geográfica no Estado do Pará. Pocard et al. 2020. Unpublished on the moment of the assessment.

Figure 8).

Figure 7. Deforestation dynamics of today's deforestation free territories (according to the classification of Poccard et al.) that had the highest accumulated deforestation until 2008 (deforestation champions). Chart elaborated by author based on [INPE](#) data.

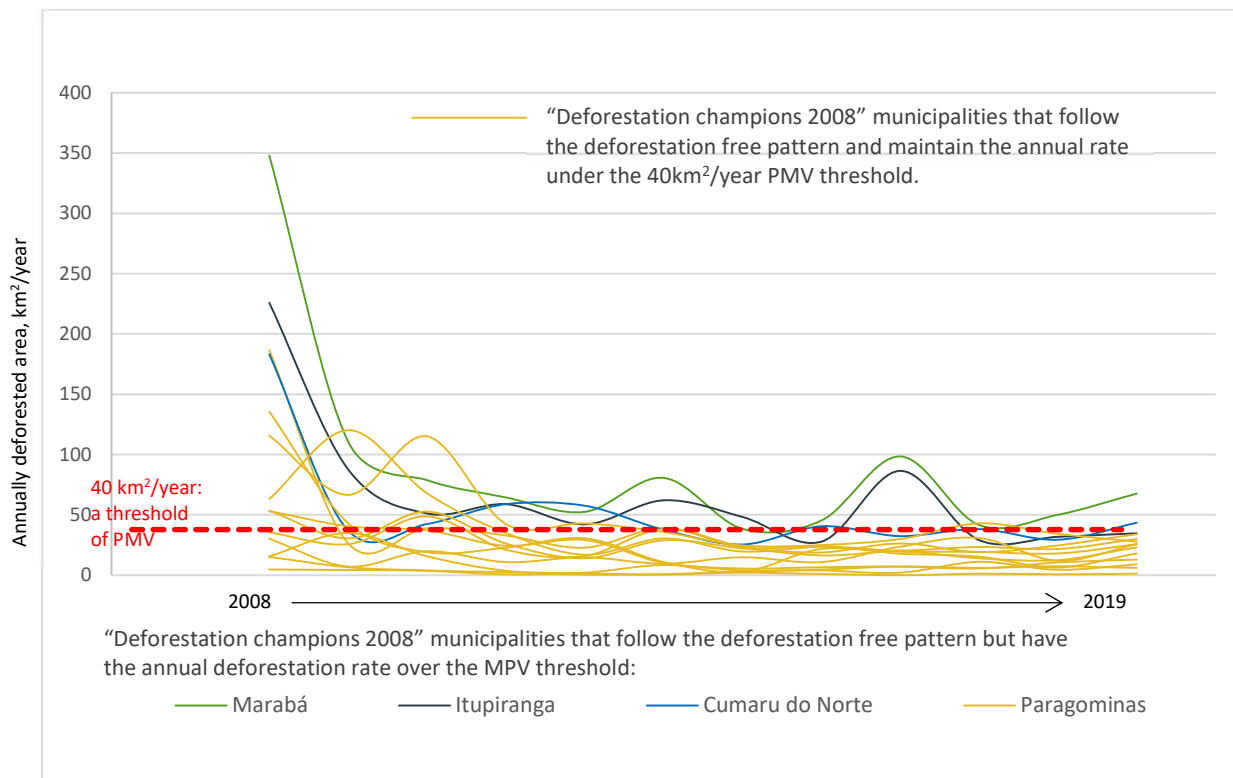
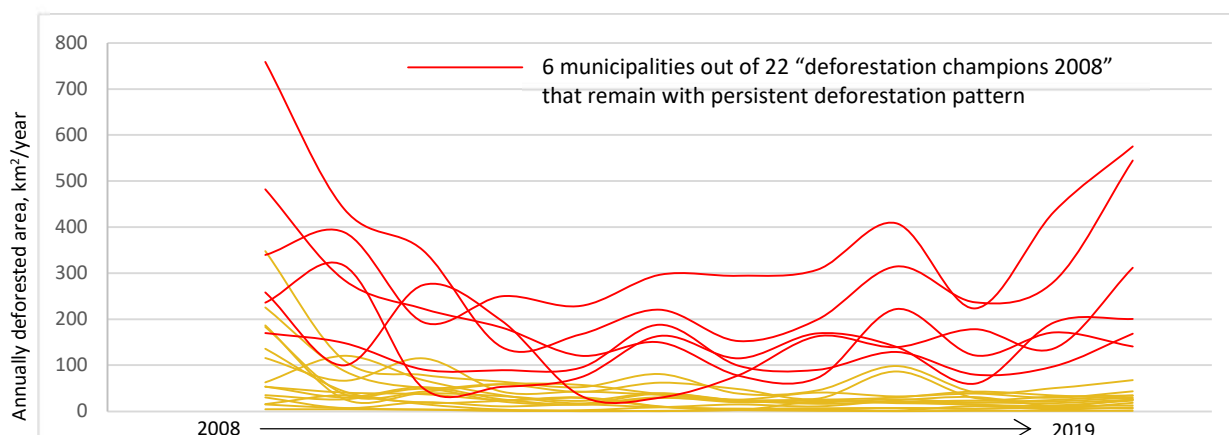
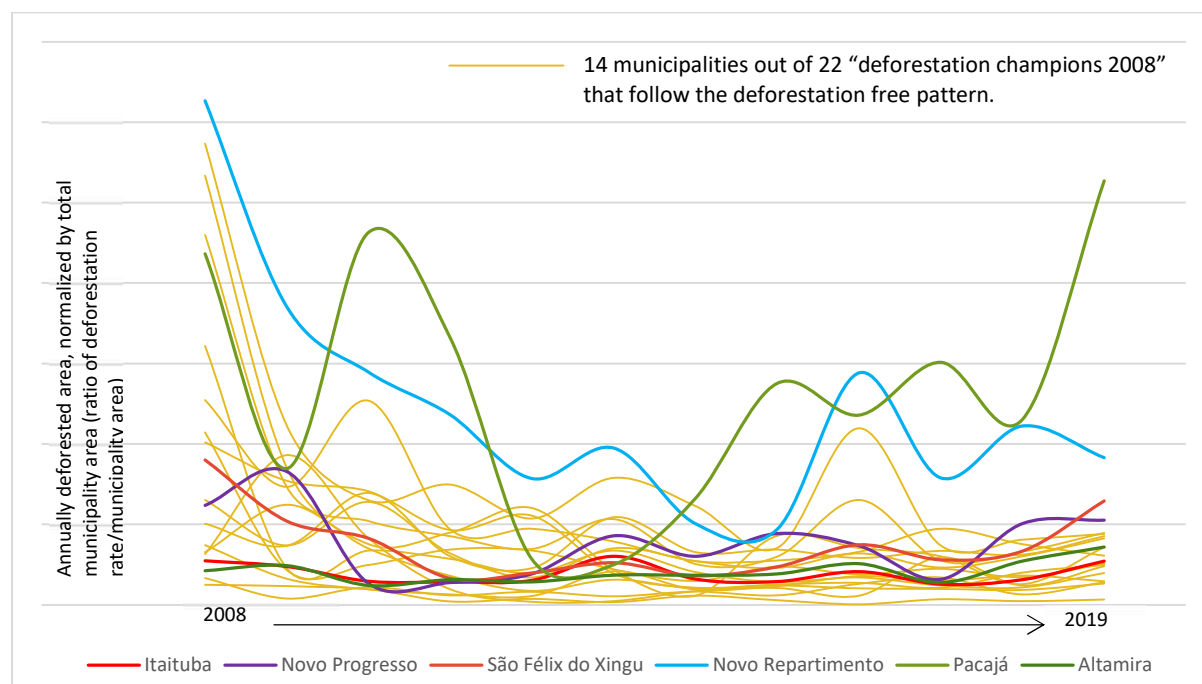


Figure 8. Comparison of deforestation dynamics in 22 municipalities that were listed as “deforestation champions” in 2008. The 6 of these remain with persistent deforestation pattern until now. Others follow the “deforestation free” models of development. The “red” municipalities with persistent deforestation include Itaituba, Novo Progresso, São Félix do Xingu, Novo Repartimento, Pacajá and Altamira. Chart elaborated by the author based on INPE data.



When seen from the normalized by municipality area annual deforestation rate, Altamira – an absolute leader both in deforestation rate and municipality size, has the deforestation pattern compatible with the universe of other 14 deforestation free municipalities.

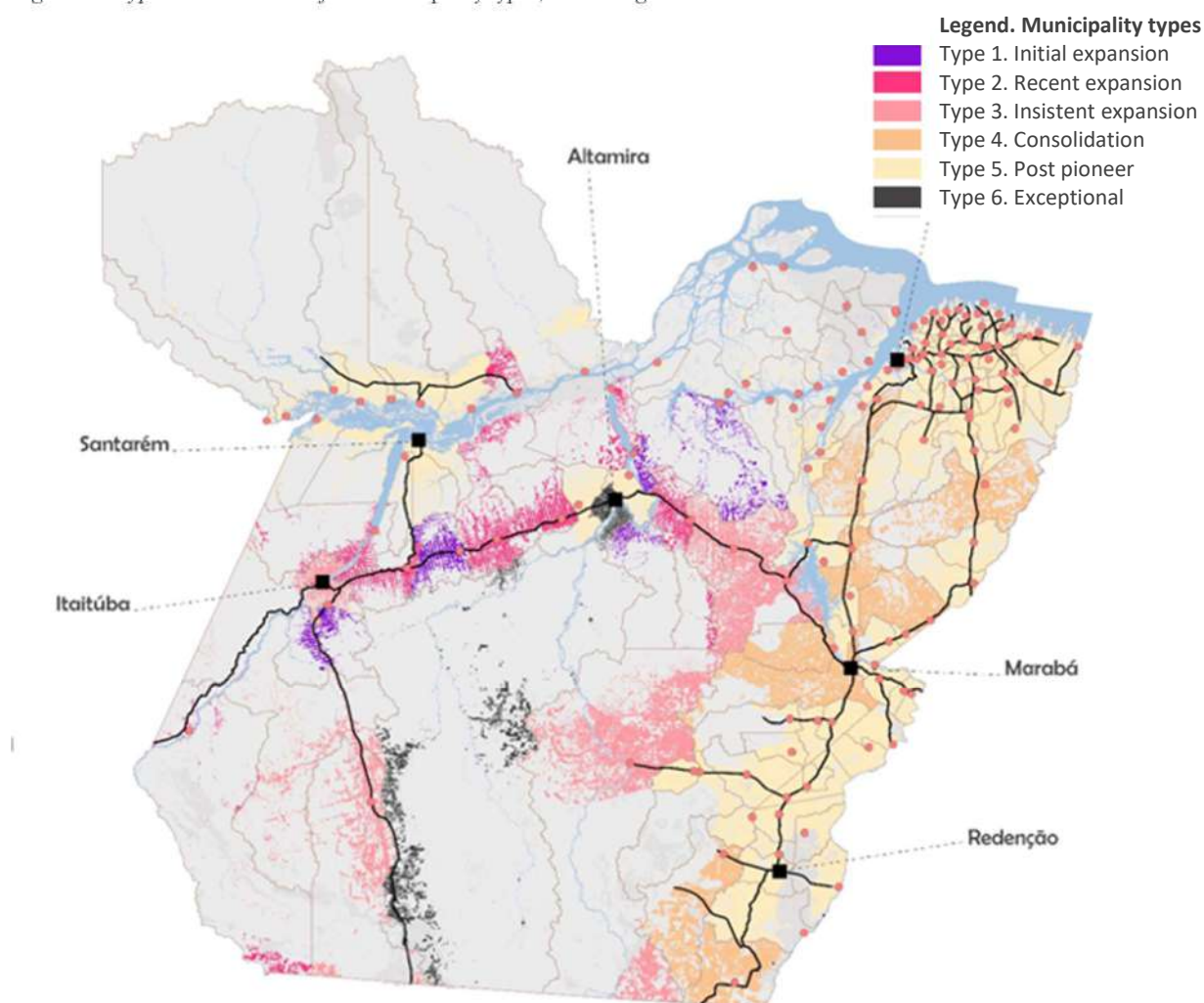
Figure 9. Deforestation dynamics of 6 ex-deforestation champions of 2008 with ongoing persistent deforestation dynamics normalized by municipality area.



The “deforestation territories” (types 1, 2, 3 and 6) are located in the South, West and centre of Pará, especially on the Transamazon and BR 163 roads. Altamira represents an exceptional situation as it is one of the biggest municipalities in the world (161,000km², comparable to Florida). It occupies the central part of the state and is under pressure of three new very active pioneer frontiers.

The deforestation-free municipalities and those in advanced phase of transition are located in the Eastern part of Pará.

Figure 10. Types and locations of the municipality types, according to Poccard et al.

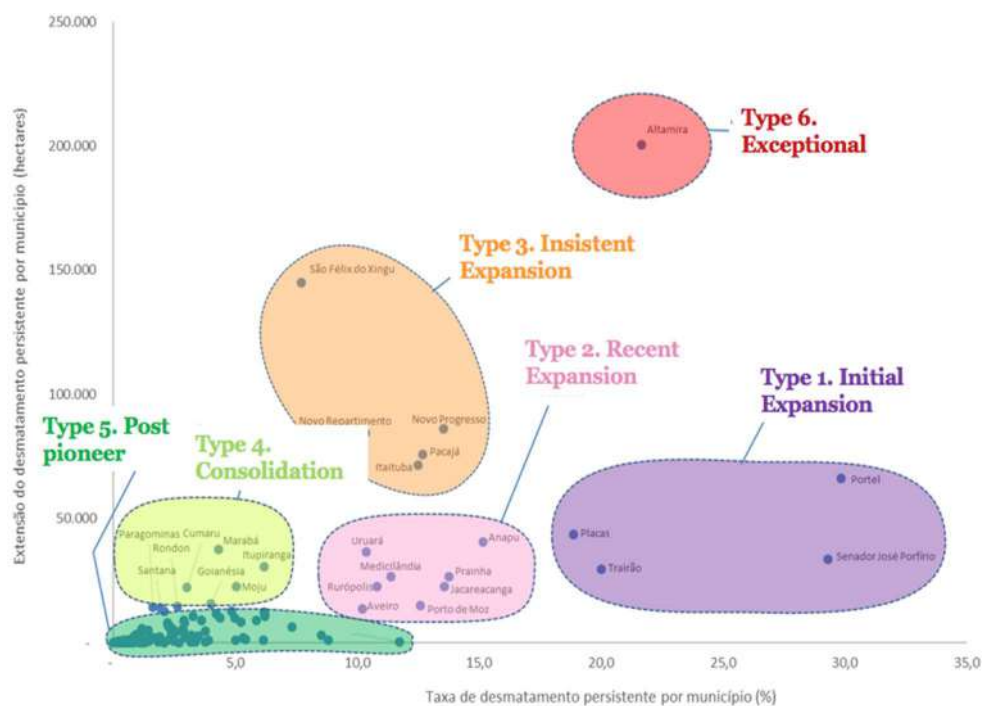


The extent of persistent deforestation is the sum of all areas deforested between 2013 and 2018 within each municipality. It shows how much each municipality continues to deforest.

The rate of persistent deforestation is a ratio between persistent deforestation and total deforestation, in each municipality. It allows assessing the extent to which post 2012 deforestation is relevant, when compared to the total deforestation in the municipality, i.e. persistence rate.

The deforestation has become an exception in the territories of Pará concentrating in specific municipalities with active “pioneer” development of the territory (i.e. agriculture not relevant). The majority of the municipalities (type 4 & 5), i.e. 126 municipalities representing 54% of the Pará state, follow a deforestation-free development model.

Figure 11. Typology of municipalities according to the deforestation pattern. Horizontal axis - persistent deforestation rate per municipality (%), vertical axis – extension of persistent deforestation in the municipality (ha).



3.3 Deforestation trends in the conservation units and indigenous territories

The State of Pará also had the highest rates of deforestation both in the conservation units and in indigenous lands. The Figure 12 and Figure 13 show the respective areas with the highest rates of accumulated deforestation (since 1998).

Figure 12. Accumulated deforestation increment map in conservation units. Source: INPE/PRODES 2020.

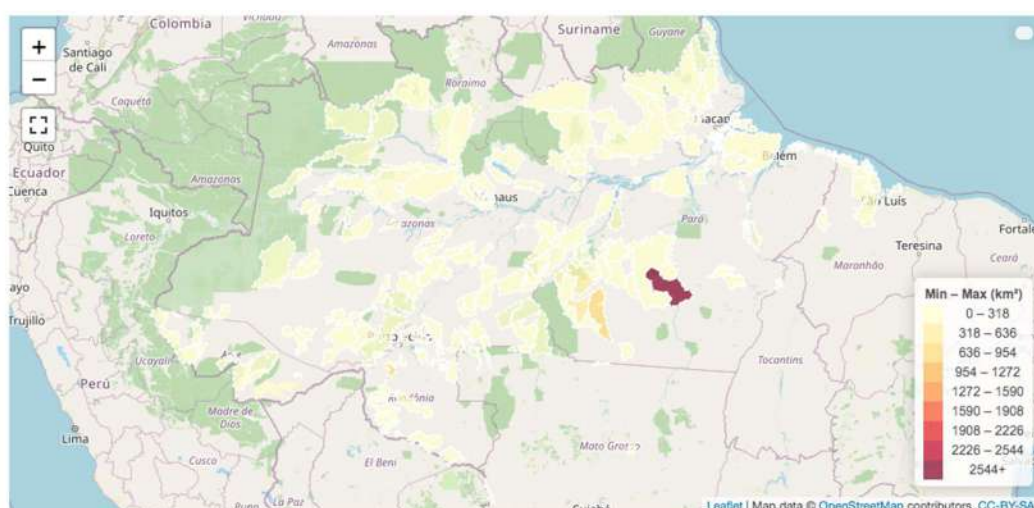


Figure 13. Accumulated deforestation increments map in indigenous land, and three the most deforested municipalities of 2019, all located in Pará.. Source: INPE/PRODES 2020.



The three most deforested indigenous lands in 2019 include Cachoeira Seca, Apyretewa and Ituna/Itatá indigenous lands, all located in Pará (Figure 14, Figure 15 and Figure 16).

Ituna-Itatá is an indigenous land of 1,420 km². It is currently under assessment and restricted use, a stage that prevents the entry and permanence of people without Funai's authorization. However, 94% of this public land was recently registered with the Rural Environmental Registry (CAR) in the name of self-declared "owners".

This problem is highly relevant to other indigenous lands. Recently, the Federal Prosecutors Office mapped³³ almost 10,000 properties overlaying the indigenous lands, 2,325 of them in Pará. According to Deputy Attorney General of the Republic, Antônio Bigonha, the expressive number of rural properties registered in the CAR overlapping areas destined to indigenous peoples reveals the strong pressure that these lands are suffering, both from an environmental and land rights perspective.

Figure 14. Annual deforestation rates in the Cachoeira Seca indigenous land. Source: INPE.



Figure 15. Annual deforestation rates in the Apyterewa indigenous land. Source: INPE.



Figure 16. Annual deforestation rates in the Ituna/Itatá indigenous land. Source: INPE.



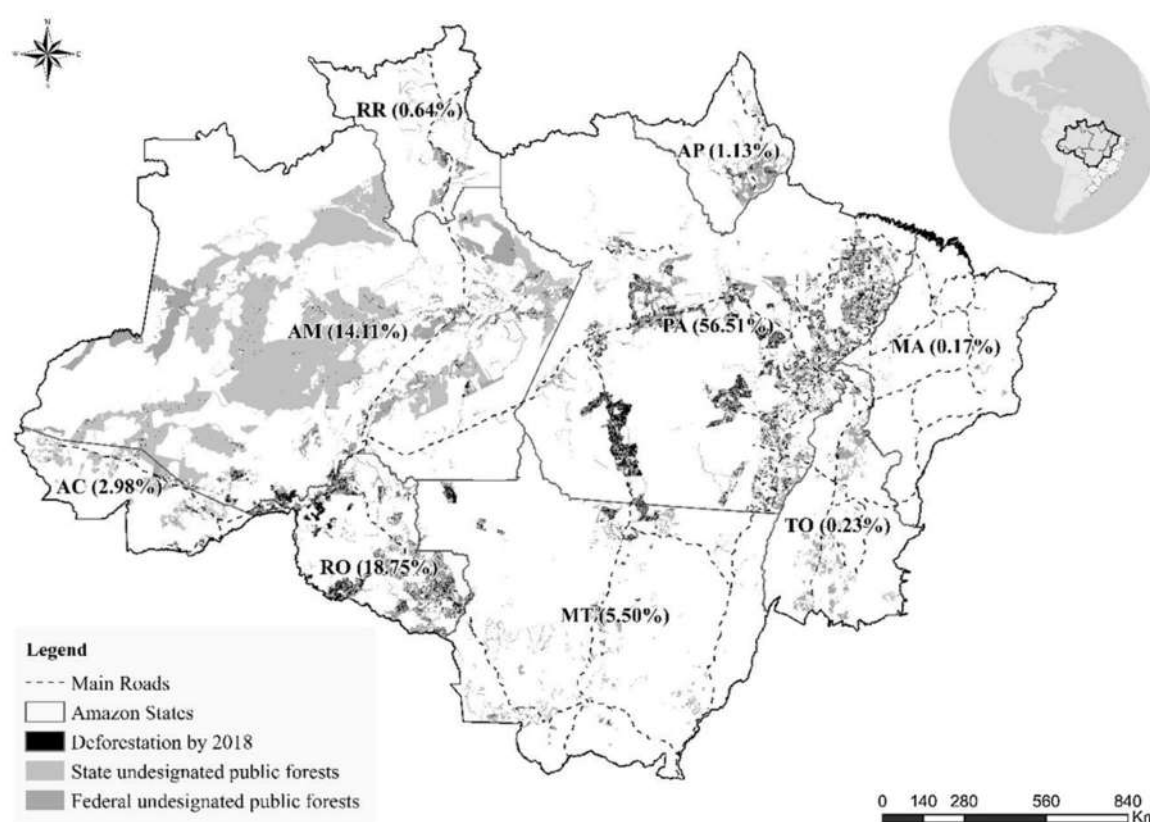
³³ MPF identifica quase 10 mil registros de proprietários privados no Cadastro Ambiental Rural em áreas destinadas a povos indígenas. MPF, 2020.

4. Current Challenges

4.1 Land Grabbing and Land Tenure

The Brazilian Amazon has 49.8 million hectares of public forestlands not allocated by the federal or state governments to a specific tenure status: the so called undesignated public forests (UPF). Historically, these public forests have been vulnerable to land grabbers and land speculation: between 1997 and 2018, five per cent of this area had already been deforested. More than half of this accumulated deforestation is in the state of Pará (Figure 17).

Figure 17. Percentage of accumulated deforestation (1997-2018) on undesignated public forestlands (UPF) in Brazilian Amazon States. The state of Pará concentrates 56.51% of the accumulated deforestation in UPF. Source: Azevedo-Ramos, 2020³⁴.



According to the Institute of Amazonian Research (IPAM)³⁵, land-grabbing accounted for 35 per cent of deforestation in the Amazon between August 2018 and July 2019.

According to Pocard et al., land tenure issues are the subject of numerous research programmes in Pará, and the show that deforestation persists in a few territories, located at the forefront of the pioneer expansion. This confirms the importance of the land market, since land is the main commodity and the most attainable way to accumulate assets. The expectation of grabbing and selling land, or speculating, is a major factor in deforestation. The absence of land title presents a barrier for investments for agriculture development.

³⁴ [Lawless land in no man's land: The undesignated public forests in the Brazilian Amazon](#). Azevedo-Ramos, C. 2020.

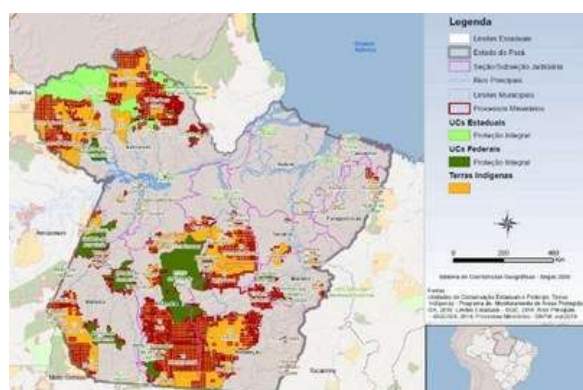
³⁵ [35% do desmatamento na Amazônia é grilagem, indica análise do IPAM](#) (news dated 11/02/2020, retrieved 16/09/2020).

In December 2019, the Brazilian government announced a change in the land tenure system, facilitating land claims and restricting on-site inspection for cases where there were issues and disputes or for properties over 400 ha. By this new legal instrument (MP 910/2019), the land tenure regularization that was previously for those who occupied land before 2008 was extended to 2014. The MP 910 has not yet been approved by the Brazilian National Congress but was proposed as a bill. The government expects to legalize at least 600,000 properties by 2022. However, the mechanism to prevent previous illegal land occupation from becoming legally titled is unclear. By the privatization of public lands through mechanisms historically linked to deforestation in the Amazon region, these actions have the potential to stimulate further land occupation and forest loss especially in the UPF (Azevedo-Ramos, 2020).

4.2 Mining in indigenous territories

Illegal mining in indigenous territories is a relevant driver of deforestation in the state of Pará. It can impact up to 70 km beyond mining lease boundaries. In 2019, there were 2,266 mining sites on indigenous lands of Pará; the Federal Prosecutor's Office of the State ordered an urgent cancellation of mining requests processes on 48 Indigenous Lands³⁶. In 2020, the Federal Court issued a preliminary decision for the National Mining Agency not to accept any request for the exploration of minerals or research on indigenous lands in the Santarém region of Pará³⁷. Launched in September 2020, the federal program Mining and Development³⁸ has as one of the goals to regulate mining on indigenous lands. There are two active bill proposals on such regulation at the National Congress.

Figure 18. Figure 8. Indigenous Lands (in yellow) and mining processes (in red) in Pará. Source: MPF



In Brazil's Amazon, mining drives deforestation far beyond operational lease boundaries, yet the full extent of these impacts is unknown and thus neglected in environmental licensing. Mining significantly increased Amazon forest loss up to 70 km beyond mining lease boundaries, causing 11,670 km² of deforestation between 2005 and 2015. This extent represents 9% of all Amazon forest loss during this time and 12 times more deforestation than occurred within mining leases alone (Sonter et al³⁹. (2017)).

In Pará, according to a survey carried out by Instituto Socioambiental (ISA) at the request of the Federal Prosecutor's Office in Pará (MPF),

there are 2,266 mining sites on indigenous lands. In 2019, the MPF ordered an urgent cancellation of mining requests processes in 48 Indigenous Lands of the state⁴⁰. In June 2020 the MPF filed a lawsuit

³⁶ [MPF pede cancelamento urgente de processos minerários em 48 terras indígenas no Pará](#) (news dated 28/11/2019, retrieved 07/11/2020).

³⁷ [Justiça veta pedidos de exploração de minérios em terras indígenas no Pará](#). (news dated 28/11/2019, retrieved 07/11/2020).

³⁸ [Lançado programa Mineração e Desenvolvimento que vai estimular retomada do País](#) (news dated 28/09/2020, retrieved 07/11/2020).

³⁹ [Mining drives extensive deforestation in the Brazilian Amazon](#). Sonter, L.J., Herrera, D., Barrett, D.J. et al. Mining drives extensive deforestation in the Brazilian Amazon. *Nat Commun* **8**, 1013 (2017).

⁴⁰ [MPF pede cancelamento urgente de processos minerários em 48 terras indígenas no Pará](#) (news dated 28/11/2019, retrieved 07/11/2020).

to force the responsible entities to fight illegal mining in indigenous lands in the southwest of Pará⁴¹. According to the MPF members, illegal mining is encouraged by the failure of the state entities to protect indigenous lands and by tolerating crimes such as usurpation, money laundering and criminal association. In August 2020, the Federal Court issued a preliminary decision that requires the ANM (National Mining Agency) not to accept any request for the exploration of minerals or research on indigenous lands in the Santarém region of Pará⁴².

According to Brazilian legislation, mineral resources belong to the federal government and any claim for exploration or mining requires a valid title issued by the National Mining Agency (ANM). Private individuals and companies are required to request authorization through the ANM before being allowed to engage in exploration of minerals or any other subsoil resources in the country. The process begins with a request for authorization to survey for the substance, and from there can go through several stages until a permit is finally issued for exploration or mining⁴³. The competent authority for environmental review is an environmental agency (a State agency in most cases), that issues an environmental license upon approval of required environmental studies.

In September 2020, the federal government launched the program Mining and Development⁴⁴. It contemplates more than one hundred goals for 2020-2023, one of them is to “Regulate the possibility of mining on indigenous land and border areas and streamline the granting of mining titles”.

Under current legislation, mining inside the Indigenous Lands (IL) requires Congressional authorization. Currently, there are two bill proposals under the National Congress assessment: the PL 1610/1996⁴⁵ about the exploration and exploitation of mineral resources in the ILs (in discussion since 1996) and the recent PL 191/2020, submitted by the Federal Government, proposing to “Regulate § 1 of art. 176 and § 3 of art. 231 of the Constitution to establish specific conditions for conducting research and mining of mineral and hydrocarbon resources and for the use of water resources for the generation of electric energy in indigenous lands and instituting indemnity for the restriction of the right to use indigenous lands”.

The recent study⁴⁶ estimates that the PL 191/2020 could eventually affect more than 863,000 km² of tropical forests—20% more than under current policies. The authors argue that the exponential growth in mining proposals inside the indigenous lands in 2018 (Figure 19) suggests that prospectors have anticipated and planned to exploit this opportunity in recent years.

The study found that 115 Indigenous Lands (31%) contained at least one claim or mining proposal and most were already under application for exploration (the initial stage of mineral permit process). In addition to legal mining activities, there were found 148 indigenous lands (45%) that already contain illegal mining activities, which may also eventually be influenced by an increase in legal operations (Figure 19). According to the study, the proposed bill does not contain any environmental or social safeguards and is silent about whether mining within ILs will require Environmental Impact Assessment (EIA).

⁴¹ [MPF pede que Justiça obrigue combate à mineração ilegal em terras indígenas do sudoeste do Pará](#) (news dated 17/06/2020, retrieved 07/11/2020).

⁴² [Justiça veta pedidos de exploração de minérios em terras indígenas no Pará](#). (news dated 28/11/2019, retrieved 07/11/2020).

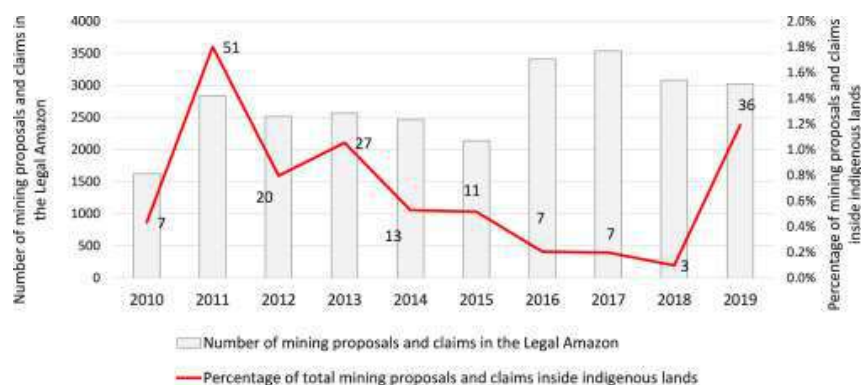
⁴³ [This report](#) is part of Agência Pública’s ongoing series “Amazônia Sem Lei” (“Lawless Amazon”), an investigation into violence related to land regularization, demarcation and agrarian reform in the Legal Amazon.

⁴⁴ [Lançado programa Mineração e Desenvolvimento que vai estimular retomada do País](#) (news dated 28/09/2020, retrieved 07/11/2020).

⁴⁵ [Bill Proposal PL 1610/1996](#) (retrieved November 08/11/2020).

⁴⁶ [Proposed Legislation to Mine Brazil's Indigenous Lands Will Threaten Amazon Forests and Their Valuable Ecosystem Services](#). Siqueira-Gay et al., 2020.

Figure 19. Mining Proposals and Claims Registered with the National Mining Agency. The bars indicate the number of mining proposals and claims in the Legal Amazon per year and the red line indicates number and the percentage of total proposals inside Indigenous Lands. Source: Mining claims (National Mining Agency, 2020); Indigenous lands (FUNAI, 2020). Cited from Siqueira-Gay et al., 2020.



A similar analysis⁴⁷ of authorization requests, based on data from the National Indian Foundation (FUNAI) and the National Mining Agency (ANM) by Agência Pública, has also pointed to an increase in such applications in 2019, reversing the trend of previous years. The majority of the applications to mine on indigenous lands submitted during the first year of the Bolsonaro administration have been for territories in the state of Pará. The Kayapó Indigenous Territory has been targeted with the most requests, followed by the Sawré Muybu Indigenous Territory of the Mundurucu people, also in Pará.

The issue of mining in the indigenous lands gained public attention in the state of Pará back in 2012 when the Federal Prosecutor's Office investigated the gold mining project of Belo Sun near the Belo Monte hydroelectric dam⁴⁸. The PL 191/2020 is under critics because it “would open indigenous lands to mining, oil and gas extraction, electricity generation, and agriculture”⁴⁹. But considering the high number of illegal activities already present in the region from one side, and absence of specific regulation plus need to every time authorize the exploitation by the National Congress, the regulation could enable the effective framework, since containing all necessary safeguards.

⁴⁷ This report is part of Agência Pública's ongoing series “[Amazônia Sem Lei](#)” (“Lawless Amazon”), an investigation into violence related to land regularization, demarcation and agrarian reform in the Legal Amazon.

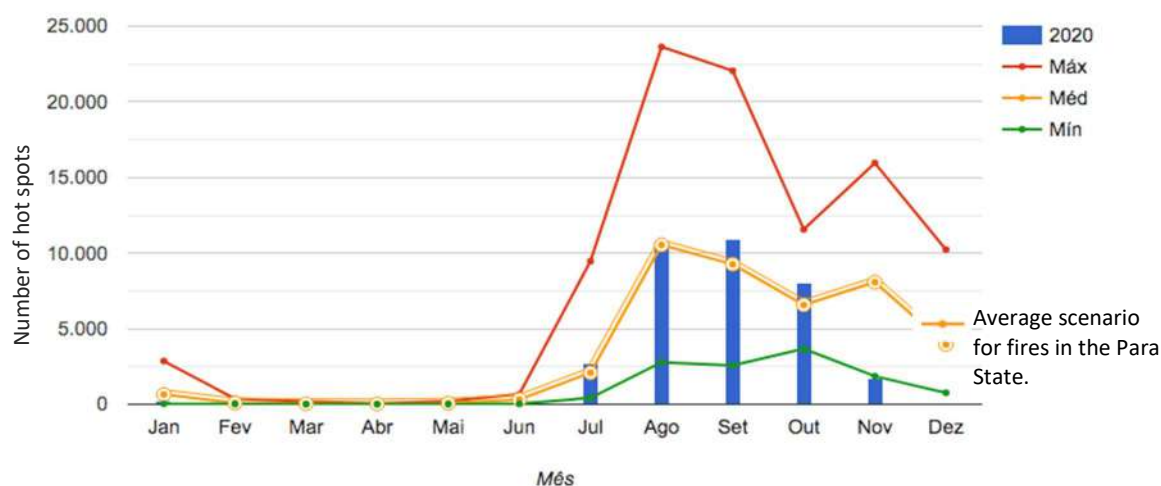
⁴⁸ [MPF investiga projeto de ouro na região de Belo Monte](#) (news dated 17/09/2012, retrieved 08/11/2020).

⁴⁹ [Undermining Rights. Indigenous Lands and Mining in the Amazon](#) (WRI, 2020).

4.3 Forest fires

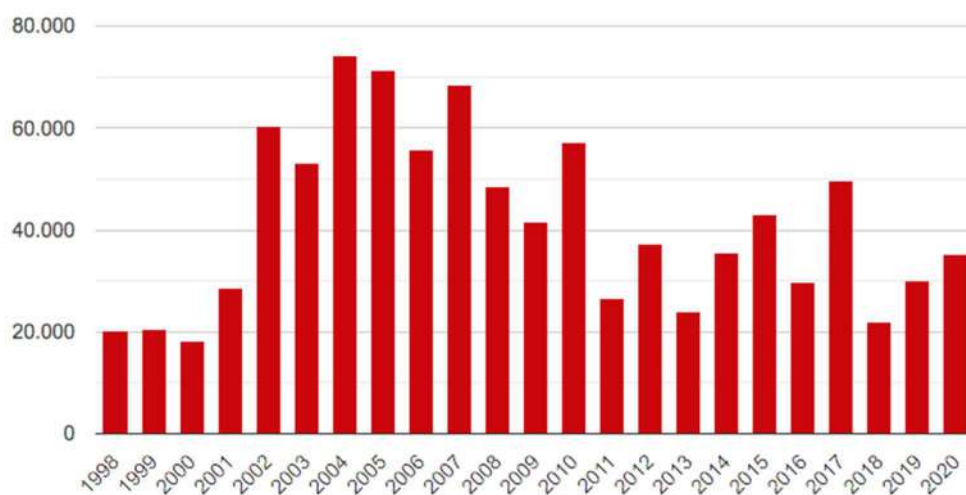
The 2020 forest fires trend slightly overcomes the average scenario expected for the year, according to the latest INPE data (Figure 20).

Figure 20. Seasonal comparison of forest fires dynamics in Pará State in the context of minimum, medium and maximum figures, between 1998 and Sept.16, 2020, highlighting the August and September situation, according to INPE. Source: INPE (retrieved 15/11/2020).



Both 2019 and 2020 showed a growing trend in a number of forest fires occurrences, the values being considerably lower though than those of 2017 (Figure 21).

Figure 21. Annual figures of forest fires active spots in Pará for the period between 1998 and November 16, 2020. Source: INPE (retrieved 16/11/2020).



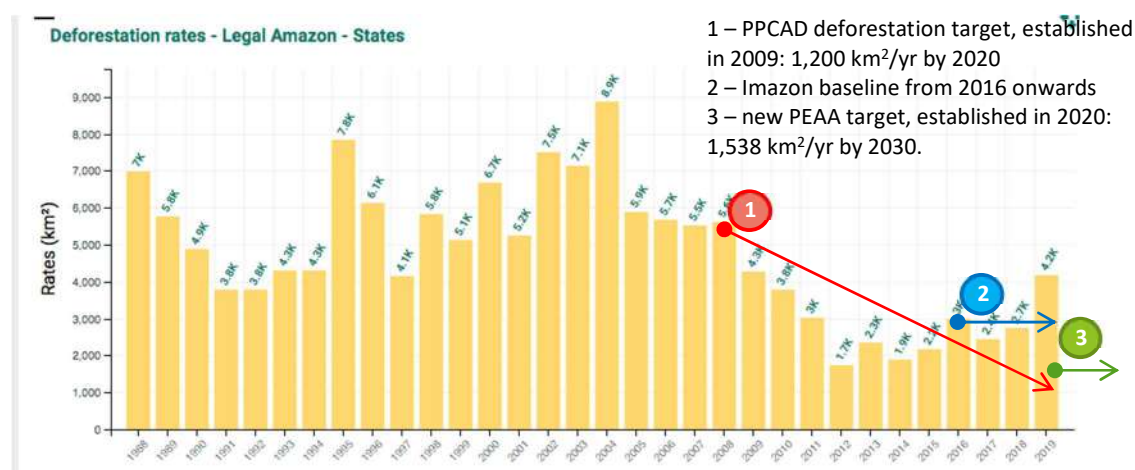
5. Analysis of Progress on deforestation rates versus targets

Pará has featured historically high levels of deforestation in the 1990s and early 2000s. While the state achieved substantial results in reducing deforestation in earlier years, since 2012 deforestation has been rising again.

The deforestation-related target that was valid until the PEAA program launch, was established in 2009 under the PPCAD (State Plan for Prevention, Control and Alternatives to Deforestation) with a threshold of 1,200 km²/year.

The baseline level defined for the State in Imazon report in 2016, was to maintain the existing 3,000 km² annual rate.

Figure 22. Annual deforestation rates in the State of Pará (Legal Amazon) since INPE started monitoring the figures in 1998. Source: [INPE](#) (retrieved September 16, 2020).



Comparing to other Legal Amazon states, Pará is at the highest level of deforestation in the region with 4,172.00 km² deforested in 2019 (estimated), accounting for 34.16% of the total deforestation.

Figure 23. Deforestation rates in Legal Amazon states (not normalized for State area). Source: [INPE](#) (retrieved on September 12, 2020).

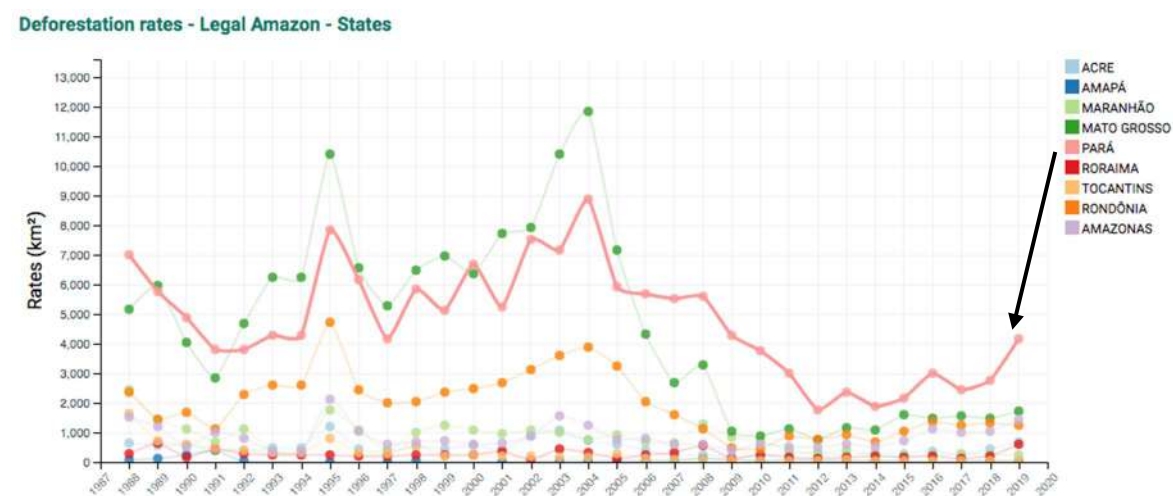
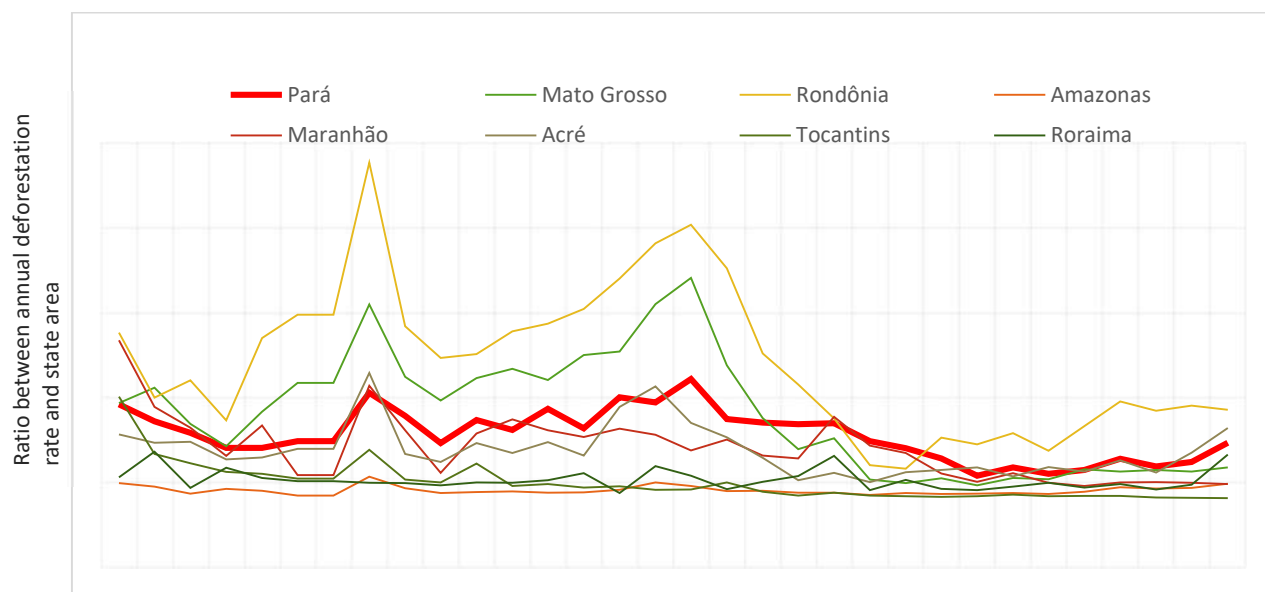


Figure 24. Annual deforestation rate in Legal Amazon states, normalized by state areas. Elaborated by the author based on INPE data.



Country <i>Brazil</i>	Date of Report <i>24th of November, 2020</i>	Author <i>Natalia Pasishnyk</i>
sub-national jurisdiction <i>Pará State</i>	Date of AB Decision <i>[...]</i>	Approval Status Under review

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Date	Version	Author
17/09/2020	V1	Natalia Pasishnyk
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16/11/2020	V3	Natalia Pasishnyk
24/11/2020	V4	Natalia Pasishnyk

Checklist JEC 1: Scope Re-assessment

Pará, Brazil

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check (OK, not OK, no data/info)	References (number referring to numbered reference list, where applicable incl. page number etc.)
1.1	Amount of forest/peatland in the jurisdiction	<p>Summary conclusion: Forest covers 86.5 million hectares of the state of Pará which represents 70% of total area [1]. During the last two years, the State lost around 690 thousand hectares, or 0.8% of its forested areas [2].</p> <p>Size: 124.6 million hectares Forest area: 86.5 million hectares (70% of total area of the State) Population: 8.6 million (ca.4% of the population of Brazil) Economy: In 2017 (latest update) the GPD of Pará state amounted to R\$ 155 billion. Of that, Services are responsible for 35.4%, Industry for 30.9%, Public Administration for 21.9% and Agriculture for 11.8%.</p> <p>The State of Pará is home to almost 9% of the remaining tropical forests in the world. Despite significant reductions in annual deforestation rates by 2012 (1,700 km²) compared to those of 2004 (8,900 km²), the post-2012 trend represented an oscillating growth, with the estimate of 4,172 km² in 2019, reaching the 2009 level [2].</p> <p>About 60.3% of the state's territory consists of legally protected areas, including federal, state and municipal conservation units (33.0%), indigenous lands (24.8%), the Armed Forces (1.85%) and quilombola territories (0.6%), with just over 30% of their territory remaining for consolidation and expansion of productive activities, considering the areas to still be regularized [1].</p>	OK	<p>[1] <u>Strategic Alignment 2019-2020.</u></p> <p>[2] <u>PRODES/INPE. Retrieved September 3, 2020.</u></p>
1.2	Quality of forest/peatland in the jurisdiction	<p>Summary conclusion: Para state's biomes of Amazon is highly valuable in terms of biodiversity conservation. It is significant as per High Conservation Value criteria (HCV1, HCV 3 and HCV 4). Areas subject to restoration as per State Plan Amazon Now (PEAA) belong to HCV4 and represent almost half of committed in Brazil's NDCs 12 million ha to be restored and reforested.</p>	OK	<p>[3] <u>Alto valor de conservação: uma avaliação em três escalas.</u> Balistieri, Leandro. USP, 2017.</p> <p>[4] <u>HCV Resource Network. Search results for Brazil.</u> Retrieved September 3, 2020.</p>

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check (OK, not OK, no data/info)	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<p>Proposed restoration areas within the Pará state are estimated in PEAA target for GEE removal:</p> <ul style="list-style-type: none"> - Regeneration of native vegetation: these areas should reach 5.65 million ha by 2030. In case the State can access external resources for PEAA implementation, the target reaches 7.41 million ha by 2035. <p>Brazil still does not have specific HCV criteria, the generic approach is applied [3], with no private companies' assessments yet made for the Pará state [4]. They can be considered of high conservation value, combining three categories of High Conservation Values (HCV):</p> <p>Primary vegetation areas. These areas include 88 million ha of Amazon forest (dense, open and seasonal forests), as of the TFA report. Considering the total area of Pará state (124,8 million ha), these primary vegetation areas today represent ca. 70% of the total area of the state.</p> <p>They can be considered of high conservation value, combining three categories of High Conservation Values (HCV):</p> <p>HCV1: Pará state is home to one of the most valuable and internationally renowned biomes in terms of biodiversity concentration - Amazon rain forest. There are 13 Key Biodiversity Areas (Annex 1. KBAs) within the State.</p> <p>Besides, Pará State is currently home to one of the largest protected areas in the world, with 67 units totaling almost 41.7 million hectares or about one third of its territory. Of this total, more than half (21.4 million hectares or 21 UCs) are state Ucs.</p> <p>HCV3: From the global perspective, the Amazon forest biome located in Pará is threatened and endangered due to human activities, and is considered one the most exceptional ecosystems and habitats by WWF .</p>		<p>[5] Annex 2 of the Initial Assessment Report.</p> <p>[6] <u>World Heritage List of UNESCO</u>. Retrieved September 29, 2019.</p> <p>[7] <u>Critical Regions of the World - Amazon</u>. WWF. Retrieved September 1, 2020.</p> <p>[8] <u>Deforestation effects on Amazon forest resilience</u>. D. C. Zemp C.-F. Schleussner H. M. J. Barbosa A. Rammig. American Geophysical Union, 2017.</p> <p>[9] <u>Amazon deforestation has a significant impact on the local climate in Brazil</u>. University of Leeds. ScienceDaily, August 2019.</p> <p>[10] <u>Brazil iNDC</u>. UNFCCC, 2015.</p> <p>[11] <u>Opportunities for Forest Restoration in the state of Pará</u> (in Port.), 2017.</p>

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check (OK, not OK, no data/info)	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<p><i>HCV4: In terms of ecosystem services, the intact Amazon forests are crucial to Amazon ecosystem resilience and stable climate.</i></p> <p><i>Restored areas with secondary vegetation belong to HCV4 category due to the ecosystem services they provide. According to the Brazilian Law 12.651/2012, an APP (Permanent Preservation Area) is defined as a protected area, covered or not by native vegetation, with the environmental function of preserving water resources, landscape, geological stability and biodiversity, facilitating the genetic flow of fauna and flora, protecting the soil and ensuring the well-being of human populations. They are established in several situations such as hilltops, steep slopes, coastal shrublands, mangroves, wetlands, water springs etc.</i></p> <p><i>The state of Pará has ca. 3 million ha of areas subject to obligatory restoration. Of these, between 760,000 and 1 million hectares are estimated liabilities for Permanent Preservation Areas (APP) and other 2.3 million hectares – for Legal Reserve (RL) areas [11].</i></p>		

Checklist JEC 2: Ambition and Strategy Re-assessment

Pará, Brazil

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
2.1	Quantitative target against historic rates of gross deforestation	<p>Summary conclusion: <i>The State of Pará has recently redesigned its strategy and targets. On the moment of the initial assessment, Para's commitment was part of the PPCAD strategy, with a target to reach the annual rate of 1,200 km² by 2020, comparing to 5,600 km²/year in 2008. The new PEAA strategy sets the target to reduce the annual rate at least to 1,593.3 km² by 2030, and at least to 1,391.8 by 2035. During the last two years, the annual deforestation rate slightly grew in 2018 (2,744 km²) and suffered a drastic increase in 2019 (4,172 km², estimated). Projections are based on PRODES/INPE methodology and database which are the same used for national communications and commitments of Brazil, with no forecast to change them.</i></p> <p><i>Since the initial assessment (2018) which stated that there was no specific legislation on Climate Change and mechanisms to reduce emissions, Pará established the legal mechanisms combined with quantitative targets related to deforestation.</i></p> <p><i>In 2020, Pará launched the State Policy on Climate Change (PEMC) in form of a state law. It includes a series of principles, concepts, guidelines as well as general objectives and instruments, now recognized and incorporated by the state legal framework. Then, to ensure PEMC's operability and effectiveness in the most impactful sector for changing the GHG emissions in Pará, LULUCF, Pará launched the Amazon Now State Plan (also called Amazonia Agora, or PEAA). The PEAA strategy continues the proposal for territorial intervention aimed by the PPCAD (described in the initial assessment) whose tempus regit actum is 2020 as the final reference. In addition, it comes up with the new elements to improve the governmental, social and business roles in the conservation and the rational use of the environmental patrimony, repositioning the State strategy in face of current challenges.</i></p> <p><i>The objectives of the PEAA include:</i> <i>I – achievement of the SDGs on the state scale;</i></p>	OK	<i>[12] Decree 941, of August 3, 2020. Creation of the State Program Amazonia Agora (PEAA)</i>

Item	Criteria	Analysis	Check	References
		(in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)		(number referring to numbered reference list, where applicable incl. page number etc.)
		<p><i>II – implement the tools to contribute to the safeguards of REDD+, according to the specific federal regulation;</i></p> <p><i>III – implementation of Pará's contributions to NDCs</i></p> <p><i>IV – encourage the activities that promote prevention and mitigation of GHG emissions, prevent, control and provide alternatives for deforestation as well as the environmental, economic, financial and fiscal strategies for environmental protection in the State of Pará, according to the recently established State Policy of Climate Change.</i></p> <p><i>The PEAA aims at reaching the overall Zero Liquid Emission in the AFOLU sector by 2036 by constantly reducing the illegal deforestation and increasing the secondary vegetation, equal or higher than the total vegetal suppression, either authorized or illegal.</i></p> <p><i>The targets are quantitative, expressed in tCO₂e but integrate the deforestation rates.</i></p> <p><i>The central target is to reduce GHG emission of AFOLU sector of Pará at 37% by 2030 (tolerance range of emissions: 117 MtonCO₂eq/year / tolerance range of deforestation 1.538,3 km²/year) and at 43% by 2035 (tolerance levels of 106 MtonCO₂eq/year and 1.391,8 km²/year, respectively).</i></p>		

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
2.2	Ambition	<p>Summary conclusion: <i>The ambition announced in 2012, passed through an adjustment due to the new public policies that have been implemented since 2019. Considering the previous strategy baseline annual deforestation rates (6,254.6 km² in 1996-2005), the average of the last five years (4,467 km²) and especially the ultimate 2019 rate (4,172 km²), the target continues to be ambitious. The formalization of the quantitative time-binding target through the PEAA law reflects the commitment of the State to follow with the deforestation efforts.</i></p> <p><i>To achieve the central target of its PEAA, Pará will set the specific (thematic) goals distributed in its current 4 components: (i) Inspection, Licensing and Monitoring, (ii) Land, Territorial and Environmental Planning, (iii) Low Emissions Socioeconomic Development, and (iv) Long Term Environmental Financing;</i></p>	OK	<p><i>[12] Decree 941, of August 3, 2020. Creation of the State Program Amazonia Agora (PEAA)</i></p>

2.3	... equaling or exceeding national targets	<p>Summary conclusion: The PEAA's central target, expressed in tCO₂e reduction, is a replica of Brazil's NDC target formula adjusted to the timeframes – to reduce 37% of the Para's GHG LUCF-sourced emissions by 2030 and 43% by 2035. Pará's LUCF emissions represent ca. 25% of the national LUCF emissions, and 10% of the total national GHG emissions.</p> <p>The national GHG emission baseline considers 2005 level while PEAA's baseline reflects the average emissions of 2014-2018 period, focusing on the LUCF sector only.</p>  <p>Figure 25. GHG emissions of the State of Pará, LUCF (source: SEEG)</p>	OK	<p>[12] Decree 941, of August 3, 2020. Creation of the State Program Amazonia Agora (PEAA)</p> <p>[13] The Greenhouse Gas Emission and Removal Estimating System (SEEG), retrieved September 3, 2020</p>
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Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
2.4	Feasible Strategy	<p>Summary conclusion: During the last two years, the strategy became more institutionally resilient in long-term as now it is formally a state law (PEAA) which in addition to targets, integrates also the implementation mechanisms such as command and control and land tenure regularization programs. In terms of sustainable land use programs, it includes the existing Territórios Sustentáveis but allows for “plug in” of other programs and projects. The implementation of KfW’s investments through “KfW Estruturante” is expected to accelerate the implementation of the strategy.</p> <p>The strategic framework of climate change management in Pará has been formalized very recently, with its details such as thematic targets still under development. It is articulated around the State Policy of Climate Change, also adopted in 2020, and the Amazonia Agora State Program (PEAA).</p> <p>It comprises the following structural components: (1) Low Emission Socioeconomic Development; (2) Long-term Environmental Financing; (3) Inspection, Licensing and Monitoring; and (4) Land, Territorial and Environmental Planning.</p> <p>In addition, the PEAA builds upon the following existing elements (allowing for new governmental and non-governmental programs, funds and projects be considered as executive tools provided they are compatible with the purposes, guidelines and objectives of the PEAA and the State Policy on Climate Change):</p> <ul style="list-style-type: none"> • State Force to Combat Deforestation; • Eastern Amazon Fund; • Policy for Integrated Performance of Sustainable Territories (Territórios Sustentáveis); and • Pará Land and Environmental Regularization Program (Regulariza Pará). <p>Other governmental or non-governmental programs, projects, actions and funds can be considered as PEAA tools too since they are compatible with the State Policy of Climate Change.</p> <p>The Eastern Amazon Fund (Fundo Amazonia Oriental, FAO) is an environmental financing strategy based on private collaborations aimed to strengthen public policies and social initiatives focused on environment and development, in Pará. It was legally recognized by a respective <u>decree</u> issued by the state government at the end of 2019.</p>	OK	<p>[12] <u>Decree 941, of August 3, 2020. Creation of the State Program Amazonia Agora (PEAA)</u></p> <p>[14] <u>KfW Estruturante project.</u></p> <p>[15] <u>Potential investments of KfW in Pará</u></p> <p>[16] <u>Fundo Amazonia Oriental: Investment Activities</u></p> <p>[17] <u>Fundo Amazonia Oriental: conceptual structure</u></p>

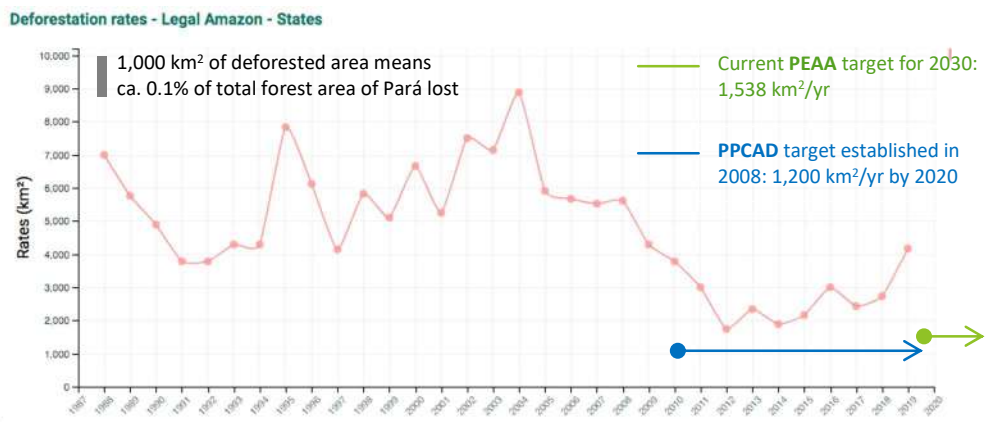
Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<p><i>The Eastern Amazon Fund is expected to invest in the following activities [16]:</i></p> <ul style="list-style-type: none"> - <i>The environmental, land and territorial ordering of the State;</i> - <i>The implementation and consolidation of Protected Areas;</i> - <i>Environmental control, monitoring and inspection;</i> - <i>Sustainable forest management and public forest management;</i> - <i>The promotion of environmental conservation and the sustainable use of biodiversity assets, especially the incentive to ecosystem services;</i> - <i>The promotion of sustainable economic activities and chains based on the use and exploitation of natural resources;</i> - <i>The increase in productivity of agroforestry productive chains;</i> - <i>The recovery of degraded areas and the increase of forest stocks;</i> - <i>The promotion of the environmental quality agenda in cities in Pará, especially those focused on environmental sanitation and solid waste management;</i> - <i>The strengthening of integrated environmental management instruments, such as the Ecological Economic Zoning, the Rural Environmental Registry and the Watershed Committees, and the like;</i> - <i>The training of public agents and the modernization of the administrative management of the bodies that make up the State Environmental System (SISEMA);</i> - <i>The strengthening of governance and transparency instruments for the social control of public policies.</i> <p>Cooperation with KfW [14, 15]</p> <p><i>The so-called KfW Estruturante Project guarantees investments of EUR 12.5 million and aims at deforestation reduction in Pará, addressing the licensing, monitoring and inspection issues.</i></p> <p><i>The project will allow the implementation of physical and operational infrastructure, aiming at deconcentrating the management of SEMAS and the Institute Forest Development and Biodiversity (Ideflor-Bio), as well as strengthening regional environmental management. This financial cooperation is also expected to directly collaborate with the results of Amazônia Agora</i></p> <p><i>In March 2020, the government of Pará discussed with the German government and KfW representatives the next investments in the Amazon protection. Two other potential partnerships are under negotiation.</i></p>		

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<p><i>One of them, ca. EUR 10 million aims to promote development of socio-biodiversity product chains (bioeconomy). Another, of ca. EUR 21 million focuses on strengthening of illegal deforestation combat in Amazon. The projects are undergoing internal review in Germany, should be carried out in more than one of the states in the Legal Amazon and are expected to start closer to the end of 2020. This is when the final design of the operation along with the monitoring and transparency criteria are to be defined.</i></p> <p><i>Additionally, the State of Pará can apply for REM Phase II. If implemented, this will contribute significantly to the feasibility of the state's strategy in mid- and long-term, quantitative and time-binding targets for deforestation reduction.</i></p>		

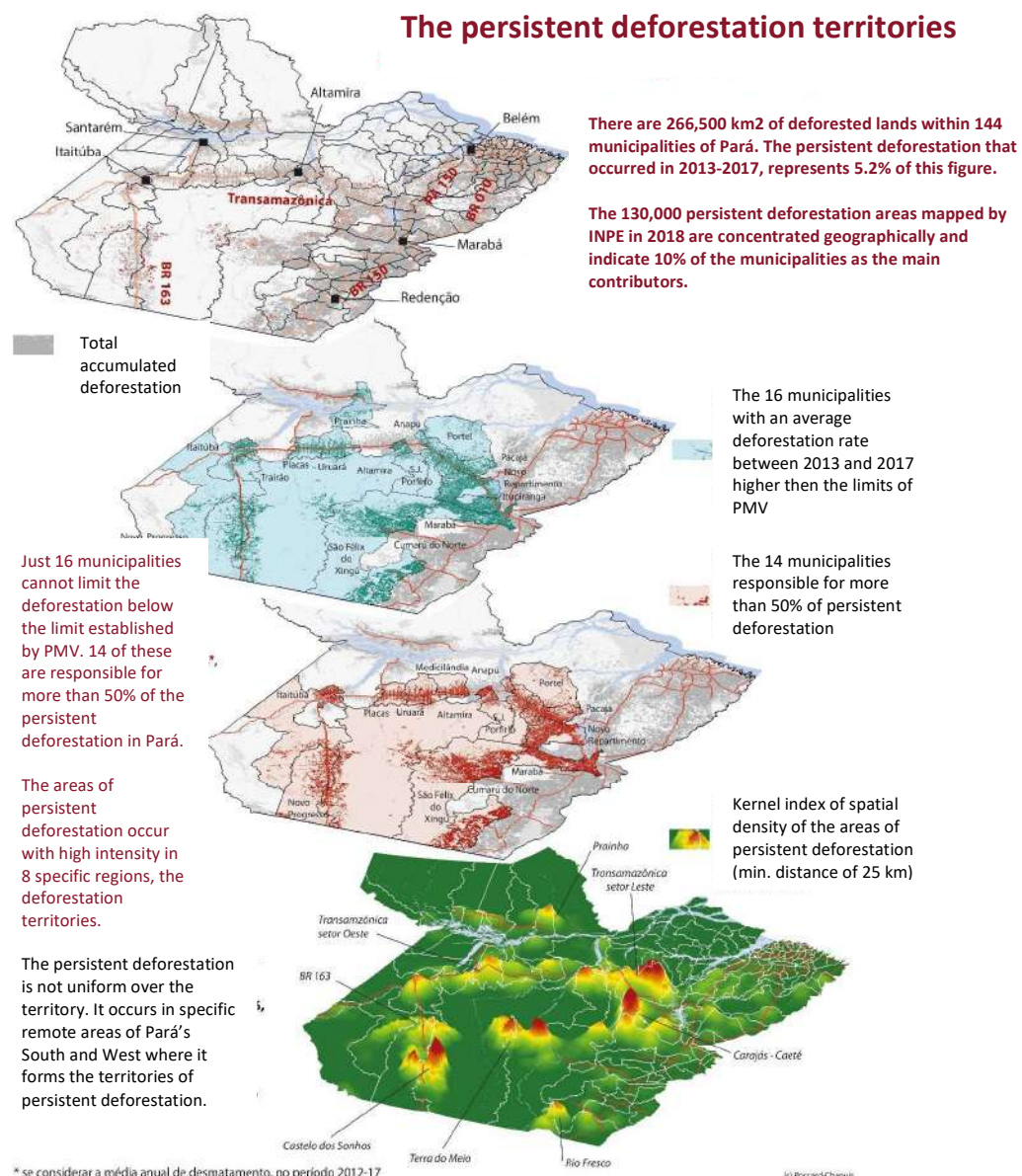
Checklist JEC 3: Progress Update

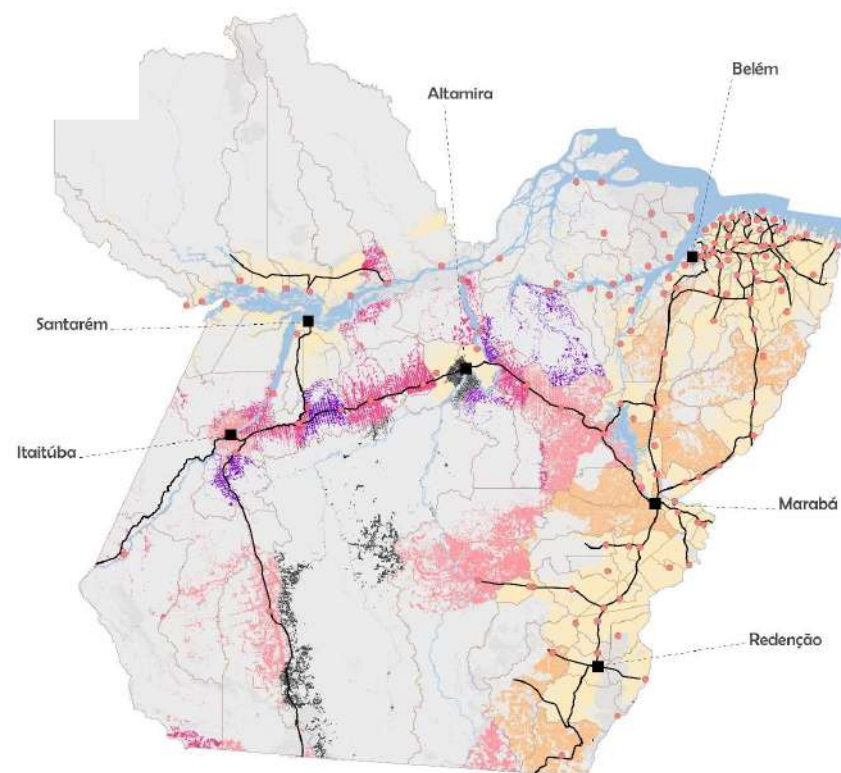
Pará, Brazil

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
3.1	Timely progress towards milestones of the strategy...	<p>Summary conclusion: <i>The recently formalized PEAA strategy is still under construction in terms of thematic targets, implementation and monitoring tools. At the moment, the performance monitoring relies on publicly available data - PRODES/INPE and Greenhouse Gas Emission and Removal Estimating System of Brazil (SEEG). The methodology of both sources is also publicly available.</i></p> <p><i>Although previous public policies were discontinued during the last two years (these include Pará 2030, PPCAD mentioned in the initial assessment report), the government of Pará made significant progress in terms to institutionalize the strategy and set legal mechanisms for its implementation:</i></p> <ul style="list-style-type: none"> - January 2019. The government of Mr Helder Barbalho assumes the office - March 2019. Participated in 17th Forum of Amazon Governors and in the establishment of Interstate Consortium of Sustainable Development of Legal Amazon - August 2019. Presents the first ideas about the Amazonia Agora Program - October 2019. Established Territórios Sustentáveis and Eastern Amazon Fund - December 2019. Publicly commits to illegal deforestation reduction with Amazonia Agora at COP25 - 2020: structuring the Amazonia Agora - Both Amazonia Agora and State Policy for Climate Change formalized. 	OK	<p>[12] <u>Decree 941, of August 3, 2020. Creation of the State Program Amazonia Agora (PEAA)</u></p> <p>[18] <u>Establishment of Amazon Consortium</u></p> <p>[19] <u>Launch of Amazonia Agora (PEAA) at COP25</u></p> <p>[20] <u>Creation of Eastern Amazon Fund</u></p> <p>[21] <u>Law on State Policy of Climate Change</u></p>
3.2	... measurably on a trajectory towards the	<p>Summary conclusion: <i>The 2019 deforestation rate showed a significant increase, similarly to other Legal Amazon states. The PPCAD target was established in 2009 was to reach the deforestation rate of 1,200 km²/yr by 2020. Another target announced in 2012, a Net Deforestation scenario, was expected to achieve 500 km²/yr</i></p>	OK	<p>[22] <u>PRODES/INPE. Retrieved September 3,</u></p>

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
	targets for reduced deforestation	<p>by 2020.</p> <p><i>Still, it is important to highlight that there are different patterns of deforestation development in the jurisdiction. A recent study revealed that the deforestation-free development path prevails in the majority of Pará municipalities. There are few municipalities that are responsible for major recent deforestation, following a pattern of persistent deforestation. They are located in the isolated parts of the State (South, West and center) with low agricultural production and are currently passing through the initial stages of land development. This confirms the importance of the land market, since land itself and not agriculture is the main commodity and the most achievable way to accumulate assets.</i></p>  <p>Figure 26. Annual deforestation rates in Pará (source: PRODES/INPE)</p>		<p><u>2020.</u></p> <p>[23] Os Territórios de desmatamento na Amazônia. Uma análise geográfica no Estado do Pará. Poccard et al., 2020. Unpublished on the moment of the assessment.</p>

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<i>The study argues that it is no longer coherent to classify municipalities by historically accumulated deforestation. The municipalities that currently have the highest rates of deforestation are not the same as before. With the notable exception of São Félix do Xingú, all major municipalities characterized with high deforestation rate back in 2008, today are consolidating the deforestation-free development. There are 18 municipalities that together form “deforestation territories”, where the advancing processes of the last active pioneer fronts persist. They are located in the West, South and center of Pará.</i>		





Legend. Municipality types

- Type 1. Initial expansion
- Type 2. Recent expansion
- Type 3. Insistent expansion
- Type 4. Consolidation
- Type 5. Post pioneer
- Type 6. Exceptional
- Never deforested areas
- Floodplains and savannahs

The persistent deforestation is concentrated in the municipalities that are in the early stages of the “pioneer march” (types 1, 2, 3 and 6). In post-pioneer (type 5) or consolidating (type 4) municipalities, deforestation has dropped dramatically and steadily.

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<p><i>According to the results of the study, there are three decisive factors related to deforestation trends in Pará: the land market, agricultural technologies, and institutional organization.</i></p> <p><i>The expectation to speculate on grabbing and selling land is considered to be a major factor in deforestation. This practice supports horizontal expansion strategies in territories of types 1, 6, 2, and 3. Additionally, the absence of land title hinders the necessary investments to engage in the trajectories of types 4 and 5.</i></p> <p><i>In terms of the aptitude for the high performance technologies, the municipalities of type 5 area ready for them, while type 4 still prefer a moderate intensification. In type 3 municipalities, the technological changes didn't start yet. The problem is bigger in type 1 and 2 territories as they are distant from the logistical systems and agricultural services. The authors of the study suggest that in this case the alternative technologies should not be guided by agronomic performance but rather by the adaptability, i.e. agroforestry systems.</i></p> <p><i>The initial phases of the land development, the local institutions are weaker. This fact prevents them assuming their regulatory, planning and monitoring roles. There, the governmental command and control actions can make much sense. However, in the consolidating or post-pioneer municipalities institutions are well suited to perform.</i></p> <p><i>The typology indicates which municipalities can efficiently commit to zero deforestation plans or targets, and where targeted actions can help to develop territorial management instruments and thus attract private investors, or positive public agendas. Type 4 and 5 municipalities are a priori the best able to implement local jurisdictional approaches in this regard.</i></p>		
3.3	Verifiable improvement of the enabling environment	<p>Summary conclusion: <i>Pará recently adopted the new umbrella program PEAA that includes 4 types of mechanisms to address deforestation: command & control (State Force), land regularization program (Regulariza Pará), Territórios Sustentáveis (sustainable agriculture and small farmers) and Eastern Amazon Fund, with possibility to plug in other programs. The design and formalization of these</i></p>	OK	<p><i>[14] KfW Estruturante project.</i></p> <p><i>[15] Potential</i></p>

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<i>mechanisms took place during the last 2 years. The current governor maintains an active role in the recently established Consortium of Amazon, keeps a dialogue with private sector and participates in negotiations about potential investments (e.g. REM Phase 2). KfW invested EUR 12.5 million in KfW Estruturante and discusses two other potential investments.</i>		<i>investments of KfW in Pará</i>

Checklist JEC 4: Monitoring, Reporting and Verification (MRV) Update Pará, Brazil

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
4.1	Transparent system operational	<p>Summary conclusion: <i>the annual deforestation rates in Pará are monitored at the federal level with data publicly available at PRODES/INPE for Amazon biome. Although the PEAA strategy is very new and doesn't have all procedures detailed, its performance can be evaluated based on the federal data (PEAA deforestation indicators are built on the PRODES data and methodology which are publicly available).</i></p> <p><i>On the national level, the official data is provided by PRODES/INPE, as mentioned in JEC 2.1 and JEC 3.2. It integrates near-real-time deforestation monitoring (DETER and DETER-B), annual deforestation rates (PRODES), forest degradation (DEGRAD), and post deforestation land-use (TerraClass) mapping within primary forests. The annual deforestation rates are informed by INPE annually. Both the methodology and data are publicly available.</i></p> <p><i>The National Commission for REDD+ (CONAREDD+) along with its working groups is currently passing through an update. As per Decree 10.144 of November 28, 2019, its composition and attributes were redefined. Among other definitions, it prescribes the Ministry of Environment to publish the National Strategy for REDD (ENREDD+), i.e. the current version of ENREDD+ may be updated. The MRV Technical Working Group has been established on July 22, 2020.</i></p> <p><i>The public availability of high-resolution satellite images of tropical forests can potentially contribute to development of jurisdictional level of monitoring with higher precision than the federal level. Due to a very recent announcement of the availability of such images, there have been no public information on such development in Pará.</i></p> <p><i>After dissolving the CONAREDD+ in the beginning of its mandate, the</i></p>	OK	<p><i>[24] CONAREDD+ (re)establishment.</i></p> <p><i>[22] PRODES/INPE. Retrieved September 3, 2020.</i></p>

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<p><i>Minister of Environment re-establish it as per <u>decree 10.144</u> of November 28, 2019, redefining its composition and attributes redefined.</i></p> <p><i>In July 2020, CONAREDD+ (re)established the Technical Working Group for REDD+ Safeguards (GTT-Salv)⁵⁰. It will be composed of representatives of indigenous people, traditional communities and small farmers, FUNAI, Ministry of Agriculture, Livestock and Supply (MAPA) and ICMBio. The main activities include (1) conceptualization of the REDD+ safeguards in Brazil considering the reviewed national context; (2) assistance for the issue of monitoring indicators for consideration and respect of REDD+ safeguards for the SISREDD+ pilot project; (3) presentation of guidelines for ombudsman to receive issues related to REDD+ safeguards in Brazil. The Safeguards have been previously designed but as per resolution of CONAREDD+ of July 2020, they will be conceptualized according the altered national context. The Technical Working Group on Safeguards created by the same resolution, will assist the CONAREDD+ with definition of monitoring and respect of the REDD+ safeguards for the National Information System on REDD+ Safeguards (SISREDD +) pilot project.</i></p> <p><i>In the same meeting, CONAREDD+ (re)established a Technical Working Group for REDD+ MRV (GTT-MRV) aimed at providing inputs for REDD+ national submissions to UNFCCC.</i></p> <p><i>The National REDD+ Strategy (ENREDD+) is operational since 2015 but it will pass through an update, according to a decree that (re)established the CONAREDD+ in 2019.</i></p>		

⁵⁰ [Resolution CONAREDD+ about GTT-Salv](#) (retrieved 01/09/2020).

4.2	Progress towards implementation of the MRV system	<p>Summary conclusion: The Integrated Center for Environmental Monitoring of Pará (CIMAM) monitors the deforestation dynamics of the Pará state, relying on the PRODES and DETER images of INPE. The “De Olho na Floresta” monitoring tool, mentioned in the initial assessment, was discontinued due cost-benefit issues (high cost of Planet images versus limited capacity to effectively use the obtained information). The recent decision of the Government of Norway to publicly provide the Planet images free of charge will have a high positive impact on Pará’s MRV.</p> <p>The state-level MRV project Olho na Floresta operated for two years, with a high degree of loyalty and institutionalization. However, it was discontinued in 2018 after a change in the state government, and due to a cost-benefit analysis carried out by the new state administration. Although the project was able to generate accurate information on the location and timing of deforestation outbreaks in the state, the inspection sector was not able to carry out inspection actions for all alerts and the speed at which the information was made available. In this sense, the quality and frequency of alerts from the PRODES and DETER systems, already made available by INPE, were considered sufficient to guide the actions of inspection and control of deforestation in the state. The new administration concluded that the cost of the data processing platform and the high-resolution images of the De Olho na Floresta project did not generate greater agility or precision in inspection activities, and had a significantly higher cost than using PRODES and DETER, which are available free of charge. Currently, CIMAM continues to monitor deforestation in the state, now using the images and alerts provided by INPE.</p> <p>In September 2020, Norway's Ministry of Climate and Environment entered into a contract worth up to USD 43 million with Kongsberg Satellite Services (KSAT) and its partners Airbus and Planet, to provide universal access to high-resolution satellite monitoring of the tropics in order to support efforts to stop the destruction of the world’s rainforests. The high-resolution satellite images provide an overview of all the tropical forests around the world, and these images will be updated every month. Users can access image archives that include data dating back to 2015. This is</p>	OK	<p>[25] Uma década de construção da agenda climática do Pará, Brasil. Gueiros et al. 2020). Unpublished on the moment of the assessment).</p> <p>[26] <u>REDD+ Results Based Payments (Phase 3). Key Results and Outputs</u></p> <p>[27] <u>New satellite images to allow anyone, anywhere, to monitor tropical deforestation</u>. News of September 23, 2020.</p>
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Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<p><i>expected to improve both the state and federal quality levels of MRV [27].</i></p> <p><i>The development on the federal level is expected to contribute to the improvements of the MRV system. The resources received by Brazil from the GCF through REDD+ payments will be in part directed to support the expansion of the forest monitoring system and MRV to include additional REDD+ activities, pools and gases, considering the mapping products produced under the Brazilian Biomes Environmental Monitoring Program, for all biomes, as appropriate, following the guidance from the Working Group of Technical Experts on REDD+. The aim is to submit a national FREL to the UNFCCC by 2020.</i></p>		

Checklist JEC 5: Social and environmental safeguards Update

Pará, Brazil

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
5.1	Safeguards against social and environmental risks associated with the strategy in place	<p>Summary conclusion: <i>The National REDD+ Strategy (ENREDD+) is operational since 2015 but it will pass through an update, according to a decree that (re)established the CONAREDD+ in 2019. The Safeguards have been previously designed but as per resolution of CONAREDD+ of July 2020, they will be conceptualized according the alternated national context. The Technical Working Group on Safeguards created by the same resolution, will assist the CONAREDD+ with definition of monitoring and respect of the REDD+ safeguards for the National Information System on REDD+ Safeguards (SISREDD +) pilot project.</i></p> <p><i>The Technical Working Group on Safeguards (GTT-Salv), (re) created by CONAREDD+ in July 2020, is composed of 5 representatives: of indigenous people, of traditional communities and small farmers, of National Foundation of Indio (FUNAI), of Ministry of Agriculture, Livestock and Supplies and of ICMBio.</i></p> <p><i>In 2018, Brazil submitted to the UNFCCC its 2nd Safeguards Summary [28]. This document presents information on the implementation of REDD+ safeguards in Brazil throughout the deployment of initiatives to reduce emissions from deforestation in the Amazon biome, aligned with REDD+ Technical Annex to the Second Brazilian Biennial Update Report (BUR), submitted to the UNFCCC in March 2017. It lays out information about the national circumstances, describes each safeguard in the Brazilian context, as well as the relevant systems and processes to implement the safeguards and the safeguards information system.</i></p> <p><i>The <u>dedicated portal</u> aims at sharing the detailed information on the implementation of Cancun safeguards in Brazil and the full development of its system.</i></p>	OK	<p><i>[28] <u>Second summary of information on how the Cancun Safeguards were addressed and respected by Brazil throughout the implementation of actions to reduce emissions from deforestation in the Amazon biome.</u> MMA, 2018.</i></p> <p><i>[29] <u>Resolution of CONAREDD+ on creation of the Technical Working Group on Safeguards (GTT-Salv)</u></i></p>

Item	Criteria	Analysis (in italics – interpretational support of the criteria in order for a jurisdiction to pass, can be deleted)	Check	References (number referring to numbered reference list, where applicable incl. page number etc.)
		<i>On the state level, the PEAA strategy targets implementation of the tools to comply with the REDD+ safeguards, attending the specific federal regulation.</i>		
5.2	Progress	<p>Summary conclusion: In 2018, Brazil submitted to the UNFCCC the <u>2nd Safeguards Summary</u> containing the analysis of the relevant actions, instruments and policies to the application of safeguards in the Brazilian context from 2011 on. According to the attributes of the newly created Working Group on Safeguards, the safeguards will be conceptualized to the altered national context. On the state level, one of the objectives of the PEAA strategy is to reach compliance with REDD+ safeguards according to the federal regulations.</p> <p><i>The resources received by Brazil from the GCF through REDD+ payments will be in part directed to support the Improvement Brazil's Safeguards Information System for REDD+ (SISREDD+) and its ombudsman, making it more complete, transparent and accessible.</i></p>	OK	<p>[28] <u>Second summary of information on how the Cancun Safeguards were addressed and respected by Brazil throughout the implementation of actions to reduce emissions from deforestation in the Amazon biome, p73. MMA, 2018.</u></p> <p>[25] <u>REDD+ Results Based Payments (Phase 3). Key Results and Outputs</u></p>

ANNEX 1. Human Rights

a) *The jurisdiction's status in relation to relevant international conventions*

All the international conventions are ratified on the federal level by Brazil.

Legend: Ac – Accession; R – Ratification; At – Acceptance; Ap – Approval; Sc – Succession

Convention	Status	Comments
Bill of Human Rights (UN) (The Universal Declaration of Human Rights (UDHR))	Brazil is a party	In Brazil, the Declaration guides much of the 1988 Federal Constitution .
International Covenant on Civil and Political Rights (UN)	Ac 24 Jan 1992	
International Covenant on Economic, Social and Cultural Rights (UN);	Ac 24 Jan 1992	
UN Convention on the Rights of the Child of 1989	R 24 Sep 1990	
UN Supplementary Convention of the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery	Ac 06 Jan 1966	
Convention on the Elimination of All Forms of Discrimination Against Women (UN)	R 01 Feb 1984	
ILO Declaration on Fundamental Principles and Rights at Work		
ILO Forced Labor Convention (No. 29)	R 25 Apr 1957	
The ILO's Abolition of Forced Labor Convention (No. 105)	R 18 Jun 1965	
ILO Convention on the Worst Forms of Child Labor (No. 182)	R 02 Feb 2000	
ILO Minimum Age Convention (No. 138)	R 28 Jun 2001	
Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP)	Article 5 Party	Vienna Convention: Ac 19 Mar 1990 Montreal Protocol: Ac 19 Mar 1990 London Amendment: At 01 Oct 1992 Copenhagen amendment: R 25 Jun 1997 Montreal Amendment: R 30 Jun 2004 Beijing Amendment: R 30 Jun 2004 Kigali Amendment: NA Establishment of ODS licensing system: Yes Establishment of HFC licensing system: No
UN Consolidated list of products whose consumption and / or sale have been banned, withdrawn, severely restricted or not Approved by Governments (UN DESA)	n/a	No information found on the status of this list application in the jurisdiction (not a convention).
Convention the Prior Informed Consent Procedures for Certain	R 16 Jun 2004	

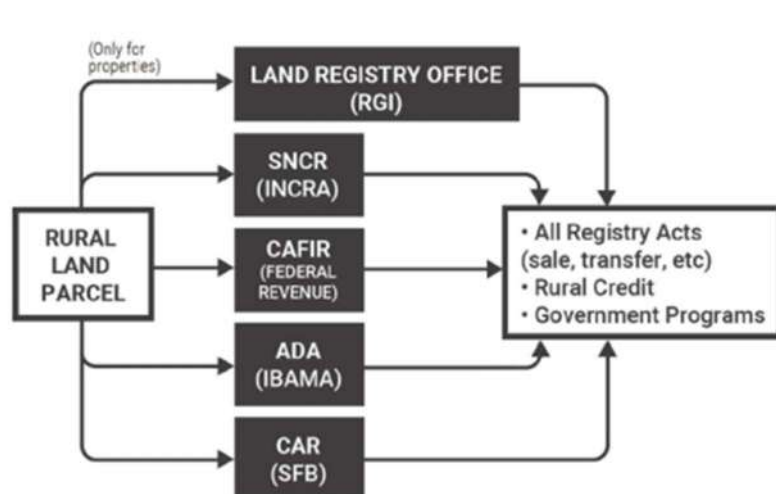
Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention, UNEP);		
Stockholm Convention on Persistent Organic Pollutants (UNEP)	R 16 Jun 2004	<p>Amendments to Annexes to the Stockholm Convention. Dates of entry into force of amendments to Annex A, B or C to the Convention for Brazil:</p> <p>28 Aug 2010: Alpha Hexachlorocyclohexane, Beta Hexachlorocyclohexane, Chlordecone, Hexabromobiphenyl, Hexabromodiphenyl ether and heptabromodiphenyl ether, Lindane, Pentachlorobenzene, Perfluorooctane sulfonic acid, Tetrabromodiphenyl ether and Pentabromodiphenyl ether.</p> <p>27 Oct 2012: Endosulfan 26 Nov 2016: Hexabromocyclododecane 15 Dec 2016: Hexachlorobutadiene (Annex A), Pentachlorophenol and its salts and esters, Polychlorinated naphthalenes. 18 Dec 2018: Decabromodiphenyl ether, Short-chain chlorinated paraffins, Hexachlorobutadiene (Annex C).</p>
Convention on International Trade in Endangered Species (CITES)	R 06 Aug 1975	
Basel Convention on the Control of the Transboundary Movements of Hazardous Waste and their Disposal (UNEP)	Ac 01 Oct 1992	
Ramsar Convention on Wetlands	Ac 24 May 1993	

- *b) local regulatory frameworks governing land rights in the agricultural, forestry and livestock sectors;*

According to Climate Policy Initiative⁵¹, in Brazil, multiple institutions share responsibility for governing land property rights. This complex system lacks communication and coordination among its activities and does not have integration among its numerous databases. The institutions in charge of land management are the executive offices at the federal, state, and municipal levels. They are responsible for executing a wide range of tasks and services related to land management, including agriculture and land reform, environmental monitoring and protection, indigenous and quilombolas community rights, and tax collection. The legislative branch of government enacts the property rights legislation while the judicial branch decides on land tenure conflicts. The land management system also includes notaries supervised by the judicial branch. Notaries are private entities but have received public delegations by the federal government to provide a public registry function.

⁵¹ [Evolution of land rights in rural Brazil. Frameworks for understanding, pathways for improvement](#). Climate Policy Initiative, 2017.

Figure 27. Cadastre/Registry System for Rural Properties/Possessions. Source: CPI, 2018.



- The National Rural Cadastre System (Sistema Nacional de Cadastro Rural - **SNCR**), is a database of the geographic characteristics, the legal situation, and the conditions of use of the land in rural real estate assets for the purposes of land reform and agriculture planning. The enrollment does not legitimate the owner's right of property to the declared land.
- The Rural Properties Cadastre (Cadastro de Imóveis Rurais - **CAFIR**), managed by the Federal Revenue Office (Secretaria da Receita Federal - SRF) was introduced to improve the collection of the rural land tax which is its main purpose.
- The Environmental Statement Act (Ato Declaratório Ambiental - **ADA**) is a cadastre of the areas of environmental interest, controlled by IBAMA.
- The Rural Environmental Registry (**CAR**) integrates environmental information of rural properties for control, monitoring and environmental purposes for economic planning in rural areas, and to serve as a tool for combating deforestation.

The Climate Policy Initiative identified four main challenges and barriers to the improvement of land organization and securing property rights in Brazil that, if addressed, could accelerate the country's progress towards major improvements in its land management practices: (i) Institutional complexity; (ii) Absence of a unique and comprehensive rural land cadastre; (iii) Bureaucratic, complex, and time-consuming procedures for land regularization; and (iv) Weak enforcement of existing rights.

On the state level, Pará runs the “Legalize Pará” (Regulariza Pará) Program, part of the new PEAA state plan. The Program aims at directing efforts to reverse irregularities in rural properties, providing legal security and environmental safety to entrepreneurs and rural producers. It is based on a partnership and integrated efforts of three state agencies: EMATER (Technical Assistance and Rural Extension Agency), SEMAS (Environment and Sustainability State Secretary) and ITERPA (Institute of Land of Pará). This strategy involves training of organizations and entities that represent traditional communities so that they can submit their collective registration with SICAR/PA.

Another relevant state program, also under the PEAA umbrella and with participation of SEMAS and ITERPA, is Territórios Sustentáveis. (Sustainable Territories). The program aims to promote and efficiency in livestock and agroforestry production, respecting economic vocations; the recovery of degraded areas as well as the conservation of natural capital.

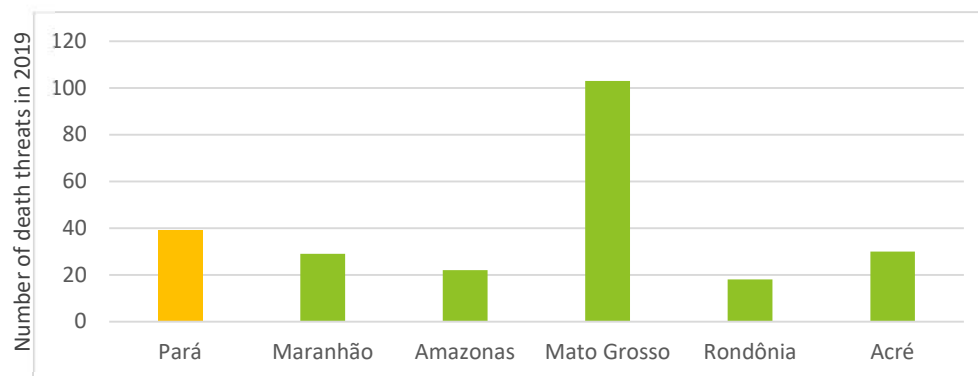
- c) a high-level overview of significant drivers of social and human rights risk, such as a history of violent land conflict; widespread occurrence of slave and/or child labour in agriculture/livestock/forestry; lack of recognition or protection

According to Federal Prosecutor's Office (MPF)⁵², disputes over lands represent 64% of cases of violence against indigenous and traditional communities in Brazil. The data show in 38% these are conflicts over ownership; 12% are due to disagreements caused by the installation of projects in the region; and 14% refer to disputes over the exploitation of resources and goods, such as fishing, agriculture and the extraction of wood and ore.

⁵² [Conflitos associados à terra são principal causa de violência contra indígenas e comunidades tradicionais no Brasil](#) (news dated 06/05/2020, retrieved 15/11/2020).

Pará figures: In 2019, the area in dispute only in the state of Pará totaled an estimated 13.6 million hectares, impacting more than 30 thousand families. Out of 32 murders that happened in the country in 2019 due to the land conflicts, 12 happened in Pará (CPT, 2020⁵³). The death threats are frequent mainly in Amazonian states.

Figure 28. Death threats in the states of Legal Amazon in 2019. Source: CPT, 2020.



According to the CPT statistics, the following types of violence related to land happened in Pará in 2019:

- 150 registered occurrences
- 104 expelled families
- 333 evicted families
- 4569 families threatened with eviction
- 25 destroyed houses and 282 destroyed farms
- 1222 armed conflicts
- 5922 invasions

In terms of **slave labour** in Pará in 2019, the CPT pointed out 11 occurrences with 56 persons released, including 2 children.

The issues related to **indigenous people** rights are discussed in Chapters 3.3 and 4.2.

⁵³ [Conflitos no campo Brasil 2019](#). Comissão Pastoral de Terra (CPT). 2020