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ZERO DEFORESTATION AND LAND USE PLANNING

FOUNDATIONS FOR THE SUSTAINABLE DEVELOPMENT OF THE BRAZILIAN AMAZON



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THE SUSTAINABLE DEVELOPMENT OF THE BRAZILIAN AMAZON DEPENDS ON TWO PILLARS:

- REDUCE DEFORESTATION TO ZERO AND
- COMPLETE AND IMPLEMENT A LAND USE PLAN FOR THE REGION

The Brazilian Amazon deserves a new economic model that enables the conservation and sustainable use of its natural resources while contributing to an improved quality of life for its 28 million inhabitants. To this end, Brazil must commit to zero deforestation by 2030 and implement a land use plan in the region. These two pillars are essential for addressing the main factors that are deteriorating the economic environment of the Brazilian Amazon: criminality, violence, and inefficient land use.

Driven by destructive practices, the predominant land uses in the region have replaced a valuable and strategic natural asset – the forest – with unproductive activities. As a result, the Brazilian Amazon has become the largest contributor to greenhouse gas emissions in the country⁽¹⁾. Furthermore, these practices have led to precarious living conditions for a large part of the population⁽²⁾. Our article “The Amazon Paradox”⁽³⁾ argues that this context of environmental destruction and socioeconomic vulnerability paradoxically presents three opportunities to establish a new pattern of regional development.

First, it is imperative to optimize the use of vast deforested areas that are largely underutilized. This entails increasing the productivity of traditional agriculture and cattle ranching while promoting agroforestry systems, reforestation, and forest restoration. Second, it is crucial to unlock the socioeconomic potential of the forest through the development of the bioeconomy and to create mechanisms for receiving compensation for its environmental services, particularly carbon capture and storage. Thirdly, it is essential to take advantage of the region’s demographic dividend and the productive capacity of its available labor force, especially the 8 million adults who are currently not participating in the labor market.

(1) plataforma.seeg.eco.br/total_emission

(2) amazonia2030.org.br/wp-content/uploads/2023/01/FatosdaAmazonia_Socioeconomia.pdf

(3) amazonia2030.org.br/wp-content/uploads/2022/10/ParadoxoAmazonia_AMZ2030.pdf



Zero deforestation and land use planning are necessary conditions for the Brazilian Amazon to seize these three opportunities. Otherwise, the country will fail to enhance regional productivity or attract significant investments to the region. It will also be impossible to capitalize on opportunities related to the bioeconomy and forest restoration or to ensure the responsible stewardship and profitability of the forest's ecosystem services.

In the Brazilian Amazon, there are still 143.6 million hectares of public lands without legally registered owners. The region's land use regularization plan – which is the basis for the allocation of these lands – is currently governed by Brazilian legislation and must be conducted in compliance with the procedures outlined in the Constitution and national laws for the allocation of public lands:

- **Recognition of Indigenous Territories⁽⁴⁾**
- **Recognition of African-Brazilian (Quilombola) Territories⁽⁵⁾**
- **Recognition of Traditional Community Territories (Law No. 11284/2006, Article 6), often achieved through the establishment of Extractive Reserves and Sustainable Development Reserves⁽⁶⁾**
- **Areas designated for environmental conservation through the creation of Protected Areas or forest concessions (which can be located within or outside a Protected Area)⁽⁷⁾**
- **Access to land for family agriculture, either through the establishment of agrarian reform Settlement Projects or through land title regularization for properties of up to four fiscal modules (maximum of 400 hectares in the Brazilian Amazon)⁽⁸⁾**
- **Titling of medium and large private occupations (up to 2,500 hectares) without the need for public bidding, provided there is no overlap with previous claims and all requirements for receiving the land title are satisfied (Federal Law 11.952/2009, Art. 4)**

It is therefore the obligation of the Brazilian State (Union and states) to lead the agenda of zero deforestation and land use planning.

(4) Art. 231 of the Constitution of the Federative Republic of Brazil of 1988

(5) Art. 68 of the Transitory Constitutional Dispositions Act

(6) On federal lands, Decree No. 9.311/2018 (Art. 10) indicates three types of environmentally differentiated settlements: the Agroextraction Settlement Project (PAE), the Sustainable Development Project (PDS) and the Forest Settlement Project (PAF)

(7) Art. 225, §5 of the Constitution of the Federative Republic of Brazil of 1988 and Federal Law 9.985/2000

(8) Art. 188 of the Constitution of the Federative Republic of Brazil of 1988, Law 8.629/1993 and Art. 2, §2 and §3 of Federal Law 4.504/1964



ZERO DEFORESTATION

Over the last four decades, the Brazilian Amazon has been subjected to excessive deforestation. The destruction of the forest has caused a significant loss of biodiversity, excessive greenhouse gas emissions, and disturbances in regional rainfall patterns, which have had detrimental effects on agriculture. Moreover, deforestation has contributed to the explosion of environmental crime and violence, inhibiting favorable investments in the region. These disruptions, particularly criminal activities, have eroded the economic environment of the Brazilian Amazon. Criminality in the region, with its extensive and consolidated networks, contributes to the frequent trend of labor going unreported and unregulated. For this reason, law-abiding businesses – ones that prioritize good corporate governance practices and are well integrated into national and global markets – avoid making investments in the Brazilian Amazon, as they are reluctant to compete within a context of rampant criminality and environmental degradation. Additionally, the prevailing pattern of land use is highly inefficient and wasteful, with nearly one-fifth of the deforested area already degraded and abandoned instead of being used productively⁽⁹⁾.

Zero deforestation is not only desirable from an environmental standpoint but also justified from a socioeconomic perspective. In fact, the continued occurrence of deforestation perpetuates a detrimental cycle of environmental degradation, leading to low productivity and poor social indicators such as high poverty rates⁽¹⁰⁾. Therefore, it is crucial to strive for zero deforestation in the Brazilian Amazon by 2030.

REDUCING DEFORESTATION DOES NOT HAVE A NEGATIVE IMPACT ON ECONOMIC GROWTH

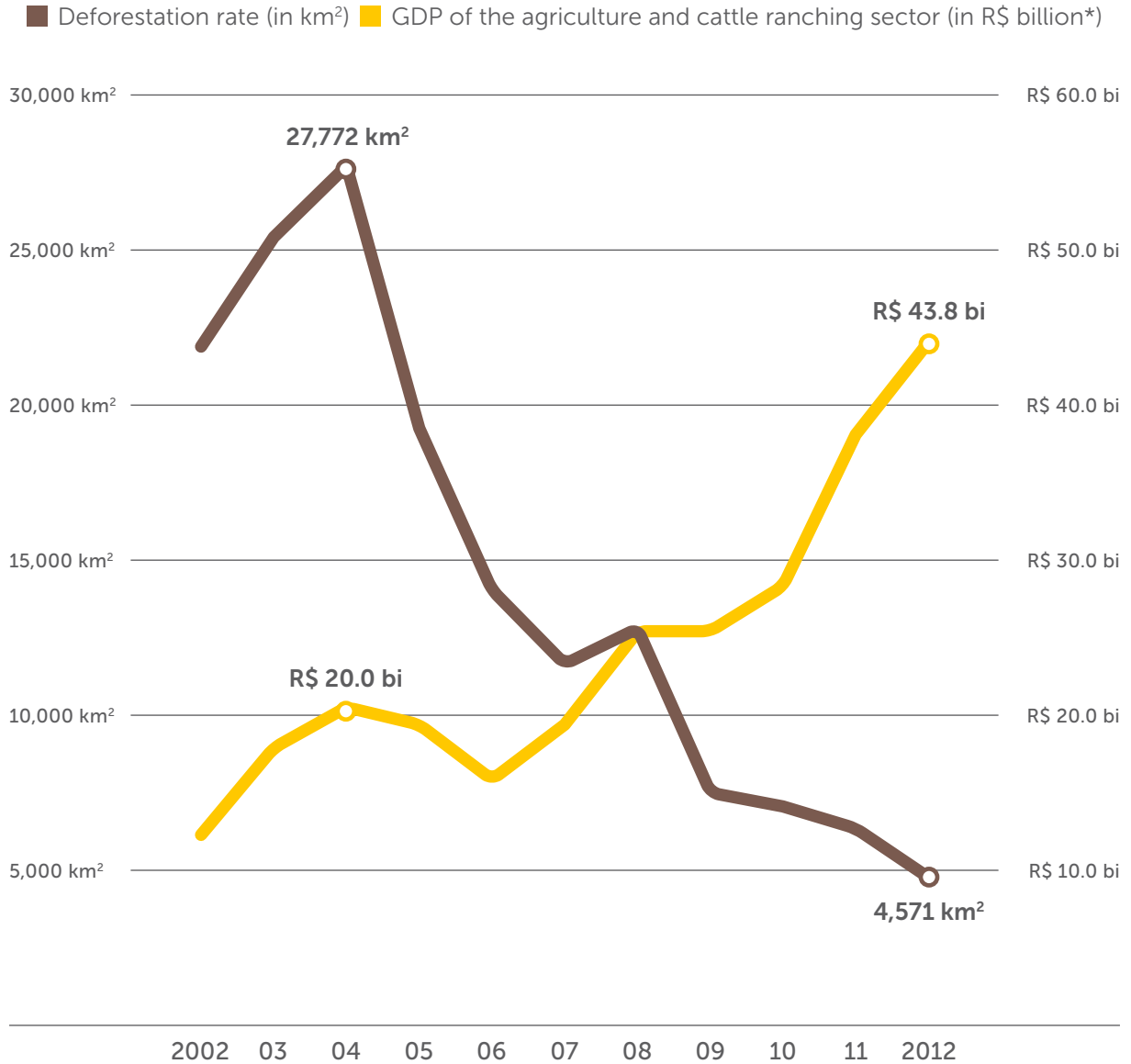
It is possible to combat deforestation in the Brazilian Amazon without harming the economy. This is because most of the deforested area is occupied by low-productivity cattle ranching, which generates few jobs and little income. Combating deforestation stimulates the intensification of farming and ranching activities in these already deforested areas, thereby contributing to increasing the value of production without requiring new deforestation. In fact, between 2004 and 2012, the period during which the deforestation rate in the Brazilian Amazon fell by 84%, the inflation-adjusted GDP of the agricultural and cattle ranching sector in the region increased by 45%.

(9) amazonia2030.org.br/wp-content/uploads/2021/07/REL-AMZ2030-Protecao-Florestal-3.pdf

(10) <https://imazon.org.br/publicacoes/ips-amazonia-2021/>

FIGURE 1 • DEFORESTATION IS NOT NECESSARY FOR THE REGION'S DEVELOPMENT

Deforestation rate X GDP of the agriculture and cattle ranching sector in R\$ billion (inflation-adjusted)



1

Between 2004 and 2012, deforestation in the Brazilian Amazon fell by more than 80%

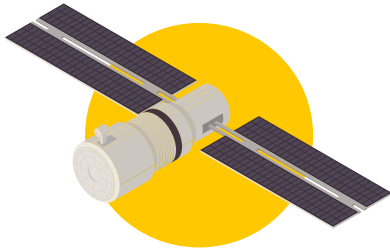
2

During this period, the region's agricultural and cattle ranching GDP nearly doubled

* Deflated values

Source: AMZ2030 with data Prodes-Inpe and IBGE

Public policy played a crucial role in reducing forest loss in the Brazilian Amazon. The Action Plan for the Prevention and Control of Deforestation in the Brazilian Amazon (PPCDAm), launched by the federal government in 2004, was the key driving force behind the decline in the deforestation rate. Over this period, deforestation decreased from 27,800 square kilometers in 2004 to 4,600 square kilometers in 2012. The PPCDAm encompassed various policy initiatives, with three highlights:



Strengthening environmental monitoring and law enforcement

The ability to detect forest loss in near-real time – the result of the development of a pioneering satellite image monitoring system



Making access to rural credit conditional upon compliance with environmental and land titling requirements

This was an innovative move towards using financial mechanisms to combat illegal deforestation in the region⁽¹¹⁾



The establishment of Protected Areas in regions with a high risk of deforestation

Taking this step was decisive in mitigating the illegal occupation of public forests and the consequent deforestation

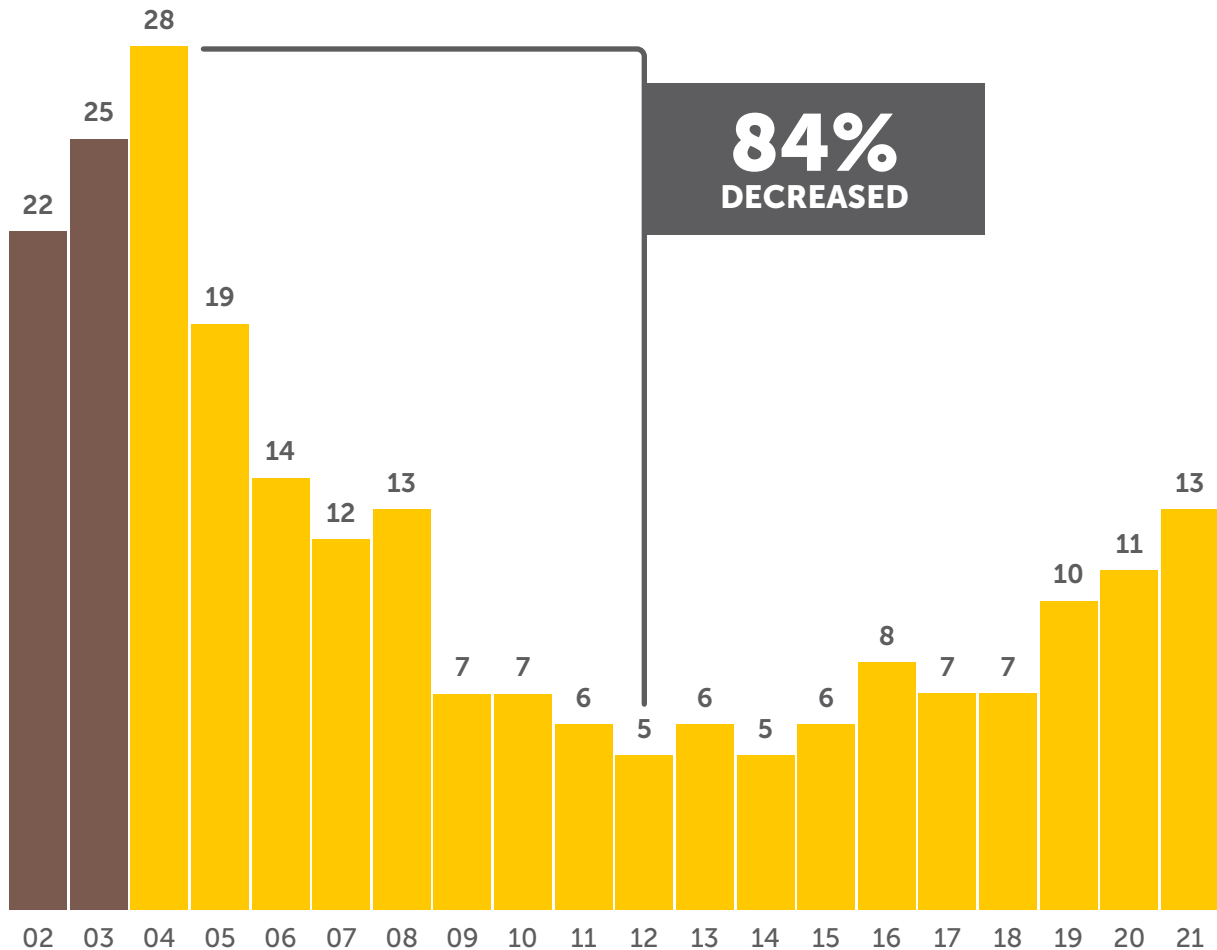
These initiatives were implemented within a new environmental governance structure. Through an inter-ministerial arrangement led by the Civil House, the PPCDAm was pioneering in its recognition of the cross-cutting nature of the forest protection agenda in the Brazilian Amazon.

Starting in the mid-2010s, government policies and actions aimed at combating deforestation lost momentum. This situation further deteriorated from 2019 onwards, with the suspension of creating new Protected Areas, a sharp decline in enforcement efforts and a significant increase in land grabbing, illegal logging, and illicit gold mining in the region. As a result, deforestation has continued at the highest rates of the past decade. Achieving zero deforestation by 2030 will require simultaneous action on two fronts: first, restructuring and strengthening the PPCDAm, and second, incorporating innovative approaches to address the region’s new challenges, such as the substantial increase in crime.

(11) bc.gov.br/pre/normativos/res/2008/pdf/res_3545_v1_O.pdf

FIGURE 2 • BRAZIL KNOWS HOW TO REDUCE DEFORESTATION

In thousands of km² per year



84%
DECREASED

1

After record destruction rates in 2004, the country implemented a strategic policy plan that proved to be very effective in combating deforestation

2

From 2004 to 2012, the country successfully achieved an 84% reduction in the deforestation rate

3

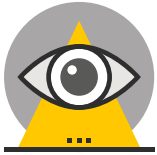
The PPCDAm was cost-effective and did not negatively impact regional economic activity

Source: AMZ2030with data of Prodes/Inpe (2021)

Zero deforestation involves the elimination of both illegal and legal deforestation. However, it is important to acknowledge that certain activities, such as industrial mining or essential infrastructure development, may involve some unavoidable residual deforestation. In such cases, it is crucial to offset the necessary deforestation through effective forest restoration measures.

RESTRUCTURE AND STRENGTHEN WHAT WORKS

The public policy framework for forest protection has suffered from inaction and dismantling, particularly after 2019. It is therefore essential to restructure and strengthen policy instruments that are capable of effectively combating deforestation. These instruments include:



ENFORCEMENT AND PROTECTION

The destruction of the Brazilian Amazon Forest is associated with the illegal extraction of natural resources and illegal occupation of the land to extensive deforestation for alternative uses. From 2019 to 2022, there was a significant decline in enforcement and a notable increase in deforestation. It is crucial to restore the response capacity of environmental protection and, in doing so, enforce the law. The Brazilian Amazon already has an effective satellite imagery system for monitoring forest loss⁽¹²⁾. The priority is to reinstate effective enforcement and the application of sanctions capable of imposing binding penalties on environmental offenders, such as economic embargoes of deforested areas, seizure and destruction of machinery, and cancellation and suspension of producers in the Rural Environmental Registry (CAR) if they act illegally in public areas.



FINANCIAL INSTRUMENTS

These can promote the adoption of sustainable practices and drive compliance with environmental standards. The Brazilian banking system has made progress in this regard by implementing measures such as: i) increasing the credit limit by up to 10% for producers who provide a validated CAR, and ii) establishing the Green Bureau by the Central Bank to integrate data on sustainable practices of rural producers into the rural credit information system. Brazil should expand the utilization of financial instruments linked to sustainable practices⁽¹³⁾. This measure encourages enhanced agricultural and cattle ranching productivity while ensuring environmental conservation and compliance with environmental regulations, particularly the Forestry Code. Moreover, the financial sector should cease financing companies and entities involved in the processing of products derived from illegal deforestation.



PROTECTED AREAS

The recognition of Indigenous Territories and the expansion of Protected Areas are essential to conserving biodiversity and safeguarding the livelihoods of forest communities. Moreover, these areas are key instruments for territorial planning in the Brazilian Amazon, especially in terms of allocating public forests. It is also important to ensure the preservation of the existing Protected Areas and to thoroughly investigate and effectively punish environmental crimes (such as deforestation, illegal logging, and gold mining) committed within these territories.

(12) The National Institute for Space Research's (INPE) Deforestation Detection in Real Time (DETER) system and Imazon's Deforestation Alert System (SAD) (<https://imazon.org.br/en/imprensa/understanding-the-imazon-monitoring-system/>)

(13) <https://www.climatepolicyinitiative.org/wp-content/uploads/2020/12/REL-Politica-de-Credito-Rural-no-Brasil.pdf>



INNOVATING TO MEET NEW CHALLENGES

Reestablishing the PPCDAm is necessary to achieve zero deforestation, but it will not be enough. It is also necessary to tackle issues that were not fully addressed by previous public policies, for example by enhancing economic incentives and ensuring the traceability of production chains operating in the region. Furthermore, it is crucial to take on new challenges – such as the growth and spread of organized crime – and to actively combat forest degradation.

1 INCREASE TRANSPARENCY AND TRACEABILITY IN PRODUCTION CHAINS

Lack of transparency regarding activities that contribute to deforestation interferes with fighting environmental crimes and limits market access for agricultural and cattle ranching products. Examples of inadequate transparency include the low percentage of validated rural property registrations in the CAR and the limited availability of Animal Transit Documents (GTA). Both the government and companies must provide accessible information that enables the traceability of agricultural, cattle ranching, and forest products across the entire production chain. Traceability is essential because it allows:

- Holding environmental criminals and their direct and indirect beneficiaries accountable;
- Encouraging and expanding markets for sustainable products; and
- Promoting products that are produced in an environmentally sustainable manner.

2 PROMOTE STRATEGIC COORDINATION AMONG ALL LEVELS OF GOVERNMENT (NATIONAL, STATE, AND LOCAL)

In a context of limited resources for implementing public policies, it is necessary to prioritize areas with the highest potential impact. This constraint leads to distinct priorities for different levels of government⁽¹⁴⁾:

- The federal government should prioritize combating deforestation in rural settlements, which account for 20% of the deforested area in the Brazilian Amazon over the past decade, with more than half of it occurring in federal areas. It is important to emphasize that this deforestation is concentrated in a few specific rural settlements.
- State governments bear the primary responsibility for enforcing environmental laws in private areas, which account for nearly 30% of deforestation in the last decade. Therefore, implementing the Forest Code – the main policy instrument for ensuring environmental protection in these areas – must be a priority for subnational governments. This state-level effort must be supported by the federal government.

(14) climatepolicyinitiative.org/wp-content/uploads/2022/12/INS_Coordenacao-Estrategica-para-o-Combate-ao-Desmatamento.pdf

- The federal government and state governments must work together in a complementary and coordinated manner to promote land use regularization in the Brazilian Amazon. Undesignated public areas and areas without land title information have become targets of illegal occupations associated with forest destruction. It is essential for the authorities to survey, register, and allocate these areas, adhering to legal priorities such as recognizing Indigenous Lands, African Brazilian (Quilombola) Territories and other Traditional Communities, establishing Protected Areas, allocating areas for family agriculture, and granting land titles once legal requirements are met.

3 STRENGTHEN THE ENVIRONMENTAL GOVERNANCE STRUCTURE

The dismantling of forest protection policies between 2019 and 2022 and its resulting consequences have exposed the vulnerability of the institutional framework for conservation. Brazil must explore methods to safeguard forest protection efforts from political interference. To this end, it is crucial to strengthen the environmental governance structure, especially the National Environmental System (SISNAMA). The protection of the Amazon Rainforest depends fundamentally on cooperation among government sectors and levels, as well as on the active and representative involvement of civil society.

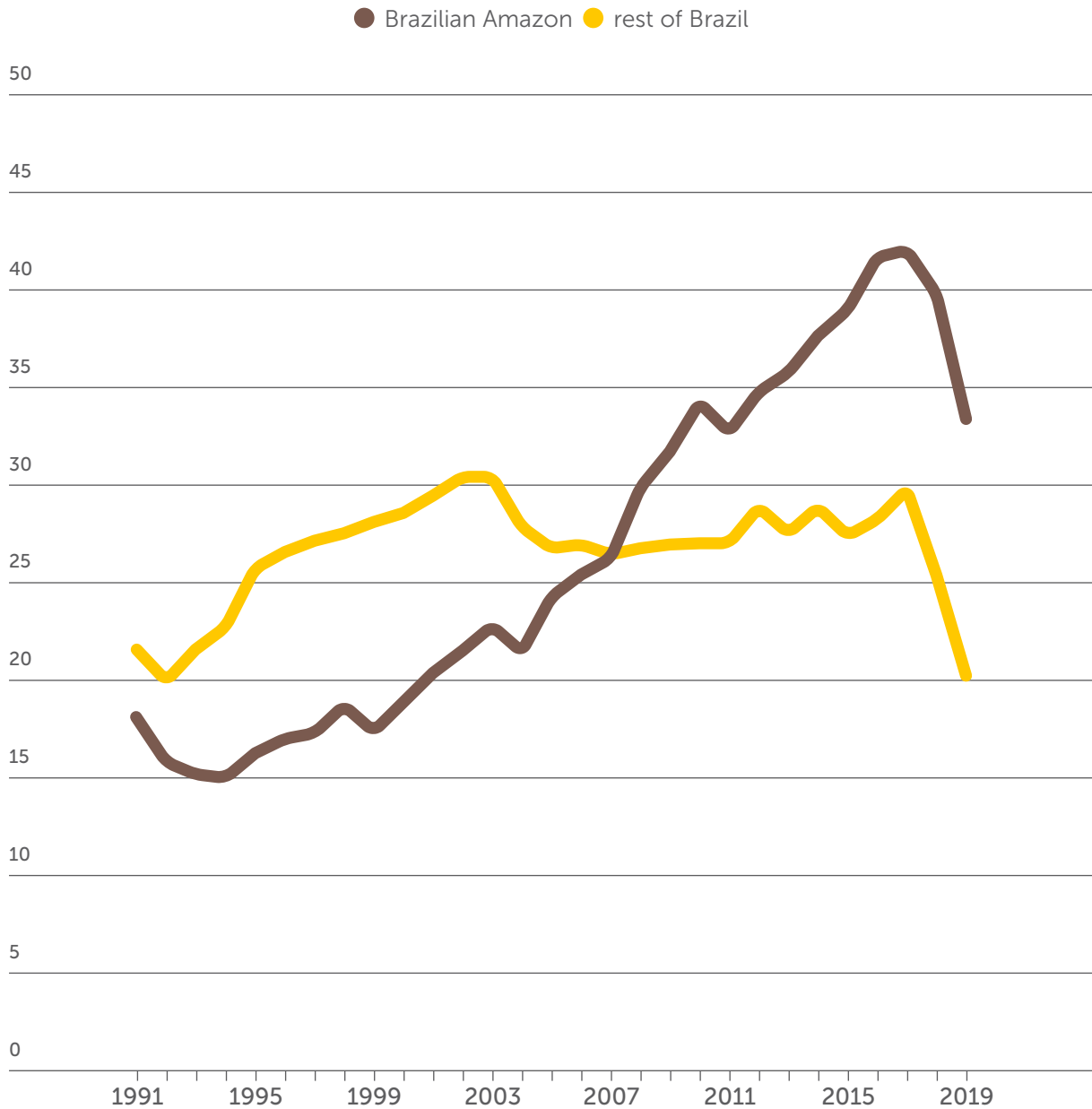
4 STRENGTHEN THE FIGHT AGAINST ORGANIZED CRIME

In recent years, the Brazilian Amazon has experienced a surge in violence and the spread of organized crime. While the region was relatively safe compared to the rest of the country until the mid-2000s, it has now become the most violent region in Brazil, hosting 23 of the country's 100 most violent municipalities⁽¹⁵⁾. This poses enormous risks to individuals in the region, leading to a significant decline in their quality of life. Moreover, the price paid collectively is very high. The lack of public safety deteriorates the economic environment and discourages law-abiding people from entering the region, while the failure to prosecute offenders attracts criminals and contributes to the expansion and consolidation of criminal networks. To dismantle these networks, it is crucial to investigate and penalize those who finance and support environmental crimes, both inside and outside the Brazilian Amazon.

In general, deforestation in the Brazilian Amazon is not associated with social and economic benefits in the region. It neither leads to better employment conditions nor generates income for the local population. Moreover, due to its association with illicit activities, the effectiveness of long-term efforts to combat deforestation in the Brazilian Amazon hinges on simultaneously strengthening sustainable and legal economic alternatives in the region

(15) amazonia2030.org.br/wp-content/uploads/2021/12/Soares-Pereira-Pucci-Relatorio-AMZ-2030-26.pdf

FIGURE 3 • THE REGION HAS BECOME ONE OF THE MOST VIOLENT IN BRAZIL
 Homicide rates – per 100,000 inhabitants – in the Amazon and in the rest of Brazil



1

Until the early 2000s, the Brazilian Amazon had one of the country's lowest regional homicide rates

2

Today, if the Brazilian Amazon were a country, it would be the fourth most violent in the world, behind only El Salvador, Venezuela, and Honduras

3

The lack of economic opportunities and growth in criminality create space for violence

Source: AMZ2030 with data of DATASUS (1991-2019)



5 COMBAT FOREST DEGRADATION (LOGGING AND FOREST FIRES)

Approximately 21% of the Brazilian Amazon has already been deforested and the remaining forest areas are not fully intact. According to the Science Panel for the Amazon, around 17% of the remaining forest has experienced degradation of its vegetation cover⁽¹⁶⁾. The forest area affected by degradation in the Brazilian Amazon is estimated to be at least as large as that which is deforested each year. Despite having the capacity to monitor forest degradation in the Brazilian Amazon, Brazil has failed to take effective action against degradation⁽¹⁷⁾. Environmental performance metrics largely ignore degraded forest, focusing only on deforestation. This is also true for emissions associated with forest degradation, which are not computed in the Brazilian inventories of greenhouse gas emissions⁽¹⁸⁾. It is necessary to implement targeted measures to combat forest degradation, including programs aimed at preventing unsustainable logging practices and forest fires.

6 PROTECT SECONDARY VEGETATION

The Brazilian Amazon holds vast amounts of underutilized deforested areas. This offers a unique opportunity to contribute to global ecosystem restoration efforts and establish the country as a leader in the restoration and carbon capture market. The region is home to 7.2 million hectares of secondary vegetation that is at least six years old, and another 6 million hectares of regenerated and potentially fallow areas⁽¹⁹⁾. However, secondary vegetation remains vulnerable. Currently, Brazil still has no official system for monitoring these areas. As a result, the country is unable to monitor and prove compliance with international targets for ecosystem recovery and restoration requirements established in its Forest Code. Furthermore, it does not detect the loss of secondary vegetation rapidly, limiting the capacity of environmental authorities to effectively protect forest regrowth. Systematic and frequent monitoring of secondary vegetation is vital for strengthening its protection and catalyzing the restoration process. Brazil already has access to the technology and technical knowledge necessary to implement such monitoring but requires political support. Strengthening public policy efforts to promote landscape restoration, particularly the restoration of native forests, is essential.

(16) theamazonwewant.org/spa_publication/amazon-assessment-report-2021/

(17) climatepolicyinitiative.org/wp-content/uploads/2022/08/Precisamos-Falar-Sobre-Degradacao-Florestal-na-Amazonia.pdf

(18) nature.com/articles/s41561-021-00823-z

(19) amazonia2030.org.br/wp-content/uploads/2021/04/Restauracao-Florestal-AMZ-2030.pdf

(20) climatepolicyinitiative.org/wp-content/uploads/2020/07/whitepaper-O-Brasil-precisa-monitorar-sua-regeneracao-tropical.pdf



LAND TENURE

Poorly defined property rights are a critical issue in the Brazilian Amazon. They affect nearly 30% of its territory, totaling 143.6 million hectares of public areas that lack well-established land tenure information⁽²¹⁾.

Without clear land titles, these areas become targets for invasions, illegal occupation, and deforestation. Together, they account for 41% of the region's forest loss over the past decade.

Undefined land tenure also creates detrimental incentives that interfere with the region's economic development. This uncertainty poses a major obstacle, for instance, for the development of forest restoration and carbon capture initiatives, which constitute potentially huge and rapidly growing markets. Furthermore, the lack of guaranteed property rights discourages investments, while land insecurity fosters illegal land invasion and land grabbing.

The problem of undefined land rights entails significant costs for the region, making land use planning another necessary condition for the sustainable development of the Brazilian Amazon.

The Brazilian National Registry of Public Forests (CNFP) shows that there are 57.9 million hectares of undesignated public forests in the region. In addition, it is estimated that another 29.2 million hectares may be undesignated public forests that are not registered in the CNFP. These areas may hold various types of occupation – including Indigenous Territories, African-Brazilian (Quilombola) Territories, and Traditional Communities – but have not yet undergone the necessary titling process.

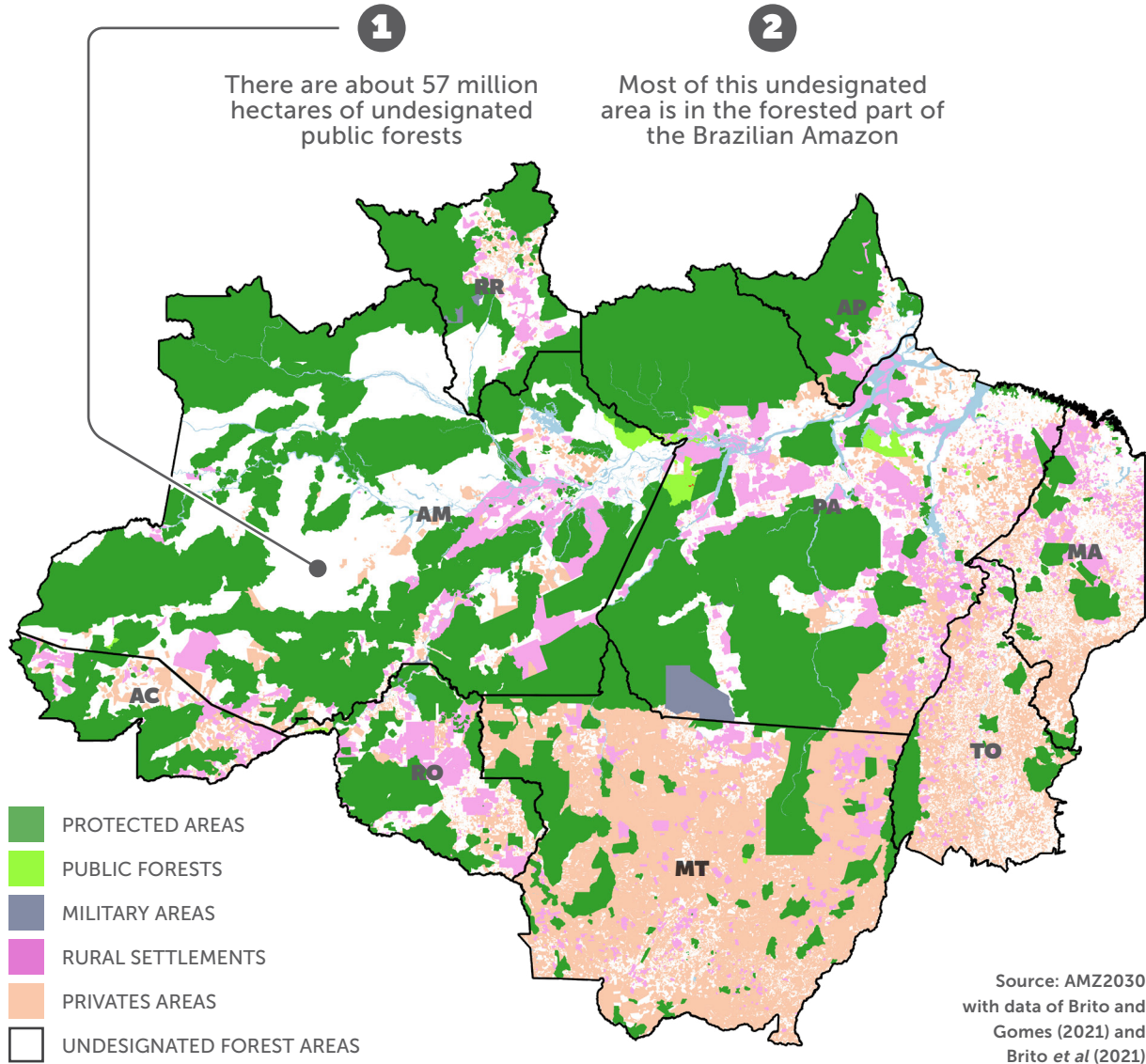
There is also an area totaling 7.2 million hectares of forests in Environmental Protection Areas (APA) and, despite appearing in the CNFP as assigned areas, they may be titled to private landowners if the legal requirements for land regularization are met.

However, requirements vary across federal and state regulations, with some allowing for the legalization of occupations that occurred at any point in time, without a specific cut-off date (Brito et al. 2022).

(21) amazonia2030.org.br/wp-content/uploads/2022/06/AMZ-2030-46-1.pdf

FIGURE 4 • CREATE AND STRENGTHEN PROTECTED AREAS IN UNDESIGNATED PUBLIC FORESTS

Establishing Protected Areas is a way to protect undesigned public forests



STRENGTHEN	1	Protected Areas through the expansion of the Amazon Region Protected Areas (ARPA) program and other similar initiatives
EXTEND	2	The budget and the scope of action of the National Indigenous Foundation (FUNAI) in Indigenous Territories
PRIORITIZE	3	The implementation of the National Policy for Territorial and Environmental Management of Indigenous Territories (PNGATI)
CREATE	4	New Indigenous Territories or Protected Areas in undesigned public forests

FIGURE 5 • RECOMMENDED ACTIONS

Approximately 29% of the Brazilian Amazon has poorly defined land rights



The appropriate treatment of undesignated areas in the Brazilian Amazon depends on their status in terms of registration and occupation:

■ REGISTERED AND UNDESIGNATED PUBLIC FORESTS

The designation of public forests should only include categories compatible with sustainable use and conservation, as outlined in the Public Forest Management Law. This includes Indigenous Territories, African Brazilian (Quilombola) Territories, territories of Traditional Communities, Protected Areas, and forest concessions.

■ UNREGISTERED PUBLIC FORESTS AND APAS

These areas should be included in the CNFP and designated according to the recommendations made for registered and unregistered public forests.

* Longstanding occupations in public lands include areas that were not titled by the National Institute for Colonization and Agrarian Reform (INCRA), areas in undesignated lands that are registered in the CAR and APA. Although they are included in the CNFP, APAs can be titled to private landholders if they are regarded as longstanding occupations that meet the legal requirements for land regularization. Landholders in properties with more than 80% of forest cover should be prohibited from deforesting as a condition for remaining on the property.



■ **LONGSTANDING OCCUPATIONS OF PUBLIC LAND**

These areas are subject to land title regularization. The current legislation allows the issuance of land titles to longstanding occupations that meet the legal requirements, such as the federal cutoff date of December 2011, and do not overlap with priority demands for territorial recognition. However, to proceed with land title regularization in these areas while maintaining socio-environmental safeguards, it is necessary to strengthen the operational capacity of the land agencies and establish mechanisms for monitoring and transparency in the associated processes.

■ **RECENT OCCUPATIONS OF PUBLIC LAND**

These areas are not eligible for land title regularization. Requests for regularization of recent occupations should be rejected, and the areas should be reclaimed and designated for other purposes. It is also essential to prevent changes in laws that would extend the deadlines for titling in public lands. Otherwise, there will always be an incentive for continued occupation and potential deforestation of public land.

The existing laws are already sufficient to allocate public forests in line with sustainable use and conservation. However, adjustments to the procedures outlined in the decree can increase the transparency in land regularization actions. It is also necessary to improve coordination among different federal entities that are responsible for solving the problem.

The time frame for land title regularization determines the cut-off date for defining what is a longstanding or recent occupation. Currently, the federal law sets December 2011 as the cut-off date, while state laws adopt more flexible dates or, in some cases, no cut-off date at all. It is crucial for all states to adopt a cut-off date for occupancy that is at least as restrictive as the federal one. Otherwise, it creates a harmful incentive for more illegal occupation of public areas, counting on the relaxation of the rules and eventual titling. The planning of the Brazilian Amazon territory must occur on the basis of transparent and consistent criteria.

The fight against deforestation and the regularization of land tenure are crucial for the Brazilian Amazon. This agenda must prioritize the protection of the forest and create the conditions that will enable sustainable development in the region. While primarily a public agenda, it has profound implications for quality of life and private investment. Uncontrolled deforestation and unregulated land use hinder the urgent economic renewal of the Brazilian Amazon.

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LIST OF ACRONYMS

- APA** Environmental Protection Area
- ARPA** Amazon Region Protected Areas
- CAR** Rural Environmental Registry
- CNFP** National Registry of Public Forests
- FUNAI** National Indigenous Foundation
- GTA** Animal Transit Documents
- INCRA** National Institute for Colonization and Agrarian Reform
- PAE** Agroextraction Settlement Project
- PAF** Forest Settlement Project
- PDS** Sustainable Development Project
- PNGATI** National Policy for Territorial and Environmental Management of Indigenous Territories
- PPCDAm** Action Plan for the Prevention and Control of Deforestation in the Brazilian Amazon
- SAD** Deforestation Alert System
- SISNAMA** National Environment System

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KEY WORDS

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ABOUT THE AMAZON 2030

The AMAZÔNIA 2030 project is an initiative led by Brazilian researchers to develop a sustainable development plan for the Brazilian Amazon. Our objective is to provide conditions for the region to reach a higher level of economic and human development and achieve the sustainable use of natural resources in 2030

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