

Executive Summary





WHERE DOES BRAZIL STAND WITH THE IMPLEMENTATION OF THE FOREST CODE?

A Snapshot of CAR and PRA in Brazilian States







2024

EDITION

Authors

Cristina Leme Lopes Senior Research Manager, CPI/PUC-RIO <u>cristina.leme@cpiglobal.org</u>

Nina Amir Didonet Senior Legal Analyst, CPI/PUC-RIO

Ana Flávia Corleto Legal Analyst, CPI/PUC-RIO

Joana Chiavari Research Manager, CPI/PUC-RIO

Acknowledgments

This work would not have been possible without the financial support of Norway's International Climate and Forest Initiative (NICFI).

The authors would like to thank Eduardo Minsky for his data analysis work, Giovana Souza for her research assistance and Wagner Oliveira for his comments and suggestions. We would also like to thank Kirsty Taylor, Giovanna de Miranda and Camila Calado for proofreading and editing of the text and to Meyrele Nascimento, Nina Oswald Vieira and Julia Berry for their graphic design work. We would like to thank the representatives of federal and state agencies who contributed data and information including: Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe, Ministry of Management and Innovation in Public Services and its Directorate of the Rural Environmental Registry (CAR), and the Brazilian Forest Service (SFB).

About Climate Policy Initiative

Climate Policy Initiative (CPI) is an organization with international expertise in f inance and policy analysis. CPI has seven offices around the world. In Brazil, CPI has a partnership with the Pontifical Catholic University of Rio de Janeiro (PUC-RIO). CPI/PUC-RIO works to improve the effectiveness of public policies and sustainable finance in Brazil through evidence-based analysis and strategic partnerships with members of the government, civil society, the private sector and financial institutions.

Suggested citation

Lopes, Cristina L., Nina Amir Didonet, Ana Flávia Corleto, and Joana Chiavari. Where Does Brazil Stand with the Implementation of the Forest Code? A Snapshot of CAR and PRA in Brazilian States — 2024 Edition. Rio de Janeiro: Climate Policy Initiative, 2024.

Pictures

Cristina Leme Lopes, Nina Amir Didonet, and Depositphotos

Contact

contato.brasil@cpiglobal.org







Executive Summary

The Forest Code (Law No. 12,651/2012), one of Brazil's most important environmental policies, reconciles the protection of native vegetation with crop production on rural properties. Essential for achieving the country's climate goals and conserving biodiversity, this law also promotes sustainable forest management, the restoration of degraded areas, the development of low carbon crops, food security and the adoption of nature-based solutions.

Recognizing the Forest Code's catalytic role in promoting better use of the country's natural and productive wealth, the Climate Policy Initiative/Pontifical Catholic University of Rio de Janeiro (CPI/PUC-RIO) has a dedicated research agenda focusing on this law. This publication is part of an ongoing project to monitor the implementation of the Forest Code in Brazilian states, with participation from state environmental and agricultural agencies. Based on a detailed analysis of state regulations, as well as data and information collected from the states and the exchange of experiences between CPI/PUC-RIO and policymakers, in virtual and face-to-face meetings, this report outlines the implementation of the Forest Code, with a focus on the Rural Environmental Registry (*Cadastro Ambiental Rural* - CAR) and the Environmental Compliance Program (*Programa de Regularização Ambiental* - PRA). The study uses specific indicators to highlight advances, gaps, and challenges faced in the last year. In addition, the report identifies strategies used in more advanced states that can serve as an example for others, and points to opportunities to accelerate the law's implementation.

Now in its sixth edition since its launch in 2019, this report has established itself as an indispensable guide for monitoring the status of the regulation and implementation of the Forest Code in all of Brazil's states. The information is revised and updated annually to enable decision-makers to target their efforts and available resources, contributing to the sustainable development of Brazilian agriculture and strengthening a robust environmental agenda.



Strategic Connections between Global Agendas and the Forest Code

In addition to its relevance as a national environmental policy, the Forest Code is connected to several global agendas occuring in 2024. Issues such as the need to mitigate weather-related disasters, participation in carbon markets and climate finance, and international trade negotiations reinforce the importance and potential of implementing the Forest Code. These global challenges and economic opportunities can align to strengthen the implementation of environmental law in Brazil.

In 2024, the climate crisis had a major impact on the country, with floods devastating the state of Rio Grande do Sul. This caused enormous economic and human damage and highlighted the urgent need for effective adaptation strategies, including better disaster risk management and the adoption of more resilient infrastructure. In this context, the Forest Code has gained prominence as a key policy for tackling climate change, helping to prevent damage and minimize impacts. Forests and other forms of vegetation present in Permanent Preservation Areas (*Áreas de Preservação Permanente* - APPs) and Legal Reserves, as well as conservation instruments provided for in the forestry law, play a crucial role in ensuring water, geological, and climate stability.

This year, the forest carbon credit market became a central issue in national and international discussions. The publication of the National Plan for Native Vegetation Recovery (*Plano Nacional de Recuperação da Vegetação Nativa* - PLANAVEG) and the approval of a bill establishing a regulated carbon market in Brazil and recognizing the coexistence of a voluntary carbon market are promising. These instruments offer the potential to mobilize the financial resources needed to recover degraded and deforested areas, contributing to the regularization of environmental liabilities. At the same time, progress made in the negotiations at the 2024 United Nations Conference on climate (COP29 in Baku, Azerbaijan, has provided important guidelines for the national carbon market and paved the way for constructing an international market for trading carbon credits.

Finally, in 2024, discussions on the free trade agreement between Mercosur and the European Union gained momentum toward a possible conclusion after decades of negotiation. However, external pressures have questioned the ability of Brazilian agriculture to produce healthy and safe food crops while respecting the environment. This emphasizes the importance of full implementation of the Forest Code, given that compliance with its rules can ensure the sustainability of the country's agricultural production.



The Role of the Federal Government in CAR Management

This year marked the effective start of shared management of the CAR—the backbone of the Forest Code—between the **Brazilian Forest Service** (*Serviço Florestal Brasileiro* - SFB) and the **Ministry of Public Management and Innovation** (*Ministério da Gestão e da Inovação em Serviços Públicos* - MGI). However, there is still a lack of regulations that clearly define the governance of the CAR and the competencies of each body involved.

Between March and August 2024, efforts focused on transferring the CAR database from the Information Technology Department (*Departamento de Tecnologia da Informação* - DTI) of the Ministry of Agriculture and Livestock (*Ministério da Agricultura e Pecuária* - MAPA) to the MGI, with Dataprev, a public company specializing in information technology that is linked to the MGI, taking on its administration. The migration of CAR data faced several obstacles and took longer than expected, resulting in system instability and challenges in synchronization with state systems. In addition, some modules of the National Rural Environmental Registry System (*Sistema Nacional de Cadastro Ambiental Rural* - SICAR)—especially the streamlined analysis module—were hampered, operating with limitations and reduced performance throughout the year. A series of infrastructure, security, governance, and data integration improvements have been discussed for the CAR.

A significant milestone in September 2024 was the launch of the Environmental Regularization Panel¹ by the SFB during the 1st National Meeting on Environmental Regularization. This dashboard provides up-to-date data on the CAR and the analysis of registrations in all federal units. With specific filters and interactive visualizations, the panel makes it easier to monitor the progress of the CAR across states.

This dashboard significantly advances transparency and accessibility, it does not accurately reflect information from some states relating to the CAR and, even more so, the PRA. This is mainly because there are states (i) whose data systems are not integrated with the federal system (Bahia and Espírito Santo), (ii) in which the procedure for signing Terms of Commitment (ToC) takes place in physical format (paper), and (iii) which have experienced synchronization difficulties. These limitations should be considered when using dashboard data, especially for monitoring the PRA.

The progress made at the federal level, with the improvement of CAR management and the development of technological tools to support the states, is an important step that supports states' essential role in implementing the Forest Code. Throughout 2024, states made strategic decisions and implemented innovative solutions to advance the analysis of registrations and the execution of the PRA, demonstrating leadership in the environmental regularization process.

1 The Environmental Regularization Panel can be accessed at: bit.ly/3Onllku.



Progress in Implementing the Forest Code in the States

Implementation of the Forest Code continues to vary significantly across Brazil's states, with varying rates of progress. After several years of progress being concentrated in a limited number of states, **2024 saw a continuation of the 2023 trend of more states achieving important results on different stages of implementing the law.**

Several states in Brazil's Northeast made progress in 2024. **Piauí, Pernambuco, and Rio Grande do Norte** advanced to the CAR analysis stage; **Alagoas and Ceará** have initiated streamlined analysis; and **Alagoas and Maranhão** have implemented the PRA and signed ToCs for the environmental regularization of rural properties.

The Southeastern states—**Espírito Santo, Minas Gerais, Rio de Janeiro, and São Paulo**—had reached all the stages of implementing the CAR and the PRA. Espírito Santo, a state at the forefront of CAR registration and analysis for many years, finally regulated and implemented the PRA. Rio de Janeiro began a streamlined analysis of CAR registrations and made progress on its Environmental Regularization Program. Minas Gerais, which has the second-largest land registry in Brazil, with over a million registrations, has achieved high CAR analysis rates. Finally, São Paulo is consolidating its lead with progress on all stages of the implementation of the Forest Code.

The four states leading the agenda in the Amazon region—**Acre, Mato Grosso, Pará, and Rondônia**—continue to progress, albeit at a slower pace. The highlight in these states was their progress on the environmental regularization of rural properties, with an increase in ToCs signed. The major innovation was Mato Grosso's development of a Digital CAR. In addition, **Roraima** began analyzing its CAR, while **Tocantins** progressed in regulating the PRA. **Southern states** remained at the same level of implementation as in 2023.

The status of the states' implementation of the Forest Code can be seen in Figure 1 below.



	NORTH	CENTRAL-WEST	NORTHEAST	SOUTHEAST	SOUTH
CAR enrollment	AC AP AM PA RO RR TO	FD GO MT MS	AL BA CE MA PB PE PI RN SE		PR RS SC
Registration analysis and validation	AC AP AM PA RO RR TO	FD GO MT MS	AL BA CE MA PB PE PI RN SE	ES MG RJ SP	PR RS SC
CAR automated analysis*	AP PA	MT (MS)	AL CE	(IIG RJ SP	PR
PRA regulation	AC AP AM PA R0 TO		AL BA CE MA PE		PR
Human, technical, and operational resources to implement the PRA	AC (PA)	(FD) (MT) (MS)	AL BA		PR
PRA implemented	AC PA	(FD) (MT) (MS)		ES (III) RI SP	
Signed Term of Commitment of APP and Legal Reserve regularization projects	AC PA	(FD) (MT) (MS)		ES (III) RI SP	
Legend:					

Figure 1. Status of CAR and PRA implementation by States, 2024

Stage reached in 2024

Self-reported PRA and Term of Commitment

Stage already reached by the state

* Automated analysis is not a mandatory stage separate from the team analysis stage. It is highlighted in the figure to showcase the states adopting the tool.

Source: CPI/PUC-RIO, 2024



Stages of Registration of Rural Properties in the CAR

Registration of rural properties in the CAR

All states are registering rural properties in the CAR.² There has been a steady increase in the registrations throughout Brazil as a result of the registration of small farmers and Traditional Peoples and Communities (*Povos e Comunidades Tradicionais -* PCT), the individualized registration of settlement plots. Last year, the number of CAR registrations increased by 5.7% from the previous year, reaching a total of 7.65 million by November 2024. Bahia and Minas Gerais have the most registrations in the country, with more than one million in their databases (Figure 2).

² The CAR is a permanent registry with no deadline for registering rural properties. However, in order to guarantee the right to join the PRA, the suspension of fines, and the benefit of the more flexible rules for environmental regularization of consolidated rural areas, the registration of rural properties in the CAR for rural properties with an area above four fiscal modules should have been done by December 31, 2023. Those with rural properties with an area of up to four fiscal modules or that meet the provisions of Article 3 of Law No. 11.326/2006 must register with the CAR by December 31, 2025, to guarantee these rights.



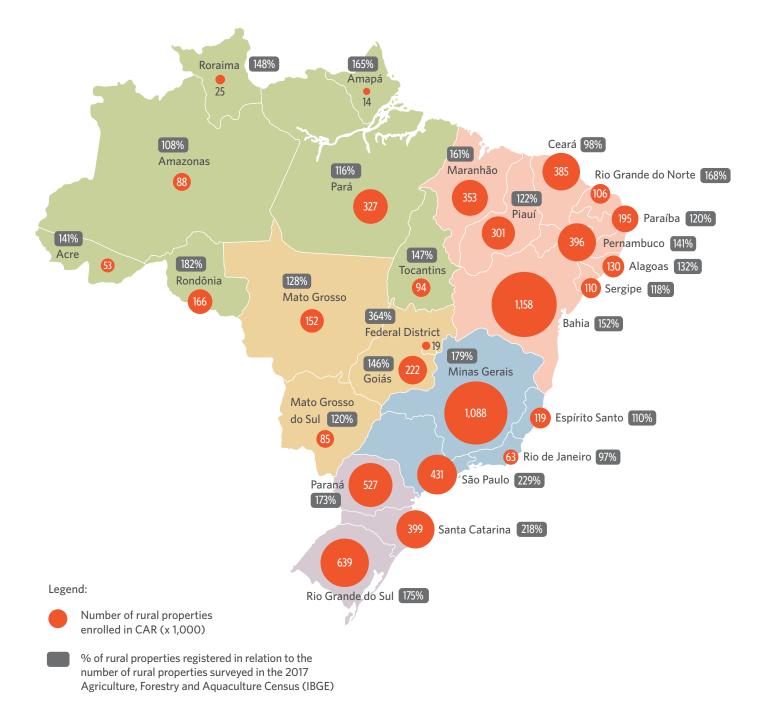


Figure 2. Rural Properties Registered with the CAR, 2024

Source: CPI/PUC-RIO based on updated data provided by state agencies responsible for the CAR (November 2024), data from the CAR Public Consultation (updated November 2024), and data from the SFB Environmental Regularization Panel (updated October 2024), 2024



Registration of PCT Territories in the CAR

In 2024, progress was made in registering Traditional Peoples and Communities (*Povos* e *Comunidades Tradicionais* - PCT) in the CAR, with all states presenting at least one CAR/ PCT registration. Bahia, for example, doubled its number of registrations of traditional territories. This progress results from various state initiatives and projects aimed at PCTs. Only the Federal District has no CAR/PCT registrations.

Alagoas has the highest number of CAR/PCT registrations (1,209), corresponding to a third of Brazil's total CAR/PCT registrations. Three other states also have standout numbers: Maranhão (683), Bahia (624), and São Paulo (290). Minas Gerais, Paraná, Pernambuco, and Piauí have between 100 and 200 CAR/PCT registrations, and Amazonas, Goiás, Pará, and Rio Grande do Norte, each has CAR/PCT registrations of between 10 and 100. The remaining states—Acre, Amapá, Ceará, Espírito Santo, Mato Grosso, Mato Grosso do Sul, Paraíba, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, Sergipe and Tocantins each have less than 10 CAR/PCT registrations. Notably, states with several traditional communities, such as Mato Grosso, have only one CAR/PCT registered with SICAR.

Individualized Registration of Plots Undergoing Agrarian Reform in the CAR

In this year, CAR Lot Module (*Módulo Lote CAR* - MLC) was expanded for the individualized registration of plots in land reform settlements in the CAR, reaching approximately **11,000** individual registrations. Normative Instruction 131/2023 of the National Institute for Colonization and Agrarian Reform (*Instituto Nacional de Colonização e Reforma Agrária* - INCRA) formally instituted the MLC, establishing administrative rules and procedures for the automated individualization of the plots of beneficiaries of the National Agrarian Reform Program (*Programa Nacional de Reforma Agrária* - PNRA) in the CAR. Previously, only the perimeters of settlements had been registered in the CAR, which made it difficult for settlers to access public policies and rural credit, given that CAR registration is used as a condition for these benefits. Interested settlers can now apply to register their plot at INCRA units or partner institutions. Individualizing the registration of settlement plots is also fundamental to promoting the environmental regularization of areas since a significant portion of deforestation in the Amazon occurs in rural settlements.³ In 2023, the implementation of this tool was underway in INCRA's regional superintendencies in nine states: Goiás, Maranhão, Paraíba, Paraná, Pernambuco, Piauí, Rio Grande do Norte, Roraima, and Sergipe.

³ Mourão, João, Marcelo Sessim, and Priscila Souza. *Preserving the Amazon: Strategies to Reduce Deforestation in Rural Settlements*. Rio de Janeiro: Climate Policy Initiative, 2023. <u>bit.ly/DeforestationSettlements</u>.



CAR Analysis Stage

Analysis of CAR registrations verifies that information declared by proprietors corresponds to the reality of the property, according to criteria established by the Forest Code. The aim is to identify any environmental liabilities of the property or confirm that it complies with the law. During this process, a technician or automated system assesses the data quality, and if any inconsistencies or pending issues are identified, the proprietor is notified to correct or supplement the information. CAR analysis occurs in cycles until completion, at which point the registration is considered as "validated."

When monitoring the efforts of the states in the analysis stage, it was observed that a large number of registrations remained in these analysis cycles for long periods. In light of this, this report separates CAR analysis into two stages: (I) **Analysis Initiated**, which includes registrations that have initiated the first analysis cycle, and (II) **Analysis Completed**, which includes registrations whose analysis cycles have been finalized, which some states refer to as validated registrations.

Initiated Analysis

Analysis of the data declared in the CAR is fundamental to implementing the Forest Code, but remains the biggest bottleneck for the agenda. **Significant progress was made in 2024: all states finally started this process, including Pernambuco, Piauí, Rio Grande do Norte, and Roraima**. In these states, the analysis process began in reaction to environmental licensing processes, authorization for the suppression of vegetation (*Autorização de Supressão de Vegetação* - ASV), inspection acts, or at the request of the interested party. Their analysis is, therefore, still at an early stage, especially in Pernambuco and Roraima.

In 2024, four new states—Alagoas, Ceará, Mato Grosso, and Rio de Janeiro—implemented automated systems to advance analysis of their registries. Alagoas, Ceará, and Rio de Janeiro adopted the Brazilian Forest Service's (*Serviço Florestal Brasileiro* - SFB) streamlined analysis tool. However, their studies are being carried out gradually and in conjunction with Dataprev because, with the migration of the CAR to the MGI, the system became unstable and slow throughout 2024, making it impossible to use this tool effectively. Nevertheless, the tool enabled an increase of more than 1,300% in analysis in Alagoas, which went from just over a thousand to almost 20,000 registrations with analysis and doubled the number of registrations analyzed in Rio de Janeiro. Ceará adopted the tool in November 2024 and expects results next year.

Mato Grosso has adopted a different system for implementing the Digital CAR. Instead of analyzing the data declared in the CAR, the state is creating new registers by cross-referencing the perimeters of the registers already submitted with an extensive set of high-resolution cartographic bases, creating **new registrations** with much more accurate data. After this cross-referencing, the proprietor must accept the new Digital CAR or present evidence to justify keeping their old CAR.



Automated systems are being used to aid analysis in ten states: Alagoas, Amapá, Ceará, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro and São Paulo. The states of Alagoas, Amapá, Mato Grosso do Sul, Minas Gerais, Paraná, and Rio de Janeiro are using the streamlined analysis module developed by the SFB. Meanwhile, São Paulo has customized this system to suit the peculiarities of the state. Minas Gerais and Pará have adopted CAR 2.0, a tool for automated analysis of a property's environmental compliance developed by a consultancy for the Green Seal Platform. Finally, Mato Grosso took a different approach by launching the Digital CAR.

Automation has proved crucial to increasing the scale and efficiency of CAR analysis. However, **analysis carried out by teams remains indispensable and needs to advance with the support of different strategies.** In 2024, Minas Gerais quadrupled its analyses from 13,000 to 71,800 registrations. This is mainly due to analyses conducted by technical teams from the environmental agencies and specialized companies. The streamlined analysis contributed 2% of the analysis conducted in the state.⁴

Considering the data consolidated over the years, **São Paulo leads the way with 388,000 registrations with initiated analysis** (accounting for 90% of the state's registrations), thanks to the customization of the SFB's streamlined analysis tool. **Pará follows in second place, with approximately 236,000 initiated analyses** (72% of the state's registrations), adopting different strategies, such as a robust technical team, joint efforts, empowering municipalities to conduct analyses, and hiring specialized companies. **In other states, the number of registrations with initiated analyses varies significantly:** 12 states have between 10,000 and 100,000 initiated analyses, three states have between 1,000 and 10,000, and nine states have between 10 and 1,000. Only Bahia has no data on this (Figure 3).

In terms of the percentage of CARs with initiated analysis of the total number of registrations in the state, apart from the high rates in São Paulo and Pará noted above, only two states stand out: Espírito Santo and Mato Grosso do Sul have initiated analyses on around 60% of their registration bases.⁵ In Acre, Alagoas, Amapá, Amazonas, Ceará, Goiás, Maranhão, Mato Grosso, and Rondônia, this percentage drops to between 10% and 30%. In four states and the Federal District, initiated analysis stands at between 1% and 10%, and in the remaining states analysis has been initiated on less than 1%. Even with the continuous progress in analysis, Minas Gerais has a relatively high number of registrations among Brazilian states, and the percentage of analysis initiated by the total number of registrations in the database is very low, indicating the size of the challenge still facing the state.

Figure 3 shows the total number and percentage of analyses initiated in each state. Considering the country as a whole, a 12% increase in analyses was initiated. More than 1.1 million CAR registrations have undergone analysis, whether manual or automated, representing around 15% of all registrations in Brazil.

⁴ Minas Gerais has also adopted the CAR 2.0 tool for automated analysis of the environmental compliance of properties. This geospatial intelligence tool cross-references a property's perimeter with 16 reference bases and identifies whether or not the property complies with the Forest Code. The data declared and documents presented in the CAR are not analyzed. CAR 2.0 passed through Minas Gerais' cadastral base and generated the following data: 387,000 properties with no environmental issues identified; 328,900 properties sent for rectification by the proprietor; 157,800 properties sent to the PRA; and 179,200 properties sent for manual analysis. As this system is not integrated with Sicar, these results are not reflected in the figures presented in this publication.

⁵ According to the CAR Public Consultation data updated in November 2024, Mato Grosso do Sul has initiated analyzing around 60% of its registration base. However, the Mato Grosso do Sul Environment Institute (*Instituto de Meio Ambiente do Mato Grosso do Sul* - Imasul/MS), the body responsible for the state's analysis, is reprocessing all registrations that underwent the streamlined analysis and, in this sense, the data from the Public Consultation may be incorrect.



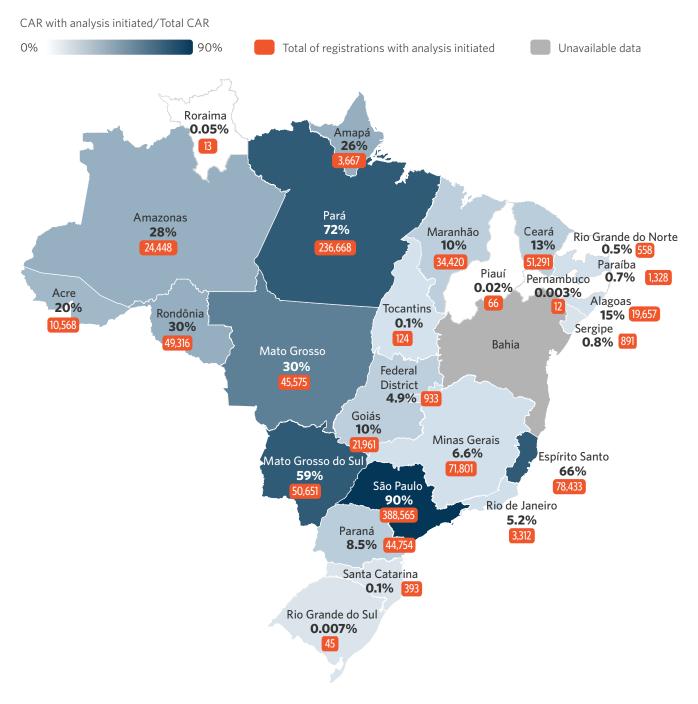


Figure 3. Percentage of CAR Initiated Analysis, and Total Number of CARs with Initiated Analysis 2024

Note: Only valid registration numbers are taken into account; analyses of canceled registrations are not included. **Source:** CPI/PUC-RIO based on data provided by the state agencies responsible for the CAR (updated November 2024), data from the CAR Public Consultation (updated November 2024), data from the SFB Environmental Regularization Panel (updated October 2024), data from the São Paulo Environmental Regularization Public Panel (SAA 2024), data from the Regulariza Pará portal (Semas/PA 2024), 2024



Finally, it is important to note that legal disputes continue to challenge the implementation of the Forest Code. **Controversy surrounding the Atlantic Forest protection regime could affect the analysis of the CAR in the states that are part of this biome.** In Paraná, a court decision halted analysis of the CAR for one year, and an upcoming decision by the Superior Court of Justice (*Supremo Tribunal de Justiça* - STJ)⁶ could again impact analysis in the state. There is a risk that this decision will be extended to other states with significant impacts on CAR analysis and the implementation of the Forest Code.

Analysis Completed

Completing the analyses remains a significant challenge in all states. The main difficulties include the poor quality of the registrations, inconsistencies with reference bases, and the lag in data, which often does not reflect changes in land use. These problems require many corrections on the part of landowners and successive cycles of analysis by the competent bodies. In addition, difficulties in communicating with landowners often prevent them from complying with notifications, prolonging the process of validating the registers indefinitely.

Alagoas, São Paulo, and Mato Grosso were the states that made the most progress in completing analyses in 2024. This was mainly achieved by adopting systems to automate the analysis. The CAR's automated analysis tools are proving useful for registrations that do not require data rectifications and do not have environmental liabilities, i.e., they are particularly effective for rural properties smaller than four fiscal modules.

In absolute terms, Mato Grosso and São Paulo have made the most progress in the last year. Mato Grosso's Digital CAR allowed the state to double the number of analyses completed last year, reaching more than 16,000 registrations. The expectation is that, by the end of 2025, the Digital CAR will make it possible to complete analysis of around 70% of the state's land registry.

São Paulo has more than doubled the number of analyses completed and has around 77,000 validated registrations (18% of the state's base). This progress is due to a change in state legislation.⁷ The state had processed the registrations in the streamlined analysis, but the system could not validate that the registrations complied with the law; it needed the producers' acceptance. This procedural change has made it possible to validate around 35,000 registrations automatically. However, for around 260,000 registrations where data has been rectified in the system, the proprietor's agreement is still required for the property to undergo environmental regularization analysis. In addition, the analysis challenges remain for the more than 45,000 registrations sent for team analysis.

⁶ As of the writing of this report, the Superior Court of Justice had not yet published its ruling. For more information see: <u>bit.ly/3V6BnE7</u>.

⁷ SAA Resolution No. 50, of July 2, 2024 establishes, within the scope of the Secretariat of Agriculture and Supply-= (Secretaria de Agricultura e Abastecimento de São Paulo - SAA/SP), the procedures to be observed in the different stages of the Environmental Regularization process for rural properties in the State of São Paulo. See: <u>bit.ly/30rcsrd</u>.



In percentage terms, Alagoas obtained the most progress (1,025% increase), going from 8 to 60 validated registrations. **Some states that had not completed analysis of any registrations in 2023—Piauí, Rio Grande do Norte, Sergipe, and Santa Catarina—have now managed to finalize analysis of some registrations.** While these states have completed analysis for a low number of registrations in absolute terms, they are showing progress in this most challenging stage of implementing the Forest Code.

Considering data consolidated over the years, the states to have completed analyses for the highest number of registrations are Espírito Santo (78,000) and São Paulo (77,000) followed by Pará (38,000), and Mato Grosso (17,000).⁸ Five states—Acre, Ceará, Maranhão, Paraná, and Rondônia—have completed between 2,000 and 10,000 analyses; 12 states and the Federal District have each completed analysis for less than 1,000 registrations, and three states—**Pernambuco, Rio Grande do Sul and Roraima**—have not completed any analyses. The state of Bahia has no data on this stage (Figure 4).

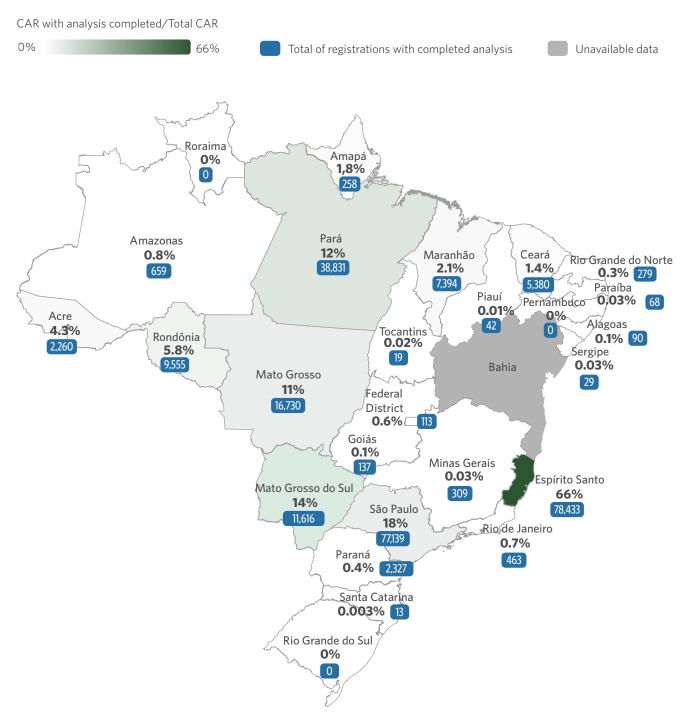
Espírito Santo leads in terms of its percentage of CAR registrations with analysis completed, with approximately 66% of its CAR registrations validated. This state has received technical support from the Institute of Agricultural and Forestry Defense of Espírito Santo (*Instituto de Defesa Agropecuária e Florestal do Espírito Santo – IDAF/ES*) for the registration of rural properties smaller than four fiscal modules, which meant such properties were registered with correct information, making for easier analysis. However, these analyses were carried out in a state system that has not yet been integrated into Sicar, and this data is not included in the SFB's Environmental Regularization Panel.

Despite the progress, CAR analysis remains the main bottleneck in implementing the Forest Code. Across the country, only around 3.3% of registrations have completed analysis—either manually or by automated systems. This represents an increase of 30% from the previous year.

⁸ According to data from the SFB's Environmental Regularization Panel updated in October 2024, Mato Grosso do Sul has completed around 13,000 analyses. However, Imasul, the agency responsible for the state's analysis, is reprocessing all registrations that underwent the streamlined analysis and the Panel's data may be incorrect. The new data was not available at the time of writing.



Figure 4. Percentage of Completed CAR Analysis and Total Number of CARs with Completed Analysis, 2024



Note: Only valid registration numbers are taken into account; analyses of canceled registrations are not included. **Source:** CPI/PUC-RIO based on data provided by the state agencies responsible for the CAR (updated November 2024), the CAR Public Consultation (updated in November 2024), the São Paulo Environmental Regularization Panel (SAA 2024), the SFB Environmental Regularization Panel (updated in October/November 2024) and the Regulariza Pará portal (Semas/PA 2024), 2024



Cancelation of CAR Overlapping with Non-Registrable Areas

The cancelation of CAR registrations overlapping with Indigenous Lands (*Terras Indígenas* -TIs), Protected Areas in the public domain, and other public areas that cannot be registered is an important indicator of the implementation of the Forest Code, but it was not possible to quantify progress or setbacks this past year. **Pará** is the only state that permanently maintains actions to cancel and suspend irregular registrations, making georeferenced data publicly available.⁹ The state has suspended and canceled hundreds of registrations in TIs and Protected Areas, but new CARs are registered every year in these areas. **Acre, Amazonas, Mato Grosso, and Rondônia** have canceled irregular CARs. This issue remains challenging, as the system has no permanent block for new registrations in these areas. Promoting a quick and efficient solution to cancel irregular registrations and prevent new registrations from being made is a land, social, and environmental issue that must be dealt with as a matter of priority and urgency.

Stage of Regulation of the Forest Code by States

PRA Regulation of the Regularization of Liabilities in Permanent Preservation Areas (*Áreas de Preservação Permanente* - APPs) and Legal Reserves

Another major achievement in 2024 was the regulation and implementation of the PRA in states that had not previously reached this stage. Espírito Santo, Goiás, and Tocantins regulated the PRA, marking significant progress. In addition, seven states also issued rules on the modalities, deadlines, and metrics for recovering APP liabilities and recovering and/or offsetting Legal Reserves.

To date, **19 states and the Federal District have regulated the PRA** and adopted metrics for the recovery of APP and Legal Reserve liabilities. However, seven states—Paraíba, Piauí, Rio Grande do Norte, Rio Grande do Sul, Roraima, Santa Catarina, and Sergipe—have not yet built a minimum set of rules for the environmental regularization of rural properties. In these states, the PRA is not regulated, or the regulation adopted is insufficient, and there are no established procedures and criteria for recovering vegetation liabilities.

⁹ For CAR data on Indigenous Lands in Pará, see: <u>bit.ly/3Ri9dTV</u>. For CAR data on Protected Areas in Pará, see: <u>bit.ly/3RDgclq</u>.



In Goiás, the regularization of forestry liabilities, before and after July 22, 2008, is carried out through the Environmental Declaration of the Property (*Declaração Ambiental do Imóvel* - DAI), a self-declaratory procedure carried out directly in the Goiás Environmental Licensing System (IPÊ). Despite regulating the PRA in 2024, the state did not introduce any new procedures, merely reaffirming the use of the DAI for regularization with the benefits provided for in the Forest Code. In addition, Goiás law allows for compensation for deforested Legal Reserve areas after 2008, extending the regime for rural areas consolidated in Legal Reserves until 2019. Although it requires each hectare cleared to be offset twice, the law makes the provisions of the Forest Code more flexible, setting an important precedent that could encourage further flexibility.

Legal Reserve compensation, the most regulated alternative adopted in the states to regularize liabilities, has gained legal certainty through a recent decision by the Supreme Federal Court (*Supremo Tribunal Federal* - STF). **On October 24, 2024, the court ruled that compensation in areas of the same biome was constitutional, ruling out the requirement of "ecological identity."¹⁰ This historic decision, 12 years after the Forest Code was enacted, is a significant step forward in implementing the law.**

In the last year, several states have updated their legislation with the adoption of new rules, sometimes complementing previous rules and sometimes replacing them. Approximately 40 rules relating to the implementation of the Forest Code were issued this year by the states, regulating procedures relating to the CAR, the PRA, and the regularization of APP and Legal Reserves.

PRA Implementation Stage

Progress has been made on implementing the PRA, with three additional states reaching this stage —**Espírito Santo, Maranhão, and Rio de Janeiro.** Several other states scaled this process, with an increase in the number of ToCs signed for environmental compliance in **Acre, Alagoas, Mato Grosso, Minas Gerais, Pará, and São Paulo**.

One alternative for speeding the progress of environmental regularization is the adoption of a self-reported PRA procedure, which allows early adherence and is not dependent on the analysis of CAR registrations. This model has enabled progress on the regularization of rural properties in Minas Gerais, which will conclude 2024 with almost 200 environmental commitments signed.

Even so, the environmental regularization of rural properties, which includes the recovery of APPs and the recovery or compensation of Legal Reserves—a central objective of the Forest Code—is still far from being achieved in the short or medium term in the country.

¹⁰ To better understand this context and its impacts, we recommend reading: Lopes, Cristina L., Maria Eduarda Segovia e Joana Chiavari, 2023. bit.ly/STF-CódigoFlorestal.



Signing of Terms of Commitment

In those states operating the PRA, only a portion of registrations analyzed as having environmental liabilities have progressed to the PRA stage. This process involves submitting a Project for the Regularization of Degradedand Altered Areas (*Projetos de Regularização de Áreas Degradadas e Alteradas* - PRADA) and signing ToCs for the regularization of APPs and Legal Reserves. Barriers to reaching this stage range from producers' resistance to environmental regularization to their lack of knowledge of productive and/or multifunctional forest restoration solutions.

Some states have implemented strategies to overcome this. **Mato Grosso**, for example, has unified the stages of CAR analysis and adherence to the PRA into a single procedural flow since 2022, which has boosted the signing of ToC. **In 2024, the number of terms signed increased by 70% on the previous year, making the state the leader in rural properties undergoing environmental regularization under the PRA.** Mato Grosso has around 1,850 properties under regularization, with plans to recover 16,000 hectares of APP and 13,500 hectares of Legal Reserve, as well as areas earmarked for Legal Reserve compensation.

Pará has also made significant progress with 1,120 ToCs signed and more than 500 PRADAS approved for the recovery of 233,000 hectares of APP and Legal Reserve, as well as 37,000 hectares for Legal Reserve compensation. Although the state has fewer properties under regularization than Mato Grosso, the total area committed to recovery is more than seven times greater.

São Paulo made remarkable progress in 2024, increasing the number of properties committed to regularization by more than 100-fold. The state registered almost 250 signed ToCs, covering **the recomposition of 13,000 hectares of APP and 27,000 hectares of Legal Reserve.**

Acre and **Rondônia** also focused their efforts on this stage and saw increased engagement from producers. Acre has around 800 ToCs for the recovery of 1,300 hectares of APP and 5,000 hectares of Legal Reserve. The state has encouraged productive recovery through Agroforestry Systems (AFs), promoting income generation combined with environmental gains. Rondônia, meanwhile, has 296 ToCs for the recovery of 5,800 hectares of APP and 13,600 hectares of Legal Reserve.¹¹

Figure 5 shows data from states where the PRA is in operation, including information on the number of CARs with analysis completed, liabilities confirmed, and number of ToCs signed. These terms formalize producers' adherence to the PRA, establishing the regularization schedule, and are, therefore, the main indicator of progress in the regularization of rural properties.

Despite progress made by some states, a significant disparity remains between properties whose CAR status is "awaiting environmental regularization" and those in the regularization process. This highlights the need to expand strategies to engage producers and speed up adherence to the PRA.

¹¹ Technicians from Bahia's Institute for the Environment and Water Resources (Instituto do Meio Ambiente e Recursos Hídricos - INEMA) report that there are more than 550,000 ToCs in the state system (Cadastro Estadual Florestal de Imóveis Rurais - CEFIR); however, these relate to the regularization of any pending environmental or registration issue, and it is not possible to identify which are for the regularization of APP and Legal Reserve liabilities. Bahia's environmental regularization program is self-declaratory and has around 48,000 PRADAS in CEFIR.



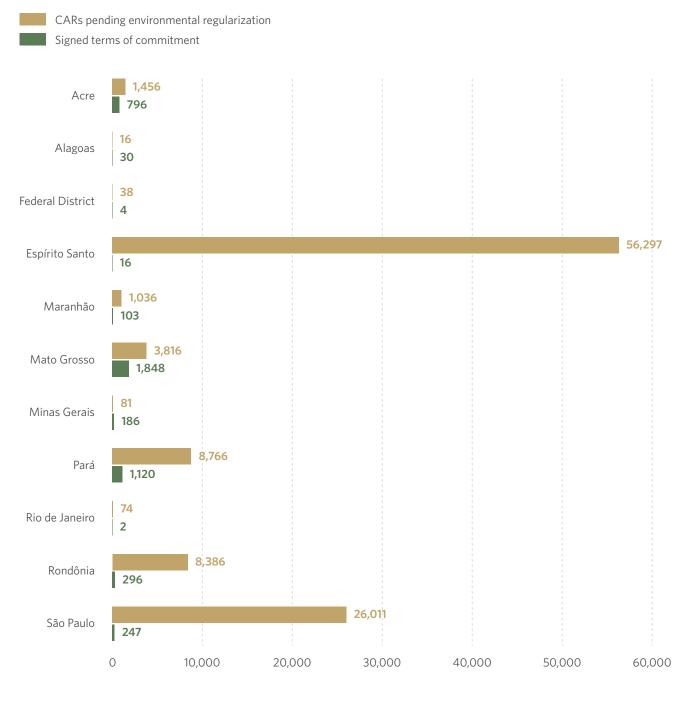


Figure 5. Number of CARs Pending Environmental Regularization and Number of ToCs Signed, 2024

Source: CPI/PUC-RIO, 2024



Environmental Regularization Monitoring Stage

Monitoring the Regularization of Liabilities in APPs and Legal Reserves

While several states have established rules for monitoring the regularization of liabilities in APPs and Legal Reserves, few have adopted systems and tools for monitoring restoration. Most states provide for self-monitoring by the proprietors, requiring periodic reports as well as monitoring by the government through remote sensing and field inspections when deemed necessary. The use of technologies such as monitoring systems and geospatial data platforms, and the use of applications such as the Brazilian Agriculture Research Corporation (*Empresa Brasileira de Pesquisa Agropecuária* - EMBRAPA)'s AgroTagVEG are essential for managing forest restoration.

Aligning the Forest Code with other Public Policies

Strengthening the alignment of the Forest Code with other public environmental policies by integrating CAR data with database information on licensing, authorizations, embargoes, and deforestation on rural property is fundamental to further Brazil's environmental agenda. Some states are moving in this direction. For example, **Amazonas** has created a routine to curb illegal deforestation and enforce the regularization of forest areas. The state cross-checks deforestation alerts from the National Institute for Space Research (*Instituto Nacional de Pesquisas Espaciais* - INPE) with the CARs, and when it identifies unauthorized forest suppression, its competent agency immediately suspends the property's registration, embargoes the area, and fines the proprietors. By 2023, more than 3,000 registrations had been suspended, preventing producers from obtaining credit or issuing animal transport guides (*Guia de Transporte Animal* – GTA), and suspending other administrative authorizations. In order for the property's registration to be reinstated, producers must present a project for the environmental regularization of the property and sign a ToC, which can be done in the administrative process of the environmental assessment.

Pará continues to implement diverse strategies to align the Forest Code with other environmental policies. In April 2023, the state government and the Ministry of the Environment and Climate Change (*Ministério do Meio Ambiente e Mudança do Clima -*MMA) created a working group to propose measures to ensure the effectiveness of the CAR as an instrument for rural environmental management, monitoring, control of illegal deforestation and degradation, alongside economic incentives. The state identified priority municipalities where properties with more than four fiscal modules had illegal deforestation of more than 50 hectares between 2018 and 2022. The state carried out joint efforts in these municipalities to help producers with environmental regularization, analyzed the CAR registrations of priority properties, and suspended those that had not complied with



regulations. The Secretariary of the Environment and Sustainability of Pará (*Secretaria de Estado de Meio Ambiente e Sustentabilidade do Pará* - SEMAS/PA) is preparing a public notice to notify producers, under penalty of cancelation of the CAR if they do not respond within 30 days. In parallel with command and control actions, the state is promoting partnerships with the federal government for payment for environmental services PESthrough the Floresta+Amazônia Program.

In addition to conservation policies, landscape and forest restoration policies associated with market mechanisms, such as PES, REDD+, and carbon credits, can also be used to encourage restoration and compliance with the Forest Code, especially in family crops, promoting recovery of degraded areas and income generation. These initiatives are expected to gain traction in the coming years.

Finally, aligning the Forest Code with Brazil's rural credit policy has also been essential in promoting agriculture compatible with environmental preservation. Initiatives by the financial system, such as resolutions by the National Monetary Council (*Conselho Monetário Nacional* - CMN) and the Central Bank of Brazil (*Banco Central do Brasil* - BCB), make producers' access to credit conditional on having active CAR registrations, as well as on those registrations having been analyzed as either being environmentally compliant being in the process of environmental regularization.

climatepolicyinitiative.org