

# The Impact of Brazil's ABC Program Credit on Pasture Recovery: Evidence from the Cerrado



CLIMATE  
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EXECUTIVE SUMMARY  
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Recovering degraded pastures provides a unique opportunity to sustainably boost Brazilian agricultural production. Pasture recovery can be used to increase agricultural productivity by converting it into agricultural crop production or by integrating crop-cattle-forest systems. Currently, around two-thirds of Brazil's pastures, equivalent to 100 million hectares,<sup>1</sup> are degraded. Recovering these areas avoids the need for further deforestation to expand agricultural production. This balance between food production and the preservation of native vegetation is necessary in order to address the pressing challenges arising from the climate crisis.

Brazil has committed to recovering 30 million hectares of pasture by 2030, according to its Nationally Determined Contribution (NDC)<sup>2</sup> and the Brazilian Agricultural Policy for Climate Adaptation and Low-Carbon Emission (*Plano de Adaptação e Baixa Emissão de Carbono na Agricultura - ABC+ Plan*).<sup>3</sup> In addition, the Ministry of Agriculture and Livestock (*Ministério da Agricultura e Pecuária - MAPA*) estimates that US\$ 120 billion will be needed to implement the National Program for the Conversion of Degraded Pastures into Sustainable Agricultural and Forestry Production Systems (*Programa Nacional de Conversão de Pastagens Degradadas em Sistemas de Produção Agropecuários e Florestais Sustentáveis - PNCPD*),<sup>4</sup> whose goal is to recover and convert 40 million hectares. These resources must be applied effectively in order to meet the national target.

To better understand and increase the effectiveness of investments in pasture recovery, **researchers from Climate Policy Initiative/Pontifical Catholic University of Rio de Janeiro (CPI/PUC-RIO) evaluated the ABC Recuperação credit line, Brazil's main policy instrument used to promote pasture recovery in recent years.** The analysis uses satellite images and an econometric methodology to estimate the impacts of the credit on recovering degraded pastures and land use changes in the Cerrado biome.<sup>5</sup>

1 MAPBIOMAS. *Plataforma Mapbiomas - Pastagem*. nd. Access date: July 22, 2024. [bit.ly/3WxYOax](https://bit.ly/3WxYOax).

2 República Federativa do Brasil. *Pretendida contribuição nacionalmente determinada para consecução do objetivo da convenção-quadro das Nações Unidas sobre Mudança do Clima*. 2016. [bit.ly/4cnxzo4](https://bit.ly/4cnxzo4).

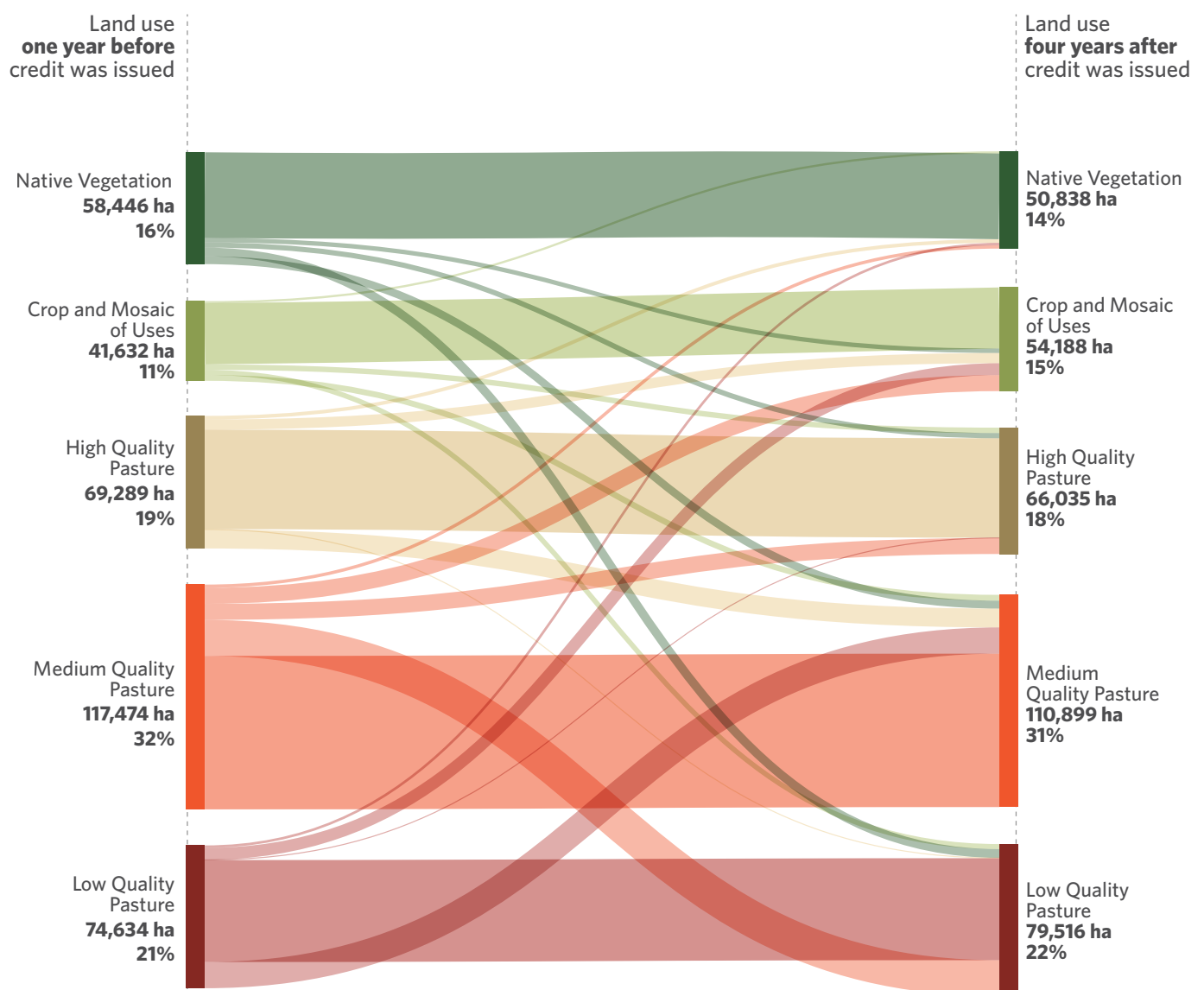
3 MAPA. *Plano Setorial para Adaptação à Mudança do Clima e Baixa Emissão de Carbono na Agropecuária 2020-2030: Plano Operacional*. 2021. [bit.ly/3wOyknK](https://bit.ly/3wOyknK).

4 MAPA. *Programa Nacional de Conversão de Pastagens Degradadas em Sistemas de Produção Agropecuários e Florestais Sustentáveis - Decreto nº 11.815*. 2023. [bit.ly/3LQeXIP](https://bit.ly/3LQeXIP).

5 The researchers matched the georeferenced polygons of the Central Bank of Brazil's (*Banco Central do Brasil - BCB*) rural credit operations with data on land use and pasture quality from the platform of the Brazilian Annual Land Use and Land Cover Mapping Project (*Projeto de Mapeamento Anual do Uso e Cobertura da Terra no Brasil - MAPBIOMAS*) and the Image Processing and Geoprocessing Laboratory (*Laboratório de Processamento de Imagens e Geoprocessamento - LAPIG*) of the Federal University of Goiás (*Universidade Federal de Goiás - UFG*). Credit operations that took place between 2016 and 2018 in the Cerrado biome are analyzed. The effects were observed until 2022.

CPI/PUC-RIO’s analysis shows that the results of *ABC Recuperação* credit are very small. The provision of credit does not generate a significant increase in the overall quality of the pastures and causes only marginal changes in land use. Moreover, these areas were partly converted from native vegetation to agricultural use before the credit was obtained, which contradicts the very objective of pasture recovery to prevent deforestation.

Land Use Transitions for Areas in the Cerrado Financed by *ABC Recuperação*, Operations Contracted between 2016–2018



**Note:** The category “Crop and mosaic of uses” includes different types of crops, planted forests and crop-cattle mosaic areas, which are not distinguishable between crops and pastures. The “Native Vegetation” category includes natural forest and non-forest formations. Transitions involving non-vegetated areas and bodies of water are very small and are therefore not shown in the graphic.

**Source:** CPI/PUC-RIO with data from SICOR/BCB (2024) and LAPIG/MAPBIOMAS (2022), 2024

The report makes a series of recommendations to improve the program and ensure the effectiveness of policy instruments. The public resources allocated to subsidized credit must yield tangible environmental benefits. CPI/PUC-RIO's analysis identifies ways to improve the credit line designed specifically for recovering degraded pastures in Brazil, which serves as the main instrument for operationalizing the ABC + Plan. In this way, this publication also provides guidance for the implementation of the PNCPD.

## Main Results

**Pasture Recovery and Conversion:** *ABC Recuperação* credit has modest effects on pasture recovery, with no relevant increase in pasture quality and with marginal changes in land use. Nearly three-quarters of the areas analyzed remain unchanged four years after the credit was issued, and the provision of credit does not show any significant effects on severely degraded areas. Obtaining credit reduces the pasture area by an average of 3 percentage points (p.p.), with conversion to other economic uses.

**Technical Assistance:** Borrowers of *ABC Recuperação* credit who used the resources to hire technical assistance saw a significant reduction of 6 p.p. on average of degraded pasture area, while borrowers who did not contract technical assistance did not see any changes in pasture quality.

**Deforestation:** Evidence indicates that areas that received credit for pasture recovery were converted to pasture prior to credit being issued. After the provision of credit, the conversion of native vegetation to pastureland (*i.e.*, deforestation) ceased.

**ABC Plan Targets:** It is estimated that the contribution of the *ABC Recuperação* credit was at most 2.5% of the target of recovering 15 million hectares by 2020. Reaching the target depends on other public policy instruments and the spontaneous adoption of degraded pasture recovery practices by producers.

## Implications for Public Policy

Brazil's subsidized credit policy needs to increase its effectiveness in transforming degraded pastures. Strengthening the monitoring of degraded areas and assessing the environmental conditions of projects are fundamental actions. It is important to focus credit on producers without recent deforestation and to combine it with other public policy instruments such as technical assistance and risk management.

This analysis concludes, through a series of robustness tests, that *ABC Recuperação* does not currently meet its goal to effectively transform and improve the quality of degraded pastures. It is important to undertake additional research efforts to understand the challenges that producers face in implementing pasture recovery projects.

## Recommendations

**Monitoring of Credit:** Verification of financed projects should go beyond what is currently carried out by financial institutions, which focuses on payment conditions and the application of resources. Policy instruments should complement and strengthen the monitoring of degraded areas after the credit is issued, assessing compliance with the technical project submitted.

**Systematic Evaluation:** Public policy should provide a systematic evaluation of the environmental conditions of financed projects to better understand the difficulties in adopting practices to recover degraded pasture. This type of verification can be costly, but the cost can be reduced with sample verification or the use of satellite data to identify priority areas.

**Enhance Evaluation before Providing Credit:** Financial institutions must evaluate the state of declared pasture recovery areas prior to providing credit to ensure eligibility. Results from this study indicate that at the time credit was issued, more than one-fourth of the declared areas did not correspond to pasture. Analysis also shows evidence of deforestation prior to receiving credit,<sup>6</sup> suggesting that part of the proposed pasture recovery areas may have recently been converted from natural vegetation.

**Focus on Good Practices:** Credit provision should prioritize producers who adopt good practices and restrict access to those who have recently deforested. Directing resources to pasture recovery is not the most effective way of addressing recently deforested areas.

**Technical Assistance:** Combining credit with technical assistance can be decisive for better results. Technical assistance allows more severely degraded areas to be recovered and helps prevent these recovered areas from becoming degraded again.

**Risk Mitigation and Economic Viability:** Combining credit with other policy instruments, such as long-term rural insurance policies and transitional income payments in the early years, can maximize impacts, strengthening the economic viability of investments.

**Successfully recovering degraded pasture areas remains a critical issue for Brazil. The 2023 launch of the PNCPD indicates the importance of these efforts. While pasture recovery will require additional resources to increase productivity and reduce pressure for deforestation, the expansion of resources but be coupled with more effective investments. Results from CPI/PUC-RIO's analysis of the ABC Recuperação credit line provides valuable insights on the potential and limitations of rural credit. It also calls attention to the need to tailor and enhance current policies and programs aimed to increase the quality of pastureland in Brazil.**

 [Read the full report at bit.ly/Pasture-Recovery](https://bit.ly/Pasture-Recovery)

<sup>6</sup> Although there are indications of errors in the declaration of areas, this is the official instrument used to direct the subsidized resources of the ABC Program and is therefore relevant as the object of the effectiveness analysis. However, this inaccuracy does not change the conclusions, since the results remain unchanged if the analysis is carried out only on the pasture areas of the declared polygons.

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