

Economic and financial analysis of the investment opportunities in the state of Mato Grosso arising from the PCI Strategy

INTRODUCTION

Launched in 2015 during the Climate Convention in Paris (COP21), the Produce, Conserve and Include (PCI) Strategy is a jurisdictional approach for the sustainable development of the State of Mato Grosso. Its objective is to promote socioeconomic development in the territory through the sustainable use of land. Therefore, all future agricultural production can be accommodated within the existing productive area through sustainable intensification and the adoption of good agricultural practices (Produce). The native vegetation areas are restored in accordance with legal requirements and the remaining forests areas are protected (Conserve). Finally, well-being improvements and prosperity for family farming, indigenous peoples, and traditional communities (Include).

This vision is materialized in a broad plan of goals in its three areas, built in a participatory process and that integrates the agendas of public, private, and civil society actors. Among the goals for 2030 are:

Produce

- Increased livestock productivity including the recovery of 2.5 million hectares of low productivity pasture areas
- Expand the area of agriculture in degraded pasture areas from 9.5 to 12 million hectares by 2030
- Expand the area under sustainable forest management to 6 million hectares
- Expand the area of planted forests in areas already open to 800 thousand hectares
- Increase biofuel production

Conserve

- Maintain 60% of the native vegetation cover in the State of Mato Grosso, reducing deforestation in the forest by 90% and deforestation in the Cerrado biome by 95% by 2030, based on the baseline: 2001-2010 (PRODES), and eliminating illegal logging
- Preserve 1Mha of area susceptible to legal deforestation
- Register and validate the rural environmental records (CAR) of 90% of rural properties (until 2024)
- Regularize 1 million hectares (100%) of Permanent Preservation Area (APP) and 5.8 Mha (100%) of Legal Reserve (RL) degraded, being 1.9 million hectares by recomposition

Include

- Expand access to technical assistance and rural extension (ATER) and markets for family farming and socio-biodiversity chains
- Increase the gross value of family farming production
- Increase access to credit for family farming
- Carry out the land title regularization of 70% of family farming properties

In 2019, PCI entered a new phase with the creation of the PCI Institute, an independent non-profit institution that aims to ensure the effectiveness of the PCI Strategy. The state of Mato Grosso pointed the institute as the responsible, for articulating multiple actors through a transparent and inclusive governance, identifying fundraising opportunities and managing programs and projects.

PCI aims to create a safe market environment for producers, buyers, and investors with a strong foundation for inclusive sustainable development. The PCI Strategy defined targets, metrics and indicators and identified potential sources of financing and implementation mechanisms for the development of an integrated landscape management and agricultural economy, socially inclusive and with low carbon emissions.

In the COP 26 at Glasgow, the state of Mato Grosso announced a net zero emissions commitment, based on 12 decarbonization trajectories. The trajectories were identified based on a study conducted by the state Environment Secretary in partnership with the Climate Group. The commitment takes into account the PCI goals. The goal is to have 236 Gton of CO₂ emission reduction by 2035.

The PCI Institute, with the support of the Tropical Forest Alliance (TFA) and the REM-MT Program, is carrying out a study in partnership with the International Institute for Sustainability (IIS) to determine the investment needs to meet these goals by 2030 and define ways to capture these investments, indicating priorities and investment models necessary to achieve the Strategy's goals.

This analysis includes: i) survey of investments related to the PCI Strategy in the period 2016-2020; ii) review of 2015 estimates; iii) adjustment of estimates to achieve these goals by 2030; iv) analysis of multiple criteria for prioritizing investments; and v) design six investment models for raising funds to finance PCI priority goals.

MAIN FINDINGS

In 2015, at the launch of the PCI Strategy during COP-21 in Paris, it was estimated that R\$ 39 billion of investments would be required during a 15-year period to reach all 21 PCI goals. Of these, R\$ 20 billion would be allocated to pasture intensification, R\$ 5.8 billion to implement the Native Vegetation Protection Law (know and the "*Brazilian Forest Code*"), R\$ 3.1 billion to prevent further deforestation and R\$ 10.1 billion to support family production (R\$6.7 billion in investments in production and R\$3.4 billion in governance and public spending).

The results of IIS study, indicates that in the period ranging from 2016 to 2020, a total of R\$ 16.04 billion were raised under 135 government projects and actions (including rural credit). These resources were distributed as follows: R\$ 9.09 billion in the Produce area, R\$ 331.58

million in the Conserve area and R\$ 6.61 billion in the Include thematic area. In addition to these resources, R\$9.48 million were invested in the governance of the PCI Strategy. The three thematic areas to which the most resources were allocated were: sustainable production (R\$9.03 billion), support for family farming (R\$6.29 billion) and strengthening of production supply chains (R\$122.61 million) and management of protected areas (conservation units and indigenous lands - R\$ 170.17 million). Of the amount raised mentioned above, R\$ 15.48 billion were executed: R\$ 8.78 billion in the Produce area, R\$ 205.20 million in the Conserve area and R\$ 9.48 billion in the Include area (see Figure 01).

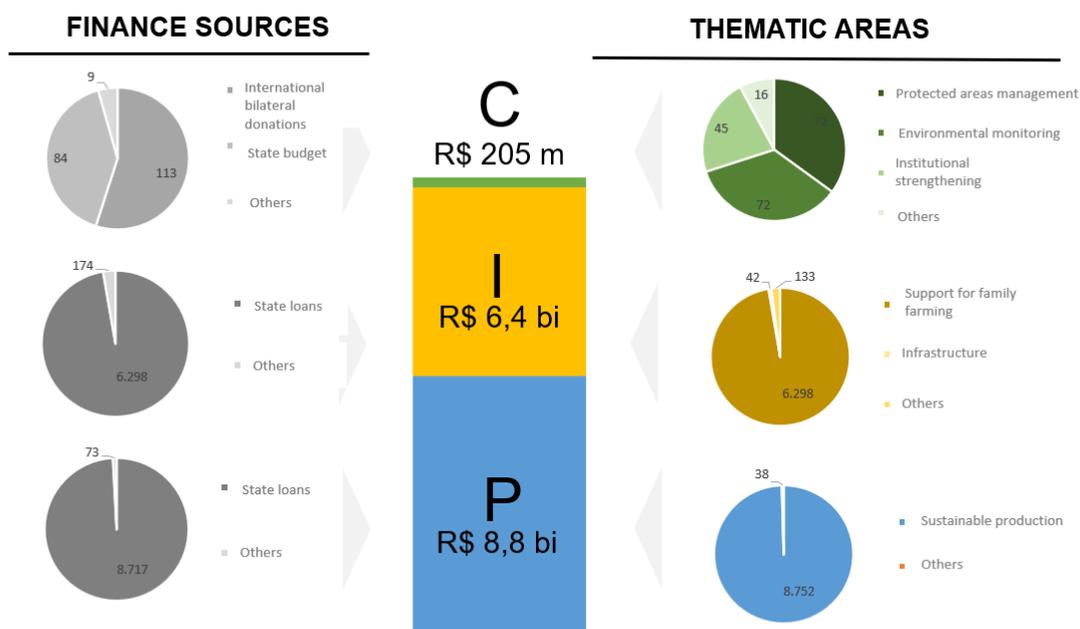


Figure 01. Total resources spent in the PCI strategy by area between 2015 and 2020: Distribution by source of resources and area (C - Conserve; I - Include and P - Produce)

In the Produce thematic area, investments were predominantly onerous and uncoordinated, originating both from public financial institutions (eg Banco do Brasil, BNDES, Caixa Econômica); as, heavily from private banks, in addition to financing via mechanisms additional to the banking system, such as supplier credits and advance payments from customers and others. In the Conserve area, public resources and international donations prevailed. Finally, in the Include area, most resources were public budget.

Private investments aimed at sustainable activities are already taking place and should follow an increasing trend in response to incentives from the consumer market and legal changes in member countries of the Organization for Economic Cooperation and Development (OECD). Investment in the Conserve area, in turn, has resulted mainly from bilateral financial and technical cooperation. Investments in the Include area did not include contributions made via credit directed to family farming (e.g., PRONAF) and focused mainly on issues of land title regularization, provision of technical assistance and rural extension.

After researching the investments made between 2016-2020, the cost estimates made in 2015 were analyzed to propose any adjustments and based on this, estimate the demand for financing until 2030. Some of the targets stipulated in 2015 did not have an estimate or their costs were allocated in related targets. Thus, to improve the accuracy of the estimate, the values, assumptions and calculation methods for the estimates were updated and/or generated for some goals that did not have cost estimates.

As a result of this exercise, the estimate is that the total investment demand for the PCI Strategy between 2021-2030 is R\$ 205 billion, with R\$ 40.15 billion being the demand for the Produce thematic area, R\$ 139.05 billion for Conserve and R\$ 25.8 billion for the Include (see Figure 02).

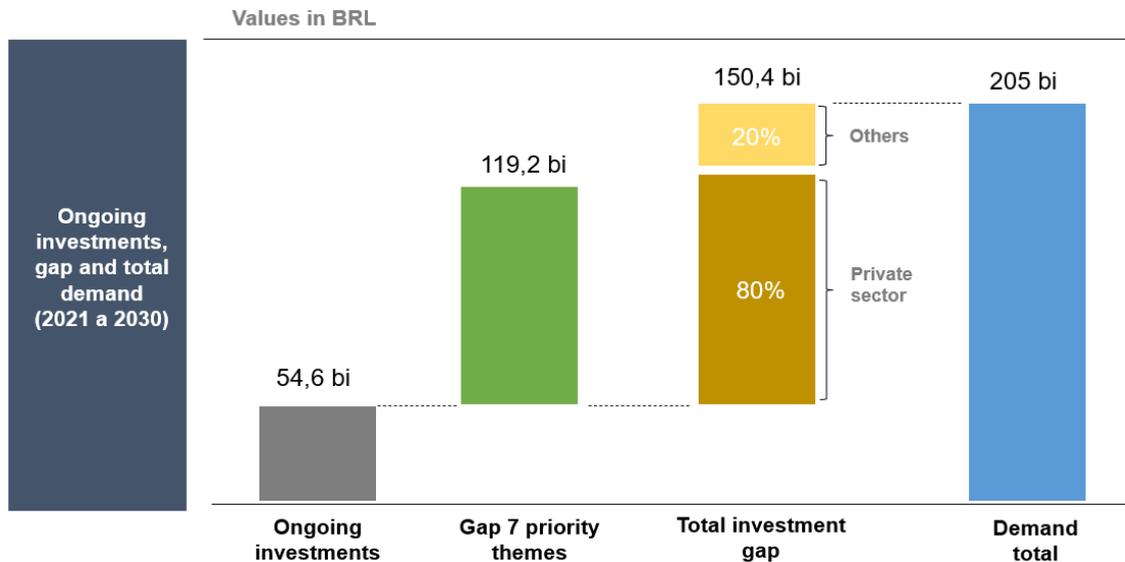


Figure 02. Total demand and funding gap for PCI strategy between 2021 and 2030: Ongoing investments and distribution of resources by sectors and themes (in billions of reais)

With respect to priority themes, financing demands between 2021-2030 would be (see Figure 03): i) CAR, R\$ 153.08 million; ii) Land regularization, R\$311.4 million; iii) Deforestation reduction, R\$ 546 million; iv) Sustainable models for family farming, R\$15.5 billion; v) Agriculture and forestry, R\$27.69 billion; vi) Promotion of sustainable production models, R\$ 74.59 billion; vii) Consolidation of protected areas as well as models aimed at the productive sectors (both without cost estimates).

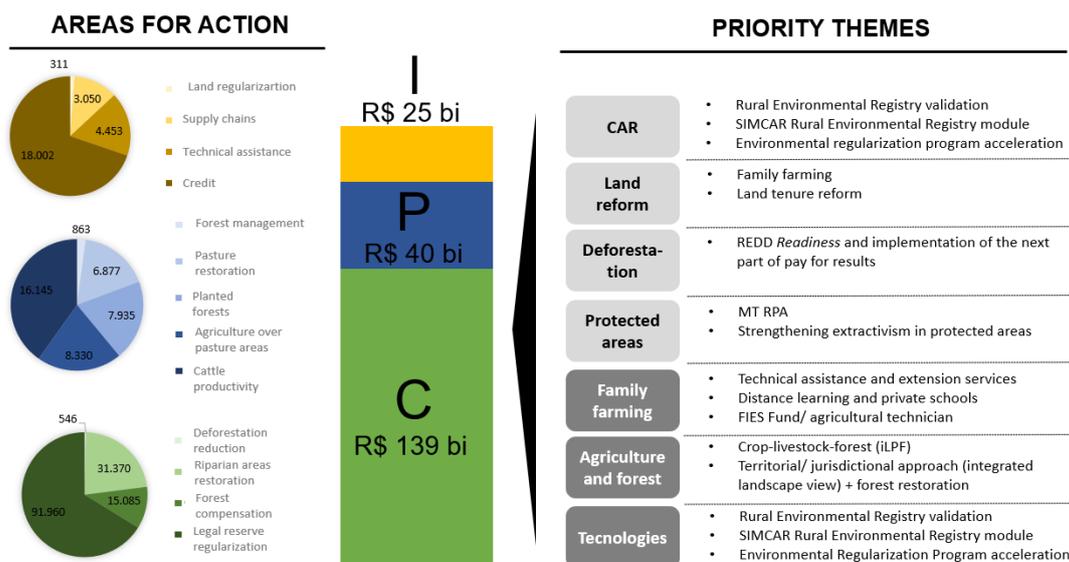


Figure 03. Total funding demand for the PCI strategy between 2021 and 2030: Distribution of resources by axis and target (in billions of reais)

The values of the demands and gaps are expressive and require a mobilization strategy that promotes synergies between the public and private sectors (including civil society here) for the realization of investments. Part of this demand would already be covered by projects still in progress and by credit projections to be made available in the coming years, as well as resources from the state budget. Based on these projections, the amount of resources available in the next ten years for the PCI Strategy was estimated at around R\$54.6 billion, which indicates a gap yet to be financed of R\$150.4 billion, or US\$ 27.15 billion in 10 years, at the current price (see Figure 02).

Of this R\$ 150.4 billion, around 80% or R\$ 120.3 billion (see Figure 02), are investments that should take place at the production stage by producers (such as restoration of pastures, planted forests, increased productivity, restoration of RL and APP). Another R\$ 30.1 billion are investments destined to other sectors, mainly in the state of Mato Grosso, and which involve land title regularization, deforestation control, technical assistance, environmental regularization and management of protected areas.

As a next step, the study looked at what would be some possible investment models to maximize the contributions from different sources of resources and their respective financial mechanisms. The process of building the investment models was based on combinations made between investment themes and priority financial instruments. Initially, priority issues and strategic investments to achieve the PCI Strategy were identified. After this prioritization, a “long list” of possible investment models was drawn up. These, in turn, were analyzed based on their feasibility, realism, complexity and the time required for their development. Six models were selected for further detail based on their ability to meet the selected criteria.

In the process of building the investment models, seven priority themes were defined to allocate the resources to be raised through eight different priority financial instruments. The seven priority themes are: i) Validation of the CAR; ii) Land regularization; iii) Deforestation reduction; iv) Consolidation of protected areas (conservation areas and indigenous lands); as well as models aimed at the private sectors; v) Sustainable models for family farming; vi) Agriculture and forestry; and vii) Promotion of sustainable production models. These seven investment themes represent a total investment gap in the order of R\$119.27 billion reais.

Investment models are created and require the identification of agents, such as: investor, borrower, trustee, manager, administrative agent, risks (exchange, reputation, credit, capital, regulatory and operational); as well as aspects and conditions related to the amount, term, return and organizational requirements. The eight financial instruments identified as priorities by the study were: a) Donation; b) Green bonds; c) Combined financing; d) Reduction of emissions from deforestation and forest degradation (REDD); e) Investment funds; f) Carbon-backed fund; g) Revolving fund; and j) Guarantee fund.

The six models, which combine priority themes and financial instruments described above, seek to facilitate the financing of R\$ 89.6 billion in the period under review and are in the discussion and detailing phase.

CONCLUSIONS AND RECOMMENDATIONS

New technologies and changes in legislation are under development, impacting the national financial market, in particular what has come to be called “green finance”. Thus, there is a need to understand more and gather robust information related to carbon, actions aimed at payment for environmental services (PES), as well as other contributions of nature to people (including

ecosystem services), which can help with fundamentals and opportunities in the process of building these investment models, particularly in the following areas: i) Deforestation reduction; ii) Consolidation of protected areas (conservation areas and indigenous lands); iii) Sustainable models for family farming; iv) Agriculture and forestry and v) Promotion of sustainable production models.

One of the major challenges of the PCI Strategy's financial resource mobilization plan is to make all these investments temporally and spatially coherent, to promote the reduction of greenhouse gas emissions and ensure an integrated management of the landscape. In addition, the execution of the collected resources needs to consider the functionality and resilience of agroecosystems and natural ecosystems necessary for the conservation of nature's contributions to people (ecosystem services), and at the same time economic prosperity and social well-being in an extensive and diverse state like Mato Grosso.

In this scenario, the agenda of solutions based on nature and ecosystem-based adaptation to the theme of mitigation and adaptation to climate change, also contains many opportunities for engagement and mobilization of financial resources, particularly regarding low-carbon agriculture and forest restoration.

In terms of private investments, the internalization of sustainability, despite being gaining strength, especially regarding the main actors of the official banking system, still needs to reach other credit segments, which, for example, in the case of agriculture, may represent approximately 75% of the supply.

Fundraising for donations should still be the key source for conservation and sustainable use of natural resources and support to indigenous peoples, *quilombolas* and other traditional communities. However, public policies supported by these contributions must also set ambitious targets for their exit strategies and future financial sustainability in a still unfavorable fiscal environment. The development of economic instruments for nature conservation will possibly be more successful and politically viable if it manages not to increase costs for the treasury. Hence the importance of investment models that combine external contributions to help develop enabling conditions that are more favorable to market mechanisms

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Support:

