

Accountability and the Rule of Law in Brazil's Soy Supply Chain

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Introduction

International Agricultural Supply Chains have become increasingly complex conduits for international trade, driving economic growth, but also exposing participants to significant vulnerabilities. Brazil stands at the forefront of global agricultural trade, being one of the world's largest exporters of commodities such as soy and beef. This standing is shadowed by persistent concerns regarding the environmental and social impacts associated with its expansion. Issues such as illegal deforestation, land grabbing, and instances of forced labour remain significant challenges.

The thesis explores the interplay between governance, accountability mechanisms, and the rule of law in shaping the functionality and security of Brazil's international agricultural supply chains, focusing specifically on the soy grain sector in the state of Mato Grosso.

Methods

Mixed-method analysis:

- Document analysis: federal and state regulations, policy instruments (e.g., Forest Code, CAR), enforcement guidelines.
- Quantitative databases from environmental agencies (e.g., IBAMA).
- Civil society monitoring tools (MapBiomas, Trase, Imazon).

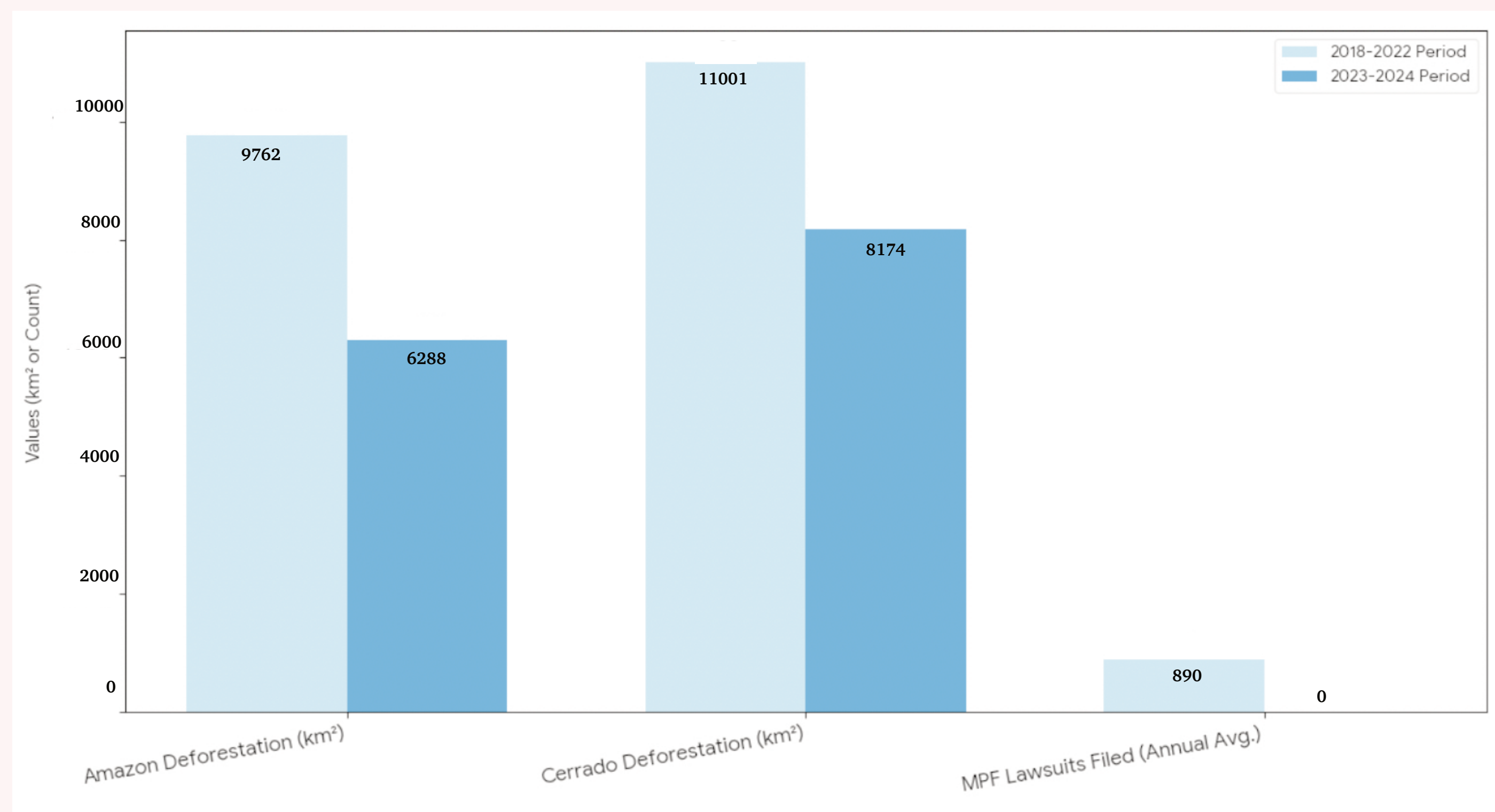
Timeframe: from 2019 to 2024, covering two contrasting presidential administrations.

Structured around five parameters: State Capacity for Legal Enforcement, Market Access, Land-Use Dynamics, Efficacy of Private Governance and Voluntary Commitments and Social-Environmental Risks.

Key Findings

- Uneven Effectiveness of Accountability Mechanisms**
Sectoral agreements like the Amazon Soy Moratorium (ASM) have curbed soy-driven deforestation in the Amazon but displaced expansion into the Cerrado (*Cerrado Leakage Effect*). Since 2000, soy-related deforestation in the Cerrado has more than doubled that in the Amazon. This shift reflects structural governance gaps: weaker legal protection (20–35% land-preservation requirement vs. up to 80% in the Amazon) incentivises agricultural relocation to less regulated frontiers.
- Governance and Compliance Gaps in Mato Grosso**
Spanning both biomes (Amazon and Cerrado), Mato Grosso exposes the gap between regulation and enforcement. Despite the 2012 Forest Code and the Rural Environmental Registry (CAR), only 11% of soy farms are fully compliant. The state's Amazonian zone holds a 4.4–5.7 thousands hectares of Legal Reserve deficit, and CAR validation (38%) lags far behind Pará and São Paulo ($\approx 72\%$), revealing persistent institutional weaknesses and uneven accountability across states.

Environmental Metrics Comparison: 2018-2022 vs 2023-2024



• Interpreting Deforestation and Enforcement Dynamics (2018–2024)

The comparison of deforestation between 2018-2022 and 2023-2024 underscores the complexity of assessing policy outcomes. While the earlier administration recorded high totals (Amazon: 9,762 km²; Cerrado: 11,001 km²) alongside consistent legal activity (≈ 890 MPF lawsuits/year), the 2023-2024 so called **Rebuilding Phase** shows a 28.8% increase in Amazon deforestation (3,144 km²). At the same time, IBAMA reported stronger enforcement efforts (+104% infraction notices; +31% embargoes), yet MPF lawsuits dropped to zero. This divergence suggests transitional frictions between enforcement agencies, possible data reporting lags, or the persistence of structural barriers to legal accountability.

Conclusion

Brazil's legal accountability mechanisms remain insufficient to ensure a sustainable and transparent soy supply chain in Mato Grosso. The core limitation lies not in the legislative framework but in systemic enforcement failures, political interference, and corruption that weaken the implementation of the Forest Code and the Rural Environmental Registry (CAR). These structural deficits perpetuate illegal deforestation, particularly in the Cerrado biome and undermine both national and global commitments to food security and climate mitigation. Evidence of a 20% decline in soybean productivity across major producing areas highlights the tangible economic costs of environmental degradation. Strengthening institutional capacity, ensuring consistent rule of law, and enhancing data transparency are therefore essential to align Brazil's agricultural growth with sustainability and governance objectives.

References

- Azevedo, Andrea A., Raoni Rajão, et al. "Limits of Brazil's Forest Code as a Means to End Illegal Deforestation." *Proceedings of the National Academy of Sciences* 114, no. 29 (July 18, 2017): 7653–58.
- Farias, Hannah, Jeferson Almeida, and Brenda Brito. *Cenário da punição a desmatadores ilegais na Amazônia: Atualização dos resultados do Programa Amazônia Protege*. Belém: Imazon, 2025.
- Gereffi, G., J. Humphrey, and T. Sturgeon. "The governance of global value chains." *Review of International Political Economy* 12, no. 1 (2005): 78–104.
- Heilmayr, Robert, Lisa Rausch, and Jon Munger. "Brazil's Amazon Soy Moratorium Reduced Deforestation." *Nature Food* 1, no. 12 (2020): 801–10.
- Schilling-Vacaflor, A., and M.-T. Gustafsson. "Integrating human rights in the sustainability governance of global supply chains: Exploring the deforestation-land tenure nexus." *Environmental Science & Policy* 154 (2024): 103–13.

