



Can co-management stop deforestation?

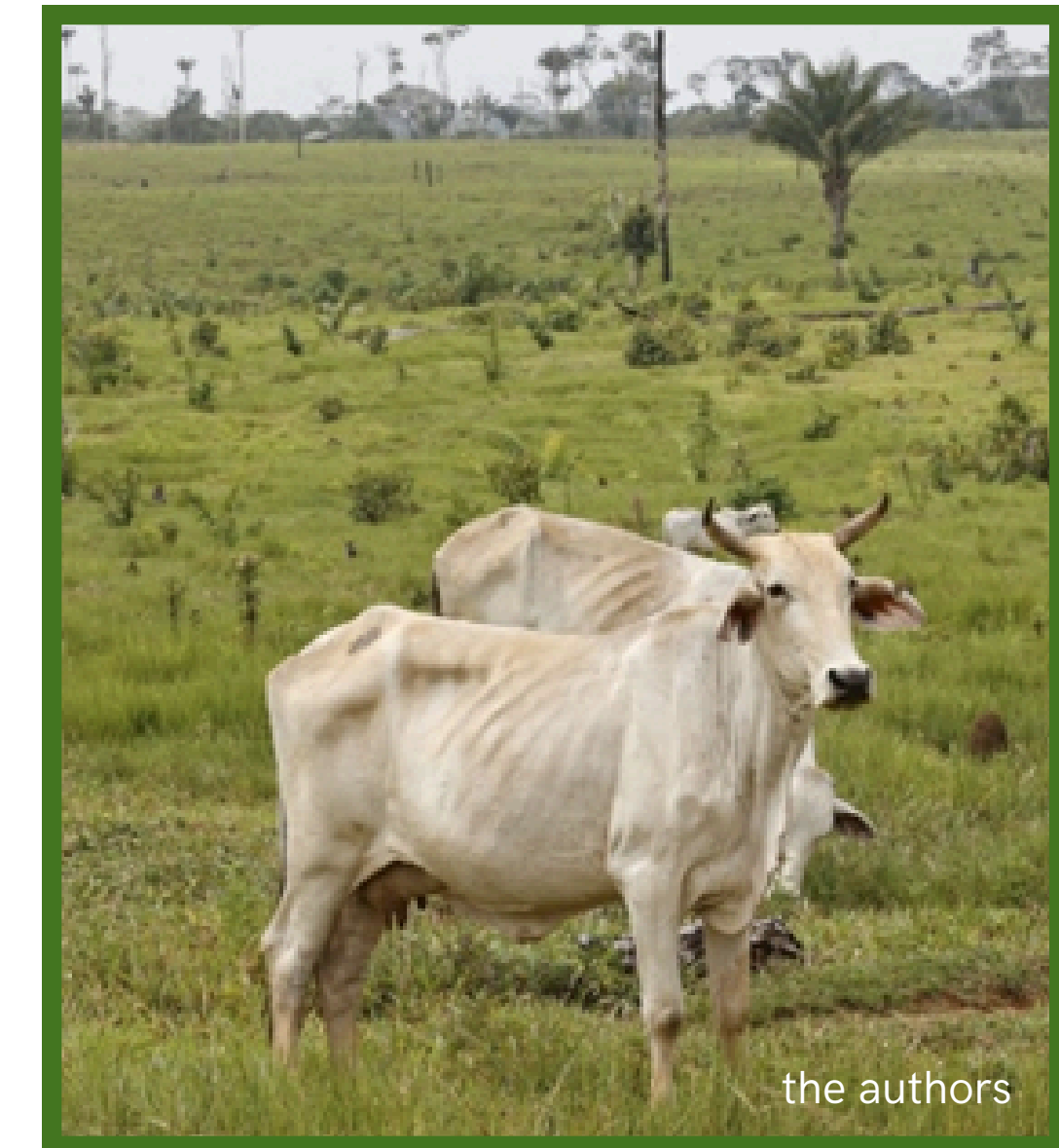
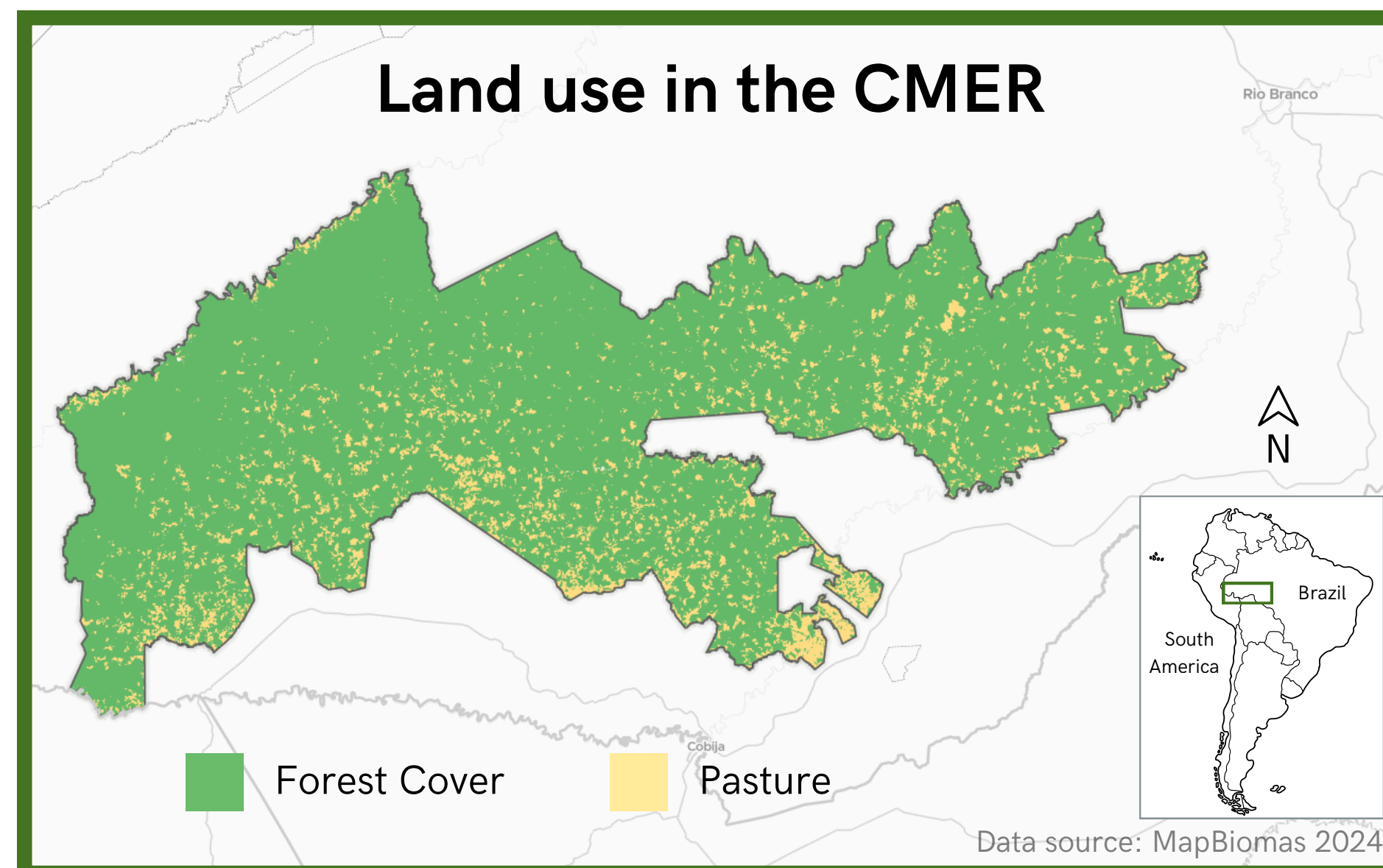
Governing land use changes in the western Amazon of Brazil



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Introduction

- Extractive reserves are protected areas that reconcile nature conservation with the sustainable use of resources by traditional populations, such as rubber tappers.
- In the **Chico Mendes Extractive Reserve (CMER)**, located in the western Amazon of Brazil, the sustainability of land use has reached a critical point.
- Extensive deforestation on individual landholdings increases in line with population growth, illegal land sales, and the expansion of cattle ranching.
- The **Deliberative Council** discusses decisions of interest to the CMER. It comprises different institutions and representatives of the local communities and is chaired by the **Chico Mendes Institute for Biodiversity Conservation (ICMBio)**.
- Although **ICMBio** is the central state institution responsible for managing the reserve, its ability to enforce land use rules and regulations over a large area of 970,550 hectares of rainforest is limited.



Objectives

1. **Analysing the actor constellations that govern land use changes in the CMER.**
2. **Identifying institutional arrangements that promote the achievement of the objectives of conservation and sustainable development.**

Material and Methods

- Qualitative and ethnographic field research during three fieldwork stays between April 2024 and March 2025.
- Participant observation, transect walks, qualitative interviews, group discussions, and participatory stakeholder workshops on sustainable land use.
- Analysis and interpretation of 39 transcripts through thematic analysis using MAXQDA.

Land Use Rules and Regulations

On individual landholdings of at least 200 ha



Non-timber forest products like rubber and Brazil nut



10% of area for subsistence farming (max. 30 ha.)



Animal husbandry (max. 30 head of cattle)

Results and Discussion

State level

- Limited resources at the ICMBio, with priority on surveillance, leads to mistrust, instead of participatory governance mechanisms focusing on social well-being.
- Suspension of surveillance during Bolsonaro, leading to uncontrolled land sales and cattle expansion.

"The management really couldn't cope, because they didn't have enough people (...). It was either surveillance or taking care. And here, the priority has always been surveillance" (ICMBio official)



Municipal level

- Institutional pluralism and competition over authority between ICMBio and Municipal Councils.
- Strategic spread of resentment against environmental policies among communities and in public, attempts to de-annex a part of the CMER (law proposal PL 6024/2019).

"To take care of the forest, you also have to take care of the people who look after it. And we don't see that." (resident)

Community level

- Increasing pressure on resources due to population growth and migration.
- Cattle as a "savings account" and viable income source to compensate decline in prices for natural rubber.
- Individualisation of social life weakens social cohesion and sense of belonging, provoking the illicit sale of properties to external actors.
- Payment for environmental services in the form of subsidies for natural rubber has led to a recent increase in rubber production.

"If you don't have an organized community, you don't know who is buying [land], who arrives there, who enters [the reserve]." (resident)

Conclusion and Outlook

- Individual land use decisions depend on livelihood opportunities, are mediated by local institutions, and are influenced by the interests of external actors.
- Strengthening co-management and local participation through the decentralization of power and accountability is essential to ensure compliance with land use regulations.
- Institutional partnerships across hierarchical levels facilitate access to resources and economic alternatives to cattle (i.e., Veja subsidies for natural rubber).

References

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