

# Transformation towards sustainability in critical areas of biodiversity conservation and food production: A governance perspective from South America

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## Introduction

- Critical need for transformation in sustainability governance
- Transformation requires changes not just in systems and practices, but in how people relate to each other and the natural system in which they are embedded
- Focus on South American Savannas and Grasslands as case study
- Growing concern over current governance systems' failure to halt biodiversity loss and land degradation
- Gap literature: western/Eurocentric dominance in transformation discourse

## Objective

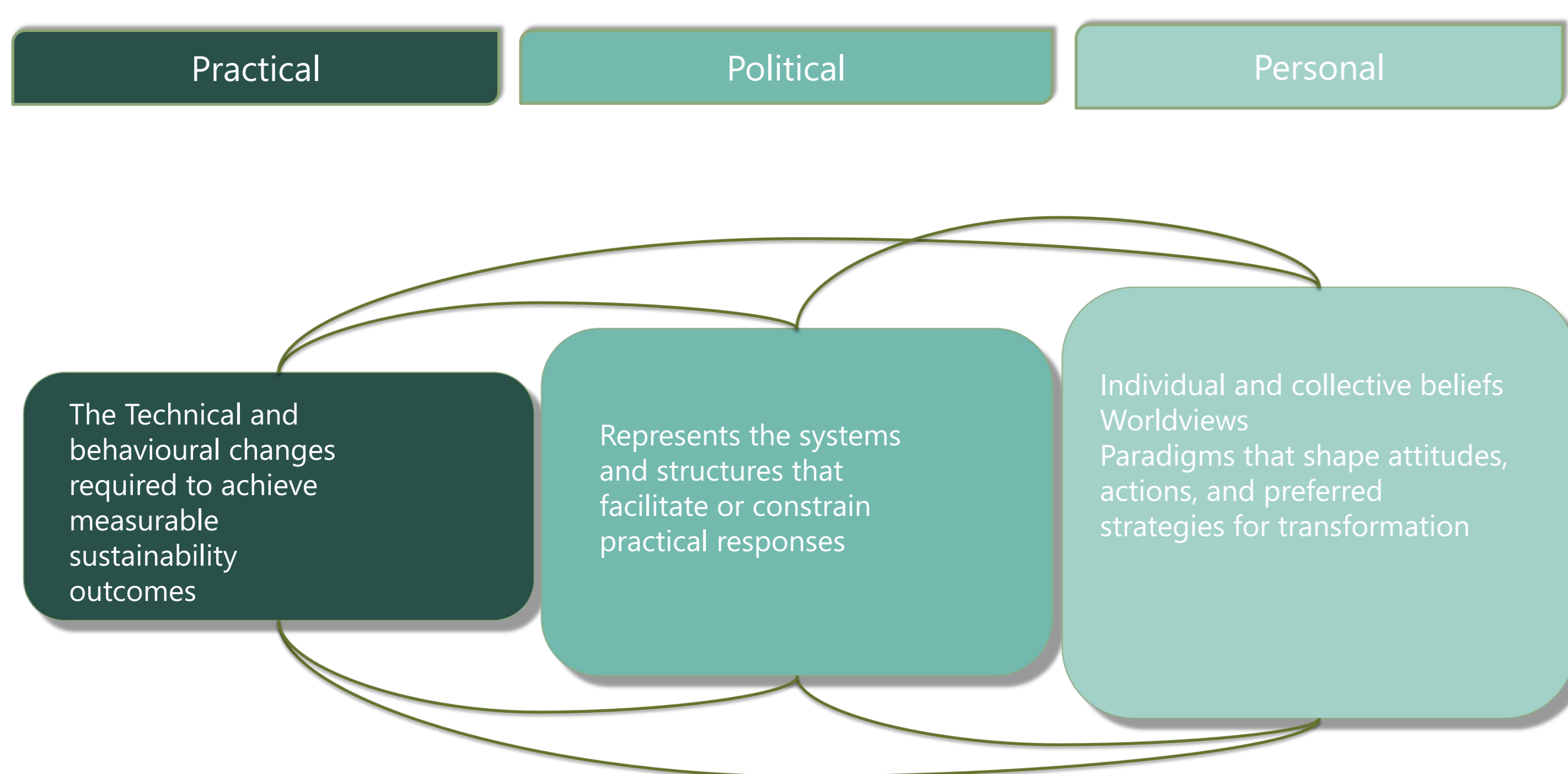
This study analyses how personal, political, and practical dimensions of transformation interact to shape sustainable governance systems in Savannas and Grasslands across Colombia, Paraguay, and Argentina.

## Methodology

Mix of qualitative and quantitative methods for data collection and analysis

- Selection of mechanisms of transformation relevant to each country's context
- Analysis of the governance structures
- Historical review of institutional changes and their effects on land conservation
- Identification of transformation pathways

## Analytical framework, linking individual worldviews with changes in actions and governance structures



Sustainable Future of South American Savannas and Grasslands

Fig: Analytical framework (based on Karen O'Brien's work on transformation towards sustainability, O'Brien, 2018)

## First insights

From October to December 2024, fieldwork was conducted across Colombia, Paraguay, and Argentina to align the PhD research goals with local needs and validate assumptions with stakeholders. Through semi-structured interviews and meetings with representatives from academia, national and local government, indigenous organizations, and the private sector, transformation mechanisms—both ongoing and planned—were identified for each country's context.



Fig: Case studies in South America, map created on visitplaces.com

## Transformation mechanisms

### Paraguay

**Integrity of Carbon Markets:** Preliminary findings suggest that the adoption of carbon markets under Article 6 of the Paris Agreement will reshape climate change governance, leading to new institutional arrangements. However, this mechanism could inadvertently drive land degradation, particularly threatening the Chaco grassland ecosystem. In-depth analysis is needed to design and implement Article 6 rules and activities and promote transformational change based on principles of integrity and transparency.

### Colombia

**Voluntary conservation in private lands:** Private landowners hold critical influence over biodiversity conservation in Colombia's grasslands and savannas, with 92% of Orinoquia's territory under private ownership. In recent years, a growing conservation awareness has been evident, with 157,794 hectares already registered as Civil Society Reserves. Our analysis suggests this transformation might be driven by shifting mindsets among landowners who are motivated by the conservation of intergenerational cultural values and aspirations for a sustainable future. Understanding these individual and collective motivation, values and principles and how these human aspects interact with state institutions and rules open a possibility of a profound change in governance structures.

### Argentina

**Strengthening Territorial Autonomy:** As Argentina's federal government rolls back decades of environmental protection, local communities and provinces are intended to find their own path forward. The latest environmental policy shifts mark an unprecedented retreat from established conservation standards, threatening the Pampas ecosystem. Territorial autonomy and grassroots participation are emerging as drivers of transformation and positive change. Community-led mechanisms, like those in the Agroecology movement, may influence the profound regime change needed to navigate the crisis.

## Conclusion

- While technological innovations in the practical dimension (like livestock management improvements) are necessary, they must be accompanied by changes in policy frameworks and shifts in individual beliefs and worldviews to ensure just and sustainable outcomes for nature conservation and land use.

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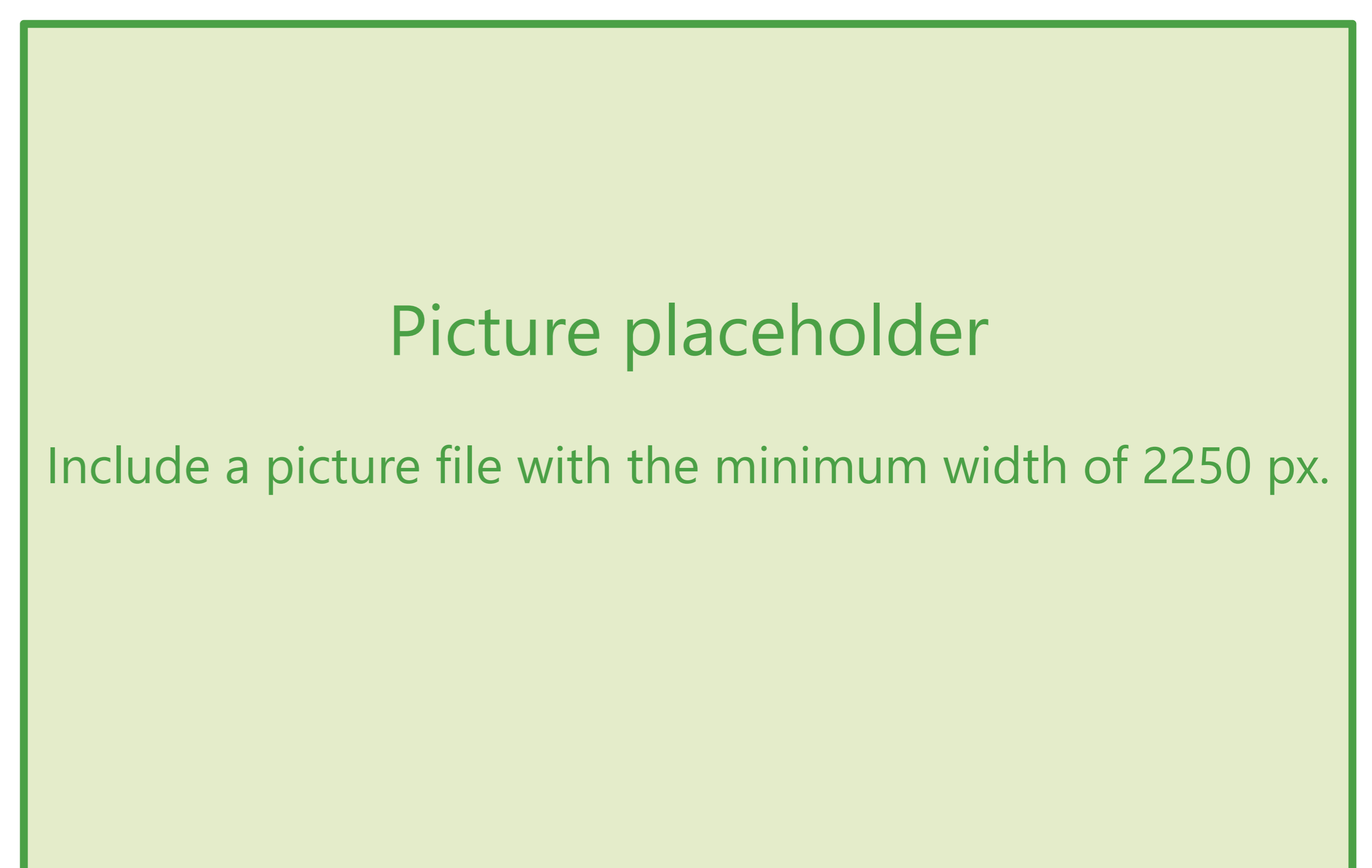
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