

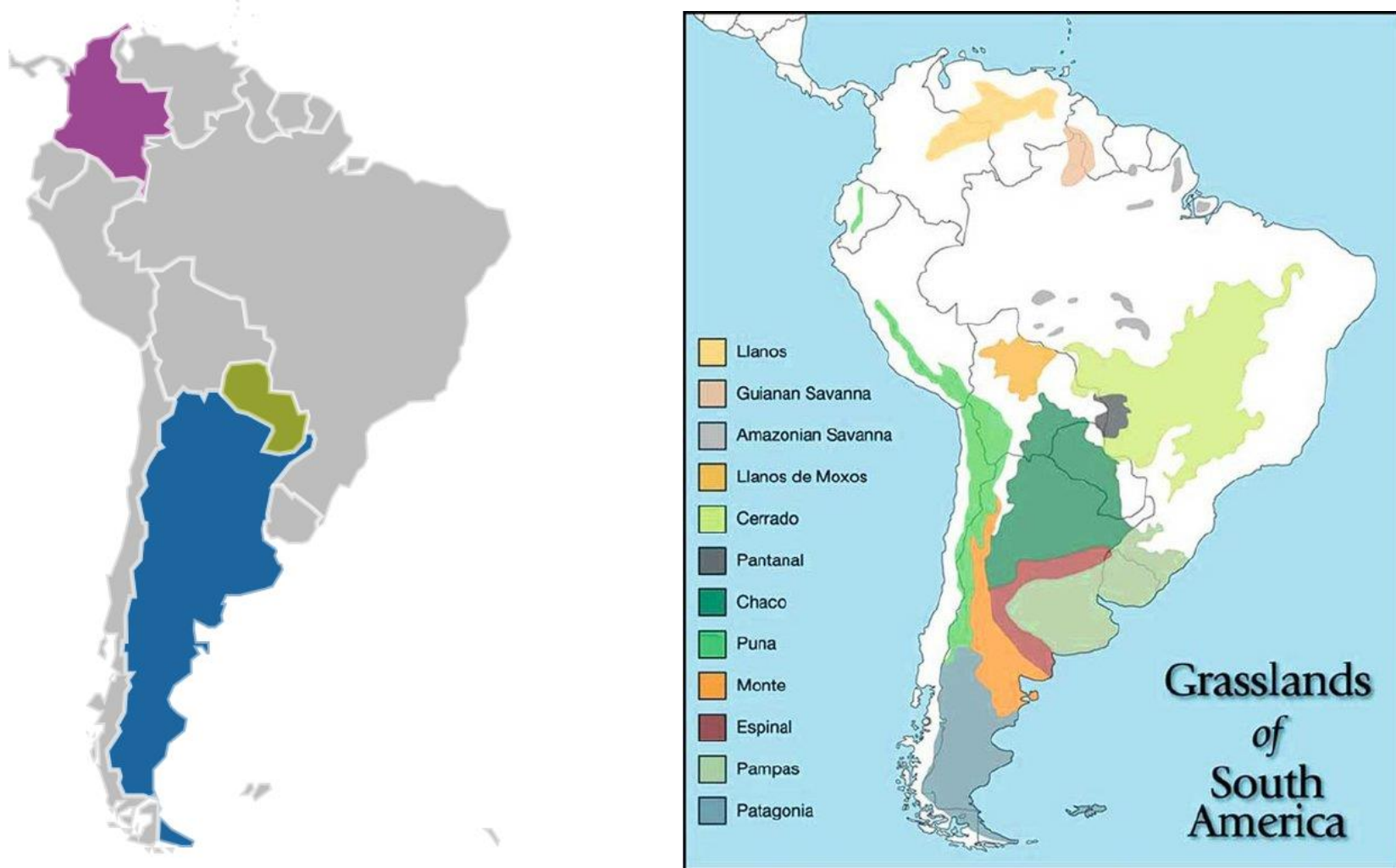
Historical Land Use Change and Statecraft in Grasslands and Savannas in South America: Shaping Agroecological Transitions

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Introduction

Grasslands and savannas, which cover 37% of terrestrial land and are critical for biodiversity and agricultural livelihoods—especially in the Global South—provide essential ecosystem services but remain underrepresented in sustainability research (O'Mara, 2012). Their widespread degradation and vulnerability to climate change highlight the urgent need for agroecological approaches to their management (Bardgett et al., 2021; IPCC, 2022). This study explores how national governance structures shape food system transformations and influence the potential for agroecological transitions, using Argentina, Colombia, and Paraguay as comparative case studies. These countries share socio-cultural, economic, and environmental characteristics, offering a valuable lens to examine how governance models condition land use and sustainability outcomes.



@Rosenberger et al., 2009

Methodology

Aim: To identify key stages of institutional development and assess the extent to which state institutions have enabled or hindered agroecological practices at the national level.

Historical institutional analysis lenses: informed by the concept of *Statecraft*, we investigate how governance structures and political strategies have supported or constrained systemic change.

Combining:

- Narrative literature review (n=130 articles). Datasets: Scopus, Web of Science Core Collection, Redalyc and the Latin American Council of Social Sciences (CLACSO).
- Semi-structured interviews: rural development scholars, historians, and grassroots organizations (n=15).

Key notions (i)

Institutions: Are the "rules-in-place" that govern political, economic, and social life. Rather than following a predictable path, institutional change is a complex and non-linear process. This transformation is driven by two key forces:

- 1) The interaction between organizations and their institutional frameworks.
- 2) The active role (agency) of diverse individuals and groups who shape and are shaped by these rules (North, 1990, 1994; Cleaver, 2012).

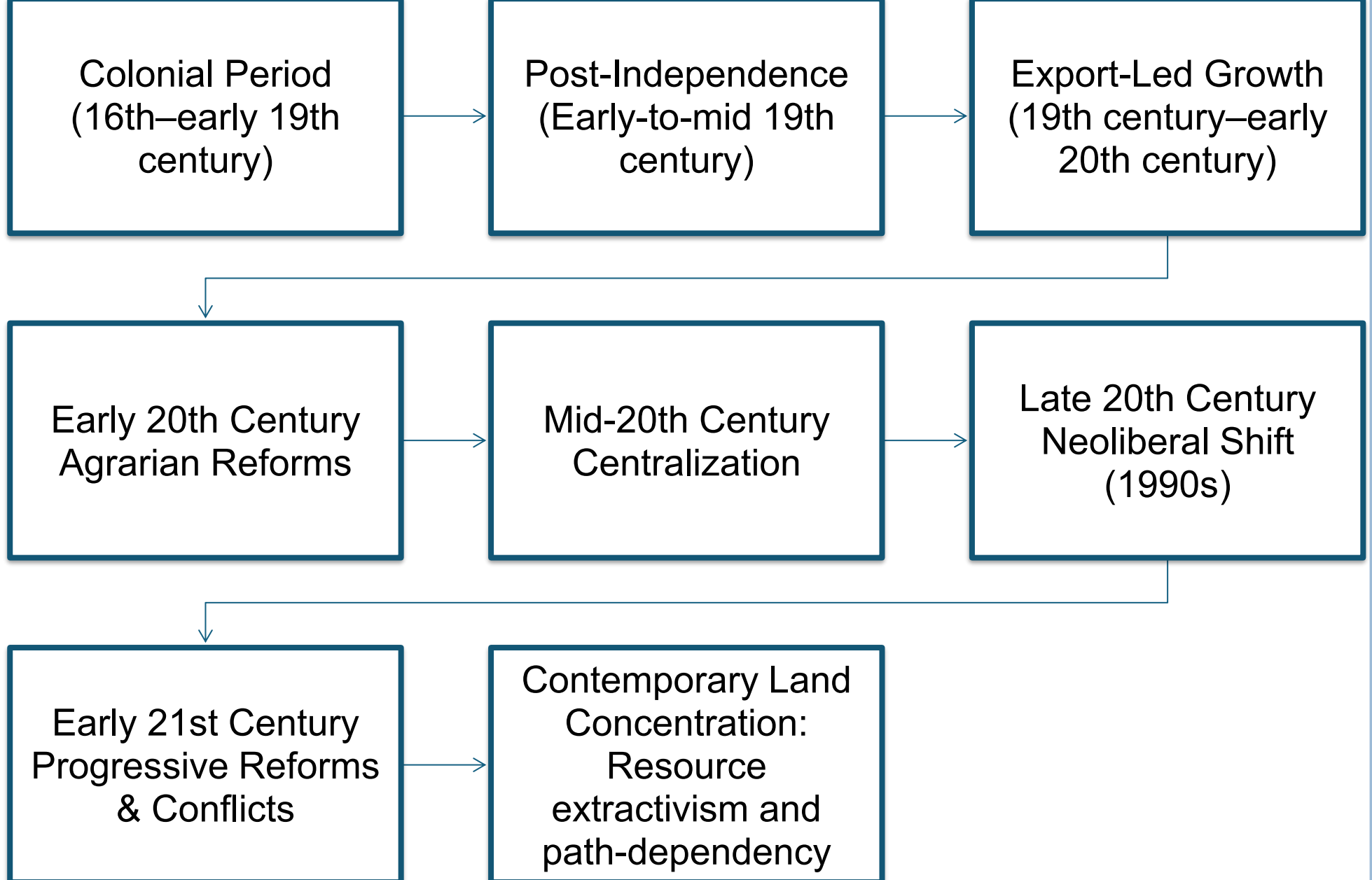
Statecraft: The strategies by which states, and dominant actors engineer systems of order and control, shaping governance arrangements across space and time (Scott, 1985). Crucial in understanding how power shapes the formation of institutions related to land governance and resource use (Castro, Hohenboom, and Baud, 2015).

Agroecology: For this research understood as broader processes of peasant mobilization, considering that the application of agroecology "requires the active appropriation of farming systems by peasants, using local knowledge, ingenuity, and ability to innovate" (LVC, 2010, p. 3).

Key notions (ii)

Agroecological transitions involve creating supportive structures and policies that enable small-scale farmers to successfully engage with, persist in, and resist pressures against their agroecological food systems (LVC, 2010; Rosset & Martínez-Torres, 2012).

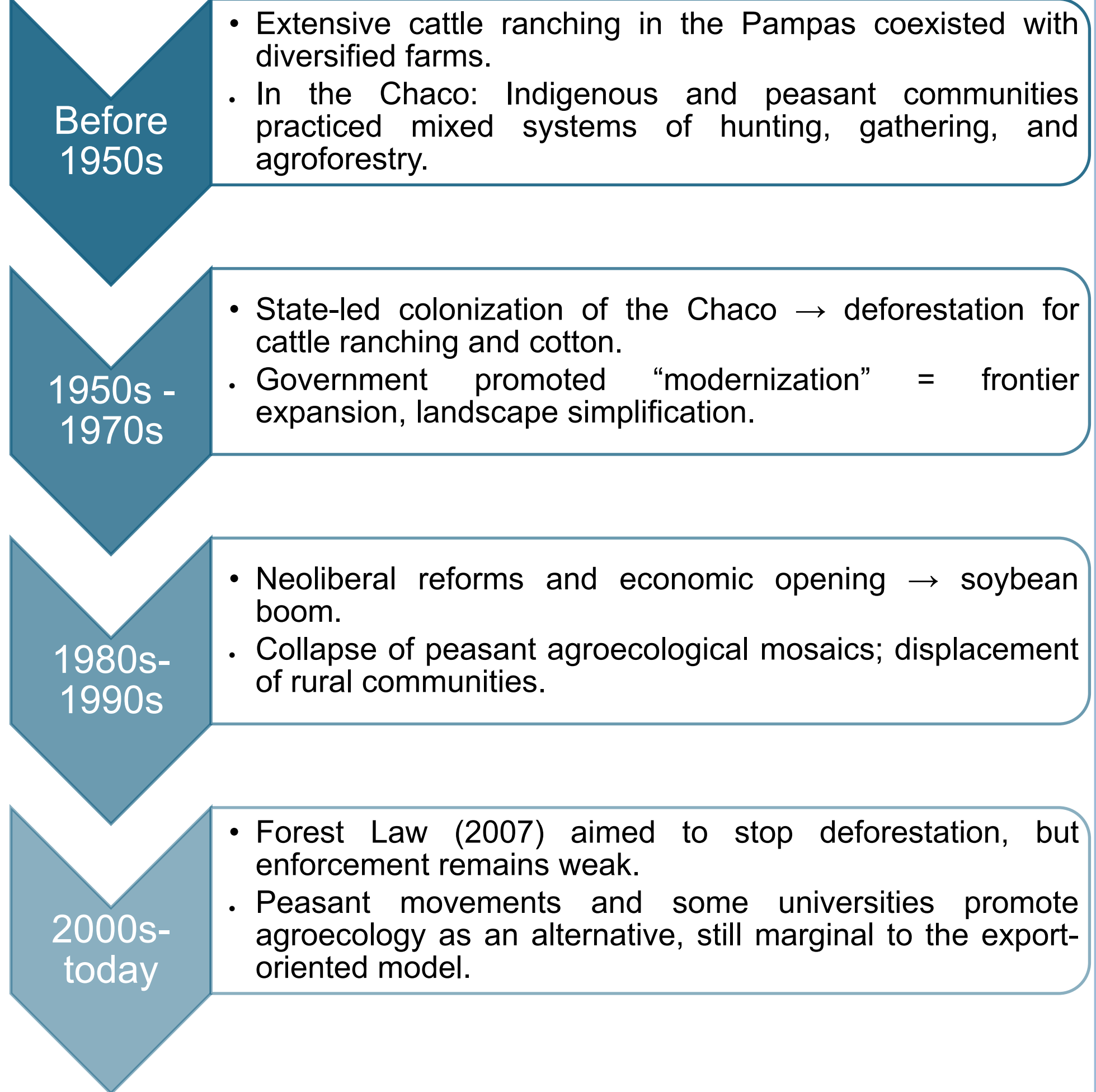
Latin American context



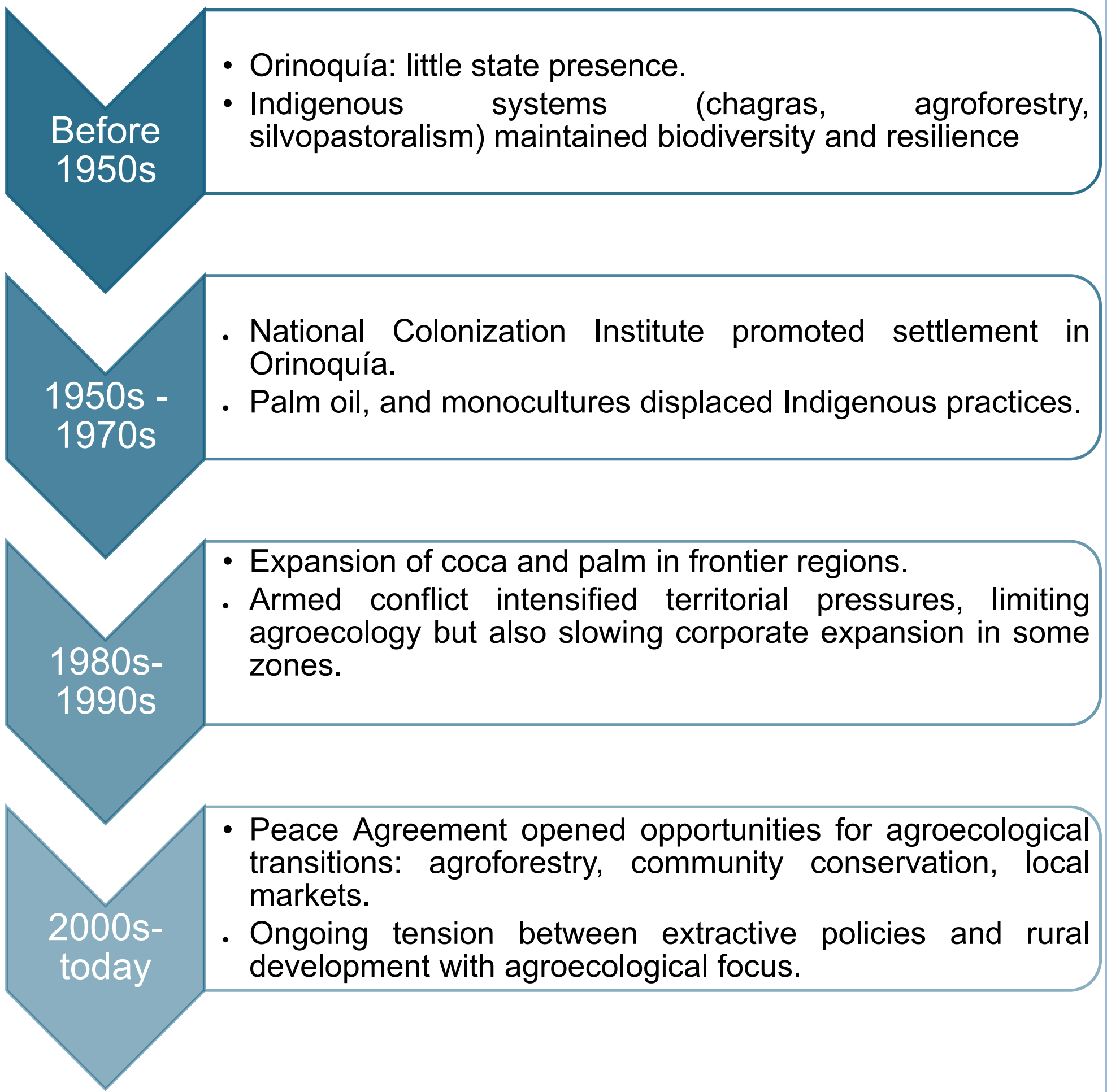
- Land ownership remains highly concentrated: the top 1% of farms control > 50% of agricultural land (Pearce, 2016; ILC, 2020).
- Path-dependence from colonial concentration and unconcluded land reforms (Eslava and Valencia Caicedo, 2023).
- Progressive reforms conducted by governments in the 2000s showed limitations in favoring the scaling of agroecology due to the reproduction of extractivist logics (Bonnet, 2024; Giraldo & McCune, 2019).

Results

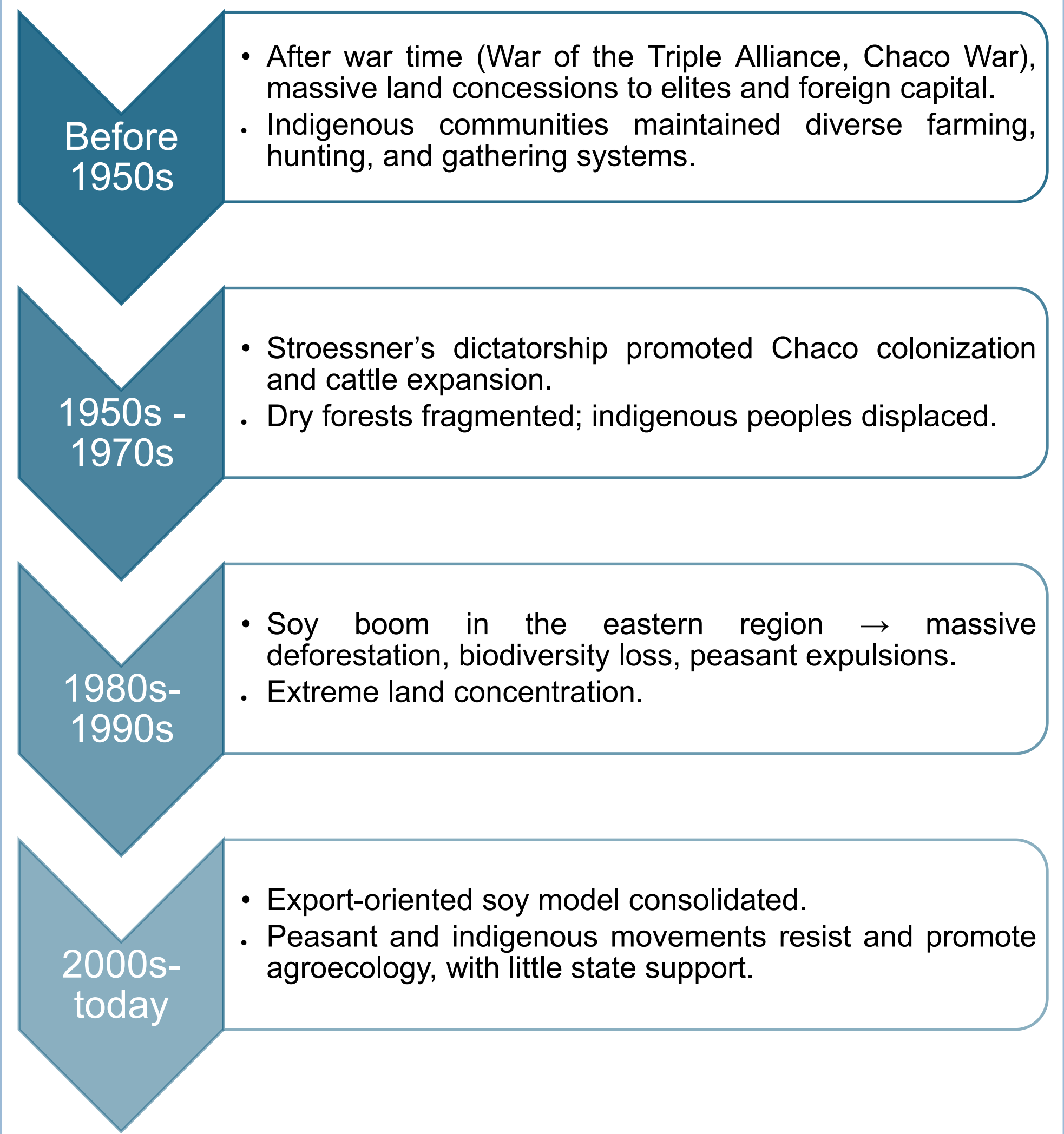
Argentina



Colombia



Paraguay



Discussions and Conclusions

Convergence: A shared historical trajectory of land governance—from colonial legacies to neoliberal processes—has centralized control and prioritized extraction.

Differentiation: National policies, unique colonial histories, and distinct local actors have shaped critical differences in how these changes manifest.

The Primary Barrier: Agroecological transitions are fundamentally limited by the dominant agro-industrial model, specifically the commodification of land for mono-crops like soy and palm oil.

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Disclaimer

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