

## Mapping and Analyzing the Sustainability of the Beef Cattle Global Value Chain (GVC) in Santarém, Pará

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### Introdução

Brazil is the second largest producer, the largest exporter of beef in the world, and one of the few areas where the herd size is expected to grow (ABIEC, 2022). Beef production occurs along global value chains (GVCs) that connect rural ranchers to urban consumers across international borders. In Brazil, cattle ranching has been shifting to the Amazon region. Pará now has the second largest herd with an emerging VC in Santarém. However, cattle ranching now is one of the top causes of deforestation in the Amazon, raising growing concern around its sustainability.

### Problema de Pesquisa e Objetivo

The cattle beef GVC represents a major sector of the Brazilian economy, but as it has shifted north to the Amazon region it has presented serious social and environmental problems coming under intense scrutiny by national and international institutions. The objective of this study is to use GVC analysis to understand how the governance of the beef cattle GVC in Brazil (and particularly in Santarém, Pará) has been responding to sustainability pressures, challenges, initiatives, and opportunities.

### Fundamentação Teórica

Global trade now occurs, in its majority, along fragmented GVCs whereby lead firms control and coordinate value-adding production chains with other firms and extra-chain actors. The sustainability of GVCs are influenced by their governance structures, which influence how actors and regions upgrade within them (PONTE; GEREFFI; RAJ-REICHERT, 2019). Theoretical GVC analysis provides a framework for understanding the drivers and motivations for sustainably upgrading within and beyond the chain and how this is facilitated or limited by particular governance structures.

### Metodologia

In order to understand the sustainability of the Brazilian beef cattle GVC, this study employed a GVC mapping and analysis methodology using primary and secondary data sources. The mapping of the GVC involved identifying the four major components of GVCs (supply chain stages, value-adding activities, end markets, and the contextual environment) (PONTE; GEREFFI; RAJ-REICHERT, 2019). Next, the governance structures along the GVC were characterized. Finally, the sustainability and upgrading within and beyond the GVC were analyzed to respond to the research objective.

### Análise dos Resultados

Nationally, the beef GVC has become increasingly concentrated around major slaughterhouse companies. Governance has been shifting from predominantly market structures to relational structures as major companies seek supply security. In the region of The Brazilian beef GVC in the Amazon region has come under increasing pressure to eliminate cattle production associated with deforestation leading to public and private governance efforts (LEVY et al., 2023). Emerging beef value chains, such as in Santarém, are at the frontier offering challenges and opportunities for improved sustainability.

### Conclusão

Much of GVC analysis continues with single case studies and often lacks a rigorous engagement with theory to offer more generalizable conclusions. This GVC mapping and analysis methodology with a focus on the impact of governance on sustainability issues offers a means of comparing the sustainability of different GVCs. By focusing on the influence of governance structures within and around GVCs, this study offers a flexible methodology for how GVCs can be improved while accounting for the particular institutional contexts in which they are embedded.

### Referências Bibliográficas

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### Palavras Chave

GVC Governance, Amazon, Sustainable Development

### Agradecimento a órgão de fomento

The author would like to thank and recognize the support of grant #2023/05865-1, São Paulo Research Foundation (FAPESP) as part of the Amazônia+10 project, "Innovation for Creating Sustainable Value: Understanding Global Value Chains in the Amazon." The opinions, hypotheses, conclusions, and recommendations expressed in this material are the responsibility of the author and do not necessarily reflect the views of FAPESP.