



# Bottlenecks for the Sustainable Development of the Beef Value Chain in the Colombian Cauca Department

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## Introduction

- The development of a competitive beef value chain for accessing formal and specialized national and international markets is among the principal goals of the Colombian agricultural development plans.
- Cattle production in Colombia is very diverse in terms of climatic conditions, agro-ecological zones, farm sizes and production systems.
- This is influencing the nature of the aligned value chains and their potential for development and for accessing more sophisticated markets.
- Therefore, it is important to conduct in-depth value chain analyses and to identify the most important bottlenecks for sustainable development.

## Location



## Objectives

Through an in-depth value chain analysis, applying semi-structured surveys, personal interviews and workshops with direct and indirect value chain actors, this research contributes to:

- Showing a complete map of the value chain, focusing on the strengths, weaknesses, opportunities and threats for each group of stakeholders as well as for the value chain itself, and the external factors influencing the chain.
- Identifying the major bottlenecks and possible strategies for achieving a stronger, sustainable and more market-oriented development of the beef value chain.

## Materials & Methods



Literature review and expert consultation.



Baseline: A total of 307 semi-structured surveys with small, medium and large producers in the region.

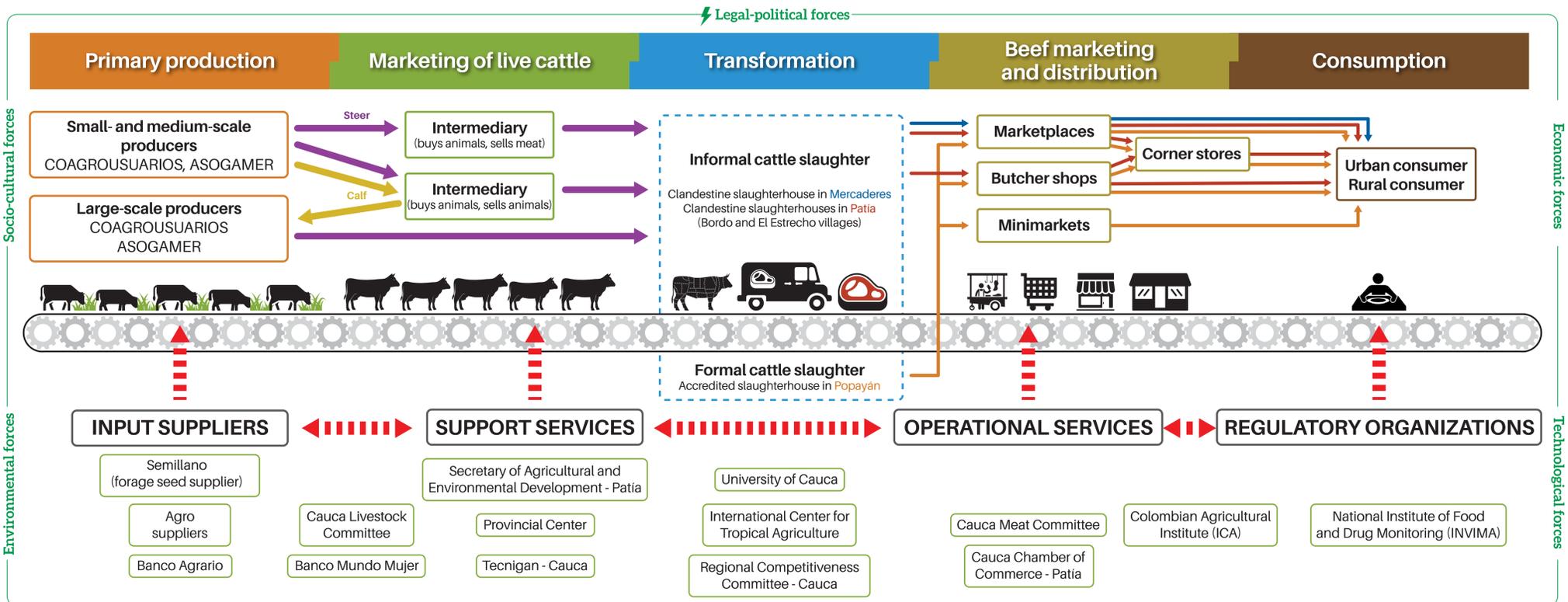


Participatory workshops with producers to validate the baseline.



Personal interviews and semi-structured surveys with other direct and indirect actors of the beef value chain.

## Results



### Strengths

- The region is experienced in cattle farming.
- Strong presence of producer associations.
- Cattle producers have experience with adverse climatic conditions (e.g. long drought periods).

### Weaknesses

- Beef value chain is not well articulated.
- Lack of productive indicators for the region.
- No product differentiation, little added value.
- Clandestine slaughterhouses are common in the region.
- Lack of financial sources that promote the investment in improved feeding technologies.
- Technical assistance is not well represented and focus on sustainable production is missing.
- Insufficient road infrastructure: Animal transport difficult, long distances to markets.

### Opportunities

- National and international markets willing to pay for a differentiated product with a reduced environmental footprint.
- Existence of a legal framework for the development of the beef value chain at national level.
- Payments for ecosystem services are about to start.
- Organizations interested in promoting research and development around sustainable cattle production (e.g. SGR).
- Support of academia and research institutions to promote sustainable livestock systems in the research area (University of Cauca, CIAT).

### Threats

- Climate change (El Niño-Southern Oscillation).
- Foot-and-mouth disease outbreak.
- Policies does not take into account the rural context (e.g. Decree 1500/2007).
- Free-trade agreements.
- Preferences for other sources of animal protein (chicken, pork and fish).

## Conclusions

- The stakeholders of the beef value chain must share an articulated vision, fostering the production, transformation, commercialization and consumption of products based on sustainable production.
- Policy makers should base their guidelines and controls taking into account the characteristics of the cattle regions to formulate a legal framework that promotes a sustainable beef value chain.
- Infrastructure for the production, processing, mobilization and sales of products derived from cattle needs to be improved.
- Technical assistance and financial services need to align their priorities to the development plans for sustainable beef value chains.
- The supply of inputs necessary for sustainable production (e.g. forage seeds) needs to be improved.

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## References

- Lundy, M; Amrein, A; Hurtado, J.J; Becx, G; Zamierowski, N; Rodríguez, F & Mosquera, E.E. (2014). Metodología LINK Versión 2.0. Centro Internacional de Agricultura Tropical, Cali, Colombia.
- Noguera Burbano A.B.; Quiñones Medina S. (2017) Descripción de eslabones de la cadena cárnica bovina sector primario y comercialización en Mercaderes, Patía y Popayán. Graduate thesis, Universidad del Cauca, Popayán, Colombia.

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