



Gender inequalities in the Colombian cattle sector: an econometric analysis

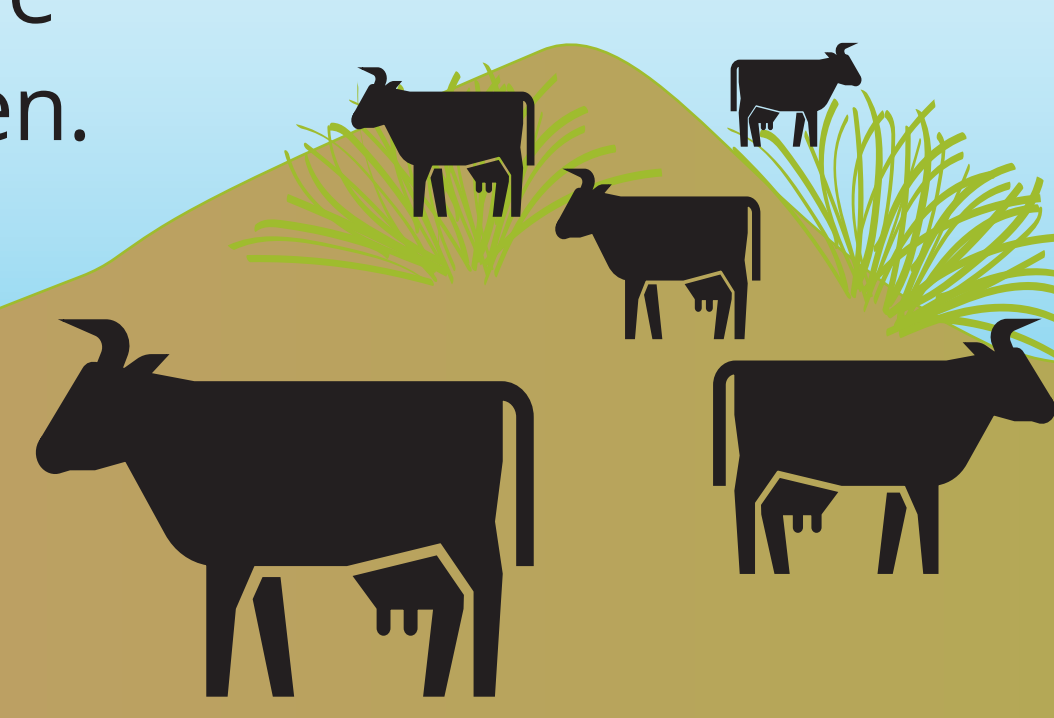
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Introduction

- » In Colombia, female cattle producers face more obstacles than male producers regarding land access, financial inclusion, and participation in cooperatives and extension activities that can hinder their production level.
- » Gender roles shape women's responsibilities in cattle farms and assign them most of the unpaid care work, constraining their participation in production decision-making and their available time for producing and attending to cooperatives and extension activities.



Differences in access to productive resources, education, and credit can affect the productive capacity of cattle producers, especially women.

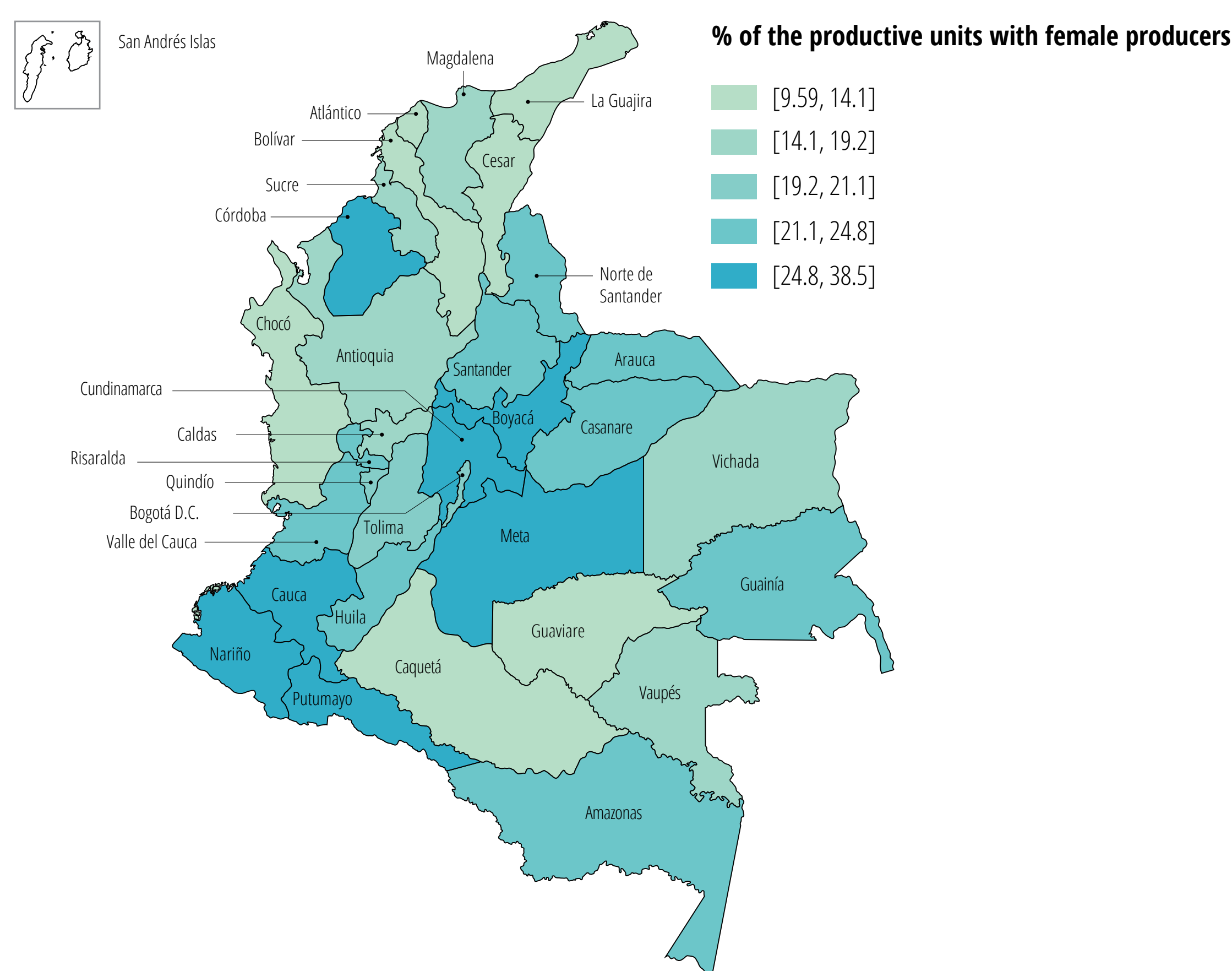


Results and analysis

Descriptive

- » Female participation in livestock production is low both for leadership and production decision-making. On average, only 2 out of 10 livestock farms are led by a woman, and 8 out of 10 production decisions are made by men. There are also territorial differences: there are far fewer women producers in the Caribbean region (10-19%) than in the Andean region (25-38%, Figure 1).
- » Female-led livestock farms are usually smaller in size than male-led farms. 69% of women's farms are concentrated between 0 and 100 hectares, compared to 56% of men's farms.
- » Fewer women apply for credit than men (9% vs. 14%), but once they do apply, the proportion of approved loans is roughly the same. Most of the loans approved to women are concentrated in the Andean region, which also has the lowest multidimensional poverty rates.
- » Most livestock producers only finish elementary school, and a few manage to graduate from high school or access higher education. However, there are more women in the lower levels of education (elementary) than men (67% vs. 61%).

Figure 1. Share of cattle farms with female producers at the departmental level, 2017.



Data source: Author's elaboration based on data from the National Agricultural Survey of 2017 (DANE).

Objective

- » To describe gender inequalities in the Colombian livestock sector regarding female participation in production, credit access, multidimensional poverty, educational level, and decision-making in household production.
- » To analyze gender inequalities in the Colombian cattle sector using census information on the cattle activity at the territorial level and an econometric approach.

Methodology

- » Descriptive analysis of gender gaps in the livestock sector regarding women's participation in farm production and decision-making, financial inclusion, poverty, and education.
- » Estimation of the relationship between the participation of female producers and the livestock production level using census data and a linear regression model.
- » Data sources: public information on livestock production, socio-demographic characteristics of producers, access to credit, and poverty obtained from national agricultural surveys and the 2014 agricultural census.

Econometric

- » There is a negative relationship between the female producers' participation and cattle production at the municipal level. This result is robust when replicated at the farm level.
- » An increase of 1 percentage point (pp) in women's participation in livestock decreases a municipality's cattle herd by 330 heads and milk production by 240 liters (Table 1).
- » We also find that larger farms usually have higher cattle production and that better rates of credit access favor the herd size and milk production of municipalities.
- » Technical assistance does not necessarily improve cattle production. We find a negative relationship between access to extension activities and production.

Table 1. Gender inequalities in cattle farming.

	Dependent Variable	
	Cattle inventory ¹	Milk production ²
Female producers (%)	-0.33*** (0.09)	-0.24*** (0.06)
Farm agricultural area (ha)	0.02*** (0.01)	0.01 (0.004)
Approved agricultural credits (%)	34.26*** (6.55)	42.27*** (4.49)
Number of agricultural workers (#/farm)	2.72*** (1.04)	0.46 (0.71)
Assistance in good livestock practices	-0.62*** (0.19)	-0.23* (0.13)
Observations	1,102	1,102

Notes: *p<0.1; **p<0.05; ***p<0.01. Data source: National Agricultural Census of 2014, DANE
¹Thousands of heads; ²Thousands of liters.

Conclusions

- » Gender gaps in the cattle sector can potentially affect the national agricultural production and the well-being of the rural families that depend on this activity.
- » Improving access to quality education, credit, and technical assistance for rural women is critical for increasing agricultural production at the local level and economic growth at large.
- Rural public policies should integrate a gender perspective when developing educational programs, financial inclusion initiatives, and land tenure regulations to ensure women's inclusion and the narrowing of the gender gap in the cattle ranching sector.

Further reading

Pirela-Rios A; Díaz MF; Enciso-Valencia K; Triana-Ángel N; Burkart S. 2022. Gender inequalities in the Colombian cattle sector: an econometric analysis, Development in Practice. <https://doi.org/10.1080/09614524.2022.2098256>

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