

Between silences and opportunities

Gender and bovine livestock in Latin America, a state of the question



RESEARCH PROGRAM ON Livestock

Natalia Triana-Ángel and Stefan Burkart

Key messages



Research on the intersection of gender dynamics and cattle and dairy production in Latin America features a major focus on milk and dual-purpose value chains, underscoring how the division of labor and societal roles based on gender identity determine the productivity of the bovine livestock industry. Even though the tasks assigned to women and men and the roles played by families vary over time, women continue to be principal agents in activities such as milk processing, animal care, and manufacture of dairy products while simultaneously bearing the load entailed by domestic work.



Drawing attention to the contribution of both men and women to cattle production is vital, as it contributes to dismantling deeply rooted gender stereotypes and fixed family roles overshadowing women's own contributions to the productive system. Adequately recognizing female participation helps bridging the gap standing in the way of their access to assets, services, and information.



Considering women's contributions to cattle and dairy production is essential in the evaluation of public policies and adoption of agricultural technologies, measuring the impact they have within household units. Accounting for women's experiences and workload sheds light on the (possible) flaws new policies or technologies might have. Such feedback helps in the construction of materials and tools that can effectively improve the living conditions of all small-scale producers, women included.



To highlight women's participation – to amplify their voices and knowledge – not only helps to bridge the gender gap determining their possibilities, but also contributes to their empowerment as agents of change and opens the door to new productive opportunities as the creation of differentiated products and fair-trade commerce.



New lines of research become urgent in the topic of gender and bovine livestock in Latin America. The impact armed conflicts, displacement, and dispossession have had in cattle and dairy production remains silent. As a transnational phenomenon affecting several countries in the region, the intersection of cattle and dairy production and warfare should draw the attention of scholars in the area. Likewise, research on the relation between gender dynamics and the adoption of forage technologies remains scarce. Both subjects constitute interesting avenues for transdisciplinary research.



Introduction

Labor division based on gender identity, unequal access to resources, technology, and information, and the extent of women's participation in different aspects of cattle and dairy production have been the main interests of gender and livestock research in Latin America. Even though literature on the subject is still scarce, an interdisciplinary dialogue has been established attempting to deconstruct the naturalization of the roles of both men and women in cattle and dairy farming, and the alleged relegation of women to domestic and reproductive activities. It is not true that women only perform domestic labor (Boserup, 1970; Kristjanson et al., 2010) nor is it that their contributions are not essential to every aspect of cattle production (Arora et al., 2017; Dürr, 2018). Seminal works on gender and agriculture have revealed that transnational dynamics such as migration to urban centers, industrialization and the exponential growth of markets have ultimately destabilized gender roles, increasing the workload for women and inserting them in activities that were previously restrained from them (Agarwal, 1997). This entails a major transformation in agriculture and rural life (be it forced or spontaneous) making it a field in constant *feminization* (Deere, 2005). Even though cattle and dairy farming is not exempt from these mutations, it continues to be an activity associated with masculinity, which hinders the appropriate recognition of women's contributions and the challenges they face as producers.

Three perspectives stand out in the studies of gender and bovine livestock. First, the analysis of dairy, beef, and dual-purpose value chains, where the action nodes of both men and women are tracked in detail and differentiated from one another. Within value chain gendered studies a special emphasis is given to women's participation in the productive process, signaling the specific stages where their presence results fundamental. Secondly, the study of the domestic unit, where cattle and dairy farming is conceptualized as a family activity and thus the roles and responsibilities of each member are explored. Finally, research contributions on breeding, mitigation, and forage technologies are starting to grasp the importance gender relations have in the appropriate implementation of silvopastoral systems and animal genetic improvement, bringing to light the different areas where women exert some influence. Gender and bovine livestock research in the area oscillates then between amplifying the contributions, roles and functions of men and women, and pointing out the obstacles and discriminations that women face and how they affect productive units across the region. This *info-note* aims at identifying the main theoretical and methodological trends, highlighting the most fertile case studies. Studies on gender and bovine livestock carried out in Nicaragua, Uruguay, Colombia, and Argentina are of special relevance, as well as nascent projects in Honduras and Costa Rica that shed light on future avenues for research. This document strives to find connecting points, bottlenecks, and possible subject matters for future research.



Gender and value chains: contributions from Central America.

Developed extensively in Nicaragua and expanding to Honduras and Costa Rica, research on gender and value chains focuses on dairy or dual-purpose cattle systems. Taking a closer look at associations and small-scale producers, researchers aim to establish the extent to which gendered stereotypes and division of labor affect sustainable production, implementation of new technologies, and producers' willingness to pay for environmental services (Flores et al., 2011; Gumucio et al., 2015; Hülssiep, 2016; Lovo and Mora, 2014). Nicaragua's regions historically devoted to cattle farming such as Muy Muy, Camoapa, and Matiguás, have served as focal points to map organizations, associations, and actors (Lovo and Mora, 2014; UNIFEM, 2009), allowing researchers to characterize the productive process at regional and national levels and identifying which stages remain in need of improvement, especially those relating to milk processing and commercialization. Value chain studies have been particularly useful to render visible gender dynamics, underscoring the stages in which women participate and providing a picture of how and why their contributions remain, generally, in the shadows.

We know from value chain analysis that women participate in a myriad of activities related to cattle and dairy production, such as the processing and selling of milk products (even if at informal markets), handcrafts, animal care, and hygiene of tools and supplies (Gumucio et al., 2015; Toruño-Morales, 2012; Vázquez-García, 2015). Literature on the topic has also been essential to understand that women combine, forcibly, productive and reproductive labor.

Scholars have documented female contribution to milk processing and hygiene activities not only as a consequence of rooted gender stereotypes but as survival strategies to lighten exhausting working days, making the household the place where paid and unpaid labor meet (Gumucio et al., 2015; Toruño-Morales, 2012).

Likewise, it has become evident that women's contributions lack an appropriate recognition precisely because they are wrongly understood as an extension of domestic work, instead of an essential and productive activity determining the success of household economies at regional and national levels. This misperception has major repercussions: access to technological and informational resources is incisively harder for women (for not being considered key actors) and the implementation of sanitary regulations (as pasteurization processes) ends up triggering situations of local shortage, endangering informal markets and going against proposed goals in matters of food security and gender equity and thus impoverishing local producers (UNIFEM, 2009).





Cattle production as a family matter: contributions from the Southern Cone.

Not all gender dynamics within the cattle and dairy production sector have been studied from a value chain perspective. Research projects conducted in Argentina and Uruguay are an example of how the detailed study of family roles and relations at the core of the productive unit determine heritage, generational transference and continuity of bovine livestock activities in the midst of growing foreign markets within the Pampean region (Ferro, 2008; Graña, 1996; López-Castro, 2009). The export-oriented nature of cattle and dairy¹ farming in the Southern Cone has determined the gradual *defamiliarization* of trade and the growing concentration of land in male hands. Familiarist readings of the bovine livestock sector in the region have furthered our understanding on the limited scope of public policies, underscoring their historically gender-blind character and evidencing how legislative transformations aiming to achieve equity in terms of land (and assets) tenure tend to fall short (Gallo and Peluso, 2013). Gender inequality regarding land tenure, it is argued, is a deep-rooted problem that does not disappear by just enabling women producers' legal ownership. While it does contribute to protect Pampean women's property rights, in several cases legal tenure is far from being a daily reality. Women's influence in productive affairs continues to be marginal, preventing a concrete and tangible equity (Graña, 1996).

Important similarities rise when comparing the findings of the research conducted in Central America and the Southern Cone: female participation in bovine livestock production is

¹ Argentina reached the seventh place in the 2018 meat-export ranking, according to the United States Department of Agriculture (USDA).

in urgent need of proper recognition, women perform both productive and reproductive labor, their access to assets, technologies and information remains scarce, and, across regions, they continue to experience constant conflicts regarding land tenure and property rights. Researchers have been able to illustrate the frictions between small cattle and dairy producers who have been traditionally established in the *pampas* and the global fluxes of export markets transforming local economies, displacing and impoverishing producing families. Researchers in the region delve into the way in which small meat and dairy family businesses adjust to massive migration to the cities. The intricacies of urbanization (mostly protagonized by male producers) complicates traditional patrilineal practices of inheriting farms, land and herds, leaving women in new positions of "power" as administrators and owners. Masculine resistance to female inheritance due to entrenched gender stereotypes and family roles is further explained by the perception of women being inadequate leaders, incapable of coping with the challenges of defamiliarization, allegedly risking an already fragile productive system. "The farm is a male terrain," declares an Uruguayan producer interviewed by François Graña, a sentence that illustrates the rooted cultural precepts the supposedly masculine qualities required in cattle and dairy production that end up marginalizing the recognition and agency of women in a space that also belongs to them.



Women as silent agents of improvement: contributions from Colombia, Costa Rica and Nicaragua

A growing and innovative body of literature on gender in the cattle and dairy sector is flourishing in the field of science. Many of the concerns raised by the studies on family and gender in value chains, like the lacking access to information



and ineffective implementation of breeding and mitigation technologies (like silvopastoral systems) are beginning to be heard. These studies aim to draw attention to women's participation in every stage of bovine livestock production, highlighting their potential as agents of change in the advent of climate change. Two particular contributions stand out: first, The Genetics Project (financed by the Austrian Development Agency [ADA] and the result of a collaboration between ILRI, CIAT and the National Agrarian University) carried out in two cattle and dairy-producing Nicaraguan regions (Camoapa and Matiguás). The project sought to increase dual-purpose cattle productivity through the genetic improvement of locally preferred breeds. By evaluating the low rates of *in vitro* fertilization and the reluctance of local producers to accept new breeding methods, investigators realized the importance of incorporating a gender perspective in their analysis, assessing the importance of family relations and gender roles as key factors determining preferences, needs and adoption practices within productive units (Mora-Benard et al., 2016). Through both quantitative and qualitative methodologies, researchers were able to integrate women's skills and practices (even when female bovine livestock producers were not originally identified as a target population), revealing their profound and useful knowledge regarding cattle management. Compared to men, women knew more about the adequate timing of reproduction and were able to calculate with better precision when to call the inseminator. Because of their expertise a "silent cattle breeders", women end up being key agents in understanding the correlation between genetic improvement and the urgent need to increase meat and dairy productivity (Mora-Benard et al., 2016). The accidental meddling of women's knowledge into the project allowed a glimpse of the harmful consequences women's invisibility can have, both in the cattle and dairy industry and in research. Rooted cultural preferences for traditional methods of animal reproduction were blind to what women had to say, and researchers were only able to hear their

voices when improvement initiatives who did not account for their experience had failed.

A second contribution comes from Colombia, a region where studies on gender and livestock remain scant. A salient study on the topic focuses on the importance of mitigation strategies (such as silvopastoral systems and agroforestry initiatives) to cope with climate change and increase cattle and dairy productivity in Costa Rica and Colombia (Gumucio et al., 2015). Gumucio et al. (2015) understand the relevance of family dynamics within decision-making processes and incursion of new pastures and technologies, therefore making an urgent call for the integration of gender perspectives into research projects relating to mitigation strategies.

Encouraging producers to implement technological innovations resulted especially difficult, researchers found, precisely because gender dynamics were not taken into account. Producer families resisted and failed at their attempt to improve their productivity through agroforestry arrangements for several reasons: it is perceived as unnecessary, expensive, and entails a heavier workload, especially for women who are also in charge of reproductive labor. Throughout the study, researchers point out how indispensable it is to map the limitations imposed on small producers by the familiar structures and gender stereotypes as means for understanding their particular needs and promote the successful implementation of mitigation strategies. The study opens up interesting lines of analysis about the role of women at the advent of global warming and finds that, within bovine livestock producing regions, they are already deeply involved in reforestation activities (Arguedas Ortiz, 2014) becoming agents of innovation and transforming local practices.

At the moment of this review, the most recent analysis on the matter of gender, climate change and mitigation strategies comes from a case-study in Patía, Colombia, where extreme weather events (drought) were examined through a gender



perspective (Arora, 2019). The author evaluates the negative impact of a prolonged drought in assets, labor allocation and livelihoods, coming to the conclusion that extreme climate events are not gender neutral and affect women more incisively. Arora finds that seasons of drought affect local bovine livestock producers, forcing them to implement diverse adaptation strategies to cope with water shortage (when possible): pay for forages or concentrate to feed cattle, provide new sources of water and diversify economic activities (as the manufacturing of milk byproducts or the cultivation of fruits and vegetables) were some of the most salient. Through the use of quantitative and qualitative data, Arora (2019) shows that while all productive units were affected by drought, female producers bore the brunt of the crisis, which ultimately exacerbated conditions of poverty and delayed the recovery of such bovine livestock producing farms, which underscores the intersectionality of gender and class identities. In addition to this, Arora observes that the drought season ended up to overload women with additional unpaid work, as most coping strategies relied on their agency: manufacturing of cheese, bread or gathering more food for animals were all tasks that, in addition to reproductive labor, resulted fundamental for the unit's survival in Patía (Arora, 2019). Case studies as the one carried out by Arora lead a necessary and telling research road towards the analysis of small-scale bovine livestock and how producers endure extreme weather events. Moreover, they illustrate the urgency to keep integrating a gender perspective in agriculture at the advent of climate change.

Conclusions and recommendations for future research

Gender dynamics in the Latin American cattle and dairy sector have been explored from diverse perspectives and methodologies. Vital contributions are made from the fields of rural sociology, economy, and family studies, and are successful in showing the urgency to overcome the gender-blindness that has characterized socio-economic and scientific research in bovine livestock. The studies quoted here all emphasize on the dangers of failing to account for gender inequality and the harms such omission can make in the formulation of projects or public policies. It is also remarkable how all studies merge quantitative and qualitative methodologies, evidencing how accounting for gender dynamics requires a careful combination of research methods that can bolster our understanding of deeply entrenched familiar and cultural dynamics. Researchers who learn from the existing literature, must listen and include the voices of all local subjects making up their body of analysis.

Value chain studies comprise the main lens through which the matter of gender in bovine livestock has been approached, a perspective particularly fertile in mapping the gendered division of labor, the action nodes where women exert influence, and the difficulties and needs female producers face in a rural world where cultural traditions and stereotypes associated with masculinity are still in full force. In general terms, the existing literature is highly successful in showing the negative impact gender-blindness can have in research projects and agendas, evidencing how the search for technological and sanitary improvements will fail if such “deaf” improvements lead to local shortages and affect informal markets, impoverishing and harming female producers instead of fostering their potential.

Nonetheless, most publications lack historical depth and fail to provide a detailed sociocultural x-ray of local populations and the many transformations territories and inhabitants experience over time. Even though the gender lens opens up the exploration of culture, kinship and sociological considerations, the study of localized cases (such as associations, cooperatives, etc.) does not favor historical deepness in relation to the various factors configuring social relations and productive activities. As an example, case studies in Nicaragua and Colombia stand out for their mutism on the evident consequences armed conflicts have had in the cattle and dairy sector. Similarly, most studies on gender and livestock focus on women, their needs and challenges. This, though urgent, blurs the possibility of questioning masculinities and the values and practices constructed around them. Such deconstruction would engender a rich and necessary dialogue that would help dismantle constricting gender stereotypes.

All possible weaknesses, however, are windows of opportunity for future research. From this review one can discern some of the possible areas and topics for further analysis that can bolster our understanding of gender in bovine livestock. A way to overcome the tangible historical gaps in the case of Latin America is to integrate the study of external factors, like warfare. Conflictive territories such as Nicaragua, Colombia, and Honduras open up the possibility for transnational comparisons while contextualizing cattle and dairy farming as a cultural practice, grounded in time and place. Livestock producers could not escape the many transformations brought by state-guerrilla warfare, and listening to their stories would definitely shed light on how violence, displacement, and dispossession affected productive units across Latin America. Another possible research subject lies on the topic of forages. At the time of this review, no significant contribution could be traced on how gendered social norms impact the adoption and use of pastures, legumes, and silvopastoral systems in Latin America, nor do we



know how a gender perspective within such research could favor the dissemination and access to information. Overall there is no doubt the subject of gender in livestock continues to be a trope open for exploration.



References

- Agarwal B. 1997. “Bargaining” gender relations: Within and beyond the household. *Feminist Economics*, 3(1):1-51.
- Arguedas Ortiz D. 2014. Rural Costa Rican women plant trees to fight climate change. Inter Press Service News Agency. 2 April. Available at: <http://bit.ly/2WpvRft> (retrieved on 15 March 2019).
- Arora D; Arango J; Burkart S; Chirinda N; Twyman J. 2017. Gender [im]balance in productive and reproductive labor among livestock producers in Colombia: Implications for climate change responses. CCAFS Info Note. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen.
- Arora D. 2019. Extreme weather events (drought) and its impact on assets, livelihoods and gender roles: Case study of small-scale livestock herders in Cauca, Colombia. Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).
- Boserup E. 1970. *Women’s Role in Economic Development*. New York, NY, St. Martin’s Press.
- Deere CD. 2005. *The feminization of agriculture: Economic restructuring in rural Latin America*. UNRISD Occasional Paper No. 1. Geneva: UNRISD.

- Dürr J. 2018. Women in agricultural value chains: Unrecognized work and contributions to the Guatemalan economy. *Journal of Gender, Agriculture and Food Security*, 3(2):20-35.
- Ferro SL. 2008. Género y Propiedad Rural. Buenos Aires: Secretaría Agricultura, Ganadería, Pesca y Alimentos.
- Flores S; Barrera J; Bastiaensen J; Castro A; Martínez S; Polvorosa J. 2011. Las cadenas de lácteos y su interacción con la dinámica de género: La experiencia en Matiguás y Muy Muy, Nicaragua. Managua: Nitlapán.
- Gallo A; Peluso I. 2013. Estrategias sucesorias en la ganadería familiar: un enfoque de género. *Revista de Ciencias Sociales* 32:17-34.
- Graña F. 1996. La resistencia a la sucesión femenina del predio rural: el caso de los productores familiares en la lechería uruguaya. *Revista de Ciencias Sociales* [online], No. 12. Available at: <http://bit.ly/2j10moZ>
- Gumucio T; Mora Benard MA; Clavijo M; Hernández MC; Tafur M; Twyman J. 2015. Silvopastoral Systems in Latin America: Mitigation Opportunities for Men and Women Livestock Producers. CCAFS Policy Brief. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), Copenhagen.
- Holmann F; Mtimet N; Mora A; van der Hoek R. 2014. Dual-purpose milk and beef value chain development in Nicaragua: Past trends, current status and likely future directions. Managua: Livestock & Fish.
- Hülssiep M. 2016. Governance and gender dynamics in global value chains. A case study of the industrial dairy value chain in Matiguás, Nicaragua. (Unpublished master's thesis). University of Vienna, Vienna, Austria.
- Kristjanson P; Waters-Bayer A; Johnson N; Tipilda A; Baltenweck I; Grace D; MacMillan S. 2010. Livestock and women's livelihoods: A review of the recent Evidence. Discussion Paper, 20. Retrieved from: <http://bit.ly/2j6PwOz>
- López-Castro N. 2009. Cuando la persistencia es una cuestión de familia. Relaciones familiares, traspaso y género en explotaciones agropecuarias del Sudoeste bonaerense (1987-2007). *Mundo Agrario* 10(19).
- Lovo IL; Mora MA. 2014. Caracterización y mapeo con enfoque de género de organizaciones y actores en la cadena de valor de ganadería de doble propósito en Camoapa y Matiguás. Centro Internacional de Agricultura Tropical (CIAT); International Livestock Research Institute (ILRI).
- Mora Benard MA; Mena Urbina MA; Corrales R; van der Hoek R; Ojango JM. 2016. "The silent cattle breeders in central Nicaragua." In: Pyburn R; van Eerdewijk A (Eds.). A different kettle of fish? Gender integration in livestock and fish research. Volendam: LM Publishers.
- Toruño Morales I. 2012. Análisis financiero-económico de fincas con varias actividades productivas y el rol de la familia en la producción y toma de decisiones en el Centro Norte de Nicaragua. (Master's thesis) CATIE.
- UNIFEM (Fondo de Desarrollo de las Naciones Unidas para la Mujer). 2019. Cuenta del Reto del Milenio/Nicaragua. Guía para incorporar el análisis de género a cadenas de valor. Managua, Nicaragua. 62 p.
- Vázquez-García V. 2015. Ganado menor y enfoque de género. Aportes teóricos y metodológicos. *Agricultura Sociedad y Desarrollo* 12(4):515-531. Doi: [10.22231/asyd.v12i4.243](https://doi.org/10.22231/asyd.v12i4.243)

Citation

Triana Ángel N; Burkart S. 2019. Between silences and opportunities: gender and livestock in Latin America, a state of the question. Infonote. International Center for Tropical Agriculture (CIAT). Cali, Colombia. 8 p.

Acknowledgements

This work was carried out as part of the CGIAR Research Program on Livestock. We thank all donors who globally support our work through their contributions to the CGIAR System. The views expressed in this document may not be taken as the official views of these organizations.

Authors

Natalia Triana-Ángel, Anthropologist, MA y PhD (c) in History, Visiting Researcher on Gender, Tropical Forages Program, CIAT.

✉ ntriana2@binghamton.edu

Dr. Stefan Burkart, Socio-economist, Tropical Forages Program, CIAT.

✉ s.burkart@cgiar.org



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