

Alliance



Gender and the cattle sector in Latin America: recent trends in literature

Activity 3.1.1: On-farm, large-scale and global feed assessments and prioritization approaches

Natalia Triana
Stefan Burkart

December 2019



RESEARCH
PROGRAM ON
Livestock

Information related to this report

CRP: Livestock

Flagship: FP3 – Feeds and Forages

Cluster: 3.1: On-farm, large-scale and global feed assessments and prioritization approaches

Activity: P1682 – Activity 3.1.1: On-farm, large-scale and global feed assessments and prioritization approaches

Deliverable: D10697 – Literature review on gender aspects in feeds and forages production and processing in LAC in order to define strategies for strengthening gender in research/scaling activities

Contents

Introduction	4
Gendered value chains: experiences from Central America	5
A family matter: cattle production in the Southern Cone	6
Silent agents of change, leaders of transformation: lessons from Colombia, Costa Rica and Nicaragua.	7
Conclusions and possible avenues for further research.....	9
References.....	11

Acknowledgements

This work was done as part of the CGIAR Research Program on Livestock. We thank all donors that globally support our work through their contributions to the CGIAR system.

Abstract:

Bovine livestock has proved to be a fundamental economic activity for rural families across Latin America. Although with some geographical variations, dairy and dual-purpose value chains stand out as the main productive systems in the region, especially in Central America and Colombia. Despite cattle farming requiring the participation of most family members, the role of women and youth in it remains largely unrecognized. Recent research trends on gender in agriculture signal the importance of drawing attention to the contributions of both men and women to cattle production as a necessary mechanism to overcome a prevalent gender gap. Research on the subject also highlights the centrality of properly recognizing such inputs, as gender imbalance has been found to be detrimental to the efficiency and sustainability of productive units. This literature review summarizes the research published in the topic of bovine livestock and gender in Latin America, finding three main perspectives: a) the analysis of dairy, beef, and dual purpose value chains in Central America, where women's participation (as well as the action nodes where they exert more influence) in the productive process is highlighted; b) the study of cattle production in the Southern Cone, where the roles and responsibilities of family members are dissected; and c) research inputs on forage technologies, genetic breeding and mitigation strategies developed in Central America, in which both women and youth have been identified as central (or potential) agents of change. This paper summarizes the main contributions in the subject with examples ranging from Argentina to Nicaragua, finalizing with a concluding section signaling possible avenues for future research.

Keywords: gender, bovine livestock, family production, value chain, climate change mitigation.

Introduction

Literature on gender and livestock research in Latin America, although still limited, has mainly focused on family roles and their intersection with labor divisions, as well as the unequal access to resources and information rural women face, harming productive units. In assessing the extent of women's participation in cattle and dairy production, scholars have developed an interdisciplinary dialogue that problematizes naturalized gender roles in cattle and dairy farming and contests the alleged relegation of women to domestic and reproductive activities. Far from confined to domestic labor (Boserup, 1970; Kristjanson et al., 2010), rural women perform essential contributions to every aspect of cattle production (Arora et al., 2017; Dürr, 2018). Path breaking research on gender and agriculture has unveiled that larger, transnational dynamics such as migration and the industrialization of markets have ultimately transformed gender roles, deepening the workload for women and/or introducing them to new labor roles (Agarwal, 1997). Evidently, this entails a major alteration of rural families, making agriculture a field in constant *feminization* (Deere, 2005). While cattle and dairy farming are not exempt from these changes, both continue to be understood as activities associated with masculine tropes, blocking the necessary recognition of women's contributions, as well as the challenges they face on a daily basis. Research in the subject both amplifies the contributions and roles of men and women have in the process, and points out the difficulties, obstacles and inequity women face and how this undermines productive units across Latin America.

This paper attempts to find suture points and bottlenecks, and highlights potential topics for future research.

Gendered value chains: experiences from Central America

With special emphasis on countries such as Nicaragua, Honduras and Costa Rica, research on gender and value chains centers on dairy or dual-purpose cattle systems. Scholars study with careful detail local associations and small-scale producers, demonstrating how gender inequity derived from rigid stereotyping influences sustainable production, adoption 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). Regions such as Muy Muy, Camoapa, and Matiguás, historic niches of cattle and dairy farming in Nicaragua, served as canvas to identify organizations and actors (Lovo and Mora, 2014; UNIFEM, 2009), which in turn permits researchers to typify the productive process and the stages in need of improvement, especially those where women exert particular influence: milk processing and commercialization. Value chain studies have been pivotal in describing and analyzing gender imbalances, setting a stage that allows us to understand underscoring how and why their contributions remain mostly invisible.

We have learned from this type of literature that women perform several, vital roles within cattle and dairy production, such as the processing and selling of milk byproducts, especially on informal markets. Women also produce handcrafts, take care of animals and engage in activities related to hygiene of tools and supplies (Gumucio et al., 2015; Toruño-Morales, 2012; Vázquez-García, 2015). By studying female tasks, value chain analysis has expanded our understanding of gender imbalances, proving that most rural women combine unpaid productive and reproductive labor. Female dedication to milk processing and hygiene activities, scholars argue, is not only rooted in strong gender stereotypes but also becomes a coping mechanism to lighten exhausting days, as the household turns into the place where family duties and productive labor meet (Gumucio et al., 2015; Toruño-Morales, 2012). Value chain studies have thus underscored how women's contributions fell short of proper recognition, as they are unfairly understood as an extension of domestic work rather than a vital, productive role which can greatly influence the sustainability of rural household economies at regional and national levels. Entrenched gender asymmetries have large impacts, such as restricting access to technology and information, hampering the lives of female producers, aggravating poverty and affecting rural livelihoods. At times, women's invisibility prevents technological improvements from having wide positive impacts: an example lies in the implementation of sanitary regulations (such as pasteurization processes for example), which ends up creating situations of local shortage, threatening informal markets (central to women producers) and contradicting proposed goals in matters of food security and social equity (UNIFEM, 2009).

A family matter: cattle production in the Southern Cone

Largely known as a cattle-producing region, the countries of the Southern Cone (Uruguay and Argentina in this particular case) are not exempt from pungent gender inequality. As productive systems in the region differ from the ones prevailing in Central America, value chain perspectives have not constituted the main analytical framework to study cultural and family dynamics. Research conducted in both countries explores how family roles and relations, property heritage and generational transference affect the 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 character of cattle and dairy farming in the region has resulted in a progressive *defamiliarization* of productive units and in an expanding concentration of land in male hands. Former family farms have been gradually replaced by large-scale cattle industries, in many times, owned by transnational firms. While economically invigorating the sector, these shifts are still controversial to local families, especially women, who tend to lose control over land and assets. Thus, despite the societal progress achieved in other realms such as public policies on property rights and inheritance, the example of the Southern Cone illustrates the constrained scope of such advances, exposing their gender-blindness, as defamiliarization affect women more incisively (Gallo and Peluso, 2013). Scholars argue on how the gender gap regarding land tenure is a deep-rooted problem that goes beyond “*enabling*” women producers’ legal ownership. While significant in protecting female and family property rights, in many cases such tenure is only real in paper. Women’s influence in productive subjects remains marginal, which in turn impedes a tangible equity (Graña, 1996). A comparative analysis of cattle and dairy producing regions in Central and Southern America brings to light some important similarities: female participation is still in lack of adequate recognition; women perform both productive and reproductive labor, and their access to necessary assets remains limited. In addition to the latter, researchers of both regions have underscored the clashing between traditional small cattle and dairy production systems and the fluxes of global export markets. Scholars also delve into the way in which small family businesses adjust to larger dynamics of rural-urban migration and industrialization, and how this complicates patrilineal practices of inheritance, giving women new positions of power as administrators and owners. Cultural resistance to female ownership, derived from rooted gender stereotypes finds its place in the misguided understanding of women as inadequate leaders, incapable of facing with the transformations brought by *defamiliarization*. “*The farm is a male terrain*” declares a Uruguayan producer interviewed by François Graña, a sentence that briefly depicts the cultural precepts that “*masculinizes*” the cattle sector par excellence, hindering women from the agency and empowerment that should be placed on them (Graña, 1996: 109)

Silent agents of change, leaders of transformation: lessons from Colombia, Costa Rica and Nicaragua.

A different body of literature on gender in the cattle and dairy sector is growing. Some of the issues raised by scholars on family and gender in value chains (like the complicated access to information and ineffective implementation of breeding and mitigation technologies) are now taken into account. These particular studies attempt to highlight women's participation in every stage of bovine livestock production and underscore their potential as agents of change in the advent of climate change. Two specific contributions excel. The Genetics Project¹ developed in two Nicaraguan cattle and dairy-producing regions (Camoapa and Matiguás). The project itself aimed to increase dual-purpose cattle productivity through the genetic improvement of locally preferred breeds. Through the analysis of how low rates of in-vitro fertilization were due to producers' reluctance to accept new breeding methods, researchers understood the importance of a gender-sensitive approach that allows them to assess the relevance of family relations as a central factor determining preferences, needs and adoption practices within productive units (Mora-Benard et al., 2016). Through quantitative and qualitative methodologies, investigators integrated women's skills, practices and knowledge (even when female bovine livestock producers were not initially targeted as key actors), unveiling their familiarity and expertise in the subject of cattle management. Compared to their male counterparts, women understood more about the adequate timing of reproduction and determined, with better precision, when to call the inseminator. This proficiency as silent cattle breeders made local women pivotal and potential agents of genetic improvement adoption practices (Mora-Benard et al., 2016). The unexpected involvement of women's capacities into the project disclosed how damaging the consequences of not integrating *all* family members into research agendas could be. Cultural preferences for traditional methods of animal reproduction were indifferent to women's knowledge and voice, voices researchers were only able to hear when improvement initiatives that did not account for women had failed.

Another contribution comes from Colombia and Costa Rica, regions where studies on gender and livestock remain somewhat stagnant. A salient study on the subject centers 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 both Costa Rica and Colombia (Gumucio et al., 2015). The abovementioned authors understand the relevance of family dynamics within decision-making processes and have studied the role such relations and roles play regarding adoption practices (of new pastures and technologies). On this occasion, they argue, a gendered perspective results urgent when

¹ financed by the Austrian Development Agency [ADA] and the result of a collaboration between ILRI, CIAT and the National Agrarian University)

developing projects related to mitigation strategies. From their research, the authors were able to conclude that producers' willingness to adopt technological innovations remain scarce, precisely because gender dynamics are not taken into account. Families resisted and failed at their attempt to improve their farm productivity through agroforestry arrangements for many reasons: they are recognized as unnecessary, expensive, and entail a heavier workload for some members (especially for women). In the study, the authors signal that mapping potential limitations, unexpected harms and difficulties is itself indispensable to promote the successful implementation of such mitigation strategies. This particular study opens up original lines of analysis on the role of women at the advent of global warming and finds that, in bovine livestock producing regions, they are already deeply compromised with reforestation activities (Arguedas Ortiz, 2014), stand out as agents of innovation and transform local practices. At the moment of this paper, the most recent analysis on the subject of gender, climate change and mitigation comes from a case-study in Patía, Colombia, where extreme weather events (prolonged drought) were examined through a gendered perspective (Arora, 2019). The author evaluates the harmful impact of a prolonged drought in assets, labor allocation and livelihoods, concluding that extreme climate events are not gender neutral and affect women and children more than other populations. Arora finds that seasons of drought hurt local bovine livestock producers and force 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). Both quantitative and qualitative data serve Arora (2019) in her purpose of exposing that while all productive units were affected by drought, female producers bore the brunt of the crisis. This aggravated poverty and delayed the recovery of local bovine livestock producing farms, which in turn underscores the obvious: the intersectionality of gender and class identities in rural settings. Furthermore, the author observes how the dry season overloaded women with additional unpaid work, as most coping strategies relied on their agency: manufacturing of cheese and 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). These case studies lead a necessary and telling research road towards the analysis of small-scale bovine livestock systems, rendering visible how local producers endure extreme weather events.

Conclusions and possible avenues for further research

Gender dynamics in the Latin American cattle and dairy sector have been studied from diverse perspectives and through various methodologies. Essential contributions stand out from the fields of rural sociology, economy, and family studies, fruitful in evidencing the urgency to overcome gender-blindness within socioeconomic and scientific research in the area. The studies and authors explored here accentuate the necessity to overcome gender inequality, especially within research agendas; as such omission will inevitably harm the possible impact of development projects and public policies. It is worth highlighting that all studies merge quantitative and qualitative methodologies and are able to account for gender dynamics precisely because of this multidisciplinary approach. This, we sustain, bolsters our understanding of deeply entrenched familiar and cultural dynamics and how they are never detached from the bovine livestock sector. In following these initial steps, we must listen and include the voices of all local subjects making up our body of analysis.

Value chain studies comprise the main lens to read the subject of gender in bovine livestock production, and is indeed a fertile perspective 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, existing research agendas are highly successful in showing the negative impact gender-blindness can have and demonstrate 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. However, most publications lack historical depth and fail to provide a detailed sociocultural panorama of local populations and the inevitable 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 regarding social relations and productive activities. As an example, case studies in Nicaragua and Colombia shine 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 cultural codes and practices constructed around them. Such examination would generate a much needed information pool for the dismantling of constricting gender stereotypes. All possible weaknesses, however, are always windows of opportunity for future research. From this paper, one can discern some of the possible areas: 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 affect the adoption and use of grasses, legumes, and silvopastoral systems in Latin America, nor do we know how a gender perspective within such research could favor the dissemination of 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 smallscale 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