

Gender dynamics in the cattle sector in Central America: A literature review

Working Paper No. 181

CGIAR Research Program on Climate Change,
Agriculture and Food Security (CCAFS)

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RESEARCH PROGRAM ON
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Abstract

Cattle production is an important economic activity throughout Central America. Dairy production, in particular, is an important activity for many smallholder farmers in Costa Rica and across the Central America region. Women's role in cattle production tends to be poorly valued and recognized, however. This literature review summarizes the scant research published about gender in the cattle sector in Central America, including the findings that (1) women lack access to and control over productive resources in the cattle sector and (2) extension services and training do not focus on women, likely because women's contributions are undervalued. The paper then describes a successful project in Nicaragua and recommends areas for research.

Keywords

Central America; livestock; gender; climate change mitigation

About the author

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Acronyms

CATIE	Centro Agronómico Tropical de Investigación y Enseñanza
CCAFS	Climate Change, Agriculture and Food Security
FAO	Food and Agriculture Organization of the United Nations
INEC	Instituto Nacional de Estadistas y Censo
RAAN	North Atlantic Autonomous Region

1. Introduction

This literature review is part of the low emission agriculture flagship of the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). It serves as a background document to an analysis on gender roles and dynamics in the cattle sector in Central America, Costa Rica in particular. It provides input into research activities on the gender dimensions of mitigation options.

Cattle production is an important economic activity throughout Central America, especially in Costa Rica. According to official statistics, the total number of cattle farms in the country is 37,171 and the total number of heads of cattle is 1,278,818, of which 538,593 are used for meat production, 327,131 for milk, and 409,899 for both (INEC 2015).

Dairy production is an important activity for many smallholder farmers in Costa Rica and across the Central America region. The dairy value chain in Costa Rica is well organized and comprises a wide range of stakeholders, such as cooperatives, private companies, and producers' associations (Hernandez et al. 2014). It is highly specialized in that it produces only milk and its derivatives. Dos Pinos, a cooperative formed by many small producers, dominates over 80% of the market. This means that smallholder farmers have been vertically integrated in the value chain (ibid.).

Women's roles in cattle production tend to be poorly valued and recognized (Gumucio et al. 2015). Their contribution to farm work is usually seen as unpaid family labor and thus not visible in the agricultural census. For instance, the 2014 agricultural census (INEC 2015) shows that women are registered as "producers" in only 15% of farms (Gumucio et al. 2015). Though gender-focused studies of the cattle sector in Costa Rica were not available when this literature review was conducted, research carried out in other Central American countries provides an indication of the gender dynamics in cattle and dairy production in the region.

2. Description of the division of labor by gender in cattle and dairy production

Research on gender roles and dynamics in Central America clearly shows that women tend to contribute to cattle production mostly as spouses or daughters of cattle producers.

Women tend to perform activities that require less physical effort, and men perform tasks that require more physical strength (Toruño Morales 2012). Women's activities tend to take place near the home, where they spend most of their time due to traditional gender norms and responsibilities, whereas men engage in activities that require longer periods away from the household. As the main owners of assets, men tend to dominate commercial transactions of milk and animals, whereas women are mostly involved in noncommercial activities. On-farm, women participate in specific production activities including worming, managing livestock health (e.g., vaccinations), shutting calves into enclosures, watering the animals, chopping grass for feed, milking, and milk processing. They also play a role in decision-making related to cattle management.

It is clear that historically the sector has been associated with men's work, despite the important role played by women in dairy production. In reality, the cattle sector depends on the contributions of all household members, especially for small- and medium-holder producers (Toruño Morales 2012). Many activities are regularly carried out by both men and women and can often involve the entire family, including children. A study in Honduras found that silvo-pastoral systems implemented by smallholder producers depended principally on family labor, which represented 61% of smallholder producers' total production costs (Perez 2006). A study on milk production in Nicaragua described the inclusion of household members in various production activities (Holmann et al. 2014). According to the authors, all family members collaborate in several stages of the production cycle, including both pasture and cattle management (e.g., planting and feeding the animals). Milking is done mostly by adult members of the family, both women and men. Women carry out most post-production activities such as product management (hygiene, cleaning, and handling equipment) and administration of family resources.

An investigation carried out in the departments of Matagalpa, Jinotega, and the North Atlantic Autonomous Region of Nicaragua found that the activities carried out exclusively by women are related to the processing of milk into curd (a type of artisan cheese traditionally done in Nicaragua) or cream (Toruño Morales 2012). This demonstrates the dominant role women play in milk processing, for both consumption at home and sale in the local market. Women were also found to spend a significant amount of time in activities related to food preparation for hired laborers for both agricultural and cattle production (Toruño Morales 2012; Holmann et al. 2014).

A study carried out by the Nitlapan Research Institute in Nicaragua (Flores and Artola 2004) estimated that the level of women's employment in the dairy sector is 22%. Importantly, the division of roles among men and women differs depending on the size of business. In small-scale family businesses, men are primarily responsible for organizing and supervising production and contract workers, maintaining contacts with buyers, directly delivering products to customers, and legally representing the business. Women generally monitor milk supply, manage relations with milk suppliers, maintain records of delivery and payment of products, and oversee production in the absence of their husbands. In larger scale businesses, which are often run by cooperatives, men tend to be responsible for production activities, and women are more involved in administration tasks and packaging.

Although joint decision-making between spouses can occur regarding various household assets and cattle-related activities, men manage most decisions about buying and selling animals and milk, consistent with traditional gender norms that assign men a primary role in commercial transactions. Resource ownership is sometimes joint (including both men and women household members), but men tend to control primary cattle production resources and the income from it. An investigation carried out in Nicaragua shows that men decide on the sale and rental of animals in most farms (93%), whereas more women access and control the money from the sale of curd (79%) (Toruño Morales 2012).

This literature review also compared businesses run by women with businesses in which the couple works together. Literature showed that dairy production tends to be more sustainable and is often integrated into more profitable markets when couples work together. In these cases, women are also involved to a certain extent in decision-making processes concerning both production and marketing. Conversely, women-only businesses tend to remain at the

micro-level. For most women-owned businesses, marketing of dairy products often takes place at the household level, or at most, in departmental capital markets. Lack of male support to dairy production appears to be a critical constraint to business expansion or upgrades. In larger scale, male-dominated businesses, women have very little or no presence in decision-making processes and are virtually absent in management and governing bodies. A similar pattern is documented in large industrial enterprises.

3. Key constraints: gaps in access to and control over productive resources, training

Women face specific limitations due to gaps in access to and control over productive resources. In some cases, women may own cattle and land.; in others, productive resources may be jointly or informally owned by men and women from the household. In any case, **men tend to own more of the principal resources that are necessary for cattle production and are more likely to have formal land rights** (Galie et al. 2015). Also, men tend to predominate commercial cattle production activities and control the corresponding monetary income (ibid.). This situation, along with the common perception that men are the main cattle managers, influences the way extension programs are designed and delivered: with a male farmer in mind (Flores and Torres 2012).

Socio-cultural norms that identify men as primarily responsible for production and provision of household income also mean that women's work in cattle often is not recognized as "real" labor. Limited recognition for women's work is also a result that traditional female activities tend to be mixed with homecare and take place near the house, thus being viewed as an extension of their domestic chores (Perez and Farah 1998).

The role of women in dairy production, as well as agricultural production in general, becomes visible only through deliberate investigation—for example, through examination of the roles that men and women perform at each stage of the value chain (KIT et al. 2012). For example, an analysis of dairy cooperatives in the Siuna municipality of Nicaragua indicates that although women play a key role in making sure that the milk is of good quality, they are not perceived of as milk producers (ibid.). Women are not members of the cooperatives, and their husbands generally keep earnings from the sale of milk. As a result

of the dairy production activity being considered a part of their domestic work, women do not receive public or private support to improve production or quality of artisanal cheese.

Historically, rural development policies in Central American countries like Costa Rica have not taken women into account under the presumption that women do not contribute substantially to priority sectors, including the cattle sector (Zumbado 2013). In Latin America, in general, inclusion of gender perspectives in public policies is a relatively new phenomenon. Historically, development and environmental policies in Central America have failed to recognize women's roles as producers in the national economy. As a result, interventions and strategies have not addressed the different resource constraints faced by Latin American women. Such gender-blind policies can have adverse effects on men and women producers and inhibit sustainable development.

In Costa Rica, the Sectoral Action Plan on Gender for the period 1999–2002, which was extended to 2007, intended to mainstream gender in agricultural policies. Recognizing the structural inequalities affecting rural women, the plan explicitly addressed the need to assess, promote, and value contributions made by rural women in the agricultural sector and in new agribusiness dynamics. The plan balances economic growth, rational use of natural resources, and social and gender equity. To fulfil its mission, the plan focuses on mechanisms that facilitate rural women's access to equal opportunities through training, support services, finance and credit, productive projects, sharing of information, and communication. The plan was implemented through the financing of programs and projects targeting women's groups. Nonetheless, most projects targeting rural women focused more on addressing women's practical needs than on promoting their strategic gender interests (Zumbado 2013). According to Kauffman (n.d.), public programs have only marginally reached out to and benefitted women in recent years. The majority of programs still discriminate against women in the workplace and marketing communities, even in the current context in which many women are now responsible for sustaining smallholder farms when men leave in search of wage labor opportunities. In some cases, men leave the family unit. It is also increasingly common in Costa Rica for women to have children out of wedlock, in which cases they receive little or no child support. Women-headed households make up a large portion of the poor, in part because of unequal treatment in the workplace (Ruben and Ruiter 2002). An analysis of the feminization of poverty in Costa Rica

undertaken by Chant (2009) reveals that persistent structural problems related to this phenomenon are lack of recognition of women's work, unfavorable conditions in workforce entry, labor market segmentation, discrimination in education (especially subject choice at higher levels), and scarcity of resources for women's initiatives.

Livestock production in Costa Rica has long contributed to loss of natural habitat and biodiversity (Pagiola 2006). In Central America, deforestation caused by the establishment of pastures is expected to continue as a result of growing demand for livestock products combined with low productivity. Therefore, dissemination of innovative and sustainable farm technologies, such as the establishment of improved pastures, legumes, and integration of improved silvo-pastoral practices that reduce emissions and increase carbon fixation, is required to improve competitiveness in local and regional economies, while decreasing the ecological footprint.

Considering the important and increasing role played by women in cattle production, there is an urgent need to ensure that training, credit facilities, and technologies for sustainable cattle production also reach out to female farmers. Women's household responsibilities and existing gender norms result in women being marginalized from cooperatives and farmer groups, where trainings and technologies related to sustainable cattle production practices are made available.

4. Evidence of good practice: promoting a gender-sensitive dairy value chain in Nicaragua

A case study involving the promotion of women's roles in the dairy value chain comes from Nicaragua, where Deutsche Gesellschaft für Internationale Zusammenarbeit and Oxfam Great Britain are working together to promote the dairy value chain in Siuna (KIT et al. 2012). The project aims to strengthen cooperatives and improve the processing and marketing of dairy products by linking the cooperatives to service providers and new markets. Project leaders realized that the cooperatives were composed almost entirely of men, and recognized the need to involve women more. A key action of the project was to raise awareness of the importance of women's contributions to the dairy value chain through the organization of gender sensitization meetings.

In the first gender sensitization meeting, groups of women and men drew the dairy value chain. They drew what they produced, whom they sold to, and the final market for their products. They then compared and discussed the drawings, which showed the different roles of women and men in the value chain. The second meeting focused on milk quality—important if the cooperatives were to develop higher value markets and be able to pay more to the producers for a better-quality product. Separate groups of women and men explored how each contributed to the quality of the milk and the benefits each received from their contributions. The third meeting focused on services the men and women receive from the cooperative and identified additional services they needed, such as credit to buy cows, training in pasture management, and help in opening bank accounts. The fourth and final gender sensitization session covered communication skills between husbands and wives, promoted joint decision-making, and discussed how the cooperative should deal with the family—not just the men—as a business unit.

As a result of the project, women have begun to join the cooperative and use its services. Women have asked for technical training, as well as loans to buy cattle, fodder seed, and fences. Members of male cooperatives are more inclined to recognize women's contributions to dairy production, viewing tasks such as fetching water and cleaning pots as work that contributes to the quality of their dairy product. Several couples have started to work more together; they discuss plans and share tasks they used to do alone. The cooperatives changed bylaws to make it easier for women to join as full members (e.g., the cooperatives allowed fees to be paid in installments). In just one year, the proportion of cooperative members who were women rose from 8% to 43%. A cooperative appointed a woman as its business manager, and she has suggested that the cooperative start producing round cheeses rather than the typical square shapes.

5. Conclusion

There is an urgent need to fill the enormous knowledge gap on gender dynamics in the dairy and cattle production value chains in the Central America region, especially in Costa Rica. This knowledge will increase recognition of women's roles and contributions to the dairy and cattle value chains; increase membership; and facilitate increased impact and uptake of training, credit facilities, and technologies for sustainable cattle production.

Further research should address women's time and labor burdens, men's and women's roles, resource control, and decision-making power as they relate to the cattle sector. This research would also increase information on the production systems, including gender roles, responsibilities, and the like. Research should aim to inform improvement in the sector, including design and implementation of mitigation technologies.

Considering the important role women play in the management of cattle production and in decision-making concerning different activities and production technologies, their inclusion in extension programs would contribute to more effective uptake of new technology by farm households. An improved extension program should go hand-in-hand with the implementation of transformative approaches to gender. Research and action will debunk the traditional view that the cattle sector is predominately a male's business, and thus empower women to retain control over assets, incomes, and benefits in the cattle sector.

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