

# A different kettle of fish?

Gender integration in livestock and fish research

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## 19 DAIRY VALUE CHAINS IN EAST AFRICA: WHY SO FEW WOMEN?

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### Organizations

ILRI

### Species



**Methods:** Document review with a gender lens; facilitated discussion; key informant interviews.

**Summary:** These exploratory studies focus on gender dimensions of the dairy cattle chain in Tanzania, Kenya and Uganda. They address producer organization sustainability and women's participation in the "hub approach" to chain development.

### Locations



**W**OMEN FARMERS do a lot of the dairying in East Africa: they look after the cows and calves, keep them well fed and watered, and milk the animals. They often sell milk to friends and neighbours, or to small-scale traders who

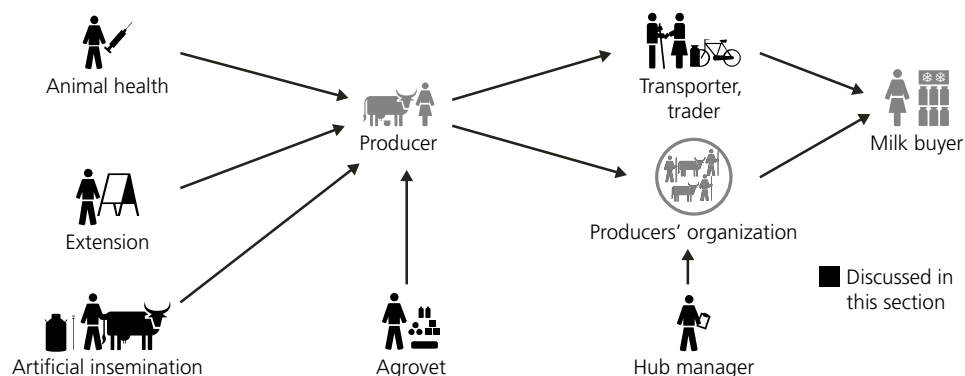


Figure 19.1 The dairy value chain in East Africa

come to the door. They are active members in producers' organizations and use those channels for sales, though men tend to be the leaders and managers of such organizations. But if the farm family wants to sell to a dairy, or if a producers' organization sets up a formal milk-collection system, then the men often take over. Beyond production, men dominate the milk value chain as milk traders, animal health workers, artificial insemination service providers and extension staff.

The East Africa Dairy Development Project, run by Heifer International in partnership with ILRI, TechnoServe, the World AgroForestry Centre and the African Breeders Services Total Cattle Management, aims to increase the incomes of 136,000 dairy farmers in Kenya, Tanzania and Uganda. It focuses on producers and their organizations, supporting them to establish "hubs" that link the producer organizations with various service providers and other value chain actors. The project works with 52 hubs across the three countries (see [www.heifer.org/eadd/](http://www.heifer.org/eadd/)): eight in Kenya, nine in Tanzania and 35 in Uganda. One of the project objectives is to increase women's participation in producers' organizations and the rest of the dairy value chain.

Here we present two aspects of the project's work. The first is an exploratory study of the roles of women in nodes of the dairy value chain beyond production. The second is an analysis of the inclusion of women and youth in producer organizations in relation to their sustainability. Both cases illustrate that women are largely missing in the milk value chain, beyond being suppliers at the production node, and they have limited opportunities to gain a voice in the leadership of the producer organizations.

## **Women beyond production in the value chain**

Much research on the dairy value chain focuses on the first nodes of the chain: production and producer organizations. We wanted to look beyond this to explore the extent of women's participation at other nodes of the dairy value chain. To do this we interviewed key informants at four locations: two in Kenya and two in Uganda. Unlike the producers' organization assessment described below, this study focused specifically on women's participation in the chain. At each location we interviewed as many different types of value chain actors as possible: hub managers, milk transporters and traders, animal health assistants, agroveter attendants, artificial insemination service providers and community facilitators. The study was exploratory and the sample size small. We interviewed 39 people in all: 30 men and nine women (eight of them younger than 35 years). We discovered that very few women were doing this type of work: we interviewed all those working in the jobs listed above at the four locations.

We asked the informants of each type about their work, how easy it was for them to do, the level of skills they needed, how much time they spent on various activities, the start-up costs, and the problems they faced.

All four of the **hub managers** we interviewed were men. The job requires a university or college education, and relatively few women with such qualifications are prepared to work in remote rural areas. Plus, the managers are appointed by the male-dominated boards of the producers' organizations.

There were no women among the **insemination providers** or **animal health workers** we interviewed. These technical professions are traditionally reserved for men, even though anecdotal evidence suggests that women may be better at the job. Inseminators, for example have to take care of their equipment and respect protocols, and women are often regarded as being more diligent and paying more attention to detail than men. But there seems to be something of a taboo against having a woman make an animal pregnant.

Three of the four **agrovet shop staff** we interviewed were women. Women, and especially young women, quite often work as shop assistants in East Africa: the shop is a "safe space" for women, and there are regular working hours that make it possible for them to juggle their work and family commitments.

Two of the seven **milk traders** were women. Both worked in shops; neither went out to buy milk from producers. The women did not have a bicycle or motorbike they could use to collect the milk, and it is less usual for women than for men to go from house to house (perhaps related to the "safe space" issue above).

Because of the small number of value chain actors interviewed, we need to be careful about making broad recommendations, however, the conclusion still holds: there are few women who are able to make a living in dairy value chains, with the apparent exception of agrovet shops. We need to better understand the reasons for this low participation of women. Overall, the underrepresentation of women seems to reflect social norms in terms of what is "acceptable work" for women and men. We also detect some gender-based constraints, especially related to mobility and access to education and information. Some of these may be specific to the dairy sector, but others reflect the social context and may be common for women working in other value chains.

To follow-up on our exploratory study, one way to dig deeper would be to interview women who trade in other perishable commodities, such as vegetables, or who do similar but non-dairy-related jobs. This would help us understand the constraints faced by women who might otherwise consider working in the dairying sector. Are there reasons that women might choose to trade in vegetables rather than in milk? Is it related to profitability, access to the products, means of transport, or other constraints that women may face? A quantitative analysis of women's participation in value chain activities other than production would suggest ways to support women to do such types of work. A study of women going "against the grain" and working in non-typical roles or nodes in a value chain might shed light on the triggers for women to enter new spaces.

**Table 19.1 Dimensions and sub-dimensions of the Producers' Organizations Sustainability Assessment tool**

Financial health	Engagement with output market	Effective and transparent leadership and management
<ul style="list-style-type: none"> <li>• Profitability</li> <li>• Liquidity</li> <li>• Capital structure</li> </ul>	<ul style="list-style-type: none"> <li>• Suppliers</li> <li>• Milk quality</li> <li>• Market reliability</li> </ul>	<ul style="list-style-type: none"> <li>• Representation and participation</li> <li>• Effective supervision and control</li> <li>• Effective management</li> </ul>
Access to dairy inputs and services	Relationship with external environment	Member loyalty
<ul style="list-style-type: none"> <li>• Dairy feeds and feeding</li> <li>• Genetics</li> <li>• Herd health</li> <li>• Extension structure</li> <li>• Financial services</li> </ul>	<ul style="list-style-type: none"> <li>• Partnership with actors</li> <li>• Corporate social responsibility</li> <li>• Risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Patronage</li> <li>• Member investment</li> <li>• Ownership</li> <li>• Member loyalty programmes</li> </ul>

**Table 19.2 Indicators used to derive the gender score**

Dimension	Indicator	Maximum score
Engagement with output market	Proportion of females suppliers	2
Leadership and management	Proportion of women in boards of directors	2
	Proportion of youth in boards of directors	2
Member loyalty	Proportion of fully paid up shareholders who are women	1
	Proportion of fully paid up shareholders who are youth	1
	Number of women offering themselves per elective post	1
<b>Total</b>		<b>9</b>

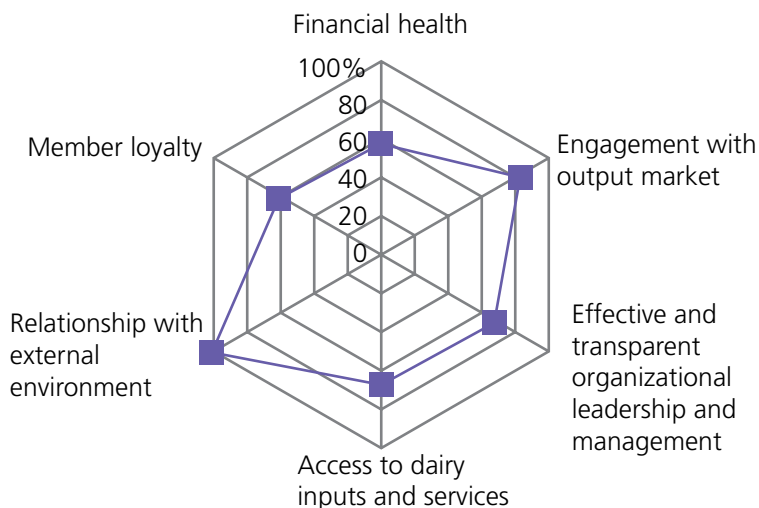


Figure 19.2 The Producers' Organizations Sustainability Assessment measures organizations along six dimensions

### Sustainability of producers' organizations

Dairy producers' organizations buy milk from their members, bulk it, in some cases chill it, and sell it to dairy processors or milk traders. They also provide a range of inputs and services. Some sell feed and provide animal health and insemination services directly, or they arrange for their members to get these services on a credit basis from commercial providers. Women are active members of such organizations in Kenya, Uganda and Tanzania. Our second study focuses on the sustainability of these organizations vis-à-vis inclusive representation in management and participation.

The project partners have developed a "Producers' Organizations Sustainability Assessment" tool to assess these organizations' progress towards sustainability. This considers an organization to be sustainable if it can adjust its business practices to respond to external shocks (such as a changing milk price) and internal shocks (such as corruption among the leadership). The tool uses two types of evidence: records, such as the financial books, minutes of board meetings and membership lists, and a focus-group discussion with the members of the board, the management and selected members of the producer organization. We undertake the assessment every year to measure progress over time and to identify areas for improvement, either by the organization on its own or with support from the project.

The measures the six dimensions shown in Table 19.1. The assessment produces a score on each dimension: the higher the score, the more sustainable the organization. The more important the indicator, the more weight it is given;

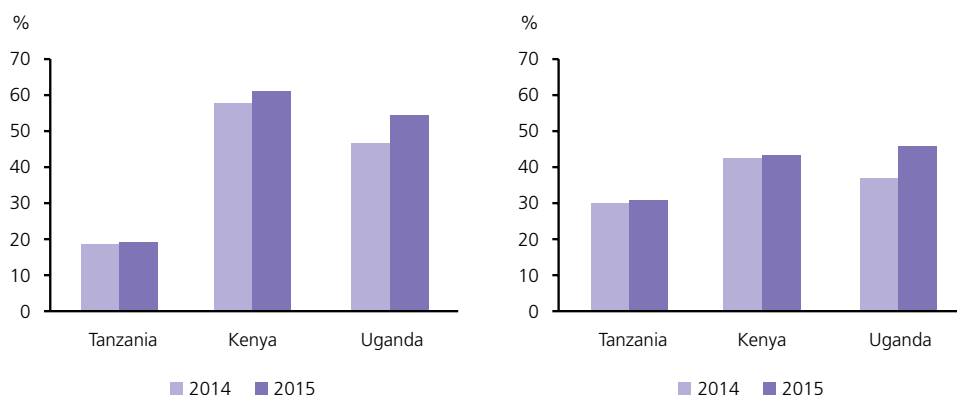


Figure 19.3 Overall sustainability scores (left) and gender scores (right): Change between 2014 and 2015

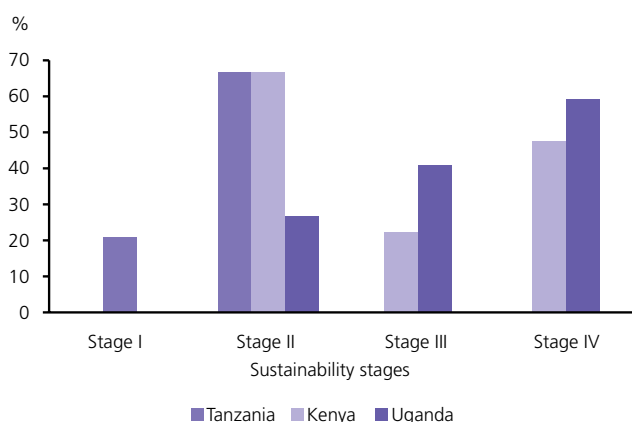


Figure 19.4 Inclusion score distribution across sustainability stages

for details see Baltenweck (2014). Summing across all six dimensions, the maximum score is 100%.

We can divide organizations according to their sustainability scores into five groups or stages. Those with 0–20% are in Stage I: they may have an interim board, have not held elections, have no staff, etc. Such organizations are typically small and just starting out. At the other end of the scale, with a score above 80%, a Stage V organization has a well-established board with regular, documented meetings; it is profitable and the financial management is in order; it is able to handle fluctuations in milk supply, and so on. Organizations scoring more than 60% (in Stages IV and V) are regarded as on the way to independence. The project progressively reduces the amount of support it gives, and provides a

different type of assistance. For example, instead of arranging an audit, it puts the organization in touch with an auditor so it can plan one itself.

### *A gender and youth lens*

Inclusiveness is important for organizational sustainability for three reasons. First, having both women and men (and youth) in the management and leadership maximizes the skills available. Second, it is in the organization's interests for women and young people to sell their milk to the organization, and not to someone else (Omondi et al. 2014). Third, committed, active young members are the future of the organization: they will manage it in later years. Therefore, cultivating loyalty and active participation by women and young members is important to ensure sustainability.

While the assessment tool was not designed to focus on gender and youth dimensions of sustainability, three of the six dimensions include questions that have gender and youth aspects (Table 19.2). Altogether, these questions account for about 10% of the total sustainability score. We extracted these indicators and combined them into a separate "inclusion score", also expressed as a percentage. While women and youth face different constraints, they are both currently underrepresented in the membership and among the leaders of the producers' organizations.

Figure 19.3 shows some results for the 52 organizations in the three countries. The **overall sustainability scores** (left-hand graph) for Tanzania are low because the project has only just started working in this country. Organizations in Kenya and Uganda have higher scores because the project had been working with them for several years, and Kenya has a more advanced dairy industry. Organizations in Kenya and Tanzania made little progress from 2014 to 2015, while those in Uganda improved.

The **inclusion scores** (right-hand graph) in the three countries are lower than the overall sustainability scores, but the patterns are similar. The trends are relatively flat for Kenya and Tanzania while the organizations in Uganda made big progress: from 38% to 46%. This is encouraging because it reflects improvements across a large proportion of the 35 organizations in this country.

The inclusion score is somewhat biased by the types of questions asked and the weights assigned to them. Inclusion of women and youth in the board accounts for 4 of the 9 points in the gender scale, which may overstate the importance of this aspect for gender equity in the organizations. Moreover, the score is very sensitive to the inclusion of women and youth: if either men or women make up more than two-thirds of the board members, the organization gets a score of 0; a more gender-balanced board gives a score of 2. There is no intermediate score of 1 that would recognize progress toward gender balance. On the other hand, the organizations are required by law to meet the gender-balance rule; not meeting the requirement is not only bad management choice, it is also against the law.

Figure 19.4 shows the inclusion scores for the 52 organizations, grouped according to their overall sustainability scores: Stage I = 0–20%, Stage II = 20–40%, etc. The high inclusion levels for Stage II are very surprising, but they are based on a very small sample – only three organizations – so may not be representative. This result aside, the inclusion scores generally improve as organizations progress from one stage to the next. Moreover, the inclusion scores are relatively well-aligned with the sustainability scores: organizations that have reached Stage IV in terms of sustainability have inclusion scores only slightly below 60%, the threshold for the overall score of this sustainability stage.

### *Getting to the right weight*

The Producers' Organizations Sustainability Assessment tool was not designed to measure gender dimensions specifically, and we see that excluding such dimensions from the assessment is likely to hide important aspects of their sustainability related to women and youth inclusion. The tool is also descriptive rather than explanatory: it measures certain aspects of organizations but does not seek the reasons behind these.

However, the tool does show that the organizations are making progress towards gender equity. To get a more complete picture, the inclusion score should be revised: the weighting of current criteria could be modified and additional criteria included, such as the percentage of women who purchase inputs and services from the organization and who use its credit facilities.

Those who use the tool to assess an organization should present their findings to its members. This presentation normally covers the six dimensions covered by the tool. It would be useful to present the inclusion score as well.

Most of the producers' organizations score well in terms of supporting women to become suppliers, but they should do more to develop women and youth as leaders. The East Africa Dairy Development Project and other initiatives can help hubs to become more sustainable both economically and socially by promoting women and youth participation.

### **Implications from both stories**

Our findings provide the broader project team and the producers' organizations themselves with a basis for discussion on gender dynamics in the dairy sector: are the current levels of women's participation in the value chain and their integration in running and managing the organizations optimal and sustainable? The Producers' Organizations Sustainability Assessment gives us a first understanding of the level of participation and representation of women and youth in producers' organizations in Kenya, Uganda and Tanzania. The inclusion scores broadly match the overall sustainability scores, showing that progress toward inclusion is at par with the overall progress toward self-

sustaining organizations, even though few women and youth are in leadership position. On the other hand, few women are involved beyond production – as hub managers, traders, and input suppliers and service providers. Development partners need to find ways to get women and youth more actively involved in dairy value chains. That means looking at the social norms that constrain women from taking such positions.



*“With some of these coached projects we really see how the interest of integrating gender in our work has really helped the different centres to come together. This is a special topic to which we can all relate, whether it is an economist like me working on value chains, or breeders, geneticists, feed specialists – we are all working with human subjects, men and women, and therefore gender brings us together.”*



<https://youtu.be/Agf6cLSdsAM>

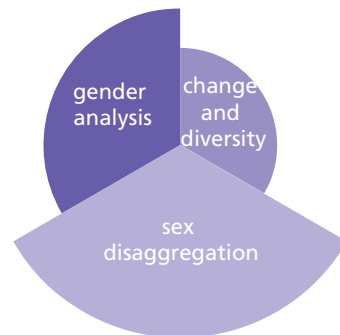
**Isabelle Baltenweck**

*Program leader, livelihoods, gender and impact program,  
ILRI*

## Situating the research

*This research links gender dimensions to producer-organization sustainability by looking at how several elements of inclusion affect this sustainability. It also looks at the poor representation of women in nodes beyond production in the dairy chain, with some examples of exceptions. Both parts contribute to the first gender-integrated research question: How does gender (in-)equality affect the technological and institutional solutions that are designed, delivered and studied?*

- The first part of the study collects data **from** women and men working at different nodes in the dairy value chain about their own positions, skills, time and the constraints that they face. The second part is a document review and facilitated discussion, with a gender lens. It focuses on inclusion. Gender analysis in this chapter focuses



*on the **participation** and **representation** of women in the chain, and the **gender-based constraints** for women and men working in different positions in the chain. The second part of the chapter looks at the **inclusion** of women and youth in dairy hubs as an aspect of sustainability.*

- *This study does not talk about change but collects exploratory data on an observed lack of female participation in the chains beyond the production node. It looks at the link between sustainability and inclusion of dairy-producer organizations so as to contribute to the development of more gender-responsive hub approaches. In terms of difference and diversity, the tool looks at both women and youth in relation to inclusion.*

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