

Quantitative and qualitative tools: friends or foes?

Alessandra Galiè (a.galie@cgiar.org)
International Livestock Research Institute

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Our mixed methods study

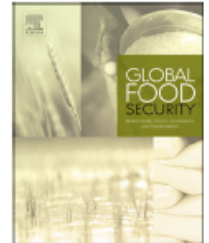
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Women's empowerment, food security and nutrition of pastoral communities in Tanzania

Alessandra Galiè^{a,*}, Nils Teufel^a, Amy Webb Girard^c, Isabelle Baltenweck^a,
Paula Dominguez-Salas^{a,b}, Mindy J. Price^d, Rebecca Jones^c, Ben Lukuyu^a, Luke Korir^a,
IlanaG. Raskind^c, Kristie Smith^b, Kathryn M. Yount^e

^a International Livestock Research Institute, Kenya

^b London School of Hygiene and Tropical Medicine, UK

^c Department of Behavioral Sciences & Health Education, Emory University, USA

^d Environmental Science, Policy and Management, University of California Berkeley, USA

^e Hubert Department of Global Health and Department of Sociology, Emory University, USA



Study methodology overview

Mixed-methods study on the relationship between women's empowerment-livestock-household food/nutrition security in two regions of Tanzania.

Quantitative: 3 domains of women's empowerment scored and matched to hh food insecurity access scale.

Qualitative: FGDs on gender dynamics affecting the women's empowerment – livestock - hh food/nutrition security nexus.

Role of qualitative analysis in a nutshell

Goals:

1. Generate rich info about a complex situation
2. Observe and explain - within context - subtle events
3. Gain experience to challenge assumptions
4. Provide novel understandings

How do you think...? Depth of investigation...

Why in your opinion...?

Role of quantitative analysis in a nutshell

Goals:

1. Test hypothesis “women’s empowerment affects positively hh food and nutrition security in the selected sites”.
2. Measure how relevant the phenomenon is
3. Understand which domain of empowerment affect food and nutrition security

In how many cases...

What is the likelihood...

Which domain is more often associated...

Quant and qual: complementary approaches for completeness of data

Iterative steps to combine quant and qual:

1. Qualitative, exploratory study: e.g. what are the local perceptions of empowerment?
2. Quantitative study: how many women are empowered?
3. Qualitative: why do livestock women associate empowerment to ...?
4. Quantitative: What is the contribution of empowerment determinants?



When qual and quant are friends...

“Both the quantitative and qualitative analysis showed a significant **positive association** between women's empowerment domains and household nutrition security.”

Quantitative analysis: “36% of women and 25% of children achieved diets of adequate diversity in the 24 h preceding the survey -which is one indicator of nutrition security.”

Qualitative analysis: “Deciding when to sell or purchase a cow conferred on women more control over the milk and allowed them to purchase other nutrient-dense foods for children.....”

Overview of the findings from each study component

Women's empowerment and nutrition			
Study component	Domain of empowerment	Type of association	Nutrition and food security
Quantitative study (WELI + FANTA)	Women's access to and control over assets	++	Diet diversity of women and children
	Women's control to and use of income	+	
	Women's workload and control over time	/	
Nutrition FGDs	Women's access to and control over assets	+	Improved household nutrition
	Women's control to and use of income (through larger milk quantities produced)	+	
	Women's workload and control over time	/	

++ strong positive association

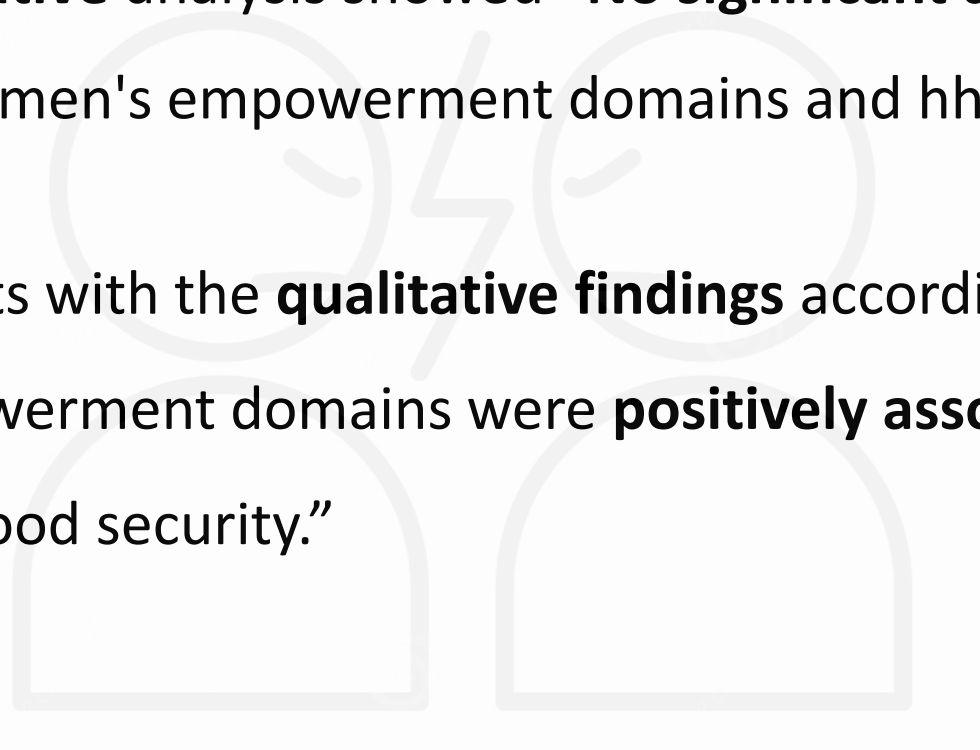
+ positive association

/ no association

And what if they are foes?

The **quantitative** analysis showed “**No significant associations** between women's empowerment domains and hh food security”.

This contrasts with the **qualitative findings** according to which “All three empowerment domains were **positively associated** with household food security.”



Overview of the findings from each study component - continued

Women's empowerment and food security			
Study component	Domain of empowerment	Type of association	Nutrition and food security
Quantitative study (WELI + FANTA)	Women's access to and control over assets	/	Household food security
	Women's control to and use of income	/	
	Women's workload and control over time	/	
Food security FGDs	Women's access to and control over assets (i.e. land and livestock)	+	
	Women's control to and use of income (from small quantities of milk only)	+	
	Women's workload and control over time (time to engage in revenue-generating activities)	+	

++ strong positive association

+ positive association

/ no association

How to reconcile different quant and qual findings?

“Our findings across methods were, at times, contradictory:

we engaged with the discrepancy

rather than, for example, resolving it by favouring the reliability
of one method over the other

**We used it to add more depth to the analysis, to improve our
tools, and to identify future areas of research”**



Using contradictory findings: methodology insights

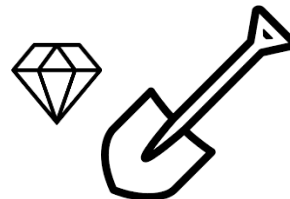
We explained the discrepancy among findings from a methodology perspective:

- Revisited the methodology to see if it was faulty:
 - found different definitions, domains and indicators adopted by the two studies
 - Extensive vs intensive systems?!
- Discussed boundaries/limitations/contributions of each method

Using contradictory findings: new content insights

We analyzed the findings (content) again:

- Looked into different interpretations:
 - ‘aspirational’ versus ‘actual’ gender roles in guaranteeing food and nutrition security
- Dug for missed insights:
 - ‘nutrition security’ is associated to women and ‘food security’ to men...a distinction that emerged in the qual study only...



Using contradictory findings: recommendations

- Dug deeper in our findings
- Looked for missing insights
- Re-analyzed data based on different respondent typologies
- Questioned and strengthened our methodology
- Highlighted research gaps

...we engaged in the discrepancy to improve our study
...and built a stronger team in the process

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Patron: Professor Peter C Doherty AC, FAA, FRS

Animal scientist, Nobel Prize Laureate for Physiology or Medicine–1996

Box 30709, Nairobi 00100 Kenya
Phone +254 20 422 3000
Fax +254 20 422 3001
Email ilri-kenya@cgiar.org

ilri.org
better lives through livestock
ILRI is a CGIAR research centre

Box 5689, Addis Ababa, Ethiopia
Phone +251 11 617 2000
Fax +251 11 667 6923
Email ilri-ethiopia@cgiar.org

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