

A different Gender integration in livestock and fish research kettle of fish?

RHIANNON PYBURN AND ANOUKA VAN EERDEWIJK, EDITORS



RESEARCH
PROGRAM ON
Livestock and Fish



Royal Tropical Institute

CGIAR Research Program on Livestock and Fish

<http://livestockfish.cgiar.org>

Royal Tropical Institute (KIT)

PO Box 95001, 1090 HA Amsterdam, The Netherlands, www.kit.nl

Writershop facilitation and content editing

Rhiannon Pyburn and Anouka van Eerdewijk,
Royal Tropical Institute (KIT)

Film production and editing

Geneviève Audet-Bélanger, Royal Tropical
Institute (KIT)

Language editing and layout

Paul Mundy, www.mamud.com

Artwork

Nyotumba Bonaventure, nyotsz@yahoo.com

Cover design

Ad van Helmond, helmond@hetbadhuis.nl

Publishing and distribution

LM Publishers, Volendam, Netherlands, www.lmpublishers.nl

This publication or parts of it may be reproduced, stored in a retrieval system, or transmitted provided that copyright holders are duly acknowledged.



This publication is licensed for use under the Creative Commons Attribution 4.0 International Licence. To view this licence, visit <https://creativecommons.org/licenses/by/4.0>.

It can be downloaded for free from www.kit.nl and from <http://hdl.handle.net/10568/76684>

© 2016 CGIAR Research Program on Livestock and Fish and Royal Tropical Institute (KIT)

ISBN 978 94 6022 433 1

Correct citation

Pyburn, Rhiannon, and Anouka van Eerdewijk (editors). 2016. *A different kettle of fish? Gender integration in livestock and fish research*. LM Publishers, Volendam.

13 THE SILENT CATTLE BREEDERS IN CENTRAL NICARAGUA

Maria Alejandra Mora Benard,¹ Martin Alejandro Mena Urbina,¹ Roldan Corrales,² Rein van Der Hoek¹ and Julie M. Ojango³

¹ International Center for Tropical Agriculture (CIAT), ² Universidad Nacional Agraria, Nicaragua, ³ International Livestock Research Institute (ILRI)

Organizations

CIAT, ILRI, UNA, BOKU

Species



Methods: Participatory rural appraisal, key informant interviews, gender-responsive baseline household survey using a random sample of farmers (both men and women); selected farmer groups document and provide regular updates on their production and management over several years; focus group discussions

Summary: There are breeders in dual purpose cattle systems of Nicaragua who quietly influence the genetic status of the cattle within the herds. How can researchers hear and respond to the voice of silence?

Locations



“WHEN YOUR COW is restless and lets other cows in the herd mount her, how quickly should you call the artificial inseminator?”

The farmer who asked this question was serving lunch to a team of national and international scientists running a genetic improvement project led by CIAT. They were holding a training course for farmers on cattle breeding at her home. The course was being held there because her husband was a member of the local dairy cooperative: she was not attending the training herself. In fact, all the course participants were men.

The woman was not a member of the cooperative, and her neighbours did not regard her as a cattle producer. But she knew just as much about cattle breeding and management as her husband, and wanted to learn more: she had silently been listening in on the discussions while she prepared refreshments

in the kitchen. She had a lot of questions – but did not feel at liberty to join the discussions or air her concerns.

She was not alone. When men in Nicaragua gather to talk and decide about cattle, women often listen in the background and engage in quiet discussions among themselves and with members of their family. The cattle may belong to the couple jointly, but women's contributions go unrecognized, even though they dedicate a lot of time to the cattle and know a lot about them.

Cattle in the Nicaragua economy

Livestock are the most important type of farming activity in Nicaragua, contributing 45% of the country's agricultural GDP (IFAD, 2015). The most important kind of animals are dual-purpose (dairy and beef) cattle, which are raised on small and medium-scale mixed farms. Nicaragua has about 4.14 million cattle and nearly 140,000 cattle raisers, who produce milk and sell off the male calves at weaning. Larger farmers or feedlots buy these calves to fatten them and produce beef. Milk productivity is low, at only 3–5 kg per animal per day. That is mainly a result of the type of animals reared and inappropriate management practices (Holmann et al. 2014). Various projects and government efforts have promoted artificial insemination to improve the breeds, but they have had limited impact. At the same time, information on the benefits of artificial insemination and its possible impacts on cattle production is scanty.

An opportunity for change

The Genetics Project, funded by the Austrian Development Agency (ADA), is a collaboration between ILRI, CIAT and the National Agrarian University (UNA). It aims to increase the productivity of dual-purpose cattle in Nicaragua using carefully targeted breeding interventions. Launched in 2013, the project works in Camoapa and Matiguás, two cattle-raising municipalities in the central part of the country. We seek to identify and address the preferences, concerns and needs of both women and men on cattle breeding, management and improvement.

We used participatory rural appraisal techniques to understand the general environment for dual-purpose cattle production, and key-informant interviews to identify actors and primary stakeholders in the milk and beef value chains. We carried out a gender-responsive baseline household survey



using a random sample of farmers (both men and women). The baseline revealed the households' socio-economic characteristics and their current cattle production and management practices. We then selected farmer groups and asked them to document and provide regular updates on their production and management over several years.

After the baseline, we organized a series of focus-group discussions with a group of farmers in each municipality. We invited both men and women, but only the men turned up. We then organized separate groups for women to make sure we heard their opinions.

During the discussions, we presented the findings of the baseline and asked the farmers to check the information was correct. We used the opportunity to answer their questions about cattle breeding and management. We asked them what characteristics they liked in animals, what management practices worked best, and how they might increase their output.

We will use this information and the findings from the regular updates to identify the best-bet ways to improve the genetic potential of the animals, increase their productivity, and enhance the incomes of the cattle raisers.

Breeding practices

The farmers generally like the mixed breeds that they raise. They especially like animals with brown coats, even though they do not fetch a higher price. They say that animals with some Brahman blood can graze on natural pastures, are not stressed by high humidity, and are easy to walk to distant watering points. But too much Brahman blood means lower milk yields.

Crossbreeding with a more productive milk line is important for farmers. But with which breed? The Brown Swiss is desirable – it has the right colour, and when crossed with the Brahman produces good beef calves. They know that Holsteins are the highest milk producers worldwide. Jerseys are also appealing, but their small size results in smaller calves that fetch a lower price when sold.












How to get the best sires for their herds? The farmers say they can get artificial insemination as long as they pay for it, but they have to watch the cows carefully for signs of oestrus in order for the insemination to be successful. They think that a bull, or *toro*, is definitely the most efficient way to get cows pregnant, and when *toros* are used, they do not have to pay for serving their cows. If a farmer does not have his own bull, he can always borrow one from neighbours or family.

As the main owners of the cattle, the men feel it is their responsibility to find the right bull for the herd. It is also their responsibility to decide how many seasons to use a particular bull, and what happens to the calves. The more calves that are born, the more milk that is produced and the more young males that can be sold for fattening.

Women are less involved in decisions to improve the animals’ genetics. This is because women are not seen as being as knowledgeable about cattle as men, or as interested in them. Yet, the formal and informal discussions we have had with women throughout the project have shown that they have similar levels of interest and knowledge as their husbands or sons. They could help make better decisions on breeds and breeding techniques.

The cost of silence

The men are generally involved in all cattle-related activities, but the women do a lot of the work when it comes to animal care, cleaning the night enclosures, and washing the milking equipment (Figure 13.1). Both the men and women put extra feed in the fields, particularly during the dry season when pasture is scarce. Both do the milking, but it is the women who make artisanal cheese, called *cujada*. The women also do all the housework, cooking, washing and other family chores.

Type of work	Men	Women	Family
Planting and pasture management			
Cattle management (sanitary, reproductive)			
Production management (feeding and pasture)			
Milking			
Product management (hygiene, cleaning, handling equipment)			
Care of people and assets, administering family resources			

Adapted from Vandershaeghye et al, 2013

Figure 13.1 Gender roles in different cattle-related activities in Nicaragua



Because most small farms have only a few cattle, the women know the behaviour and preferences of each one. During the day, they check up on the animals to see if they are content: it is not restless, it grazes amiably and takes time to ruminate on the feed that it consumes. Women have learned with time and practice that happy cows produce quality milk and good calves.

The men learned about artificial insemination at one of the many training courses they were invited to attend. They were eager to try it out. The women, who keep a close eye on the cows, have to alert their husbands when a cow comes into heat. All too often, the husband does not send for the inseminator quickly enough. The insemination then fails, and the cows do not become pregnant. That is a waste of time and money; it is much easier to find the nearest bull to mate with the cow.

The woman described in the introduction to this story learned about the benefits of artificial insemination by listening in on a training course, even though she was not invited to attend. She realized that the costs of the insemination service were actually very small compared to the benefits of the more productive offspring that would result from a successful insemination. The women are as eager as the men to find ways to benefit from the insemination service. But their silence, influenced by household power relations, and their exclusion from the training, has a cost. This cost has two dimensions: women have little access to the information and technology, and that reduces the likelihood of a successful insemination.

Why are women silent?

So why do the women tend to keep quiet when men are around? There are many reasons. Women do most of their work in or near the house, and that is where they spend most of their time. Men, on the other hand, tend to do things that take them away from home for longer periods. Women's work with cattle is often not seen as "real" work; it is mixed with homecare, so is viewed as an extension of their household chores (IICA 1996, Perez and Farah 1998). Women are not regarded or treated as farmers, so they do not have nearly as many chances to improve their knowledge or build their confidence to speak up and express their ideas.

This "not a farmer" perception has excluded them from public spaces where training and discussions to build knowledge usually take place. Many projects, and the technicians employed by cooperatives, do not realize this is a problem and don't talk to the women or invite them to training courses or field visits (Flores, et al., 2011). Further, husbands may limit their wives' mobility and freedom to attend activities where other men may be present.

Despite this, women have come up with ways to learn and develop skills. They learn through everyday interaction with the animals; they get information second-hand from other men (their husbands, sons or fathers); and they challenge norms by going to trainings or by listening in the background.

How can research influence the sound of silence?

Through the genetics project, it was evident that although the farmers knew about breeding technologies, they did not use them: they did not understand enough about them. Women, who rarely spoke up in group meetings made choices on what to try out and what not to do when it came to animal management. In reality, the women were "silent breeders", who we need to talk to if we want to influence their decisions.

Unfortunately, women do not attend training courses away from their farms. We need to find other ways to reach them with information about breeding management. One possibility is to include offering separate training sessions for women on reproductive management and the use of artificial insemination. We also plan to present a set of options for men and women to improve their cattle's productivity. We will work with women's groups and with cooperatives to get their women members more involved in the project's activities. We will invite the wives and daughters of farmers who are already taking part in the project's work. We hope to come up with incentives or guidelines for dairy cooperatives and local organizations to increase the number of women and support them in their breeding work.



“Immediately we noticed that though the women were not present at the workshop, it didn’t mean that they were not curious to learn about the breeding and the use of different technologies. And it didn’t mean that the women didn’t want to use them. It’s just that they didn’t have the knowledge required.”



<https://youtu.be/tUw9uX6Rslw>

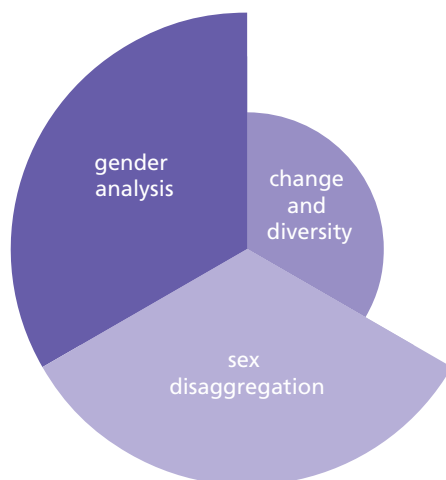
Julie Ojango

Scientist - animal breeding strategies, ILRI

Situating the research

This project contributes to the first gender-integrated research question in exploring how gender inequalities – like the lack of access to training for women, perceptions of women’s knowledge of cattle or as farmers – affect the breeding of dual-purpose cattle for increased productivity in Nicaragua.

- Preferences, concerns and needs of both women and men were collected using participatory rural appraisal techniques, key-informant interviews with women and men, a gender-responsive household survey based on a random sample of men and women, and separate women’s and men’s focus-group discussions.
- **Gendered knowledge** comes out quite strongly as women’s roles in cattle husbandry (**gender division of labour**) allow them to build up knowledge through practice, for example, as to when cows are ready for insemination. **Gendered preferences** for particular traits, cattle management and improvement are also analysed in the study. The study looked at **access to resources** (e.g., training, animal-health services) and related gender-based constraints, including mobility and gender norms that do not recognize women as farmers or as being knowledgeable about cattle. In terms of **intra-household decision-making**, the study looked at women and men’s involvement in decisions to improve animal genetics – both in terms of the big decisions related to finding the right bull for the herd,



as well as the daily choices women make on what to try out related to animal management.

- *The study paid attention to ongoing change and gender dynamics by examining the ways in which women navigate around obstructive gender norms in order to ensure access to knowledge on cattle management, for example, by attending or listening in to training directed towards men.*

References

- Flores, S., J. Barrera, J. Bastiaensen, A. Castro, S. Martínez, and J. Polvorosa. 2011. Las cadenas de lácteos y su interacción con la dinámica de género: La experiencia en Matiguás y Muy Muy, Nicaragua. Managua: Nitlapán.
- Holmann, F., N. Mtimet, A. Mora and R. Van der Hoek. 2014. Dual-purpose milk and beef value chain development in Nicaragua: Past trends, current status and likely future directions. Managua: Livestock & Fish.
- IFAD. 2015. Performance report, IFAD-funded portfolio in Nicaragua. IFAD. <http://operations.ifad.org/documents/654016/abcab28f-a0c8-4fc2-acff-3203683fea31>

Acknowledgements

We would like to thank the Austrian Development Agency (ADA) for funding the ADA-Genetics project in Nicaragua. We would also like to thank the men and women cattle farmers who have participated in the project's activities and have shared their knowledge and experiences with us. This project would not be possible without the partnership and support from dairy cooperatives and women's groups in Camoapa and Matiguás. Finally, we are very thankful to the coaching team for their support and guidance.