



Challenges of implementing modern milk quality standards in developing countries: case of Rwanda

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Objectives

- 1) Compile evidence on actors in the informal dairy sector related to milk quality and milk production.
- 2) Assess household milk consumption, consumption behavior and preferences.
- 3) Evaluate microbiological milk quality attributes.
- 4) Expand the systems dynamic model to include informal milk marketing.

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Introduction

- The informal channels dominate milk supply in Rwanda
- Little is known about actors, their linkages and governance in the chain
- First, a mapping was applied to identify structural and functional vulnerabilities in the informal milk chain and safety risks issues associated

Methods

- This study is still ongoing and there have been Covid-19 related delays
- Interviews were conducted in Kigali and Nyabihu in the form of focus group discussions and key informant interviews
- Thematic analysis was conducted to create visual diagrams linking various chain profiles in the value chain

The informal milk chain supply constitutes an important source of consumed milk.

Poor hygienic standards during storage and transport of milk may lead to milk spoilage and expose the consumer to risk.

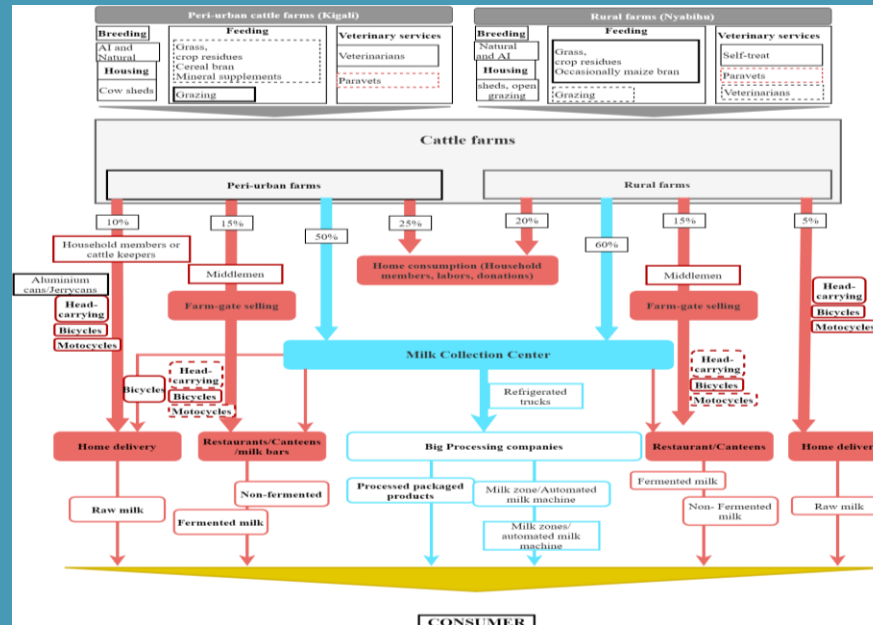


Fig. 1: Overview of Rwanda Milk value chain in the study area. Red color shows informal milk supply chains. Blue is for formal. Dotted lines are .

Results

These are preliminary findings

- Four chain profiles were identified:
 - Farm-gate selling
 - Household-centered consumption
 - Milk bars and restaurants
 - Customer's home delivery
- There are interlinkages between the formal and informal value chain supply
- Inadequate materials, inexistence of and lack of regulation and testing in the informal sector are main chain vulnerabilities.

Recommendations

- Characterize the informal-supplied consumer preferences and choices (Next study)
- Characterize physicochemical and microbiological quality attributes of milk circulating in informal supply chains (Next study)
- Use the dynamic system model to better characterize impacts of upgrade strategies

Research gaps or future opportunities

- Expand the study to the whole milk production zones in Rwanda