An assessment of forage production in dairy production systems in Central and Western regions in Uganda (A FEAST approach)

Kevin Maina¹, <u>Ben Lukuyu²</u>, Nils Teufel¹, Solomon Mwendia³ ¹International Livestock Research Institute (ILRI), Nairobi-Kenya, ²International Livestock Research Institute (ILRI), Kampala– Uganda ³Alliance Bioversity CIAT (ABC), Nairobi-Kenya Tropentag 2022, Hybrid conference, September 14-16 2022, Czech

Introduction

- . Sub-optimal feeding is a major constraints to the development of the dairy sector in Uganda
- . Feeding constitutes 65% of production cost in dairy production.
- . Therefore, there is need to improve availability of high-quality forages to increase livestock productivity

Objective

The study aimed to characterize dairy production systems and explore opportunities for enhancing forage production and improving access to high quality forage







Men (left) and Women (right) FEAST in focus group discussions in Central region of Uganda

Materials and methods

Study used a gendered feed assessment tool (FEAST) to understand the overall feeding system and thinking with farmers and local stakeholders about possible interventions. This involved:

- . Focus group discussion with men and women
- . Participatory identification of solutions
- . Individual household questionnaire with a few households
- . Data entry and analysis

Figure 3: Annual rainfall and dietary composition by production systems

There are strong seasonal effects on feed availability throughout the year Farmers use less concentrates in their feed rations



Figure 4: Dietary contribution of dry matter (DM) to the total diet by feed

Study area & sampling:

Study area was determined by grouping the dairy production systems in Uganda into three clusters (Figure 1):

- Improved intensive system:
 Mukono & Wakiso districts
 were selected
- Improved extensive system:
 Kiruhura & Mbarara districts
 were selected
- Traditional extensive systems:
 Kiboga district was selected.



Figure1: A Map showing study sites of Mbarara, Kiruhura, Kiboga, Wakiso, and Mukono districts

In each district, one sub-county was selected excepts in Mukono district where two sub-counties were selected due to its large size.

Two focused group discussions (FGDs) with a minimum of 16 men and women were conducted in each session in the month of February 2020.

Farmers were selected based on gender, land size and farming system. A total sam-

Grazing contributes to the highest share of dietary DM in all production systems. The use of cultivated fodder is emerging in all systems.

There is limited use of concentrate feeds and crop residues in all production systems

There is low adoption of improved forages due to low awareness of forage varieties, lack of knowledge on use of forages and agronomic practices, and lack of quality forage seed amongst farmers (Fig 4).

Table 1: Constraints identified by farmers in all study sites by gender

Main problem	Rankings: 1= Most important and 5= Least important									
	Mbarara district		Mukono district		Kiruhura district		Wakiso district		Kiboga district	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Diseases (high cost of drugs, exist- ence of counterfeits)	1	2	1	2	1	3	2	3	1	2
Lack /poor vet and extension services (knowledge gaps)	3	1	3	4	-	-	1	1	-	-
Low milk prices/ fluctuation of milk prices/limited access to mar-kets	4	4	-	-	4	2	-	-	3	5
Scarcity of feed/poor feed management practices	5	3	2	1	3	4	5	4	5	4
Poor quality breeds	-	-	4	5	-	-	-	-	-	_
Theft of animals	-	-	5	3	_	-	-	-	-	-
Water scarcity	-	-			-	-	-	-	4	1

Livestock diseases and feed scarcity stand out as important constraints to livestock production.

Farmers face the problem of producing feed and conservating feeds especially in wet seasons

ple size of 50 men and 48 women were interviewed

The FGDs were followed by in-depth individual interviews with 9 farmers per session

based on landholding categories developed during the discussions.

Knowledge gaps remain a major constraint to improving livestock productivity

Conclusions

 Strategies to train farmers on forage production, forage conservation, will enhance adoption and use of improved forages.

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