



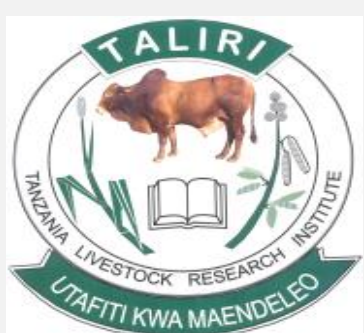
# Livestock Feeds Assessment in southern highlands in Tanzania

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## Introduction

- Livestock contributes significantly to Tanzania's agricultural GDP (Michael, et al. 2018) being the second country in Africa after Ethiopia in cattle population
- Amongst the costs involved in cattle production, the feeding component takes ~70% suggesting (Odero-Waitituh, 2017)
- Matching forages with the correct ecologies (Mwendia et al., 2017 and the social-cultural background of the communities involved livestock is key to increasing forage production.
- Three districts namely; Mufindi, Njombe, Rugwe in Tanzania southern highlands were selected in consultation with Tanzania Livestock Research Institute (TALIRI).
- In every district, two wards were randomly selected for the study.
- To collect data, procedure of the Feeds Assessment Tool (FEAST- <https://www.ilri.org/feast>) (Duncan et al., 2012) was implemented in each of the wards.
- The tool contains two major sections; Focused Group Discussions (FGD) and Individual Farmer interviews in the same sitting.
- However, the procedure was modified to capture responses for women and men separately hence the FGD was done separately for women and men.



## Objective

→ We set out to assess the farming context and role of livestock involvement in household incomes in three district in Tanzania highlands in order to inform subsequent forage interventions.

## Findings

Table 1. Relative percentage (%) livestock contribution to household incomes in Mufindi, Njombe and Rugwe districts of southern highland in Tanzania

Income category	Mufindi Igowole		Njombe Ibumila		Rugwe Kiwira	
	Women	Men	Women	Men	Women	Men
Livestock	31	18	45.6	51.7	36	34
Cropping	46	35	41.7	23.3	60	58
Business	9	18	6.7	22	4	-
Paid labor	7	15	1	2.8	-	-
Other	7	14	-	-	-	-
Remittance	-	-	5	-	-	8
Mtwango		Ikuna	Lufingo			
Income category	Women		Women	Men		
	Men					
Livestock	24	47	46.1	29.7	23	24
Cropping	56	46	33.9	46	68	76
Business	1	6	11.1	24.3	9	-
Paid labor	13	-	2.2	-	-	-
Remittance	3	-	-	-	-	-
Other	4	-	6.7	-	-	-

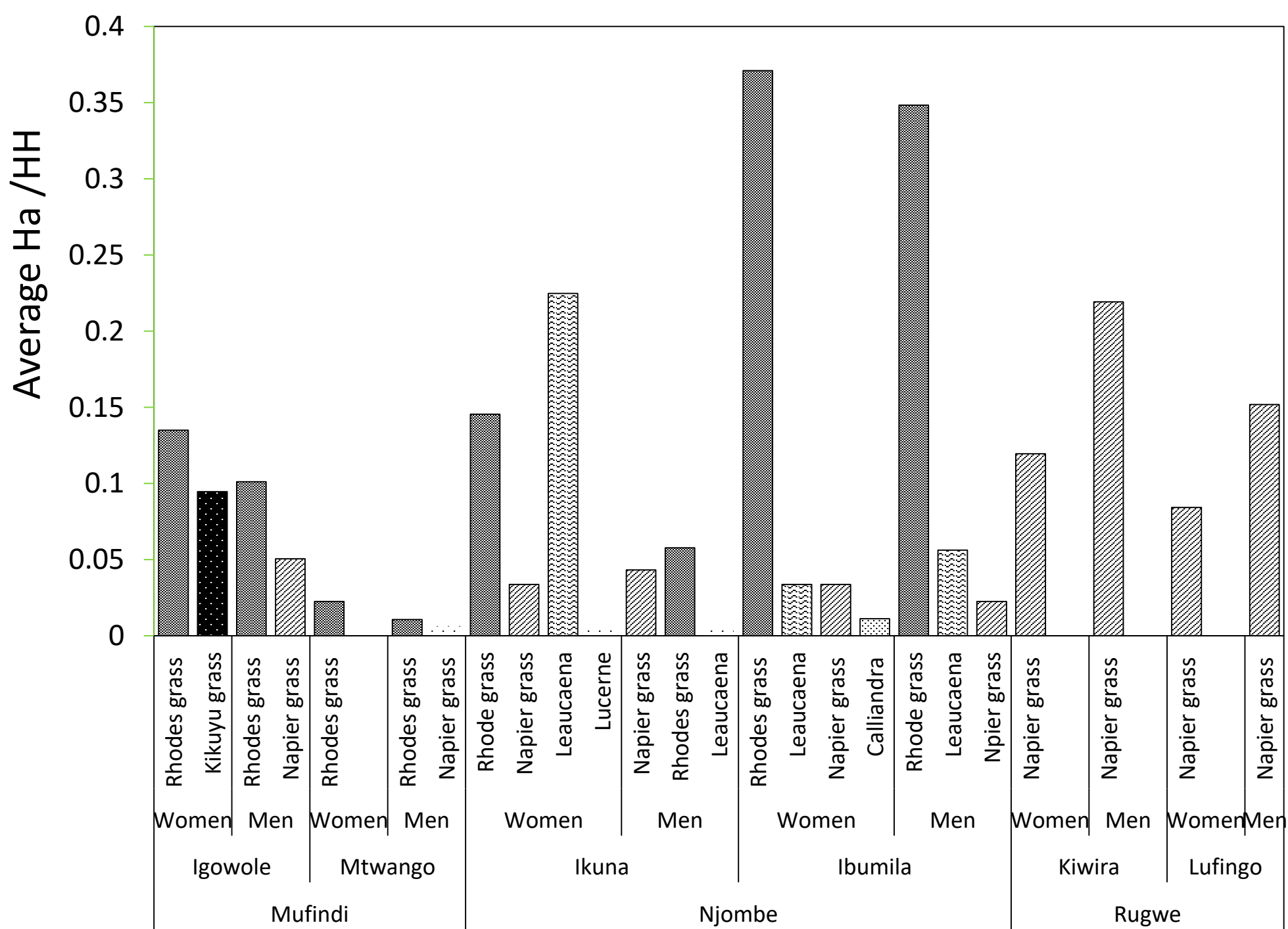


Figure 1. Mean cultivated fodder (Ha) in Mufindi, Njombe and Rugwe districts of Tanzania Southern highlands disintegrated by gender and in two Wards, in each District.

## ...findings

Table 2. FEAST tool suggested interventions, pooled for women, men and wards, for each district

District	Interventions
Mufindi	<ul style="list-style-type: none"><li>Supplementation with energy rich supplements</li><li>Grasses for cut and carry system – under rainfed</li><li>Irrigated fodder production</li><li>Supplementation using protein by products e.g.</li><li>Short duration/Annual fodder crops</li><li>Establishment of fodder trees and shrubs</li></ul>
Njombe	<ul style="list-style-type: none"><li>Irrigated fodder production simple way of overcoming feed scarcity in dry season</li><li>Establishment of improved forages for cut and carry system</li><li>Establish of short duration/annual fodder crops</li><li>Supplementation with energy-rich supplements</li><li>Supplementation with protein by-products supplements.</li></ul>
Rugwe	<ul style="list-style-type: none"><li>Irrigated fodder production – simple way of overcoming feed scarcity in dry season</li><li>Establishment of improved forages for cut and carry system</li><li>Establish of short duration/annual fodder crops</li><li>Supplementation with energy-rich supplements -</li><li>Supplementation with protein by-products supplements</li><li>Use of cereal by products.</li><li>Use of commercial balanced compounded feeds e.g. dairy meal</li></ul>

## Conclusions

- Livestock plays a significant role in the area of study, but inadequate feed availability in more than six months annually contribute to low livestock productivity.
- Farmers have not engaged fully in forage cultivation necessary to improve livestock productivity and this opportunity should be explored.
- Improving and promoting forage cultivation, through awareness, demonstration approaches and piloting involving farmers' would be desirable.

## References

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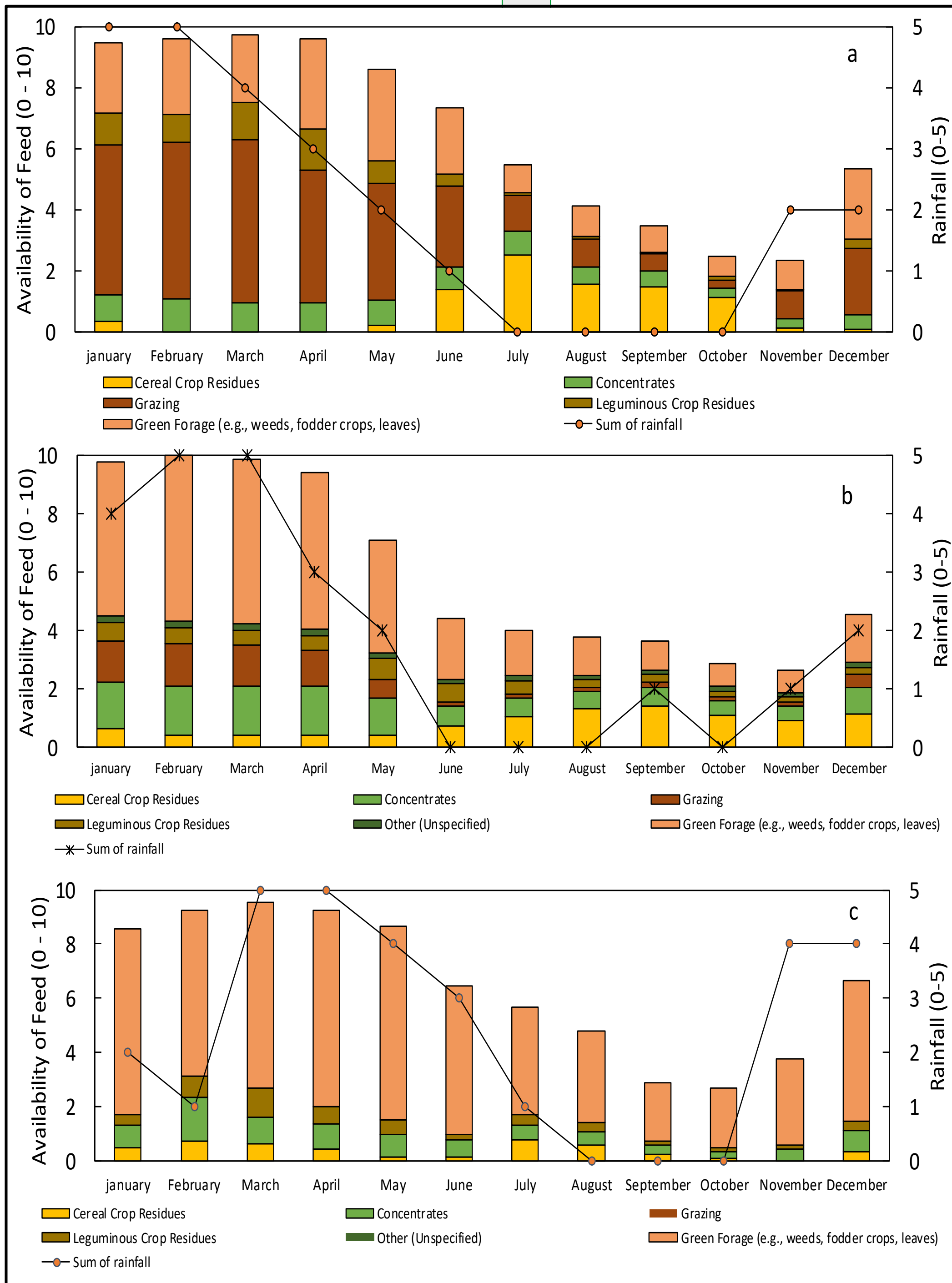


Figure 2. Feed availability in Mufindi (a), Njombe (b) and Rugwe (c) districts