



Tropentag, September 14-16, 2022, hybrid conference

“Can agroecological farming feed the world?
Farmers’ and academia’s views”

A G-FEAST approach to assess forage production in dairy production systems in western and central regions in Uganda

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Abstract

Livestock is an important part of smallholder livelihoods in mixed crop/livestock systems in East Africa and provides incomes and other livelihood opportunities. In Uganda, the dairy sub-sector contributes to more than 9% to the national GDP. Livestock production is characterised by sub-optimal feeding. Hence the need to improve the availability of high-quality feed all year-round. However, improving forage production is constrained by the production and distribution of quality forage seeds including vegetative splits. This study was conducted to assess feed and forage production and use, the roles of improved forages in livestock diets and potential for forage seed production in Uganda. This study was conducted in five districts covering improved intensive system, improved extensive system and traditional extensive system of Uganda. The Gendered Feed Assessment Tool (G-FEAST) was used to assess the livestock production systems. Findings showed that farmers in improved intensive systems had small land sizes of 0.75–3 ha, and practised cut and carry feeding system. Purchased feed, grazing, collected feed and cultivated fodder contributes 79% 10%, 10% and 1% respectively to the total dry matter intake. The improved extensive systems have large farm sizes of 1–65 ha with grazing on improved and fenced pastures is common. Grazing contributes 80% while cultivated fodder contributes 18% of total on-farm diets. Crop residues constitute about 1%. There are strong dairy cooperatives supporting milk marketing. The traditional extensive system has large farm sizes of 1–65 ha. Grazing on unimproved pastures, cultivated fodder, collected feeds, crop residues, and purchased feed contributes 67% 16%, 13%, 3%, and 1% respectively of the dry dietary matter. On gender issues, both men and women are actively involved in decision making on livestock and forages. Women are more involved in animal husbandry practices ensuring animals are fed and cows milked. Women are also involved in forage production and feeding at farm level underpinning the importance of involving both men and women in promoting improved forages.

Keywords: Forages, G-FEAST, livestock, seed system, Uganda