

Maziwa Zaidi (More Milk) in Tanzania

Increased Napier cultivation in Lushoto could increase milk production 103%

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Key messages

- Farmers in Lushoto underfeed their cattle, leading to low productivity
- Farmers are interested in cultivating Napier around the homestead to make forages easily accessible year-round
 - Such a scenario could increase milk production by 103% and household income by 88%
 - Fetching livestock feed currently consumes more than 30% of on-farm work
- However there is a risk of nutrient mining if Napier is not fertilized – a higher risk due to lower food self-sufficiency

Objectives and approach

- Inadequate quality and quantity of feed causes low livestock productivity. Improved forage technologies have been promoted in Tanzania for sustainable intensification
- However, we have insufficient information on impacts on household economics as well as the environment
- Methods included household surveys, milk and meat measurements, focus group discussions, bio-economic household modeling

Key results I

- Farmers fed on average only half of recommended feed quantities, and only one farmer provided drinking water. The diversity of feeds was high, pointing to opportunistic feeding (see figure 1)
- 31% of on-farm work used for livestock feeding, especially for fetching natural grasses
- Total average annual household income was only 618\$
- Farmers were most interested in increasing Napier cultivation around the homestead to provide year-round, easily available fodder

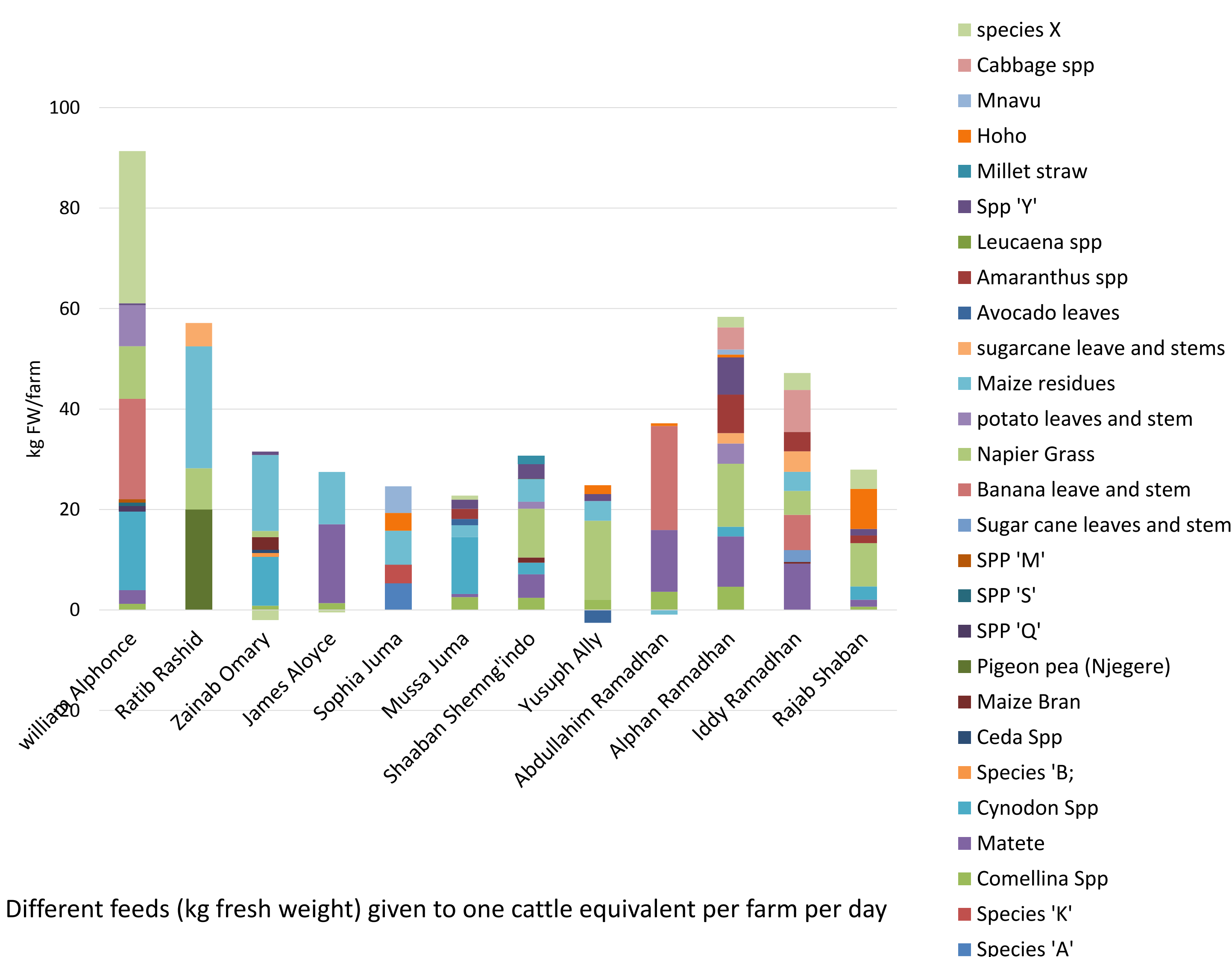


Figure 1: Different feeds (kg fresh weight) given to one cattle equivalent per farm per day



Twahilu (right) is member of the Mbuzi Innovation Platform. He feeds his three cattle with naturally occurring grasses as well as Napier and *Brachiaria* grasses and *Desmodium*. Pictures Georgina Smith/CIAT

Key results II

Increased Napier cultivation around the homestead could:

- Decrease labor demand by 3% - however low opportunity costs of labor will not favor adoption
- Increase milk production by 103%
- Increase gross total household income by 88%
- Aggravate nutrient mining if Napier is not fertilized;
- Decrease initial income due to long establishment period of forages in Lushoto
- Lead to higher risks due to lower food self-sufficiency

Opportunities to invest and scale

- Wide-scale training of extension officers for daily follow-up with farmers
- Administrative support to buffer risks for farmers in the transition period to forages
- Increase credit availability



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