Maziwa Zaidi (More Milk) in Tanzania

Increased Napier cultivation in Lushoto could increase milk production 103%

Birthe Paul (CIAT), Stijn Heemskerk (WUR), Julius Bwire (TALIRI), Beatus Nzogela (CIAT), Jeroen Groot (WUR)

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

Twahilu (right) is member of the Mbuzii 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 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

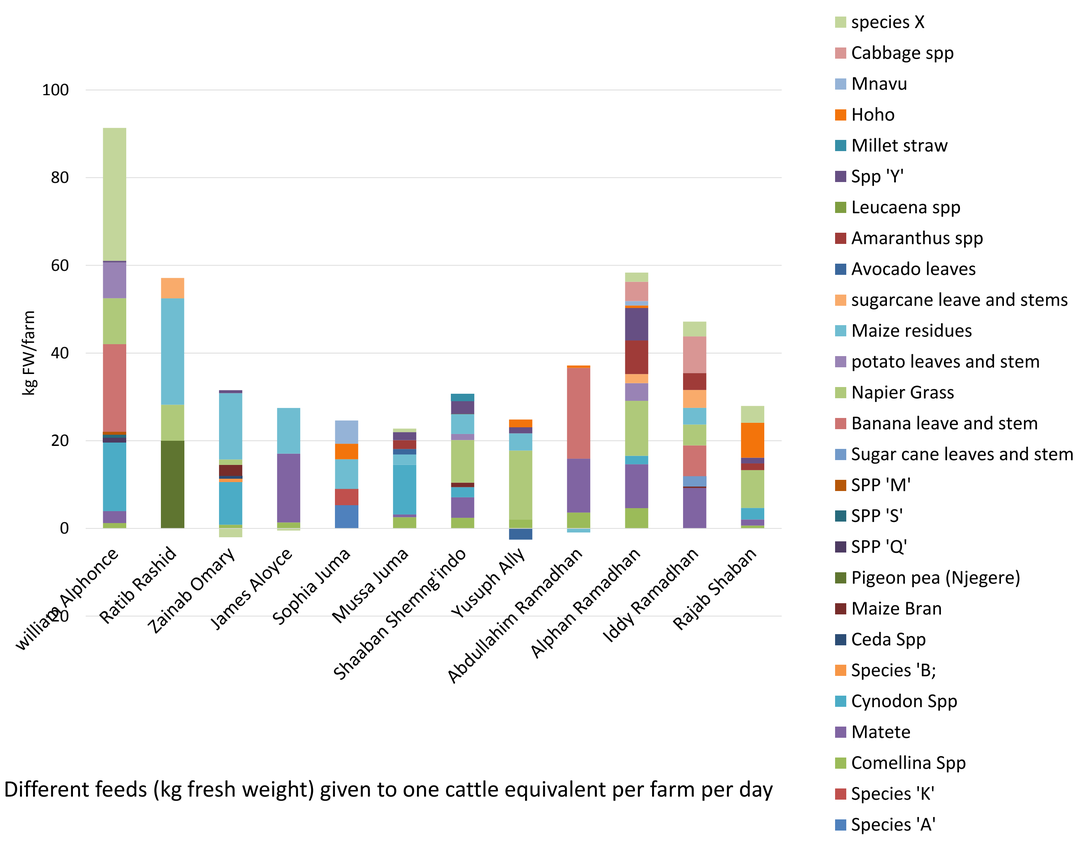

Figure 1: Different feeds (kg fresh weight) given to one cattle equivalent per farm per day

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

MAZIWA ZAIDI | More Milk in Tanzania (MoreMilkiT)

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