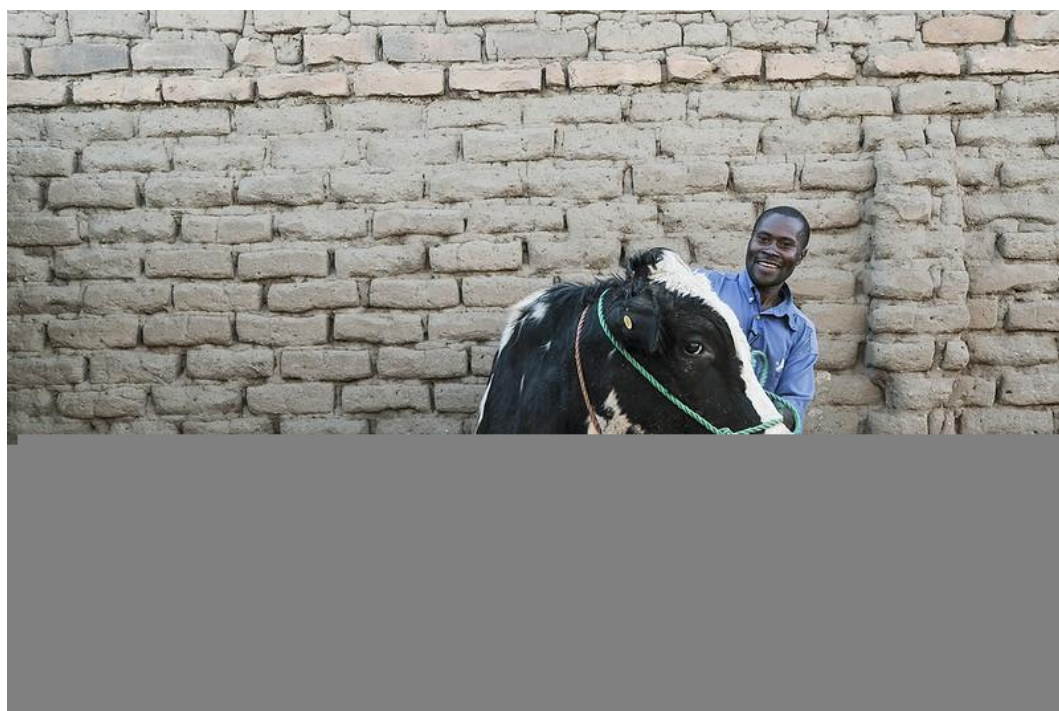


PUBLICATION

Improving dairy production in Tanzania



Themes

Populations

Productivity

Species

Cattle

Most milk in Tanzania is produced by cattle in low input, low yielding systems. Dairy production & household income can be increased by using higher yielding breeds and feeding better quality diets.

Contributors

LiveGAPS

LiveGAPS (CSIRO) have created a fact sheet summarising important findings

AGRICULTURE AND FOOD
LIVEGAPS



Improving dairy production in the southern highlands of Tanzania

Most milk in Tanzania is produced by cattle in low input, low yielding systems. Dairy production & household income can be increased by using higher yielding breeds and feeding better quality diets.

This factsheet uses production systems from Mbeya as an example of how milk yields and income from dairy production can be improved in the southern highlands.

Current production systems in Mbeya

Most milk in the southern highlands is produced in intensive smallholder production systems. These systems are based on cut and carry of native grasses and crop residues with minimal grazing. Crossbred and improved cattle breeds are common, and milk is sold into formal value chains.

Issues limiting milk production

Animal genetics

Local cattle breeds have low milk yields.

Feed shortages & costs

Seasonal feed shortages. Decreased land area available for grazing. Cost & quality of concentrate feeds is variable.

High animal mortality & low reproduction rates

Largely caused by disease & poor nutrition.

Using models to understand potential impacts

Bio-economic models can be used to simulate and understand the potential effects of changes to production systems. A baseline simulation is created to match current production systems, and different interventions are tested.

Models show what could happen, not what will happen, so results need to be interpreted with caution. For more information McDonald et al (2019).



Modelled baseline household

- 6 Tanzania Shorthorn Zebu cows (local cattle).
- Cows fed native grass + home grown crop residues in a cut & carry system.
- Model input parameters from references below.

Modelled interventions to increase production

Improved genetics

Local cattle replaced with Friesian cross cattle.

High quality forage

Cows supplemented with high quality, home-grown legume forage.

Supplementation with concentrate

Cows supplemented with purchased concentrate:

- Low concentrate: 3 kg maize bran/cow/day.
- High concentrate: 5 kg maize bran + 3 kg cottonseed cake/cow/day.

Combined interventions

Improved genetics + provision of high quality forage & concentrate.

Header photo: Superior bull identified through genotypic and phenotypic data under African Dairy Genetic Gains Platform. K. Dhanji ILRI. ([source](#))