

Maziwa Zaidi (More Milk) in Tanzania

Assessing sustainability of milk production in Tanzania

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Key messages

- Sustainability of Tanzania's milk production requires an assessment to monitor its progress.
- This study developed a milk production farm sustainability assessment tool and applied it to assess the sustainability of smallholder dairy and traditional milk production systems in four districts of Tanzania.
- The overall sustainability performance index was weak; some key sustainability performance indicators like income, cow productivity, participation in trainings and organizations and land ownership were weak to moderate.

Objectives and approach

- This study assessed sustainability of smallholder dairy and traditional cattle milk production farms in Tanzania.
- A set of relevant economic, social and environmental sustainability indicators were selected using the Delphi approach.
- A sustainability assessment tool was developed based on the identified indicators and applied on 431 farms in Kilosa, Mvomero, Handeni and Lushoto districts
- The performance indices were ranked from 0 to 1→weak: (0; 0.33); moderate (0.34; 0.66); high (0.67; 1).

Key results

- The study generate a milk production farm sustainability assessment tool made of fifteen indicators, which cover economic, social and environmental dimensions of sustainability.
- The overall sustainability mean performance index was weak (0.30±0.15)
- The economic, environmental and social sustainability performance dimensions were weak (<0.33)
- Some key performance indicators like income, cow productivity, participation in organizations and trainings, gender and land ownership were weak to moderate (from 0 up to 0.66)

Opportunities for inclusive investment and scaling

- **Public and private sector:** using the developed tool to monitor sustainability of milk production farms in the study context; improving farmer knowledge on farm management through training and education; establishing and strengthening farmers' organizations for better access to inputs, services and market through collective action.
- **Private sector:** Creating a conducive environment by establishing active milk collection centers and set a better milk price
- **Public sector:** Sensitization on use of environmentally friendly practices and improve land ownership.

Table 1: Weight of sustainability indicators

Dimension	Indicator	Weight
Economic	Income from milk production	0.13
	Cow productivity	0.31
	Labour productivity	0.11
	Feed self sufficiency	0.16
	Animal health	0.11
	Use of artificial insemination	0.03
	Feed conservation program	0.15
Social	Education level	0.14
	Participation in training	0.35
	Participation in farmer group	0.37
	Women's empowerment	0.14
Environment	Erosion control	0.01
	Water quality	0.43
	Water availability	0.18
	Land ownership	0.38

Fig 1: Farm sustainability performance indicators in smallholder dairy and traditional milk production systems in Tanzania

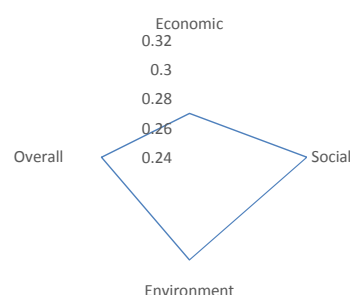
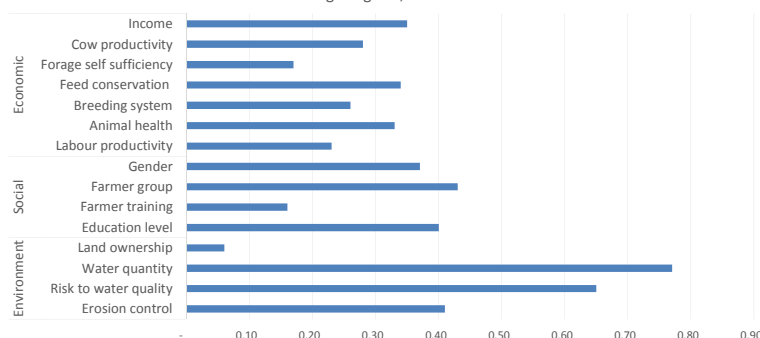


Fig 2: Sustainability performance indicators per milk selling systems in Morogoro and Tanga Regions, Tanzania



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