Assessment on the availability of cattle and feeds for quality beef production in Tanzanian

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1.Introduction

Growing demand for quality beef has motivated livestock keepers to finish cattle under feedlot. However, there is no reliable information on feed and animal resources that could sustainably support beef fattening in Tanzania.

2. Objective

To asses and document the availability of the major resources that, are necessary for production of quality beef for the current market demand in Tanzania.

3. Methods

- Cattle available for fattening were predicted from average national annual cattle population growth, whereas the animal nutrients requirements for fattening was obtained from the literature.
- Quantities of cereal, sugarcane and oilseeds harvested were collected from Government Reports from Year 2000-2005 and FAO from 1990 – 2005 and by-product yields computed according to Kossila (1987).
- The number of animals that can be finished on the available feed resources was computed based on animal nutrients requirements for fattening.

4. Results

- Potential feedlot cattle available in Tanzania is **6 mill.**
- Steers from traditional herd (TSZ) being the most available (Table 1)
- Maize bran is the most abundant feed energy resource in Tanzania followed by rice polishing, surplus maize grain, molasses and wheat bran (Table 2).
- Main protein sources were sunflower and cotton seedcake (Table 3).
- The available protein source could finish more cattle (16 x 10^5) under feedlot compared to the energy (13 x 10^5) source (Table 2 and 3).

5. Conclusion

Quality beef production in Tanzania is feasible using low grain rations complemented with grain by-products and molasses. However, the economics of using these grains and marketability of such quality beef need to be studied

Table 1: Proportional (%) of feedlot cattle by breed and category

	Cattle category			
Cattle breed	Bulls	Steers	Male calves	**Overall proportion**
Traditional	30	42	28	98.2
Dairy	40	7	53	1.5
Improved beef	47	21	33	0.2
Overall proportion	30	42	28	100.0

Table 2: Annual energy output and its finishing potential in Tanzania

Feed resource	Quantity produced (x 10^3 Tonnes DM)	Produced energy (x 10^9 MJ ME)	No. of finished cattle (x 10^3)
Surplus maize grain	62	832	105
Maize bran	560	6,268	793
Rice polishing	90	1,250	158
Wheat bran	14	144	18
Wheat pollard	4	53	7
Cotton seedcake	63	642	81
Sunflower seedcake	21	220	28
Molasses	45	636	80
Total		**10,000**	**1300**

Table 3: Annual protein output and its finishing potential in Tanzania

Feed resource	Quantity produced (x 10^3 Tonnes DM)	Produced protein (x 10^6 kg CP)	No.of finished cattle (x 10^3)
Surplus maize grain	62	7	89
Maize bran	560	66	900
Rice polishing	90	13	170
Wheat bran	14	0.5	7
Wheat pollard	4	0.2	3
Cotton seedcake	63	22	290
Sunflower seedcake	21	8	110
Molasses	45	2	27
Total		**120**	**1600**

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