



FOKUS

201203

FINISHING OF CATTLE WITH FEEDTEK

By Ewie Coetzee (Pri.Sci.Nat)





Farmers can add a lot of value to weaners and cull cows, thereby improving their profitability, by growing out and finishing these animals themselves. Finished animals fetch a much better price in the market place because they are heavier and could be sold when prices are good. Animals that are finished should preferably be sold on carcass weight, since they slaughter out much more than unfinished animals (typical dressing percentages for finished beef animals are 52 – 56% compared to 46 – 48% for unfinished animals).

Finished animals fetch a much better price in the market place because they are heavier...

The main factors determining the way in which animals should be finished includes:

- The amount of grazing the farmer has available for non-reproducing animals
- The amount of time the farmer has available (depending on his cash flow situation)
- The prices of energy sources (grains and grain by products)
- The current and expected meat price.

Depending on these factors farmers can grow out and finish their animals on a system ranging from extensive to intensive.

	Extensive	Semi-intensive	Intensive
Grazing	Freely available	Availability restricted	Not available
Time	Little time constraints	Time a factor	Severe time constraints
Energy prices	High	Medium	Low

Extensive system

Adequate grazing is available. Grazing is supplemented by an energy lick with an intake of approximately 1000 – 1500 gram/head/day. Typical growth achieved will largely depend on the quantity and quality of the available grazing, but will typically vary between 500 – 1000 gram/head/day.

Advantages of this system:

- Low financial risk due to extensive use of grass and minimal use of concentrates
- Highest margin over concentrate cost
- Animals grow out in frame – is a very good way of preparing animals for finishing
- Relative low level of management input (it is not complicated).

Disadvantages of this system:

- Animals take a relative long time to grow out – this has cash flow implications
- Larger risk of theft and disease.

Semi-intensive system

The farmer has limited grazing (or hay and/or silage) which he supplements with a restricted amount of concentrate. Roughage is supplemented by a veld growth meal with an intake of between two and four kg/head/day. Growth will again depend on quantity and quality of both the roughage and concentrate, but will typically vary between 750 and 1250 gram/head/day.

Advantages of this system:

- Still relatively low financial risk due to restricted use of concentrates
- Still a high margin over concentrate costs
- Animals grow out relatively quick
- Relative low level of management input (it is not complicated).

Disadvantages of this system:

- Animals still take a relative long time to grow out – this has cash flow implications
- Still a larger risk of theft and disease.

Intensive system

The farmer does not have access to additional grazing and finishes his animals in a small camp or feedlot. The minimal amount of roughage is fed (to maintain the rumen) and the maximum amount of concentrate is fed unrestricted. Growth will depend on the quality of the concentrate, but will typically vary between 1200 – 1600 grams/head/day.

Advantages of this system:

- Animals grow out quickly – low impact on cash flow
- Low risk of theft and disease
- High dressing percentage – best price for carcass.

Disadvantages of this system:

- Very high management input
- High risk of metabolic disorders (bloat and acidosis)
- High financial risk due to huge input costs of concentrates
- Lowest margin over concentrate costs.

The following table shows examples of an energy lick, veld growth meal, finisher meal and complete finishing diet that can be mixed with the Feedtek concentrates and maize meal / hominy chop. These feeds are fully balanced and comply with all the nutrient requirements of the beef animal.

Ingredient	Energy Lick	Veld Growth Meal	Finisher Meal	Complete Finisher
Maize meal / Hominy Chop	700	750	700	700
Molasses meal	80	80	80	80
Grass Hay (milled)				200
Salt	150	100		
Veldgrazer 128	75			
Beef Gainer 110		72	36	36
Total (kg)	1005	1002	816	1016
Composition (%)				
Protein	15,8	14,6	12,5	11,5
Protein derived from NPN (% of total)	60,6	54,2	38,7	34,1
Calcium	1,1	1,0	0,7	0,6
Phosphate	0,6	0,4	0,3	0,3
TDN (Energy)	62,4	66,6	76,8	71,5
Intake – cattle (kg/day)	1 – 1,5	2 - 4	unrestricted	unrestricted

Basic management principles during finishing

- Animals should be adapted gradually on all these licks and feeds. Adapt animals onto the energy lick and veld growth meal by doubling the level of salt for the first week, before moving onto the final recipe
- When feeding licks it is critical that adequate levels of grazing and / or other roughage should be available unrestricted at all times to prevent digestive disorders. The quality of the roughage should be good to ensure adequate intake of the roughage
- Adapt the animals on the finisher meal and complete finishing diet by starting off with 1 kg of feed per head on day one. Increase this by an additional 1 kg per day until feed remains in the trough at the time of next feeding for three days or more. Adequate trough space is very important during adaptation – ensure a minimum of 200 mm per head. Good quality roughage should be available unrestricted during this phase as well as for the duration of the feeding period on the finisher meal
- Molasses meal could be replaced with molasses syrup if preferred
- Daily intake of the Energy Lick and Veld Growth Meal should be measured to ensure that animals are not consuming too much or too little of the lick. This is done by adding a known amount of lick to the troughs and then weighing back the remaining lick after 7 days. The amount of lick consumed is then divided by the amount of animals and the amount of days.
- In the case of over consumption of licks (on the condition that adequate levels of quality grazing is available), the farmer can:
 - o Increase the level of salt by 50 kg/ton (replacing maize/hominy chop)
 - o Move the lick troughs as far away from the drinking water as possible
 - o Decrease the amount of available trough space.
- The opposite is done in case of under consumption of licks
- Lick trough space should be a minimum of 100 mm per head
- All animals should be treated for internal parasites and be subjected to a health management program as prescribed by a veterinarian before they are grown out or finished to ensure the best growth and feed conversion.

The economy of finishing

This will depend to a great extent on the prices paid for grains and received for the meat. Since margins could be very small (or even negative in certain circumstances) it is of utmost importance that the farmer gets good advice from a reputable and professionally registered animal scientist before such a big decision is made. It is also critical to weigh the animals (or at least 10% of the total group) on a regular basis to ensure that target growths are achieved. Seek professional advice if the sums do not add up.

Why use Feedtek?

The Feedtek macro premixes contains all the critical nutrients required by the modern high producing animal in one handy ready mixed pack without any carriers, fiber, natural protein or energy. This minimizes the transport cost per unit of nutrient. No weighing off of critical nutrients is required and it also enables the farmer to make maximal use of home- or locally produced roughage, energy and protein sources, providing the full benefit of home mixing to the farmer. As energy and protein sources are not part of the macro premixes, feeds can easily be adapted for different stages of finishing without having to change the premix.



**For any further inquiries please
contact the author at:**

**Email: formufeed@lando.co.za
Mobile: 082 459 7117.**