

Nguni's thrive on maize silage ration in feedlot trial



GEORGE GERMISHUYS AND FRANS LUBBE

For several years now, Nguni cattle breeder Frans Lubbe has been irked by the unequal treatment of Nguni cattle compared to other breeds at various feedlots. To Frans, it appeared that Nguni cattle breeders receive less money than breeders of specific beef breeds, while the relative growth and feed conversion of Nguni cattle compare well to that of the larger beef cattle breeds. Frans has developed an elaborate and effective theory and formula to prove this and determine whether it's worth feeding his weaned Nguni calves in the feedlot or selling them as weaner calves.

Now, thanks to the research done by

Frans and Johan Schreuder, the owner of JH Agri Feedlot in the Douglas region, the Nguni Cattle Breeders' Society can provide clear guidelines about how and when to send weaners to the feedlot.

To complete his annual study, Frans considers many variables: slaughter price, the value of the weaner at the

Slaughter price A-Grade/kg	R 60.00	Selling price	R 13 836.00
Value of the weaner - start process	R 6 160.00	Feed costs	-R 5 221.00
Feed turnover ratio (Corn silage damp state)	7	Standing costs	-R 420.00
Feed eaten (kg)	1243	Transport to the abattoir (if app.)	-R 150.00
Daily standing costs	R 3.50	Transportation to a feedlot	-R 100.00
Initial weight (kg)	220	Processing cost	-R 250.00
Average weight increase (kg/day)	1.5	Interest: Feed and standing charges	-R 98.00
End weight (kg)	398	Interest on weaner purchase price	-R 223.00
Weight gain (kg)	178	Mortality (0.5%)	-R 31.00
Number of days in the feedlot	120	Netto realisation price	R 7 343.00
Killing-out percentage (Uitslag %)*	58%		
Carcass weight (kg)	231	Realisation/weaner	R 33.38
Interest rate	11%	Nguni weaner price at weaning	R 28.00
		Value added per animal	R 1 182.98



start of the process, feed conversion (corn silage damp state), ration cost, daily standing costs, initial weight (kg), average weight increase (kg/day), average slaughter percentage, and interest rate. Finally, these variables are used to determine the net realisation price and value added per weaner.

* Killing-out percentage (noun) (KO%), also known as dressing percentage is the dead weight of an animal expressed as a percentage of its live weight. (In Afrikaans: uitslagpersentasie (s.nw.) die dooiegewig van 'n dier uitgedruk as 'n persentasie van sy lewende gewig)

Frans and Johan researched three groups of weaners weighing 220kg, 190kg, and 155kg. A fourth control group consisted of animals weighing around 210kg, but they did not receive hormone treatments as Frans did not intend to use them for slaughter. The Nguni Cattle Breeders' Society has long suspected that grain feeds, such as the usual maize and chop ration, do not optimise the growth of their animals. Therefore, Frans and Johan opted for a diet primarily consisting of corn silage, roughage, and premixes with additional vitamins and minerals. Their goal was to refine the formula and establish a reliable

method for determining the potential profitability of sending weaners to feedlots, specifically identifying the optimum weight for doing so.

Their findings highlight three important outcomes and guidelines for Nguni cattle breeders when sending Nguni weaners to feedlots:

The optimum weight for sending Nguni weaners to feedlots is above 220kg.

A diet with low grain content, focusing on roughage and fibre, yields more profitable results.

The slaughter percentage is better when animals are fed a roughage and fibre diet compared to a grain-based diet.

For breeders, the key lies in acquiring knowledge and comparing the potential profit of feeding Nguni weaners themselves or sending them to a custom feedlot, considering the selling value of the weaner calf.