

CROSS-BREED WITH THE ADAPTED NGUNI BREED FOR HIGHER RETURNS

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The Nguni cattle breed is the answer to climate change because of its adaptability to the increasing temperatures and lower rainfall particularly in the Western parts of Southern Africa.

In the eastern parts of the country humidity with high temperature and disease carrying ticks are present. **The Nguni has acclimatised over centuries to these conditions.**

The Nguni has the ability to play a major role as a dam line in cross-breeding systems for effective economical weaner production.

Cross-breeding is the mating of animals from different beef breeds. The advantages entail the wonderful adaptation mechanisms of the Nguni breed particularly as a smaller cow of about 375kg and the utilization of heteroses when crossed with other breeds. The smaller 375kg Nguni cow utilizes 38% less feed than the larger 575kg cow – a tremendous economic advantage.

Terminal cross-breeding with the indigenous Nguni cow is a production system which is fast gaining ground and which by far is the most economical cow production system available in Southern Africa.

The Nguni cow is highly fertile, adapted to a high temperature environment, has smaller calves at birth with terminal sires, needs less grazing, has a docile temperament and is the most ideal cow for a terminal cross-breeding system.

Any system where heavy weaners are

produced from smaller cows is more efficient than a system where the cows are also large, because smaller cows eat less relative to output and more cows can be kept on a given size of land.

In comparison with normal cross-breeding terminal cross-breeding places no additional cost on management. During the mating season it is possible to mate Nguni cows with terminal cross sires adding an Nguni bull to produce replacement heifers.

In experimental work done by the ARC at Groblersdal Research Centre it was found that the Nguni cow easily accommodated the larger Charolais breed in a terminal-cross experiment. There were absolutely no dystocia problems of any sort. The pure Nguni calves weighed 27kg and the crossbreed calves 34kg. This was 3kg below the mid-parent weight of 37kg. In another experiment Charolais x Hereford calves weighed 47kg at birth.

The Nguni cow therefore has a wonderful ability to restrict the birthweight of the cross-breed calves well below the mid-parent value.

The weaning weight of the Nguni bull calves in this experiment was 193kg with the Charolais-cross calves 232kg; a 20.2% higher weight. This weight is most acceptable to the feedlot industry. All the bull calves were subjected to an intensive growth test. The Charolais-cross calves had a final weight 38% higher than the Nguni calves and the average daily gain (ADG) was 47% higher. This is a significant increase emphasizing the value of a terminal cross-breeding system with the

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Nguni cow to enhance economic returns.

On farms where the terminal cross-breeding system has been operational similar results have been obtained. Feedlots pay more per kg for the cross-bred calves.

The Nguni has quality beef which adds to the value of these calves.