GOING BACKWARDS? – MOVING FORWARD? – NGUNI CATTLE IN COMMUNAL KWAZULU-NATAL

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Abstract

The Nguni. an indigenous, small to medium size cattle breed of eastern and northern South Africa is well adapted to low quality feed, has a high degree of tick resistance, is docile, early maturing and fertile. It is also a typical multi-purpose animal, used for meat, milk, leather, draught, saving account, as well as various socio-cultural functions. Because of its heterogeneity in colour, hornshape and confirmation Nguni were rejected as "scrub" by the great majority of white settlers. After being told that Ngunis are inferior cattle, communal farmers started to believe that and started crossbreeding their cattle with cattle from commercial farms. More recently scientists and commercial farmers have developed an interest in Nguni as low external input breed. A breed society has been formed almost 20 years ago. A recent book on the meaning of Nguni colour pattern became a best-seller. A study of animal husbandry practices in communal areas of KwaZulu-Natal for two development project brought to light the lack of current information among communal farmers. Farmers were rather sceptible with respect to Ngunis, and presently keep a crosses with commercial breeds. The promised higher productivity does not materialize, particularly because of insuffient feed. , but a visit to a stud farm or even showing a booklet on South African breeds already created some interest. The development projects are now looking for ways to promote Nguni cattle among. Possibilities include communal bull-keeping, or even AI, depending on local circumstances.

Introduction

Breed management is one of the cornerstones of success animal husbandry. Theoretically there are two extremes a) modify the environment (feed, disease control, water supply, even control of climate within a stable etc) to suit the requirements of animals b) select animals are adapted to the respective environment. In reality breeding strategies are somewhere in between. In tropical region selecting animals adapted to the environment means animals that have to be able to cope with variable feed supply, high ambient temperatures and high disease pressure. Unfortunately high milk yield or high growth rates and adaptation to a difficult environment are antagonists. In the past animal science and state did not fully appreciate the potential benefits of keeping of animals adapted to the environment and rather encouraged high yielding breeds such as Jersey or Holstein or large framed beef cattle, that need high quality feed, have difficulties in coping with high ambient temperature and that are susceptible to a number of diseases, i.e. cause higher costs. These breeding objectives also neglect the sometimes high cultural importance of indigenous breeds. In this paper we will discuss some of these issues in relation to people in communal areas in KwaZulu Natal, South Africa and the indigenous cattle breed, the Nguni.

Origin of breed and breed description

Nguni cattle are part of the Sanga group in southern Africa. Some other breeds of this group are the Ovambo, Kavango and Caprivi in Namibia, the Tswana in Botswana, the Afrikaner more arid parts of South Africa. Sanga cattle also contributed to modern breeds such as the Bonsmara and Drakensberger in South Africa (Bester et al 2003). The Sanga are now thought to descendants of *Bos taurus* animals that were domesticated in north eastern Africa 7000 or 8000 years ago and later crossed to an extent with zebu cattle from the Arabian Peninsula (Bester et al 2003). They arrived in South Africa 300-700 A.D. (Scherf 2000).

Ngunis are small to medium size cattle, that are docile, and well adapted to a harsh environment. They have a fair degree of tick resistance (in one study it was found that the costs for tick control exceed the benefits by far), can cope reasonably well with low quality forage, are fertile and not late maturing (Bester et al 2003, Scherf 2000). However they are neither uniform in colour, horn-shape or confirmation. The great variability of appearance in Nguni that are or were kept by the Zulu people is documented by Poland et al (2003).

Ngunis are multipurpose animals. They are used for milk and meat production, for draft, for sale and for various cultural purposes. Their comparatively docile nature allows that even bulls are used in a “span” or team for draft. Hides – if properly prepared are the basis for a high quality leather, although leather prices are such, that this may not encourage a change of cattle breed. Skin with a speckled fur can fetch fairly high prices – up to 1000 Rs or the value of a third of a 2 year old heifer from a stud farm.

Zulu and other cattle keeping people in South Africa emphasised in the past the cultural importance of cattle. Certain types, like pure white Nguni are kept as a Royal herd. For sacrifice, particular types of animals are preferred (black bulls). The most common cultural function is the *lobolo*, the animals to be paid at marriage to the family of the bride. . *Lobolo* neither requires nor rules out Nguni cattle.

Decline and rise of the Ngunis

Most European colonists, who started to arrive in South Africa already in the sixteenth and seventeenth regarded indigenous cattle as inferior (with the exception of the Afrikander for which a breed society was already formed in 1912) . The animals appeared to perform poorly – mainly due to high stocking rates - and were not as uniform as European breeds. In 1934 an act was passed by the government regarding the indigenous breeds as “scrub” animals (Bester et al 2003) The act empowered inspectors to inspect bulls in communal areas and to castrate them, if they thought that the bulls were inferior. Fortunately this was rarely enacted. A bias for bigger animals is also evident in the carcass classification system.

Communal farmers have been exposed to the negative opinion on indigenous cattle for about a century and started to believe it. As a result the farmers tried to acquire “better” livestock and started to cross-bred – with the result that more veterinary care was needed, tick control became a must, but because high stocking rates prevailed

and supplementary feed was hardly used, productivity did not increase. Breeds being used include Drakenberger, Simmenthal, Herford etc. More recently large framed Brahman bulls seem to gain in popularity. This breed also has a good measure of tick resistance, is better adapted to low quality feed than European breed, but is late maturing and, because of its temperament bulls, cannot be used in a span.

Scientists and commercial farmers became interested in Nguni cattle already half a century ago. It was found that Nguni responded almost as well to high quality feed as other commercial beef breeds, but they could maintain a better nitrogen balance than other breeds during the dry season, when forage quality is low (Bester et al 2003), and commercial farmers found that Nguni cows have an amazing mothering ability and could be used as mothers for crossbred calves with larger beef breeds, as final product (Nguni breed society pers. com 2003). In an experiment it was found that Hereford that are not dipped against ticks gained almost 30 kg less per animal and year than dipped animals. With the Bosmara breed the difference was 17.5 kg, and with Nguni only 4.4 kg (Bester et al 2003). At the time of the experiment, annual costs of tick control were equivalent to the price of 10 kg liveweight (Majuda pers com 2001). On experimental stations Ngunis have not been dipped for decades yet the tick loads remained low and few, if any losses due to tickborn diseases have been reported.

Photo 1: Nguni cattle on a stud farm in KwaZulu-Natal (photo. W.Bayer)

In 1986 a society was formed which presently has almost 200 members (Ramsey 2003). Different sources give quite different opinions about the state of the breed. It was listed by FAO as an endangered breed, with only 1000 pure bred breeding females (Scherf 2000), yet Bester et al (2003) found already more than 19000 Nguni

animals registered in the herd-book, and a large number of unregistered Nguni cattle of varying purity in communal areas. Information on Nguni cattle was included in a publication of the Farm Animal Conservation Trust (Ramsey et al n.d.) and a recent coffee table book on Nguni cattle (Poland et al 2003) is a best seller. The cultural dimension of keeping Ngunis is also strengthened. Apparently the traditional herd of the Zulu king of pure white Ngunis is presently being re-established (Poland et al 2003).

Photo 2: A Nguni cow in a communal area in one of the Diocese project areas in South Western KwaZulu Natal (Photo W. Bayer)

A more detail study of cattle keeping

Despite of these trends there is little evidence that the opinion of communal farmers on Ngunis has changed much. This was confirmed in a recent study for two development project in KaZulu-Natal, both supported by Misereor.. Both, the Land Reform Project of the Mariannhill Diocese and the Mdukatshani Rural Development Project concentrated initially on land rights and land reform. The Land Reform Project of the Diocese concentrates on handing over land owned to groups who already live on these lands, and mainly works in the coastal and south western parts of KwaZulu-Natal in a number of communities that are far apart, in the wetter Sour Veld Areas, whereas the Mdukatshani Rural Development works in the central part in one area only, and is predominantly in Sweet Veld. Both projects also advise local people on how to use the newly acquired land, but have done little systematic work in animal production. They asked Misereor to send a consultant to study present practices in animal production in the project areas.

The study was carried out in August/September 2003, using PRA techniques. As expected, cattle was the most discussed species, although many people do not own cattle. With respect to functions of cattle keeping there are some differences between areas. In the diocese, where herds are generally smaller than in Mdukatshani, the main emphasis is on saving account, draft and milk, whereas in Mdukatshani the social function, particularly saving of *lobolo* are more important. There is however a trend away from "cattle only" for lobolo. A series of interviews with married women indicates that women born in the 1930's almost all received the traditional 11 cattle (average number of cattle 10.7) whereas of the women born in the 1970's none got the 11 head of cattle (average lobolo payment 3.4 head of cattle, C. Alcock pers. com). The saving account function means that few cattle are sold and none of the households included in the study sells animals on a regular basis. As cattle holdings are small (in the Diocese a common herd is 4-6 animals, and few household im Mdukatshani have more than 10 head of cattle), many farmers argued that they would sell animals if cattle herds were bigger – more than 10 animals, or more than 20. However the largest cattle owner interviewed (70 head) still used the cattle herd mainly as saving account, and sold cattle only if particular cash needs arrived (new house, or new roof for the house as examples). Given the poor banking infrastructure in most of rural KwaZulu-Natal, the "cattle banks" still makes sense, although it may be time consuming to withdraw cash from that bank.

A South African speciality is fairly large teams or spans at ploughing and for transport. At ploughing even in the Diocese area 4-6 cattle are common. These are however not always oxen. Cows (preferably dry cows) and even bulls are included into spans. In the own herds are too small, neighbour may combine their animals for a span. For draught, docile breeds, like the Nguni are therefore of advantage.

Traditionally each kraal/household each household had to have a bull. Given the small cattle holdings many households do not have a fully grown breeding bull. As cattle normally of different households graze together, cows and heifers in heat are either serviced by a young bull for the own herd, or by the adult bull of a neighbour. Because too many people hope that a neighbour will keep a bull, the adult bull to cow/adult heifer ratio is rather wide. The data from the present study do not allow the calculation of the bull to fertile female ratio. Another study in Nguni areas found an adult bull to fertile female ratio of 1:150 (Bester et al 2003). Neighbours also do normally not charge for the service of their bulls. In fact one farmer said jokingly that the bull should pay *Lobolo* if he mates with a heifer. This indicates potential organisational difficulties for systematic animal breeding.

With respect to animal breeds the farmers kept what they called a mish-mash, i.e. a mixed of breeds of often uncertain origin. In the Diocese missionaries, who tried to keep "good animals" probably had some influence. Some farmers there kept animals which could be better identified, such as Hereford crosses and one farmer even kept Jersey X local crosses, with the intention of producing milk for sale. The excepted better growth and higher milk yields of the crosses do rarely materialize, particularly because of insufficient feed. The main difference between crossbreds and Nguni is that the former need more veterinary care, especially dipping against ticks.

The farmers knew Hereford, Drakensberg, and a few other breeds. Brahman cattle regarded by many farmers as a suitable breed, although the "wildness" of this late

maturing breed is acknowledged. In one location farmers said that the preferred breed would be Zulu cattle, but they could not agree, how these animals should look like. According to Bester et al (2003) Zulu are a local type of Nguni.

When asked about Nguni cattle, farmers argued that these animals would be weak and probably something for the white farmers. When told about tick resistance, farmers would first not believe. Opinions changed to a degree when a Nguni stud farm was visited with some farmers in the Diocese area, whereas pictures from the Ramsey at al (n.d.) booklet caught the attention of farmers in Mdukatshani area, as "cattle kept by our forefathers". Tick control and tick resistance is much discussed in South Africa. It used to be mandatory and for communal farmers, free of charge and was used by the veterinary service as a means of control of cattle. After 1994, this scheme was discontinued in KwaZulu-Natal and farmers had to make their own arrangements . e.g. buy and use pour-on acaricides., There are now plans again

Photo 3: Nguni cattle in Mdukatshani in central KwaZulu Natal (Photo (R. Alcock)

Project support for promoting Nguni cattle

Project personnel was soon convinced that better adapted animals could help to improve cattle productivity – with respect to almost all functions of the animals. As a follow-up to the study both projects organised visits to commercial farms and research stations where Nguni cattle, where visitors were amazed how strong the Nguni cattle looked. The fact that Nguni cattle on commercial farms are not dipped, yet do hardly have any tick also increased interest in this breed. It was also decided that bull services are probably the easiest entry point for breed improvement – i.e. animals that cope better with low quality feed and have a better disease resistance. With the Diocese villages various models are possible – a community bull, a bull acquired by a richer farmer, AI in collaboration with nearby commercial farmers. It

has not yet been decided which way with be persuaded. Because the pasture in the diocese area is predominantly sourveld, with low concentration of minerals, other innovations, such as mineral supplements may bring about quicker improvement

In Mdukatshani conditions are more difficult, because of wide spread cattle theft – particularly of new animals. After some discussions, it was decided to select breeding females, synchronize these animals and artificially inseminate them. Because of high technical skills available in South Africa this scheme might work, inspite of negative experience with AI in developing countries in general. Farmers, who participate in the scheme signed a contract with the project that states that farmers who get a bull calf will raise that calf, and keep it for at least three years. It remains to be seen, how this scheme will turn out, but first results – pregnancies diagnosed – look promising.

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