



***The Sabi sheep:  
the indigenous breed for today and tomorrow***



*Sabi sheep at Matopos Research Institute (Photo: Matopos Research Institute)*

***Introduction***

Zimbabwe is not a major sheep producing country. However, sheep play a very important role in the livelihoods of many people especially rural communities in terms of food and nutrition security as well as income generation. Despite the relatively low numbers (roughly 400,000 to 500,000 head), Zimbabwe is endowed with some highly productive sheep breeds. To a large extent, for its sheep production, the country depends on a number of imported sheep breeds. The breeds include the Mutton and Wool Merino, Dorper, Blackhead Persian (BHP), Corriedale, Van Rooy, Suffolk, Wiltshire Horn, Dorset Horn and Wiltiper. These breeds are generally reared commercially for wool, lamb and mutton production.

However, the only breed that stands out as the truly Zimbabwean indigenous sheep breed is the Sabi. The other sheep breed which is considered as indigenous is the Wiltiper, a composite breed from Wiltshire Horn and Blackhead Persian which was developed solely in Zimbabwe. The importance and significance of the Sabi sheep breed to Zimbabwe cannot be over-emphasized. As the only truly indigenous sheep breed in the country, there is a definite need to ensure its survival and conservation for current and future generations. The Sabi sheep breed offers Zimbabwe and the Southern African region an opportunity to benefit from its unique and outstanding qualities as an adapted indigenous breed. Indeed the transboundary nature of the Sabi which is also found in parts of Zambia, Botswana and South Africa provides Southern Africa with a breed that can withstand the elements and vagaries of climate change and considered a breed for the future.

***History of the Sabi Sheep***

Donkin (1973), Matika (1995), Matika et al. (2003) and Sikosana (1999), describe the Sabi as the indigenous sheep of Zimbabwe which is a fat-tailed type characterized by a hairy coat and with a multiplicity of

colours ranging from black, through all shades of brown to pure white. One of the four government livestock research institutes, Makoholi Experiment Station (now Research Institute) played a pivotal role in the breeding and selection of the Sabi sheep breed and is regarded as an important contributor to the development and conservation of this breed. The Sabi sheep is noted for its hardiness and fecundity under difficult conditions and in addition, its resistance to certain local diseases including Blue Tongue which is known to cause high mortalities in exotic sheep breeds. As is common among hardy animals, the Sabi sheep breed is generally small and relatively slow growing and the mature carcass is considered poorly fleshed by European standards (Donkin, 1973). The Sabi has very small ears which appear absent in some cases (Donkin, 1973). This is a common feature of this breed. However, in some Sabi flocks the ears are relatively larger. The Sabi has a distinctly wide and swinging fat tail which is a feature also found in the Damara sheep breed in Namibia, the Tswana sheep in Botswana and the Red Maasai sheep in East Africa. It has been reported that these sheep breeds may indeed be related (Sikosana, pers. comm.). The fat-tail is generally regarded as an adaptive response of the sheep breeds to harsh environments and serves as an important energy reserve during times of nutritional stress (Sikosana, 1999).

### **Distribution of the Sabi sheep**

The exact distribution of the Sabi sheep breed in Zimbabwe is not clearly known. However, populations of the breed are scattered mainly in the dry areas of the country, such as Binga, Sabi valley and Gokwe. Some of the sheep have been crossbred and no longer true to the original Sabi type and have been continually infused with Blackhead Persian blood as reported by Donkin (1973). According to Sikosana (pers. comm.), the only known purebred Sabi population is at Matopos Research Institute which has approximately 300 breeding ewes (nucleus) as well as at Makoholi and Henderson Research Institutes. The nucleus and main flock at Matopos has been closed since the original flock which was established at the then Makoholi Experiment Station in 1951. The foundation stock was reportedly obtained from two main sources, Gokwe in North-west Zimbabwe and the Sabi River valley in South-western Zimbabwe. The status of the breed elsewhere in Zimbabwe is not accurately known or recorded. . The small flocks established at Makoholi and Henderson Research Institutes represent a strategic reserve for the conservation of this important sheep breed. The breed is threatened with extinction.



Various coat patterns and colours of Sabi sheep (Photo: Matopos Research Institute)

### **Breed characteristics and physical traits**

Coat colour:	<i>Multi-colour (white, brown, tan, combinations)</i>
Coat description (fibre type):	<i>Hair</i>
Hair type:	<i>Straight</i>
Hair length:	<i>Short, Long</i>
Face profile:	<i>Convex, Flat</i>
Muzzle colour:	<i>Pigmented, (not pigmented in young)</i>
Throat ruff:	<i>Absent</i>
Toggles:	<i>Absent</i>
Horns:	<i>Present, polled</i>
Horns (number):	<i>2</i>
Horn shape:	<i>Spiral, Curved</i>

Horn length:	<i>Medium to Long</i>
Horn orientation:	<i>Backwards, drooping</i>
Ear size:	<i>Medium to Large</i>
Ear orientation:	<i>Drooping</i>
Body frame:	<i>Medium to Large</i>
Back profile:	<i>Straight</i>
Rump profile:	<i>Sloping</i>
Legs:	<i>Long</i>
Hoof colour:	<i>Dark, Striped</i>
Tail length:	<i>Long</i>
Tail thickness:	<i>Fat, Fat-rumped</i>

### **Some production traits:**

Studies conducted at Matopos Research Institute and elsewhere have shown that mature Sabi ewes have a weight range of 40 to 50 kg while the weight range for entire males is 45 to 55 kg (Sikosana, 1999). Their core characteristics include their adaptability, fecundity and survivability under harsh conditions. Studies conducted on-station but under extensive conditions showed that the Sabi sheep have high fertility (number of females lambing per females mated), moderate prolificacy (litter size at birth) and acceptable viability (Sikosana, 1999).

Some performance traits and characteristics of indigenous Sabi sheep of Zimbabwe are shown below.

<b>Parameters</b>	<b>Sabi sheep</b>
Mature body size (kg)	
- male	45–55
- female	40–50
Age at first lambing (months)	23*
Fertility <sup>1</sup>	86
Lambing percentage <sup>2</sup>	101
Litter size <sup>3</sup>	1.2
Lamb birth weight (kg)	2.4
Lamb weaning weight (kg)	18–20
Weaning rate <sup>4</sup>	83
Pre-weaning mortality rate (%)	14
Growth rate (from birth to weaning: g/day)	123
Dressing percentage (%) <sup>5</sup>	44

\* Age at first lambing for animals at Matopos Research Institute is fixed

<sup>1</sup>Fertility = number of ewes lambing per 100 ewes mated.

<sup>2</sup>Lambing percentage = number of lambs born per 100 breeding ewes mated

<sup>3</sup>Litter size (prolificacy) = number of lambs born per number of ewes lambing

<sup>4</sup>Weaning percentage = number of lambs reared to weaning per 100 ewes lambing

<sup>5</sup>Dressing percentage = hot carcass weight/live-weight

**Source: adapted from Matika (1995).**

### **Other important characteristics of the Sabi**

Matika et al. (2003) reported that Sabi ewes were found to be more resistant to internal parasites than Dorper ewes as shown by their significantly lower faecal egg counts (FEC) and significantly higher packed cell volume (PCV) at all sampling times except at 2-month post-lambing for FEC and at weaning (3-month post-lambing) for PCV. It has been reported that the Sabi sheep because of its coat characteristics of having hair rather than wool, is suited to the dry environments where sharp grass seeds with barbed awns

such as the dominant *Heteropogon contortus* (Black speargrass) and *Aristida* grass species can adversely affect woolled sheep breeds (Sikosana, pers. comm.). The significance of this characteristic is highlighted by reports that *Heteropogon contortus* has also been responsible for the elimination of the wool industry over much of Australia due to the seeds becoming embedded in the wool and skin of sheep and devaluing the wool and even killing the animals ([https://en.wikipedia.org/wiki/Heteropogon\\_contortus](https://en.wikipedia.org/wiki/Heteropogon_contortus)).



*The hair coat of the Sabi makes it less prone to sharp grass seeds or barbed awns (Photo: Matopos Research Institute)*

### **Conclusion**

The Sabi sheep with its exceptional adaptability attributes has a lot to offer the country and indeed the Southern African region, especially with the increased adverse environmental conditions caused by climate change. Therefore, no effort should be spared to ensure that this precious gem is conserved for current and future generations.

### **References and Further reading:**

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