



# Sustainable Cape Wool Standard

Good Practice Principles for  
Sustainable Wool Production in South Africa



CAPE WOOLS SA



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## Introduction and Scope

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Wool is not a mandatory choice in today's apparel markets. It competes with other fibers, natural, and synthetic. However, the retail sector is rapidly evolving and issues such as sustainability, animal welfare, ethics and the environment are becoming increasingly important as factors influencing fiber choice when purchasing garments. Traceability and transparency along the value chain are also becoming increasingly important to underpin the story of wool at consumer level.

Traditionally, the marketing of wool at consumer level has mostly concentrated on promoting fiber attributes in the end-product form. As the other issues mentioned gain traction in the marketing and promotion effort, best practice and assurance protocols must be introduced, implemented, maintained and supported by appropriate documented proof or evidence to support the overall marketing and promotion of the wool industry and its products.

This document is intended to package the essential components and principles for good production of wool in South Africa, as the first "quality" step in the value chain. Wool producers, single or in groups, who can be shown to comply with the basic requirements covered here will be well positioned to attract the attention of buyers supplying value chains for brands, as and when appropriate. It will also support the market in general, where credible proof of custodianship for the environment, the animals and the people in the industry is becoming increasingly important.

Best practice is the operational response of a business or an industry to threats and opportunities. It is, by definition, not static, and the supporting processes and procedures underpinning them will evolve as science, technology and legislation develop over time. However, the driving principles are stable. Consequently, the focus of this document is less on the former than on the latter, to mitigate the need for too frequent revisions.

This document provides the operational framework to allow the wool growers industry and its stakeholders in the value chain to utilize the necessary and appropriate tools, as well as evidence to support this process to promote our industry and its products.

## Glossary, Definitions and Vocabulary

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This document can be used as information for people not necessarily informed on the meaning of certain terms, concepts and descriptions used within the wool production environment in South Africa. Accordingly, for clarity purposes, these have been included to broaden its usefulness as a source document to understand the credentials of the South African wool growing industry. In general terms, as far as vocabulary is concerned, "shall" indicates a requirement, "should" indicates a recommendation, "may" indicated an allowance and "can" indicates capability/possibility. Terms used in this document and their definitions include the following:



**Audit** – Assessment of compliance with a set of guidelines or with a standard. It is usually carried out on the property (farm) and takes the form of an internal audit or an external (independent) audit by a third party. (Accredited 3<sup>rd</sup> party)

**Animal Health / Welfare** – The AVMA defines animal welfare as its ability to cope with the conditions in which it lives. Procedures to ensure the absence of sheep diseases, and conditions to ensure that sheep can produce and reproduce in a natural way, are core components.

**Tail Docking** – Surgical removal of sheep tails.

**Mulesing** – Removal of woolled skin adjacent to the anal area to reduce the risk of fly strike.

**Fly strike** – Flies lay eggs at the moist area surrounding the anus and vulva with resultant maggot (fly larvae) infestation and tissue damage.

**Castration** – Removal of ram testicles at a young age to avoid non-managed coupling with ewes.

**Hoof Care** – Trimming/paring of hoofs to avoid foot rot or hoof deformation.

**Horn Care** – Trimming or removal of horns for various reasons.

**Ear Marking** – Clipping, tattooing or tagging of ears for identification purposes.

**Euthanasia** – Administration of a quick and painless death to end / avoid unnecessary pain and suffering.

**Crutching** – Shearing around the anus and vulva to avoid a moist area which is conducive to fly strike.

**Rangeland** – Natural (non-pasture) grazing areas. (Veld)

**Predation** – Livestock losses as a result of attacks by wildlife species, such as caracal, jackal or leopard.

**Pesticides** - Synthetic chemical products used to prevent or treat external parasite infestation.

**Dosing** – Application of remedies for the control of internal parasites through ingestion.

**Controlled/Notifiable Diseases** – Diseases which are listed in the Animal Diseases Act (Act 35 of 1984) which if suspected or confirmed must be reported to the Provincial Veterinary Authorities or the Animal Health Directorate of the National Department of Agriculture, Land Reform and Rural Development (DALRRD) previously the Department of Agriculture, Forestry and Fisheries (DAFF). The reporting of these diseases is a statutory obligation on the part of the farmer.

**OIE** – World Organization for Animal Health.

**SANS** – South African National Standard.



# 1. KEY FOCUS AREAS

## 1.1 Introduction

An operational plan focused on appropriate good practice principles shall be based on the key focus areas requiring the effective application of management expertise and assets. These are the following:

- Animal Welfare (Incl. animal health & disease management, nutrition and water)
- Environment Custody (Incl. protection of biodiversity)
- Social Ethics and Labour Relations
- General Business / Economic Aspects

## 1.2 Animal Welfare

Animal welfare represents a core requirement for responsible and profitable wool farming. Management processes to achieve this must consider the five basic principles of animal freedom as developed by the OIE (Terrestrial Animal Health Code 2016).

- Freedom from hunger, thirst and malnutrition.
- Freedom from discomfort through provision of adequate shelter.
- Freedom from pain, injury and disease.
- Freedom from fear and distress.
- Freedom to express normal patterns of behavior.

To achieve the goal of maintaining a situation in which the animal can cope with and thrive under external conditions, a large number of good, effective husbandry/management practices are required, not necessarily involving excessive costs. A useful indicator to measure the effectiveness of such practices is to use Body Condition Score (BCS) for benchmarking purposes. BCS is rated on a scale of 1 to 5, with 1 being emaciated and 5 being extremely fat. Most sheep on farms will have a BCS ranging from 2 to 4. Farm workers shall be able to measure the BCS of sheep. If there is evidence of BCS below 2, appropriate action shall be taken to return the animals to good health.

Preventative and reactive procedures, when animal health is threatened, is usually in the form of a complex matrix of activities requiring experienced management. The following principles shall apply:

- Preventative or reactive practices which might cause pain or discomfort shall only be used if effective alternatives to achieve the same result are not available.
- All procedures shall be carried out by competent and experienced practitioners, or under direct supervision of such practitioners.
- At all times relevant hygiene precautions must be adhered to and appropriate pain relief preparations must be available for use as and when required.



Growers are encouraged to liaise with local State or Provincial veterinary authorities, or private sector veterinarians, on an ongoing basis to keep up to date with developments in this regard.

### **1.2.1 Mulesing**

This procedure is prohibited and shall not be practiced under any circumstances.

### **1.2.2 Tail Docking**

Tail docking shall be carried out after establishment of the lamb/ewe bond, when the lamb is older than 24 hours but not older than 6 weeks, using appropriate equipment. Such equipment must be fit for purpose and clean.

### **1.2.3 Castration**

Castration shall be performed on ram lambs which are not to be kept for breeding purposes, and who are between one and six weeks old. It should be performed before or after the season for blowfly attack, by competent staff with the necessary skills. There are a number of appropriate techniques available, such as surgical castration, use of rubber bands or a castrator clamp (burdizzo). Registered antiseptic as well as topic pain relief products should be available for use during castration. If castration has to be performed during a high-risk period for blowfly strike, wounds must be treated using registered products to avoid blowfly attack and deposition of eggs in the wound area. Castrated lambs should be inspected two days after castration to check for complications and then a week later to assess the wound healing process.

Vaccination against Tetanus is required, especially if rubber bands/burdizzo are used. Ewes to be vaccinated to achieve this immunity in the lambs.

### **1.2.4 Hoof Care**

Hoofs may be checked and trimmed as necessary using a clean sharp knife or pruning (foot rot) shears to remove dead or overgrown hoof wall. This process should preferably not be carried out during periods of external stress, high temperature or late gestation.

### **1.2.5 Horn Care**

Removal of horns from adult sheep is unacceptable unless carried out for a specific reason and then only by a veterinarian using appropriate anesthesia. Horns may be trimmed back to avoid ingrowing or injury to other sheep, by pairing the tip where the horn tissue is devoid of nerves and blood vessels.

### **1.2.6 Ear Marking**

Ear markings shall be used for identification purposes. According to the current relevant legislation – the Animal Identification Act, (Act 6 of 2002) – all lambs must be tattooed at 1 month of age.

Pain relief and/or topical antiseptic treatments should be available for use as and when required.



Ears may also be tagged, notched, hole-punched or have a transponder/microchip inserted. However, please note, although used as a management tool, none of these comply with the current legislation.

### 1.2.7 *Lambing*

Pregnant ewes shall be allowed to lamb without interference, and if required, assistance shall be given by competent individuals with the necessary experience using acceptable techniques. Routine surveillance shall be provided to monitor risks associated with potential health problems and predation. Under inclement weather conditions adequate shelter shall be provided including a clean and dry area for the lambing process. Surveillance must continue after the lambing process to monitor bonding and to take the appropriate action with strays and abandoned lambs. (Reuniting with mothers, raise as orphans or euthanasia)

### 1.2.8 *Shearing*

Shearing is the first link in the wool value chain and therefore of critical importance. Shearing shall be monitored and managed to minimize all potentially stressful effects. To ensure that all in-shed processes comply with the Animals Protection Act, (Act 71 of 1962), strict supervision is required during the entire process.

- Shearing shall be performed by trained, competent and accredited shearers only, according to the wool industry shearing standards. These standards are covered in the Cape Wools SA Code of Best Practice for Sheep Shearing and Wool Handling.
- Sheep gathered and penned in preparation for shearing shall not be deprived of food and water exceeding a period of 24 hours.
- Undue and careless handling of sheep shall be avoided
- Shearing equipment shall be well maintained
- Shed facilities shall be well maintained, clean, well ventilated and have adequate lighting
- Shorn sheep shall be returned to adequate food and water as quickly as possible
- Shorn sheep shall not be exposed to adverse weather conditions
- Shear cuts shall be treated immediately with suitable products to minimize pain, distress and infections
- Appropriate shed management procedures for disinfection should be in place to avoid the spread of disease within or between individuals and flocks.

Shearing sheds shall not be used for activities such as skinning of dead sheep, housing of sick animals, drying and storage of skins and pelts or storage of agriculture chemicals.

### 1.2.9 *Euthanasia*

The core purpose of euthanasia is the application of effective and humane methods to cause quick and painless death of sheep when there are no other options to prolong life or to limit pain and suffering.



Humane methods are:

- Stunning by captive bolt, followed by rapid severance of the trachea, carotid arteries and spinal cord.
- Clean head shot from firearm
- In emergency cases, rapid and clean severance of trachea, carotid arteries and spinal cord with a sharp bladed knife of suitable length
- Medical overdose by a qualified veterinarian

### **1.2.10 Sheep Handling and Transport**

- Sheep shall be provided shelter against extreme weather conditions, providing clean, well ventilated, dry and sanitary conditions if comprising a constructed shelter.
- Races, loading facilities and enclosures shall be free of sharp projections, protruding nails or bolts or broken or slippery sections to avoid injuries.
- Sheep shall be patiently driven at a calm and relaxed pace to avoid exhaustion, and not faster than the slowest animal in the group. One hour rest per 10km with provision of water, is recommended.
- Electric prodders or whips shall not be used for any activity related to the handling, driving and transport of sheep.
- Transport of sheep by road shall be compliant with all relevant legislation, as well as with relevant SANS guidelines and standards. In this respect the following requirements are important:
  - Vehicles shall be licensed and roadworthy, and drivers suitably licensed.
  - Vehicles and trailers shall have a non-slip floor.
  - Sheep shall not be transported totally enclosed and preferably in sub-divisions for not more than 20 sheep each.
  - Side walls must be adequate to prevent escape or falling out.
  - Animals shall be watered and fed before loading.
  - Loading and off-loading shall be done calmly, quietly and tolerantly.
  - If restrain is required, wire and baling twine shall not be used. Rope shall be long enough to avoid strangulation or neck-break.

All animals must be promptly off-loaded upon arrival at destination.

### **1.2.11 Housing**

Sheep requiring temporary housing (i.e. feed lot) shall be handled in the same way as required by item 1.2.10. Such facilities shall be well ventilated, clean and provide sufficient freedom of movement and floor space. The minimum space per animal shall depend on age, size and class and can typically vary between 0.4m<sup>2</sup> and 1.7m<sup>2</sup>. The period of housing per individual animal shall not exceed 12 weeks.



## 1.3 Animal Health and Disease Management

### 1.3.1 *General*

A bio-secure farming environment is a core requirement for healthy sheep and management systems shall be in place to mitigate potential hazards. Healthy sheep is the foundation for a profitable and sustainable wool farming enterprise. Throughout its life sheep shall be kept free from pain, injury and disease through the strategic, tactical and responsible application of appropriate management practices and remedies. This goal is best supported if the woolgrower has a written animal health plan which is regularly reviewed and updated as health technology improves, new health issues requiring attention emerge, or as new or improved remedies, are introduced. Consultation with veterinary practitioners is to be recommended in this regard.

Infectious diseases are the main focus of biosecurity practices.

The Animal Disease Act (35 of 1984) requires that certain diseases shall be reported to the veterinary authorities, and woolgrowers are therefore legally obliged to do so. These diseases are divided into two categories:

#### Controlled sheep diseases:

- Anthrax
- Brucellosis
- Foot and Mouth Disease (FMD)
- Johne's Disease
- Rabies
- Rinderpest
- Scrapie
- Sheep Scab
- Skin conditions in sheep.

#### Notifiable sheep diseases:

- Bluetongue
- Rift Valley Fever (RVF)

### 1.3.2 *RVF*

Rift Valley Fever is a viral disease of sub-Saharan Africa. The virus attacks the liver and causes symptoms ranging from fevers and listlessness to hemorrhage and abortion rates approaching 100% in pregnant sheep. It is transmitted by mosquitoes. There is no specific therapy for infected animals. Vaccination of animals against RVF is used to prevent disease in endemic areas.



**Different vaccines are available:**

- **Live vaccine**

This is a vaccine that confers long lasting immunity but cannot be used in pregnant animals as it can cause abortion. In addition, should it be used in the first three months of gestation and abortion does not result, the lamb can be born with brain abnormalities.

Lambs from vaccinated ewes should not be vaccinated before 6 months of age to avoid maternally acquired immunity interfering with the immune response to the vaccine.

- **Inactivated vaccine**

This vaccine is safe to use for pregnant sheep. Its disadvantage is that the immunity lasts for one year at most.

**Points to note:**

- Vaccination against RVF is strongly recommended as a routine, because vaccination during outbreaks is a problem.
- Severe losses are suffered during an outbreak.
- RVF is a zoonosis. (A disease that can be transmitted from animals to humans)

Although both Controlled and Notifiable diseases must be reported as a legal obligation the difference between the two groups is the reaction of the National and Provincial State Veterinary authorities to the report and confirmation of the disease.

The response to Controlled diseases is vastly more intensive, intrusive and far reaching than to Notifiable diseases, with a legal obligation on both National and Provincial State sectors to deploy resources to deal with a Controlled disease outbreak.

**Specific Requirements:**

- Biosecurity shall be maintained by utilizing all available tactics e.g. maintenance of good fencing, vendor declarations, quarantine procedures, controlled access onto the farm etc.
- Preventative measures should be used for diseases which are common or prevalent in the area where the farming operation takes place.
- All remedies shall be stored in original containers and be used strictly in accordance with the supplier's instructions or with veterinary advice/prescription. This is necessary to effect successful application and to avoid risk to animals, humans and the environment.
- Application of remedies shall be by competent individuals only, who can demonstrate the appropriate skills and knowledge levels.
- Expired products and empty containers/receptacles shall be disposed of in an appropriate manner.



- Storage of medicines shall be according to label instructions in a locked, clean and well-lit environment, and separate from all other materials.
- Emergency information shall be displayed, and facilities shall be available to deal with spillages or accidents.
- An appropriate balanced inventory comprising record of purchase and use of medicines shall be kept as an addendum to the animal health plan.
- Equipment used to administer remedies and medicines, such as injection syringes, needles and dosing guns shall be clean, well maintained, sterile (if required) and regularly calibrated.
- Treatment of sheep against external parasites using pour-on products or by dipping shall be well planned and executed using only registered products, strictly according to prescription. No products containing organophosphates, cypermethrin or chlorfenvinphos shall be used. Studies have shown that these chemical compounds pose significant health threats under extreme or extended periods of exposure to humans (e.g. farmworkers). Absorption takes place through the skin or lungs and can lead to cardiovascular and respiratory disease and cancer. This is also important to avoid downstream pollution and environmental degradation caused by scouring effluent as per international environmental protection standards such as Oeko-Tex®.

### **1.3.3 Promotion of Internal and External Biosecurity**

#### **Quarantine:**

The implementation of quarantine procedures is the single most effective way of preventing the introduction of biological hazards into a flock. The construction of a suitable quarantine station should be one of the first activities of any flock manager to ensure that all animals introduced into the system are managed in such a way that the lowest possible threat to the flock's health is presented by new introductions. The quarantine station shall be positioned in such a way that animals can be off-loaded into the quarantine facility without any possibility of coming into contact with the resident flock. The quarantine facility shall be adequately fenced and positioned far enough from existing camps, pens or human activity to prevent the spread of hazards. Run-off water should not contaminate downstream farming activities. If no other terrain is available, the run-off water shall be channeled into a dam that is inside the quarantine area. Quarantine facilities shall ideally be sited downstream from the rest of the farm. Insects can pose a serious problem in carrying infective material from a quarantine facility. Quarantine facilities shall ideally be situated downwind from the rest of the farm. Quarantine areas shall always have their own handling facilities such as races, footbaths and dips. At least 100m clearance around animals in quarantine should be allowed to avoid aerosol transmission.



**Quarantine procedure:**

Before purchasing any animals, request a vendor declaration and get a signed commitment that sheep can be returned if found to be infected with slow incubation period diseases.

**Before departing from source (if possible):**

- a) Dip all animals.
- b) Conduct a Famacha flock examination.
- c) Collect a faecal sample from at least 10 animals, for assessment of worm infestation.
- d) Vaccinate the animals as required against at least the following diseases if more than 7 days remain before movement to their destination: Enterotoxaemia and Pasteurellosis. (Mannheimia).

**After arrival:**

- a) Perform a physical examination.
- b) Tag each group with a distinct colour code and record origin and destination.
- c) Clip feet that need attention.
- d) Footbath with Zinc sulphate plus small amount of soap.
- e) Dip and or inject for external parasites.
- f) Collect faeces for egg counts.
- g) Conduct a Famacha flock examination.
- h) Respond to faecal examination results.
- i) Drench if necessary.
- j) Test the response to drenching after 10 days and act accordingly. (Alternative procedure: Buy susceptible Haemonchus larvae and drench introductions with low levels to stimulate their immunity.)
- k) Collect blood for serology (discuss with flock health veterinarian – for example: Johnes Disease, Pulmonary Adenomatosis (Jaagsiekte), Brucellosis).
- l) Respond to serology results.
- m) Keep animals in quarantine for at least the incubation period of short incubation infectious diseases (21 days) or sufficient time for vaccinations to take effect.
- n) Observe animals daily. Take temperature and record if possible.
- o) After release from quarantine facility keep rams separate until genital soundness examination and first mating if possible. Pizzle Disease becomes apparent only at mating time.
- p) Keep pregnant ewes separate until after lambing.
- q) Keep ewes separate until after first mating.



### 1.3.4 On-farm Handling and Management of Chemicals

- Chemicals used in the wool growing environment cover a large and diverse range of products, such as stock remedies and medicines, vaccines, fertilizers, pesticides and herbicides. For information purposes refer to Annexure 1 - GUIDE TO THE ECTOPARASITICIDES USED ON LIVESTOCK HORSES, OSTRICHES AND GAME IN SOUTH AFRICA (E&OE).
- Use of chemicals as well as storage and disposal of surplus products and empty containers shall be carefully managed to obviate deleterious effects on animals, humans and the natural environment.
- Storage of all chemical products shall only be in a locked well-lit facility with access limited to key holders only who have an understanding of the use of such chemical products and the implications of incorrect use. No other products for human or animal consumption shall be stored in proximity to such chemicals. Access to first aid in the case of accidents is a priority.
- All chemical products shall be stored in original containers and never decanted. Containers shall be kept on non-absorbent shelving. Labels shall be present on the containers and be legible.
- Solid or powdered products shall be stacked above liquid products.
- A chemical register recording data such as date of purchase, product use and shelf life shall be kept.
- Expired, defective or hazardous chemical products shall be responsibly disposed of, taking into account human, animal or environmental risk when deciding on a suitable disposal method. This includes destruction or part destruction of empty containers.
- Prescribed withholding periods for all chemicals used shall be strictly adhered to, and no organophosphate, chlorfenvinphos or cypermethrin containing products for external parasite control shall be used.
- There are various types of vaccines:
  - a) **Live vaccines** usually contain a live micro-organism which has been weakened (attenuated) in some way, or a naturally occurring strain which is of low virulence and/or pathogenicity. Most live vaccines are in a freeze-dried form. Freeze-dried vaccines are presented in the form of a compact, dry pellet, which must be mixed with sterile water before it can be injected. In this form the micro-organisms in the vaccine can be successfully stored provided the vaccine is kept in a refrigerator and is not exposed to direct sunlight.
  - b) **Inactivated vaccines.** There are 3 types of inactivated or non-living vaccines.
    - Killed vaccines: This is a vaccine made of micro-organisms that have been killed using chemicals or heat. Killed bacterial vaccines are sometimes referred to as bacterins.
    - Toxoids: These are vaccines made of bacterial toxins, which have been rendered non-toxic by chemical treatment.



- Sub-unit vaccines: Sub-unit vaccines contain only certain parts or structures of a micro-organism.

Inactivated vaccines are usually less effective inducers of an immune response than live vaccines and so they have chemicals added to them which improve the immune reaction. These chemicals are called adjuvants. The adjuvant may be mineral oils or potassium or aluminum salts. In some adjuvanted vaccines that have been standing for a while, a sediment may settle out to the bottom of the vaccine bottle. Vaccines containing adjuvants must be shaken well but gently before use to mix all the components.

#### How to use a vaccine:

Directions for the use of a specific vaccine must always be followed carefully. As the directions for using a vaccine are changed from time to time, vaccines should never be purchased without the package inserts which contain the directions for use. It is essential to read the package inserts with regard to the following important information:

- a) Storage: The vaccine must be stored at the recommended temperature. With the exception of heartwater and frozen red water vaccines, which are kept frozen, on dry ice or in liquid nitrogen, all other vaccines should not be frozen. Freezing and thawing destroys certain components in vaccines and therefore a vaccine which has been accidentally frozen must be discarded. Fridges used for vaccine storage should be checked regularly for efficient functioning. Maximum-minimum thermometers or commercially available colour indicators can be used for this.
- b) Vaccines must not be used after expiry date and surplus vaccines should not be stored for later use. All vaccines must be used within the prescribed period after opening the container.

## 1.4 Nutrition and Water

### 1.4.1 *General*

Convenient access to sufficient quantity and quality food and water underpins animal health and welfare, which is required for sustainable and profitable wool production. It is the woolgrower's responsibility to ensure that his sheep have convenient access to sufficient food and clean water to mitigate hunger, thirst, malnutrition and dehydration. These factors, when present, not only impact sheep health and welfare, but also efficient fiber and meat production.



### 1.4.2 Nutrition

- Depending on age and needs, nutrition availability shall be estimated by means of practical and proven stocking rates when allowing sheep to graze and browse on rangeland.
- Best practice as far as palatable food stock cultivars and associated stocking rates for pasture farming shall be employed, with, if needed, appropriate advice from an experienced pasture scientist. Advice on supplementing feed and dietary needs may also be sourced from professional and experienced animal nutritionists and/or veterinarians.
- When farming on either rangeland or on planted pasture, care shall be taken not to expose sheep to moulds, poisonous plants or seeds and any toxic material or physical objects.

### 1.4.3 Water

- Sufficient, accessible and safe water supply points shall be made available to allow thirst slaking at least once in a 24-hour period.
- Water quality shall be monitored regularly to assess the presence of potentially toxic levels of chemical products or substances.
- Drought exacerbates stress conditions and severely affects sheep welfare. Since droughts are essentially the result of external, non-manageable climatic conditions, an appropriate management plan to mitigate such effects should form an essential component of the woolgrower's business plan.

## 2. ENVIRONMENTAL CUSTODIANSHIP

### 2.1 General

- The woolgrower shall take responsibility for custodianship of the natural environment in which he conducts his commercial wool growing business.
- A business plan to action key performance areas for the maintenance of biodiversity, ecosystem stability and protection of the agricultural resource base shall be developed and revised on a regular basis to benchmark progress and to identify new threats. Target areas shall include, but are not limited to, plans for soils, waterways, vegetation (alien and naturally occurring) fauna (wildlife) and other features affecting biodiversity. National and Provincial legislation, as well as associated land care guidelines shall be accessed to ensure appropriate compliance where legal requirements exist.
- Custodianship can also be demonstrated, for example, by conversion of electricity sourcing from traditional sources to environmentally friendly options such as solar or wind.
- Climate change and its effect on the farming environment shall also be considered and long-term plans made accordingly. A useful reference document to assist in this regard is "The Green Choice Living Farms Reference".



## 2.2 Soils

- Sustainable use of this natural resource base shall be demonstrated through prevention of erosion and not exceeding the maximum grazing capacity of the farm.
- Cultivation and fertilization of soils shall target improvement of soil fertility and maintenance of appropriate nutrition levels.
- Rangeland (veld) grazing capacity shall be established and reduced where deterioration is observed, particularly during periods of drought.
- Suitably developed grazing/resting protocols must be observed to support long term sustainability.
- Eroded and damaged soils should be restored if feasible and cost-effective.

## 2.3 Water

- South Africa is a water-poor country, and, accordingly, woolgrowers must manage water resources and water bodies accordingly.
- Systems shall be in place to avoid degradation of natural water sources through contamination with effluent, agricultural run-off and leaching from potential sources of contamination such as dip tanks or troughs.
- Moisture/ water retention may be improved through provision of strategically placed contour planning and catchment of precipitation.
- Water quality shall be monitored through testing and assessment for animal and human use.
- A large body of National and regional legislation exists which regulates water use in South Africa. Growers are encouraged to stay informed in terms of all regulatory guidelines in this regard.

## 2.4 Invasive Vegetation

- Invasive alien species cause habitat destruction and can affect the availability of surface and sub-surface water and increase veld fire risk.
- By definition, an on-farm alien plant and grass eradication program is of a long term nature and is best planned in association with public nature conservation authorities.
- Cost effective plans should include collaboration with neighboring properties to increase clearing efficiency.
- Advice shall be sourced from external expert service providers to seek an appropriate balance between different options for eradication, which may include the use of herbicides, biological methods or even well managed burning.
- Potential for dispersal of invasive plant seeds by sheep to unaffected areas of the farm and neighboring properties shall be monitored, and stock movement planned accordingly.

## 2.5 Pasture Systems

The use of clean or safe pastures will help to control parasite problems.

The “refugia” principle applies here: “Refugia” is simply the Latin term for “refuge”. When managing drenching/anthelmintic resistance it refers to avoiding the whole population of worms being exposed, **at the same time**, to the drench and therefore subject to drench resistance



development. In other words leave some of the worm population in “refugia” – in “refuge” from the drench.

There are various ways of achieving this and it should developed as part of the flock management plan with your flock health advisor.

Pasture rotation system: A pasture grazed by cattle and/or horses is also considered safe, since sheep/goats and cattle/horses do not share the same parasites.

Rotational grazing generally does not help to control internal parasites unless pasture rest periods are long enough (> 70 days).

## 2.6 Wildlife Management

- South Africa has a rich and diverse population of wildlife in most wool production areas. In terms of the woolgrower’s overall responsibility for, and custody of, the natural environment in which the business operates appropriate conservation must be properly managed. This is important even if game farming is not a branch of the overall farming operation.
- Woolgrowers must be knowledgeable about bird and wildlife species occurring naturally on the property. Appropriate conservation plans shall be in place to avoid decimation of such species through the irresponsible use of agrichemicals, veterinary products or any other ill planned farming operations.

## 2.7 Predator Management

- Predators such as jackal, leopard and caracal form part of the natural ecosystem on many wool growing properties.
- Predation, by definition, causes severe economic problems for woolgrowers, as a result of production and stock losses. Predation very often also causes severe suffering to livestock due to maiming. Accordingly, a balance between predation management and environmental protection of biodiversity is of critical importance. Therefore, predator management shall be addressed in a suitably developed plan. Consultation with public and private nature conservation agencies and compliance in terms of legislation is strongly advised.
- The underpinning of a good predator management plan is the use of preventative measures as a first line of defense. These include but are not limited to using guard dogs (Anatolian shepherd dogs), donkeys, alpacas, fencing and technologies such as protection collars and noise/light generating devices. If ineffectual, the use of other legal control methods by accredited and experienced service providers shall be sourced.
- All methods used for predator control shall be selective, be as humane as possible and have no effect on non-target species or on the environment in general.
- The use of any poison is strictly prohibited and shall not be considered as an option under any circumstances.

# 3. SOCIAL ETHICS AND LABOUR RELATIONS

## 3.1 Introduction

Wool growing as an economic activity must comply with social and ethical standards applicable to the woolgrower as well as to his staff, their dependents and the communities in which the



business operates. Social principles which shall be upheld include rights, privileges and obligations, and a system of clear understanding of these issues. Fair labour practices, a safe, hygienic and enjoyable work environment and a commitment to build and sustain good, productive employment relationships to support the strategic business goals of the wool growing enterprise is required.

### 3.2 Human Rights

Human rights in line with the South African Bill of Rights and the South African Constitution must be supported and protected in line with all core labour rights, as embodied in the principles of the International Labour Organization. This includes, but is not limited to, prohibition of forced labour or child labour. It shall guarantee freedom of association and the right to organize and bargain collectively. No discrimination of any nature will be practiced.

### 3.3 Labour

Access to and the ethical, efficient and effective utilization of labour is critical in terms of the sustainability of a wool growing enterprise. Labour can be utilized via a workforce employed by the woolgrower directly, or indirectly via external labour providers. In the latter context the provision of shearing and wool classing services by brokers, or by shearing contractors, is a major component. A Code of Best Practice for Sheep Shearing and Wool Handling developed by Cape Wools SA (NPC) is the source document for woolgrowers to use, covering a range of minimum requirements in this regard.

In terms of basic conditions of employment legislation, the wool growing employer shall ensure that a contract is in place with his employees, specifying the following:

- Working hours and responsibilities.
- Compensation and timing of reviews and salary increases.
- Leave particulars and provisions (sick leave, normal leave and maternity leave)
- Conditions of employment termination details.
- Any other particulars to ensure a fair and equitable arrangement between employer and employee, consistent with legislation.
- Details of grievance and disciplinary procedures to manage and/or prevent conflict in a productive manner.
- Details to support development and management of good labour relations. It is important for the woolgrower employer to proactively seek and utilize opportunities for skills development to increase productivity and job satisfaction.

The employee has the right to provide his/her services in a working environment that is safe, healthy and conducive to general wellbeing. The employer shall have available a set of contingency procedures and access to first aid in the case of emergencies, and to ensure that employees are aware of such procedures to be able to respond timeously and appropriately.



The employer is well advised to source assistance to analyze the farming operation from a risk assessment point of view in this regard.

Employers shall make provision for their employees to have access to unemployment insurance and pension/provident fund schemes, and to medical aid schemes or other similar assistance plans, if so desired.

Employees have the right of access to comfortable, safe and convenient housing with electricity supply, good sanitation and ablution facilities and other appropriate conveniences.

## 4. BUSINESS/ECONOMIC ASPECTS

### 4.1 Introduction

The business and economic environment for wool marketing requires that these processes form the bedrock for market driven, sustainable wool production and marketing, as the first link in a profitable and sustainable supply chain.

Wool production can only be run as a profitable business on a sustainable basis if a plan exists which balances the optimal utilization of resources such as the climate, soil, water, animal assets, labour resources and operating capital. Of necessity, a relatively large body of documentation is kept as required for legal compliance (e.g. submissions for tax purposes and drawing up of financial statements).

However, wool growers are encouraged to expand this process by drafting and regularly reviewing plans for responding to opportunities and threats impacting on the overall business of wool growing.

### 4.2 Core Issues

- A comprehensive record keeping strategy shall be in place to allow estimates of the status of the business at any point in time. Records can be quantitative or qualitative in nature.
- Records are also critically important for supply chain marketing arrangements. Traceability is a key requirement to verify authenticity and origin of product, through tracking of documents along the supply chain.
- A mapped land use plan is recommended for strategic management and long-term planning of farming operations to mitigate climate change. Regular audits of this plan, e.g. annually, should be carried out as new science becomes available.
- A written plan and budget are required for the wool growing enterprise, as for any other commercial enterprise. Although forward pricing to estimate income is speculative at best in the spot market, thorough and regular sourcing of market intelligence from industry organizations, local and international, is recommended.
- Shearing shall be carried out by well-trained and competent shearers and the clip prepared, packed and offered in line with commercial and marketing requirements. These are contained in the Cape Wools SA Classing Standards.



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