



REPUBLIC OF KENYA



BEST ANIMAL MANAGEMENT STRATEGIES FOR QUALITY HIDES AND SKINS



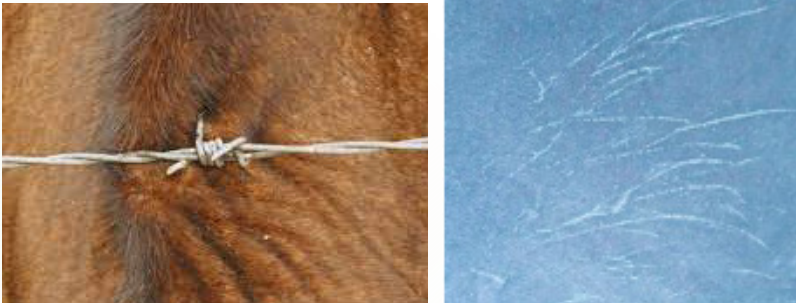
Introduction

Good quality hides and skins are a result of good animal husbandry on-farm. Poor livestock management increases the likelihood of damaged hides and skins, leading to downgrading of value, rejection by tanners and generation of waste.

Damages to hides and skins and their causes

Hides and skins can be damaged on-farm by the following factors:

- **Scratches:** Scratches from sharp projections in housing, or barbed wire fencing. Livestock in the ranges are also prone to scratches from the thorny herbage.



LEFT: Abrasive fencing or herbage cause scratches on hide downgrading the quality of processed and finished leather. RIGHT: Scratches persisting in semi-processed leather

- **Branding marks:** due to hot iron or freeze branding especially in high-value areas



Poorly branded cattle

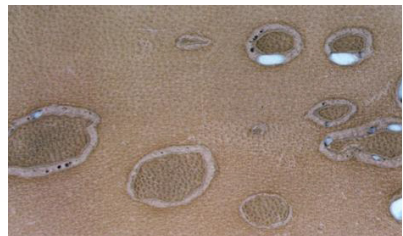
Downgraded leather

- **Scars or Wounds:** from fungal, bacterial, viral infections, and ectoparasites such as ticks, mites, lice, and flies (e.g. keds)



Ticks on hides (LEFT) cause pinpoint holes and blisters that persist on processed leather (RIGHT)

- **Bruises:** due to injury or blow to the body, usually inflicted by poor stockmanship behaviour such as beating and poking of animals. Rope marks can cause bruising across the body, especially in tethered livestock.
- **Skin lesions:** from viral infections such as lumpy skin disease (LSD) which is, transmitted by ticks, certain flies, and mosquitoes; sheep pox, goat pox, warts and tumours.



LEFT: Cow infected with LSD. RIGHT: LSD lesions on semi-processed goat skin

- **Manure marks:** In livestock housing (dairy pens or feedlots), neglect and irregular cleaning of dairy pens, stalls and feedlots, leads to the accumulation of manure and mud which can accumulate on the hide and damage the top grain of hides and skins.



Manure marks damage the top grain of hides, downgrading its quality

- **Small hides and skins:** Poor nutrition produces smaller livestock, causing their hides and skins to be thinner. The resultant leather lacks elasticity, has low fat deposition in the corium and has a finer grain.



An emaciated cow produces thin hides. A healthy dairy herd with larger hides

- **Poor substance:** Substance refers to the structure of the hide/skin, due to breed, sex and age. Breeds influence the hide or skin fibre structure, shape, and hair type. Larger breeds produce larger and thicker hides and skins while humped cattle produce inferior hide patterns due to the presence of hump.

Heifers usually have thinner hides, with more spread while bulls produce bigger and thicker hides.

As cattle age, the hide and skin develop wrinkles, the grain surface becomes tougher and coarser, and the texture loosens and becomes vulnerable to mechanical damage during processing.

Such damage to hides and skins will result in their downgrading or total rejection, rendering them unusable for the manufacture of high-value leather products.

Animal management practices for quality hides and skins

Good animal management practices are recommended. These include:

Improved housing

Dairy cattle housing should be well-designed to enhance ease of cleaning and drainage to reduce manure and mud accumulation. Internal structures should be well-finished to avoid sharp projections. The use of periphery fencing should be made of non-invasive materials to reduce injuries to the hides.



LEFT: Dairy calf pen with straw bedding. RIGHT: A dairy pen with adequate draining

Disease control strategies

Improved livestock health service delivery and effective disease control strategies should be implemented against fungal, bacterial, viral, and parasitic infections. These strategies include regular dipping, vaccination and deworming, non-invasive livestock identification methods and dehorning or disbudding.



Dipping of livestock to control ticks and other ecto-parasites



Vaccination



Deworming



Ear-tagged calves. Ear tagging is a good option instead of hot iron branding



RIGHT: Disbudding of buds to prevent horn raking in horned breeds

Good nutrition of animals

Well-nourished livestock will be large with thicker hides and skins, so good nutrition should be observed throughout the life of the livestock.

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