

Beautiful Livestock, Beautiful by Jennifer Rucha

“Quality is everyone's responsibility”
– Edwards W. Deming--



Truly an excellent example of beautiful leather

Leather is a fundamental industrial product, with diverse utilisation in downstream sectors of the consumer products industry. It is often the major material input, and is cut and assembled into shoes, clothing, leather goods, furniture and many other items of daily use.

Throughout the history of mankind hides and skins have been an important part of each day's life. Traditionally, hides and skins have always been important in Africa's rural setting as the leather made was used for several basic needs including clothing and bedding.

There was already a distinct notion to “process” hides and skins. Hides basically refer to the larger animals like cattle and camel, and skins to smaller animals like goats and sheep.

Quality

Hides and skins are a renewable resource of national and international significance. They provide scope for exploitation on a sustainable long-term basis.

In order for many companies in the leather industry to be competitive, there needs to be high quality and high performance leathers. However the potential benefits can only be fully realised when the hides and skins available to the industry reach a consistent quality.

Livestock rearing in Kenya is done under very diverse conditions varying from open Savannah grasslands, organised commercial farms, zero and semi-zero grazing.

The quality of products obtained from livestock reared in these varying environments is directly influenced by these conditions. In the case of hides & skins the quality and yield of leather obtained from such animals is dependent on these factors. The quality of the hide or skin is to a large extent related to the amount of damage to the grain or "outside" surface. Determining the extent of losses from hides and skins that are not collected for processing or are processed improperly is difficult to estimate. Many hides and skins are discarded soon after slaughtering, but the major losses occur among materials which have been damaged before, during or after collection. Most hides and skins are affected by pre-slaughter defects accumulated during the life of the animal. Some are damaged during slaughter while relatively few are spoiled during preservation.

Some factors that cause these damages are:

- skin parasites
- indiscriminate branding
- Injuries from thorns, whips, sticks barbed wire and horns,
- Poor husbandry practices
- Poor transportation
- Damage during slaughter
- Damage during removal of hide/skin
- Dragging of animal and/or skin at the abattoir
- Inadequate preservation techniques of raw hide/skin

Most types of damages can be reduced or avoided altogether by better management of the animal or the hide.

A case study by Food and Agriculture Organization of the United Nations FAO “In Ethiopia in the early 1990s almost all the country's sheepskins and most of its goatskins were increasingly affected by pre-slaughter defects of unknown origin. The problem varied from minor imperfections in the surface grain of finished leather made from affected skins to more severe pits and blisters. None of these defects were apparent on the raw material, so skins went through expensive processing before the damage became obvious. Since these types of skins were often used to make such products as high quality sporting gloves, anything less than a perfect, blemish-free skin was a serious problem.

Field trials eventually confirmed that the sheep skins were affected by cackle, an irritation caused by the sheep ked (*Melophagus ovinus*) and the sheep louse (*Bovicola ovis*). Goats were affected by sarcoptic mange caused by mites (*Sarcoptes scabiei*). Both problems were easily treated with pesticides such as Diazinon or Amitraz, but the sheep also responded well to simple shearing. Since the damage caused by these external parasites was not permanent, skins from treated animals soon showed no evidence of the original defect. Among the goats in particular, mortality was reduced significantly and there was significant weight gain among the treated animals. In practice, these findings were of immense value to the industry.”

For production of the best hides and skins only healthy animals should be slaughtered and they should be processed by operators properly trained in slaughtering and dressing techniques.



To avoid unnecessary stress and to reduce the risk of stress-related defects in the meat, animals should be treated humanely. Approved slaughtering and dressing techniques should be adhered to. Correct post-slaughter treatment of hides and skins by small producers is essential if quality is to be assured. Correct flaying, drying and treatment of skins is necessary if slaughter is 'in the bush'. If appropriate precautions are adopted during slaughtering, the hides and skins produced should be free of processing or pre-slaughter defects. They should be even along the backbone and more or less rectangular without being folded inward. They should in particular be free of deep cuts on either side and have no holes in the external surface. Hides and skins should be, wherever possible, be well protected against contamination by blood, dung or other extraneous matter and kept cool to restrict the growth of any microorganisms that can damage them.

Most hides and skins must be preserved to protect them during storage and transport until they are converted into leather. Preservation should ideally begin immediately after slaughter and should never be delayed overnight. The most common methods of preservation are drying, salting, brining or the use of other chemicals. Refrigeration, freezing and mechanical drying methods can be used, but they are expensive and tend to be reserved for more valuable skins in particular situations.

The Livestock Society of Kenya is among one of the sources farmers can turn to for any answers to the 'whats' and 'whys' in the quality enhancement of hides and skins. It all starts in the fields. Let's make a change.