

Global perspectives on animal welfare: Africa

W.N. Masiga ⁽¹⁾ & S.J.M. Munyua ⁽²⁾

(1) P.O. Box 47926, 00100 Nairobi, Kenya

(2) Pastoral Livelihoods Programme, African Union's Inter-African Bureau for Animal Resources, P.O. Box 30786, Nairobi, Kenya

Summary

Livestock production systems, production objectives, the cultural values of livestock keepers, and the close relationship between keepers and their livestock have evolved over the years and have influenced the quality of animal welfare in Africa. An equivalent level and quality of care is not evident for companion animals, especially dogs and donkeys, who are often mistreated and physically abused. In the densely populated highland and humid coastal belts of Africa, profit-driven commercial large-scale intensive livestock production systems predominate. As the main production objective of these operations is to maximise profit, the operators of these production systems do not exhibit the same kind of attachment to their livestock as traditional farmers. In some large-scale commercial systems animals and birds are kept in sub-standard poorly constructed structures that greatly restrict the animals' movements.

In Africa, conservation of wildlife habitats is part of animal welfare, but due to an increasing human population and a greater demand for land for grazing, cultivation, and housing, wildlife reserves are quickly diminishing. This essentially means that the land that was previously set aside for wildlife and forests is being encroached upon and previously unsettled plains and marginal lands are being used for agriculture and mining. In most places there is significant conflict between humans and wildlife, such that wildlife are considered to be pests that need to be destroyed. This is a particular problem in areas where wildlife have destroyed crops, attacked man and/or livestock, or there has been disease transmission between animals and humans. In situations and/or areas that do not have official animal control services, crude weapons, poisons, and traps are used to kill the wildlife. Animal welfare issues, domestic and wildlife related, need to be urgently addressed through policy and legal frameworks and supported by community awareness of, education about, and participation in, animal welfare issues.

Keywords

Animal welfare – Cruelty – Cultural practice – Cultural values – Livestock production system.

A working definition of animal welfare

Animal welfare, for the purpose of this paper, is defined as an animal's ability to comfortably interact with the environment in which it lives (i.e. welfare is an individual

animal's state with regard to its attempts to cope with its environment). In the context of this definition, 'environment' refers to internal and external factors to which an animal responds with psychological (i.e. feelings and other brain mechanisms) and physiological (i.e. a range of body functions) coping systems (1). The more an animal is incapable of maintaining its physiological and psychological systems, the greater the effect on its welfare.

Livestock production systems and their influence on animal welfare in Africa

There are an estimated 224 million cattle, 447 million sheep and goats, and 34 million equines and camels in Africa. Between 70% and 90% of the livestock on the continent are produced in extensive natural grazing pastoral areas and they are the basis of survival for the local population. The remaining 10% are raised under semi-intensive and intensive production systems (3).

Classification of production systems is based on four factors:

- species and distances travelled to access feed and water
- product (crops, livestock, or combined production systems)
- scale of production
- climate (agro-ecological zones [AEZ]).

According to the latter classification, AEZ 1-4 are arable areas, and AEZ 5-7 are arid and semi-arid lands (ASALs). Classification can also be based on the degree of dependency of the local human population on livestock and the type of crops associated with the production systems. Livestock production in the ASALs is in semi-nomadic, agro-pastoral, or pastoral systems. The traditional nomadic and transhumance pastoral systems (seasonal movement of livestock between mountain and lowland pastures by herders) based upon communal grazing in the ASAL areas, are well adapted to the annual and seasonal variations in rainfall and vegetation. Mobility of livestock keepers and herds is essential to ensure that the pastoralists are able to access water and grazing areas, reduce gastrointestinal worm infestations, and avoid attacks by tsetse, biting midges, and other pests. The livestock production systems and societal values of the livestock keepers have a significant effect on animal welfare.

Understanding the relationship between African communities, livestock production systems, and animal welfare

In the pastoral and agro-pastoral (AEZ 5-7) and traditional non-intensive production (AEZ 1-4) systems, livestock are fundamental to the survival of man, with an almost

mystical relationship existing between the two entities in many cultures. Some cultural groups believe that in the beginning of the world God, the creator, granted them custody of all livestock for safe keeping, which gives members of that cultural group the right to take possession of any livestock being held by people who do not belong to the same cultural group. This has led to varying forms of retaliation, such as recurrent raiding of neighbouring cultural groups.

In Africa, livestock have many uses and purposes, which may explain the complex nature of the relationship between livestock and their owners. Livestock produce meat, milk, and blood that is used as food; hides that are used for bedding, shoes and other accessories; and hair and wool that are used to make clothing and bedding. Their dung is used to plaster traditional houses and as fuel and fertilizer and their urine is sterilised and used as a medicine. Tools, ranging from needles to arrows are used to collect the blood (via venipuncture) that is used as food. The resulting wound is not fatal and is bandaged afterwards. While this may appear cruel, extra care is taken to avoid unnecessary harm to the animals.

Livestock are a major sign of wealth and a source of pride, and they are often exchanged during marriage. There is a common misconception that pastoral and agro-pastoral livestock producers are more concerned about the quantity rather than the quality of the animals. On the contrary, producers select and breed only the highest quality animals and travel long distances to ensure that their livestock have access to the best pastures and water.

In extensive (transhumance), intensive, and semi-intensive farming systems animal draught power is used extensively for transporting goods. While traditional methods have been used extensively to perform various farming chores since the early periods of time in Africa, the rising human population, changing household needs, shifting production objectives (from subsistence to semi commercial and commercial), the evolution of independent countries, and the improvement in transportation systems and infrastructure have greatly modified the use of animal power.

In the highly populated highland and humid coastal belts, commercial intensive or large-scale livestock production systems predominate. The operators do not have the same relationship with their livestock as traditional farmers, as the main production objective of these new enterprises is to maximise profit. Intensive and semi-intensive production systems, which range from simple zero-grazing (tethering animals or keeping them indoors) in ruminants and pigs to deep litter and battery cage systems in poultry, are characterised by varying degrees of limitation of animal movement and access to natural grazing (Fig. 1).



Fig. 1
Intensive livestock production systems with limited space allocated to each bird or animal

Poultry

Forced molting of poultry, which involves inducing chickens to shed their feathers at a time when they do not normally shed, is widely practiced in Africa. Forced molting, which is usually applied to poultry that have stopped laying after one year of production, is achieved by manipulating daylight length and feed (withdrawal for up to 14 days) or by completely immersing the birds in cold water. The stress associated with the forced molting causes unnecessary deaths and deterioration of the birds' body condition.

Broiler chickens, on the other hand, are packed into cages in battery systems or crowded in open units in deep litter systems. Poorly constructed cages result in injuries to the feet and bodies of the birds; inadequate emptying and cleaning of deep litter units results in ammonia burns on their feet and acute and chronic kerato-conjunctivitis. The 'enhanced' growth rates, achieved through the use of growth promoters, cause crippling leg defects and ascites (fluid-filled abdomens), which greatly stress the poultry and cause unnecessary mortalities.

There is an urgent need in most African countries to design appropriate housing structures, determine the stocking density, and enforce rules and regulations governing the commercial production and welfare of poultry.

Dairy cattle and goats

In intensive production systems, dairy cattle and goats are either tethered or kept indoors. The quality of housing and feeds greatly determines the animals' level of stress and the risk of infection and injury. Due to inadequate guidance from appropriate professionals, a lack of policies and/or statutes governing animal housing, the high cost of feeds, and the escalating cost of construction, most housing is not suitable for the species of livestock that is living in it and the quality and quantity of the feed is very poor. Inappropriate or poor housing often results in injuries,

especially to the hooves and protuberances (e.g. hip bones), which are aggravated by inadequate and low quality animal health care.

Animal power: transportation and ploughing

Animal power (horses, donkeys, mules, camels, and steers) is commonly used in Africa for transport and ploughing. Traditionally the species and sex of the animals used for these purposes were matched to the type of task being performed, the load carried, and the distance travelled. In traditional systems efforts were made to ensure that the welfare of the animals was taken into account because the livelihood of the owners was dependent on the well-being of the animals. Traditionally, harnesses and saddles were made by village artisans who also used animal power. There was, therefore, an important relationship between the animals, the owners, and the artisans, which is currently being undermined by the commercialisation of animal transport and ploughing services throughout Africa. Due to an increased emphasis on monetary gain, animals are forced to carry heavier loads over longer distances and plough bigger fields for longer periods of time. To 'increase profit margins', poorly designed and inappropriate equipment (i.e. harnesses, wagons, and ploughs) are used and the animals are not given adequate water, feed, or rest. African countries need to develop and implement policies and legal frameworks that address animal welfare issues and, at the same time, encourage compliance through community education and awareness about animal welfare.

Animal handling along stock routes and at slaughterhouses

In Africa most of the animals are transported to market or to slaughterhouses by foot or on motorised transport. Unlike most developed countries, few countries in Africa

have specialised vehicles for animal transport (Fig. 2). Birds and other animals are loaded into any available space on a vehicle, including in the boots (trunks) of vehicles and in closed train wagons. It is common to see birds being transported upside down or pigs and dogs tied to the back seat of bicycles. Overcrowding and injuries on lorries and train wagons are extremely common. To compound the situation most livestock and bird markets do not have loading facilities, nor are there any feeding and watering points along the stock routes to the slaughterhouses.

Similarly, animals that are transported by foot to the market often walk for days without adequate rest, water, or feed. The drivers of the animals, who are often paid per number of animals delivered to the final destination, beat the animals to force them to move faster. By the time the animals reach the slaughter facilities they are exhausted and their physical condition has greatly deteriorated.

At the slaughter facilities the animals are crowded into small holding pens and fairways for ease of control and are pushed and poked with sharp objects to force them towards the stunning area. Most slaughter facilities, especially those in the rural areas of Africa, defy all definitions of a proper slaughterhouse. Some extreme examples of unacceptable handling procedures include cutting the tendons on the fore and hind legs to immobilise animals, stunning animals with mattocks (an axe-like tool), strangling chickens, suffocating pigs, and slitting the throats of animals and birds before stunning.

There is an urgent need for African countries to develop, implement, and enforce transport and pre-slaughter handling procedures and to improve handling facilities (Fig. 3).

Companion animals

The most common companion animals in Africa are the cat and the dog. Various species of primates and reptiles are

also kept as pets. While legal statutes and societal and cultural norms have resulted in the establishment of standards of care for companion animals in some countries in Africa, the methods used to control stray and abandoned animals in urban areas are often cruel. The animals are either poisoned, using strychnine or other painful slow-acting poisons, strangled, or killed by blows to the head with a hammer. Several countries in Africa have animal welfare organisations that take care of stray and abandoned animals, but the capacity of their facilities is limited (Fig. 4). The public sector needs to actively support the existing voluntary animal welfare organisations/institutions to help them to be more effective in assisting animals in need and increasing awareness of the importance of animal welfare.

Welfare of wildlife in zoos and open areas (parks and reserves)

Most countries in Africa have a large number and variety of wildlife, including carnivores, herbivores, reptiles, birds, and primates, that live in the wild and in zoos or sanctuaries. Unlike domestic animals, however, there are no societal and cultural norms or set standards of care for wildlife. In most places there is such significant conflict between humans and wildlife (i.e. destruction of crops and transmission of disease between animals and humans) that the wildlife is considered to be a menace that should be destroyed. The control of wildlife in situations and/or areas that do not have official animal control services is often cruel and, in some instances, inhumane: crude weapons, poisons, and traps are used to kill the animals. Some of the most common methods used to trap wildlife include pits dug into the ground containing sharp objects at the bottom (spikes), snares, nets, and hunting with dogs. With the emergence of a lucrative bush meat trade the killing of wildlife has gained momentum over the past ten years, and unless African countries collaborate to control the illegal trade of wildlife the wildlife populations are at risk of being decimated.



Fig. 2

Camels being trekked over long distances and overloaded and poorly designed vehicles transporting animals to the market



Fig. 3
Appropriate animal handling facilities (including at ports) are essential

Conservation of wildlife habitats is part of animal welfare, but due to an increasing human population, the demand for land for cultivation to meet food requirements and to provide space to build houses is increasing. This means that land that was previously set aside for wildlife and forests is being encroached upon and previously unsettled plains and marginal lands are being used for agriculture and mining. African countries need to develop and implement land use policies and a legal framework that takes into account the co-existence of wildlife, humans, and livestock (2).

Ethnoveterinary practices

Over the years, livestock keepers in Africa have perfected the art of ethnoveterinary medicine (animal health care that is based on folk beliefs and traditional knowledge and practices) such that they are able to perform surgical and obstetrical procedures on domestic animals with relative ease. Some of the most common procedures performed are castrations of various species, episiotomies, anatomical alterations to increase virility, surgery to prevent repeat uterine prolapses, and the treatment of fractures (2).

In Africa, castrations can be performed as an open or closed procedure. To perform an open castration, the scrotum is cut open with a sharp instrument and the testicle is exteriorised and subsequently twisted and stretched until it tears off. To perform a closed castration, the spermatic cords from both testicles are hammered with a mallet or a club to block the vas deferens. In contrast, to increase the virility of an animal, the same procedure is conducted, but only one spermatic cord is blocked.

To prevent repeated uterine prolapses, a fold of skin on the back of the animal at the level of the sacrum is stapled using a sharpened stick. This causes the back of the animal to arch downward, which, in turn, causes the uterus to fall into the abdomen. To retain a prolapsed uterus, a similar technique is used whereby the size of the vulva is reduced using either strings or sharpened sticks (2).

While animal handlers in Africa are proficient at performing these techniques, analgesics and anaesthetics are not used, which results in pain and suffering for the animals.

The need to identify animals for cultural or commercial purposes has, in the past, resulted in the development of branding patterns that range from simple lines to complex



Fig. 4
Neglected animals – most of these are rescued by animal welfare organisations where present

designs. The branding process, which is accomplished using a hot iron or coals, is not only painful and stressful for the animal, but it also lowers the quality of the hides and skins and, thus, should be actively discouraged. It is important that African countries adopt more modern methods of animal identification, which are acceptable in accordance with international standards and are less painful to apply.

Research and laboratory animals

Most African countries have adopted initiatives that support research and development work; however, unlike developed countries, there are no policies and legal frameworks in place to support the initiatives. To compound the situation, in countries such as Kenya and other former British colonies, the legal system criminalised animal abuse without any provisions for community awareness or education about animal welfare. This situation is made worse by the fact that the research and training institutions are governed by different statutes that protect them from the scrutiny of external parties (i.e. the institutions are only subject to reviews by internal animal welfare and ethics committees). Furthermore, the internal committees, which are often subservient to the directorate, do not have the capacity and/or authority to perform self-inspections or enforce regulations, which makes them essentially powerless. It is important that countries in Africa develop systems to inspect animal facilities and review research practices to ensure that animal welfare issues are addressed in all institutions and facilities dealing with animals. Provision should also be made in the statutes for regular external monitoring and evaluation of the current systems.

The status of animal welfare legislation

Currently in West, East and Southern Africa, animal welfare issues are addressed under several Acts of

Parliament, ordinances and proclamations, including the following (the titles of these acts vary from country to country, so some of the alternative names have been provided in brackets):

- the Prevention of Cruelty to Animals Act (Animal Welfare Act)
- the Branding Act (Animal Identification Act)
- the Animal Diseases and Pest Control Act
- the Wildlife Conservation and Management Act (Wildlife Act)
- the Meat Control Act (Meat Inspection Act, Veterinary Public Health Act)
- the Veterinary Surgeons Act (Veterinary Professionals and Paraprofessionals Act).

In Kenya, Uganda, and Tanzania national animal welfare policies are being developed, along with a review of the Prevention of Cruelty to Animals Act, but they are still in draft form.

Among the legislation on animal welfare in Eastern and Southern Africa, the Prevention of Cruelty to Animals Act, Cap 360 of the Laws of Kenya, is one of the most comprehensive and inclusive pieces of legislation on animal welfare issues. The Act defines what constitutes an animal cruelty offence and what the penalties are for an offence. The Act also outlines regulations in relation to experimentation with animals, slaughter of animals, transportation of animals, welfare of dogs and cats used for breeding purposes, destruction of animals, and the power to enforce the provisions of the Act; effective enforcement is crucial if legislation is to be a deterrent to animal abuse (Fig. 5).

The future of animal welfare in Africa

The overall objective of the existing and emerging policies and strategies on animal welfare services is to facilitate the



Fig. 5
Abused animals

responsible and humane care, use and management of sport, companion, research and farm animals, as well as pets and wildlife (free roaming or in zoos and sanctuaries). The specific objectives of these policies and strategies (available in a draft report) are to:

- regularly review existing statutes and develop supporting policy frameworks to better address animal welfare issues
- monitor for and reduce the incidence of animal abuse (cruelty to animals)
- increase community awareness of the importance of animal welfare
- promote training in animal welfare for service providers in veterinary practice, livestock production, and wildlife management

– promote and facilitate community involvement in and education about animal welfare issues.

It is important that the countries that do not have policy and legal frameworks addressing animal welfare issues put these frameworks in place. This is especially important since both halal requirements and the emerging World Organisation for Animal Health (OIE) guidelines emphasise the importance of animal welfare. The OIE guidelines stress the importance of this issue in the trade of livestock and livestock products and African countries risk being restricted from certain markets in the future due to non-compliance with provisions on animal welfare. The time to act is now.



Perspectives mondiales en matière de bien-être animal : Afrique

W.N. Masiga & S.J.M. Munyua

Résumé

Les systèmes d'élevage, les objectifs de production, les valeurs culturelles des éleveurs et la relation étroite entre les éleveurs et leurs animaux ont évolué au fil des ans et ont eu une influence sur la qualité du bien-être animal en Afrique. Une qualité et un niveau équivalents de soins ne sont pas évidents pour les animaux de compagnie, notamment les chiens et les ânes, qui sont souvent maltraités. Dans les hauts plateaux et les zones côtières humides d'Afrique à forte densité de populations prédominent les systèmes d'élevage intensifs industriels à grande échelle. Comme le principal objectif de ces opérations consiste à maximiser les profits, les exploitants de ces systèmes de production ne montrent pas le même attachement à leurs animaux que les éleveurs traditionnels. Dans certains systèmes industriels à grande échelle, les animaux et les oiseaux sont détenus dans des structures mal construites et de piètre qualité qui limitent considérablement les mouvements des animaux.

En Afrique, la conservation des habitats sauvages fait partie intégrante du bien-être animal, mais compte tenu de l'essor démographique et de la demande accrue de terres pour le pâturage, les cultures et les logements, l'étendue des réserves sauvages se réduit rapidement. Cela se traduit essentiellement par un empiètement sur les terres qui étaient auparavant réservées à la faune sauvage et aux forêts et par une utilisation des plaines inhabitées et des terres marginales pour les besoins des activités agricoles et minières. Il existe dans la plupart des régions un conflit important entre l'homme et la faune sauvage qui fait que les animaux sauvages sont perçus comme des êtres nuisibles devant être détruits. Ce problème est particulièrement perceptible dans les régions où les animaux sauvages ont détruit les cultures, attaqué l'homme et/ou le bétail ou bien dans lesquelles il y a eu transmission de maladie entre les animaux et l'homme. Dans les situations et/ou les zones dans lesquelles aucun service

oficial de capture des animaux errants n'a été mis en place, des armes rudimentaires, des poisons et des pièges sont utilisés pour éliminer les animaux sauvages. Les questions de bien-être animal, liées aux animaux domestiques et sauvages, doivent être traitées d'urgence en recourant à des cadres réglementaires et juridiques avec, à l'appui, une sensibilisation, une éducation et une participation des populations à ces questions.

Mots-clés

Bien-être animal – Cruauté – Pratique culturelle – Système de production animale – Valeur culturelle.



Perspectivas mundiales en materia de bienestar animal: África

W.N. Masiga & S.J.M. Munyua

Resumen

En África, los sistemas y objetivos de la producción agropecuaria, los valores culturales de los pastores y la estrecha relación que el pastor mantiene con su rebaño han ido cambiando con el paso de los años, y esa evolución ha influido en el nivel de bienestar animal. Sin embargo, no se observan un nivel ni una calidad equivalentes en la atención dispensada a los animales de compañía, en especial perros y asnos, que a menudo son objeto de malos tratos y castigos físicos. En las mesetas y los cinturones litorales húmedos africanos con una elevada densidad de población predominan los sistemas de producción pecuaria intensiva e industrial a gran escala, marcados por el afán de lucro. Puesto que tales sistemas tienen por principal objetivo la obtención del mayor beneficio posible, sus trabajadores no exhiben el mismo tipo de apego al ganado que los pastores tradicionales. En algunas explotaciones industriales a gran escala, los animales están encerrados en locales deficientes y mal contruidos que limitan sobremanera sus movimientos.

Aunque en África la protección de los hábitats de la fauna salvaje es un componente más del bienestar animal, las reservas de animales salvajes menguan con rapidez debido al crecimiento demográfico y a la mayor demanda de pastos y tierras para cultivos y viviendas. Ello se traduce básicamente en la invasión de tierras reservadas hasta hace poco a la fauna y la flora salvajes y en la explotación agrícola y minera de llanuras y tierras marginales anteriormente libres de presencia humana. En la mayoría de los lugares la presencia del hombre entra en conflicto con la de los animales salvajes, hasta el extremo de que éstos son considerados una plaga que hay que destruir. Ello resulta especialmente problemático en zonas donde la fauna salvaje ha destruido cultivos, atacado al hombre o al ganado o transmitido enfermedades a las personas. En situaciones y/o zonas en las que faltan servicios oficiales

de control animal se utilizan armas toscas, venenos y trampas para matar a los animales salvajes. Urge aplicar marcos programáticos y jurídicos para abordar las cuestiones relacionadas con el bienestar de los animales tanto domésticos como salvajes, labor que debe venir apoyada por actividades de sensibilización, educación y participación de las comunidades.

Palabras clave

Bienestar animal – Sistema de producción ganadera – Tradición cultural – Valor cultural.



References

1. Grandin T. (1994). – Farm animal welfare during handling, transport and slaughter. *J. Am. vet. med. Assoc.*, **204**, 372-377.
2. Munyua S.J.M., Mbai K., Kariuki D.I. & Chibeu D.M. (1995). – Indigenous knowledge and the use of medicinal plants in ethnoveterinary practices (in small ruminant theriogenology reproduction/obstetrics) in arid and semi arid areas of Kenya. Regional workshop on pastoral indigenous production systems and sustainable development, 16-18 January, Nairobi.
3. Tambi E.N. & Maina O.W. (2002). – Policies for improved livestock development and trade in Africa. In 6th Conference of Ministers Responsible for Animal Resources in Africa, 18-22 March, Addis Ababa.



