

AN ASSESSMENT OF THE LEVEL OF KNOWLEDGE OF, ATTITUDE TO AND COMPLIANCE WITH OIE ANIMAL WELFARE STANDARDS OF WORKING EQUIDS IN KENYA.

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BACKGROUND

1.1 Introduction

The scope of standards of the *World Organisation for Animal Health* (OIE) working equids includes horses, mules and donkeys which are used for traction and transport and for income generation as well as domestic use (non-commercial work). Equids used in sports, leisure riding, biopharmaceutical production and research are excluded. Working equids used for transport and traction impact directly or indirectly on the livelihoods of communities. They contribute to agricultural production and food security by transporting water and fodder for other livestock, firewood and other daily needs for the homestead, and agricultural products to the market. They are also involved in draught power for ploughing, harrowing, seeding and weeding. According to FAO (2014) working equines also supply manure and, in some cases milk, meat and hides. Working equids may also generate income by being rented out or through involvement in commercial activities such as taxi services, construction or tourism. They may strengthen social relationships within extended families and communities through the sharing of working animals at times of need like during ploughing and harvesting seasons. In very remote areas where means of transport are a problem, working equids may be used to transport people and form an important part of weddings and other ceremonial occasions (FAO, 2014; The Brooke EA, 2014).

In Kenya, working equids consist of horses, mules and donkeys. Based on statistics from Brooke East Africa, donkeys are the most used. This study will therefore focus on the welfare of donkeys as a proxy to working equids. According to the 2009 Kenyan livestock census report, there are over 1.8 million donkeys, which is a considerable increase from an estimated 600,000 donkeys after a period of 10 years (Livestock Census, 2009)

1.2 OIE standards on animal welfare of working equids

The OIE defines *animal welfare* as the manner in which the animal copes with the conditions in which it lives in (OIE, 2016). An *animal* is in a good state of *welfare* if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear, and distress. Good *animal welfare* requires *disease* prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane *slaughter / killing*.

In May 2016, the OIE World Assembly of Delegates unanimously adopted a new chapter of the Terrestrial Animal Health Code dealing with the welfare of working equids which includes horses, donkeys and mules for traction, transport and income generation. OIE recommends that working equids should be fed fibre-based diets with proteins, minerals and vitamins to be supplemented. Water should be safe and palatable, given regularly, in sufficient amounts. Shelter should be provided both at resting and in working environments to protect them against heat and cold stress and from predators. Diseases and injuries should be managed promptly to reduce mortality and morbidity rates. The personnel involved in driving and handling working equids should be trained so as to acquire good management skills. Animal handlers should be familiar with normal and abnormal behaviour in order to interpret the welfare implications. End of working life should be considered and abandonment discouraged since it causes suffering. Such equids should be slaughtered or euthanized humanely. Animals should work for at most 6 hours a day and given one to two full day rest from work in a week. Mares should not be worked three months before and after foaling. Sick and injured animals should not work at all. Hooves should be checked, cleaned and trimmed regularly. The harness should be well fitting and comfortable to avoid causing wounds.

1.3 The *Farm Animal Welfare Council* (FAWC)

The FAWC in 1979 defined the “five freedoms” that provide ideal conditions for animals which can be used as a basis for assessment and improvement of animal welfare. These are:

- Freedom from hunger and thirst availed through provision of ready access to water and a diet to maintain health and vigour;
- Freedom from pain, injury and disease attained through disease prevention and treatment;
- Freedom from fear and distress attained by avoiding conditions which cause mental stress;
- Freedom to indulge in normal behavior patterns attained through the provision of sufficient space and adequate facilities; and
- Freedom from thermal or physical discomfort attained through the provision of a suitable environment.

1.4 Animal Welfare stakeholders in Kenya

There are several organisations in Kenya - both local and international - that work with the *Department of Veterinary Services* (DVS) to support the improvement of animal welfare. The local organisations that deal with donkey welfare include the DVS, the *Kenya Veterinary Association* (KVA), The Donkey Sanctuary, *Animal Welfare and Public Health* (AWAPH), the *Kenya Network for Dissemination of Agricultural Technologies* (KENDAT) and the *Kenya Society for Protection and Care for Animals* (KSPCA). The international/ or regional welfare stakeholders include the *World Organisation for Animal Health* (OIE), The Brooke / Action East Africa For Working Horses and Donkeys, the *Africa Network for Animal Welfare* (ANAW), The Donkey Sanctuary, *World Animal Protection* (WAP), and the *Society for Protection of Animals Abroad* (SPANNA).

PURPOSE OF THE STUDY

This study was designed to assess the level of knowledge of, attitude to, and compliance with, OIE welfare standards of working equids by welfare stakeholders and donkey owners in Kenya.

MATERIALS AND METHODS

Study area and design

A cross sectional survey was carried out which involved the administration of questionnaires to donkey owners and some of the animal / donkey welfare stakeholders in Kenya. One hundred questionnaires were administered in Meru County and during the Nairobi International Trade Fair in which respondents from various counties in Kenya participated. The OIE animal welfare standards for working equids were used as reference in designing the questionnaire. The data obtained were entered into an excel spread sheet and analysed using excel statistical functions.

RESULTS

The table below shows the profile of respondents by county of origin and place of interview.

Table 1. Respondents profile by county of origin

County of origin									
Meru town	The Nairobi Agricultural Show (NAS) in 2016								
Meru	Kiambu	Vihiga	Isiolo	Nakuru	Machakos	Murang'a	Nyeri	Nairobi	Narok
33	18	2	7	11	6	5	8	2	8

The table below shows the gender, age bracket, marital status and ownership pattern of the respondents

Table 2. Respondents profile by gender, marital status and age

Gender		Marital status			Age in years				Donkey ownership	
Male	Female	Single	Married	Divorced	15-20	20-25	30-40	> 40	Owner	Handler
64	36	31	57	12	10	26	23	41	28	78

The table below shows a comparison by type and frequency of feeding, supplementation and frequency of water provision

Table 3. Feeding and water

Location	Type of feed		Frequency of feeding per day			Salt and/or supplement	Water provision		
	Grass only	Grass, Napier, leftovers, maize cobs	Once	Twice	Grazing overnight		Once	Twice	Regular
MERU	21%	79%	13%	49%	38%	18%	28%	51%	21%
NAS 2016	48%	52%	20%	74%	6%	35%	40%	29%	31%

The table below compares shelter provision, working days, drivers/handlers training, use of whips and night confinement.

Table 4. Handling practices / management

	Trained drivers/handlers	Use of whips	Donkey confinement at night	Working 7 days per week	Provision of shelter
MERU	0%	81%	15%	100%	15%
NAS 2016	0%	77%	39%	100%	39%

The table below compares the common types of treatment offered, the personnel involved in treatment and biosecurity measures.

Table 5. Management of injuries and disease control

	Treatment type		Personnel involved in treatment			Biosecurity measures
	Wound dressing	Deworming	Owner	Para-vet	Veterinarian	
MERU	51%	7%	61%	32%	7%	0%
NAS 2016	48%	24%	49%	19%	32%	0%

The signs of ill health that animal handlers know include droopy head, coughing, standing hair coat, anorexia, reluctance to work, abnormal discharges, presence of wounds and isolation from the others during grazing or resting. The most reported type of treatment is wound management and deworming while treatment has never been attempted in some donkeys. Treatment is mostly done by the owners and to some extent the veterinarian. No biosecurity measure has been put in place to control the spread of diseases.

The next table compares the duration of work in hours, age at start and end of working and period for resumption of work after foaling.

Table 6. Working age and appropriate workloads

	Sick donkeys	Duration of work per day (in hours)			Age at start of work		Age when retiring	Treatment after retirement		Work resumption after foaling	
		1-5	5-8	8-12	One year	No specific age	No specific age	Left to die	Sold	No specific time	Don't know
Meru	9%	22%	36%	42%	34%	66%	100%	82%	18%	51%	49%
NAS 2016	2%	21%	24%	55%	19%	81%	100%	98%	2%	33%	67%

This table compares the frequency of hoof trimming and personnel involved, hoof conformational abnormalities, harnessing materials and associated wounds.

Table 7. Furriery and harnessing

	Frequency of hoof trimming			Trimming personnel		Abnormal hooves	Harnessing material		Harness wounds
	Once per year	Rarely	Never	Veterinarian	Owner		Clothes / rags	Manila ropes	
Meru	6%	64%	30%	39%	16%	27%	75%	15%	29%
NAS 2016	15%	51%	34%	24%	7%	33%	72%	28%	22%

Finally, 6% the respondents in Meru County and 25% of those interviewed during the Nairobi Agricultural Show were aware of the existence of the World Organisation for Animal Health or OIE, but none of them were aware of the welfare standards on working equids.

5.0 DISCUSSION

The results above clearly indicate the gap in compliance with the OIE welfare standards of working equids. This can be attributed mainly to the negative perception about donkeys and lack of awareness that there exist welfare standards for working equids. Most of the respondents did not provide a balanced diet to their donkeys because they didn't gain anything in return e. g milk. Equids are natural grazers and therefore their diet should predominantly contain grass. A well balanced diet containing energy, fibre, protein, minerals and vitamins is essential as it determines the power of the animals, growth and overall productivity. Inadequate feeding contributes to diseases, stress and discomfort and should be avoided. Water is the most important nutrient of working equids and should be provided regularly. The irregular provision of water by respondents in both Meru County and during the Nairobi Agricultural Show was attributed to the scarcity of it in some places. The water should be palatable, safe and adequate to meet the physiological and work requirements.

A small proportion provides shelter for the donkeys, 15% in Meru County and 39% of those interviewed during the Nairobi Agricultural Show. Working equids should be provided with shelter against cold and heat during work and at rest. The resting place should be clean, dry and spacious to allow the equids to lie down and wake up.

None of the handlers and drivers has received formal training in handling equids. Training is important for acquisition of good management skills which is key as far as

welfare is concerned. Owners and handlers should be aware of signs of ill health, distress, disease and injuries which should be reported to the veterinarian or other qualified persons. A larger proportion, 77% and 81% in Meru County and during the Nairobi Agricultural Show respectively use whips to make the animals move during work while the remaining proportion uses threatening sounds to make the animals. Whips and harmful goads such as sticks should be discouraged and humane training on good driving practices developed.

Most respondents work their animals for 5 - 12 hours a day for 7 days a week without rest unless there is no work. Animals should work for a maximum of 6 hours a day and given full day rest once or twice a week. Sick animals were reported not to be subjected to work except for the 9% and 2% in Meru and at the Nairobi Agricultural Show respectively where they work unless they become too weak. The OIE recommends that sick or injured animals should not work, or any animal that has been on under veterinary treatment should not be returned to work until advised by a veterinarian. There was no specific time and most respondents didn't know when mares should resume work after foaling since this depended on how strong the mare is. The OIE standard indicates that mares should not be ridden or worked three months before and after foaling. Thirty four percent (34%) of respondents in Meru County and 19% of those interviewed at the Nairobi Agricultural Show start engaging their donkeys to work at the age one year while the rest didn't know the exact age since they use physical size to judge readiness for work. The OIE recommends that equids should start working at three years of age or more but not less than two years of age. Animals subjected to excessive work too young in life usually suffer from leg and back injuries in later life, resulting in a much-reduced working life. The respondents did not have a specific age to retire their donkeys from work since they work till death except for 18% in Meru County and 2% during the Nairobi Agricultural Show who sell them and finding a market for old donkeys is really challenging. Abandonment at the end of working period should be discouraged. The equids should be euthanized / slaughtered humanely to avoid prolonged suffering and painful death by abandonment.

Six percent (6%) and 15% of the respondent in Meru County and at the Nairobi Agricultural Show respectively check and trim the donkeys hooves at least once a year. Sixteen percent (16%) and 7% in Meru County and Nairobi Agricultural Show trim the hooves of their donkeys yet they are not trained. Hooves should be checked and cleaned before and after work. Hoof trimming should be done by persons with knowledge and skills since improper trimming may result in lameness which impacts negatively on the fitness to work.

The manila ropes used as harness material caused wounds and should be discouraged. Twenty nine percent (29%) and 22% in Meru and Nairobi Agricultural Show respectively

had wounds due to poor harnessing. A harness should be well fitted and comfortable without the risk of pain and injury.

The respondents were not aware of the existence of international welfare standards for working equids set by OIE which makes compliance difficult.

CONCLUSION

The World Organisation for Animal Health has published animal welfare standards for working equids. However, it is clear from this study that there is a gap in information among donkey owners and handlers in Kenya. There is a negative perception of donkey welfare in general and lack of awareness of the existence of the OIE welfare standards of working equids which makes compliance difficult. Donkey owners, handlers and the public in general should be educated and sensitized on the welfare of working equids. This can be achieved through community engagements, trainings, workshops, seminars and schools. The five animal welfare freedoms and how they are provided should be focused on during education and sensitization sessions. Stakeholders advocating for the welfare of working equids should intensify the community participation with emphasis on changing the negative welfare perception and myths about donkeys.

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