

# Factors influencing the performance of donkey welfare a case study in benadir region, Somalia

## Abstract

Animal welfare, refers to the ability of an animal to cope with its current living conditions. Such an animal is free from distress, pain and fear, and express innate behavior. This study sought to look at the factors that influence the performance of donkey welfare in Benadir region-Somalia. The specific objectives of the study were to establish the influence of donkey owners' perceptions on the performance of donkey welfare, to determine the influence of donkeys' contribution to owners' user's livelihood on the performance of donkey welfare and to assess the influence of owner/user training on the performance of donkey welfare. A descriptive study design was used for the study and the sample size for the research study was hundred and eighty (180) donkey owners/users in Benadir region from the three Different districts: - Howlwadag, Warta nabada and Daynile. Quantitative data was collected and coded in SPSS Version 20 for analysis. The study found out that donkey owner' perceptions, donkeys' contribution to owner/user livelihood and owner/user level of training had statistically significance association to the influence of on performance of donkey welfare in Benadir Region-Somalia. Donkey owners' perception affects how they treat the donkeys; donkeys contributed largely to the livelihood of the donkey owners and users. The findings of this study will help to the donors and other stakeholders as they will help them to mainstream their programming to ensure donkey owners and users change their attitude thereby improving the performance of the donkey welfare. The findings of this study also will provide policy makers and Ministry of Livestock and range in Somalia with information that they will use to ensure that donkey owners and users have the necessary knowledge and skills to handle their donkeys well. The study has built on the existing study and also suggests area of further study and research. the recommendations of the study were that there is need for more sensitization and training to donkey owners or users on donkey welfare issues. In addition, to the government especially the ministry of livestock and range should be done to improve policies that protect the welfare of donkeys

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## Introduction

The estimate world donkey population has steadily increased from 37 million in 1961 to 44 million in 1996, but it is not evenly distributed around the world with most donkeys occurring in semi-arid and mountainous areas. In Africa, in the last fifty years (1949-1996), donkey population has increased from 8.5 million to 13.7 million.<sup>1</sup>

The great majority of donkeys in the world are kept specifically for work. Their most common role is for transport, whether riding, pack transport or pulling carts. They may also be used for farm tillage. In certain countries, they may assist threshing, raising water, milling or other operations.<sup>2</sup> In most developing countries, donkeys frequently get harness sores. This is mainly because most donkey owners adjust the harness to their own designs and make modifications without making an informed decision on the applied principles of traction. Additionally, some people do not know how each part of the harness work hence making the situation worse. Using an inappropriate design of poorly fitting a harness to a donkey makes the animal uncomfortable, fatigued, and may have injuries.<sup>3</sup> Donkeys are preferred as draught and transport animals, because they are friendly, hardy, quiet and more economical, compared to horses and oxen. They can be maintained on local farm produce, and are easy to train, intelligent and patient while working (Inns, 1980). These characteristics make donkey a likely choice for many children and women to use in developing countries.<sup>4</sup> Animal welfare, according to the world organization for animal Health (OIE), refers to the ability of an animal to cope with its current living conditions. An animal is

in a good state of welfare if it is comfortable, safe, healthy, and well nourished. such an animal is free from distress, pain and fear and can express innate behavior. Consequently, good animal welfare requires humane handling of animals, provision of shelter, proper nutrition, and prevention of diseases. Animal welfare is an intricate issue which has implication on scientific, ethical economic and political dimensions. According to the farm Animal Welfare Council, animal welfare is about the state of physical and mental well-being of animals and is also referred to as an animal's "quality of life". The improvement in health and welfare will enhance their productivity and provide their owners with a more reliable source of income.<sup>5</sup>

Improper housing and handling expose donkeys to wounds and lead to poor performance. Donkeys are exposed to wound infections mostly during the hot-dry and rainy seasons.<sup>6</sup> Various welfare issues have been reported in working donkeys elsewhere in Africa. Long working hours, harsh environmental conditions, over-use, improper equipment, limited veterinary attention and little or poor-quality supplementary feed during dry periods can lead to welfare problems.<sup>7</sup> According to Webster,<sup>8</sup> addressing donkey welfare problems were a considerable challenge because these welfare problems and remedies were all mediated by humans. In this regard, resolving donkey welfare problems was about changing human behavior. The way that humans manage their animals in different parts of the world was a synthesis of cultural norms, experience, learning, received wisdom and trial and error and was dependent on income and access to resources. Management of the donkeys was based around routines which are

often planned to deliver convenience for humans rather than to address the complex needs of the animals.

Human training can play an important role in creating a compassionate and caring society which would take benign responsibility for ourselves, each other, our fellow animals and the earth. When animals were abused and badly treated in a home, there's a strong chance that people were also being abused in that home by way of child abuse, spouse abuse, and /or abuse of the elderly. When a home was not a safe and caring place for animals it was not a safe and caring place for people either. Animal welfare training promotes knowledge, understanding skills attitude and values related to human involvement in the lives of animals. It included the effect on animals' abilities to satisfy their needs, and human responsibilities as a result. It could bring about beneficial changes in the treatment of animals at the hands of humans, but can stop shorts of bringing about lasting attitudinal change-especially if carried out in an instructional or piecemeal way.<sup>9</sup>

### Statement of the problem

The phrase “Beasts o Burden” Defined the utility of donkeys as pack animals in many parts of the world as they play a significant economic and social role in the transport of water, building materials, relief supplies , animal feeds and other critical supplies. In Benadir region-Somalia, donkeys suffered welfare related challenges such as poor harnessing, overloading and whipping which affect and physical well-being, as well as productivity. Some Institutions tried and put projects in place to enlighten the owners and users on the importance of taking care of donkeys, the uptake of these activities was still very low among donkey owners and users. Researchers of donkey welfare projects had taken major strides especially in training on donkey harnessing, on appropriate load, on handling and also on donkey safety through construction of good lockable shelters where donkey were able to rest after work and also at night. However, there still remained a challenge since donkey users had not utilized the gained skills and knowledge to care for their donkeys. They continued to overwork them, failed to give them necessary veterinary care underfed them thus affecting the welfare of donkeys. Over time donkey owners had been unwilling to sell their prized assets and this had contributed to increased cases of donkey theft in different parts of the country in order to facilitate the continued operations of the abattoirs at the expense of the donkey owners' livelihood. It was in this regard therefore that the researcher sought to undertake the study to unearth the factors influencing the performance of the donkey welfare projects in Benadir region-Somalia.

### Purpose of the study

The purpose of this study was to investigate the factors influencing the performance of the donkey welfare project.

### Specific objectives

To establish the influence of donkey owners' perceptions on the performance of donkey welfare project in Benadir region-Somalia

To assess the influence of donkeys' contribution to owners' livelihood on the performance of donkey welfare in Benadir region-Somalia.

To assess the influence of training among donkey owners/users on the performance of donkey welfare project in Benadir region-Somalia.

Therefore, in this article as the authors we need that the donkey owners and users be aware the welfare is so important to their animals

and have baseline information about the level of welfare in donkeys in the study area. Only after then we can apply the correct measure for this point.

## Research methodology

### Study area

The study was conducted in the Benadir Region of Somalia Country lying on the latitude 2.046934North and longitude 45.318161East. The study was done from November 2022 to March 2023. The region usually has normal yearly temperatures of 28.7°C - 37°C. Benadir region in Somalia has a population of approximately 2.3 million people and is Somalia's capital city. The area covered was about 96,878 km in total.<sup>10</sup>

### Research design

A cross-sectional study was conducted from November 2022 to March 2023 to determine the factors influencing the performance of the donkey welfare. the study adapted descriptive study design to carry out the research. The study was employed this design in order to describe the state of the aspect under the study without manipulating the data. The respondents were asked the questions using Questionnaires whose response was described. descriptive study design studies large population by selecting and studying sample that has been chosen from the population to determine the relative distribution. The data collected quantitative and then analyzed by Using SPSS Version 20 and explain the relationship between the independent Variable (Donkey owners' perceptions, donkey contribution to livelihood and training among donkey owners and users) and the dependent variable (Performance of donkey welfare Project). This method provided information of attitudes and values of the population which quantitative in nature. Questionnaires was used to collect data from the respondents and researchers will use them because of the easiness to administer to large sample of study population at low cost and easy analyze of data.

### Sample size & sampling procedure

Sample size required for the study was determined using the formula given by Sloven's formula to calculate sample size, we took population size 328 and margin of error (e) 5% and the formula was given below and Simple random sampling was used to select sample locations in which a total of 180 questionnaires were administered, descriptive statistics was used to analyzed data.

$$n = N / (1 + (N * e^2))$$

$$n = 328 / (1 + 328 * 0.05^2)$$

$$n = 328 / (1 + 328 * 0.0025)$$

$$n = 180.$$

So, the number of required populations to observe the factors influencing the performance of the donkey welfare project was calculated to be 180. All collected raw data of the study by letters were entered to a Microsoft Excel database system and imported to be analyzed using SPSS Version.

A study with a population of 328 donkey owners would use a sample size of 180. This study used sample random sampling to collect data where by a fixed starting point was identified to select respondents for the study. The data of the study also was collected local administration and three Veterinary officers within the area. This was illustrated in a sample frame as indicated below.

### Data analysis

The study adopted quantitative method of data analysis. During the data analysis, the researcher checked the completeness and consistency of the questionnaires. The data collected through questionnaires was firstly edited, coded and descriptively analyzed using Statistical Package for Social science (SPSS version 20) where the output was presented in form of percentage. The findings were presented using tables which generated the conclusion and recommendations.

Since the expected findings was considered to be 95%. Accordingly, with 5% absolute precision at 95% confidence level. Chi square analysis was used to determine the association of donkey welfare and the objectives. A p-value of less than 0.05 at 95% confidence interval was considered as statistically significant.

### Results

This section consists of the response rate of the questionnaires and the interviews. In this study, the researcher administered 180 questionnaires to the respondents. The researcher got back 156 questionnaires were filled and returned for analysis. The response rate was 86.67% which is considered sufficient for analysis and drawing of conclusions. According to Martin-Curran et al.,<sup>5</sup> a response rate of 50% and above is adequate for making conclusions. Data was collected through questionnaires and Interview.

#### Demographic characteristics of the respondents

The questionnaire used to collect data from animal owners had section A which concern to get demographic information of the respondents which included gender, age and level of education.

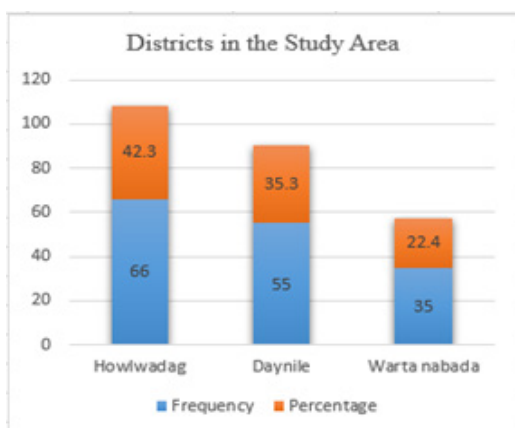


Figure 1 Districts in the study area of the Benadir region.

#### Distribution of the respondents by number of trainings attended

The summary of the respondents by number of trainings is as shown in Table 2.

Table 2 Distribution of respondents by number of trainings attended

Number of trainings	Frequency	Percent	Cumulative percentage
One	15	9.6	9.6
Two	19	12.2	21.8
Three or more	28	17.9	39.7
None	94	60.3	100

The respondent was found only Male (100%; n=156), The highest percentage of age groups was found between 31-45 (51.3%; n=80). In terms of educational level, the highest percentage of the respondent was found from primary (74.4%; n=116), followed by only few uneducated respondents (25.6%; n=40). The overall details of the demographic characteristics of participants are presented. Table 1.

Table 1 Respondents information: Gender, Age and level of education

Variable	Frequency	Percent	Cumulative percentage
<b>Gender</b>			
Male	156	100	100
<b>Age</b>			
18-30 years	46	29.5	29.5
31-45 years	80	51.3	80.8
46-57 years	18	11.5	92.3
58 years and above	12	7.7	100
<b>Educational level</b>			
Illiterate	40	25.6	25.6
Primary	116	74.4	100

The highest percentage of the respondent was found in the Howlwadag district (42.3%; n=66) and the least was seen in the Warta nabada district where the respondent percentage was (22.4%; n=35) (Figure 1).

From the Table 2, most of the respondents did not attend any trainings with percentage of 60.3%, while respondents who had attended three or more training sessions were 17.9%, those attended two training sessions were 12.2% and whereas those had attended one training sessions were few at 9.6%. this indicates that the highest number of donkey owners and users did not attend training and this leads lack of knowledge on donkey welfare and thereby influencing the performance of welfare.

#### Number of donkeys Owned

The summary of the number of donkeys owned by the respondents is shown in Table 3.

Table 3 Distribution of the number of donkeys owned by the respondents

Variables	Frequency	Percent	Cumulative percentage
None	0	0	0
One	52	33.3	33.3
Two	76	48.7	82
Three or more	28	18	100

Table 3 shown that majority of the respondents owned two donkeys at 48.7 percent. On the other hand, some significant number of respondents had three or more donkeys at 18%. This can be attributed to their nature of working where the cart they pull is usually loaded to a pair of donkeys thus most of the respondents had a pair of donkeys. In other occasions, donkey owners and users use three donkeys to pull a cart. This can be attributed to their effort to distribute the weight of the load especially if it is heavy or with an intention of ensuring that they do not overwork the donkey. The Table also shown that 33.3% of the respondents had only one donkey. This can be attributed to their financial inability to own two donkeys as well as loss of donkeys through theft. Their inability to have more than one donkey forced

them to either overload their donkey or overwork them for lack of additional donkey to use on the cart. This increased the probability of the donkey overworking, getting mistreated and reduced rest time.

### Finding of the three objectives of the study

The study sought to investigate the factors influencing the performance of donkey welfare, a case of bendair region-Somalia. The objectives that guided this study were donkey owner's perceptions, donkeys' contribution to livelihood and training donkey owners and users.

### Owners' perception and performance of donkey welfare

The first objective of the study was to establish the influence of donkey owners' perceptions on the performance to donkey welfare. The researcher sought to know the perception of donkey owners so as to establish the perception influence on the performance of the donkey welfare.

Table 4 shown varying perceptions of donkey owners and users. The Association between Donkey welfare and owners' perception was statistically significance difference  $X^2(7, N=180)=10.201$ ,  $P\text{-value}=0.02$  It was notable that virtually all respondents had negative attitude towards the donkeys. Many termed them as beasts of burden and that they do not get sick. This identifies that why many of the owners do not provide medical care to the donkeys thereby leaving them unattended and sickly. A significant number of respondents replied that donkey do not get tired at 13 percent. On the other hand, respondents had perceptions that if the donkeys are not overworked, they will become aggressive and starting biting and kicking at 32%. Similarly, 30 percent of the respondents had perception that donkeys should only feed at night.

**Table 4** Owners' perceptions and performance of donkey welfare

Donkey owners' perception	Percent	X2	P-value
Donkeys are beast of burden	5.8		
People believe that donkey do not get sick	6.4		
Donkeys are dirty and unfriendly animals	4.5		
Donkey do not get tired	13	10.201	0.02
Donkeys do not deserve any special treatment	5.1		
Donkey waste causes tetanus among people	3.2		
If you do not overwork a donkey, it will become aggressive	32		
Donkey should only feed at night	30		

### Donkeys' contribution to owners' livelihood and performance of donkey welfare

The second objective was to assess the influence of donkeys' contribution to owner's livelihood on the performance of donkey welfare from Table 5, it was found out that donkeys contributed to livelihood of their owners and users a significant manner. Significance difference between Donkey welfare performance and Contribution to owners' livelihood was observed  $X^2(4, N=180) = 7.940$ ,  $P=0.03$ . Through the donkeys, the owners and users were able to get money thereby improving on their income (20.5%). The donkey also contributed to food security (22.4%) and acted source of financial capital hence increased saving at 22.4 percent and 17.3% respectively.

**Table 5** Donkeys' contribution to owners' livelihood and performing of donkey welfare

Donkeys' contribution to owners' livelihood	Percent	X2	P-Value
Donkeys are a source of money	20.5		
Donkeys have contributed to improved income	23.7		
Donkeys have contributed to food security	22.4	7.94	0.03
Donkeys are source of financial capital	17.3		
Donkeys have contributed to increased savings	16.1		

### Training among donkey owners and performance of donkey welfare

The last objective was to ascertain how training influences performance of donkey welfare. Table 6 shown that donkey owners are less trained on donkey welfare issues at 21.1%. Statistically significant difference in Donkey welfare and Training Among donkey owners was recorded  $X^2(4, N=180)=5.802$ ,  $P=0.04$ . this is significantly less where donkey owners are not empowered with skills and knowledge of how to care for their donkey which influences on how they treat them.

**Table 6** Training among Donkey and performance of donkey welfare

Training among donkey owner/users	Percent	X2	P-value
Training on donkey welfare issues is good	21.1		
The method and technique used in training is appropriate	18		
The cost of training donkey welfare issue is high	16.1	5.803	0.04
The number of people trained on donkey welfare issues is high	22.4		
Trainings are organized frequently	22.4		

## Discussion

### Performance of Donkey Welfare

Donkey welfare is a complex, multifaced, international and domestic publicity policy issue with scientific, ethical economic and cultural dimensions. Alongside various, ethical and philosophical bases for animal welfare, there is also recognition of the ties between animal welfare indicators and animal health. Donkey welfare is thus intrinsically related to other government concerns such as public health, food safety and long-term economic development The World Organization for Animal Health (OIE) note that it is a responsibility that must be shared between governments, communities and the people who own, care for and use donkeys. Mutual recognition and constructive engagement among parties is considered necessary to achieve sustained improvements to animal welfare.<sup>11</sup>

### Owners' perception and performance of donkey welfare

There was need to change our perception and appreciate the economic value of the working animals as donkey were a big asset in combating poverty Kielland et al.,<sup>12</sup> reported that farmer's perception and attitude directly relate to human-animal interaction and these attitudes and perceptions affect farmers' behavior towards animals in terms of the type of food they feed their animals and also the duration that animals spend working, this in turn affect the performance of the animal welfare projects. Dutlaw.,<sup>13</sup> claims that most developing countries tend to be embarrassed that they are still using donkey but in

Latin America, some countries now want to redouble the populations after seeing the environmental and cost benefit.

Most people in peri-urban centers either owned or sent horses, mules or donkeys to transport goods, people and even water (Mohammed,1991). Despite their use, the husbandry practices of working equines are poor. Some hobbling methods cause discomfort and inflict wounds.

In addition, inappropriate harnesses or yokes that may be heavy and ragged, long working Alujia and Lopez,<sup>14</sup> hours and insufficient food, have a negative effect on the animals' health and welfare (safety). Working donkeys were also suffering from lack of shelter that would protect them from sun, rain and insect parasites at market or working sites.

Only few owners provide water (4.38%) and feed (10.5%), and almost no one provides shelters at the working site.<sup>15</sup> Food is preferably allocated to bovines than to equines. In many cases, local communities, professionals and institutions pay more attention to the maintenance of cattle, because it provides meat and milk.<sup>4</sup>

### **Donkeys' contribution to owners' livelihood and performance of donkey welfare**

The findings revealed that the donkey provide labor in the farms where they are used to plough hence providing food to its owners. This concurs with Admassu B & Shiferaw Y.<sup>16</sup> who argued that working donkeys save money that would otherwise have been spent on other forms of labor or transport, since most of the households that own donkeys use them for household activities hence saving on cost that would have incurred on alternative transport means. This was not the limit of the donkeys in terms of how they contributed to income as part of livelihood, as they also supplied other livestock such as chicken, cow, sheep and goat with fodder and water, thus making farming possible and profitable. According to the Admassu and Shiferaw.<sup>16</sup> donkeys contributed both directly and indirectly to livelihood among communities in Mwea West Sub-country. Donkey owners were able to generate income through a number of ways: using their own animals for transport of commercial goods (mainly rice) that they were able to sell in different towns at a profit, use of donkey drivers who hired donkeys at a fee to engage in commercial activities and hiring their donkey to casual laborers who engage in commercial activities on behalf of individual who own donkeys. this was especially in cases where donkey owners are aged or unwell hence unable to use the donkeys. A healthy and well cared donkey would benefit its owner by being able to work more efficiently and remain active longer.

### **Training among donkey owners/users and performance of donkey welfare**

The respondents agreed that the technique that was used in training was not appropriate and not suited them. The respondents also replied that the training were not organized frequently which means that there was no knowledge gap and that corrective measure were not taken promptly.

Veterinary officers interviewed and confirmed that the donkey owners who did not receive most training on donkey welfare compared to those who had not attended any trainings.

Learner interest in animals and animal welfare issues, while it varies some based upon distinguishing student factors that include age or grade level, gender and residential location such as urban versus rural is reported by both student and teachers alike to be high.<sup>17</sup> It was important that animal donkey training became an essential part of the professional development of any person planning to work with

animals or any policy. Donkey welfare training for veterinarian was important because of their future potential for spreading the welfare message and promoting good practice. Training without doubt was key part of the answer to improving the lives of donkey. Humane training could play an important role in creating a compassionate and caring society which would take benign responsibility for ourselves, each other, our donkeys and the earth. When donkey are abused and badly treated in a home, there's a strong chance that people are also being abused in that home was not a safe and caring place for donkeys it was not safe and caring place for people either. Donkey welfare training promoted knowledge, understanding, skills attitudes and values related to human involvement in the lives of animals. It included the effect on animals' abilities to satisfy their needs, and human responsibilities as a result. It could bring about beneficial changes in the treatment of animals at the hands of humans, but could stop short of bringing about lasting attitudinal change-especially if carried out in an instructional or piecemeal way. The findings of the study indicated that there was influence of perceptions of donkey owners on the performance donkey welfare. This agrees with the study done by Gathanga,<sup>17</sup> which indicated that ideological beliefs and values may promote particular attitudes toward animals. Donkeys also contribute to the livelihood of their owners and users. The perceptions of donkey owners greatly influenced how they related with the donkey. These perception affected the welfare of the donkeys negatively and as a result affected their productivity. The donkey owner believed that the donkey should feed only at night which influenced on their feeding patterns. This gave the owners the leeway of overworking the donkeys and providing them with feed only at night. These results are in line with Pearson RA,<sup>4</sup> who indicated that the donkeys can only be productive if they are allowed adequate rest and are also fed well. Donkeys contribute significantly to the livelihood of their owners. They are used to ferry goods from farms to market. They are also used to transport farm produce from the farms to homes.

Training among donkey owners had influence of how they treated the donkeys. Those who were trained on the welfare of the donkeys took care of them better compared to those who were not. This training imparted less knowledge and skills on how to care for the donkey including Feeding, treatment, housing and general handling of the donkeys.

### **Conclusion of the study**

The researcher made conclusions of the study according to the objectives of the study which included influence of donkey owners' perceptions on the performance of donkey welfare, donkeys' contribution to owner/user livelihoods, and training among donkey owners/users as outlined below.

#### **Influences of donkey owners' perceptions on the performance of donkey welfare**

The study concluded that donkey owners and users have perceptions that are negatively impact on the welfare of the donkeys. These perceptions have led to slow uptake of knowledge passed on through training and sensitization thus citizen and governments are not always aware of animal welfare issues. Consequently, the donkeys are poorly fed, overworked, beaten unnecessarily, and denied time to rest. As a result, the donkey welfare are affected negatively.

#### **Influences of donkeys' contribution top owner/user livelihood on the performance of donkey welfare**

The study concluded that the donkeys play a significant role in contributing to the livelihoods of their owners and users. The donkeys therefore are very critical in farms and play significant role in

contributing to the livelihoods of their owners and users.

### Influence of owner/user training on performance of donkey welfare

The study concluded that the training has an influence of the performance of donkey welfare. Those who were trained tended to have better donkey handling skills compared to those who were not trained on donkey welfare. The trainings should help the participant to understand how human actions can effect donkeys and other living beings and that as result we owe them a duty of care, to understand that we are frequently faced with moral dilemmas and that people hold different opinions, to acquire skills in effective communication ( in order to better explain our ideas and responsibilities), demonstrating appropriate levels of care and of empathy and also to develop and show attitudes of kindness, respect and responsibilities.

### Factors influencing the performance of donkey welfare

The study concluded that donkey owner' perception, donkeys' contribution to owner/user livelihood and training had significance association to the performance of donkey welfare.

Owners' negative perceptions affected how they treated the donkeys through excessive beating, overcrowding , medical neglect and poor feeding which affected the health of the donkeys. The role of donkeys in contributing to livelihoods of their owners and users made them to have positive attitude towards them. Training is a paramount when it comes to uptake and utilization of knowledge and skills of donkey.<sup>18,19,20</sup>

### Recommendation of the study

#### Based on the findings of the study, the following are the recommendation

Donkey owners and users need to be sensitized on the right perception with an aim of changing their attitude towards the donkeys. This can be done through public seminars or organized workshops to give them the right knowledge to ensure that the properly handle their donkeys. This sensitization should be done progressively in order to fully root out those negative impact about which affect how they are treated.

Government, especially the Ministry of Livestock and range should come up with policies that deal with donkey welfare. These policies will address the current negative impact towards Donkey welfare to rise the welfare and lead good performance of donkey.

The universities and Institutions concern animal science should come up with trainings to donkey owners monthly and donor organizations should fully ensure that donkey owners have the right information through training and sensitization. Acquisition of the knowledge and skills will ensure that they treat their donkey well in a manner that will improve the general welfare of the donkey.

The researcher suggests further research to be done on the community participation in donkey welfare issues. Communities' participation is paramount in the success of donkey welfare.

### Acknowledgments

None.

### Conflicts of interests

The authors declare that there are no conflicts of interest.

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