



Factors or Constrains Affecting Goat Rearing Practices in Burao District, Togdher-Somalia.

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ABSTRACT

This study has intended to the constrains or factors that effecting goat rearing practice in Burao district, togdher, Somalia. It was carried out from March to June 2021. The objective of the study was to find out goats problems in terms of physical problems, feeding and system of housing and management. 240 rearing goats and their owners were participated this study. For the past 10- 15 years in Somalia, the number of goats used for rearing purposes has decreased compared to 20 or 30 years ago, the collected descriptive data were analyzed by using quantitative data analysis instrument mainly SPSS version 21, observation and Questionnaire were used to collect information. The observation showed these goats were suffered from several ailments including poor management system and lack of proper handling such as housing, quality and quantity of the feed, method of feeding and frequency of management. They are mainly used to provide lifesaving in the urban areas. The goat rearing as animal is very limited as their product, perhaps due to lack of extension and suitable equipment. goat rearing almost exist in Burao. In urban areas mostly goats are very narrowed. The use of product is limited because of their environmental impact and land enclose prohibiting their use of product.

Introduction

The domestic goat (*Capra hircus*) is generally considered to have been first domesticated from the wild bezoar goat (*Capra aegagrus*) somewhere in the Fertile Crescent of the Near East some 10,000–11,000 years ago (Zeun 1963; Mason 1984; Davis 1993; Zeder and Hesse 2000). The rapid spread of domestic goats worldwide was probably the result of different activities, including commercial trade, thieving, warfare, or the migration of people with their livestock (Clutton-Brock 2000).

Archaeological data indicate that domesticated goats were first introduced into the African continent from South west Asia (Mason 1984). It is only after 7,000 before present (BP) that clearly identifiable caprine remains begin to show up in the African archaeological record at the eastern Sahara and Red Sea Hills (e.g., at the Sodmein Cave near Quseir, Egypt) (Newman 1995; Hassan 2000). Radio carbon dates of goat and sheep bones from various archaeological sites along the North African coast (dated 6,000 BP at Grotte Capeletti in Algeria or 6,800 BP at Haua Fteah in Cyrenaica, Libya) are similar to those excavated in the eastern Sahara, suggesting a very rapid dispersal of small ruminants from Southwest Asia into North Africa between 7,000 BP and 6,000 BP (Hassan 2000). The routes taken could have been either through the present-day Sahara desert by overland diffusion or along the Mediterranean coast.

By this time, a new type of culture, known as the Neolithic of Capsian Tradition, characterized by its possession of domesticated animals and the shift from hunting and gathering to self supporting food production, flourished in the Maghreb (Newman 1995). Archaeological evidence also suggests that trans-Gibraltar human movements were already common since the Terminal Paleolithic period, possibly with an interchange of goods (Straus 2001). Goats and sheep also spread rapidly from the Near East into the central Sahara and the Ethiopian highlands between 6,500 BP and 5,000 BP (Newman 1995; Clutton- Brock 2000). The increasing aridity of North Africa and the southward movement of the tsetse barrier permitted the later migration of herders and their livestock into southern parts of the continent (Smith 1992).

In more recent times, North Africa came under the economic and political influence of different cultures that could have improved the local livestock or even introduced new animals from other regions. Among the most important were the Phoenicians, Ionians, Romans, Arabs (and Berbers) and, more recently, Ottomans and Europeans (Newman 1995).

Despite decades of archaeological research, several questions still remain concerning the origin, timing and trajectory of major human, and livestock migrations throughout the northern African continent. For instance, it is a matter of debate to what extent maritime diffusion across the Mediterranean Sea was important in shaping the gene pool of North African livestock (Zeder 2008). Furthermore, the roles played by different colonists in the development of animal husbandry in Northern Africa remain to be clarified (Newman 1995).

Africa accounts for over 30% of the total small ruminant population in the world with an estimation of 205 million sheep and 174 million goats representing approximately 17% and 31% of livestock production. However, from 1980 till 2005, ruminant production in Africa has increased to 75% goat, 44% cattle, and 43% sheep according to FAOSTAT (2008), with the majority of goats from sub-Saharan Africa (Wint and Robinson, 2007; FAOSTAT, 2008; Simela and Merkel, 2008). Africa has about 180 indigenous goat breeds, distributed across all agro-ecological zones in the continent (Lebbie, 2004).

The management of goats in Burao district has been poor since long time in past. They were not treated well by the goats. This means the people who with rearing for goats don't know the value of goats and how to care. The perception of local people on advantage and usefulness of goats may have been not a positive one. Therefore, factors or constraints that effecting goat rearing practices in Burao district in terms of how to manage, care for the type of food provided, how much body weight is, housing system, what activities they receive.

The over-all objectives of the article were as follows:-

- To evaluate the impact of housing to the goats in Burao district
- To assess the mode of feeding and watering goats in Burao district
- To identify the impact of management goats in Burao district

Therefore in this article as the authors we need to identify the factors effect goat rearing practices and so, this research will establish and document the existing animal managements.

Methodology

A questionnaire method was used to collect data from sample group who are fifty goats owners in Burao district, the questionnaire were divided into four sections, and each section was used to ask certain specific questions. A team of researchers were contact individually to owners of the goats by direct interview technique. SPSS statistical program was used to analyze collected data accordingly.

Descriptive survey was the main approach used in this study through structured questionnaire.

Descriptive survey research aims to accurately and systematically describe a population, situation or phenomenon. It has flexibility of how, what and where in regarding the research question of study. In addition to that, descriptive survey design also permits the researcher to assess how the independent variable affects the dependent variable. Thus, The research is designed to use a quantitative approach to measure variables that was investigated include pastoralist's conflict about range resource as well as the problems that faced on rangeland resource. This descriptive study aimed to explore the importance of rangelands through cross sectional survey as methodological with convenient sample on study population.

The study involved owners of goats constraints in Burao district. 240 goats owners were interviewed by using Simple random sample to collect information about constraints or factors effecting goat rearing practice Management in the study area.

The research was conducted in Burao sheikh bashiir district under two villages (Qunyardega and Cuqubo

). The region has estimated of population size of approximately 350,000 and the pastoralist's way of life is the main of livelihood system qunyardega small village, the goats rearing have reaching 200 households, the type of animals that rearing include sheep, goat and few cattle. cuqubo small village which goats rearing of livestock and near to Burco district in east with 400 household. The pastoral community that lives in cuqubo village was estimated in 400 of dominates goats, And the weather is warm and dry year round. The total population of goats Qunyardega and cuqubo was 600 households.

The acceptable population was 600 of pastoralists this acceptable population was selected for questionnaire.

The 95 percent of acceptable population was calculated the sample size, our research was consisting of 240 respondents selected from 600 of target population. The 240 respondents are selected by probability sampling technique, stratified technique sampling was selected.

stratified sampling is a sampling technique that identifies the major and significant of subgroups within population and then selects population from each sub-group to form a sample with of reproducing the population. A stratified sampling divides populations into homogenous attempt to represent the sub-group in the sample in proportions equivalent to their size of populations.

No	Category of respondent	Sample Size
1	Goats rearing (qunyardega)	80
2	Goat rearing in Burao Town (cuqubo area)	160
	Total	240

Data was collected from two station areas in Burao district by group of four enumerators divided into two teams where each team assigned to collect data, first team have to collect 160 respondent, second team have to collect 80 respondent . In total, the two times have interviewed 240 respondents from specified sites.

Findings of the results Constrains of domestic rearing goats was carried out in Burao district. During this constrains,240 goat's owners were interviewed with observing their daily routine practices.

Findings of the results

Responses	Frequency	Percent	Cumulative Percent
Gender			
Male	89	37.1	37.1
Female	151	62.9	100.0
Marital Status			
Single	77	32.1	32.1
Marred	163	67.9	100.0
Educational Level			
No Formal Education	118	49.1	49.1
Primary	66	27.5	76.6
Secondary	28	11.7	88.3
University	28	11.7	100.0
Goat Sex			
Male	14	5.8	5.8
Female	40	16.7	22.5
Mixed	186	77.5	100.0
Type of rearing			
Extensive system	167	69.5	69.5
Semi-Intensive system	39	16.3	85.8
Intensive system	34	14.2	100.0
Location of the Study			
Qunyardega	80	33.3	33.3
Cuqubo	160	66.7	100.0
How goats are treated routinely			
Take to the veterinary clinic	125	52	52
Traditional medicine	82	34.2	86.2
Do nothing	33	13.8	100.0

Goat's vaccination practice			
Yes	163	67.9	67.9
No	77	32.1	100.0
Feeding			
Once in 24 hours	39	16.2	16.2
Twice in 24 hours	84	35.0	51.2
Three times in 24 hours	77	32.1	83.3
More than three times in 24	40	16.7	100.0
The amount of feed given for goat			
Less than 1 kg	62	25.8	25.8
One kilogram	74	30.8	56.7
2 kilogram	49	20.4	77.1
More than 2 kilogram	55	22.9	100.0
Types of feed for the goats			
Dry grass	69	28.8	28.8
Residual	92	38.3	67.1
Cereal crop	62	25.8	92.9
fodder	17	7.1	100.0
watering characteristics			
less than three days per week	47	19.6	19.6
once by the days	77	32.1	51.7
twice by the two days	67	27.9	79.6
more than three days	49	10.4	100.0
Did follow goat women			
Yes	152	63.3	63.3
No	88	36.7	100.0
Kept in shelter and feed for the goat			
Yes	75	31.2	31.2
No	165	68.8	100.0
Shelter at night			
Yes	214	89.2	89.2
No	26	10.8	100.0
How often manage the goats			
Everyday	167	69.6	69.6
4-5days/week	29	12.1	81.7
1-2days/week	31	12.9	94.6
Once every week	13	5.4	100.0
The age of the domestic goats in breeding(mating)			
6 months	81	33.7	33.7

1 year	138	57.5	90.8
2 year	21	8.8	100.0
Salt and mineral goats			
Yes	198	82.5	82.5
No	42	17.5	100.0
How much cost do you give goat followers			
1500 per goat	71	29.6	29.6
2000 per goat	65	27.1	56.7
3000 per goat	27	11.2	67.9
Nothing	77	32.1	100.0
Did you meet any problem when you follow goat women?			
Yes	131	54.6	54.6
No	109	45.4	100.0
Housing of the goats			
Holding open area	135	56.2	56.2
Fencing area	65	27.1	83.3
Building roofs and walls	40	16.7	100.0
Equipment of feeding and watering of the goats			
Cans and iron sheet	90	37.5	37.5
Plastic and wood	135	56.2	93.7
Non-equipment	15	6.3	100.0
Breeding and frequency of goats			
Start by 6 months	93	38.8	38.8
Start by one year	133	55.4	94.2
More than one year	14	5.8	100.0
Condition of hygiene and stall of goats			
Well	92	38.3	38.3
Poor	120	50	88.3
Bad	28	11.7	100.0
Physical problem appearing			
Legs problem	48	20	20
Skin problem	139	57.9	77.9
Head and face problem	28	11.7	89.6
There is no any problem	25	10.4	100.0

Summary of the findings

The findings of current study showed that, 38.8% of owners of rearing goats said that their animals start mating at age of 6 months. But, 55.4% of respondents answered 1 years old. Furthermore, the last part which is 5.8% said that they start mating to their goats at age of 2 years old.

This study revealed that some of rearing goats start mating as early as 6 months, the majority of the rearing goat owners use their goats to mating when they are 1 years old, in this age goats are mature and this is the best time their growth as well as longevity of their lifespan or breeding at too young age. Because, goats starting sexually maturity in early age can cause longevity of lifespan.

The purpose of this study is to know some detailed information about goats farms in burco district to improve their care and protection, which did not discover yet and to make research for it.

The constrains affected goats practices in burco districts is to provide people reliable information they need and weakness is to un prepared future problem on the research.

Suppose we want to show that only goats farms, vaccines, feeds have low average level than the global average because of low or lack of knowledge and the objectives was

We recommend to increase training and education and research of stakeholders helps people to understand how to adopt new innovation, getting skills and knowledge to the goats rearing burco districts.

Conclusion

At the end of the study, based on the results, rearing goats in the present study area had poor management system and lack of good physical appearance. Hygiene condition of the stall of rearing goats were almost very bad and it seems area that danger for outbreak of infectious diseases. There were many wounds on the body as a result of hairless problem, horns and killing, and irregular feeding, goats rearing starting work in a young age, in adequate of veterinary service delivery and quality of feed was very low. Furthermore, the distributions of sore on different body parts were evaluated and leg problems, skin problem as well as head and face problems. Although, animal care organization like SOS are rearing closely with goat owners because of their financial limitation they are not making fast impact on improvement of animal care issues of rearing goats in Burao district.

RECOMMENDATIONS

On base of the result, the following important recommendations are suggested.

- Problems facing rearing goats can minimize and improve by using different approach like, good management system, improving quality of feeding, reduce overloading and frequency of breeding
- Ministry of livestock and Animal welfare organizations like SOS should increase animal welfare awareness with goat's owners.
- Government should train and educate the goat's owners in modern veterinary service awareness.
- To train and educate goat owners on proper harness, feeding and curing of rearing goats.
- Ministry of livestock and SOS organization is recommended to open clinic for intended to treat rearing goats.
- Further studies are suggested to determine care and management of rearing goats.
- To support owners of goats for their treatment and money spent for treatment
- To improve the health and management of rearing goats, When the goats was became retire they must be give care and slaughter if they need.
- Making awareness of the community of Burao towards perception of goats and their owners.

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