



Assessment of Participatory Awareness on Major Constraints of Livestock Productions and Market Accessibility in Kumbi District East Hararghe Zone, Ethiopia

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Abstract

An attempt was made to study major health problems of livestock in Kumbi Woreda, Eastern Ethiopia, from December 2015 to April 2016. Questionnaire survey was carried out on 100 livestock owners to collect information on the livestock production system and the major health problems recognized by farmers in the study area, observational studies were also conducted. The questionnaire survey result revealed that in cattle infectious diseases (58.5%) followed by miscellaneous cases (27%) and parasitic problem (14.5%), in sheep parasitic problems (50.3%) followed by infectious diseases (46.2%) and miscellaneous cases (3.5%) are the common health constraints and similarly in goats the most important health problems were those caused by parasites (20.5%) followed by infectious cases (63.1%) and miscellaneous diseases (16.3%). In equines miscellaneous cases (63.5%) followed by parasitic diseases (11.5%) and infectious diseases (25.5%) were identified. In poultry NCD (53.5%) was the most devastating. A retrospective study showed that infectious disease with an average of 28.2%, parasitic 46.4% and miscellaneous 25.4% were frequently recorded in the Woreda Veterinary Clinic. The study also addressed that the animal production system in the study area in general is traditional with a number of problems. Most of the respondents complained that animal feed followed by water shortage is a serious problem. They also indicated that due to uncontrolled animal movement especially from Kumbi District, disease transmission is a problem. Infectious disease.

Keywords: Kumbi; Livestock; Animal Health; Infectious; Parasitic; Miscellaneous; Disease

Introduction

Animal production has been considered as the main component of agricultural development in most parts of sub-Saharan Africa. Like in many developing countries, domestic animals play a crucial role in Ethiopia, they constitute as a source for traction power, income, in provision of milk and meat [1]. Ethiopia is known for its high livestock population, being the first in Africa and tenth in the world, the recent

livestock population estimate that the country has about 44.3 million heads of cattle, 23.6 million sheep and 23.3 million goats [2]. Despite the large number of livestock in Ethiopia the sector is characterized by low productivity and, hence, income derived from this sector of agriculture could not impart a significant role in the development of the country's economy [3]. The low productivity is attributed to the low genetic potential of indigenous cattle, poor nutrition and reproductive performance, inadequate management, high



disease incidence and parasite burden. Among these diseases have numerous influences on productivity and fertility of herds i.e. losses due to mortality and morbidity, loss of weight, slow down growth, poor fertility performance and decrease physical power. In tropical areas livestock health problems is high due to environmental factors like high temperature and humidity, topography structure of sloppy area exposed to flood so easy to infect soil born diseases, stress factors and drought are common in these area as a result feed availability is limited and low vegetation coverage. And the other major reason is the lack of weakness of animal health services [4]. Even though these diseases are due consideration, experiences has shown that [5] information on animal health was never a significant focus of research. However, knowing the type and extent of the common and /or major health problems is very important owners, Veterinarians, and researchers and can assist in the development of herd health strategies and the selections of possible interventions Radostits, et al. [6], to recommended that an organized research that can elucidate major animal health problems is a central issue for further study of epidemiological study on the diseases of livestock. The general objectives of this study were: to characterize the livestock production system.

Methods and Materials

Study Design Sampling Procedure Purposive and Simple Random

Sampling methods have been done to select the peasant association, households, respectively. Initially five PAs namely: urgo, Kara balci, sela, jajo and Burqa nagaha were purposely selected based on accessibility transport, agro-ecological differences. From each PA 20 households were randomly selected which then made a total of 100 households to include in the study. All livestock owned by the sampled households were considered as study animals. There were, Cattle 506678 Sheep 240238 Goat 391444 Poultry 4488 Equine 29152, camels 231857 and Bee hive 4540.

Questionnaire Survey

A detailed and organized questionnaire format was designed and an attempt was made to generate base line information related to livestock production and with particular emphasis on major livestock health problems; livestock diseases considered as important by farmers and measures taken by farmers against livestock diseases. About 0.2% of the estimated whole population of household heads of the Woreda that amount 100 respondents were involved in the interview. The questionnaire was framed in such a way that farmers could give information that are recent and easy to recall, and it was filled directly by interviewing randomly selected farmers from different villages of the five peasant associations.

Participatory Approach

Twenty key respondents were selected by the development agent in each of the five PAs and informal group discussion has been held for one hour to generate relevant information for the farmers. Points considered during the discussion were disease occurrence and trend for the last few years and constraints of livestock production.

Clinical Observational Study

Clinical cases appearing in the kumbi woreda veterinary clinics from December 2015 to April 2016 were examined to address the major clinical diseases of livestock in the study area.

Data analysis and management

The data collected in the study was stored in the Excel Microsoft (MS excel) and descriptive statistics was employed to summarize the data (Table 1).

Variable	N	Category	Frequency (Proportion)
Sex	100	Male	82%
		Female	18%
Educational status	100	Illiterate	82%
		Religious	10%
		Elementary school	6%
		Junior and above	2%
Family size	100	<15years	39.80%
		>15 years	61.20%

Table1: Demographic characteristics of sampled households.

Livestock Herd Size and Composition

Majority of the respondents own sheep, goats, cattle and

equine which are major species with herd structure as (Table 2).

pecies	Mean	Range	(Min.-Max)
Heifer	1.1	2-Jan	9.7
Cow	1.5	5-Jan	31.6
Oxen	1.2	4-Jan	37.9
Goat(56)			
Kids	4.5	9-Jan	21
Yearling	2.3	5-Jan	7
Doe	6.9	28-Jan	40.4
Buck	7.4	16-Jan	31.4
Sheep(n=88)			
Lamb	4.3	8-Jan	22.6
Yearling	3.2	10-Jan	19
Ewe	4.9	12-Jan	28.7
Ram	7.6	11-Jan	37.6
Equine(n=46)			
Donkey	1.2	2-Jan	79
Mule	1.3	2-Jan	20
Horse	1		1
Poultry(n=69)	4.9	16-Jan	
Cow	1.5	5-Jan	31.6
Oxen	1.2	4-Jan	37.9
Goat(56)			
Kids	4.5	9-Jan	21
Yearling	2.3	5-Jan	7
Doe	6.9	28-Jan	40.4
Buck	7.4	16-Jan	31.4
Sheep(n=88)			
Lamb	4.3	8-Jan	22.6
Yearling	3.2	10-Jan	19
Ewe	4.9	12-Jan	28.7
Ram	7.6	11-Jan	37.6
Equine(n=46)			
Donkey	1.2	2-Jan	79
Mule	1.3	2-Jan	20
Horse	1		1
Poultry(n=69)	4.9	16-Jan	

Table 2: The detail description of the heard structure and description statistics shown.

Livestock Functions and Products

In the study area animals are used for different purposes and hence they are considered as back bone of the livelihood

of the community. Their functions and products, and proportion of respondents are listed in (Table 3).

Functions/	Cattle	Goat	Sheep	Equine	Poultry	Bee
products	N=77	N=56	N=58	N=46	N=69	hive N=41
Traction power	62(23.6)			5(8.8)		
Milk/its byproducts	57(21.8)	37(27.0)	33(14.5)			
Market/sell	53(20.0)	40(29.0)	66(30.0)		48(30.0)	40(44.4)
Breeding/rearing	35(13.0)	24(18.0)	42(19.0)	2(3.5)	10(6.0)	
Meat	25(9.60)	22(16.0)	34(15.5)		35(22.0)	
Hide/skin	17(6.5)	7(5.10)	15(8.5)			
Manure/fertilizer	12(4.5)	6(4.4)	29(12.5)	4(7.0)		
Transport/loading				46(80.7)		
Egg					66(42.0)	
Honey						41(50.6)

N=Number of animal owners.

Table 3: Functions/products of livestock, frequency and percentage of respondents.

Livestock Feed and Availability

Majority of respondents indicated that natural pasture; cereal straws and cactus (belles) are the major livestock feed types. The respondents also reported that feed availability

depends on seasons. Feed shortage is the main problem especially during dry season in the study is maintained market oriented livestock development extension. Common feed stuff types and proportion of respondents is shown in (Table 4).

Feed stuff	Dry seasons	Short RS	Long RS	Proportion of respondents%
Natural pasture	*	*	**	97
Cereal straws	**	*	*	96
Cactus(Bells)	**	*	*	50
House left(Attela)	*	*	*	44
Cultivated pasture	**	*	*	39
Stover	*	*	*	32
Furshca	*	*	*	26

**=More available,*=Available, RS=Rain season

Table 4: Types of major feed stuff and availability across seasons.

Water Sources

In the study site they have water sources for watering animal like rivers, streams, ponds and well. Majority (84%) of the owner use river and streams for watering animals. These water sources not available throughout the year. Shortage of water encountered during drought dry season especially during January to June. At these time farmers use pond and

well as mechanism of adoptability water shortage problems.

Housing, Breeding and Recording

Most of the peasants sixty nine percent house different specie animals with in one house, which is separated from their own house and thirty-one percent of their spondents house the same species of animals in different houses,

which are separated their own home. Regarding to breeding most of the eighty percent of respondents use uncontrolled natural mating and twenty percent respondents use selected bulls to reproduce cattle. eighty five percent explain the performance of their animals by recalling and fifteen percent respondents use measurable unit to know the performance of their animals.

Selling and Marketing

Respondents sold livestock for different purposes fifty three percent, thirty-five percent and ten percent

respondents indicated that they sell animals for house hold expense, due todrought and diseases/outbreak, respectively. Respondents argue that they don't have specific time for selling livestock but mostly selling is under taken during holidays and cultivated season.

Culling Criteria of Livestock

Respondents reported that they cull animals from the herd based on age, reproductive capability, disease and production level (Table 5).

Culling criteria	proportion/frequency N=88	Importance (%)
Old age	67	28.6
Reproductive disease/infertility	61	26.1
Disease	55	23.5
Poor production	41	17.5
Other	10	4.3

N= Number of respondents who use the above culling criteria.

Table 5: Reasons of culling and their importance (%).

Occurrence of Abortion in the (2015-2016) years

About thirty percent of the farmers encountered abortion in the past two years. The most frequent abortion

occurred in ovine, caprine and bovine among this 58%, 24% and 18% occurred respectively. Mostly abortions occurred in early and late gestation period. The seasoned countered abortion from January to May months (Table 6).

Aborted species	Frequency of Occurrence of Abortion	Frequency of Occurrence of Abortion by gestation period		
		Early	Mid	Late
Bovine	10	8	2	
Goat	20	5	3	12
Sheep	40	10	7	23
Equine	4	4		
Total	74	27	12	35

Table 6: Occurrence of abortion in different species of livestock.

Livestock Health Problems

Respondents complained that many infectious, parasitic and miscellaneous diseases are the major health problems of livestock, which are cause of death of number of animals

and production loss. They also indicated that the disease dynamicis aggravated by many factors like feed shortage, inadequate Veterinary service, season and agro ecological (Table 7).

Disease	Local name	Cattle N=77 And%	Sheep N=88 And%	Goat N=56 And%	Equine N=46 And%	Poultry N=69 And%
Infectious		58.50%	46.20%	63.10%	25%	
Anthrax	Taffia	74(16.98)	19(6.6)			

Blackleg	Wekie	62(15.7)	43(14.7)			
Mastitis	H/gulo	42(10.6)		7(9.4)		
Pasteurellosis	Mieta	35(8.9)	50(17.0)			
LSD	Enfirir	18(5.3)				
Sheep/goatpox	Enfirir		23(7.9)	40(53.7)		
NCD						57(53.5)
AHS					46(25.5)	
Parasitic		14.50%	50.30%	20.50%	11.50%	
GI/parasitic	W/tesietagan	16(5.07)	16(7.7)		21(11.5)	
Tick	Kuridid	14(4.56)	3(1.7)	3(2.1)		
Mangemites	Ekeke	12(3.54)	2(1.6)	14(11.5)		
Coenuruses	Zarity		45(19.4)			
Fasciolosis	Effel	10(2.56)	43(18.7)			
Miscellaneous		27%	3.50%	16.30%	63.00%	0
Rep/disorder		16(4.07)	18(3.5)	4(4.1)	3(1.3)	
Lameness	Sinkale				22(12.1)	
Colic	Kuritset				42(23.2)	
Backsore	Kusiliy				36(19.9)	
Hyenabite					3(1.3)	
Bloat	Nefihi	8(2.22)				

Table 7: Distribution of major disease of livestock frequency and percent.

Mortality of Livestock in the Past Year (2005/2006)

During the past year a total of 223 animals died from different causes, but according farmer most of sheep died of diseases that is categorized as unknown disease. From the total number of animals died last year, 12.3% were cattle, 40.8 % were sheep, 20.1% Goat, 18.7% were poultry and 4.1% were quince.

Diseases outbreaks were reported to government bodies only by 45% of the farmer's and about 63.9% of the reporting farmers knew that the government bodies responded for their reports.

Treatment and Preventive

The peasant respond that 42.5 % (N=94) of them use modern treatment, 35.2 % (N=77) use traditional treatment and 22.3 % (N=50) use slaughter ocure /relief diseased animals.

Traditional treatments are widely used in the study area for infectious, surgical, noninfectious and parasitic. Among the preventive measures vaccination and slaughter

are mostly practiced. The proportion of respondents and treatment and preventive measure taken by them are listed in (Table 8).

Treatment/measures	Frequency(n)	Percent
Modern treatment	94	42.5
Traditional treatment	77	35.2
Slaughter	50	22.3
Diseases treated traditionally		
Infectious	77	37.4
Surgical	64	31
Noninfectious	41	41
Parasitic	24	
Preventive measures		
Vaccination	98	60.9
Slaughter	38	23.1
Quarantine	25	16

Table 8: Measures and frequencies of treatment and vaccination.

Veterinary Service

68% of the Respondents have an access to modern veterinary service and 32% have not access to modern veterinary service. Majority of Respondents argue that there is lack of man power as compare to livestock population of the Woreda, high cost of medication and lack of veterinary clinics in nearby.

Cost of treatment and vaccination and proportion of Respondents is described in (Table 6). The survey also indicated that 50% (N=50) of the Respondents reported to the government body when outbreak/diseases were encountered. Of these 44% (N=22) Respondents a certain edthat government as interfered to outbreak/diseases (Table 9).

Treatment			Vaccination	
Degree of cost	Frequency	Percentage	Frequency	Percentage
Expensive	44	44	20	20
Moderate	44	44	10	10
Cheap	12	12	51	51
Free	0	0	19	19

Table 9: Response to cost treatment and vaccination at the study site.

Clinical observation examination takes place in the woreda veterinary clinic with different cases present of livestock shown in.

mastitis (8.5), tick (15.8%), gastrointestinal parasitism (9.6%) were frequently encountered in cattle and in goat abortion (25.4%), and pasteurellosis (25.8%) were highly occurred. Fasciolosis (34.1%) and wound (27.3%) were diagnosed in sheep and equine respectively (Table 10).

Incidence of Diseases

Among the diseases which were diagnosed tentatively,

Disease	Species			
	Bovine N=94	Caprine N=31	Ovine N=44	Equine N=22
GI parasitism	9(9.6%)	2(6.5%)	2(4.6%)	5(22.75)
Fasciolosis	14(14.9%)	0	15(34.1%)	0
Tick	15(15.8%)	2(6.5%)		0
Abortion	6(6.4%)	8(25.4%)	10(22.7%)	1(4.5%)
Mange	11(11.7%)	2(6.2%)	3(6.8%)	0
Pasteurellosis	4(3.2%)	8(25.8%)	6(13.6%)	0
Dystocia	2(2.0%)	0	3(6.8%)	1(4.5%)
Anthrax	7(3.2%)	0	0	0
Blackleg	3(2.0%)	0	0	0
LSD	6(6.4%)	0	0	0
Wound	6(6.4%)	2(6.4%)	0	6(27.3%)
Mastitis	8(8.5%)	2(6.4%)	0	0
Sheep/goat pox		3(12.0%)	5(11.4%)	0
Colic				3(13.6%)
Lameness				3(13.6%)
Other diseases	2(2.0%)	3(12.0%)	0	3(13.6%)
Total	94	31	44	22

Table10: Shows that clinical cases observation relative with disease.

Discussion

Cattle

The result of the present study disclosed the existence of major animal health problems on market oriented livestock development of cattle with an overall diagnosed based on questioner survey, Checklist group discussion, retrospective and clinical observation. 58.5% of infectious diseases, and 14.5% of parasitic and 27% of miscellaneous diseases were recorded at the study area.

Infectious diseases

The current survey revealed that among the infectious disease Anthrax (16.98%), Blackleg (15.7%), Mastitis (10.6%), Pasteurellosis (8.9%) and Lumpy skin disease (5.3%) were encountered that frequently occurred in the area. The result shows that there is difference in frequency of respondent proportions on infectious diseases of cattle. This difference may be due to degree of severity, mortality and morbidity rates and loses of economy as prioritized by farmers.

Anthrax and Black leg are categorized as soil borne diseases in the study area a occurred frequent the diseases were major health problems of cattle, sheep and equines. Several studies reported that Anthrax and Black leg were claimed to be the leading cattle health problem in Kumbi Woreda [7]. Black leg was reported to be the most important infectious disease with prevalence rate of 20% in then other nor part of Ethiopia Legesse [8] and Tesfahiwot [9] also mentioned that it was common infectious disease of cattle in Ada liben Woreda. These two diseases were endemic as major health problems in the study area. The reason is probably due to the area is characterized by short heavy rainfall, flood and drought which predispose for the agent to be epidemic. Epidemics tend to occur in association with marked climatic or ecological change, such as heavy rainfall, flooding, or drought Aiello.

Mastitis: based on questionnaire survey, participatory approaches with key respondents, veterinary staffs and retrospective study mastitis was found major health problem of smallholder dairy farmers in the study area. Solomon [10] reported that mastitis was major dairy cow health problem with high prevalence rates (16.2%) in Asella, eastern Ethiopia. Overwhelming cases of mastitis were sub clinical and clinical mastitis in both breeds [11]. In the area dairy cows were distributed to the farmers by government but the managements could not know well understood so that dairy cows easily affected by mastitis.

Lumpy skin disease: The result indicated that lumpy skin disease was found as the frequently appeared infectious

viral disease in the study area in cattle. The disease frequently occurs from November to December. This result agrees with Regassa [12] in Nekemte, Western Ethiopia that occur during November and December. The author also discussed the epizootic characteristics of this disease has close association with climatic condition mainly prolonged and heavy rains which favor an increase in the population of biting insects and topography. Traditionally the disease occurs in Southern and Eastern Africa but, in recent years, has extended North West through the continent in to sub-Saharan west, Africa. In the area clinical cases were observed during the study period.

Septicemia pasteurellosis (hemorrhagic septicemia or bar bone): Was observed in cattle as the main infectious disease in the study area. This might be animals movement is common for searching of feed, water and to be sold for market during drought period. In addition to rear predisposing factors such as stress, excessive cold (due to high altitude ranges) that can favors the bacteria to multiply and then evade the lower respiratory tract from which infection is triggered. Radostits, et al. [6] also indicated that the disease is common when animals are exposed to wet, chilly weather or exhausted by heavy work.

Parasitic Disease

Regarding to the result many parasitic diseases were observed as common health problem of livestock. Among the parasitic diseases GI helimenthiasis was found frequently causing mainly loss of body condition, emaciation and weak in draught power of cattle. The high occurrence of parasitic diseases in the study area could be due to low deworming practices and the increasing of irrigation lands in the Woreda at which reproduction and development of the parasites and their intermediate hosts favored.

Feseha reported that gastro intestinal helimenthiasis commonest disease-affecting cattle in other crop-livestock production system areas of Ethiopia. Other reports (Belayneh, 2002 and Tesfahiwot [7,9] also showed that GI helimenthiasis in water shed and Adaliben woreda were major animal health problems of cattle respectively.

Fasciolosis common end parasite that affect productivities and growth rate of cattle in the study area. This could be associated to large water wholes and marshy areas available in the grazing area and less deworming. This finding is in agreement with other results with incidence rates as high as 33.8% and 47 % that were reported by Regassa from northwestern Ethiopia and Ameni [13] from northeastern Ethiopia respectively.

The study also revealed that with ratio of 3.45% mange mites were ectoparasites of cattle that affects skin mostly

encountered in the study area. This result was relatively low compared that of Assegied [14] who recorded a prevalence rate of 7.4%, and relatively high compare that of Chalachew [15] whose reported prevalence of 1.86%. This difference might be due to the study design, management, climate condition and season. An animal that is affected by mange mites shows with clinical signs like rubbing, itching, emaciated body condition and loss of hair in the field area observed.

The observational study also showed the presence of low tick infestation in the area. This may be due to the microclimate (high land) helps for lowering tick infestation in the study area. High land districts have lesser tick population relative to low land in addition; tick infestation is highest in area by a complex interaction of factors such as climate, host susceptibility and grazing habits.

Miscellaneous Disease

In this survey reproductive problems were important health problems one of cattle as mentioned by respondents. This may be due to UN controlled breeding, infectious agents, production and management systems. Kassahun [11] 6.3% and Yesuneh [16] 2.23 % abortion prevalence rates were recorded in different parts of Ethiopia. In addition a prevalence rate of 7.5% [17] and 7.8% [18] dystocia was recorded in Holleta. The high occurrence of dystocia may vary due to the fact that it is influenced by factors such as age and parity dam, as well as breed of the sire.

The present study showed that small ruminants were affected by parasitic disease (50.3%), infectious disease (46.2%) and miscellaneous disease (3.5%).

Parasitic Diseases

Parasitic diseases in small ruminants were found high which was responded by the farmers during interview and field supervision. Among the parasitic diseases, endoparasitic comprises more than half of the reported cases. This could be attributed to over grazing of infested pasture and low use of anthelmintic. This result is in consistent with previous findings in Ethiopia high land sheep [19,20]. Similar result has also been described by Belay [21] in western part of Ethiopia (15%).

The result shows that circling disease (coenurus cerebrals) was among the major health problems of sheep in the Atsbi wombertaworeda. Its occurrence may be related with presence of infected final host (dog) in the area and low prevention and control strategies.

Fasciolosis was also the major health problems of

sheep mentioned during the survey protocol procedures in the study area. This result agrees with Tembley [22] that described Fasciolosis as a very important disease of sheep in the high lands of Ethiopia. Its importance in the present study area may be plained by wide range land marshy area and water holes in which wet up the dry season and good opportunity for the survival of the intermediate host, water snails and consequently gives high chance for the development of the fasciola parasite.

Infectious Disease

Sheep/goat poxviruses in the present study were found frequently occurring viral infectious diseases in the area. Similar study reported by Haffize [23] in central Ethiopia indicated that prevalence rates of sheep pox and goat pox were 1.55% and 1.62%, respectively. Factors predisposing for poxvirus infection include climate, housing and shortage of feed during the long dry season. The occurrence was higher in young animals than in the adults. As sheep and goat pox are endemic to Ethiopia, adults had lower prevalence probably due to acquired immunity by previous infection and vaccination. Sheep poxvirus occurs in all breeds, sexes and ages of sheep but lambs suffer with higher disease incidence and more severe lesions [24], Ethiopia is considered as having a low sporadic occurrence of the disease [25]. But in the 1999 about 25 outbreaks in sheep and goat pox were

Reported to MOA with a reporting rate of only 42.4% [26], live, attenuated vaccines of sheep and goat pox are produced at the national institute (NVI), Dabre Ziet Ethiopia, to control the disease.

The present study showed pasteurellosis which is locally called 'mieta /areye' is the most serious economically important bacterial infectious disease of small ruminants in the Woreda. This result is in agreement with findings of Aschalew [27] who studied on Ovine pneumonic pasteurellosis in north shoa. He described that the higher incidence of the disease were from December to January could be due to the adverse effects of the inclement weather, which was coldest during this months. Pasteurellosis being commensally of the upper respiratory tract selectively proliferate and colonize the lower part of the respiratory tract. This occurs during times of ill-defined factors of which inclement weather is one example [6]. Similarly the high occurrence of the diseases in the word away bet stress.

Equine Disease

In the study area one of the major animal health problems of equines is African horse sickness. AHS is highly fatal viral infectious disease of horses, mules and donkeys

[6]. Its frequent occurrence may be due to the present of insect vector in the area. In areas where outbreaks occur the morbidity rate is related to the number of insect vectors present. The other reason may be due to low vaccination cover age in all villages/animals in the area.

In donkeys, parasitic disease is the most frequently encountered health problems in this study area. Among the parasitic cases, GI helmenthiasis is the predominant case, which is occurring, significantly in higher rate in young donkey. This finding is in agreement with that of Yoseph [28] in Wonchi area. Mostly this may be due to stress, which leads to lower immuno competence. Young donkeys are subject to stress when they are being training to carry loads by their owners and hence they become susceptible to parasitic infestation. This study, also correlated with result of Tesfahiwot [9].

The study indicated that back sore is the leading most important health problems of equines in the study area and representing more than 63.5% of traumatic wound in equines. Significance nearly similar

Finding was reported by Awake [29], northern Gonder, for prevalence of 48%, another report by Tesfahiwot [9] in Ada liben area for prevalence of 50%. This result little bite differs because equines use extensively for transportation and loading of salt from remote area (Afar) to market, poor harnessing which cause abrasion and small to large wounds.

Lameness and hyena bite were also identified in the study that was frequently account significant proportion of traumatic health problems. These diseases related to the housing systems, ragged, swampy and open fencing systems, which predisposing donkeys for hyena bites and unsuitable topography and improper loading style of donkeys which exposed on keys remarkably to lameness.

Colic which was found one of miscellaneous cases had a considerable incidence rate which could be a tribute to the heavy infestation rate of horses with the red worms, restricted access to water, poor teeth status, access offer men table feed staff, torsion of intestine and others [6].

Poultry Disease

The study also revealed that Newcastle Disease (NCD) was identified as more popular and economically significant infectious viral disease of chickens in the study. It was also reported by Dessie and Jobre [30] that NCD was the single major health constraint, which cause heavy mortality and morbidity to village chicken and affects productivity of the system in the country. Its frequency in the woredamay because of absence of control and prevention methods to

reduce its economic impact [31,32].

Conclusion and Recommendations.

This study revealed that in Atsbi womberta woreda the mixed crop- livestock production system is the dominant system and livestock are the most important component of live hood of farmer in the area. The woreda support different species of livestock including cattle, small ruminant (Sheep and goat), and equine (Donkey and mule) and poultry. Though livestock are the major source of live hood in Atsbi womberta woreda, farmer cannot exploit full potential of the sector because of different constraints. Among this constraint livestock disease and feed shortage are the major ones. Disease like infectious diseases, external and end parasite and miscellaneous case are the major health problems of livestock developments for poor productivity of the sector. As the consequence this disease affects both the local and national economy. So to improve productivity of the sector.

- Livestock owner need to be introduced with the basic knowledge of nutritional and animal health management
- Development of proper animal health delivery system that could be extended to all livestock owner.
- Introducing alternative forage developments (cultivated pasture) is mandatory to alleviate feed shortage
- Using data generated from this study, which could be serve as basic line information, strategic disease control scheme should be developed to fight against infectious, parasites and miscellaneous diseases.

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