COLLEGE OF AGRCUITURE AND NATURAL RESOURCE

DEPARTMEMT OF ANIMAL PRODUCTION AND TECHINOLOGY

Assessment of Village Chicken Production, Management and Marketing System in Cheha Woreda, Gurage Zone

Senior Research Paper Submitted to the Department of Animal Production and Technology, College of Agriculture and Natural Resource, Wolkite University, in Partial Fulfillment of the Requirements for the Bachelor Degree in Animal Production and Technology

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LIST OF TABLES

ABBREVIATIONS

CSA	Central Statistical Authority
FAO	Food and Agricultural Organization
Ha	Hectare
HHs	Households
Masl	Meters above Sea Level
NCD	New Castle Disease
SNNPRS	Southern Nations, Nationalities and Peoples Regional State
SPSS	Statistical package of Social Science
WLFRS	Woreda's Livestock and Fishery Resources Sector

ABSTRACT

The study was conducted to assess marketing and village chicken production system in Cheha district, Gurage Zone, southern Ethiopia using questionnaire on 90 households. Both primary and secondary data were collected for this study with interviewing the farmers by using semi-structured questionnaires and by understanding their socio-economic characteristics and production system, feed resources, and housing system then the data is analyzed by using descriptive statistics. The dominant chicken production system in the study area was extensive system (90.0%). seasonal supplementary feeding (63.4%) of home grown grains. 62.2% of respondent provides water for chicken and (73.3%) of the respondents do not construct a separate house to their chickens. The objectives of chicken production in the study area were sources of income (66.7%) and followed by home consumption (32.2%) and both consumption and income (1.1%).Village chicken production system in Ethiopia is characterized by small flock size owned by individual households and are maintained under scavenging system with low inputs for housing, feeding or health care, low outputs, and periodic devastation of the flocks by disease. The main constraints of scavenging chicken production were housing, predator, diseases, feed shortage and management**.** Chicken product traders, collectors, retailers, are identified to be the key actors in the value chain of chicken product sector. Three principal channels were identified in the value chain of the sub-sector. These channels are complex and interconnected that implies absence of organized marketing channel and lack of formal linkages among the actors. Efforts should be made to improve health care, housing, husbandry practices, and extension service and marketing to increase productivity of chicken at village management level. So that by considering conditions identified management and production system and give attention for marketing systems, use of alternative management and marketing situation and providing training to be successful in chicken production.

Key Words: Village chicken production system, Marketing, Production.

CHAPTER ONE

1. INTRODUCION

1.1 Background of the Study

Animal production in general and chicken production in particular plays an important socioeconomic role for people living in low income countries like Ethiopian (Alders 2004). Ethiopia is one of the sub-Saharan African countries where most of the national economy depends on agriculture (Deressa et al., 2008).In most developing countries rural poultry play significant roles of improving the nutritional status, income, food security and livelihood of many smallholders (Solomon et al., 2013).

Village poultry production bases mainly on scavenging system of socio-economic significance, in terms of contribution to family nutrient and household food security throughout the developing world (Muchadey et al., 2007). Although there is overwhelming evidence that family poultry production plays a vital role in the socio-cultural, economic and nutritional aspects of the livelihood of rural households have paid limited attention to its development and promotion. Financial support, marketing, administration, coordination and technical support are among issues that affect family poultry development (Addo, 2003).

In Ethiopia, village chickens are an integral component of the farming system of nearly all rural families, and they account for about 99% of the poultry production system (Tadelle et al., 2003) and for more than 90% of the chicken and egg output of the country (Nigussieet al., 2010).Village chicken production fits quite well with the conditions of rural households due to small feed cost, space requirement and low price of the animals (Solomon, 2003). In addition, the local chicken sector constitutes a significant contribution to human livelihood by being affordable sources of animal protein and contributes significantly to food security of poor households (Dhuguma, 2009).

Development of successful production strategies for poultry rearing depends on an accurate description of village chicken production systems (Muchadey*iet al*., 2005). Even if, Ethiopia owned huge chicken flock; there are different factors like diseases, predators, lack of proper

healthcare, feed source and poor marketing information that hinder the productivity of the chickens in most area of the country. Among the above obstacles, the poultry diseases are the main constraints incriminated for reduction of total numbers and compromised productivity (Natnael, 2015).Developing schemes that aim to promote and improve the village poultry sub-sector need to incorporate local knowledge in productivity and health management in addition to the roles and contributions of women (Tadelle, 2003). The study on village poultry production may reveal different and more information on production system, constraints and opportunities

1.2 Statement of the Problem

Village chicken production system in Ethiopia is characterized by small flock size owned by individual households and are maintained under scavenging system with low inputs for housing, feeding or health care, low outputs, and periodic devastation of the flocks by disease (Tadele and Ogle, 2001). The most serious problems facing birds of early age are inadequate environment and managements. Chicks suffer from high temperature, low humidity and lack of ventilation (DHi Alchalabi, 2001).Therefore, to engage in chicken production and to improve productivity of chicken identifying clearly the existing production constraints and management of chicken.

1.3 Research Questions

- What are different chicken production and management system in the study area?
- What are the marketing system of chicken production in the study are?

1.4 Objectives of the Study

1.4.1 General Objective

- To assess village chicken production, management and marketing system in Cheha woreda.

1.4.2 Specific Objectives

- To assess major management practice of chicken production system in study area.
- To determine the productive performance of chicken production system in study area.
- To identify the constraints for production performance in study area.
- To collect baseline information on marketing system of chicken production in the selected kebeles of cheha woreda.

1.5 Significance of the Study

After completing this work the study should give the great information for village chicken constraints. Consequently, these were help as baseline information for its future poultry production, especially for the improvement of village chicken. In addition to this the study also provides direction for further research extension and development schemes that would benefit the farming population**.** This study were undertaken to practice village chicken production management and marketing system. Hoping that the findings of the study were sound enough in addressing the problems of the study areas and it provides a base line data to complement the decision making process ultimately to improve future extension interventions.

1.6 Scope and Limitation of the Study

This study was focus on assessing the village chicken production, management and marketing system. Due to shortage of time, resources, and finance the study were limited on small number of village chicken production of owning households in Cheha District of Gurage Zone in southern Ethiopia.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 Village Chicken Production System in Ethiopia

Village chicken production in Ethiopia is generally characterized by low inputs for housing, feeding, health care. Scavenging is the only source of diet and health care with minimal level of bio-security leads to high level of mortality. As such, it does not involve investment beyond the cost of the foundation stock a few handfuls of local grains and possibly simple night shades, mostly night time in the family dwellings. Mostly, indigenous chickens are kept although some hybrids and exotic breeds may be kept under this system (Dawitet al., 2008).

The village chicken production system in Ethiopia followed the primitive type with 5-20 birds per households, simple rearing in backyard with inadequate housing, feeding and health care. Such production systems may result in slow growing, and poor layers of small sized eggs Amsalu, (2003).

2.2 Contribution of Village Chicken Production to the society

Women carry out the leading role in the activity related to livestock and poultry rearing, they gain less access to training programs on poultry production improvement techniques than men. As the result, an attempt to improve productivity in rural poultry farming suffers. The role of village leadership in rural areas is also important and if the leadership is innovative and risk taking it is easier for extension agencies to make technological improvement in rural poultry production (Prabakaran, 2003).

According to reports of (Tadele *al.* 2003); village households in tropics like Ethiopia keep their chicken for purposes other than for reproduction, sale and consumptions, in particular for their socio-religious functions at home, gifts, for ceremonies and chicken are given as or received to show or to accept a good relationship or to say thanks for favor or help. The plumage color, sex, comp-type, feather cover and age are very important for socio-religious function.

2.3 Management of Village Chicken Production

2.3.1 Feeding and Feed Resources

Family poultry production in Africa survives by scavenging and generally, no supplements provided except that sometimes, household waste fed to the birds and other circumstances the diet supplemented with grain. Similarly, in Ethiopia the chicken production is characterized by keeping under free range system with some amount of supplementary feeds like frushika, maize, sorghum, food leftover and the major feed sources are believed to be insect worms, seed and plant materials (Mekonnen, 2007).However, the availability of the supplementary feeds was reported during the dry season (November to March) following the grain harvest while the grains/grain by-products were in short supply leading to feed scarcity during the rainy reason (Alemayehuet al., 2015).In general, well fed chickens have high growth rates and were very fertile and less prone to disease and parasites.

2.3.2 Health, Disease Control and Mortality

Diseases were one of the major bottlenecks for village chicken productions in the studied areas. Newcastle disease was most widely distributed among the village chicken in Ethiopia. This was reported in several previous studies which employed different diagnostic methods such as virus isolation, sero-epidemiological investigations and molecular methods to confirm the presence of the disease in Ethiopian village chicken productions (Terefeet al., 2015). In village production study in different parts of Ethiopia, no vaccination practice against poultry diseases was reported by (Moges et al., 2010).

The finding of(Fissehaet al., 2010) also indicated that the level of awareness about availability of vaccines for local chicken is low and the farmers do not have any experience of getting their chicken vaccinated against diseases. This is due to the fact that the farmers have no information about disease control and vaccination because of poor extension package of poultry production. The problem of disease in village chickens is compounded by the interaction of different entities that are of significant importance of disease epidemiology. At village level, contacts between flocks of different households, exchange of birds as gifts or even entrusting sales and purchase were the main sources of infection transmission (Tadelle, 2003)

2.4 Marketing Systems of Village chicken

Chicken product traders, collectors, retailers, are identified to be the key actors in the value chain of chicken product sector. Three principal channels were identified in the value chain of the sub-sector. These channels are complex and interconnected that implies absence of organized marketing channel and lack of formal linkages among the actors. Poultry products in most developing countries, especially in Africa, are still expensive. The marketing system is generally informal and poorly developed (Alemayehuet al., 2015). Poultry marketing structure has not well studied in Ethiopia. The market outlets or channels available to producers are diverse at all markets, although their importance differs across markets. Unlike eggs and meat from commercial hybrid birds (derived from imported stock), local consumers generally prefer those from indigenous stocks (Desalew, 2012).

Amsalu (2003) reported that in most countries, the village chicken and egg are highly prized for their body color and deep yellow color of the yolk of locally produced small sized egg and thus the price paid is frequently well above that paid for a small sized commercial broiler and egg. The sale of chickens is mainly important around Christmas or in case of emergencies (that is not true since eastern, Muslim holydays are equally important when it comes to chicken or egg sale) (Tadele*et al*., 2003). The proportion of sale is more to the poorer households, who depend more on the income from sale of eggs and chickens compared to wealthy households who consume more. The sale of birds and eggs takes place in local market. Price fluctuates during the year being low during hungry season. Individual family members unlike other case, such as ruminant animals, own poultry; there is decentralized decision making power for sales of poultry either owned individually or by the family member (Alganesh*et al*., 2003).

CHAPTER THREE

3. MATERIALS AND METHODS

3.1 Description of the Study Area

The study was conducted in Cheha districts. The district is located in Gurage Zone of Southern Nations, Nationalities and Peoples Regional State (SNNPRS), Ethiopia. The capital of the district, Endeber, is located at 188 km south of Addis Ababa on the way to Wolkite town, the capital of the Zone. The geographical location of the study area extends from 8° 00' 18.9" to 8° 15' 28.53" N and 37° 35' 46.48" to 38° 03' 59.59" E at an elevation ranging from 900 to 2812 meters above sea level (Masl). It has a total area of 573, 13.85 ha of which 40,190 ha is cultivated. The district constitutes 38 rural Kebeles. As it is true to the other parts of Ethiopia, rainfall and temperature conditions depend on elevation. The average annual rain fall of the area is about 1,268.04 mm and the average maximum and minimum temperature in the study area is 24.97^{o}C and 10.69 ^{o}C, respectively (Woreda's Livestock and Fishery Resources Sector).

3.2 Sampling method and data collection

In order to achieve the objective of the study both primary and secondary sources of data were used. Primary data were collect through interview, personal observation, and through distributing a semi-structured questionnaire which comprised of backyard chicken households, extension services, development agents, key information. Secondary data were collect from published and unpublished documents from the WLFRS (Woreda's Livestock and Fishery Resources Sector). The numbers of kebeles surveyed was purposively selected from woreda based on accessibility and chicken production potential. Thus, three kebeles from Cheha woreda (YefekterekEndebera; Wurerber and Buchach) were purposively selected. From each purposively selected kebeles, 30 households that possessed chickens were purposively considered for the survey study. Thus, a total of 90 households were included in the survey.

3.3 Statistical Analysis

Descriptive statistics such as mean, frequency and percentage were calculated and all the surveyed data were analyzed using Statistical Package for Social Sciences (SPSS) version 16.

CHAPTER FOUR

4. RESULTS AND DISCUSSION

4.1 Socio-Economic characteristics

Table1 Socio-economic characteristics of respondents in the study area (% house hold)

Districts (%)					
Parameters	No. of Respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Age structure					
Ø 18-35	24	26.7	26.7	26.7	26.7
Ø 35-45	37	33.3	36.7	53.3	41.1
Ø >45	29	40.0	36.7	20.0	32.2
Total	90	100	100	100	100
Education %					
Ø Illiterate	52	56.7	60	56.7	57.8
Ø Primary	21	20	20	30	23.3
Ø Secondary	16	20	20	13.3	17.8
College	1	3.3	0	0	1.1
Total	90	100	100	100	100
Sex of house hold (%)					
Ø Male	70	76.7	86.7	70	77.8
Ø Female	20	23.3	13.3	30	22.2
Total	90	100	100	100	100

Socio-economic characteristics of the households in the study area were presented in Table 1. Out of the total house hold interviewed only 22.2% are headed by female, this shows female are not participating in house hold heading responsibility. More than 41% of the respondent in this study fall under the age category of 35-45, which indicate that the involvement of youth is small. Most of the interviewed households (57.8%) are illiterate. Whereas, the report of

Mekonnen, G. (2007) says that large proportion of respondents were within age group of 35-60 years.

4.2 Types of Breeds

Table 2 Types of breeds in the study area

Parameters (%)	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Local breeds	29	23.3	26.7	46.7	32.2
Saso breeds	60	73.4	73.3	53.3	66.7
Bovans breed	1	3.3	0	0	1.1
Total	90	100	100	100	100
Type of chicken reared					
Broiler	5	6.7	3.3	6.7	5.6
Chicken	13	16.7	16.7	10	14.4
Layer	65	63.3	76.7	76.7	72.2
Pullet	7	13.3	3.3	6.7	7.8
Total	90	100	100	100	100
No of eggs collected per year					
< 150	3	0	6.7	3.3	3.3
150-180	50	56.7	43.3	66.7	55.6
180-200	37	43.3	50	30	41.1
Total	90	100	100	100	100

The table2 indicates the data collected from respondents shows in the study area were about 66.7% were Saso breed and most type of chicken reared were layer because most their breed were exotic. These chickens were high production performance than local breed. The availability of these breeds type were the achievement Gubre chicken production farm. These result agree with(Fasil*et al.*, 2016) said that, Saso breed is a commercial breed originated from France and it has distributed to different regions of Ethiopia. The Reproductive cycle takes longest time for

indigenous than exotic chickens because they require long time to reach sexual maturity age and replace parent stock by traditional broody hens which require long time to recover the reproductive cycle.

4.3 Poultry production system in the study area

Table3 Poultry production system in the study area.

Production System	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
extensive	81	93.3	83.3	93.3	90
Semi Intensive	9	6.7	16.7	6.7	10
Intensive	0	0	0	0	0
Total	90	100	100	100	100

Chicken production system available in the study area is indicated in Table 3. According to this finding Chicken production system in the area shows clear distinction between traditional and intensive chicken production system. Among all interviewed households 90% practice free-scavenging or/and extensive chicken production system and 10% of the respondent practice semi-intensive poultry production system. These studies agree with Dawitet (2008), said that most of village chicken production in Ethiopia is generally characterized by extensive production system.

4.3.1 Purpose of keeping chicken and egg production

Table 4 Priorities in Purpose of chicken keeping in the study area

Purpose of rearing chicken	No. of Respondents	Buchach(%) N=30	Endebera(%) N=30	Wurerber(%) N=30	Overall (%) N=90
consumption	29	33.3	36.7	26.7	32.2
selling	60	66.7	60	73.3	66.7
Both	1	0	3.3	0	1.1
Total	90	100	100	100	100
Purpose of egg production					
Consumption	17	20	20	16.7	18.9
Selling	70	73.3	76.7	83.3	77.8
Hatching	3	6.7	3.3	0	3.3
Total	90	100	100	100	100

Purpose of keeping chicken in different study areas of the households is shown in Table 4. The purposes of keeping of chicken by the households were various types across study areas. Generally the respondent in the study area gave priority for income generation. According to the current study out of the total respondent interviewed (66.7%) raise chicken for the purpose of income generation by selling live chicken and eggs and the other (32.2%) gave secondary importance. These results agree with (Dessalew, 2012), Selling of live chicken and eggs for generating income was given higher priority.

4.3.2 Responsibility sharing in chicken production

Table 5 Responsibility Sharing in Chicken Production in the Study area.

Feeding, watering and selling of chicken	No. of Respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Women	79	93.3	80	90	87.8
Men	4	3.3	6.7	3.3	4.4
Children	7	3.3	13.3	6.7	7.8
Total	90	100	100	100	100

In the study area women share the responsibility of chicken feeding, watering and selling in the market. Women dominated as 87.8**%**, Children 7.8%, Men 4.4%.

4.4 Source of feed in the study area

Table 6 Sources of supplementary feed and way of supplementation in the study area.

Parameters (%)	No of respondents	Buchach(%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Source of feed					
From the house/left over	61	70	60	73.4	67.8
Purchased	27	30	36.7	23.3	30
Purchase and from the house	2	0	3.3	3.3	2.2
Total	90	100	100	100	100
Way of supplementation					
Separate to different classes	70	76.7	80	76.7	77.8
Together for the whole group	20	23.3	20	23.3	22.2
Total	90	100	100	100	100
Basis to give supplements					
Egg yield	71	27.8	32.2	40	78.9
Meat yield	2	2.2	0	0	2.2
Egg and meat	17	70	67.8	60	18.9
Total	90	100	100	100	100

Table6 indicated that respect to the source of supplementary feed, 67.8% of left over obtained supplementary feed from their own harvest 30% market, and 2.2% used both left over and market and the way of supplementation were 77.8 in Separate to different classes, 22.2% of Together for the whole group and Basis to give supplements 78.9%Egg yield, Meat yield 2.2% and 18.9%Egg and meat. These results agree with Mapiye and Sibada(2005) reported that in rushing district of Ethiopia, most farmers (95.5%) produce their own supplementary feeds, and 4.5% use purchased feed and the portion that comes as grain supplement varied with seasons and

activities and also the way to supplementation of feed were in different class based on age and their purpose.

4.4.1 Supplementary feed source

Table 7 Supplementary feed source in the study area.

Source of feed	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
wheat	4	3.3	6.7	3.3	4.4
Maize	57	56.7	56.7	76.7	63.4
Amicho	29	40	36.7	20	32.2
Total	90	100	100	100	100

The table indicates the data collected from respondents shows that there are four types of feed source.63.4 %of the respondents reported that their feed source was maize; out of 32.2% used Amicho, 4.4 % used wheat as feed source for their chickens.

4.4.2 Provision of water

Table 8 Water provision for village chickens in the study area.

Water provision	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
No provision	34	40	33.3	40	37.8
By a dish	56	60	66.7	60	62.2
Total	90	100	100	100	100

The study result also revealed that, about 62.2% of the total households provided water for chicken by dish and 37.8% of the total households provided water for chicken with no provision. These results also agree with (Dessalew, 2012) reports that most village chicken are gain water by a dish, wooden bamboo etc.

4.4.3 Housing of village chicken in the study area

Table9 Housing of village chicken in the study area

Parameters (%)	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Separate house					
Yes No	26 64	36.7 63.3	10 90	40 60	28.9 71.1
Total	90	100	100	100	100
Night shelter of chicken					
Perch inside the house In separate house	77 13	83.3 16.7	80 20	93.3 6.7	85.6 14.4
Total	90	100	100	100	100
Reason not construct separate house					
Lack of awareness	65	63.3	90	63.3	73.2
Lack of money	25	36.7	10	33.3	26.8
Total	90	100	100	100	100

The table9 indicates the data collected from respondents shows in the study area were about 71.1% of the respondents have no separate chicken house, 85.6% Perch inside the house and 73.2% Lack of awareness about housing system .This indicates that the owners are not aware of the importance of housing. These results agree with Dwingeret, al (2003) He said that, lack of housing is one of the constraints of the village exotic chicken production systems. In some African countries, a large proportion of village chicken mortality accounted due to nocturnal predators because of lack of proper housing. Some research works also indicated that the mortality of scavenging birds reduced by improved housing.

4.5 Type of predator and disease

Table10 Type of Predator and Disease in the Study area.

Type of Predator	No of respondents	Buchach(%) N=30	Endebera(%) N=30	Wurerber(%) N=30	Overall(%) N=90
Cat	3	6.7	3.3	0	3.3
Dog	1	3.3	0	0	1.1
Eagle	15	13.3	20	16.7	16.7
Shelemetmat	71	76.7	76.7	83.3	78.9
Total	90	100	100	100	100
Any disease occurrence in the farm					
Yes	87	93.3	96.7	100	96.7
No	3	6.7	3.3	0	3.3
Total	90	100	100	100	100
Main diseases					
NCD	70	76.7	86.7	70	77.8
Parasite	20	23.3	13.3	30	22.2
Total	90	100	100	100	100

The table10 indicates the data collected from respondents shows in the study area Shelemetmat 78.9%, eagle16.7%, cat 3.3%, dog1.1% , so that the table indicate the main predator was Shelemetmat because of most of their management system were extensive. And the most serious disease was NCD 77.8%, parasite 22.2%. Because of their feeding system were free range and contact with different flock .The result were agree with (Terefeet al., 2015), said that Newcastle disease was most widely distributed among the village chicken in Ethiopia and (Tadelle and Ogle, 2001) said that, High mortality of chicks under village chicken production in the central highlands of Ethiopia was due to diseases, parasites, predation, lack of feed, poor housing and insufficient water supply.

4.5.1 Major constraints in village chicken production

Table 11 Major constraints in village chicken production

Parameters (%)	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Disease	11	6.7	23.4	6.7	12.2
Feed scarcity	1	0	3.3	0	1.1
Housing	77	90	73.3	93.3	85.6
Management	1	3.3	0	0	1.1
Total	90	100	100	100	100

The table11 indicates the data collected from respondents shows in the study area were, the main constraints about 85.6% were housing system. The problem of disease in village chickens is compounded by the interaction of different entities that are significant importance of disease epidemiology. These study were agree with (Tadelle, 2003; Mapiye and Sibanda, 2003) Said that, At village level, contacts between flocks of different households, were the main sources of infection transmission because of in adequate housing system.

4.6 Extension services and training

Table 12 Extension services and training

Parameters (%)	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Got extension services					
Yes	25	20	23.3	40	27.8
No	65	80	76.7	60	72.2
Total	90	100	100	100	100
Training took					
Yes	30	30	43.3	26.7	33.3
No	60	70	56.7	73.3	66.7
Training on					
Health care	60	68.7	56.7	73.3	66.7
Housing	30	31.3	43.3	26.7	33.3
Total	90	100	100	100	100

The table12 indicates the data collected from respondent's shows in the study area were 27.8% Got extension service, 72.2% not got extension services and 33.3% training took, 66.7% no training took. These indicates that farmer were in adequate Extension education on aspect of chicken production. And they were Training on66.7% Health care and 33.3%Housing system, most of them were unskilled in housing system because they were less awareness about housing system. These studies also agree with (Desalew, 2012): said that, lack of housing system one of the Constrain of village chicken production system.

4.6.1 Veterinary service

Table13 veterinary service in the study area.

Parameters (%)	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Identification of sick chickens					
Diarrhea	53	53.3	63.3	60	58.9
Stand feather	37	46.7	36.7	40	41.1
Total	90	100	100	100	100
Treatment/vaccination					
Traditional	73	80	80	83.3	81.1
Modern	17	20	20	16	18.9
Total	90	100	100	100	100
Traditional medicine used					
Areke	33	20	46.7	43.3	36.7
Lemon	57	80	53.3	56.7	63.3
Total	90	100	100	100	100

Table13 indicates Vaccination/treatment in the study area of sick chickens identify by58.9% Diarrhea, 41.1% Stand their feather and the way of Treatment/vaccination were 81.1% by Traditional, 18.9% by Modern and To treat their sick chickens, half of the owners used traditional remedies, which were usually administered through they used 63.3% Lemon and 36.7% Areke. Whereas few use or treated by veterinarian access medicine. These results agree with Fissehaet al., (2010) said that, the level of awareness about availability of vaccines for local chicken is low and the farmers do not have any experience of getting their chicken vaccinated against diseases. This is due to the fact that the farmers have no information about disease control and vaccination because of poor extension package of chicken production.

4.7 Marketing of chicken and chicken products

Table 14 Market determinants of chicken price and their demand in the study area

Parameters (%)	No of respondents	Buchach (%) N=30	Endebera (%) N=30	Wurerber (%) N=30	Overall (%) N=90
Marketing system of chicken products and their demand.					
festival	60	68.7	56.7	73.3	66.7
Non festival	30	31.3	43.3	26.7	33.3
Total	90	100	100	100	100

Table 14 indicates in the study area were Marketing system of chicken products and their demand in festival day 66.7%, Non festival day33.3% because the demand of chicken were dominants mainly around Christmas, ester and new year. These study agree with Amsalu (2003) reported that, in most countries, the village chicken and egg are highly prized in the festival day The sale of chickens is mainly important around Christmas or in case of emergencies, Muslim holydays are equally important when it comes to chicken or egg sale and, Tadele*et al.*, (2003) said that, The proportion of sale is more to the poorer households, who depend more on the income from sale of eggs and chickens compared to wealthy households who consume more.

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CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study were focused on village chicken production, management and marketing system in cheha woreda, gurage Zone, southern Ethiopia, and covers selected kebeles purposively and a total of 90 purposively selected households were used. Poultry production is one of income extension system and widely practiced by farmers in study area. It is practiced by every farmers as side line with other farming activities and offer farmers with further income, and also used as starting point for young to establish business idea. From the results, both males and females were highly participated in chicken farming activity. Most dominant flock structures were layers hens, pullets, and source of chicken was hatching egg at home, and gifts from parents.

The purposes of keeping chicken by households were for different purposes across the study area. The highest priority for sales followed by home consumption and hatching. It also identified that majority of the households engaged in traditional chicken production system followed by semi intensive production system. Women play major role in the ownership of decision making to sale chicken and egg. Households provided pullet for children so that children share the responsibility of chicken feeding and watering. Children have been used for school materials, to cover part of the express required for clothing, while in other cases the income was used by women for household use. Women dominated in feeding and watering, cleaning chicken house, treating sick chicken while men's dominate in preparation of night resting place and or a partition in the house.

Disease occurs in dry and rainy seasons. In dry season, bloody diarrhea, poor appetite and ruffled feather were the symptoms observed. . As observed in this study chicken production in study area was hindered due to poor management like health care, feed shortage, lack of improved breed and predators. This problem can be overcome by slight advance in poultry house, cross breeding with exotic breeds and vaccination of chicken. Therefore, information should be disseminating to farmers about chicken husbandry and government should provide vaccine and improved breeds of chicken for farmers

5.2. Recommendations

- Agricultural office and development agents should provide training in use of different chicken farming system, feed management, provision of house
- Extension education on aspect of chicken production should be given for the farmers
- Since women play the major role in village chicken production, the poultry extension activities need to be targeted towards women.
- Training for both owners and extension staff focusing on disease control, improved housing, feeding, market and entrepreneurship could help to improve productivity of chicken.
- The producer should use feeder to decrease wastage of feed, to prevent feed contamination and it also decrease feed competition among the flock where only the strong ones are going to eat.

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Appendix

Questionnaire survey on village chicken production, management and marketing system

General information

1. Household Name _____ Woreda _____ Kebeles _____

2. Sex A/ Male B/ Female

3. Age Household A/ 18-35 B/ 35-45C/ 25-35 D/> 45 years.

4. Educational level A/ uneducated B/ primary C/secondary D/college/University 5/What is the primary importance in chicken in your locality?

A/Meat B/ Egg C/ marketing D/other (specify)

6. How many number & type of chickens do you have?

A/ Pullets --- B/Layers ---- C/Chicks ------- D/Cocks --------- E/Cockerel ---

7. What type of feed do you offer for your birds? A/ Concentrate B/ Cereal C/Home wasted food D/Other /specify

8. Where do your birds rest at night? A/In the main house B/ in bamboo cage C/In kitchen D/Other /specify

9. How do you provide feed for your chicken? A/No provision B/ by a dish C/ Scavenging D/ Other /specify

10. How do you provide water for your chicken? A/ No provision B/ by a dish C/ Other /specify

11. Is there predator attack chicken in your farm? A/Yes B/No

12. If yes in Q11, which type of predators has mainly attack?

A/Cat B/ Dog C/Eagle D/Other

13. What are the main constraints of chicken in your farm? A/Feed scarcity B/Disease C/Housing, D/management E/ Other

14. is there any disease occurred in your farm? A/Yes B/ No

15. If yes in Q13, which type of disease occurred? A/ NCD B/ parasite C/other

16. InQ13,is there any treatment /vaccination for such type of disease? .....

17. Which types of chicken housing you used for your chicken?

A/Perch inside the house B/ In Separate house C/Flour covered container D/Others ------

18. Whom to sold poultry in the market? A/Children B/ Women C/Father E/ Other

19. The purpose of egg in your locality? A/Consumption B/ Hatching C/ for selling

20. Which type of feed has preferable by chicken in your locality?

A/Wheat B/Maize C/ Sorghum D/Others

21. Is there any difference use of feeds for layers, broilers, chickens, etc? .....

22. What type of management system do you practice for your chicken rising?

A. Extensive B. Intensive C. Semi-intensive D. Others, specify

23. Do you have separate chicken house (other than family dwellings)? A/ Yes B/ No

24. If your answer to question No. 21 is no, what is a problem in the construction separate village chicken house? .....

25. Is the house purposely construct for chicken A/yes B/no

26. If your answer in Q23 is no, where does your birds stay during day times? .....

27. Do you practice purposeful feeding of your chicken in confinement? A. Yes B. No

28. If your question it is yes: what is the source of supplementary feed?

A. Market B. Farm C. Both D. Left over

29. How do you give the extra feeds? A. Separate to different classes B. Together for the whole groups (for group feeding) C/ other

30. What are your limitations in providing supplementary feeds to your chicken?

A. Lack of awareness about feeds and feeding B. Unavailability C. Feed cost (Expensive) D. Time shortage E. Lack of cash credit F. Others, specify

31. How do you recognize sick birds…….

32. Is there any treatment for your sick chickens A/ traditional B/modern

If traditional what type of medicine/ name for what type of disease diseases? .....

33. What is your objective(s) of keeping chicken? …….

34. What type of chicken you reared? A/ layer B/ Broiler C/ pullet D/ chicken

35. If you keep layer, how many eggs you can collect in week---------/month----------/year?

36. If you keep/reared broilers, in how many days/months you keep to reach maximum weight to sell the market……

37. What type of breed do you have? A/Saso breeds B/Bovans C/ /local breed D\Others/specify

38. Does any extension services you got in chicken A/ Yes B/ No

39. Is there any training you took in chicken management, housing health, feeding, etc? A/ Yes B No

40. In Q 39 if yes, how many times you took----------and which type of training?

41. In Q 39 if yes, whom to took in the household? A/ Man B/ Woman C/ Children D/ Others/Specify