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Research Article

Assessment on Sheep Fattening practice and Marketing System in Sibu Sire District, East Wollega Zone, Oromia Region, Ethiopia

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Abstract

The study was conducted in Sibu Sire Woreda East Wallega Zone, with the objective of assessing sheep fattening and marketing systems practices. Four Kebeles were selected based on agro-ecology and population densities of sheep. A total of 80 households were interviewed by using interview and questionnaire. Among the interviewed householders (85%) were males while (15 %) were females. The educational background of the respondents indicated that (56.25 %) of the householders' members were illiterates, (32.5 %) attended primary school, (10 percent) attended secondary and the rest (1.25 %) hold diploma. The majority of the sample households have large family size. Of the total, half (51.25 %) of respondents had a family size of 4-7, while a few (33.75 %) of respondents had family size 1-3 the rest greater than 8 family size (15 %). In terms of occupation, almost all of the households (98.75%) of the respondent were predominantly engaged in subsistence farming and produce cereal crops such maize, and sorghum for their home consumption. The result showed 50%, 15% and 35 % were using river water, whale water and both well and river water respectively. Fattening sheep in feedlot system (40 percent) and grazing and stall feeding (30 percent) and grazing only 10 percent were the major fattening systems identified in the area. The high proportion of producers provided crop residues and grazing of natural grasses. Farmers market sheep at farm gates or the nearest local/primary markets.

Both market supply and demand of sheep were typically seasonal and reaches peak during the holidays. Agricultural development agents should give attention in creating awareness for farmers by providing adequate skill and monitoring regarding marketing and improved fattening system.

Keywords: Fattening, Marketing, Practice, Sheep, System.

1. Introduction

In Ethiopia, more than 80% of the human population depends on agriculture for their livelihoods and usually keep livestock as pastoralists or in mixed crop livestock systems [1]. Ethiopia has one of the largest livestock populations in Africa with the estimated domestic animal number of 65 million cattle, 40 million sheep, 51 million goat, 8 million camels, and49 million poultry, 2.1 million horses, 0.4 million mules and 7.88 million donkeys.

Livestock play an important role in providing export commodities in a form of live animals, skins and hides. The total annual meat production are cattle (63%), sheep (25%) and goats (12%). At the national level, sheep and goat account for about 90% of the live animal/meat and92% of skin and hide export trade value. Sheep and goats represent an important component of the farming system by providing about 12% of the value of livestock products consumed and 53.3% of the cash income generated at the farm level [2].

It has been long recognized that the limitation to increase sheep development (increasing fattening practices and their productivity) in Ethiopia are multi-dimensional. Constraints can be grouped into socio-economic limitation (infrastructure: Ethiopia has one of the lowest density of roads of any country, those forcing sheep in almost all cases to walk long distance; policy issues: sheep fattening and natural resources management are influenced by absence of sheep fattening policy, pricing policy, community organization and participation), and technical limitation: feed quantity and quality, breeds of sheep and goat, and pests and disease [3].

In Ethiopia, there is still a gap of information available on sheep fattening practices. Therefore, to plan and develop improved sheep fattening practices in the subsector, it is very important to investigate the existing sheep fattening

practices and marketing systems. According to Belachew and Jemberu a relatively huge number of exportable surplus livestock, proximity to the export market especially to the Middle East countries and other factors give the country a comparative advantage in livestock trade [4]. The country has 1.02 million heads of surplus and exportable sheep annually. Poor marketing system affects the country's foreign exchange earnings.

Livestock production and productivity and producers' benefits from livestock production are far below expectations. There are also variations in the performance of different breeds of sheep in Ethiopia. The lackofcurrentandlocation-specificinformationonproductionandmarketing systems is often a major limitation to productivity and production improvement activities in sheep in Ethiopia [5].

Fattening has been defined as intensive feeding of highly nutritious feed to promote fast growth and fat deposition to achieve desired carcass growth and quality [6]. Such systems can be applied to sheep as they` can easily adapt to an intensive system of production under feedlots [7]. Fattening programs aim to realize maximum growth rate and higher carcass yields in a minimum period of time, which would raise production per unit of land and the value of the livestock. Fattening is generally profitable because the value per kilogram of live weight increases as both weight and condition increase [8]. Sheep rearing is one of the main cash income sources for the farmers in most of our country [9]. According to Ayele et al. funding several studies in high lands concluded that livestock account for 37-87% of the total farm cash income of farmers [5]. In addition, the livestock sub-sector in Ethiopia contributes from 12-16% of the total and 30-35% of agricultural GDP. Farmers in Ethiopia rear sheep for two reasons, to get cash and for home consumption. They slaughter their sheep for festivals like Easter, New Year and Christmas [9].

1.1. Statement of the Problem

Although Ethiopia has a high population of sheep but their productivity for fattening is low due to lack of knowledge for mutton sheep selection, poor management system and poor marketing system and other limiting factors of sheep fattening and marketing, Sibu sire woreda also have this problem. Therefore, it is an important need to access various management factors (feeding, watering, housing, health care) related to fattening, and marketing techniques of sheep in sibu sire woreda.

1.2. Objective

General objective: The general objective of the study was to assess sheep fattening practices and marketing system in Sibu sire woreda.

3. 1.2 Specific objectives:

- To assess fattening management practices of sheep and their marketing in the study area
- To estimate the profitability of sheep fattening practices in Sibu sire woreda

1.3. Literature Review

Small ruminants are playing an important role in the economy of farmers in Ethiopia. In Ethiopia, sheep and goats are accountable for about 25% of the domestic meat consumption and 58% of the national annual hide and skin production. However, attempts to improve their performance under the prevailing condition must take into consideration in order to increase their specific purpose in the production and fattening system and their potential under varying and skins
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Sheep and goat fattening in Ethiopia have been recognized as a potential profitable activity that enhances the income of smallholder farmers [7]. In spite of the large population of sheep and goat, and the role of sheep and goat both to the livelihood of resource-poor farmers and the national economy at large; the current level of on-farm productivity in the smallholder production systems is low; with off-take rate 33% and average lamb carcass weight of 10 kg. Different research report presents the characteristics of the prevailing sheep and goat fattening activities in Ethiopia as described by stakeholders across various regions, the challenges likely to slow productivity and the prospects for improving sustained productivity [10].

1.4. Sheep Production System in Ethiopia

Mode of livestock production in Ethiopia is broadly classified into pastoral, agro-pastoral and mixed crop-livestock, peri-urban and urban production systems [11]. There are a number of basic classification criteria for sheep production systems in Ethiopia. Its usual to classify production systems as intensive, semi-intensive, extensive based on the develop inputs and intensify of production and based on agro-ecology, length of growth period and relation to land and type of commodity to be produced , there are five sheep and goat production systems, the three are major production systems such as high land sheep barley system, mixed crop livestock and pastoral and agro-pastoral production systems; whereas the minor production system are ranching and urban and per-urban production systems 12].

1.5. Constraints of Sheep Production

Adane and Girma reported that sheep production and productivity in Ethiopia are constrained by many factors [13]. The major ones are; scarcity of feed, lack of infrastructure (transport facility), high mortality rates, inadequate veterinary coverage, long marketing channels and lack of market information, lower product quality (live animals and meat) for export market penetration, inadequate provision of credit services and low average reproductive rates.

1.6. Sheep Breed in Ethiopia

Indigenous sheep genetic resources have developed specific adaptations to survive and produce under adverse local environmental conditions and to perform better under low input system [14]. There are about 14 traditionally recognized sheep populations in Ethiopia. These populations are called sheep types in some literatures. They are also designated as breeds according to some definitions of 'breed'. These are Menz, Sekota, Semen, Tukur, Wollo, Farta, Washera, Adilo, Arsi-Bale, Horro, Bonga, BHS, Afar and Gumz, [15].

1.7. Sheep Fattening System

Sheep fattening is a common practice in different parts of the country, though the degree of fattening and resource base differs markedly. Less than 39.0% of the farmers owning small ruminants practice some form of fattening before marketing and majority of the farmers sale their animals early before attaining optimum market weight [16]. Sheep fattening practice should consider the general husbandry practice issues like major feed resources, management practice, records and marketing system [17].

1.8. Traditional fattening systems

This system generally depends on grazing natural or planted pastures with variable degrees of supplementation. Animals require a long period of time to attain market weight and condition. It is also associated with huge fluctuations in the weights and conditions of the animals depending on feed availability. This system can be improved to supply animals of acceptable condition to slaughterhouses for ultimate export. The conditioned animals may also go into a finishing operation targeted to supply the local market [8].

Traditionally, farmers in Ethiopia are used to fatten a few sheep based on available inputs targeting sales during festive holidays. This is based on limited scientific and technical knowhow in feeding systems and husbandry practices. Shapiro et al. Sheep fattening, and breeding practices are owned smallholder farmers as an integral part of the livestock sub sector and contribute to both subsistence and cash income generation EARO [18, 19].

1.9. Agro-industrial by product-based fattening

Fattening of sheep based on agro-industrial by products is practiced in different areas of the country. Though the contribution to the total animal feed resource is limited (1.45%), agro- industrial by-products are one of the important feed resources available in Ethiopia. Agro-industrial byproducts produced in Ethiopia include; by-products from flour milling, oil processing, sugar factory and brewery by-products. These products are mainly used for dairy and fattening animals [20]. Oil seed meals are produced from a variety of crops that have seeds that are high in oil. Oil seed cakes are rich in protein and most are valuable foods for animals.

1.10.Management Practice and Risks Associated with Sheep Fattening

The fattening program should be started after the necessary feed supplies are secured. Underfeeding and incorrect timing are the most common causes of failures in fattening activities. The objective in a fattening operation is to convert as much of the feed to body tissue as possible. It is, thus, necessary to minimize the movement of animals during the fattening period. The success of a finishing operation depends on the first two weeks after arrival of animals. They may have traveled long distances and will be stressed, hungry, and thirsty.

They are generally gathered, sorted; often stand for a long time without feed and water. It is recommended that the following guidelines be followed under such circumstances: Rest the animals for a few hours in a dry, clean, sheltered area with access to fresh water after arrival. Then offer grass hay or mixed grass-legume hay. Hand feed salt during the first two weeks; then provide trace mineral salt in a separate feeder. Afterwards, these supplements can be mixed in the complete diet, but salt should continue to be provided ad libitum (free choice). Animals should have feed available at all times including evenings. If there is no feed left in the morning, feed supply should be increased for the following day [8].

1.11.Housing system and hygiene

Housing for fattening sheep varies from fattener to fattener. In sheep houses are attached to the side of the main house. Most of the peri-urban and urban sheep fatteners use a separate house for fattening sheep Cooperative fatteners' use separate housing for sheep and goat. Most housing is unclean, poorly ventilated; lacks proper floor bedding and stocking rates are sometimes too high. This is due to lack of awareness and lack of understanding on the space requirement of fattening sheep and goats by most producers [21].

1.12.Feed resource and feeding practice

Feeds can be classified according to some of their general properties. The classification used hears is typical of that used in the feed industry. Feedstuffs can be classified as either concentrates or roughages.

The availability of feed resource in the highlands of Ethiopia depends on the mode and intensity of crop production as well as population pressure. The major basal feed in the highlands of Ethiopia are a natural pasture, crop residue and stubble grazing, and their contribution to the total feed resource vary from area to area based on cropping intensity [22].

1.13.Roughages

A wide variety of roughages can be fed to growing and finishing lambs. The amount of roughage to feed depends on the objective of feeding the roughage. Roughages are bulky feeds that contains relatively large amount of poorly digestible materials. It contains more than 18% CF. They can be of two categories, namely dry and succulent roughages based up on their moisture content. Succulent feeds usually contain more than 75% moisture and it includes pasture, cultivate fodder crops, grasses, tree leaves and silage available for fattening animals. Dry roughages contain only 10-15 moisture includes hay and crop residues [23].

1.14.Concentrate

Concentrates have low fiber content and a high content of either protein or energy or both. Cereal grains for example are considered as primary energy sources but also contribute a significant amount of protein. Energy source concentrates: are includes cereal grain (corn, sorghum and buck wheat), grain milling byproducts (wheat bran and corn gluten meal), root and tubers (cassava and potatoes), food processing by-products (molasses, bakery waste, citrus pulp distiller and brewers' by-products), industrial by-products such as wood molasses. Protein source concentrates: Protein supplements

generally are products with more than 20% crude protein.

Some of these feeds are; oil seed meals (soybean, cottonseed, rapeseed, canola, and linseed, peanut, sunflower and sunflower meals), grain legumes (beans, peens and lupines) and animal protein (meat meal, tank ages, fishmeal's and whey.

1.15.Watering Practice

The water intake of fattening animals depends on environmental temperature, the temperature of drinking water itself, the activity of fattening animals; the moisture content of the feed and the amount of feed per day. Most fatteners give waters for fattening animals twice a day and once a day respectively. These are due to the shortage of water for small scale fatteners [24].

1.16.Healthcare practices

An important environmental challenge as a party of fattening animal health program is the control of internal and external parasites. In general, any problems associated with animal health can largely prevent if proper management practices are followed. Therefore, the veterinarian involved in sheep and goat health management program should have the necessary depth of knowledge about the elements that must be addressed in crucial on animal health control [4].

Prevention of disease is a key aspect of minimizing health risks in your herd. Strict sanitation is necessary to prevent disease outbreaks. Although sanitation requires time and money, it is time and money well spent since prevention of the diseases is more economical than treatment. The housing for small ruminants, feed and water must be kept fresh and sanitary [25].

Internal parasites are one of the biggest disease issues for small ruminants. Parasites can not only kill both young and old sheep and goats, but also contribute to poor growth rates, an unthrifty appearance, coughing, diarrhea and other digestive problems. Depending on your operation (grazing density, past history of dewormer use, other health issues) a deworming schedule should be developed with help from a consulting veterinarian. Some deworming products may have poor efficacy against some types of internal parasites that affect small ruminants. Your veterinarian can assist you with conducting fecal examinations for worm eggs, and help you make critical decisions when selecting a dewormer that will be effective for your operation [25].

1.17. Fattening Cycle of Sheep

For most rural and peri-urban and urban sheep fatteners, the fattening activities are seasonal. This is mainly associated with market demand seasons for fattened sheep and to a smaller extent due to feed availability for fattening. Informants from regional research offices and Bureau of Agriculture or Livestock Development Agency of the Amhara region, Wollega, Keffa, and Woliata Zones noted that 2 to 3 fattening cycles to be commonly used by rural farmers. The dominantly 2 fattening cycles practiced by majority of rural, peri-urban and urban fatteners in the country target two peak demand seasons for fattened sheep that are highly profitable [21].

The peak demand is during the Ethiopian Easter (April) and New Year (September). The third fattening cycle practiced by some producers considers Ethiopian Christmas (January). It has been noted by many fatteners that demand for fattened sheep and goat is highest in Easter followed by New Year and then by Christmas. In Muslim dominated areas like Afar, ED Al Adeha (Arefa), a religious ceremony, is the high peak demand time for fattened sheep for the live animal exporters.

The length of sheep fattening varies depending primarily on the availability of sufficient and quality feed for fattening. Generally, the length of the fattening period is dictated by feed availability and partly on market. If there is good management, sheep takes three rounds of fattening in a year (90 days are required for each round). Considering a minimum fattening length of 2 months, a maximum of 4-5 annual fattening cycles can be achieved [21].

1.18. Risks Associated with Sheep Fattening

The main risk associated with sheep fattening activity is the loss of animals. This could be due to disease, predators or theft. Price fluctuation is another risk associated with sheep fattening. To minimize risks associated with disease there is a need to enhance the service delivery system and ensure availability of enough health services. Strategic deforming and proper vaccination must be developed and in place. Risks associated with predators and theft can be minimized using proper housing [21].

1.19.Socio-Economic Importance of Sheep

Animal genetic resources in the Tropics play an important role from food product supply, manure (fertilizer and fuel), wool, hides and skin to transport and traction service beside to their socio-cultural relevance. In addition to this, they are very vital as cash reserves and means of insurance in risk aversion for farmers with subsistence oriented traditional farming system. In most developing regions there has been a rise in the importance of livestock, those livestock form key components of the livelihood strategies of the world's poorest people. In Ethiopia, 80% of the smallholder farmers own cattle while only about 31-38% and 21-33% of the smallholder farmers own sheep and goat, respectively.

The annual national mutton production is 78 thousand metric tons, because of the high average off-take rates which were estimated to be about 35%. Furthermore, sheep contributes 20.9% of the total ruminant livestock meat output and 13.9% of the total domestic meat production, with live animal and chilled meat export surpluses. Per capita consumption of small ruminant meat (Kg/person/year) in Ethiopia is 2.1 kg [19].

1.20. Sheep Marketing System in Ethiopia

Sheep rearing is one of the main cash income sources for the farmers in most of our country [26]. According to Ayele et al. funding several studies in high lands concluded that livestock account for 37-87% of the total farm cash income of farmers. In addition, the livestock sub-sector in Ethiopia contributes from 12-16% of the total and 30-35% of agricultural

GDP. Farmers in Ethiopia rear sheep for two reasons, to get cash and for home consumption. They slaughter their sheep for festivals like Easter, New Year and Christmas [26].

According to EstefanosTadesse et al. funding about 72.5 % of sheep marketing was based on eye estimation of the weight and on the traditional evaluation of condition score of the sheep [27]. 21.7%of sheep markets based on live weight using scales. The remaining, 5.8 % of sheep marketing uses both live weight and estimation. Moreover, most purchasers like this method than price setting based on live weight. Marketing of sheep is characterized by strong seasonality and subject to fluctuation.

Demand and price increases during festival periods. Factors affecting market supply, as measured by the number offered, include high demand during religious festivals, lambing season, quality and quantity of grazing, as well as cash needs for crop inputs and, later, for food purchase before harvesting [19]. There are sheep marketing channels in Ethiopia. A marketing channel refers to the sequence of enterprises and markets by which produce is moved from producer to consumer.

Sheep marketing agents include producers, country buyers (farmers, cooperatives, small traders, butchers, etc.), big traders (wholesalers), export abattoirs, live animal exporters, brokers/agents and consumers. In fact, there are also brokers, transport owners and other market agents who have direct and indirect roles. The marketable live sheep and goats in the hands of farmers reach consumers largely following a 3-tiered system consisting of small, medium and large markets [28].

1.21.Structure and performance of small ruminant markets
Animals are sold on a per-head basis and price agreement reached by a long one-on-one bargaining between a seller and a buyer. Under such circumstances, prices paid will reflect buyers' preference for various animal characteristics (weight, sex, age, condition, breed, and color), the purpose of animals purchased (for resale, slaughter, fattening or reproduction), the season of the year (occurrence of religious and cultural festivals) and the bargaining skills of buyers and sellers.

According to Ayeleet al., the livestock marketing structure of Ethiopia follows a four-tier system. The main actors of the 1st tier are local farmers and rural traders/rural assemblers who transact at farm level. Those small traders from different corners bring their animals to the local market (2nd tier). Traders/wholesalers purchase a few large animals or a fairly large number of small animals for selling to the secondary markets. In the secondary market (3rd tier), both smaller and larger traders operate and traders (wholesalers or retailers) and butchers from terminal markets come to buy animals.

In the terminal markets (4th tier), big traders and butcher (wholesalers or retailers) transact larger number of mainly slaughter type animals. Consumers get meat through purchase of the animals from terminal markets and slaughters at home or they may get meat from markets or they may access from butchers who process the meat via abattoirs. Marketing of sheep and goats is characterized by strong seasonality and subject to fluctuation. Demand and price increases during festival periods. Factors affecting market supply, as measured by the number offered, include high demand during religious festivals, lambing season, quality and quantity of grazing, as well as cash needs for crop inputs and, later, for food purchase before harvesting [19].

1.22. Marketing constraints

Improving marketing success of livestock producers provides incentives to adopt technological interventions that improve livestock productivity, which in turn improves marketing success. Access to local market is the most important economic determinant to adopt technologies and choice of fattening enterprises [29]. Market locations in primary and secondary markets are usually not fenced; there are no permanent animal routes and no feed and watering infrastructures. Yet, buyers and sellers are subjected to various service charges by the local authorities as well as other bodies [7]. Nearly in all parts of the country, there is no regular market information on prices and supplies, nor formalized grades and standards of sheep and goats and other livestock [30].

As a result, there is excess supply of animals beyond demands in some seasons. The more mobile trader is better informed on market prices which combined with excess supply places the trader in a better position during price negotiation. Illegal market in Ethiopia is identified as a constraint to fatteners and traders [31]. Traders and exporters are also faced with marketing problems. A survey in IPMS identified lack of adequate supply of good condition animals, inadequate market places, lack of holding (concentration) places, feed supply, lack of market information, and multiple taxation at checkpoints (especially when animals are trekked or trucked through towns) and lack of efficient vaccination services for export animals as the major problems identified by exporters include lack of adequate supply of appropriate and good quality animals, poor marketing infrastructure, livestock diseases, lack of adequate sanitary and phytosanitary services to support exports, long market channels (usually 3–5 stages between producer and the abattoirs), and problems with air-freight transport services.

2. Materials and Methods

2.1. Description of the Study Area

The study was conducted in Sibu Sire woredas in Oromia Region, Ethiopia. It is bounded in the south by Wama Bonaya, on the west by Guto Wayu, and on the north and east by Bila Seyo. The administrative center of this woreda is Sire. The altitude of this woreda ranges from 1300 to 3020 meters above sea level; important peaks include Mount Chalsisi, Mount Adere and Mount Godomo. Rivers include the Aleltu, Ambelta, Gorochan, Indris, Leku, Chekorsa and the Jalele. A survey of the land in this woreda shows that 32.8% is owned by peasants while 67.2% is part of the Wama State Farm or unoccupied; of the land owned by peasants, 69.8% is cultivated land, 12% pasture, 10.1% swamp, and 8.1% forest.

Cash crops include niger seeds. [1] Coffee is another important cash crop; between 20 and 50 square kilometers are planted in it. Industry in the woreda includes 12 grain mills and one edible oil mill. There were 14 Farmers Associations with 11,254 members and 6 Farmers Service Cooperatives with 6205 members [32-47].

Sibu Sire has 25 kilometers of dry weather road and 49 all-weather road, for an average of road density of 65.3 kilometers per 1000 square kilometers. About 18.6% of the total population has access to drinking water. [1] There are 20 primary schools in this woreda, seven providing education for grades 1-4 and 13 providing education for grades 1–8, and two secondary education schools, one providing education for grades 9-10 and the other for grades 11–12. Health services are provided by one health center, three clinics, and three health posts; these facilities are ill-equipped and under-staffed, making them insufficient to reach the entire population. [3]

The 2007 national census reported a total population for this woreda of 102,228, of whom 50,717 were men and 51,511 were women; 10,243 or 10.02% of its population were urban dwellers. The majority of the inhabitants observed Protestantism, with 43.85% reporting that as their religion, while 41.15% observed Ethiopian Orthodox Christianity, and 13.68% were Moslem. [4]

Based on figures published by the Central Statistical Agency in 2005, this woreda has an estimated total population of 97,866, of whom 50,302 are men and 47,564 are women; 13,710 or 14.01% of its population are urban dwellers, which is greater than the Zone average of 13.9%. With an estimated area of 1,132.51 square kilometers, Sibu Sire has an estimated population density of 86.4 people per square kilometer, which is less than the Zone average of 81.4.

The 1994 national census reported a total population for this woreda of 68,919, of whom 33,587 were men and 35,332 women; 7,675 or 11.14% of its population were urban dwellers at the time. The two largest ethnic groups reported in Sibu Sire were the Oromo (86.06%), and the Amhara (12.24%); all other ethnic groups made up 1.7% of the population. Oromiffa was spoken as a first language by 86.73%, and 12.22% spoke Amharic; the remaining 1.05% spoke all other primary languages reported.

2.2. Method of Data Collection and analysis

The most important instruments we used to generate relevant information for tis research were questionnaires, direct observation and interview. The data was collected from each randomly select respondent on pre agreed mutually convenient time.

2.3. Methods of Data Analysis

The data that has been acquired were processed and computed by simple descriptive statistics and presentedintabularform

3. Results and Discussions

3.1. Socio-Economic Characteristics of the Respondents

From the socio-economic characteristics of the households, it is reported that (85 percent) of household members were males while (15 percent) were females. The educational background of the respondents indicated that (56.25 percent) of the household members are illiterates (32.5 percent) attended primary school (10 percent) attended secondary and the (1.25 percent) rest hold diploma. The majority of the sample households have large family size. Of the total, half (51.25 percent) of respondents had a family size of 4-7 while a few (33.75 percent) of respondents had family size 1-3 the rest greater than 8 family size (15 percent).In terms of occupation, the almost all of the households (98.75percent) of the respondent are in predominantly engaged in subsistence farming and produce cereal crops such maize, and sorghum, for their house consumption. Income sources a number of activities such as farming, livestock keeping, small scale business and government worker (Table 1).

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Table 1: Socio-economic characteristic of the respondents

Parameter		Frequency n-80	percentage (%)
Sex	Male	68	85
	Female	12	15
Age	15-25	10	12.5
	26-45	39	48.75
	>45	31	38.75
Educational status	Illiterate	45	56.25
	Primary school	26	32.5
	Secondary school	8	10
	Diploma and above	1	1.25
Family size	3 Jan	27	33.75
	7April	41	51.25
	>8	12	15
Occupation	Farmer	79	98.75
	Government worker	1	1.25
Income source	Crop farming	51	63.75
	Livestock keeping	10	12.5
	Small business	18	22.5
	Government worker	1	1.25
Total		80	100

Table 2: Fattening management practice of sheep in the study area

No	System of feeding sheep	Frequency N=80	%
1	Stall feeding	40	50
2	Grazing with stall feeding	30	37.5
3	Fattening grazing only	10	12.5

Table 3: housing system of fattening sheep in the study area

Housing system	Frequency N=80	%
Common with flock of sheep	25	31.25
Separate for fattening sheep	55	68.75

Table 4: Feed resources in the study area

No	Major feed resource	Frequency N=80	%
1	Grazing	42	52.5
2	Atela	15	18.75
3	Concentrate feed	23	28.75
Total		80	100

Table 5: Water sources and watering of fattening sheep in the study area

S/N	Sources of water	Frequency N=80	%
1	River water	40	50
2	Well water	12	15
3	Well and river water	28	35

Table 6: purpose of keeping sheep in the study area

Purpose of keeping sheep	Frequency N=80	%
For income	40	50
Reserve	29	36.25
Home consumption	11	13.75
Total	80	100

Table 7: Sheep marketing system in the study area

Marketing system	Frequency =80	%
First level market	35	43.8
Second level market	20	25
Third level market	15	18.7
Forth level market	10	12.5

Market channels

A. Producer Retailer Broker Consumer

B. Producer Local Mark Village Market Zonal Market Regional Market Commercial Market Consumer

Conclusion

Sheep production is common practice in Sibu sire Woreda due to suitable agro ecology that makes the Woreda potential for sheep production and marketing In the process of sheep marketing, farmer, middle men and traders were involved. Based on the result of the current study, utilization of improved forage and house leftover was appreciated and intensive training on sheep fattening, marketing and management in addition to further work is needed to develop a cost-effective feeding strategy by combing improved and locally available feed resources for better productivity and profitability. Generally, the study was identified sheep fattening and marketing system in sibu sire woreda.

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