

Goat marketing in northern highlands of Ethiopia: The case of Wag-Hämera- Mekelle supply shed

Leulseged Kasa

Email: leulseged1979@gmail.com

Sekota Dry land Agricultural Research Centre, Amhara Regional Agricultural Research Institute

Abstract

A rapid assessment of goat marketing was conducted in 2009 in Wag-Hämera-Mekelle supply shed, Ethiopia. The survey was aimed at generating information on the characteristics, constraints, and opportunities of goat marketing. Amdework, Kedamit, and Nyere Aqu (primary), Sekota (secondary) and Mekelle (terminal) markets were studied. Findings revealed that suppliers were smallholder farmers and the gross and net off-take rates during 2008 were estimated at 23.7% and 12.9%, respectively. The prevailing marketing system is characterized by involvement of large number of illegal farmer traders across the market chains with traditional marketing way of conduct. The dominant market outlet was found to be towards Mekelle. Taking producer prices at Sekota and retail prices at Mekelle, producers' share of the retail price for castrated, uncastrated, and adult female goats were estimated to range from 23 to 50%, 28 to 36%, and 23 to 50%, respectively. The corresponding gross profit ranges were 135-185, 25-35, and 75-120 ETB head⁻¹, respectively. Absence of coping strategies against the frequent drought, underdeveloped market infrastructures, and involvement of many informal actors were the major marketing constraints. Hence, appropriate research and development interventions must be undertaken to have continuous and quality product in the required amount for the growing domestic and international livestock markets.

Key words: Goat, marketing, Wag-Hämera.

Introduction

In Wag-Hämera, given their relative low input requirement, goat production has been felt as more rewarding enterprise under the prevailing ecological niches (Adefris *et al.*, 2000; Ephrem *et al.*, 2006). As a result, currently more than 60% of farm households in the area have been engaged in goat raising parallel to other farm activities (CSA, 2008).

Even though there have been considerable number of goat population in the nationality administration, its economic contribution to smallholder producers is very low. This is

attributed to, among many other things, the poor marketing system prevailing in the area. In a condition where there are very few and poor marketing services, research in agricultural marketing is of paramount importance. It can contribute in the establishment of facts and description of the existing marketing systems that may be necessary for developing appropriate marketing policies and strategies (Adefris *et al.*, 2000).

An efficient marketing system stimulates increased farm production and leads to proportionate increases in the level of real income of the farmers. Hence, to promote efficient goat marketing system in the area, the existing marketing characteristics should be well understood, potentials and constraints should be identified. Therefore, this survey was conducted to characterize live goat marketing system of the area, identify major marketing constraints, and explore opportunities for goat marketing.

Methodology

The study area

The study was conducted in Wag-Hämera nationality administration of ANRS, where more than 93% of the population lives in rural areas (PCC, 2008). The farming system of the area can be characterized by crop-livestock mixed farming, and agro pastoral in some parts of Tekez, Tirari, and Tella river basins. Currently, the total goat population found in the area was estimated at 560 528 (CSA, 2008). Abergelle and Central highland goats are the dominant breeds reared in the area (Belay, 2006; Mohamed *et al.*, 2007). The goat production system of the area can best be described as free grazing and browsing under traditional management practice (Adefris *et al.*, 2000; Ephrem *et al.*, 2006).

Data collection and analysis

In this survey, commodity approach was adopted to assess live goat marketing system. This approach helps to examine the entire marketing chain of a single product in an integrated manner (Drummond and Goodwin, 2001). A rapid market appraisal technique was employed for gathering the required data and information. Accordingly, primary information on the overall marketing characteristics, consumer preferences, marketing

constraints, and opportunities were collected from primary and supportive marketing actors in the primary (Dehana, Kedamit, and Nyere Aqu) and secondary (Sekota) markets, and in the terminal market (Mekelle). In addition, secondary data were also taken from the institutions contacted and CSA reports.

The gross and net off-take rate estimation methods used by Asfaw Negassa and Mohammad Jabbar (2007) were employed.

$$\text{Gross commercial offtake rate} = \left(\frac{\text{Sales}}{0.5(\text{Opening Stock} + \text{Ending Stock})} \right) * 100$$

$$\text{Market off - take rate} = \left(\frac{\text{Sales} - \text{Purchases}}{0.5(\text{Opening Stock} + \text{Ending Stock})} \right) * 100$$

Results and discussion

Off-take rates

The gross and net commercial off-take rates of the area were computed based on data obtained from the 2008/09 agricultural sample survey of CSA (2008). Accordingly, the gross and net off-take rates were 23.7% and 12.9%, respectively (Table 1). These figures were lower than the national and regional figures, which were 26.5% and 32.3% for gross off-take rates and 15.9% and 15.7% for net off-take rates, respectively.

Table 1. Gross and net off-take rates of goat in Wag-Hämera nationality administration, 2008.

Geographic area	Opening Stock	Ending Stock	Average Stock	Sales	Purchase	Gross	Net
						Commercial off-take rate	Commercial off-take rate
Ethiopia	10,765,609	21,884,222	16324916	4,328,136	1,729,980	26.51246	15.91528
ANRS	2,452,193	6,022,105	4237149	1,371,051	705,244	32.35787	15.71356
Wag-Hämera	300,325	560,528	430426.5	102,172	46,558	23.73739	12.92067

Goat marketing structure

The structure of goat marketing in the area can be characterized by dominance of primary markets (Sekota was the sole secondary market), which were not distributed fairly in all weredas of the nationality administration, and nearly 47% were inaccessible for vehicles (Table 2).

Table 2. Market centers in Wag-Hämera nationality administration, 2008.

		<i>Woredas</i>					
		<i>Abergelle</i>	<i>Sehala</i>	<i>Ziqualla</i>	<i>Dehana</i>	<i>Gazgibla</i>	<i>Sekota</i>
		Nyere Aqu ^{AWR*}	-	Tsitsika ^{AWR}	Amdework ^{AWR}	Taba ^{AWR}	<i>Sekota</i> ^{AWR}
		Dihirgiba ^{NA}	-	Kedamit ^{DWR}	Chilla ^{AWR}	<i>Asketema</i> ^{AWR}	Hamusit ^{AWR}
				Mishira ^{NA}	Koziba ^{AWR}	Iksa ^{NA}	Dable ^{AWR}
				Kamariam ^{NA}	Azilla ^{NA}	Nobogela ^{NA}	Tsemara ^{AWR}
				Telaje	Silda Hamusit	Sella ^{NA}	Siriel ^{AWR}
Market				Hamusit ^{DWR}	NA		
Site					Arbit ^{NA}	Hamusit ^{NA}	Jerba ^{DWR}
							Itsa ^{NA}
							Bad
							Georgis ^{NA}
							Tsata ^{DWR}
							Mukun ^{NA}

^{AWR} = all weather road, ^{DWR} = dry weather road, ^{NA} = not accessible for vehicles.

Source: From administrative map of Wag-Hämera developed by COOPI, 2007.

All, except Sekota market, were open markets. There were about six outlets, which link these primary and secondary markets to other neighboring zones in the Amhara and Tigray regions. However, the Mekelle root was the dominant one and the shares of others were minimal and seasonal (Figure 1).

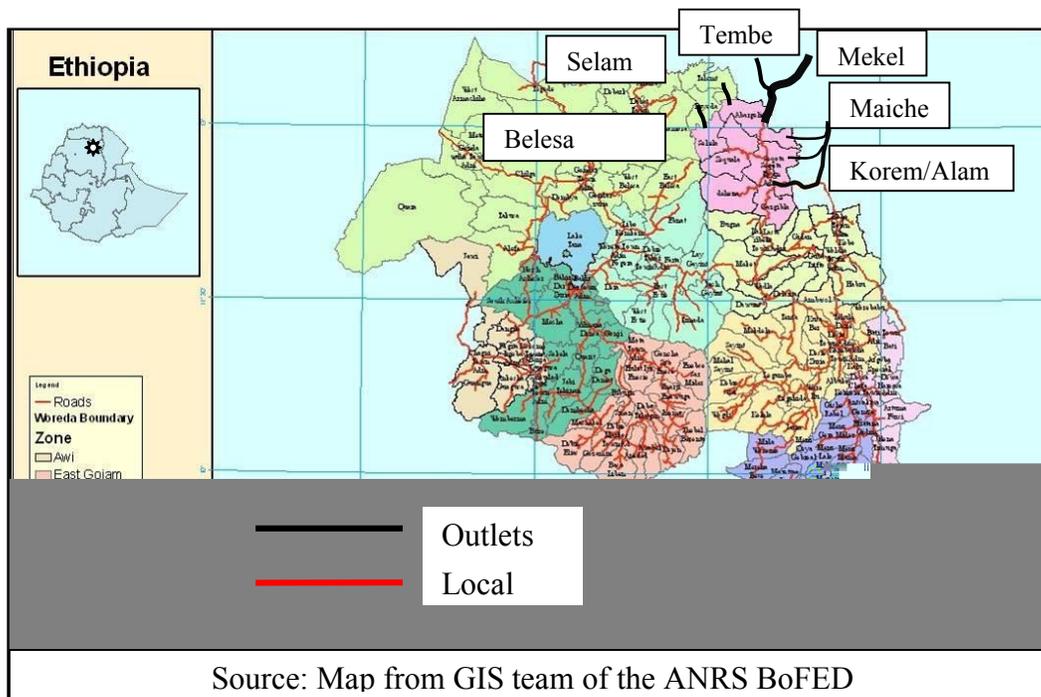


Figure 1. Goat marketing roots in Wag-Hämera nationality administration.

The chain/level of goat marketing in the area was very short/direct (Figure 2). The main marketing actors were local collectors, wholesalers, and retailers. Most local collectors were farmers, who perform as part time. They have place and time value addition functions. In the other ways, wholesalers, mostly come from Tigray, purchase either directly from producers in retail bases or from local collectors as a block (in Amharic ‘*Jamla*’). However, most wholesalers visit only those market centers, which have road and transport access, and found along main roads. These have place and time value additions too. Within the nationality administration level, retailers have dual function, collection and retailing. However, in *Mekelle* there were retailers who primarily engaged on retailing activities. Some of them had their own or rented in holding centers and use supplemental feeding.

Goat marketing conduct

Regarding the market *conduct* of the area, major actors of goat marketing need to have either registration or licenses. Traders coming from outside the nationality administration,

whether they have licenses from their origin or not, must have short-term registrations by micro and small-scale trade and industry promotion office in the respective woredas. They will only be charged ETB 10 as registration fee. Actors within the geographic territory must also be registered if their capital is less than ETB 3000, or need to have licenses if their capital is greater than ETB 3000. However, the number of legally registered traders in both cases was few when compared with illegal actors. There were about 21 formally registered and licensed traders for livestock retail in Sekota town, as of June 2009. Out of whom 10 were from Tigray region and registered, 8 were from Sekota town and registered, and the remaining 3 were also from *Sekota* town and only licensed. However, the number of illegal traders was believed to exceed than legal traders.

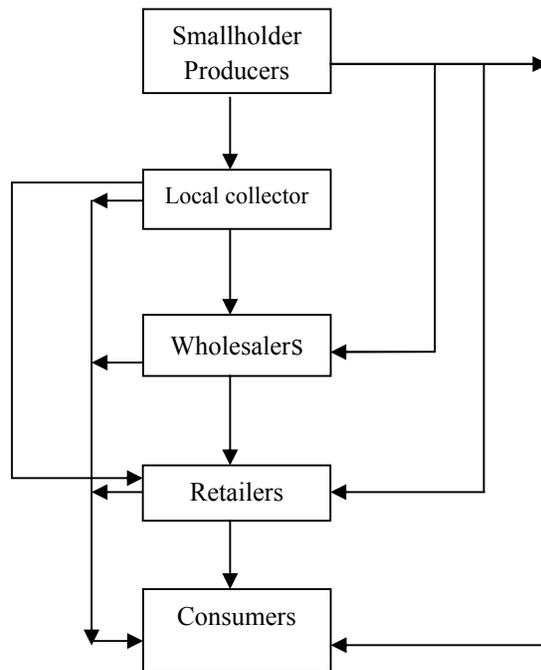


Figure 2. Goat marketing channels in Wag-Hämera

The other feature of goat marketing actors was their multiple functions. There was no clear distinction of work among actors, collectors from wholesalers, wholesalers from retailers, and local collectors from retailers. In addition, they involve in other livestock marketing too. In relation to supportive marketing facilities, traders use traditional market information

system, operate in the absence of grading and standardizing systems, and both trekking and trucking transportation mechanisms were used.

Goat marketing performance

Concerning the performance of live goat marketing of the area consumer preferences, price analysis, and gross margins were considered. Accordingly, given their better fat content,

Mekelle (ETB 2.5 Kg⁻¹), and rent for holding centers at Mekelle (ETB 0.25 per day). Overall, the total marketing costs from Sekota to Mekelle were estimated to be ETB ≤15 per head. Considering this, the gross profit per head for castrated, uncastrated, and adult female goats ranges from ETB 135-185, 25-35, and 75-120, respectively (Table 3).

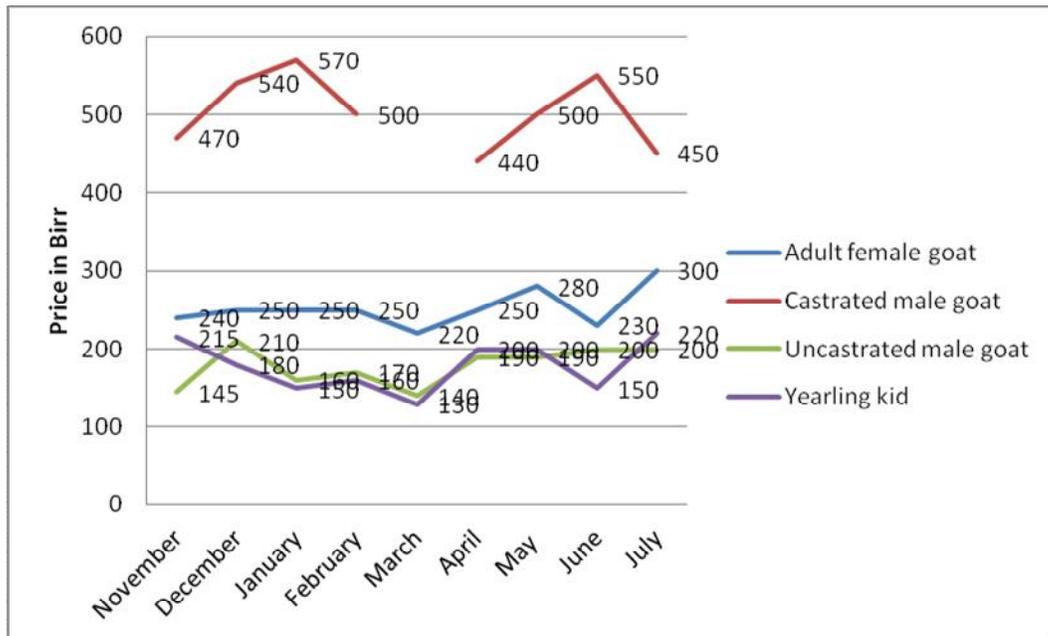


Figure 3. Nominal goat price trends in Sekota market 2008/09 (Source: data from Marketing process of Sekota WARDO).

Table 3. Farmers' share of retail price and gross profit (September-May 2009).

Characteristics	Farmers' selling											
	price at Sekota in ETB			Retail price at Mekelle in ETB			Gross/Marketing Margin/%			Gross profit/ETB		
	Exp	Cheap	Normal	Exp	Cheap	Normal	Exp	Cheap	Normal	Exp	Cheap	Normal
Castrated	650	400	450	800	600	650	0.23	0.50	0.44	135	185	185
Uncastrated	180	125	140	230	170	180	0.28	0.36	0.28	35	30	25
Adult female	300	200	230	370	300	320	0.23	0.50	0.39	120	85	75

Marketing constraints

- Supply of poor body condition goats to markets – given the prevailing recurrent drought in the area, shortage of feed and water have been occurring in many years. In addition, disease outbreaks in these seasons contribute to poor body condition for the remaining animals from death. For these problems, when we compare the goat population of the area, either farmers or supportive organizations have no strategically devised development and/or other drought coping mechanisms, which can reduce drought hazards. As a result, goats supplied to markets were poor in their body condition. According to wholesalers' explanation, this problem was particularly important in dry seasons.
- Absence of market centres and road access in some goat potential area - as stated before market centres in all woredas of the nationality administration were not distributed evenly. The existing market centres were concentrated along the main roads of Sekota, Gazgibla, and Dehana woredas. Apart these about 47% of the market centres in the nationality administration were not accessible for vehicles and most potential kebeles in these and other woredas do not have nearby market centres at all.
- Seasonality in supply – the prevailing goat supply was seasonal and this may be considered as a constraint to exporters, which can be the potential buyer to the area. These exporters require sustainable supply of exportable commodities to the international markets.
- Involvement of informal actors – though not actual estimates have been made, the number of informal actors were believed to exceed than formal marketing actors. This is because most traders in local markets were farmers who involves in par time terms and act seasonally. As a result, they do not believe that the income earned from this activity will cover their livelihoods and they do not tend to be legally registered.
- Absence of well-developed market information system - In some woreda town market centres, market information has been collected by different organization though not in a continuous way. The efforts to disseminate this information were not as to data collections. The information in general either not communicated to end users or the communication Medias were backwards. Even they were not interlinked with regional,

national, and international information. As a result, sellers and buyers use their traditional information communication means.

- Small-scale production – producers are smallholders. No organized producers groups or cooperatives exist to promote large-scale production to enjoy economies of scale.

Market opportunities

From infrastructure point of view, the geographical location of the nationality administration by itself has location advantage for the newly established slaughtering houses at Mekelle, and Kombolcha. Even it can potentially benefit from Bahir Dar and Gondar Slaughtering houses too. Further, there are Mekelle and Lalibela airports within 175 and 130 km radius, respectively for exports. In addition, from demand side, there has been increasing consumption of goat meat and as a result a growing demand for goat meat from Ethiopia (Desta *et al.*, date not specified). The other basic opportunity is the possibility of developing goat production at large scale/commercial goat production. For this, the large goat population, vast grazing land for rangeland development, and many perennial rivers would help a lot. The other opportunity is the sector has been identified as development priority area for intervention.

Conclusion and Recommendations

Supply of quality goat in sufficient quantity has not yet attained when considered with its potential. Even the gross and net off take rates were lower than national and regional figures. The marketing system for live goat is very traditional and not interlinked with alternative potential domestic and international markets. Given limited access of producers to markets, they are getting lowest share of retail prices. In the other ways, intermediate marketing actors are enjoying rewarding gross profits. To have efficient and effective marketing system in the area the following points need to be considered.

- Undertake a regular review of terminal markets in domestic and international markets to benchmark market prices in local markets (primary and secondary markets).

- Develop Market Information System and networking - The respective marketing promotion offices should establish strong marketing information system and work with other similar organizations like Abergelle International Livestock Development and regional and national media.
- Improve the capacity of producers—organizing producers in to goat marketing cooperatives will help producer to strengthen their negotiation power, have better information access, and get access to credit facilities.
- The extension system must be strategically geared towards bringing market oriented production system. For that supportive organizations should revise their structure and human resource.

References

- Adefris TekleWold, Agajie Tesfaye, Aster Yohannes, Birhane Kidane, Dereje Gorfu, Elias Zerfu, Mengistu Alemayehu, and Worku Atlabachew. 2000. Participatory farming systems characterization and intervention options for Sekota woreda, Wag himra zone (amhara region). Holetta Agricultural Research Centre, EARO.
- Asfaw Negassa and Mohammad Jabbar. 2007. Livestock ownership, commercial determinants in Ethiopia. ILRI. Nairobi, Kenya.
- Belay Deribe. 2008. Growth, Reproductive Performance and Carcass Characteristics of Abergelle and Central Highland Goat Types under Traditional and Slightly Improved Management in Sekota Woreda. MSc. Thesis, Haramaya University.73p.
- CSA (Central Statistical Agency). 2008. Agricultural Sample Survey 2008/2009 [2001 E.C]. Volume II. Report on Livestock and Livestock Characteristics (Private Holdings). Statistical Bulletin No. 446. FDRE: Addis Ababa, Ethiopia.
- Drummond, H. E. and Goodwin, J.W. 2001. Agricultural Economics. Prentice Hall, Inc., New Jersey.
- Ephrem Fufa, Belay Deribe, Haile Adamu, and Temesgen Alene. 2006. Characterization and Analysis of the Farming Systems of Dahina Woreda, Wag-Himra zone.

- Ephrem Fufa, Belay Deribe, Haile Adamu, and Temesgen Alene. 2005. Characterization and analysis of the farming system of Ziqualla Woreda, Wag Himra zone.
- FAO (Food and Agricultural Organization of the United Nation). 2004. Livestock Sector Brief: Ethiopia.
- Mohamed Jabbar, Asfaw Negassa and Taye Gidyalew. 2007. Geographic distribution of cattle and shoat populations and their market supply sheds in Ethiopia. Discussion paper No. 2. Improving Market Opportunities. ILRI (International Livestock Research Institute), Nairobi, Kenya. 54pp
- PCC (Population Census Commission). 2008. Summary and Statistical Report of the 2007 Population and Housing Census. Population Size by Age and Sex. December 2008. FDRE: Addis Ababa, Ethiopia.