



### Marketing channels for goat meat in Turkey

Ogun S., Koluman N., Daskiran I.

ir

Napoléone M. (ed.), Ben Salem H. (ed.), Boutonnet J.P. (ed.), López-Francos A. (ed.), Gabiña D. (ed.).

The value chains of Mediterranean sheep and goat products. Organisation of the industry, marketing strategies, feeding and production systems

Zaragoza : CIHEAM

Options Méditerranéennes : Série A. Séminaires Méditerranéens; n. 115

2016

pages 475-479

Article available on line / Article disponible en ligne à l'adresse :

http://om.ciheam.org/article.php?IDPDF=00007318

To cite this article / Pour citer cet article

Ogun S., Koluman N., Daskiran I. **Marketing channels for goat meat in Turkey.** In: Napoléone M. (ed.), Ben Salem H. (ed.), Boutonnet J.P. (ed.), López-Francos A. (ed.), Gabiña D. (ed.). *The value chains of Mediterranean sheep and goat products. Organisation of the industry, marketing strategies, feeding and production systems.* Zaragoza: CIHEAM, 2016. p. 475-479 (Options Méditerranéennes: Série A. Séminaires Méditerranéens; n. 115)



http://www.ciheam.org/ http://om.ciheam.org/



# Marketing channels for goat meat in Turkey

S. Ogun<sup>1</sup>, N. Koluman<sup>2</sup> and I. Daskiran<sup>3</sup>

 <sup>1</sup>Middle-East Sustainable Livestock Production, Biotechnology & Agro-Ecology Research and Development Centre Zirve University, Gaziantep (Turkey)
 <sup>2</sup>Cukurova University, Agricultural Fac., Department of Animal Science 01330, Adana (Turkey)
 <sup>3</sup>Ministry of Food, Agriculture and Livestock, Ankara (Turkey)

Abstract. Goat meat is a major red meat protein supplier to populations in many parts of the globe and is becoming a significant contributor to the income of livestock producers in those regions. Over 90% of the world's goat populations are in developing countries. In Turkey, goats have traditionally been reared for subsistence farming purposes in micro and small mixed farming systems. Following a significant decline in numbers over a three-decade period, goats are now being bred in increasing numbers in many regions of Turkey. Whilst sustainable agriculture principles are being promoted in such agricultural development, with consideration to both producer and consumer needs; efforts to organize enterprising marketing channels for goat meat production in Turkey have had limited success. This paper reviews the past and present situation of goat meat production in Turkey, taking into account geographic and landscape limitations, discussing non-suitability of goat breeds being used as a by-product of the dairy goat industry for meat production and also highlighting effective supply-chain collaboration to enable stakeholders to deal with complexity and potential market threats.

**Keywords.** Meat – Goat – Marketing – Supply chain – Turkey.

#### Chaines de commercialisation de la viande caprine en Turquie

Résumé. La viande caprine, en tant que viande rouge, est un important fournisseur de protéines animales aux populations vivant dans de nombreuses parties du monde, et sa part au revenu des éleveurs de ces régions devient significative. Plus de 90% des populations caprines mondiales se trouvent dans les pays en développement. En Turquie, les caprins ont été élevés traditionnellement pour la subsistance dans des systèmes mixtes en petites et micro-exploitations. Après une baisse sensible des effectifs sur trois décennies, les caprins sont maintenant élevés en nombres de plus en plus grands dans de nombreuses régions de la Turquie. Tandis que les principes de l'agriculture durable sont encouragés dans ce type de développement agricole, tenant compte des besoins à la fois des producteurs et des consommateurs, les efforts pour organiser les circuits de marketing des entreprises pour la production de viande caprine en Turquie n'ont eu qu'un succès limité. Cet article présente la situation passée et présente de la production de viande caprine en Turquie, avec ses limitations géographiques et paysagères, en examinant le manque de spécialisation des races caprines qui sont utilisées en aptitude mixte pour l'industrie laitière et pour la production de viande, et met en relief la collaboration effective de la chaîne d'approvisionnement pour permettre aux parties prenantes d'affronter la complexité et les éventuelles menaces de marché.

Mots-clés. Viande - Caprin - Marketing - Chaîne d'approvisionnement - Turquie.

#### I – Introduction

Goat production is productive due mainly to their ease of management, small initial investment requirement and their short generation interval. At around 10 million head (TUIK 2014) Turkey has the highest goat population in Europe and 8<sup>th</sup> highest in the world, following a steady reduction from around 25 million since the 1960's. Goat production in Turkey has traditionally been carried out in marginal rural areas with small breeders raising goats as a source of meat and immediate cash income from fernier style of cheese and yogurt production. Whilst introduced restrictions in the use of pasturelands has been the main reason for the falling numbers, poor herd management, declining

integrity in the genetic pool have also contributed to the shrinking of the sector, resulting in Turkey loosing its advantage as a major goat breeding country in the Middle East and Europe. In recent times Turkey has seen investment resurgence in intensive goat dairy's and cheese factories which have been supported by government incentives. This as also impacted, more as a by-product, the goat meat industry, however marketing of goat meat in Turkey still remains erratic, unorganized and poorly supported. In addition to these barriers, there is also a strong consumer resistance to goat meat consumption due mainly to poor marketing and misinformation regarding its nutrition and health attributes. Consumption of goat and kid meat is confining to only certain regions of Turkey despite strong scientific evidence supporting its nutritive value. The aim of this study was to review a number of bibliographical studies which support the improved marketing of goat meat in other regions of the world where the consumption levels have increased and the value chain improved for the product.

### II – Main goat breeds used for meat in Turkey

Besides the excess males as a by-product of the goat dairy industry, there are, three main goat breeds or types used for meat in Turkey: Crossbreds resulting from the imported dairy breeds and the 2 endemic breeds, the local Hair and the Honamlı goats. However there is great diversity within these types in relation to their production and carcass traits. Most of the stakeholders in the value chain see this as the main impediment to moving forward in marketing the product. There has been very little research carried out to characterize these types of goat for meat production and carcass merit. The native Hair and Honamlı goats, making up the majority of the national herd are managed within extensive production system in the mountainous regions of Southern Turkey, primarily in brush, forbs and grasses being the primary sources of nutrition. Supplementary feeding is not an option in Turkey due to disproportionately high feed prices. They are able to utilise poorquality feed and gain almost 117-120 g live weight per day in these extensive grazing systems (Celik et al., 1999; Darcan and Guney, 2002; Darcan and Cankaya, 2008; Ocak et al., 2009). Intensive goat enterprises are usually smaller in capacity (20-100 head) and are mainly dairies. Due to a well-developed dairy marketing chain, particularly in the western part of Turkey, these farms have difficulty breaking into that market with goat or kid meat. Turkey has reached an important crossroads in the last decade with regards to its goat milk production; the purpose of rearing goats in the region. The goat population in 2012 with a 16% increase over the decade had reached 7.3 million, resulting in a 15% increase for milk production to 370,000 tons and goat meat production with a 19% increase to 49,300 tons (see Table 1 below). As mentioned earlier Turkey is turning to more intensive production using an increasing number of imported breeds in its goat farms. Presently, approximately 1 million goats are now producing potential breeding stock on these farms which have desired qualities such as higher litter size and better productivity. Yet buck kid numbers at around 750,000 every year due mainly to poor marketing and information relay are still not having any significant impact on the national herd improvement programs.

Table 1. Livestock and Meat Market Report of Turkey

	Cattle	Buffalo	Sheep	Goat
Number of animals	12,386,337	97,632	25,031,565	7,277,953
Number of slaughtered	2,571,765	7,255	5,479,546	1,254,092
Meat production (Tn)	644,906	1,615	107,076	23,318
Slaughter ratio	21%	7%	22%	17%
Meat production per animal (kg)	251	223	20	19

Source: TUIK 2014.

### III – Consumption patterns of goat meat in Turkey

There is a reasonably high consumption of goat meat amongst the low income rural sector in Turkey. Cultural factors dating back to transhumance farming periods (300-1600AD) in regional Turkish history has been the main influence for this trend. As a versatile mobile production system. it is the cheapest form of red meat to produce on pasture if you also have to rely on the milk production. Although more economical to produce, in the Turkish market place goat meat is not significantly cheaper than beef or lamb due to the underdeveloped market chain (see Table 2). However in Europe and greater USA goat and kid meat can fetch high prices in the market place due to the perceived health benefits of goat meat. Kids in general with a carcass weight of between 10-12 kg have a fairly low fat content. In Europe and the USA, cryopack / vacuum packaging have opened internet marketing options, significantly increasing sales. France and Spain have lead the consumption rates, with "Cabritos" 1 month old suckling kids, where it commands 2-3 times the price of beef or lamb (Boyazoglu and Morand-Fehr, 2001). In Turkey goat meat is consumed generally as kid meat or yearling castrated billy goats. Kids are usually marketed at four to five months of age or before weaning as light carcass average 12-15 kg. The yearling castrated ones are preferred especially in mountainous district of the country. The model of traditional goat meat marketing in Turkey is similar to that of Knipscheer et al. (1987) model as given in Fig. 1, below.

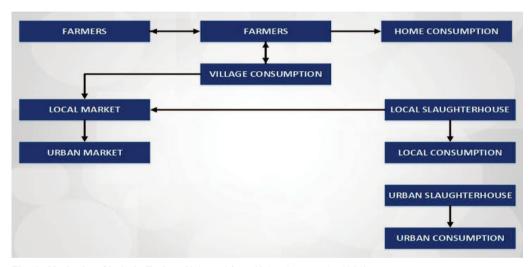


Fig. 1. Marketing Chain in Turkey (Adapted from Knipscheer et al., 1987).

## IV - Marketing issues of goat meat

In contrast to other high goat meat consuming nations the price paid for goat meat in Turkey is considerably lower (see Table 2) than the price paid for beef or lamb. This anomaly seems purely to be a mixture of marketing deficiency and poor genetics. Meat production as a by-product of dairy genetics has proven to be an unproductive process. The type of red meat consumption in Turkey varies at least 10% from year to year impacted by the rate of imported slaughter cattle and sheep mainly around the Haj period where high quantities of animals are slaughtered for religious and cultural purposes. This in turn not only effects the rates of beef, lamb, mutton and goat meat consumption but the price paid at the butchers. At present Turkey consumes approximately 71% beef, 22% mutton or lamb, 6% goat and 1% other red meat (see Table 1). As indicated by Knipscheer

et al., (1987), the main market outlets for farmers are the village collectors and the local markets. In isolated areas, farmers generally have access to at least one village collector. Farmers rely on village markets to sell animals, hence the main determinants of marketing efficiency are the road condition, availability of transport and distance from local markets. The location of the local market depends largely on the geographic distribution of animals in a given region. Large ruminants and small ruminants follow almost the same marketing channels. However, small ruminants are easier to transport and have a relatively higher turnover compared to large ruminants (Anonymous, 2015 a). In most parts of the world, goat farmers sell animals to village collectors or traders. Only a small proportion of animals are sold directly to final consumers and about 10 per cent of the animals sold in local markets are bought by local farmers as replacement stock (Soedjana et al., 1984). The village collector is an important link in the small ruminant marketing system. For some local traders, this is a part-time activity. In Turkey, a relatively stable relationship seems to exist between trader and farmer, which is characterized as the traditional market system with a cash/credit payment arrangement (Anonymous, 2015 a).

There seems to be a growing trend in the western world towards red meat being a healtier option than chicken meat due to use of growth enhancers in broilers. As such, there appears to be an opportunity for the goat farmers to appeal to the health-conscious consumer who may be looking for the low-fat, low-cholesterol sources of red meat. Goat kid meat may well be the answer to this market demand. Another concern in Europe which is also slowly becoming more important in Turkey, is about the environmental issues related to red meat production. It is becoming quite evident with recent scientific publications that small ruminant production is proving to be much less impactful to the ecological balance and in particular to climate change than large ruminant production. This could well be another serious marketing angle to the conscious consumer.

Table 2. Animal Product Prices in Turkey, 2010-2011

	Price (USD/kg)			
-	2010	2011	Changes (%)	
Meat				
Sheep meat	12.62	12.19	-3.4	
Goat meat	12.21	11.30	-7.5	
Cattle meat	12.27	11.10	-9.5	
Buffalo meat	11.10	10.06	-9.4	
Milk				
Sheep milk	0.86	0.84	-2.3	
Goat milk	0.91	0.87	-4.4	
Cow milk	0.61	0.48	-21.3	
Buffalo milk	1.19	1.06	-10.9	
Hide				
Sheep hide	3.30	3.80	15.2	
Goat hide	3.17	3.14	-0.9	
Cattle hide	22.19	19.70	-11.2	
Buffalo hide	14.27	18.28	28.1	
Other products				
Wool	1.63	1.53	-6.1	
Hair	1.25	1.19	-4.8	
Mohair	4.19	4.43	5.7	

### V - Discussion and conclusion

- Turkey is suffering a serious genetic deficiency in relation to meat goat breeding. Required
  improvement for meat production need to entail adaptability to environmental and production conditions, reproductive rate, growth rate and carcass value. Less so to carcass value
  as appreciation for meat quality is still lacking in the market place that is struggling to meet
  its basic need for read meat demand let alone its quality. However the nation needs to define
  carcass appreciation standards.
- There is also a lack of standardized processing system and a product distribution chain for goat
  meat in Turkey, which often results in an erratic supply. From a buyer's point of view, the value
  of a well-developed supply chain is consistent, but this unfortunately does not exist in Turkey.
- Turkish goat producers need to differentiate their product from others by improving communication regarding goat meat qualities, improve its image and differentiate it from other red meat products. Marketing will also need to incorporate value-adding to their produce to create new marketing opportunities.
- Producers need to improve negotiation capacity retailer, i.e. develop their production system
  to channel product in to a supply chain without relying on the middleman which generally
  takes the lion's share of the profit.
- It is evident in most of the reviewed literature that the Turkish consumer has prejudicial preferences related to health aspects of goat meat which need to be overcome with effective marketing and industry and government backed educational initiatives.
- It is also critical that the producer solves the issue of access to market. To overcome the
  restriction to market by geographic location, processing factories may need to go the animal
  rather than the other way around.

#### References

Anonymous, 2015a. Meat Goat Production. College of Agricultural Sciences, Agricultural Research and Cooperative Extension.

**Boyazoglu J. and Morand-Fehr P., 2001.** Mediterranean Dairy Sheep and Goat Products and Their Quality. A Critical Review. In: *Small Ruminant Research*, 40, p. 1-11.

Celik K., Darcan N., Guney O. and Firat M.Z., 1999. Effect of Diet with Different Lasalocid Sodium Levels on the Fattening Performance and Carcass Characteristics of Crossbred Male Kids. In: J. Applied Animal Research, 16, p. 195-200.

**Darcan N. and Güney O., 2002.** Effect of Spraying on Growth and Feed Efficiency of Kids under Subtropical Climate. In: *Small Ruminant Research*, 43, p. 189-190.

**Darcan N. and Cankaya S., 2008.** The Effects of ventilation and Showering on Fattening Performances and Carcass Traits Of Crossbred Kids. In: *Small Ruminant Research*, 75, p. 192-198.

Erdem O., 2015. Turkey Livestock & Red Meat Market Report, Omer Erdem. http://www.slideshare.net/omererdem/turkish-livestock-and-red-meat-market

Knipscheer H.C., Sabrani M., Soedjana T.D. and De Boer A.J., 1987. The small ruminant market system in Indonesia. A review. In: Agricultural Systems, vol. 25, p. 87-103.

Koluman N., 2014. Goat Meat in World and in Turkey. 4 Mevsim Tarim Dergisi, 3 (11), p. 44-46.

Ocak S., Darcan N., Çankaya S. and Inal T.C., 2009. Physiological and Biochemical Responses in German Fawn Kids Subjected to Cooling Treatment Under Mediterranean Climate Conditions. *Turkish Journal of Veterinary & Animal Sciences* 33(6), p. 455-461.

**Shelton M., 1990.** Selection for meat production in goats. *Proceedings Meat Goat Production Seminar*, December, Texas A&M University, San Angelo.

Soedjana T.D., Knipscheer H.C. and Sugiyanto A., 1984. The marketing of small ruminants in East Java. In: Sheep and goats in Indonesia, p. 179-183.

TUIK, 2012. Annual Statistics. www.tuik.gov.tr