

## Pastoral Societies of Mardin Province in Southeast Anatolia –Some Anthrozoological Aspects

Abu Bakar Siddiq<sup>i</sup>

**Abstract:** Human first started domesticating animals at least 11,000 years ago in the Levant and Central Anatolia. Gradually the idea of animal controlling process, along with agricultural practice, spread throughout Africa, Asia and continental Europe and eventually transformed the face of the world. Archaeozoological evidences suggest that the process of animal domestication was actually occurred in a new way of human-animal interactions which was totally unknown to previous hunter-gatherers. Mardin region is located in the central point of northern Fertile Crescent. Archaeological settlements near and around this region provide the evidence of human-animal relationships in Early Neolithic societies which essentially promoted the early domestication process. However, the dimensions of present human-animal interactions are far different than the early stage, and therefore, Mardin region is a crucial place to study different facts and status in pastoral societies, particularly focusing on anthrozoological perspectives. Unfortunately, very few attempts have yet been taken regarding this issue in Southeast Anatolia. This field research is therefore aimed to observe the status of pastoralism and human-animal relationships in pastoral societies of Mardin province.

**Keywords:** Anthrozoology, Pastoralism, Anthropology, Mardin, Southeast Anatolia



### Mardin Bölgesindeki Pastoral Toplumlarda Bazı Antrozoolojik Yönler

**Öz:** İnsanlar en az 11.000 yıl önce Levant ve Orta Anadolu'da hayvanları evcilleştirmeye başlamıştır. Tarımsal uygulama ile birlikte hayvanları yönetme fikri, bu bölgelerden aşama aşama Afrika, Asya ve Avrupa'ya yayılmış ve sonunda dünyanın yüzünü de değiştirmiştir. Arkeozoolojik kanıtlar, hayvanların evcilleştirilmesi sürecini daha önceki avcı-toplayıcılar tarafından tamamen bilinmeyen yeni bir insan-hayvan etkileşimi biçiminde

<sup>i</sup> Lecturer, Mardin Artuklu University, Department of Anthropology, Turkey. abubakarsiddiq@artuklu.edu.tr

olduğunu ortaya koymaktadır. Mardin bölgesi Kuzey Bereketli Hilal'in merkez noktasında yer almaktadır. Bu bölgenin yakınında ve çevresinde bulunan arkeolojik yerleşmeler, esasen hayvanların ilk evcilleştirilmesi sürecini teşvik eden Erken Neolitik toplumlarda insan-hayvan ilişkilerinin kanıtlarını sağlamaktadır. Ancak, günümüzdeki insan-hayvan etkileşimlerinin boyutları, erken dönemlerden çok daha farklıdır ve bu nedenle, Mardin bölgesi pastoral toplumlarda, özellikle antrozoolojik bakış açısına odaklanan farklı olguları ve durumları incelemek konusunda çok önemli bir yerdir. Ne yazık ki, Güneydoğu Anadolu'da bu konuyla ilgili günümüze kadar çok az çalışma yapılmaktadır. Bu nedenle bu saha çalışmasıyla, Mardin ilinin pastoralcılığı ve pastoral toplumlarda insan-hayvan ilişkilerinin durumunu göstermek amaçlanmaktadır.

**Anahtar Kelimeler:** Antrozooloji, Pastoralcılık, Antropoloji, Mardin, Güneydoğu Anadolu

## Introduction

After the beginning of animal domestication in Early Neolithic period, pastoralism i.e. the controlling process of animals, has been acting a basic means of subsistence of human societies around the world. Major portion of national economy of many countries of Africa, Asia and Americas is being supported by pastoral practice. Pastoralism can actually be categorized basing on animal species, animal management process, environment and ecology as well as in many other ways. Although there are different ways of pastoral practice are seen around the world, four major types of pastoralism described by Roger Blench (2001). These are Nomadic pastoralism, Transhumance pastoralism, Agropastoralism and, Enclosed system or ranching pastoralism. In nomadic pastoralism, people grow no crops and they simply depend on the sale or exchange of animals and their products to obtain foodstuffs and other necessary things. These pastoral people are generally nomads and they follow pasture resources from one place to another throughout the year. In most case, these people prefer established migration routes and often develop long-standing exchange arrangements with farmers for exchanging crops or other trade goods. On the other hand, Transhumance pastoralists are primarily herders, although they often produce some crops for their survival while living in semi-permanent settlement. In this practice, men usually take away the majority of the animals in search of grazing (Blench, 2001) and women take care of the households, milking female animals and weak or work animals that are left behind in the residence. Agropastoralism is settled pastoral practice which includes both the agriculture and the raising of livestock in support of living. People cultivate land for basic staple of their families and to feed their herd animals. Agropastoralists usually make greater investment in permanent settlement and other local infrastructure. Their herds are generally smaller than nomadic or transhumance pastoralist, although animals are still their valued property. They prefer closer areas for grazing (Bonfiglioli, 1993) and often sell

their animals if herds become large. Lastly, the enclosed systems or ranching pastoralism is an extensive livestock production system where the land is owned by individual person or a group of people and animals are raised in the enclosed property usually with enough natural resources and grazing field. This type of pastoralism became common in Americas and Australia after European colonization.

In some regions, pastoral systems are based around one or two species, whereas with several species in some other regions. For example, sheep are predominated in Southwest Asia, although horses, donkeys, goats, cattle and dogs are kept for portage, riding, ploughing or herd management (Bacon, 1954; Barfield, 1981). On the other hand, herders seem to manage 2-4 species of roughly equal importance simultaneously in Mongolia, Africa and South American countries (Göbel, 1997).

In some countries, particularly India (Casimir, 1996; Crawford, 1984; Prasad, 1994) and Bangladesh (author's personal observation), ducks and geese are herded by specialised pastoralists who move them from place to place to exploit changing food resources. Historically in Europe and the Middle East, pig-based pastoralism clearly existed (Blench, 2001), but there seem to be no modern cases of it in Europe. However, pig-based pastoralism is still being practiced in different areas of India, Papua New Guinea and Australia.

No matter which kind of pastoralism are practiced or which animal species are people dealing with, a mutual understanding is precondition for all kinds of pastoralism. Humans ensure the food supply, shelter and protection for other animals and in return, they provide nourishment, wealth and sustainability for humanity. Since the beginning of animal domestication, this mutual understanding between human and non-human animals developed with dimensions of inter-relationship. Anthrozoology, being an emerging discipline, is raising several questions regarding these positive relationships between human and other animal species.

Mardin region is located in the central point of northern Fertile Crescent and considered one of the centres where the first domestication occurred. Therefore, Mardin region is a crucial place to study the human-animal relationships as well as the facts and status in their interactions. Unfortunately, no significant research attempt has yet been taken in southeast Anatolia, especially in Mardin area, regarding this issue. This field research is therefore a proposal of the beginning of anthrozoological research on pastoral societies of Mardin region, more specifically of Southeast Anatolia.

This field study has been attempted to gather information about different types of pastoral practices as well as the interactions and emotional bonds between people and their heard animals. Evidences from different archaeological settlements are also incorporated aiming to illustrate the position

of present Mardin region in the origin of pastoralism. Moreover, socio-economic and environmental factors as well as many other changes in pastoral subsistence of rural communities in the region have been observed.

### **Environmental background of the Mardin area**

Mardin region located at 37° 25' N latitude and 40° 50' E longitude in Southeast Turkey. This area stands on the southern slopes of a broad highland and extensive limestone plateaus with an average elevation of around 1052 metres. The collision of Arabian Plate with Eurasia (Keskin, 2007) perhaps created Mardin Highlands around 10 million years ago. Scattered stone tools in different areas of the region (author's personal observation) suggest that human occupation was perhaps started here in the early phase of Palaeolithic period.

With an area of 12,879 square km, Mardin is connected to Gaziantep in the west, Aleppo (Syria) in the southwest and Diyarbakır in the northeast. Present-day this is a semi-humid area in the Mediterranean climate zone experiencing very hot summers and cold winters with occasional snow. Dust storms coming from Egypt and Syria are considered as the major problem for this region. It is also amongst the areas with an average highest wind speed in Turkey (Sensoy *et al.*, 2008). However, this area has over 3000 hours of sun, and an average rainfall of about 641.4 mm per year. Although short-term drought is not uncommon, profound sunlight and semi-humid landscape have transformed Mardin as a perfect pastoral ground. Angora goats are raised intensely in Mardin villages and Mohair is considered an important product of this species. Beside pastoralism, people are mainly producing wheat, barley, sesame and some seasonal fruits.

### **Position of Mardin in the origin and development of pastoralism**

The origins of pastoralism can be traced back to the Neolithic period in parts of the Fertile Crescent (Bellwood & Oxenham 2008; Zeder, 2008) and in the Central Anatolia (Özbaşaran, 2011) around 11000 years ago (Hammer & Arbuckle, 2016) when people started to domesticate some animals (e.g. sheep, goats, cattle and pigs) instead of hunting. Archaeozoological evidences from some remarkable archaeological sites such as Nevalı Çori (Losch *et al.*, 2006; Peters, *et al.* 2013), Çayönü (Hongo *et al.*, 2004, 2009), and Cafer Höyük (Helmer, 2008) in Southeast Anatolia show that the domestication of sheep, goats and pigs occurred alongside of hunting and cultivating activities in early Neolithic villages which eventually transformed previous life ways in this area. Along with the archaeozoological remains, the isotope data also provide some of the earliest evidence for animal husbandry in this region. During this time, animals were fed the cultivated crops by humans for the first time. On the other hand, there is a long tradition of historical and anthropological thought emphasizing that traditional Near Eastern societies were characterized by separate, distinctive agricultural and nomadic components (Rowton, 1977). However,

evidences indicate that the earliest systems of control over the movement, feeding, and breeding of sheep, goats, pigs and cattle developed within communities of settled cultivators (Hammer & Arbuckle, 2016) by the mid of 9<sup>th</sup> millennium BC in southeast Anatolia. Certainly, these systems were very different from present-day pastoral system.

In the early pastoral practice of 9<sup>th</sup> millennium BC, sheep and goats comprise only 12-15% of total animal remains in archaeological settlements of southeast Anatolia. However, it became over 50% within a millennium by widespread pastoralism across the Fertile Crescent (Arbuckle 2014; Peters *et al.*, 2013). Data further suggest that secondary products such as milk and fibre were used during late eighth and seventh millennia BC (Vigne & Helmer, 2007). The identification of dung deposits within settlements such as Çayönü, indicate that animals were frequently penned onsite (Brochier, 1993). Archaeological site such as Gritille (Meiggs, 2010: 277), occupied between 8000 and 6500 BC, suggest that there was not long-distance mobility or nomadic pastoralism in Neolithic Southeast Anatolia, instead this practice was mostly connected to permanent settlements. However, the idea of animal controlling was spread through several wave migrations, re-migrations as well as cultural exchanges in following periods (Siddiq, 2016). As a result the early form of pastoralism has reached to the present pastoral practices facing many changes in cultural and environmental characteristics.

Present days Mardin is located in the central part of Fertile Crescent. Several archaeological settlements of the earliest animal domestication are very close to this area. Among the most notable sites, Nevalı Çori (Gazibey, Hilvan, Şanlıurfa) is located 180 km west, Çayönü tepesi (Ergani, Diyarbakır) is 122 km north-west, Cafer Höyük (Battalgaz, Malatya) is 219 km north-west, and Gritille (eski Samsat, Adıyaman) is 191 km west of present Mardin city. Neighbouring location with this earliest pastoralist sites, its landscape as well as position in the Fertile Crescent largely suggest that Mardin region, along with other significant regions in southeast Anatolia, was an important zone for the earliest pastoralists during Neolithic period.

### **Materials and Methods**

Fieldwork and qualitative research methodology has been applied in this study. The main objective of this research was to build up an anthrozoologic data source on the interactions between human and non-human animals in the pastoral villages of Mardin area. Moreover, it was attempted to indicate different agents for recent changes in pastoral communities. The study was further intended to comprehend the differences between present pastoral systems and early process of animal domestication. Considering these objectives, alongside of scanning archaeological data, fieldworks have been carried out in four villages, Yeşilalan Köyü in Savur district, Yaylabaşı Köyü in Mardin Merkez district, Fıstıklı Köyü in Ömerli district, and Tepebağ (Telbisim)

Köyü in Derik district. Household interviews, personal interviews and participant observations with shepherds in the grazing fields were principle approaches in fieldworks. Moreover, some case studies were well observed to understand the emotional bonds between common villagers, caretakers, children as well as shepherds and their herd animals.

## Results

More than 200 families have been observed inhabiting in Yeşilalan Köyü village. This village is located around 18 km north of Mardin city by a local river which is connected to Tigris River. Ancient architectural remains around the village as well as its oral history suggest that human occupation occurred in the village during at least earlier of Byzantine period. Only 6 of the 200 families are intensively practicing transhumance pastoralism in this village and their herds are comprised with over 1000 caprine. However, most of other families practice agriculture and agropastoralism. Most of them have horses, donkeys, mules and more than one cattle for regular dairy products for their families and agricultural practices. Yaylabaşı Köyü is a neighbouring village of Yeşilalan Köyü located around 15 km from Mardin city centre. This is a small village comparing to Yeşilalan Köyü. However, transhumance pastoralism is seen more popular in this village. 11 of 96 families in this village are totally depended on transhumance pastoralism while most of others have small number livestock together with of small scale agricultural practice. Fıstıklı Köyü is comparatively newly established village in Ömerli district. Located around 25 km northeast of Mardin city, this village was found in 1930s. Currently, all 46 families are seen practicing agropastoralism. Tepebağ (Telbisim) Köyü is an old settlement like Yeşilalan Köyü locating about 32 km west of Mardin city. 27 of 195 families in this village are intensively practicing transhumance pastoralism and most of others depend on agropastoralism. Agriculture is seen more developed in Tepebağ Köyü in contrast to 3 other villages in this study.

Alongside of seasonal nomadic pastoralism, mainly three other pastoral systems are observed in the study area; 1) Transhumance pastoralism, 2) agropastoralism, and 3) semi-agropastoralism, in which people occasionally labouring in construction work, factories or transporting goods during off season of agriculture. Pastoralist families are found as the richest in villages, albeit lower in number. Livestock, mainly of caprine, wool, mohair, milk, and different types of dairy products are the sources of profound amount of money. Family members are usually the main labour force for maintaining the herds. However, sometimes people are hired too. Most of the agropastoral families cultivate their own land while some are found tenant usually renting others land seasonally by cash. These agropastoral families mainly grow wheat and barley as their staple. Vegetables, different types of nuts, lentil, and fruits such as cherry, melon, grapes and water-melon are also common. Insufficient money is the main

obstacle while most of the families want to keep herds for their livings. Small herds are generally maintained by family individuals; however, collective or communal attempt for herd management is not uncommon. In this case, individual males from different families take responsibility of grazing everyone's herds in the village. Grazing cannot be practiced in winter when animals do not like to go out and therefore people usually feed them straw, husk, low quality barley and wheat in the pen.

Old way of exchanging goods is still seen common in the study area. Many families do not prefer using cash or having activities with bank since they do not feel strong necessity of it. For example, people in Fıstıklı Köyü do not grow wheat because of insufficient agricultural land and therefore, they exchange their animals for staple grains from nearer agricultural villages. Number of heard animals symbolise the wealth and eventually social status in the villages. Alongside of age, wisdom, social contribution and ownership of high number herds are the key factors to be the headman in the village. Families have strong ties and in most case, kinship is seen wide spread. Headman plays a vital role for peace, solving social problems, marital relations, distribution of grazing fields as well as contact and negotiations with other villages. No families have seen selling or buying their herd animals without the counsel of neighbours and village headman.

Every family in the study area is raising animals for their various needs, despite of their different subsistence techniques. Most all of the households of Yeşilalan Köyü and Tepebağ (Telbisim) Köyü have horses, mules or donkeys for mainly transporting goods. However, only few families of Yaylabaşı Köyü and Fıstıklı Köyü have Equidae animals because of their small scale or absence of regular agricultural practices. Besides the ruminant herds, for regular protein source, most of the families in all villages have cattle, domestic fowls, ducks and turkeys.

Species	Scientific name	Number	Use
Cattle	<i>Bos taurus</i>	YAK300-320, YBK100-105, FK60-70, TK350-380	Milk, reserve property for emergency cash.
Horse	<i>Equus caballus</i>	YAK30-35, YBK 17-22, FK8, TK 25-30	Transport and agriculture
Donkey	<i>Equus asinus</i>	YAK40-45, YBK 35-40, FK 15-15, TK50-60	Mainly transport, sometimes agriculture.
Mule	<i>E.asinus</i> × <i>E. caballus</i>	YAK 40-45, YBK 10-15, FK 10-15, TK 40-50	Transport and agriculture
Goat	<i>Capra hircus</i>	YAK-250, YBK-300, FK-60, TK-300	Milk, wool, meat and source of family income.
Sheep	<i>Ovis aries</i>	YAK-800, YBK-1300,	Milk, wool, meat and



		FK-280, TK-1200	source of family income.
Dog	<i>Canis familiaris</i>	YAK 52-60, YBK 20-25, FK 12, TK over 40	Protection of caprine herds, fowls, and the settlement.
Cat	<i>Felis catus</i>	YAK 70-80, YBK 40-45, FK 30-40, TK 120-125	Mainly to control the rat population in households.
Domestic fowl	<i>Gallus gallus</i>	YAK over 1500, YBK around 900, FK 450-480, TK over 2200	Eggs and meat for regular protein source.
Turkey	<i>Meleagris gallopavo</i>	YAK around 120, YBK 40-50, FK 30-35, TK 180-200	Regular protein source and occasional income.
Pigeon	<i>Columba livia domestica</i>	YAK 180-90, YBK around 200, FK 125-30, TK over 900.	Occasional income.
Geese	<i>Anser a. domesticus</i>	YAK 50-55, YBK 30-35, FK 18, TK 135-40	Regular protein source and occasional income.
Duck	<i>Anas platyrhynchos domesticus</i>	YAK 70-80, YBK 30-35, FK 30-35, TK 45-50	Eggs and meat for regular protein source.

**Abbreviation:** YAK (Yeşilalan Köyü), YBK (Yaylabaşı Köyü), FK (Fıstıklı Köyü) and TK (Tepebağ Köyü).

**Table 1:** Number and uses of different species in study area.

Keeping dogs is an essential practice in the study area since people need them to control the herds during grazing and defending the wolves' attacks. Dogs are also used for protecting domestic fowls from foxes and other predators, watching fruits garden, patrolling the settlement at night and even as the companionship for the children in the community.

Women start their daily activities by feeding their animals and cleaning the pens before they start preparing breakfast. People usually do not butcher animals from their own herd as because it makes them deep sadden for long time. Therefore, they buy others animal or hire someone from distance neighbourhoods to butcher or sacrifice their own animals when they are obligated, especially during religious festivals or after the fulfilment of their wishes to god. Butchering certain number of animals is also needed for weeding as well as some other special social occasions. In most case, people distribute the meet of the sacrificed animals among their neighbours and other fellow villagers. People are found caring their animals like their children. They usually name their animals mostly after human names according animals gender, and



sometimes they are seen naming their favourite animals after their children. Many individuals of small ruminant, cattle, dogs and equine species are found very responsive with their given name. In many case, individual even show distinct responses for their own name. Old people are observed very much emotionally touched by remembering long past bonds with their childhood animals.

### Discussion

Locating in the centre point of northern Fertile Crescent, Mardin witnessed origin of pastoralism and domestication of ruminant species around 11 millennia ago. The pastoralism of this area has been shaped by wide range natural variations and multiple cultural factors through different political socio-economic changes over time. In reality, pastoralism is locally declining due to enclosure and advancing agriculture, particularly in the Near East (Blench, 1998; Pratt, *et al.* 1997) and Anatolia (Hammer, 2014). The number of herds in pastoral villages in Mardin region has been decreased alarmingly in last fifty years. However, one of the reasons for the survival of pastoral tradition is because pastoralist people occupy landscapes of low productivity (Sahlins, 1972) which is not suitable for agriculture. Archaeozoological evidences indicate that the earliest pastoralism was developed comprising mainly four animals, i.e. sheep, goat, pig and cattle. The early Neolithic people were practicing pastoralism within their settled communities (Hammer & Arbuckle, 2016). Present pastoralism in Mardin is very different from that type of animal controlling process. Pastoral systems in present Anatolia are based around sheep, albeit people keep horses, donkeys, goats, cattle and dogs for portage, riding, ploughing or herd management, and domestic fowls, geese etc. for basic nutrients. Moreover, present pastoralists are heavily depended on other communities for exchanging commodities as well as grazing fields for their herds.

It was theorised that two kinds of pastoralism, nomadic pastoralism and agropastoralism (Thevenin, 2014) are practiced in southeast Turkey. However, there are families and small communities found during the fieldwork who are practicing transhumance pastoralism. Traditional seasonal migration by families from the Dubiran nomad tribe is reported (Thevenin, 2011) through the Simak route in April and in September. This route links the high summer mountain pastures of Hakkari to Batman, Siirt, and Mardin regions. Close connection between these nomads and Mardin's village pastoralists is observed in this study. Agropastoralist villagers usually look forward to these nomads for exchanging goods and animals. Self-sufficiency largely governs the whole of agricultural (De Tapia, 2007) as well as pastoral villages Anatolia. In pastoral villages of Mardin, different products mainly made of meat, and dairy products i.e. cheese, yogurt, and butter are also sold for basic income. Besides, one kind of beverage made of milk, water, and salt is called Ayran in Turkish, and Daw in

Kurdish, is prepared only for family use. Wool is also sold sometimes, albeit it helps more to knit winter clothes and bedding for family.

Livestock is the basic resource in these pastoral villages. Generally men represent the ownership of the animals and they have sole rights to sale and slaughter the animals, and eventually the size of his herd is the measure of the social status of the individual man. Large herds signify not only wealth but power. Therefore, ownership of big herds is among the prerequisites for the leadership of the settlement. Nonetheless, comparing to men, women play a significant role in the communities and have stronger bond with animals. It is, perhaps, because they usually feed and take regular care of the animals within the households. Many researchers (Anggoro *et al.*, 2008; Backscheider *et al.*, 1993; Inagaki & Hatano, 1996; Leddon *et al.*, 2008; Opfer & Siegler, 2004) suggest that children realize that humans and non-human animals alike share certain fundamental biological processes including birth, growth and death as well as biological requirements including air, water and food etc. Children in pastoral and agropastoral societies in Mardin region are also found reflecting this idea. While helping their mother in the pens or playing with animals, children are accepting their animals as like other human children in their community.

Domestic animals are found with a profound influence on human societies, playing a major role in the course of human history. It is unarguable that human lives have been shaped by the diversity of animals around them (York & Mancus, 2013). Before the exploitation of fossil fuels in the modern era, animals provided the principal source of energy, being the prime labour sources on which most of the societies in the world survived. Animal species such as cattle, goat, sheep and donkeys are still continuing to play roles in socio-cultural, economical and certain religious activities in the study area.

Very strong emotional responses from both human and animal sides are observed in this study. Animals have different magnitudes of relationships with people such as playing with children, responding their own name, obeying their human owner for long time (sometimes over 14 years) and not forgetting the owner's family members for long time. No matter practicing nomadic, transhumance or agropastoralism, most of the people, children or adults, in these four villages are also found emotionally involved with their domestic animals. Besides, they are very much depended on animals by means of transportation, nourishment, religious obligations and inevitably emotional affections.

### Conclusion

Not two, at least three types of pastoralism- nomadic, transhumance and agropastoralism are being practiced in Southeast Anatolia. Some small-scale variations and mixtures can also be found in Mardin region, and sometimes transhumance and agropastoral families can occupy the same village. Most of

the families are still heavily depended on ruminants, cattle and other domestic animals for over 60% of their annual income. Women and children have more emotional relationship comparing to men in the study area. Activities like feeding, caring and raising the animals from the moment of their birth have strong effects on women's mind, and therefore, they consider the animals as their own children. Adolescents are in love with the animals of their families with naive friendship. Losing, selling, slaughtering, sacrificing or deaths of animal thus have deep effects on women and children minds. In some case, old individuals show deepest feelings for domestic herds. Overall, the animals are not only considered as the wealth and fortune, they are also providing psychological-feed in the pastoral societies of Mardin region.

On the other hand, it is worth to mention that most of the previous anthrozoological researches had been carried out on the relationships between human and companion animals. Considering that, this research will theoretically provide new insights for anthrozoological research on the relationships between human and herd animals. Besides, as a new research approach, this study will certainly open some new perspectives for anthropological and sociological study in Turkey.

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