

Introduction: Sheep-farming in Bulgaria

1. Brief Historical Background

Geographical, geomorphological and climatic characteristics of Bulgaria proved particularly favourable to animal husbandry and especially – to pastoral economy and sheep farming.

Tending sheep has been one of the general occupations and trades of people since Prehistory. According to archaeological data and studies, since Prehistorical times (Neolithic – Bronze Age) many tribes on the Balkans and in Anatolia practiced particularly mobile pastoralism – due to its extensive nature.

In Antiquity Homer called Thrace “*fat-soiled land*” and “*the Mother of sheep*”. Proto-Bulgarians came in V – VI c. A.D. from the arid zones around the Caspian and the Black sea to settle on the Balkan Peninsula and brought their nomadic and semi-nomadic traditions. Slavic tribes from the Southern branch settled down on the Balkans in Byzantine provinces (V – VI c. A.D.), and brought quite different pastoral and agricultural traditions. All these economic and cultural traditions merged in the process of formation of the early medieval Bulgarian state.

In Medieval Bulgarian kingdom sheep-breeding and pastoral husbandry was widespread as an important branch of feudal economy. It was included in the system of feudal regulations and taxation. In Bulgaria and generally in the Balkans a special category of dependent pastoral population was registered – the so-called Vlachs (βλαχοι), whose trade and subsistence proves the continuity of mobile pastoral economy from Antiquity in Medieval ages. The denomination “Vlachs” appears for the first time in Byzantine sources not earlier than the XI century.

According to the evidence and historical researches in the “economic and social” and the “ethnic” category of *Vlachs* we should include Latin-/Romance-speakers – the descendants of autochthonic Balkan pastoral tribes: the romanized Aromanians [*koutsoβλαχοι, βλαχοι*] and the hellenized Sarakatsans [*Σαρακατσάνι, Karakachani*]. Bulgarian shepherds from the Rhodopes also practiced some kind of Transhumance in the Middle Ages.

There is no clear information about sheep-breeding in Bulgaria in the course of Ottoman conquest. According to the testimony of the Ottoman analyst Mehmed Neshry, who described the prosperity of medieval Bulgaria just before it fell under Ottoman rule: “*Sheep, butter and milk was flowing out from this land to the World.*” This indirect evidence suggests the high level of development of animal husbandry and sheep-breeding in the XIV c. as one of the oldest economic traditions and trades of Bulgarians.

The accounts of foreign travelers, envoys and diplomats from XV – XVIII c. (the ages of Ottoman domination) prove there was continuity and further development of pastoral economy and sheep-breeding among Bulgarians and various ethnic groups - Christian and Moslem, subjects of the Sultan. In the course of the conquest of Balkans, new waves of nomads invaded the peninsula – various tribes from Asia Minor known as *Jürüks*. Similarly to the case of medieval “Vlachs”, the term *Jürüks* became the subject of the discussion – whether it should be regarded as a distinct “social and economic category” – nomadic sheep-breeders, or rather as an “ethnic” category opposed to other ethnic groups. Local Balkan pastoralists, shepherds and nomadic communities (including *Bulgarians*, *Vlachs* and others) were pushed away and oppressed by *Jürüks*, because the seasonal pastures were located in the same areas which were formerly used by autochthonic shepherds. This resulted in many conflicts and fights between *Jürüks* and the local stockbreeders. Since the XV c. a slow and long migration of “Vlach” pastoral population from the Balkans started to the North – through Wallachia and Transylvania to reach in XVI – XVII c. the mountains of Southern Poland.

In the late XVII and the early XVIII c. the great deal of *Jürüks* settled down basically in the plains, while still keeping the rights and control of seasonal pastures in the mountains and plains. The presence and impact of nomadic and semi-nomadic *Jürük* groups in the plains for a long time (XV – XVIII c.) resulted generally in the mode of making use of land. The particular plots ascribed and hold by *Jürüks* in the plains, were exploited exclusively in the system of nomadic or mobile pastoral husbandry – most of all as pastures and just occasionally for agriculture. This proportion between arable/cultivated land and grazing land/pastures, as well as the preferences of land-use and some specific forms of

leasing/renting land, were kept in the lowlands for ages - up to the mid-XIX century, as it was well documented in sources.

The condition of the *non-moslem* Ottoman subjects was very hard, but at the same time the terms for the development of sheep-breeding emerged as quite favourable: there were no inner frontiers and barriers to stop the migrations of flocks and people; the culture, traditions, religion and living of the conquerors were bound to the consumption of huge quantities of mutton and sheep products, so the needs of the Court, big cities (*Constantinople/Istanbul*, *Adrianople/Edirne*, *Salonica/Thessalonica*, etc.) and the army for food supply and clothing were enormous.

In XV – XVI c. a great deal of Bulgarians whose main occupation was pastoral husbandry (owners of flocks and shepherds) belonged to the category of *gelepkeshani* or *gelepi*. They were charged with the obligation to deliver, ordered by the state, great supplies of livestock for butchery (exclusively sheep) to the capital, the big consumptive centers of the empire and the army. The category of *gelepkeshani* consisted by both: 1. owners (owners of sheep and traders/merchants) and 2. breeders, tenders (farmers, shepherds) who were breeding and raising sheep themselves, were engaged in animal husbandry and pastoral economy and this was their general trade and means of living. The *gelepkeshani* in the period XV – XVIII c. presented a fairly broad and ethnically versatile category, incorporating *Jürüks* too. It was also marked with a clear social and economic differentiation – the property of *gelepkeshani* in XVI c. varied from 400 to 6 000 sheep (of their own). The rate of their annual compulsory delivery was about 1:20 (5 %) of the whole flock: in the range from 20 – 25 sheep (minimum, very rarely) – to 25 – 100 (average, usually) – up to 300 – 400 sheep (maximum, rarely). Growing and tending such big flocks was possible only in the system of extensive pastoral husbandry – most of all transhumance (for the sedentary population – Bulgarians) and to a smaller extent vertical nomadism (practiced by *Jürüks*, *Vlachs*, etc.).

In the frames of this category (*gelepkeshani*) many Bulgarians made a fortune and in the XVI - XVII c. the wealthy class of stockbreeders, owners and traders – the so-called *chorbadzhii* arose. Later on (XVII – XVIII c.) the greatest and the wealthiest among them became leasers of the right to collect sheep-taxes (*beglik*) in vast districts of the Empire – the so-called *beglikchii*. Both classes – *chorbadzhis* and *beglikchis*, were at the same time big owners of huge flocks – sheep, cattle and horses tended in the system of Transhumance. Many of them managed to get privileges for the use of

restricted areas of winter pastures in Eastern Thrace (between Adrianople and Constantinople).

In the period XV – XVIII c. sheep-breeding in the system of transhumance developed progressively and reached its climax in the XIX century. It was in the system of Transhumance that the wealthy class of Bulgarian bourgeoisie grew up, due to the development of trade with livestock, products and raw materials from sheep: mutton, wool, milk production – both in the vast inner market of the Ottoman Empire and for export to Central and Western Europe. Their trade contacts went from Asia Minor and Egypt to Russia, Wallachia, Transylvania, Austria and France. It was this wealthy class that started and carried on the struggle for political emancipation and liberation.

Many trades and crafts in Bulgaria in the XVIII – XIX c. flourished on the base of transhumant sheep-breeding: wool-processing and manufacture of coarse and fine woolen fabrics for the needs of citizens and the army (*abadzhiystvo* – Bulg.), knitting big quantities of woolen socks for the market, tailoring industry (*terziystvo* – Bulg.) 90 % from the pieces of popular clothing, as well as interior textiles in the village and town was home-spun, manufactured in the household from sheer sheep-wool. Many towns in Bulgaria flourished with their economic prosperity and beautiful architecture due to the development of transhumance.

After the Liberation in 1878 and the emergence of new Bulgarian state, a period of brief decline of transhumance started. The most affected by setting national borders was transhumance in Central Bulgaria (along the Balkan range and in Sredna gora). It was literally “cut” from the winter pastures in Eastern Thrace that remained in Turkey. Later on this brought the decline of the once flourishing textile and tailoring industries, and the crafts based on processing ovine raw materials, centered in the same towns all along the Balkan range. After WWI and 1920 the free access between summer and winter pastures was again interrupted because Western Thrace and Aegean Macedonia were included in the territory of Greece. Because of the customs duties, taxes and fees for the flocks on their way to and back from the pastures, transhumance already proved not profitable and managed to survive up to the 30-ies of XX c.

After the Liberation of Bulgaria (1878) the so-called *Agrarian revolution* started – a brief process of redistribution of land and changes in ownership but also in rapid increase of cultivated arable lands. It resulted in a complete change of the structure of modern Bulgarian economy and left no room for mobile pastoralism. Transhumance remained a type of extensive pastoral economy and proved incompatible with the

development of modern industrial society. After the decline of Transhumance in Bulgaria, in all the areas it was practiced, it was replaced by another type of mobile pastoral husbandry – the Mountain/Alpine husbandry. Among all the types and forms of traditional pre-industrial mobile pastoral economies, Alpine husbandry was distinguished by its higher potential for intensive development.

2. Modern times

2.1. Sheep- farming (1944-1989)

Sheep breeding used to be an extensive agricultural sub-sector of economy under centralized planning (1944–1989), after nationalization of the private agricultural land. In the period of socialism in Bulgaria cooperative labour farms were created (TKZS – in Bulgarian). The main target of agriculture was pooling and achieving of highest yields from plant-growing and stock-breeding. This forced the rapid mechanization of the agricultural sector (since the early 1970-s), large-scale installations for irrigation were built along all big rivers. At the same time the 1960–1980-ies of the last century was the period of rapid industrialization of the country's economy. The intensive agriculture and the large-scale industrial developments caused environmental problems, the most serious being: pollution of soils due to extensive use of fertilizers and industrial production. The industrialization was followed by rapid urbanization which substituted pastures and agricultural land with housing estates and industrial zones.

The agricultural land belonged to the villages and was managed by the cooperatives (TKZS and later on APK (Bulg.), i.e. Agro-Industrial Complex). The ownership structure of the land towards the end of 1980-s was characterized by state control of more than 80% of arable land and the domination of big collective farms, which occupied almost 60% of arable land (NSI). Meanwhile, the traditions for self-provision with agricultural production were kept and officially regulated: each household was allowed to use small plots (less than 0.1 ha) and breed some number of livestock (maximum number of sheep allowed was 5). During the centralized planning small personal plots occupied 13.1% of arable area, but only private rights of use were granted and no full ownership rights. Self-production was “the second occupation” of many Bulgarian, who could not

afford to substitute their occupation for the shepherd's. That's how the practice of neighborhood shepherding and milking was organized and sheltered in neighbourhood folders of 50–100 sheep.

2.2. Sheep-farming after 1989

The first laws dedicated to land reform were two ordinances that appeared in 1989 authorizing a certain decentralization of agrarian production. They helped the emergence of new agrarian structures, which were comparatively independent from the state control. (Dobrevá and Kozhuharova, 1994). During the Transition, the most influential forces that shaped sheep breeding were decentralization, privatization and the market forces. In order to avoid the perpetuation of the existing “old type” organizations” in Bulgarian countryside, the Law on Land contemplated the liquidation of collective farms and other similar organizational structures. Then, according to a new law (The Law on Cooperatives, adopted in 1999), cooperatives have to buy or lease land to expand. In spite of having encountered many difficulties, the restitution process was considered concluded at the end of year 2000 when 99% of the land subject to restitution was delivered back to its owners. After the restitution process, half of the total area of the country, i.e. 5,782,461 ha, was registered as “agricultural land”. As a result, the restitution process caused three fundamental transformations: privatization, duality and fragmentation. Almost all individual farms are very small - of less than 1 ha, where the land is cultivated with the objective of providing products for self-consumption and, if possible, some additional income.

This tendencies contrast with the high-priority objective of the Ministry of Agriculture to impel the process of land consolidation.

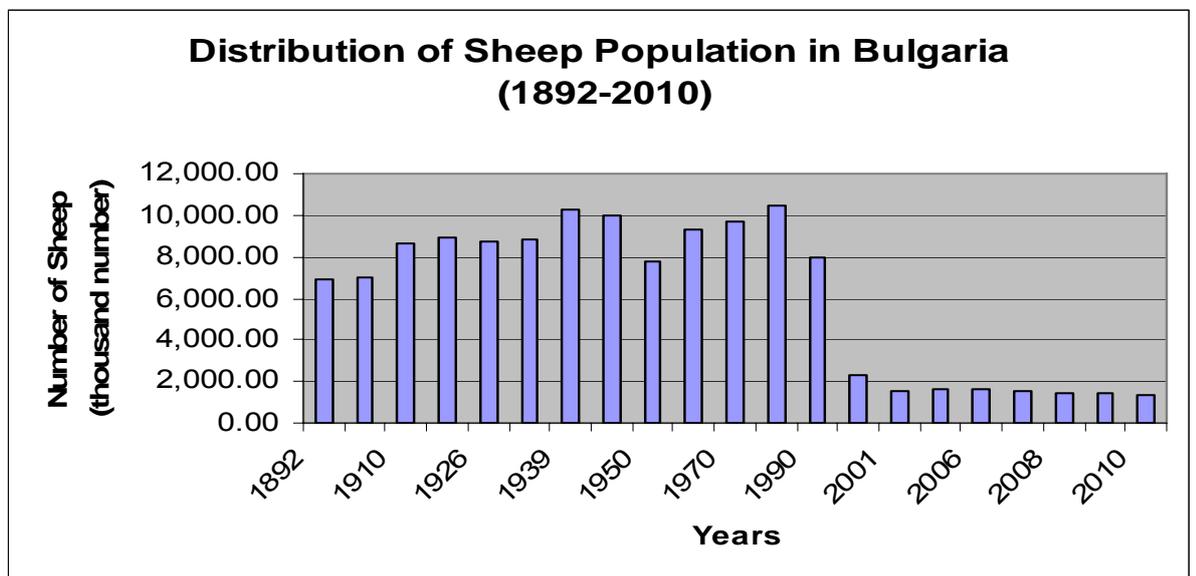
Table 1. Livestock products (2001-2010) (tons)

	2001	2003	2005	
Meat total	482103	193876	232964	
Beef & buffalo meat	68700	28727	30025	
Sheep	51789	19366	24428	

& goats meat				
Milk	1351005	1504015	1508070	
total				
Sheep	69614	88679	105057	
milk				
Goats	87804	101530	109114	
milk				
Wool	6568	6500	6500	
greasy				
Hen	82313	93016	97012	
eggs				
honey	4931	8500	11221	

Source: FAO Statistics Division, 18.01.2012

Figure 1. Distribution of sheep population in Bulgaria (1892- 2010)



Source: Data of National Statistical Institute of Bulgaria

3. Sheep and Goats breeds in Bulgaria

After the Liberation of Bulgaria a new stage in the development of sheep-breeding started. Rams and ewes of European breeds, highly productive of milk and wool, were imported. The work on sheep-breeding and breed improvement advanced, new breeds of higher milk yield were created (K. Jelev et al., 2009). Since the 80ies of the 19th c., Bulgarian state held a strict protectionist policy in the development of that sector.

The agrarian reform after WW II abolished private farms and sheep-breeding developed in the newly created collective and state farms (TKZS, DZS). The breed trends also changed. Local breeds were crossed with rams of fine-fleece and semi-fine-fleece breeds. In that way four new fine-fleece breeds were created in the lowland areas, two half fine-fleece breeds in the hilly areas and two *tzigay* breeds – in the highland areas (K. Jelev et al., 2009).

In the early 90s of the 20th century Bulgaria had a unique gene pool – the aboriginal breeds and their sub-breeds were more than fifteen. Some of them are now believed irreversibly lost, but as a rule in the National gene bank sperm of highly productive but endangered species is stored – the sperm can be used as a basis for different genetic programs. The oldest “basic” breeds of sheep in Bulgaria are two – *tzakel* whose distribution on the Bulgarian territory covers the western part of the country and *tzigay* – the eastern. According to the academician Hlebarov (1940) “the greater number of the sheep in Bulgaria and in the Balkans, however different their morphological features may look, whatever local names they may have, are nothing else than a form of the *tzakel* sheep breed”. The name “tzakel” comes from the German word *zig-zag*, as the horns of the rams are shaped like stretched spirals pointed forward. The local forms of sheep as *Karakachan sheep*, *Replyan*, *Kula*, *Panagyurishte*, *Shumen* and *Karnobat* breeds are typical representatives of the Bulgarian *tzakel*. The origin of the *tzigay* breed in Bulgaria comes from the *Millet fine-fleece sheep* of the Greek colonists in the 7th century BC that settled on the Black sea coast. From the *tzigay* sheep various types such as *Copper-red Shumen* sheep, *Blackhead Pleven* sheep, *White Dobrudzha* sheep, *Karnobat fine-fleece* sheep and others were bred (Hinkovski, Tz. et al., 1984).

Now more than thirty different breeds can be named. Over the years, to the local breeds were added by breed crossings the *Merinoland* and *Karakul* sheep, *East-Friesian* and *Avassi* sheep and recently *Ile-de-France* and *Mouton Sharole* sheep. The *Blackhead Pleven* sheep and *Stara Zagora* sheep are intermediate breeds, obtained by crossing of *tzakel* and *tzigay* types - they are highly productive of milk, meat and wool. In 2003, the Association for Breeding Indigenous Breeds in Bulgaria was established - the priority of their activity are the *Karakachan* sheep (one of the oldest breeds in the Balkan Peninsula related to nomadism), the *Red-copper Shumen* sheep, *Duben* and *Replyan* sheep, whose stocks are expected to increase as a result of the funding under the SAPARD program. Sheep of local breeds are now bred in many private farms. A program is developed for storing genetic resources for sheep-breeding and for preservation of 19 endangered local native populations (K. Jelev et al., 2009). Meat and milk obtained from the old breeds of domestic animals are highly valued for their high nutritional, taste and hygiene qualities. Their grazing areas are the ecologically clean mountainous and hilly territories. Sheep milk is of high fat contents and high-quality dairy products are prepared from it – curds, butter, and cheese. The high-quality dried meat (*pastarma*) is produced from the meat of the Panagyurishte sheep. Pigmented wool, much on demand in the textile industry is obtained from the local sheep breeds as *Copper-red Shumen*, *Karnobat*, *Kotel*, *Pirdop*, *Panagyurishte* and *Karakachan* (Hinkovski, Tz. et al., 1984).

Bulgaria has patented nine sheep breeds – *North-east Bulgarian fine-fleece*, *Danubian fine-fleece*, *Thracian fine-fleece*, *Karnobat fine-fleece*, *North Bulgarian Corriedale*, *South-Bulgarian Corriedale*, *Stara Planina Tzigay*, *Rhodopean Tzigay* and *Synthetic Population Bulgarian Milky*, raised in the respective regions of the country. In general, the largest concentration of sheep is documented in the South Central, Northeast and Southeast regions of Bulgaria.

Research stations and institutes conduct work on selection of profitable breeds estimated by milk yield and composition of milk indicators, fertility and maturity of the new-born. Breed structure should certainly be considered not only physiological, but also a historical category, because its formation, development and adaptation is the result of the active human interference. The interest of

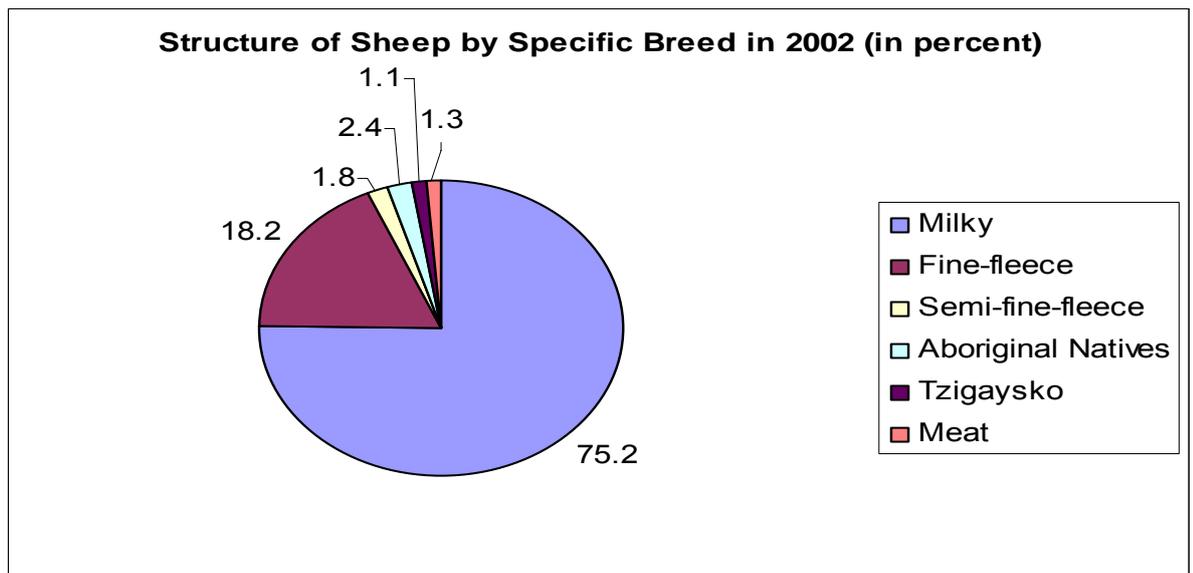
private producers is targeted at raising sheep with increasing milk yield. As a result, the fine-fleece and semi-fine-fleece sheep have decreased to fewer than 5% and the share of the dairy products has reached over 60% (K. Jelev et al., 2009). Now in the country 37 sheep breeds are raised, 19 of them are endangered native breeds.

The most common breeds are the *Blackhead Pleven* sheep and the *Synthetic Population Bulgarian Milky*. There is a great interest of farmers to the sheep bred for meat. In this aspect, industrial crossings with rams of *Ile-de-France* and *Mouton Sharole* breeds have certain effect. According to Stankov, et al. (2007), sheep bred for meat represent 10 – 15 % of the herds. Fine-fleece sheep-breeding should not be excluded as a destination. The fine-fleece breeds are combined into a single breed called Bulgarian merinos, 10 – 15 %; the *Tzigay* sheep - into one breed *Bulgarian Tzigay*, 5 – 10%. The local (indigenous) breeds – 19 in number, represent up to 5 – 10% and are our genetic resource.

Goat is one of the most unpretentions domestic animals. It is the most economical milk domestic animal which finds food itself.

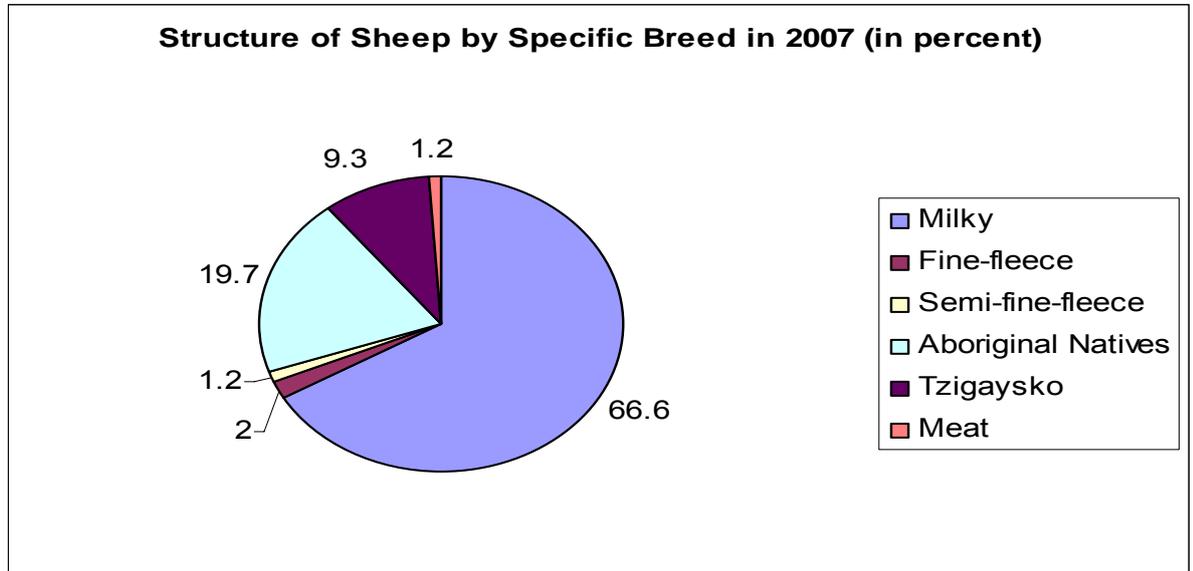
Suitable breeds of goats for plains and hilly areas in the country are *Bulgarian White Milky Breed*, but in mountain areas – *Togenburg goat*. In the plains for the production of different kinds of cheese is used *Anglo-Nubian Goat* breed.

Figure 2. Structure of sheep by specific breed, under control (2002)



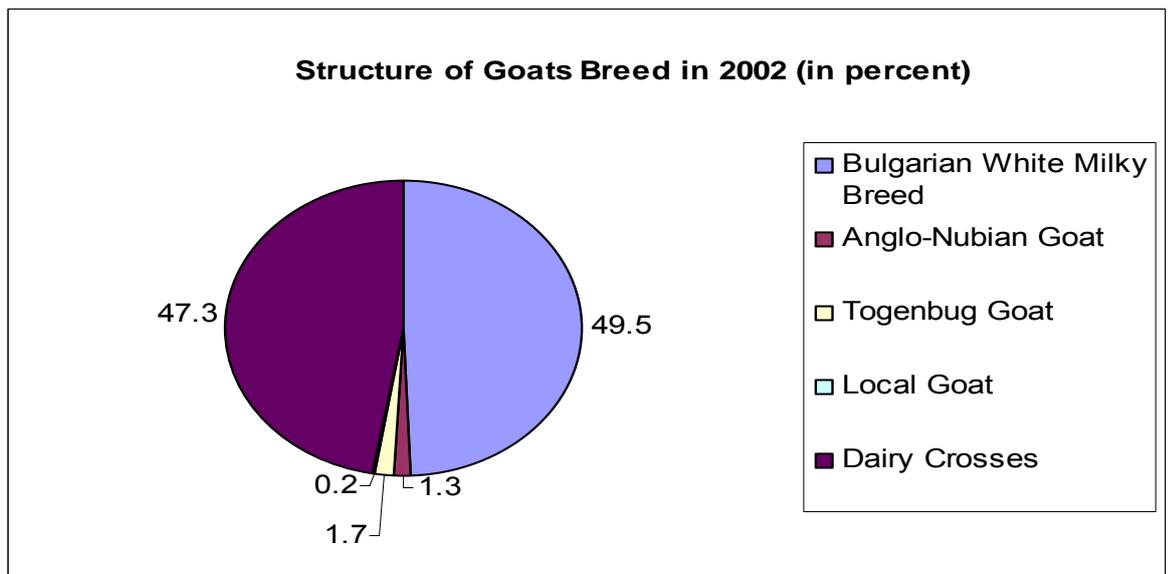
Source: Data of “Strategy for development of livestock in Bulgaria during 2008-2013”, (2008)

Figure 3. Structure of sheep by specific breed, under control (2007)



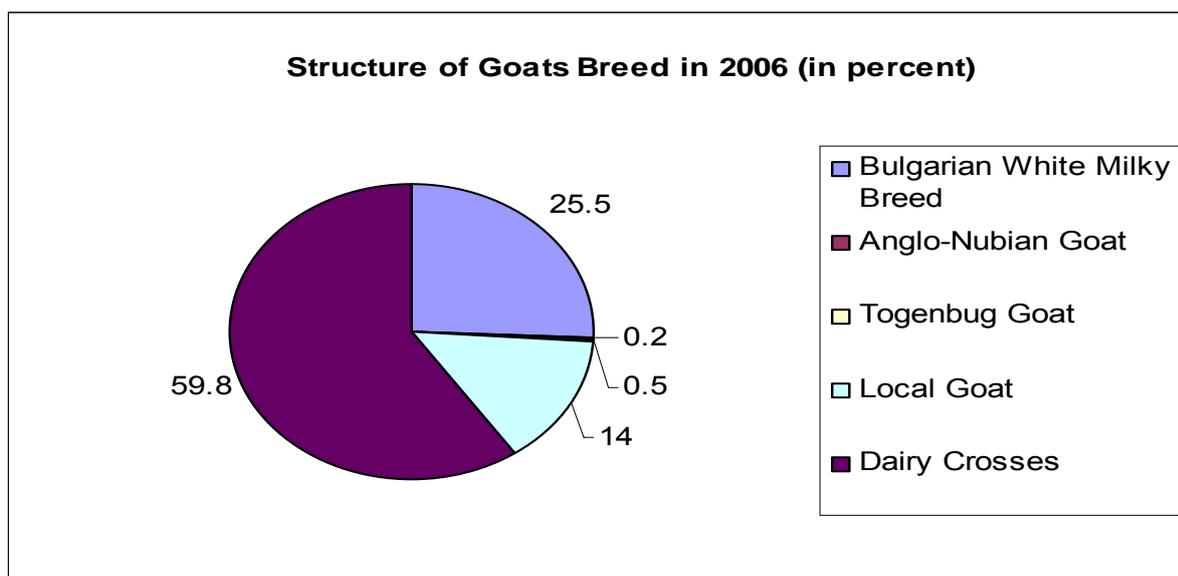
Source: Data of “Strategy for development of livestock in Bulgaria during 2008-2013”, (2008)

Figure 4. Structure of goats by specific breed, under control (2002)



Source: Data of “Strategy for development of livestock in Bulgaria during 2008-2013”, (2008)

Figure 5. Structure of goats by specific breed, under control (2006)



Source: Data of “Strategy for development of livestock in Bulgaria during 2008-2013”, (2008)

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