

## **THE LIVESTOCK SITUATION OF TURKEY**

Muhittin TUTKUN\*, Ali Murat TATAR, Halit Deniz ŞİRELI

Department of Animal Science, Faculty of Agriculture, University of Dicle, Diyarbakir, Turkey

\*Corresponding author: mtutkun2001@yahoo.com

### **Abstract**

In this review, it was intended to present general information about the products status, breeding systems and to propose recommendation for improvement of the potentials about livestock. Based on the agricultural statistics by Food and Agriculture Organization of the United Nations (FAO) and Turkish Statistical Institute (TSI), there is an important potential in terms of livestock farming, the number of animals and the production value. According to 2013 figures, the number of cattle has increased 3.6% compared to the previous year, while the number of small ruminants has increased 6.8 %. By the end of year 2013 the number of cattle is 14.415.257, sheep 29.284.247 and goat 9.225.548 of head. Total milk production increased by 4.7 % compared to the previous year, 18 million tons. That 91.39 % of the cow's milk, 6.04 % of sheep milk, 2.28 % of goat's milk and 0.29 % of has created the buffalo milk. In the same period, the wool, hair and lint production increased, while honey, beeswax and in the production of silk cocoons has seen a decrease. During this period, the total number of poultry increased by 4.9 %. By the end of 2013 the number of broilers and laying hens 5.0% to 177.5 million units, an increase of 4.8% from the number of 89 million units, while the number of turkeys increased by 6.0% and reached 2.9 million units. In the same period, the increase in the number of ducks and geese, while the increase of 3.1 % percent in the duck, goose stood at 11.7 %

**Key words:** *Turkey, Livestock, Cattle, Small Ruminant, Poultry*

### **Introduction**

Livestock in the whole world as it is adequate and balanced nutrition for the growing population in Turkey and used as raw materials in many areas of industry occupies an important place. However, unlike other sectors of the livestock sector in the country due to host many sectors of the economy that brings solutions to the social problems of the country. The livestock sector in Turkey has considerable potential and is an important part of the agricultural sector and economy. Livestock contribute to the economic development of rural households. The Livestock products such as; meat, milk, eggs, honey, wool, and hides play a significant role in the Turkish economy.

The livestock sub-sector in Turkey, consisting mainly of cattle, dairy, buffalo, poultry, sheep and goats, includes traditional and commercial activities.

Animal husbandry has a great potential and is well placed in Turkish national economy and agricultural sector. Turkey in terms of geographical features and a suitable environment for the production of all animal products has a significant potential.

The Turkish livestock sector is characterized by small-scale farms and domestic breeds, which are better able to adapt to the harsh climate of eastern Turkey but are less productive. More than half of the nations' herds are in eastern Turkey, despite less suitable topographical and climatic conditions (Gifford and Serttaş, 2010).

Turkey maintains a very restrictive livestock product import policy, allowing only imports of dairy and and beef breeding stock.

Although demand for meat products is increasing, the Turkish livestock suffer from low yields, extreme price fluctuation, and an unpredictable government support system.

The recent high meat prices have attracted investments in the sector. Large companies have tried to establish commercial farms in the western parts of the country, primarily for dairy production, along with some feedlots. In the west part of Turkey former textile factory owners are also investing in the livestock sector. These investments have increased demand for quality live cattle and livestock genetics in recent years

Animal husbandry sector plays an important role in nutrition, and has so many economic functions such as increasing national income and level of welfare, providing raw material for food, textile, leather, cosmetic and medicine sectors. At the same time, the sector has many other effective social functions such as decreasing and preventing migration, and decreasing registered and unregistered employment. In addition, the human being benefits from all the materials of the animals from their skin to their nails (Selli et al, 2010).

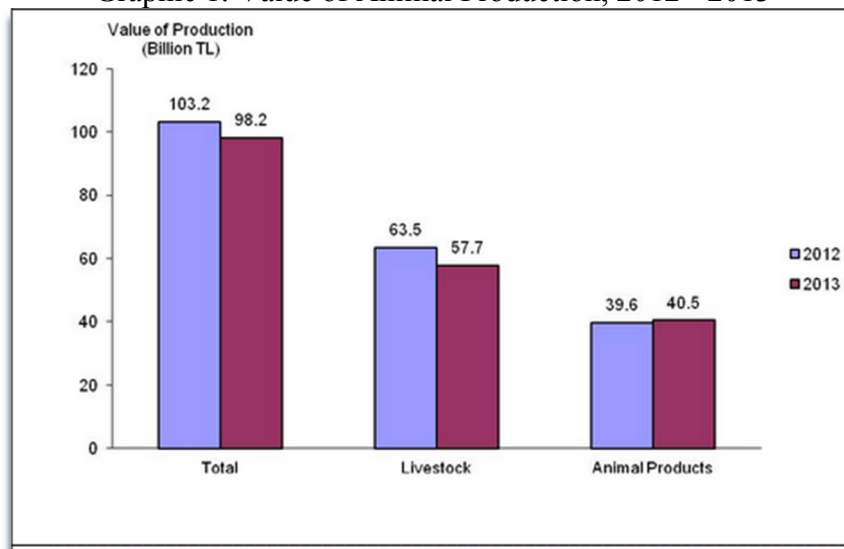
Products meat, milk, eggs, fibre and hides from the livestock subsector in Turkey contribute 30 percent of total agricultural gross domestic product (GDP). Some 96 percent of the country's 4 million agricultural enterprises are mixed crop–livestock farms. The average number of animals per farm is low (Gursoy, 2006).

The contribution of livestock production is 26,5% in the agricultural production value (of 89.782 million TL). And the greatest contribution to livestock production value comes from cow milk as much as 42 % of it.

Livestock value decreased by 9.2% respect to previous year and reached to 57.7 billion TL in 2013. Value of bovine animals decreased by 15.1% and became 36.7 billion TL whereas value of sheep and goats increased by 3.3% and reached to 17.3 billion TL. Value of poultry became 3.5 billion TL with 3.2% increase.

The value of animal products reached to 40.5 billion TL with 2.1% increase in 2013. Total production values of milk 18.3 billion TL, honey reached to 1.9 billion TL, hen eggs production value reached to 3.9 billion TL and red meat production value became 16.0 billion TL.

Graphic 1. Value of Animal Production, 2012 - 2013



Source: TSI (2013)

### Livestock Sector in Turkey

The livestock sector is still traditional and important sector in Turkey. The Turkish livestock sector is characterized by small-scale farms and domestic breeds, which are better able to adapt to the harsh climate of eastern Turkey but are less productive. In Turkey, the family owned farm is the basic unit of agricultural production, and family members provide most of the farm labor.

Livestock products are an important source of household income for many farmers and households in rural areas. For small farmers, livestock products such as cattle, sheep and goat generate income and ensure food security for these households because an important amount of their incomes comes from the sales of animal and milk (Akbat and Boz, 2005).

### Livestock Population in Turkey

Regarding the number of animals and level of yields per animal, it should be clearly stated that yields were rather low as compared to the developed countries.

Turkey take place in the first place in terms of the bees, chickens and goats presence of among EU (28) countries, while presence of cattle, buffalo and sheep ranks second.

Table 1. Trends in livestock numbers in Turkey (2000-2013)

Years	Cattle	Buffalo	Sheep	Goat	Poultry	Beehives
2000	10.761.000	146.000	28.492.000	7.201.000	258.168.320	4.267.123
2005	10.526.440	104.965	25.304.325	6.517.464	317.497.114	4.590.013
2010	11.369.800	84.726	23.089.691	6.293.233	234.918.385	5.602.669
2013	14.415.257	117.591	29.284.247	9.225.548	266.153.454	6.641.348
Change (%)	33.96	-19.45	2,78	28,11	3,09	55,64

Source: TSI (2013)

### Livestock Products in Turkey

Table 2. Trends in Livestock products in Turkey (tonnes)

Product	2000	2005	2010	2013	Change, %
<i>Red Meat</i>					
Beef	354636	321681	618584	869292	142,3
Buffalo*	4 047	1 577	3 387	1.736*	-57.1
Lamb/Mutton	111 139	73 743	135 687	102 943	-7,3
Goat	21395	12390	23060	23554	-55,6
<i>White Meat</i>					
Poultry	643 457	936 697	1 444 059	1 758 363	171,2
Total Meat	662 731	979 406	1 476 025	1 797 990	134,8
Hen Eggs	13 508 586	12 052 455	11 840 396	16 496 751	22.0
Honey	61091	82336	81115	94694	54,8
<i>Milk</i>					
Cow	8732041	10026202	12418544	16655009	91.0
Sheep	774 380	789 878	816 832	1 101 013	42,1
Goat	220211	253759	272811	415743	88,7
Buffalo	67 330	38 058	35 487	51 947	-22,8
Total Milk	9793962	11107897	13543674	18223712	86.0

Source: TSI (2013)

\* TSI, 2012 Stst.

Livestock products between the years 2000 and 2013 was shown in Table 2. According to the data, buffalo, lamb/mutton and goat meat quantity decreased by -57.1%, -7,3 and -55,6 respectively while beef meat increase by 142,3% with respect to previous 2000 year.

Additionally, the white meat (poultry) increased by 171,2 % between the mentioned years. Total meat quantity increased by 134,8 and reached to 2.793.000 tonnes approximetly. Hen eggs imroved by 22% and honey 54,8 % as well. The milk quantity except buffalo milk increased by 86% totally.

**Comparing of the Turkey's Livestock Production with EU (28) Countries**

Table 3. Livestock production and changes of EU28 and Turkey (2000 production=100)

Livestock Products	2000 1000 t	2005	2010	2013	2013 1000 t
	<b>*EU 28</b>				
Cattle meat	8.516.634	95,5	98,4	93,6	7.970.638
Buffalo meat	1.767	365,5	380,2	1367,2	24.158
Chicken Meat	8.144.929	108,2	122,6	129,7	10.567.149
Total Milk	156.155.395	99,2	98,2	99,8	155.919.234
Hen Eggs	6.711.057	100,2	101,7	99,7	6.689.713
Goat Meat	94.158	105,0	102,4	92,9	87.495
Goat Milk	1.982.607	104,7	100,4	97,2	1.927.712
Honey	168.899	118,6	121,0	113,2	191.119
Lamb /Mutton Meat	1.202.214	88,1	74,2	73,2	880.379
Swine Meat	21.723.966	100,3	105,7	105,1	22.842.351
Sheep Milk	2.705.480	101,8	107,8	103,3	2.795.315
Turkey Meat	1.961.525	93,7	88,8	90,0	1.765.151
Wool	197.143	94,9	95,9	97,6	192.483
<b>**TURKEY</b>					
Cattle Meat	354.636	90,7	174,4	245,1	869.292
Buffalo Meat***	4.047	39,0	83,7	8,3	1.736*
Chicken Meat	643.457	145,6	224,4	273,3	1.758.363
Total Milk	9.793.962	113,4	138,3	186,1	18.223.712
Hen Eggs	13.508.586	89,2	87,7	122,1	16.496.751
Goat Meat	21.395	57,9	107,8	110,1	23.554
Goat Milk	220.211	115,2	123,9	188,8	415.743
Honey	61.091	134,8	132,8	155,0	94.694
Lamb/Mutton Meat	111.139	66,4	122,1	92,6	102.943
Sheep Milk	774.380	102,0	105,5	142,2	1.101.013
Turkey Meat	19.274	221,6	165,8	205,6	39.627
Wool	43.140	107,0	99,3	127,0	54.784

Source : \*AB (28) FAO Statistics (2012), \*\* TURKEY, TSI (2013) \*\*\* (TSI, 2012)

EU(28) and Turkey's main animal products in terms of value of production value was given in Table 3. As can be seen in mentioned table; beef, goat meat, sheep and lamb, turkey meat and wool production, with the exception of any product or group of products for the EU production quantity is not below in terms of 2000 values. However, in Turkey the situation is quite different. In by the year 2013, many production values are above the production in 2000, while 92% in buffalo meat has seen a decrease.

The major livestock products in Turkey consist of cow milk, broiler meat, eggs, beef and veal, lamb, mutton and goat meat. Based on religious and cultural preferences the demand of pig meat is negligible in Turkey.

Under the baseline, Turkish beef, sheep meat and eggs are significantly above the respective EU prices due to the high levels of tariff and non-tariff protection provided to Turkish livestock farmers. In contrast, Turkish broiler prices are projected to remain below the EU prices for the projection period (Leeuwen et al, 2011).

### Conclusion

In spite of Turkey is in the first place in terms of the the animal presence among EU (28) countries, productivity per animal is low. It is well known that Turkey's shortcomings in animal production can be improve by using the country's potential already exist. Turkey need to improve its own animal production for both better nutrition of the people living in country and the country wealth and prosperity (Tatar, 2013).

EU-related studies at least have the ability to agree on what can be done. However, those proposed by the EU to Turkey as the only real orders and not to regard it should be an understanding .

### References

- Akbay, C., Boz, I. 2005. Turkey's livestock sector: Production, consumption and policies, Livestock Research for Development, Volume 17. Number 9.
- Anonymus, 2013. Turkish Statistical Institute.
- Anonymus, 2013. Food and Agriculture Organization of The United Nations.
- Gifford, R and Serttaş,S. 2010. 2010 Turkey Livestock Products Report, Ankara
- Gursoy, O. 2006. Characterizing and improving the traditional goat production system on the highlands of Eastern Mediterranean region of Turkey. In J.M.C. Ramalho Ribeiro, A.E.M. Horta, C. Mosconi, A. Rosati, eds., Animal products from the Mediterranean area. EAAP Publication No. 119, Santarém, Portugal. 113–123.
- Leeuwen, M.V., Salamon, P., Fellmann,T., Koç, A., Bölük, G., Tabeau, A., Esposti, R., Bonfiglio, A., Lobianco, A and Hanrahan, K. 2011. Potential Impacts On Agricultural Commodity Markets of An EU Enlargement to Turkey, Joint Research Centre, Spain.
- Selli, F., Eraslan, I.H., Chowdhury, D., Sukumar,A.2010 International Competitiveness: Analysis of Turkish Animal Husbandry: An Empirical Study in GAP Region, Enterprise Risk Management ISSN 1937-7916 2010, Vol. 1, No. 1: E6
- Tatar, A. M., 2013. Türkiye ve AB’de Hayvancılık. T.C. Dicle Üniversitesi Diyarbakır Yerüstü Kaynakları 1, Tarım ve Hayvancılık. Sf:343-355.