Turkish Breeding Situation and What Will Be Development Plans For The Beef Production?

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1-3 October, 2013
Clermont -Ferrand, France
- Turkey is located in the eastern Mediterranean and a bridge between the continents of Europe and Asia.
- Total land area is 785.347 km\(^2\)
- Population is estimated as 75.6 million
- Turkey is mainly divided into seven regions as you see below picture.
Livestock population of Turkey

» **Cattle**: 13.9 million head

» **Water buffalo**: 107 thousand head

» **Sheep**: 27.4 million head

» **Goat**: 8.3 million head

» **Poultry**: 253 million number

**Cattle, Sheep & Goat Population in Turkey**

- **Cattle**
- **Sheep**
- **Goat**

Population (head)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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</thead>
<tbody>
<tr>
<td>1991</td>
<td>40,000,000</td>
</tr>
<tr>
<td>1995</td>
<td>35,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>30,000,000</td>
</tr>
<tr>
<td>2005</td>
<td>25,000,000</td>
</tr>
<tr>
<td>2006</td>
<td>24,000,000</td>
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<tr>
<td>2007</td>
<td>23,000,000</td>
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<tr>
<td>2008</td>
<td>22,000,000</td>
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<tr>
<td>2009</td>
<td>21,000,000</td>
</tr>
<tr>
<td>2010</td>
<td>20,000,000</td>
</tr>
<tr>
<td>2011</td>
<td>19,000,000</td>
</tr>
<tr>
<td>2012</td>
<td>20,000,000</td>
</tr>
</tbody>
</table>

Population (head)
Meat Production of Turkey

Year | Sheep | Goat | Cattle | W.Buffalo
--- | --- | --- | --- | ---
1991 | 120000 | 20000 | 300000 | 40000
1992 | 130000 | 21000 | 310000 | 41000
1993 | 140000 | 22000 | 320000 | 42000
1994 | 150000 | 23000 | 330000 | 43000
1995 | 160000 | 24000 | 340000 | 44000
1996 | 170000 | 25000 | 350000 | 45000
1997 | 180000 | 26000 | 360000 | 46000
1998 | 190000 | 27000 | 370000 | 47000
1999 | 200000 | 28000 | 380000 | 48000
2000 | 210000 | 29000 | 390000 | 49000
2001 | 220000 | 30000 | 400000 | 50000
2002 | 230000 | 31000 | 410000 | 51000
2003 | 240000 | 32000 | 420000 | 52000
2004 | 250000 | 33000 | 430000 | 53000
2005 | 260000 | 34000 | 440000 | 54000
2006 | 270000 | 35000 | 450000 | 55000
2007 | 280000 | 36000 | 460000 | 56000
2008 | 290000 | 37000 | 470000 | 57000
2009 | 300000 | 38000 | 480000 | 58000
2010 | 310000 | 39000 | 490000 | 59000
2011 | 320000 | 40000 | 500000 | 60000
2012 | 330000 | 41000 | 510000 | 61000
Turkey livestock breeds

Sheep and Goat

Kivircik

Sakiz

Herik

Norduz

Karagul

Hemsin

Daglic

Ivesi

Angora

Kilis

Morkaraman

Kangal

Honamlı

Norduz

Akkaraman

Karayaka
Turkey livestock breeds

Cattle

- Anatolian Grey
- Native Black
- South Anatolian Red (Kilis)
- Southern Yellow
- Zavot
- East Anatolian Red
- Anatolian Water Buffalo
Popular Dairy Breeds Imported

- Holstein Fresian
- Brown Swiss
- Simental
- Jersey
Imported animals come from:

- USA,
- Hungary,
- Italy,
- Netherland,
- Germany,
- Denmark,
- Austria,
- Chech Republic,
- Esthonia,
- Slovakia,
- Lithuania,
- Uruguay,
- Australia
Popular Beef Bull semen imported

Angus x Holstein

Piedmont x Holstein

Charolais x Holstein
Turkgeldi, sales lot (imported slaughter animals)
Turkgeldi, delivering organization
Sample of Charolais crosses from Trakia region farms

Sample of MontbeliardxHolstein cross from Agean region farms
Livestock Organization in Turkey

Turkey has two important organization for livestock production.

For sheep and goat production:
Sheep and Goat Breeder Association of Turkey (SGBAT):
- SGBAT was founded in 2006
- SGBAT is working;
- 80 provinces,
- 171 thousands members,
- 18.7 million registered sheep and goats.
Second important organization is Cattle Breeder Association of Turkey (CBAT)

In Turkey, record keeping activities that will make a contribution towards pedigree have started with the projects (ANAFI-GTZ) executed jointly with Italian and German governments.

Cattle Breeders’ Associations have begun to be established starting from the year 1995.
Livestock Organization in Turkey

CBAT is working;
In Turkey, the National Improvement Program for cattle is being executed by CBAT.

Under the said program, CBAT and the Agricultural Production and Development General Directorate of the Ministry of Food Agriculture and Livestock (MFAL) are working jointly in 3 separate projects which are:

- Pre-Herdbook Project
- Pedigree Project
- Progeny Testing Project

CBAT is working on two main pure breeds;

Brown Swiss, Holstein Friesian
Livestock Organization in Turkey

The aim of the National Improvement Program is to obtain, and disseminate in the population, a genotype which:

- is strongly-built and healthy, has the body capacity to provide the high yield expected,
- can provide 7000 kg milk yield with 4% fat in lactation (in 305 days),
- is suitable for semen collection with machine and whose semen can be collected easily,
- has feet and claws that will enable the animal to move easily,
- has a high-capacity udder.

• CBAT has 161,000 registered members for breeding programme,
• 2 million dairy cattle has under pedigree project and totally 8.5 million animal were registered in CBAT
Animal Registration System

CBAT is Responsible Herdbook Activities with MFAL

- Dairy farm identification
- Animal identification
- Cow milk production information
- Type treats classification
- Calving information
- Artificial insemination information
- Animal movement information
- Supervision and consulting
- Estimation for breeding values
- Pedigree arrangements, policies and cow shows.
Eartag Standard in Turkey
Resmi Damızlık Belgesi
official pedigree certificate
@ ISLAMH DATABASE
Central Database (ANKARA)

Regional Office in Province

Farm with Internet

Farm without Internet

Provincial Office

mobile system (Ankara province)
LAND REGISTRATION DATABASE (MFAL)

AGRICULTURAL INSURANCE DATABASE (TARSIM)

MINISTRY OF FOOD AGRICULTURE AND LIVESTOCK – (MFAL)

IDENTIFICATION AND REGISTRATION DATABASE FOR CATTLE I&R (MFAL)

CBAT E-ISLAH DATABASE
Dairy Farm and Animal Records

TECHNOLOGY

MOBILE HERD BOOK

Calving, A.I., Movement, Milk Yield, Type, Health etc.

E-Islah Database (CBAT)

I&R Database (MARA)

New Born Calves
Different Milk Measurement samples
Livestock production and very popular in Turkey last 20 years.

Especaill private sector investment getting increased fastly and modern farms numbers are increasing for cattle and small ruminant sector.

Depend on animal farm increasing modern slaughterhouse and meat sector are developing and very important sector in Turkey.

On the other hand we can see some local breeds and extensive system production systems in different region of Turkey.
» Turkey Livestock Production Systems
» Traditionals systems
Tied barns
» Turkey Livestock Production Systems
» Intensive systems
Modern cattle farms
High technology and consultancy services
Hygiene and animal welfare is more important.
Modern Dairy cattle sector support beef production
» Turkey Livestock Production Systems

» Intensive systems
Newborn dairy calf is the major material of Beef sector
Turkish meat sector prefers beef cattle breeds
Improving genetic capacity of local breeds with beef bull semen is supporting by Ministry of Agriculture.
New beef farms is establishing
Turkey Livestock Production Systems

Intensive systems

- 6000 dairy cattle capacity
- Modern semi open barns
- Automated calves feeding barns
Turkey Livestock Production Systems

Intensive systems
Modern Meat Processing systems
Semi Modern Meat Processing & Slaughterhouses
ESK: A state-owned company (official authority) and intervention agency which is responsible to keep the domestic prices stable in the domestic market.

1.139 total staff

9 slaughterhouses operated by ESK:

- Ankara, Adana, Ağrı, Bingöl, Diyarbakır, Van, Sakarya, Erzurum, Yozgat

Slaughtering capacity:
- 150,000 heads/year bovines
- 120,000 heads/year sheep and goat
- 8,800 tons/year poultry

Retail Chain: 81 meat stores all over Turkey (most of them being franchisee)

- 98,000 heads bovine purchase (20,000 tons beef prod’n and sales)
- 17,000 heads sheep and goat purchase (356 tons meat prod’n and sales)
- 3 million poultry purchase (6,800 tons poultry meat prod’n and sales)

PS: ESK will be active in the Turkish milk market as an intervention agency, once the secondary legislation is made ready.
Traditional Systems For Small Ruminants
Sheep production is important and rapidly improving.
The breeders and investors is installing modern buildings and want new Sheep&Goat breeds.
Modern goat farms are installing
Turkey Import Situation for Livestock Production

For meeting to consumer meat demand and fulfill the need of meat industry Turkey has importaed live animal and carcaass meat time to time.

Turkey some live animal import situation was given below table.

Import animals come from ; USA, Hungary, Italy, Netherland, Germany, Denmark, Austria, Chech Republic, esthonia, Slovakia, lithuania, Uruguay, Australia
## Turkey Imported Breeds and Numbers

<table>
<thead>
<tr>
<th>Year</th>
<th>Angus</th>
<th>Brown Swiss</th>
<th>Holstein Friesian</th>
<th>Hereford</th>
<th>Simmental</th>
<th>European Red</th>
<th>Limousin</th>
<th>Jersey</th>
<th>Total</th>
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<td></td>
<td></td>
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<td>2007</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>2009</td>
<td></td>
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<td>2.149</td>
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<tr>
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<td>2.838</td>
<td>60</td>
<td>20.550</td>
<td>262</td>
<td>1.304</td>
<td></td>
<td></td>
<td></td>
<td>25.014</td>
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<td>2011</td>
<td>3.024</td>
<td>2.344</td>
<td>66.356</td>
<td>386</td>
<td>16.088</td>
<td>252</td>
<td>171</td>
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<td>88.621</td>
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<td>2012</td>
<td>1.876</td>
<td>35.669</td>
<td>137</td>
<td>10.041</td>
<td>182</td>
<td>166</td>
<td>238</td>
<td></td>
<td>48.309</td>
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<tr>
<td>2013</td>
<td>290</td>
<td>12.758</td>
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<td>3.611</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.659</td>
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<tr>
<td>Total</td>
<td>7.215</td>
<td>4.570</td>
<td>150.822</td>
<td>785</td>
<td>31.188</td>
<td>434</td>
<td>166</td>
<td>409</td>
<td>195.589</td>
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Turkey Strategy
Milk and Meat demand forecast for 2011–2018 of Turkey (000 ton)

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle Milk</th>
<th>Cattle Meat</th>
<th>Sheep Milk</th>
<th>Sheep Meat</th>
<th>Goat Milk</th>
<th>Goat Meat</th>
<th>Water Buffalo Milk</th>
<th>Water Buffalo Meat</th>
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<tbody>
<tr>
<td>2011</td>
<td>13.801</td>
<td>1046</td>
<td>896</td>
<td>232</td>
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<td>2012</td>
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<td>1081</td>
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<td>240</td>
<td>332</td>
<td>45</td>
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<td>1038</td>
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<td>49</td>
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<td>2017</td>
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<td>1116</td>
<td>289</td>
<td>399</td>
<td>51</td>
<td>48</td>
<td>5.3</td>
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<tr>
<td>2018</td>
<td>18.191</td>
<td>1314</td>
<td>1157</td>
<td>299</td>
<td>413</td>
<td>53</td>
<td>49</td>
<td>5.4</td>
</tr>
</tbody>
</table>
Scenerio 1. Turkey Development plan for 2011-2018

- 20.5 kg red meat consumption/per person for 2018
- 2.8 kg /per person red meat production gap for 2018
- Red meat produce will not meet to consumer demand in 2018
Scenerio 2. Turkey Development plan for 2011-2018

- Fixed breeds and without import
- Total cattle 16.3 million head Sheep: 32.3 million head and Goat: 9.4 million head
Turkey Livestock Production Perspectives

- For improving of Turkey Livestock production 10th Development plan was prepared by Turkish Government.
  
- Tracking and control system should be improved.
- Livestock policies should be developed to increase animal production.
- Animal registration systems and databases should be enhancement.
- Animal health services will be furthered.
- Animal production input costs should be decreased.
- Production and marketing systems should be improved in Livestock production.
- New financing cost should be developed.
- Animal organization infrastructure and responsibilities should be strengthened.
- Effective training systems should be set up for livestock breeders.
Finally

- Cooperation is the most effective way to improve quality of work in future animal production.

THANK YOU FOR YOUR ATTENTION