

# CATTLE BREEDING IN TURKEY



**Prof. Dr. Selahattin KUMLU**  
Akdeniz Üniversitesi Ziraat  
Fakültesi  
Zootekni Bölümü Antalya

# Goal

---



The goal of this presentation is to evaluate the history and present situation of cattle breeding in Turkey.

# History

---

Efforts to improve cattle production in Turkey could be examined in three periods:

From 1923 to 1970: Activities only through state organizations; private sector and breeders are inactive

From 1970 to 1985: Activities mainly through state organizations, private sector and breeders are partially active; heifer importations and establishment of new private nucleus herds.

From 1985 to present: Breeding activities mainly through cattle breeder's organization and private sector with support and subsidy of state. Intensive importation of heifer (1988-1996), start of National Cattle Breeding Program, EHRC and ICAR memberships, etc.

# History

---

Active participations of cattle breeders to breeding activities have started in 1995.

Main reasons of actual problems of Turkish cattle breeding are the delayed interest and participation of breeders to breeding activities.

# Actual Situation

- Cattle Breeders' Association of Turkey (CBAT) has built up a valuable data base for national genetic evaluation system.
- In 14 years, 78 % of all cows are registered .
- Rate of herdbook cows in total cows is 23 %.

Registered cattle in data base of CBAT			
	Herd book (head)	Pre herd book (head)	Total (head)
Cow	938.996	2.217.529	3.156.525
Heifer	432.089	665.552	1.097.641
Total	2.158.602	3.749.328	5.907.930

# Actual Situation

- The number and rate of Holstein and their crosses are 2.582 thousand heads and %59 respectively.

Number and share of recorded cattle per breed		
Breeds	head	%
Holstein and crosses	2.582.005	58,7
Brown Swiss and crosses	787.924	17,9
Simmental and crosses	423.947	9,6
Jersey and crosses	102.731	2,3
Other culture breeds and crosses	14.804	0,3
Native breeds	488.564	11,1
Total	4.399.975	100,0



# Actual Situation

---

## Breeding goals of Turkish Holstein

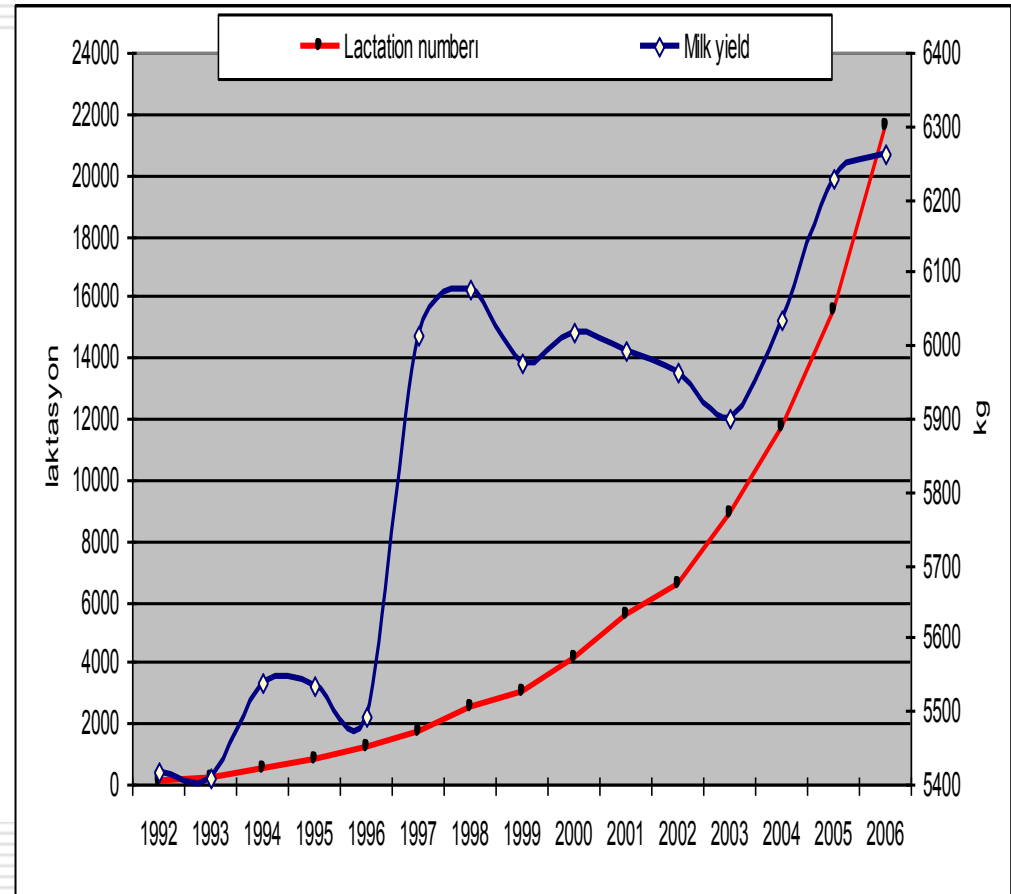
- Profitable and productive dairy-type cows
- High production, health and longevity
- Genetic production potential: 7.000 kg milk at 4,0% fat
- High feed intake capacity, solid health, and good fertility
- Stature: 142-146cm, body weight: 750kg
- Sound and sturdy feet & legs
- Healthy and easy-to-milk udders that enable high daily production for many lactations and meet the demands of modern milking systems with regards to the quality and functionality

CBAT has been able to record only the milk yield until now.

# Actual Situation

Between 1992-2006;

- Counts of usable lactation records have increased (from 72 to 22.000 records);
- The milk yield has increased 850 kgs per lactation (from 5.400 kg to 6.250 kg);
- Annual increase has been nearly 60 kg milk.





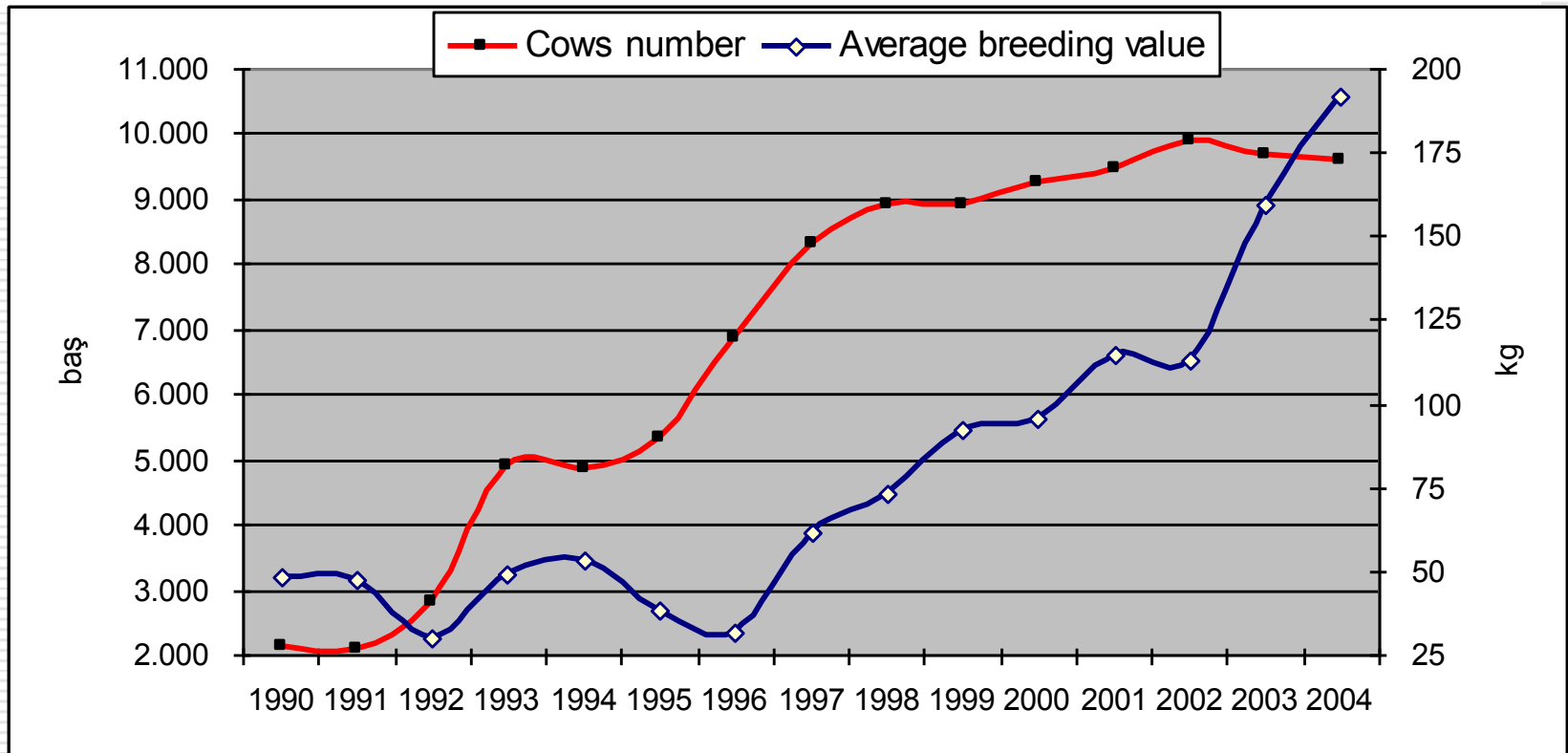
# Actual Situation

---

- Phenotypic and genetic parameters and breeding values are estimated once a year.
- Single trait repeatability model is used. Test day model is in test phase.
- Data checking is done before evaluations
- Data quality is low and data loss is high. Only 10% of recorded cows could be used for genetic evaluation.

# Actual Situation

Genetic trend; between 1996-2004, 20 kg milk increase per year



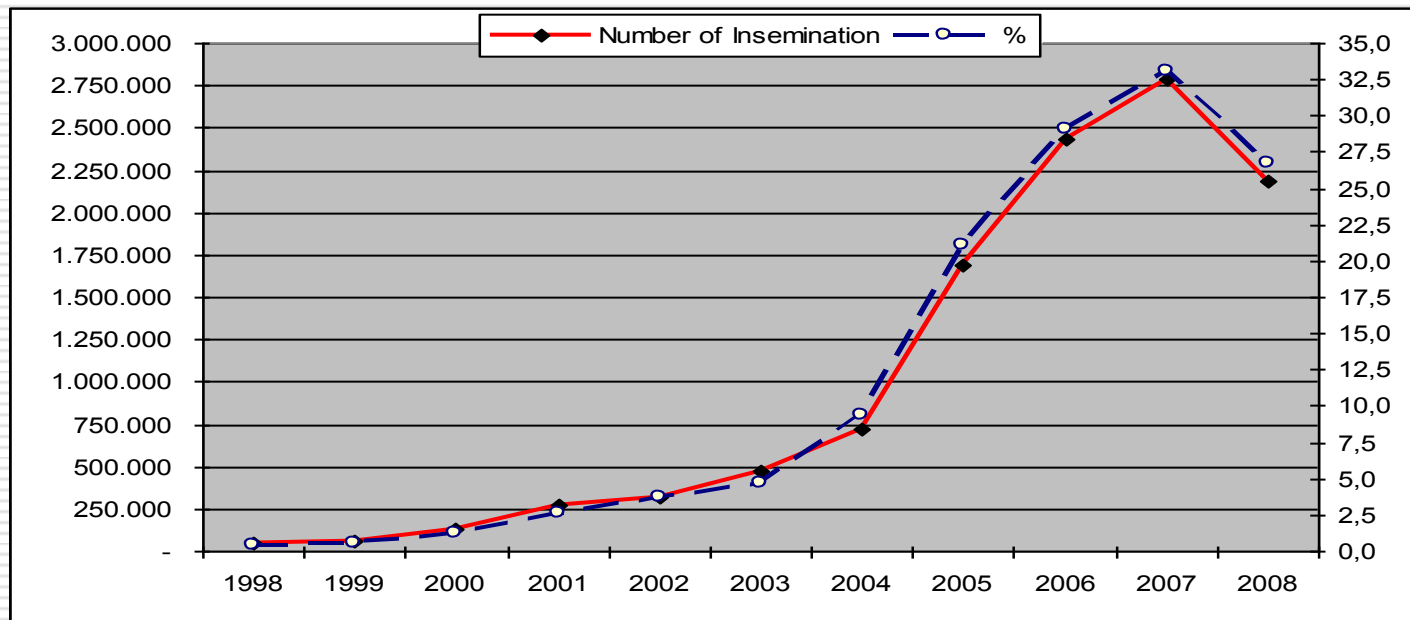
# Actual Situation

- Reason of low data quality and data loss is the big number of small farms/herds
- Average cow and cattle number of herds are 10 and 22 heads respectively.
- The number of herd book farms is 100.418

Kind of farm	Number of farms	Cows per farm	Cattle per farm
Private	79.408	10,2	23,7
Company	461	119,1	263,6
Public	33	250,9	537,5
Cooperative member	20.516	3,2	6,9
Total	100.418	9,4	21,5

# Actual Situation

- Between 1998-2008, the number of AI has increased 65 times.
- The rate of inseminated cows is still low (only %30)
- Subsidies of the government may result in increase or decrease of the number of AI.



# Conclusion

---

- With regards to the cattle population, Turkey is an important country. The population is approximately 10 million heads.
- Main reason for actual problems of turkish cattle breeding is the delayed participation of breeders to breeding activities.
- CBAT plays an important role in providing the participation of breeders
- CBAT has created a valuable data base for national cattle breeding program.
- The number of member provinces and breeders have increased steadily during the past few years.

# Conclusion

---

- The data base and national genetic evaluation system of CBAT have to be improved, because,
  - the quality of data is low.
  - only the data of milk quantity is collected.
  - feedback to breeders isn't sufficient.
  - the number of usage of the semen of test bulls (AI) are too low.
  - etc.



# Conclusion

---

- If taken into consideration that the establishment of provincial associations have just been 14 years while it has only been 11 years since CBAT has been founded, it is not realistic to expect from a breeders association to be more successful in a big country like Turkey.
- Taking over the presidency of EHRC for a period of 2 years starting in 2007 has been a real motivation and encouragement for CBAT and the Turkish breeders to work more in compliance with the international standards and to be more successful.
- For CBAT, as the EHRC representative of Turkey which has a remarkable potential for cattle breeding, to be more active and successful, and to cooperate better with the other EHRC members it should be supported more than it has been until now.