National Workshop on Intellectual Property, Genetic Resources and Traditional Knowledge:
20th of November 2014, TPE Ankara

Status and legal framework in Turkey

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National Coordinator for AnGR, GDAR
Content

• National Focal Point of AnGR
  • Background
  • Institutional infrastructure
• What is doing now in AnGR management?
  • Characterization, inventory, awareness
  • Conservation
  • Sustainable utilization
  • Policies, institutions and capacity building
• Future management of AnGR
National Focal Point of AnGR

REPUBLIC OF TURKEY
MINISTRY OF FOOD AGRICULTURE
AND LIVESTOCK
About 40 animal species have been domesticated for use in food production and agriculture.

Five species; cattle, sheep, chickens, goats and pigs dominate in terms of numbers and distribution.

The composition of livestock breed has never been static. Over time, breeds emerged, were crossed to develop new breeds and disappeared.
National Focal Point
A. Oya AKIN - Dr. Mesut YILDIRIR - Nermin AKSÜMER
Institutional structure of AnGR Focal Point in Turkey

National Consultative Committee for AnGR Conservation

Ministry of Food, Agriculture and Livestock (MFAL)
General Directorate of Agricultural Research and Policy (GDAR)
Department of Livestock and Fisheries Research

National Focal Point for AnGR

Advisory Committees
Ex situ, in vivo conservation
Cryo conservation
In situ conservation
Sustainable utilisation
Access and benefit sharing
Inventory

Breed Registration Committee
Breed Registration Subcommittees

Stakeholders
Breeders organisations
Breeders
Universities
NGO
Local administrations
Related public authority
Research agency
Private sector
Cooperatives

Research institutions
Background story of NFP

- Preparation of the conservation project with national consultants, 1995
- Research institutes have been included in *ex situ* conservation project, 1995-1997-2002
- Appointment of national coordinator, 2001
- Establishment of 2 national consultative committees, 2002
- Establishment of 8 breed registration subcommittees, 2004
- Establishment of AnGR Research Working Group, 2012
- Establishment of 6 national advisory committees, 2013
What is doing now in AnGR management?

- Characterization, inventory, awareness, conservation, sustainable utilisation
The projects on characterization of AnGR in morphologic, physiologic and genetic level are supported by GDAR
TÜRKHAYGEN-I project for pre molecular characterization
Infrastructures of the research institutes were strengthened
The need and possible implementation ways of a comprehensive breed inventory study was brought up with relevant stakeholders on various platforms.

The breed catalog was prepared in 2009 to help survey takers to classify breeds and crossbreds more accurately. The English version of the catalogue was published in 2011.

Descriptive material for breed inventory have been prepared.
Raising awareness; the documentary films, tv programs and series stamps
Conservation projects

**Ex situ in vivo conservation:** project was started in 1995, today 4 sheep, 4 cattle, 1 water buffalo, 1 goat, 1 bee and 2 chicken breeds and 3 silkworm lines in 6 institutes of GDAR.

**In situ conservation:** was started in 2005, subsidies have been given for registered 6 cattle, 1 water buffalo, 10 sheep, 9 goat and 1 bee breeds.

**Ex situ in vitro:** Cryo-conservation, two gene banks were established, characterization, capacity building, biotechnology.
Sustainable utilization

- Subsidies have been given for live animals and their products by MFAL
- Sheep and goat breeders' organization have been enlarged and strengthened
- The Animal Improvement Program on Breeders' Condition has been started in 2006
Legislation on AnGR
Law on Veterinary Services, Plant Health, Food and Feed, 2010

Regulation on utilization and export of the native domestic AnGR, 2012

Decree on Livestock Production Subsidies (revizes each year)

Animal Genetic Resources Conservation and Sustainable Utilization Regulation, 2002 and revized 2012

Animal Breed Registration Regulation, 2002 and revized 2012
Regulation on utilization and export of the native domestic AnGR:

The aim of the regulation is to embody the procedures and principles of the necessary actions and processes for utilization and export of the FAnGR. All actions related to FAnGR are conducted by the Ministry of Food Agriculture and Livestock and FAnGR are not allowed to export for any reasons without permission of the Ministry.
Regulation on utilization and export of the native domestic AnGR:
Foreign national legal entities should get permission from the GDAR for the utilization of FAnGR for their research activities in Turkey. Also Turkish researchers should get permission from GDAR for the utilization of FAnGR for their research activities abroad. In this context, unregistered FAnGR can not be export except for the research aim. If there is no sufficient information about a certain genotype then exporting is not allowed of the genotype despite the registration.
Regulation on utilization and export of the native domestic AnGR:
The lists of the impermissible and subject to pre-permission of FAnGR
determined by the National Committee and announced by the Ministry of
Economy via statement published in TR Official Gazette. With in this scope,
endangered and/or under the risk of endangerment FAnGR are not allowed to
export with any commercial aim. Moreover, FAnGR which will be used for
scientific researches by foreign national legal entities are not allowed to export
without necessary document such as application form, permission form and
MTA (Material Transfer Agreement). In case of the stocks are limited, requests
for the exportation of genetic material from the Gene Banks are not accepted.
Breed registration

- Native Black Cattle
- Anatolian Gray Cattle
- Anatolian Water Buffalo
- South Anatolian Red (Kilis)
- East Anatolian Red
- Native Southern Yellow
- Zavot
Breed registration

- Sakız (Chios)
- Hemşin
- Mor Karaman
- Ankara Keçisi
- Çine Çaparı
- Norduz
- İvesi
- Honamlı Keçisi
- Gökçeada (Imros)
- Dağlıç
- Akkaraman
- Kilis Keçisi
- Kırırcık
- Güney Karaman
-TÜJ
- Kıl Keçisi
- Herik
- Karagül
- Norduz Keçisi
Breed registration

Å 2004: Anatolian Black Cattle, South Anatolian Red Cattle, Native Southern Yellow Cattle, Turkish Grey Cattle, Eastern Anatolian Red Cattle; Anatolian Water Buffalo; Awassi Sheep, Sakiz Sheep, Imroz Sheep, Karacabey Merino Sheep, Daglic Sheep, Red Karaman Sheep, Tushin Sheep, Norduz Sheep; Angora Goat, Hair Goat, Norduz Goat; Angora Rabbit; local Silkworms (Bursa Beyazı, Bursa Alaca, Hatay Sarisi); Caucasian Bee.

Å 2005: Kivircik Sheep, White Karaman Sheep, Karayaka Sheep; Kilis Goat; Kangal Dog; Turkish Van Cat.

Å 2006: Malya Sheep; Akbash Dog.


Å 2008: Cine Capari Sheep, Angora Cat.


Å 2010: Polatli Sheep, Bafra Sheep, Bursa Roller Pigeon.

Å 2011: Trakya Makaracısı, Zağar

Å 2012: Hemşin, Kangal Akkaraman, Türkgeldi, Tahirova, Menemen Alabadem, Edremit Kelebek Güvercini

Å 2013: Karya, Akkeçi, Muğla Dalıcı Güvercini

Å 2014: Zavot, Güney Karaman, Hasmer, Hasak, Ramlıç
System

Breed Registration Committee

Registration Sub Committees

- Big ruminants
- Small ruminants
- Honey bee
- Silkworm
- Poultry
- Cat & Dog
- Pigeon

Working Groups on Breed Level
Breed registration

Animal Breed Registration Regulation, 2002 and revised 2012

Local and improved animal breed, type and lines of Turkey are registered by Animal Breed Registration Committee.
Breed registration

Animal Breed Registration Committee
Å holds annual meetings at the end of April,
Å Overviews prepared animal registration lists and approves or denies

**Animal Registration Form:**
- a list constituted on the base of species

**Animal Registration List:** Based on scientific data, a list including morphologic, physiologic, genetic and other characteristics related to animal breed to be registered
Animal Breed Registration Sub-Committees

- constituted on the basis of species; big ruminants, small ruminants, poultry, dog, cat, bee and silkworm.
- each sub-committee consists of experts with PhD degree and a consultant.
- arrange animal registration lists.
ANIMAL BREED REGISTRATION

Working Groups

• constitute on the basis of breeds
• consist of researchers from institutes of GDAR
• provide all scientific documents and record data in animal registration forms
Breeds of Turkey in EFABIS and DAD-IS network

- Data of 101 breeds have been recorded in DAD-IS since 2002.
- Population data are not available or given in approximate figures in EFABIS databases.
- There is no information for some breeds except their names.
- For some breed data still need to be recorded
Turkish Government in Strategic Priority Area 1 of Global Action Plan

- Taking urgent measures to complete the AnGR inventory,
- Consideration of geographical, climatic, socio-economic, cultural and breed diversity of regions while conducting animal breeding programs,
- Establishment or encouragement of breeders’ organizations and development of niche markets.
- Establishment of institutional responsibilities and infrastructure for monitoring trends in AnGR,
- Establish breed endangerment early warning/response systems,
Turkish Government in Strategic Priority Area 1 of Global Action Plan

- Establish a platform for the introduction of animal identification and performance recording systems
- Installation of EFABIS national node,
- Regional Collaboration;
  - cooperate and share experiences,
  - initiate, develop and implement regional projects.
Â 61 local animal breeds, types, lines and genotypes have been registered since 2004

Â European Farm Animal Biodiversity Information System (EFABIS)

Â GENBIS, national information system for AnGR has been establishing, genbis.tagem.gov.tr

<table>
<thead>
<tr>
<th>REGISTRATION LOCAL ANIMAL BREEDS, TYPES, LINES and LAYER HYBRIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Big Ruminant Breeds</strong></td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Native Black Gattos / Black Cows</td>
</tr>
<tr>
<td>South Australian Red / Goby-Anadolu Kemalci (Kilo)</td>
</tr>
<tr>
<td>Native Southern Yellow / Yorh-Güney Sarı</td>
</tr>
<tr>
<td>Anatolian Grey Gattos / Bošt</td>
</tr>
<tr>
<td>East Anatolian Red / Akça-Anadolu Kemalci</td>
</tr>
<tr>
<td>Arabian White Buffalo / Arastu Milpa</td>
</tr>
<tr>
<td>RED Karaman / Merinaova</td>
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</tbody>
</table>

| **Sheep Breeds**                                               |
| Name                                                                 |
| Karayaka / Karayotch                                         |
| White Karaman / Akçaköken                                    |
| Minkas / Mınya                                                |
| Yozgat / Yozgat                                              |
| Aksaray / Aksaray                                            |
| Sarıkoz / Sarıkoz                                            |
|                                          | Date and number of TR Official Gazette | Notification Number |
|                                          | 22/06/2004 and 205210                 | 2004/06             |
|                                          | 08/07/2003 and 262723                 | 2003/02             |
|                                          | 26/06/2004 and 205068                 | 2004/09             |
|                                          | 24/06/2004 and 205068                 | 2004/09             |
|                                          | 04/01/2007 and 267498                 | 2007/02             |
|                                          | 24/02/2009 and 271726                 | 2008/21             |
|                                          | 18/01/2010 and 270408                 | 2010/21             |

| **Goat Breeds**                                                |
| Name                                                                 |
| Arslan / Arslan                                              |
| Karaca / Karacán                                             |
| Yozgat / Yozgat                                              |
| Aksaray / Aksaray                                            |
| Sarıkoz / Sarıkoz                                            |
|                                          | Date and number of TR Official Gazette | Notification Number |
|                                          | 13/10/2004 and 256068                 | 2004/09             |
|                                          | 13/06/2004 and 256068                 | 2004/09             |
|                                          | 22/04/2008 and 205147                 | 2008/06             |

| **Poultry and Small Domestic Animals**                         |
| Name                                                                 |
| Gennos / Genvos                                              |
| Native Silakovan Lins / Silakovan Bovacs, Silakovan Haci-Sen    |
| Caucasus Hamay Ham / Yalıcan Alan                            |
| Angora Rabbit / Anarea Söğüt                               |
|                                          | Date and number of TR Official Gazette | Notification Number |
|                                          | 13/12/2004 and 256068                 | 2004/09             |
|                                          | 13/06/2004 and 256068                 | 2004/09             |
|                                          | 22/04/2004 and 205147                 | 2004/06             |
|                                          | 08/08/2006 and 262129                 | 2006/02             |
|                                          | 06/12/2008 and 270375                 | 2008/04             |
|                                          | 18/07/2010 and 27043                  | 2010/07             |
|                                          | 06/04/2011 and 280309                 | 2011/08             |
THANK YOU

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Research institutions of GDAR

- Lalahan CLRI
- Sheep RS
- East Anatolia ARI
- East Mediterranean ARI
- Bahri Dağ IARI
- Southeast Anatolia ARI
- Bursa Provincial Departments of MFAL
- Kafkas (Caucasian) Bee Gene Center
<table>
<thead>
<tr>
<th>Institution</th>
<th>Project leader</th>
<th>Project number</th>
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<tr>
<td>Lalahan CLRI</td>
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<td>Sheep RS</td>
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<td>East Anatolia ARI</td>
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<td>East Mediterranean ARI</td>
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<td>4</td>
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<td>Bahri Dağdaş IARI</td>
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<td>Southeast Anatolia ARI</td>
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<td>Bursa Provincial Departments of MFAL</td>
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<tr>
<td>Kafkas (Caucasian) Bee Gene Center</td>
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<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
<td><strong>33</strong></td>
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Advisory Committees

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*In situ* conservation  
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