

## ERFP Country report 2010 - 2011

**COUNTRY:** TURKEY reported by: A. Oya AKIN

#### **Strategic Priority Area 1:**

#### Characterization, Inventory and Monitoring of Trends and Associated Risks

The Project which aims to establish a computerized system for small ruminant identification is almost completed.

Morphological, physiological and molecular level characterization studies continued for conservation herds.

The documentary films of Native Black, Kilis and Grey Cattle, Ankara (Angora) and Kilis goat, Kivircik, Sakiz, Daglic and Gokceada sheep and Anatolian Buffalo breeds prepared with the close collaboration of Turkish Radio-Television Corporation and submitted to the public interest on the national TV channel.

English version of the Breed Catalogue which includes information and photos of local cattle, water buffalo, sheep, goat, chicken, rabbit, dog, cat and bee breeds, and silkworm lines has been prepared. These documentary films and the Breed Catalogue (Turkish version) are also considered an education materials for pilot breed inventory studies.

### Strategic Priority Area 2: Sustainable Use and Development

To encourage local farmers in community based conservation and improvement programs some incentives have been paid per animal. There are two types of subsidy, one for in situ conservation of local cattle, water buffalo, sheep and goat breeds, and the other for the improvement of sheep, goats and water buffalo in breeders' condition.

This year was the sixth year of that kind of subsidy and the payment has been very attractive for the local farmers especially farming in remote areas.

Overall Improvement Model mainly includes an open core flock and a categorical breeding system. Pure breeding and selection will be used in the extent of the project, which covers at least 6.300 head for each subproject. This will provide Top Elite Flock (TEF), Medium Elite Flock (MEF) and Base Flock (BF) constitution. TEF and MEF will be in the state institutions and selected breeders' enterprises respectively. Since there is no systematic recordings at the beginning of the project, selection of other breeders' flocks will be based on phenotypic criteria, breeders' feedback and age of animal. The subsidy program for the improvement projects cover 18 sheep 3 goat and 1 buffalo breeds.

# Strategic Priority Area 3: Conservation

(please give details for the most relevant institutions for national genebanks / cryopreservation in the table in Annex 1)

Ministry of Food, Agriculture and Livestock has giving strong emphasis on conservation and sustainable utilization of farm animal genetic resources. All conservation activities, either ex situ or in situ have conducted by General Directorates of Agriculture Research and Policy (GDAR).

\* Ex situ conservation activities:

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Due to the rapid decline of local breeds, in 1995 it was projected to conserve domestic cattle breeds by GDAR. Today, the project includes conservation of 4 sheep, 4 cattle, 1 water buffalo, 1 goat, 1 bee and 2 chicken breeds and 3 silkworm lines in the 6 research institutes of GDAR.

The cryo-conservation project which is named "Conservation and Pre-Molecular Identification of Some of the Native Domestic Animal Genetic Resources of Turkey-I" (TURKHAYGEN-I) started in March 2007. This project aims to establish gene banks to conserve national animal genetic resources, to characterize our local breeds, to build national researcher capacity in animal genetics and animal biotechnology and to combine and disseminate knowledge. TURKHAYGEN-I Project's live animal material almost completed and DNA isolation, semen and embryo freezing activities has been finished for most of the breeds.

\* In situ conservation activities:

In the frame of the community based conservation program some local breeds conserved in their original breeding areas;

In the frame of the programme some local breeds conserved in their original breeding areas;

Cattle; Native Black, Anatolian Grey, South Anatolian Red (Kilis), East Anatolian Red, Native Southern Yellow, Zavot

Buffalo; Anatolian Water Buffalo

Sheep; Kivircik, Sakiz, Karagul, Herik, Cine Capari, Hemsin, Norduz, Daglic

Goat; Angora Goat, Kilis, Norduz and Honamli

The conservation population sizes have been enhanced, thereby small ruminant and big ruminant populations is reached 1000 and 600 head per breed, respectivelly. Also conservation areas are duplicated in order to eliminate possible health, natural disaster or economic risks which may force the breeders giving up the breeding activities.

## **Strategic Priority Area 4:**

Policies, Institutions and Capacity-building

In recent years Turkey has been placing strong emphasis on management of farm animal genetic resources. Actually, almost all activities related conservation and sustainable utilization of the Farm Animal Genetic Resources is coordinated and supported financially and technically by the General Directorates of Agricultural Research and Policy (GDAR) on behalf of the Ministry of Food, Agriculture and Livestock.

- \* Two regular meetings of the National Consultative Committee for AnGR Conservation took place on October 2010 and April 2011 in Ankara.
- \* Programme evaluation meeting of AnGR Conservation Project was held on March 2011 in Antalya and subprojects were discussed.
- \* Participation to the 16th ERFP Workshop on 20-23 August 2010 in Crete.
- \* Participation to the 6th Session of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture on 24-26 November 2010 in Rome.

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- \* Participation to the Workshop on 'In vivo conservation of farm animal genetic resources' on 14-18 June 2011 in Wageningen.
- \* Participation to the 13th Regular Session of the Commission on Genetic Resources for Food and Agriculture on 18-22 July 2011, in Rome.

The National Strategy and Action Plan for AnGR preparation has been started. Preparatory meetings were organised to ouitline the NAP. Current information have been collected and some of the stakeholder's view have been gathered. On the other hand the FAO guideline's working tables have been translated.

In order to create interest on decion makers about 'Community Based Small Ruminant Improvement Projects', an introductory meeting will be held by GDAR.



## Annex 1: List of relevant national institutions for national Genebanks / Cryopreservation Experts

institution, address, e-mail, homepage, phone / fax	contact person / expert incl. e-mail	animal species	type of genetic material	remarks
General Directorates of Agricultural Research and	A. Oya AKIN	Cattle, sheep, goat,	Semen, embryo,	
Policy	oakin@tagem.gov.tr	chicken	tissue, cell, DNA	