

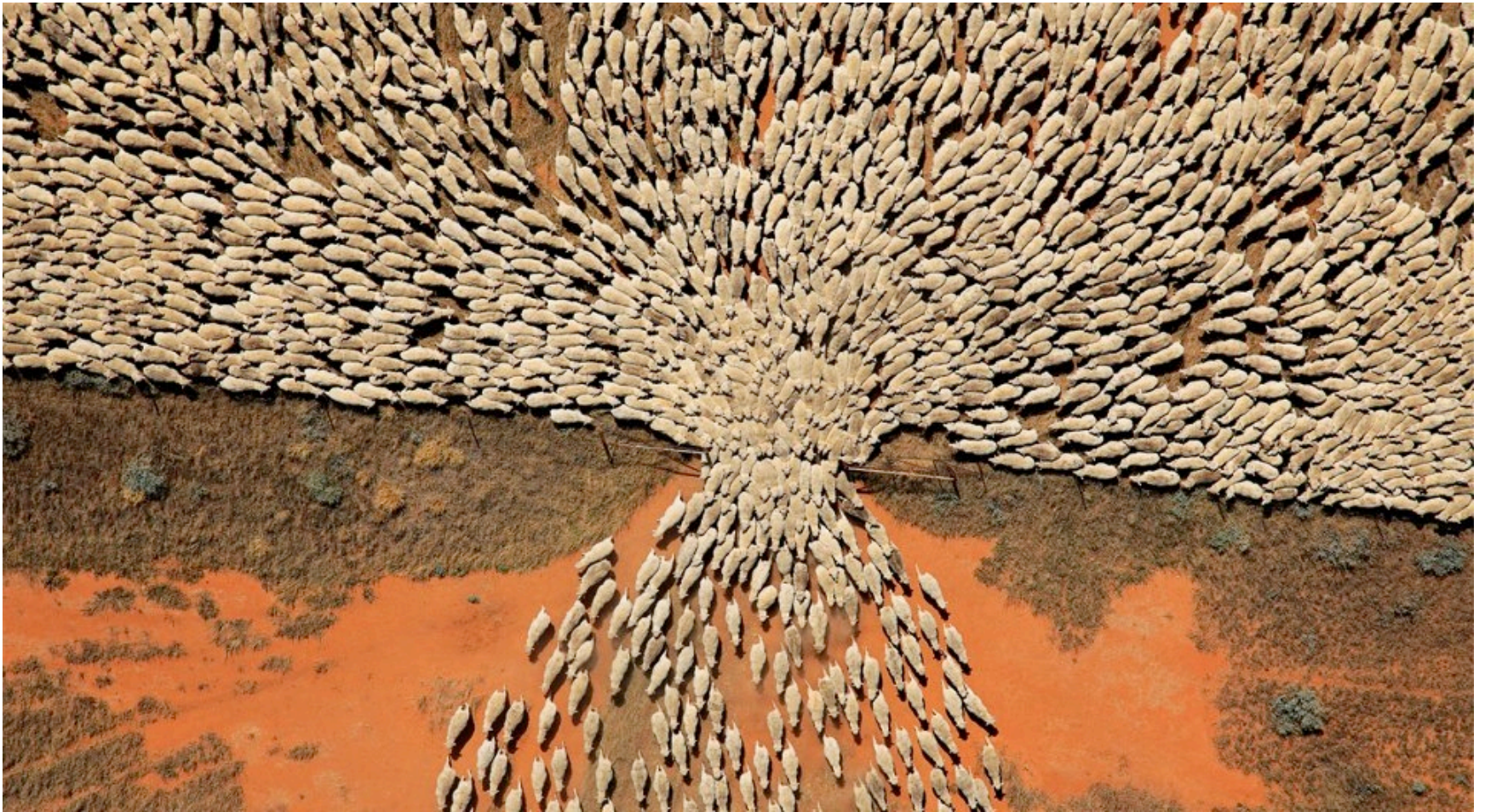


Sustainable rural development strategies in Mediterranean regions

DR. SINAN OGUN

SOLID Workshop
10–11 September, 2015
Thessaloniki

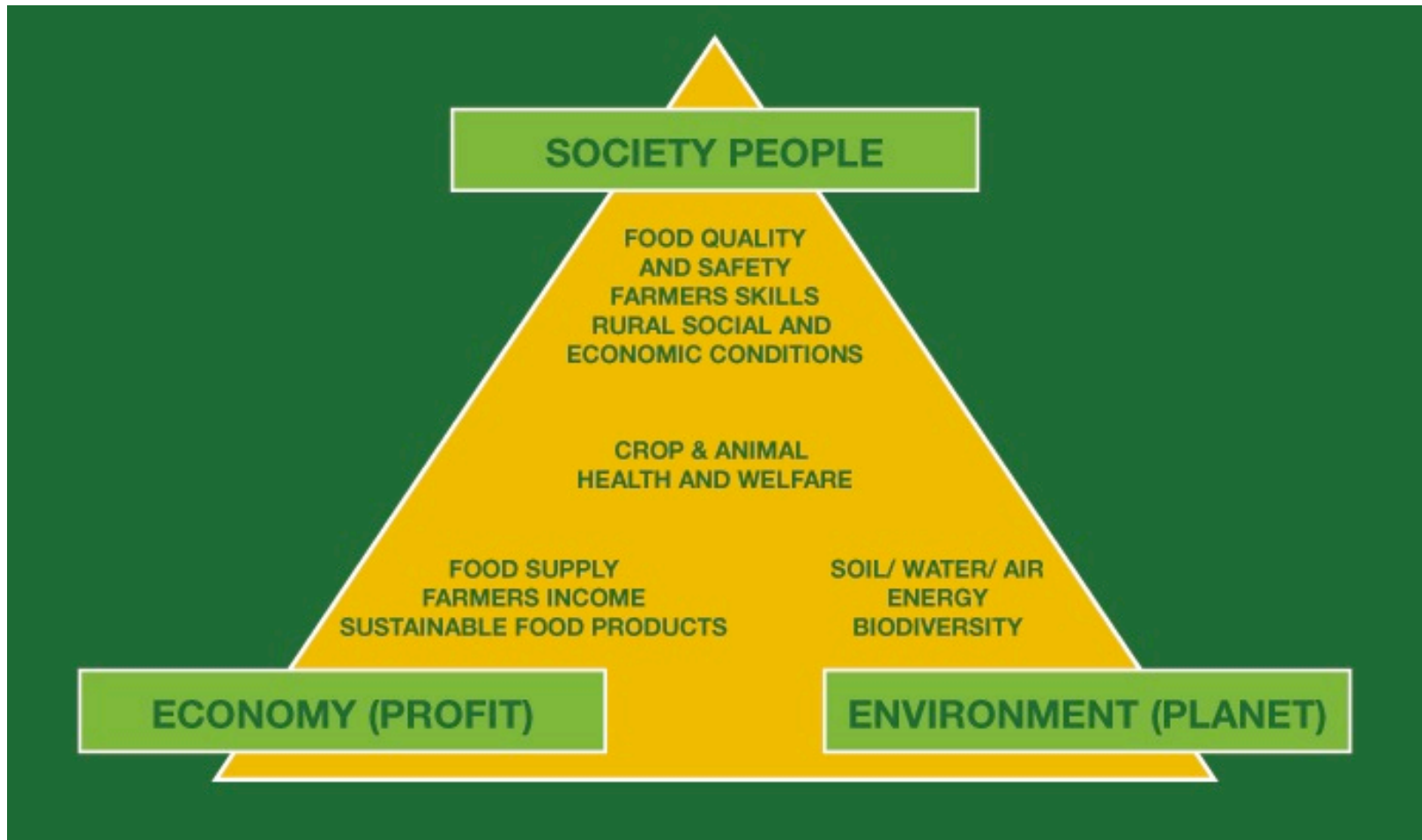
Impact of Livestock Production



Impact of Livestock Production



Sustainability?



Sustainability?



Example : Water Footprint

Agricultural Production 92%



Water Footprint

Industrial Production - 4.4%



Water Footprint

Domestic use - 3.6%



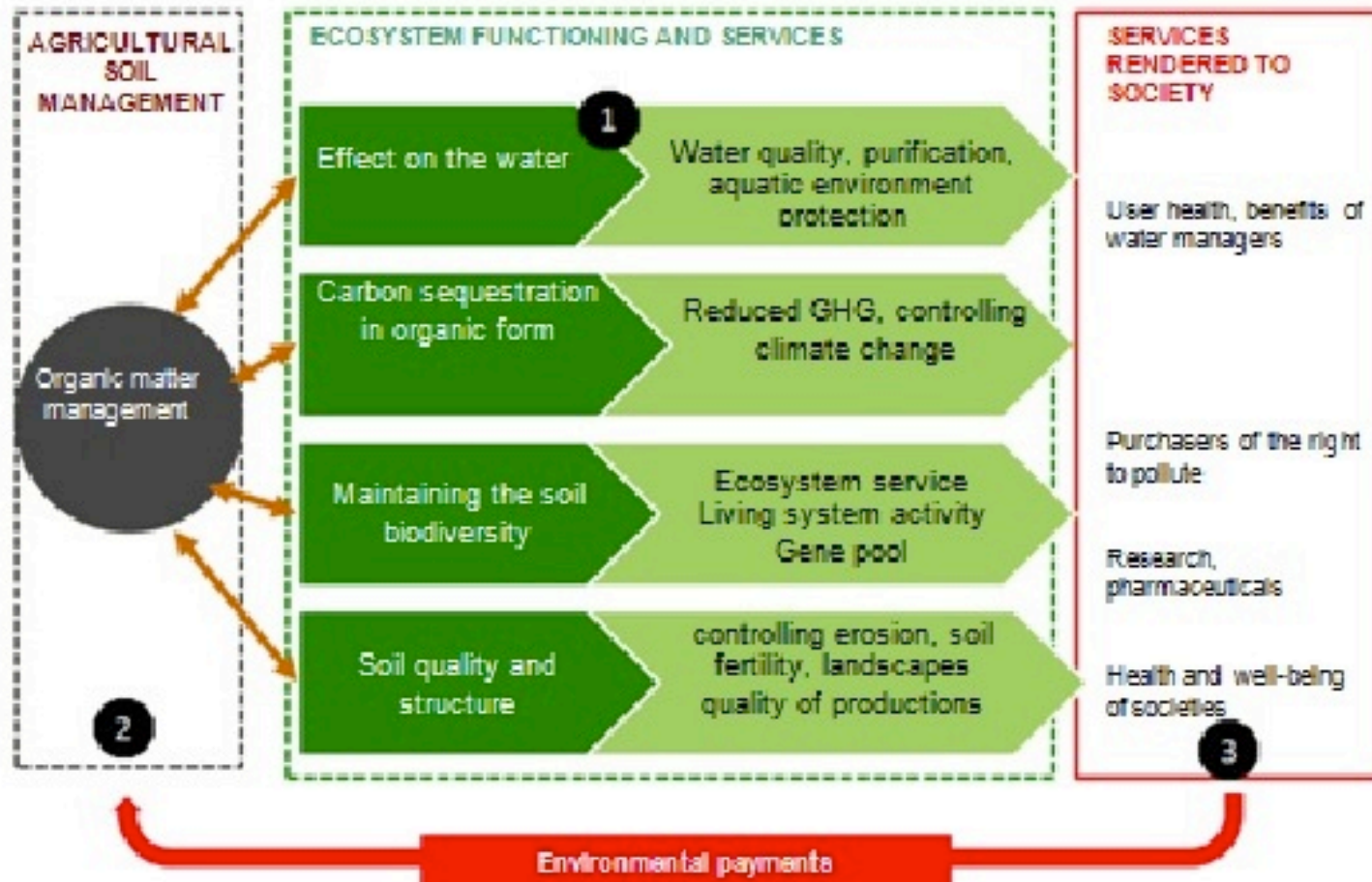
Sustainability – Meat vs Vegetarian



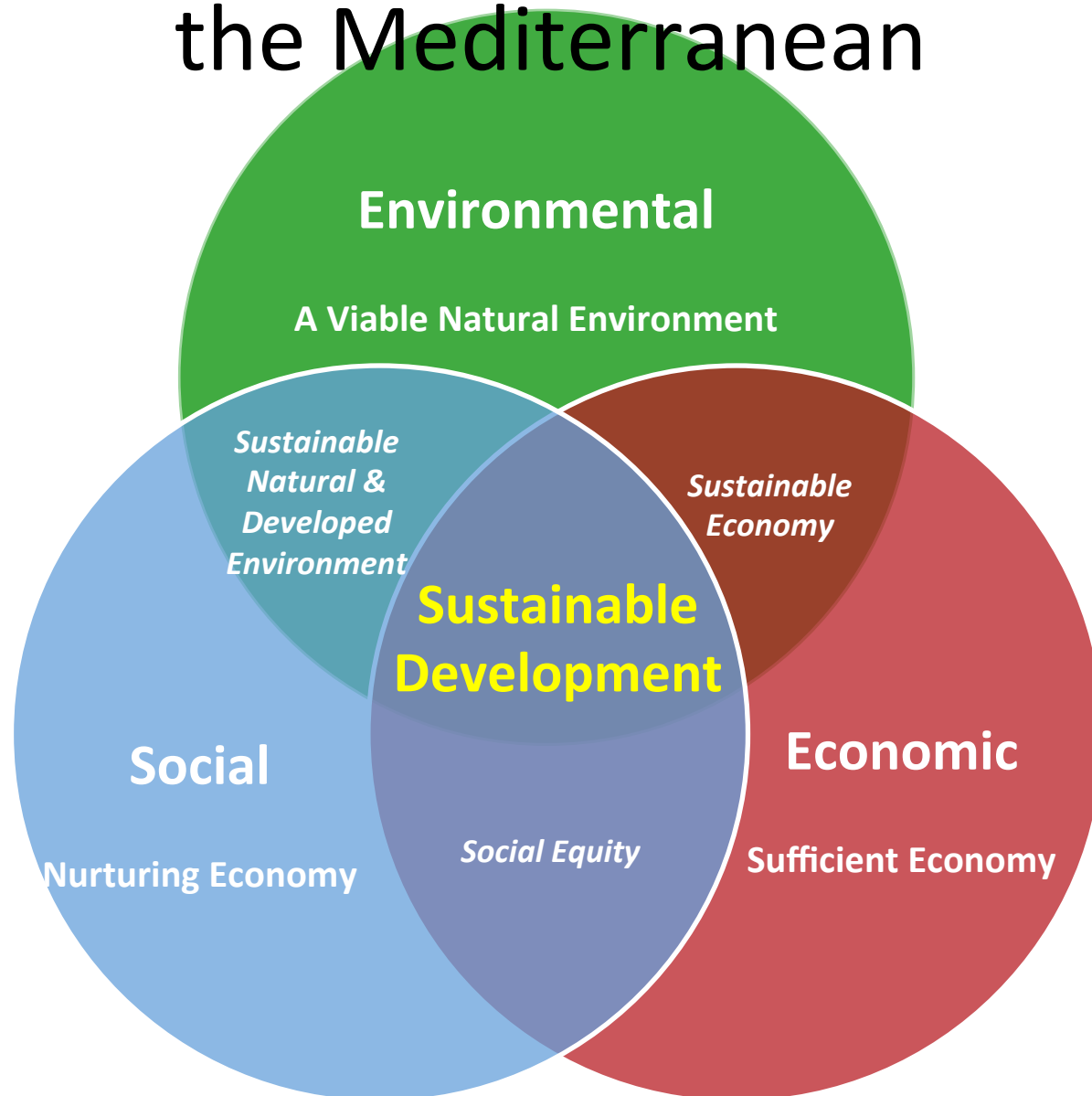
Turkeys depleting waterways



Sustainability Scorecard



Sustainable Livestock Production in the Mediterranean



Sustainable rural development projects in Turkey

1. Resource efficient and value chain rich goat cheese production: A case study in South East Anatolia
2. Livestock Aid for Syrian Refugees
3. Herd Improvement Strategy by Small Ruminant Producers in Turkey.
4. Corporate Social Responsibility in Livestock Production
5. Centre of Excellence in Sustainable Agriculture
6. Development of a Novel Functional Meat Product with a low Ecological Footprint

1. Resource efficient and value chain rich goat cheese production: A case study in South East Anatolia

Objective :

Our project aimed to strengthen development within and across the rigid domestic dairy industry by supporting creativity, innovation, commercialization and integration along the dairy value-added chain.

Resource efficient and value chain rich goat cheese production: A case study in South East Anatolia

Conclusion :

- optimizing the supply of quality (productive) genetic material from a single breeder;
- providing a more cost effective centralized veterinary and AI service to all the farmers,
- efficiency of the small family labour unit;
- better natural resource management in reducing feed costs by providing quality extensive feed due to size of a manageable herd;

Resource efficient and value chain rich goat cheese production: A case study in South East Anatolia

- forming a market edge by promoting a greener product;
- resource consolidation in the cheese production and
- creating a market niche by merging sufficient micro producers to establish a small enterprise.

2. Livestock Aid for Syrian Refugees



Livestock Aid for Syrian Refugees



Livestock Aid for Syrian Refugees



Livestock Aid for Syrian Refugees



Livestock Aid for Syrian Refugees

Benefits for all stakeholders:

“Livestockaid” project will be;

- Using humanitarian funding in a sustainable manner;
- Reducing dependence on meat imports and aid by encouraging self sufficiency;
- Aiming to improve trade balance and regional food security by ensuring suitable future livestock genetics to the region;



Livestock Aid for Syrian Refugees

- Providing a long-term solution for sustainability of food/protein sources by assisting in post-war development; in addition to providing immediate employment, the project will be offering the participants a minority shareholding in the company running the production system where if they chose, at the end of the program period, could take back to Syria the equivalent value of their shareholding in livestock;
- Minimising the impact on health and welfare services of the host country by providing employment to refugees;

Livestock Aid for Syrian Refugees



Livestock Aid for Syrian Refugees

- Ensuring affected population remains economically active with a stake in local communities which will have a direct impact on their standard of living and reduce criminal activity;
- Delivering accredited training from an educational institute as a partner in the program which will provide necessary qualifications for the participants future stability;
- Delivering training to trainers (TOT), ensuring skills and expertise are transferred cost-effectively if the project multiplies;

Livestock Aid for Syrian Refugees



Livestock Aid for Syrian Refugees

- Reinvesting any profits made from the sale of livestock in establishing new “livestockaid” farms;
- Supplying an immediate food need for the effected country whilst also creating the platform for ongoing trade with the bordering nations;

Livestock Aid for Syrian Refugees



Livestock Aid for Syrian Refugees

- Developing and ecologically improving otherwise under utilized government land previously left fallow;
- Adopting and utilizing methods from the existing environmentally friendly pilot project which compared to conventional farming methods, has reduced carbon footprint (emissions) by 300% and water footprint (usage) by 500% to similar animal production systems.

3. Herd Improvement Strategy by Small Ruminant Producers in Turkey

Project Aim:

Improvement of yield (milk, meat, mohair, prolificacy etc.) of domestic sheep and goats in breeder conditions in Turkey.

Specifically Improving;

- ✓ Infrastructure of breeder organizations,
- ✓ setting up precision farming systems
- ✓ consumer awareness about breeders, and
- ✓ protect endemic genetic resources

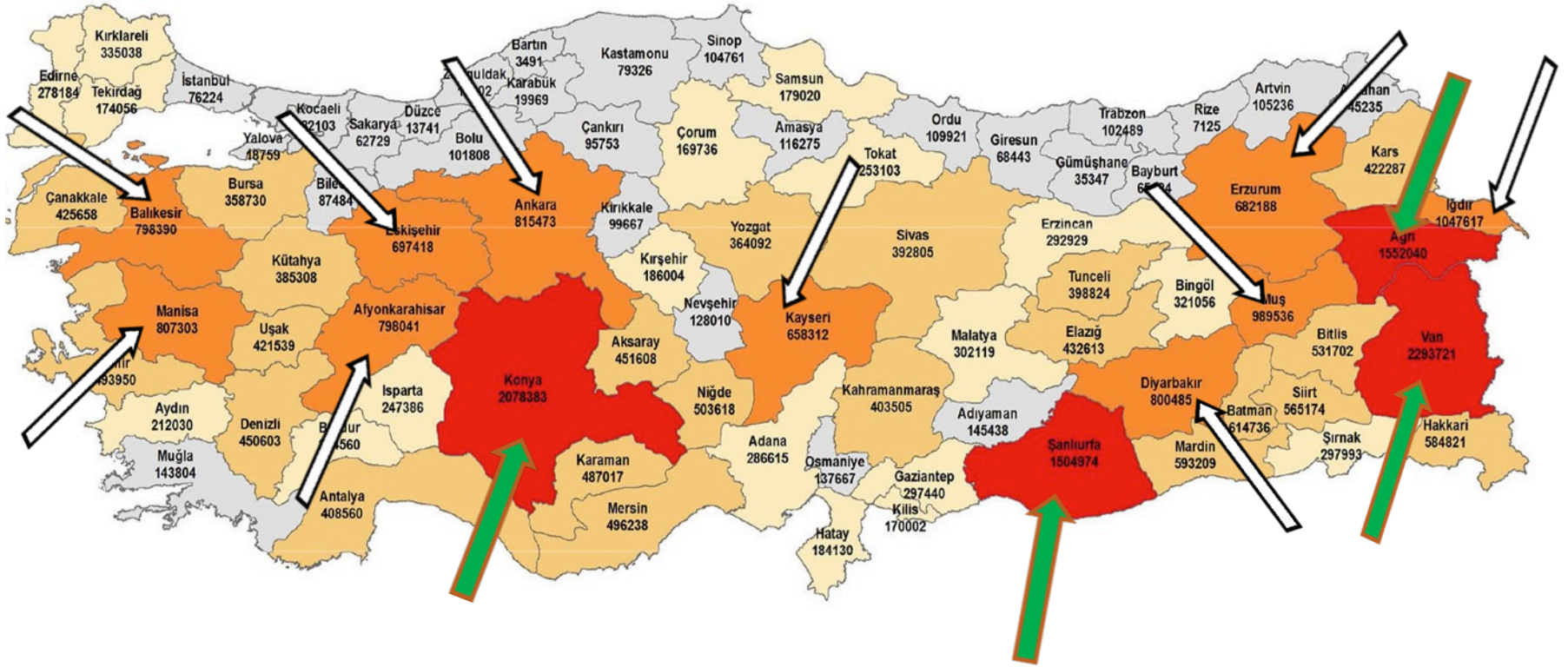


Bridge between the continents of Europe and Asia

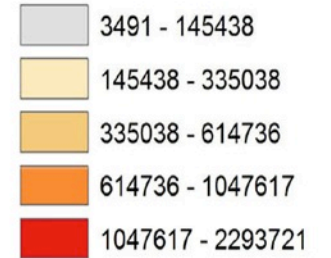


Total land area is 785.347 km²

Population is 77.6 million



İllere Göre Koyun Sayısı



DISTRUBUTION OF SHEEP POPULATION

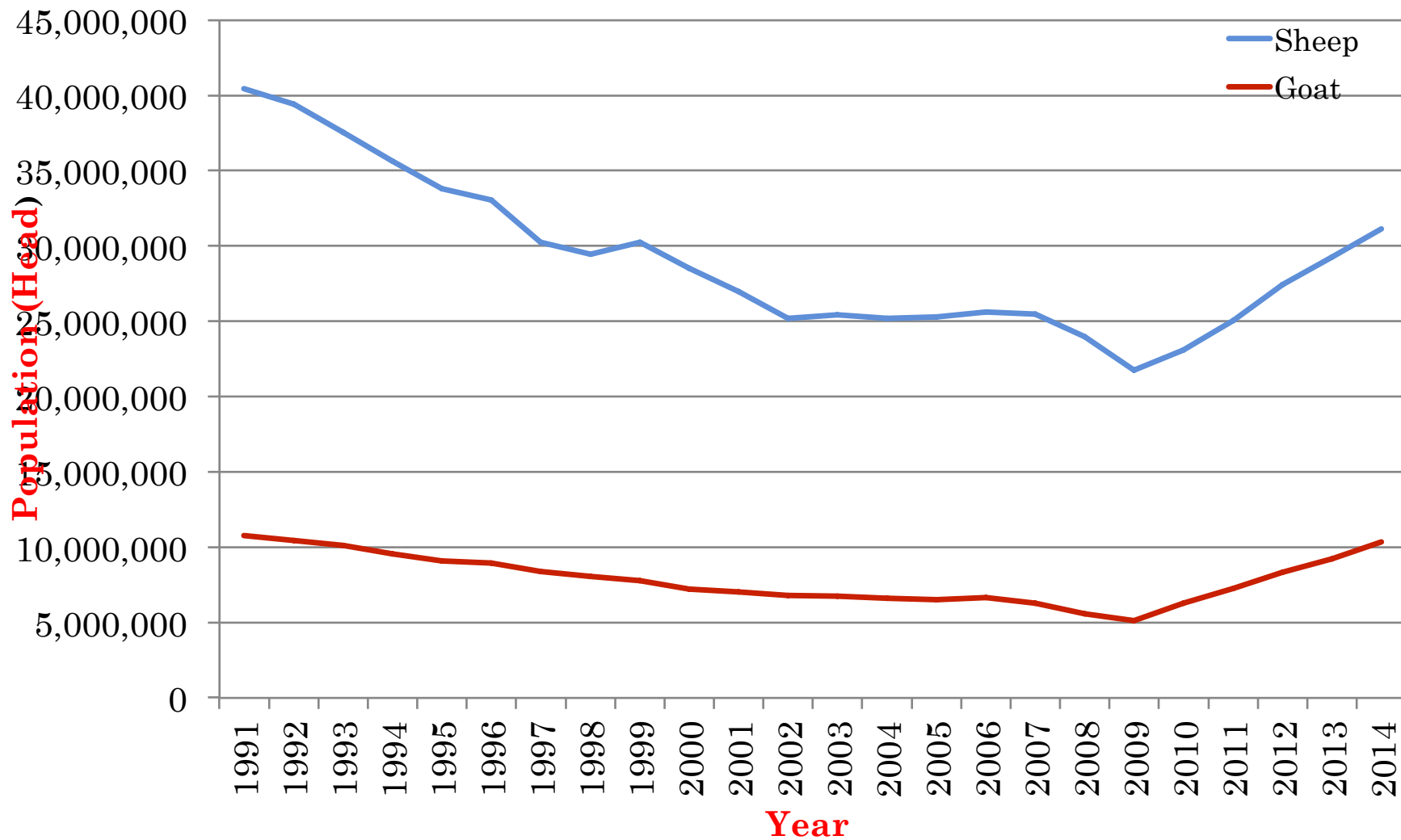
SHEEP AND GOAT POPULATION OF TURKEY



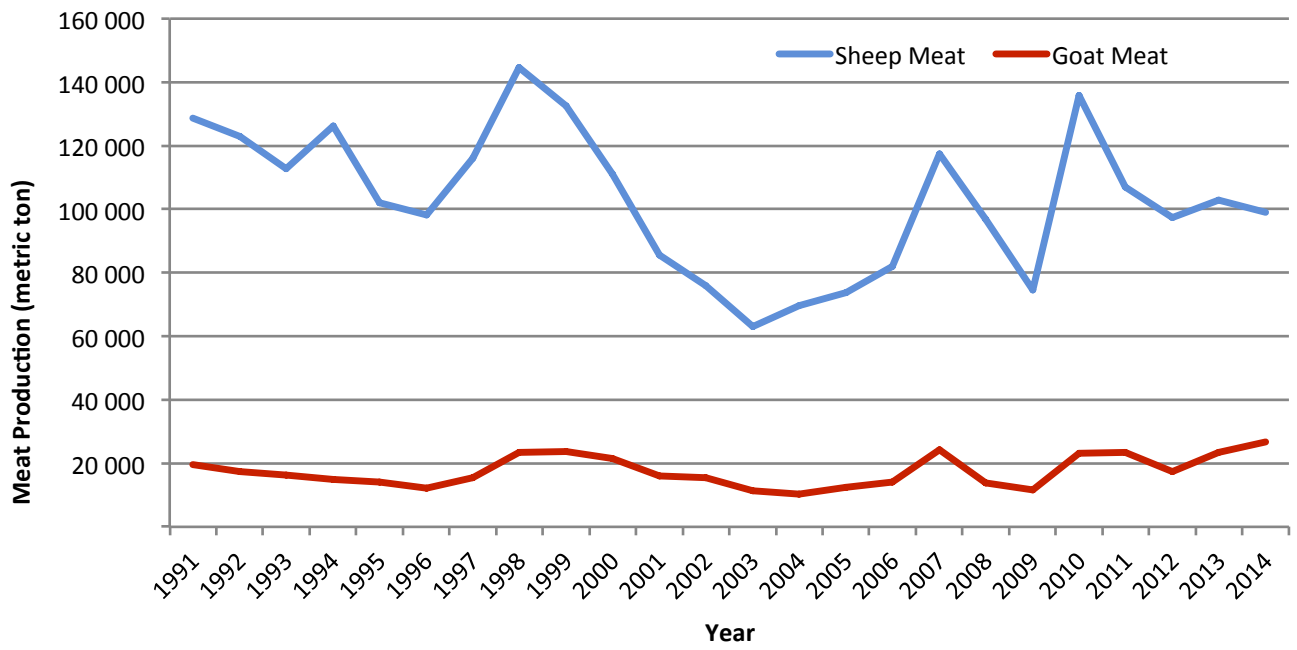
31.1 million



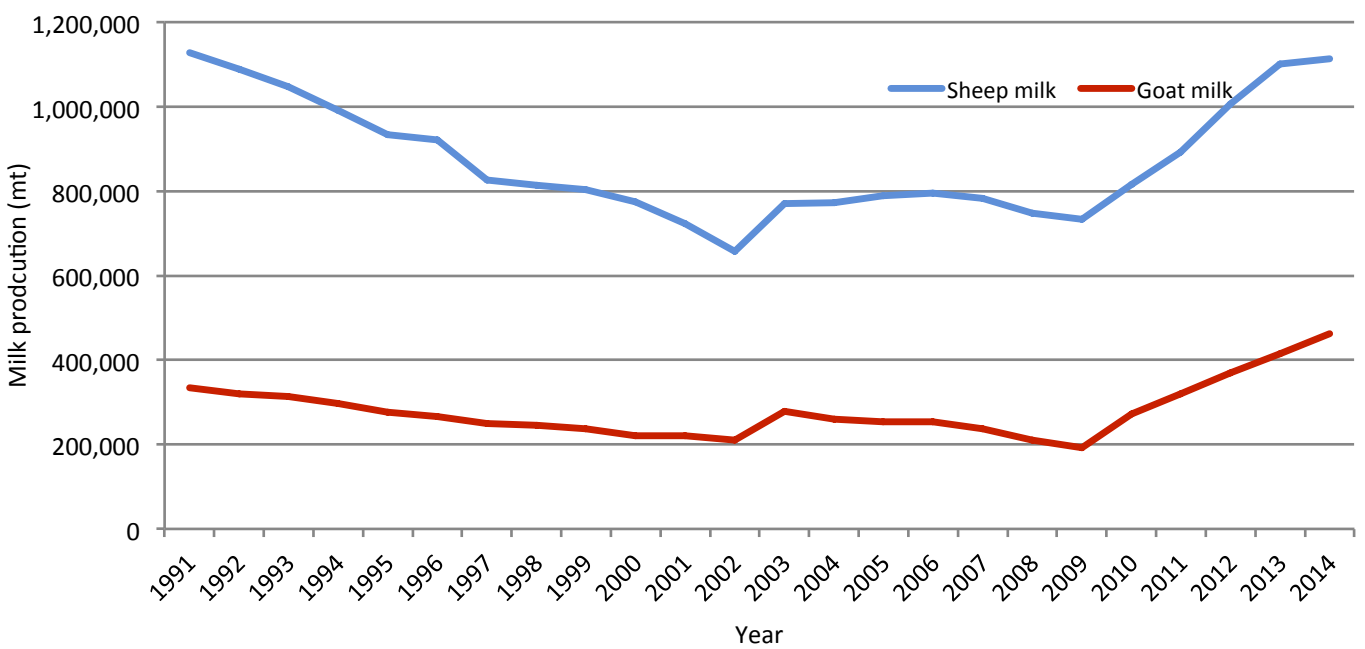
10,3 million

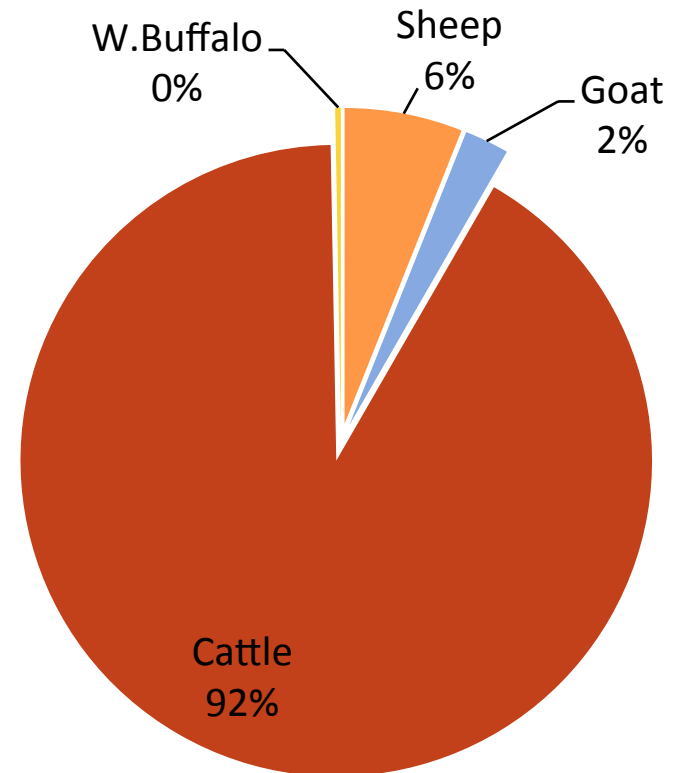
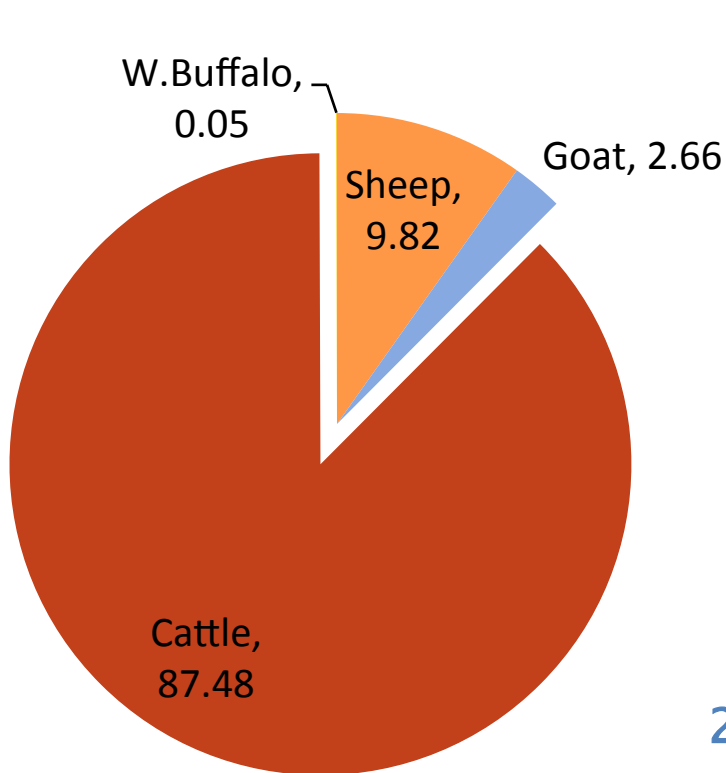


MEAT PRODUCTION



MILK PRODUCTION





2014

PRODUCTIONS AND DISTRIBUTIONS OF TURKEY

GOat BReeds



Angora



Norduz



Honamlı



Hair Goat



Kilis



Damascus Goat



Gürcü Goat



İspir Goat



Kaçkar Goat



Abaza Goat



Malta Goat



Turk Saanen Goat

Sheep Breeds



Akkaraman



Morkaraman



İvesi



Hemsin



Sakiz



Kivircik



Karayaka



Karagul



Herik



Dağlıç



Norduz

TURKEY SHEEP & GOAT SECTOR PRESENT SITUATION

- Generally, Sheep & Goat sector structure is traditionally
- But;
- Goat & Sheep production and very popular in Turkey last 10 years.
- Especially private sector investment getting increased fastly and modern farms numbers are increasing for sector.
- Depend on sheep&goat farms are increasing, modern slaughterhouses and sheep & meat and milk sector are developing rapidly in Turkey.
- On the other hand we can see some local breeds and extensive system production systems in different region of Turkey.
- Sheep&Goat breeders have been started to organize in under Sheep and Goat Assoc.

SHEEP AND GOAT PRODUCTION SYSTEMS IN TURKEY

- Extensive Systems
- Semi Intensive Systems
- Intensive Systems
- Nomadic and Transhumance Systems
- Sheep and Goat Mixed Systems



EXTENSIVE SYSTEMS

- Extensive systems are very common in Turkey.
- Flock capacity is very changeable between 50-500 head sheep or goats.
- SR breeders' economical status is very low,
- They don't use supplementary mixed feed out of harsh winter condition

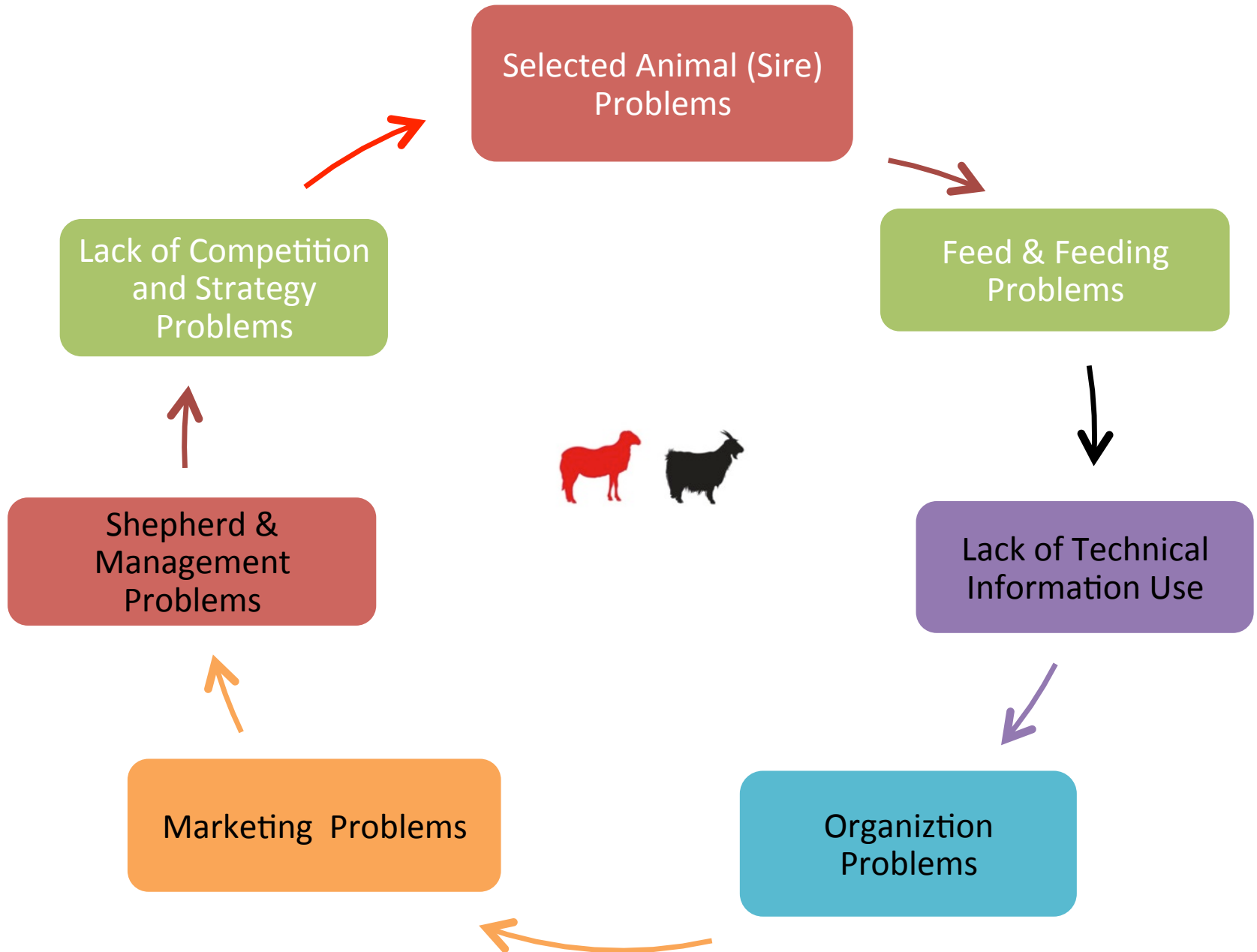


SEMI INTENSIVE SYSTEMS

- These group breeders prefer to use little bit modern feeding, housing and management systems.
- use supplement concentrate feeds in winter,
- basic selection methods are applied in their farms.
- they take care of animal diseases and health.
- They have permanent shepherd for managing goat flock.
- Some semi intensive farms use the controlled mating methods and the limited animal registration systems.



BASIC PROBLEMS OF SMALL RUMINANTS



MAIN PROBLEMS OF SHEEP & GOAT SECTOR IN TURKEY

- Big part of breeds are indigenous breeds,
- Local breeds have low genetic capacities,
- Small farms don't use modern technologies,
- Small scale livestock farms are not effective
- Sheep & Goat production is not attractive for young people
- Marketing problems,
- Lack of technical background of sheep & goat breeders,
- Animal registration problems,
- Breeders Association infrastructure problems.

GENETIC BREEDING STRATEGIES

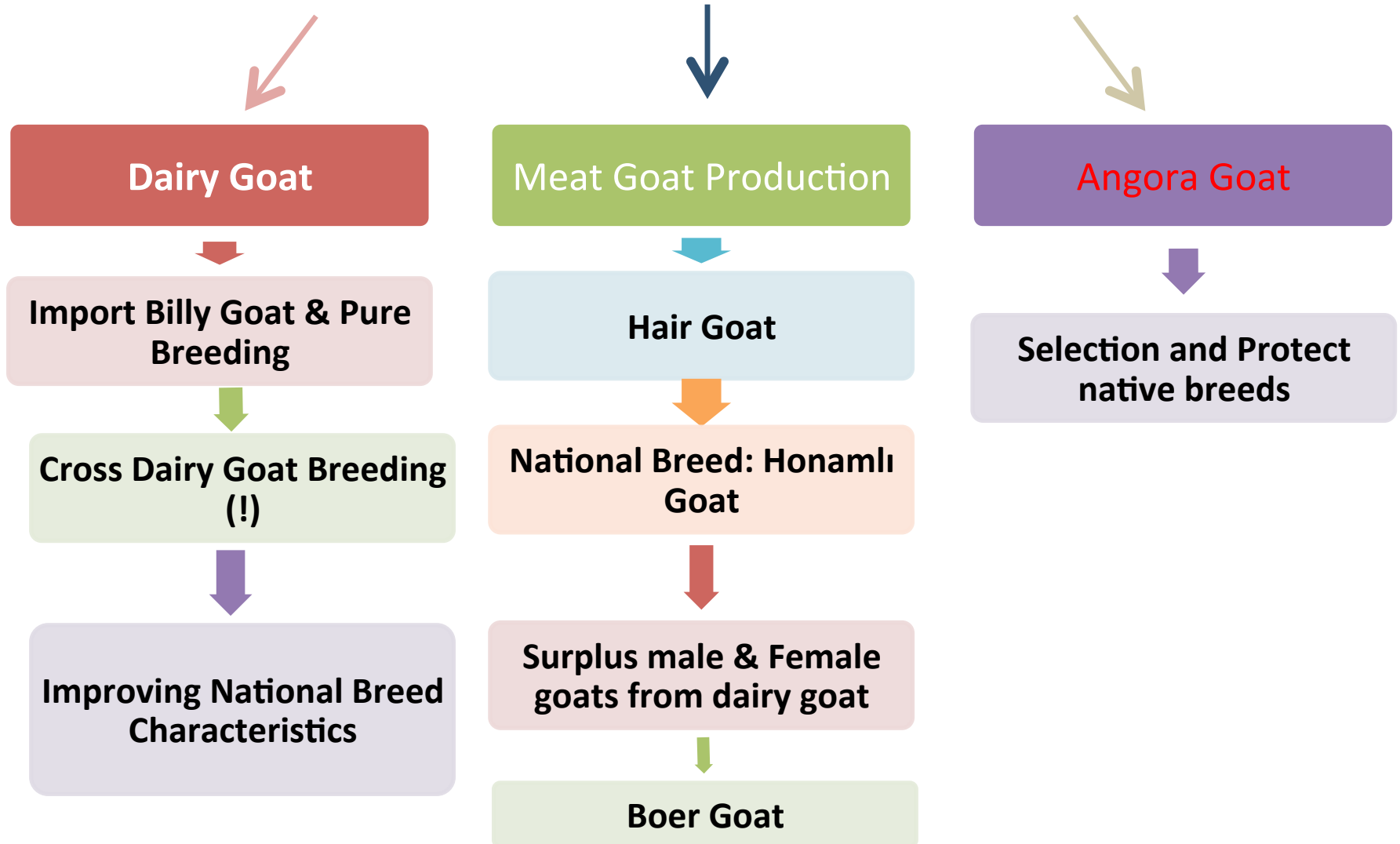
```
graph TD; A[GENETIC BREEDING STRATEGIES] --> B[Government Breeding Strategy]; A --> C[Breeding Strategy for Sheep & Goat Breeders];
```

**Government Breeding
Strategy**

**Breeding Strategy
for Sheep & Goat
Breeders**



GENETIC BREEDING STRATEGY FOR GOATS



NATIONAL SHEEP AND GOAT BREEDING PROGRAM

PROJECT AIM

- Improvement of different yields (milk, meat, mohair, prolificacy) of national (local) sheep and goats in breeder conditions in Turkey.

Improving;

- ✓ infrastructure system of breeder organization,
- ✓ setting up animal registration systems
- ✓ awareness of livestock breeders
- ✓ protect local genetic resources of Turkey



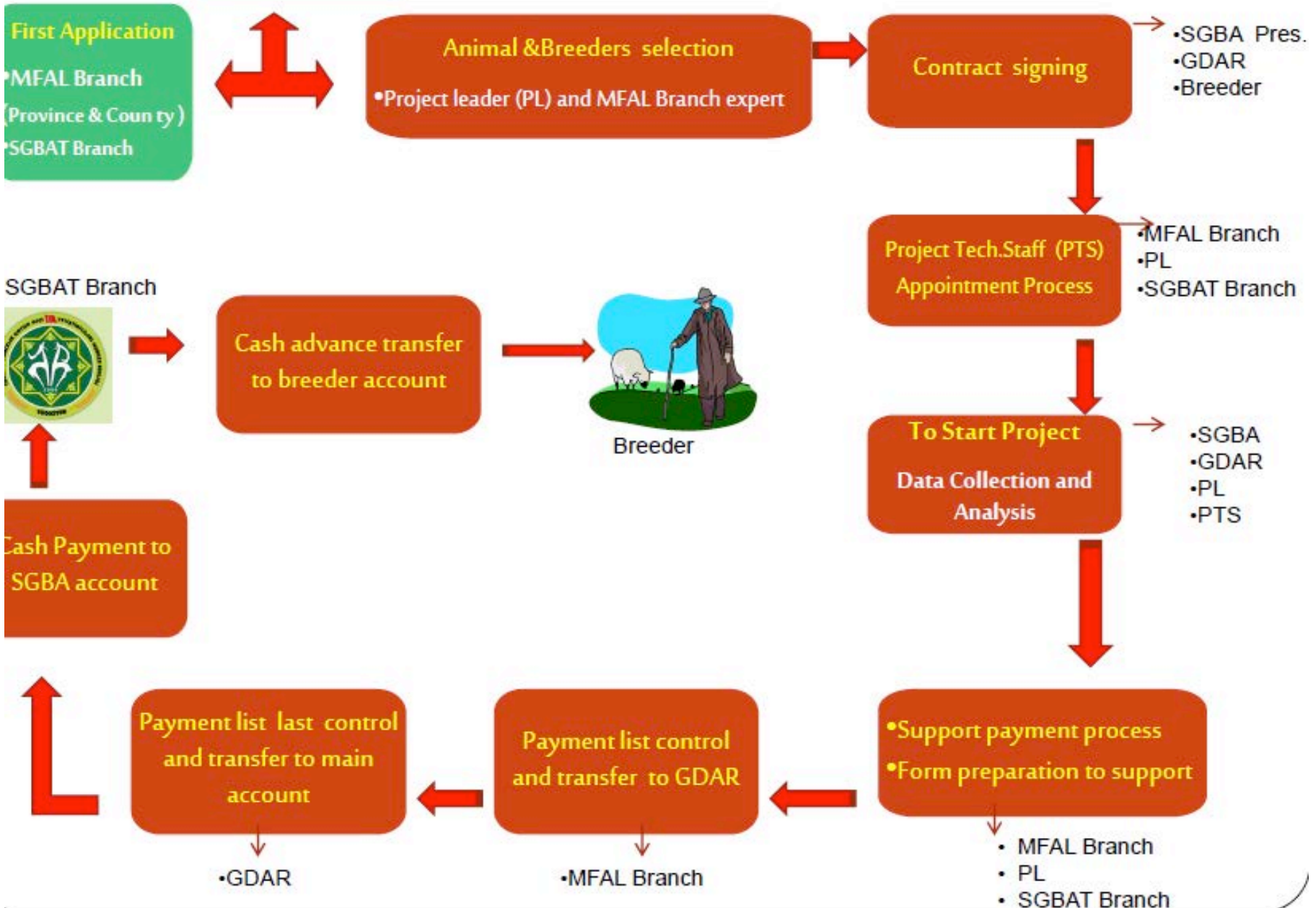
Project Justification

- Lack of small ruminant registration system,
- Lack of sheep and goat breeders organization system,
- Insufficient sheep and goat yield capacities,
- Requirement of high capacity ram and billygoat,
- Improvement socio-economic level of sheep & goat breeders.

Project Flow Chart

GDAR

Project Process



Project Partners



Min.Food.
Agr.&Livestock
MFAL

63 MFAL Province
Branches

22 Universities
41 Project Leader

8 Institutes
40 Project leader

63 Province
SGBAT Branches
144 technical Staff

GDAR
Coordination

Universities
&
Research Institutes

Sheep and Goat
Assoc.

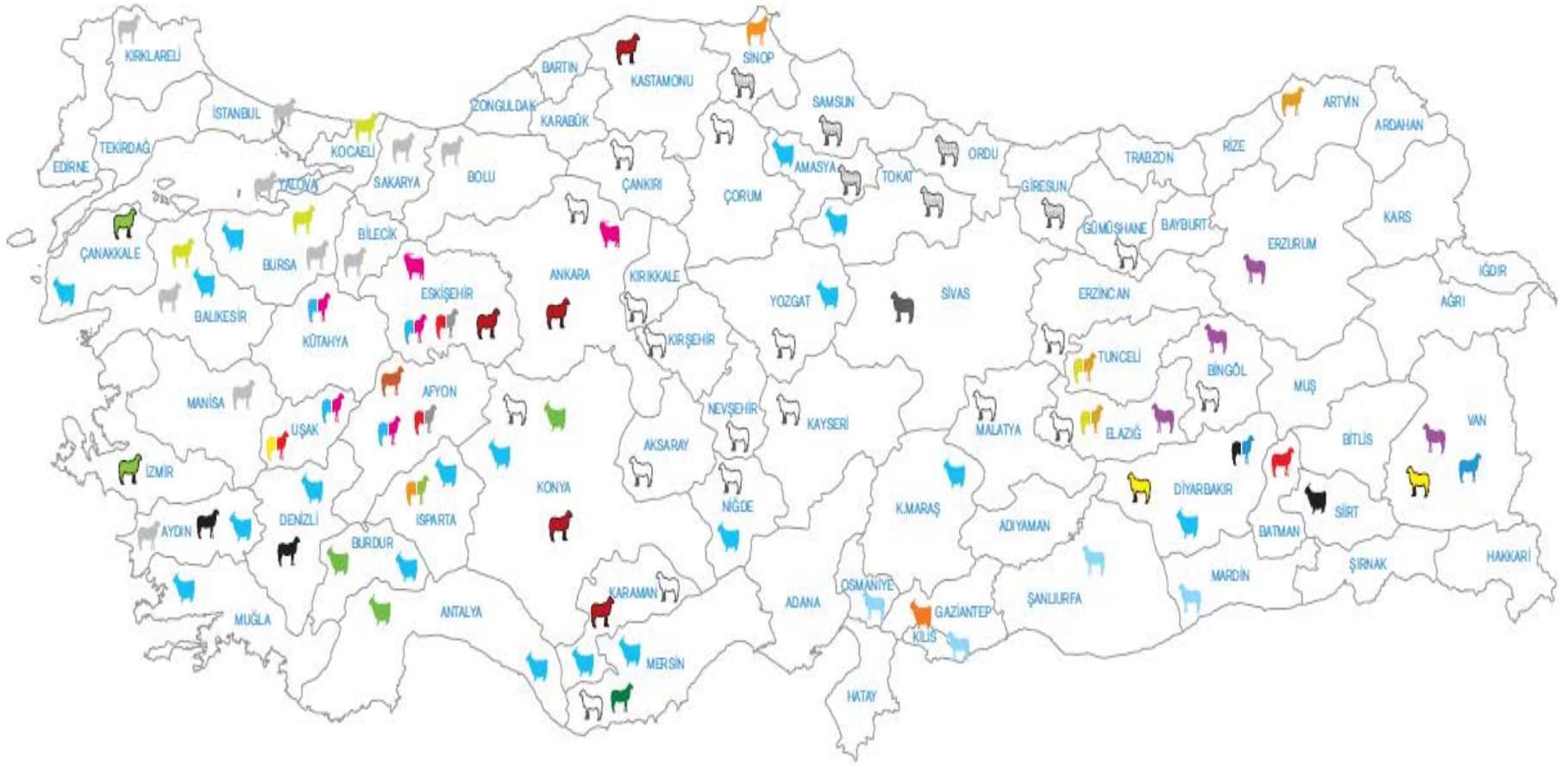


WHAT WE DID AT FIRST PERIOD?

- **Duration:** First period (2006-2010)
- **Project area:** 13 different provinces of Turkey.
- **Support cost (cash advance to breeders):** 2,5 million Turkish Liras(TL)
- **Material:**
- 12 Sheep&Goat Breeds
- 466 breeders. 81.000 head animal were registered



PROJECT AREAS And BReeds For 2013



- | | | | | | | |
|--|--|---|--|---|---|---|
|  Sakız |  Kıvrak |  Norduz |  Kangal Akkaraman |  Karakaş |  Ramık Koyunu |  Kilis Keçisi |
|  Orta Anadolu Merinosu |  Koçeri |  Dağlıç |  Morkaraman |  Zom Koyunu |  Şavak Akkaraman |  Kil Keçi |
|  Karacabey Merinosu |  Kaya |  Güney Karaman |  İvesi |  Pınt Koyunu |  Eşime Koyunu |  Tiflk Keçisi |
|  Balra Koyunu |  Hemşin |  Akkaraman |  Karayaka |  Pırlak Koyunu |  Honamlı Keçisi |  Ankara Keçisi |

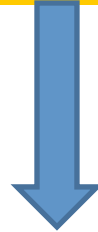
Faced Problems

- Lack of awareness of breeders,
- Coordination problems,
- Lack of technical background breeders,
- Animal registration problems,
- Breeders Association infrastructure problems,
- Legal situation,
- Budget problems,
- Project leader and Project Technical staff problems,
- Data management problems,
- Correct and reliable data collection problems etc.

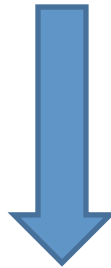
SHEEP & GOAT ORGANIZATION IN TURKEY



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.

TURKEY LIVESTOCK PRODUCTION PERSPECTIVES

- Tracking and control system should be improved,
- Livestock policies will be developed for increasing animal production,
- Animal registration systems and databases should be enhancement,
- Animal health services will be furthered,
- Livestock input costs will be decreased,
- Marketing systems should be improved,
- New financing cost should be developed
- Sheep&Goat organization infrastructure will be strenght,
- Effective traning sytems must be set up for sheep & goat breeders.

OUR PROJECTS ARE ON;
-NATIVE HAIR GOAT
-AWASSI SHEEP
AT EASTERN MEDITERRANEAN REGION OF TURKEY

NATIVE HAIR GOAT

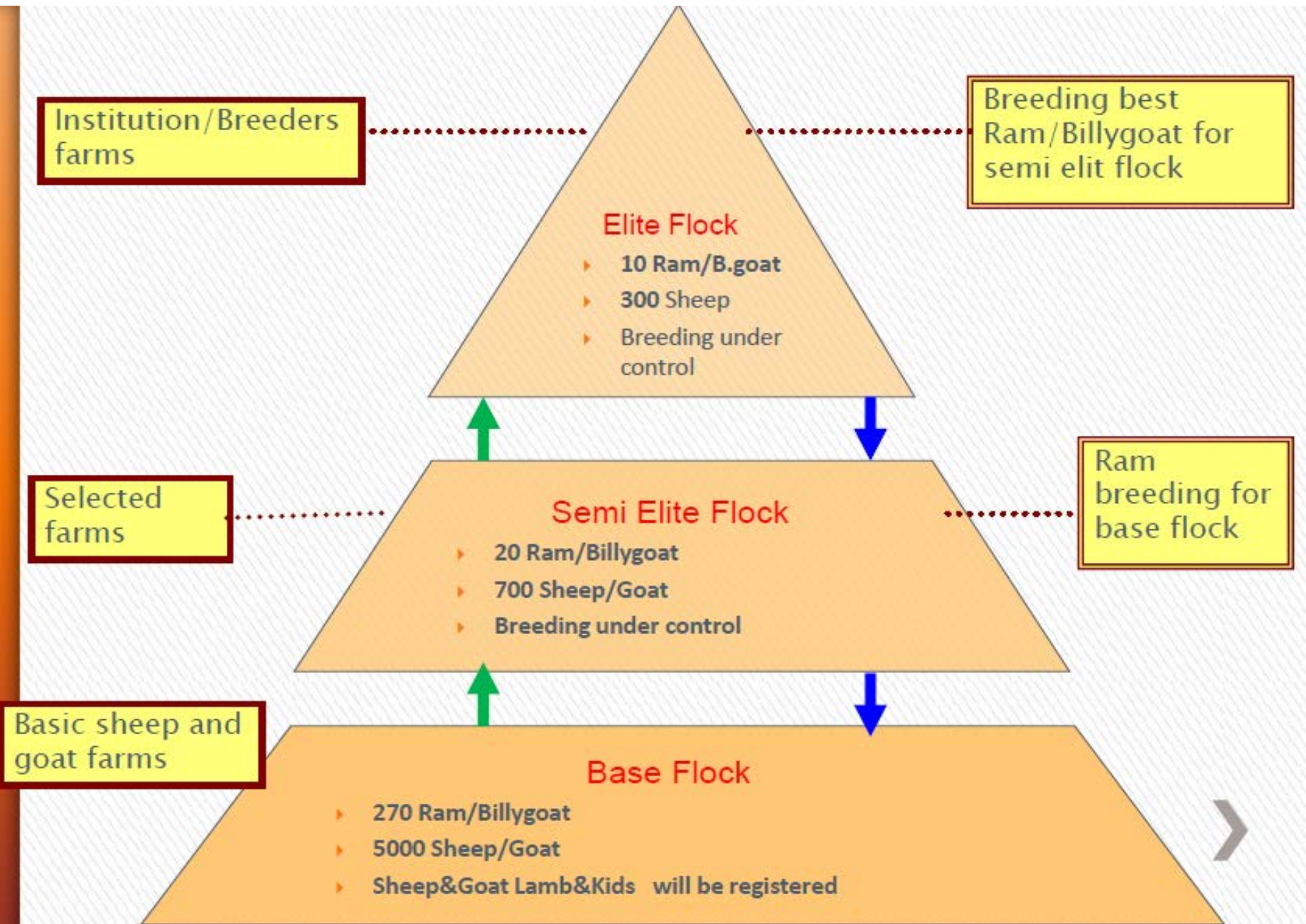
Project Leader : Prof. Nazan Koluman
Çukurova University
Project Staff : Murat Sen (Sheep and Goat
Breeders Association– Adana Branch
Dr. Sinan Öğün– Redrock Minerals
Res. Assist. Kadriye Hatipoğlu
Registered Farmers : 38 (at mountain region)



NATIVE AWASSI SHEEP

Project Leader : Prof. Nazan Koluman
Çukurova University
Project Staff : Murat Sen (Sheep and Goat
Breeders Association– Adana Branch
Dr. Sinan Öğün– Redrock Minerals
Res. Assist. Kadriye Hatipoğlu
Registered Farmers : 41 (At Çukurova plain
area)

METHOD





IGA 2016

12th INTERNATIONAL CONFERENCE ON GOATS

25-30 September 2016, Antalya  Turkey

The role of the goat in society and sustainability of goat production in agro-ecosystem.

THANK YOU
FOR
YOUR ATTENTION

www.icg2016.org





THANK YOU FOR YOUR ATTENTION