Current situation of autochthonous breeds in Greece

Bizelis Iosif
In Greece ....

- Diversity of geomorphological and climatic conditions
- Diversity of social and economic conditions
- Differences in social habits, customs and traditions of each region

Results ....

- Creation of numerous indigenous livestock breeds (horses, cattle, sheep, goats, pigs) over time, under natural and zootechnical selection
• resistance to harsh environment
• ability of exploiting the poor, arid land – pasture
• survivability with a limited amount of food and water
• disease resistance
• products, especially milk and meat, with unique quality characteristics

GREAT ECONOMIC IMPORTANCE
However ....

Worldwide, especially in developing countries, most farmers have replaced indigenous breeds with specific improved foreign breeds that were more productive with greater yields.

Today ....

relatively few "international" improved breeds dominate in all countries with developed livestock production, and not only, while many indigenous breeds have dramatically limited number of animals, threatened with extinction or already extinct.
### Greek Equine Breeds (6)

<table>
<thead>
<tr>
<th>Secure (-)</th>
<th>Threatened (1)</th>
<th>Vulnerable (3)</th>
<th>Endangered (2)</th>
<th>Extinct (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pindos</td>
<td>Pinias</td>
<td>Andravida</td>
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<td></td>
<td>Skyros</td>
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<td>Thessaly</td>
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<td></td>
<td>Messara</td>
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</tbody>
</table>

Unidentified breeds or populations (>3) : Rhodes, Lesvos, Samothraki
<table>
<thead>
<tr>
<th>Secure (-)</th>
<th>Threatened (1)</th>
<th>Vulnerable (2)</th>
<th>Endangered (1)</th>
<th>Extinct (4)</th>
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</thead>
<tbody>
<tr>
<td>Vrachikeratiki</td>
<td>Katerini</td>
<td>Kea</td>
<td>Tinos</td>
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<tr>
<td>Sykia</td>
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<td>Andros</td>
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<td></td>
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<td>Kerkyra</td>
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<td>Chios</td>
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</tbody>
</table>

Unidentified breeds or population (> 10): Prespa, Rodopi, Crete, Kastelorizo, Nissyros, Lipsi, Agathonissi, Lesvos, Acheloos, Mani
<table>
<thead>
<tr>
<th>Secure (5)</th>
<th>Threatened (9)</th>
<th>Vulnerable (5)</th>
<th>Endangered (6)</th>
<th>Extinct (6)</th>
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</thead>
<tbody>
<tr>
<td>Chios</td>
<td>Serres</td>
<td>Sarakatsaniko</td>
<td>Thraki</td>
<td>Lefkimi</td>
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<tr>
<td>Mitilini (Lesvos)</td>
<td>Kalaritiko</td>
<td>Vlachiko (Orini Epirus)</td>
<td>Pelagonia (Florina)</td>
<td>Roumlouki</td>
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<tr>
<td>Arta (Frisarta)</td>
<td>Karystos</td>
<td>Zakinthos</td>
<td>Argos</td>
<td>Katafigio</td>
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<td>Karagouniko</td>
<td>Anogia</td>
<td>Agrinio</td>
<td>Kokovitiko</td>
<td>Arvanitovlachiko</td>
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<tr>
<td>Sfakia</td>
<td>Asterousia</td>
<td>Kimi</td>
<td>Ikaria (Evdilos)</td>
<td>Drama</td>
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<tr>
<td>Skopelos</td>
<td></td>
<td></td>
<td>Samothraki</td>
<td>Chalkidiki</td>
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<tr>
<td>Katsika</td>
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<td>Pilio</td>
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<td>Kefalonia</td>
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</tbody>
</table>

Unidentified breeds or populations (> 5): Sitia, Aegean islands, Skyros, Kasos, Limnos
Sheep Breeds

Vlachiko (Orini Epirus)

Kokovitiko

Karystos
<table>
<thead>
<tr>
<th>Status</th>
<th>Breed</th>
<th>Island</th>
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</thead>
<tbody>
<tr>
<td>Secure (1)</td>
<td>Greek indigenous goat</td>
<td>Skopelos</td>
</tr>
<tr>
<td>Threatened (1)</td>
<td>Unidentified breeds or populations (&gt;4)</td>
<td>Ulokeros, Samothraki, Karystos, Aegean Islands</td>
</tr>
</tbody>
</table>
Greek indigenous (black) pig

Unidentified breeds or populations: (>2) :

Elia,
Nissyros,
Aegean Islands
• Uncontrollable crossings in flocks
• Small populations – inbreeding and genetic drift
• Animal classification. Inability to breed by phenotype
• Low self-esteem of farmers - No culture for breeds & conservation
• Low perceived economic importance
Highlighting the economic importance of a breed, results in maintaining of this breed.

- Lack of knowledge of the properties of the breed - produced products
- Breeding in unsuitable environmental conditions of farming - rearing system
- Genetic improvement of the breed
- Low prices of manufactured products
- Absence of producer organizations - low self esteem
- High yields dairy – meat
- Great adaptability to different environmental conditions (drought, high and low temperatures, humidity, etc)
- Low cost housing facilities
- Easy handling and management
- Long productive life
- High disease resistance – infestations
- Small to medium body size - low maintenance costs for their maintenance needs
- Production of high quality value products, which are valued by consumers in the Greek and global market
Conservation measures

- Study of their physiological and productive characteristics
- Genetic Certification of breeds
- Yield monitoring and implementation of genetic improvement programs
- Improving conditions and/or change their productive farming system
- Connecting their quality products to appropriate markets
- Creation of Breed Associations - promotion and advertising of breeds and products
- Support of rare breeds, according to the risk of extinction
The Greek native breeds is an important unknown wealth of our country, waiting to be discovered again.

Most disappear slowly and quietly, without anyone to care for them. We could believe in them and care for them:

- universities and research institutes,
- the State with its various departments and agencies and finally
- the local communities and farmers