Goat breeds and breeding programmes in Hungary

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Average Hungarian Goat Herd
The past of goats

• At the beginning of 20’s century 250 000 heads of goats bred. now the does population less than 40 000 heads

• The original goat population was rather mixed – several breeds were introduced into the national herd

• Last two decades before World War II a program was developed Hungarian White and Hungarian brown besides the traditional populations
The past of goats 2.

• In the second half of 1940’s and first half of 1950’s the reconstruction of the abovementioned H. White and Brown breeds was carried out (using mainly Saanen and Alpine breeds)

• Since the organisation of cooperative farms the goat breeding practically disappeared from early 1960’s

• The first wave to import new breeding stock happened in early – mid 1970’s (Saanen. Alpine. Toggenburg. etc.)
The past of goats 3.

- The second wave started in early 1980’s imported these breeds again. but they were diluted within the population.
- From the end of 1999 new breeding program for dominant part of domestic goat population developed and started.
The past of goats 4.

• Based on colours, body measurements, phenotypic characteristics – confirming with genetic traits – development of three breeds were started from 1999
  – Hungarian Milking White
  – Hungarian Milking Brown
  – Hungarian Milking Multicolour

• The uniformity of different parts of the population was successful program until 2008.
The past of goats 5.

• The first societies in goat breeding founded mid 1990’s
• The Hungarian Goat Keepers and Goat Breeders’ Association established in 1998
• The societies covering the breeding programs of exotic breeds, while the Association (covering the societies as well) carried out the breeding programs for the Hungarian breeds
• For several reasons these programs finished in 2008
Breeding at present

• Breeding programs for exotic breeds (Saanen, Alpine, Nubian, Boer, and Murcia-Granadina) dominating, but the smaller parts of these breeds are in nucleus breeding.

• Only the long haired indigenous population (called native breed) has separate breeding program with limited population.

• Dominant part of the domestic goat population does not belong to any breeding program. Yet several crossing are carried out using local and exotic breeds.
The breeds at present

• There will be a separate paper about Hungarian White-, Brown-, and Multicolour, so, details are given about other breeds present below:
  – Saanen
  – Alpine
  – Nubian
  – Boer
  – Domestic indigenous
  – Murcia-Granadina
Hungarian milking goats

- Three varieties by colours developed between 1999-2008; sorted into Saanen, Alpine and native goat breeds
- Average milk yield 250-700 liter/180-230 days
- Prolificacy 150-190%
- Adult bucks 75-95; does 45-55 kg
- Tolerating various conditions

Photos by Sándor Kukovics
Hungarian multicolour milking goat
Hungarian Milking White goat
Hungarian Milking Brown
The present breeds

- **Saanen**
  - 4 nucleus herd
  - 60 does (2012)
  - 586 l lactation yield
  - 231 milking days
  - 150% reproduction rate
  - 30-35% difference among herds
  - Used for crossing
The present breeds

• Alpine
  – 7 nucleus herds
  – 158 breeding does
  – 685 l lactation yield
  – 257 milking days
  – 171% reproduction
  – 20-25% herd difference
  – Used also for crossing
The present breeds

- **Nubian**
  - 3 nucleus herds
  - 20 breeding does
  - 240 l lactation yield
  - 166 milking days
  - 159% reproduction
  - 20-25% deviation
  - Used also in crossing
The present breeds

- **Boer**
  - 7 nucleus herd
  - 66 breeding does
  - 185% reproduction
  - Used also in crossing
The present breeds

• Domestic goat
  – 7 nucleus herd
  – 257 does
  – 318 l lactation yield
  – 183 milking days
  – 20-35% herd differences
## Size of nucleus herds by breeds
(2014 - by heads)

<table>
<thead>
<tr>
<th>Breeds</th>
<th>No farms</th>
<th>Doe</th>
<th>She-goat</th>
<th>Buck</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpine</td>
<td>15</td>
<td>251</td>
<td>88</td>
<td>16</td>
<td>339</td>
</tr>
<tr>
<td>Boer</td>
<td>8</td>
<td>72</td>
<td>42</td>
<td>4</td>
<td>114</td>
</tr>
<tr>
<td>H. Native</td>
<td>13</td>
<td>350</td>
<td>65</td>
<td>17</td>
<td>415</td>
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<tr>
<td>Murcia G.</td>
<td>2</td>
<td>0</td>
<td>14</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Nubian</td>
<td>9</td>
<td>258</td>
<td>127</td>
<td>16</td>
<td>385</td>
</tr>
<tr>
<td>Saanen</td>
<td>5</td>
<td>174</td>
<td>38</td>
<td>14</td>
<td>212</td>
</tr>
</tbody>
</table>
Average lactation yield of various breeds

- Saanen
- Alpine
- Nubian
- Indigenous
Number of milking days by breeds

![Graph showing the number of milking days by breeds from 2009 to 2012. The graph compares Saanen, Alpine, Nubian, and Indigenous breeds.](image-url)
Change in reproduction rates - various breeds

- Saanen
- Alpine
- Nubian
- Boer
- Indigenous
## Summarised data

<table>
<thead>
<tr>
<th></th>
<th>Indigenous breed</th>
<th>Exotic breeds</th>
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<tbody>
<tr>
<td>Number of does</td>
<td>143</td>
<td>167</td>
</tr>
<tr>
<td>No. lactation days</td>
<td>182.7</td>
<td>248.2</td>
</tr>
<tr>
<td>Lactation yield (litres)</td>
<td>318.3</td>
<td>645.2</td>
</tr>
<tr>
<td>Daily milk yield (litres)</td>
<td>1.78</td>
<td>2.60</td>
</tr>
<tr>
<td>Standardised Yield for 140 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of does</td>
<td>135</td>
<td>143</td>
</tr>
<tr>
<td>Lactation yield (litres)</td>
<td>266.9</td>
<td>418.8</td>
</tr>
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</table>
The farm size distribution

<table>
<thead>
<tr>
<th>Herd sizes</th>
<th>HSGBA*</th>
<th>COS**</th>
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</thead>
<tbody>
<tr>
<td>No. of goat farms</td>
<td>643</td>
<td>19 413</td>
</tr>
<tr>
<td>Less than 10 heads (%)</td>
<td>29.7</td>
<td>91.9</td>
</tr>
<tr>
<td>Between 10-30 heads (%)</td>
<td>37.8</td>
<td>7.6</td>
</tr>
<tr>
<td>Between 30-50 heads (%)</td>
<td>15.2</td>
<td>0.9</td>
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<tr>
<td>Between 50-100 heads (%)</td>
<td>11.7</td>
<td>0.3</td>
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<tr>
<td>Between 100-200 heads (%)</td>
<td>5.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Between 200-500 heads (%)</td>
<td>0.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Above 500 heads (%)</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Summary of goat sector

- **Total No. of goats (80 000) and does (35 000)**
  /Central Office of Statistics/

- **19 000 heads in ENAR system** /Hungarian Sheep and Goat Breeders’ Association/
  - 700 heads indigenous
  - 2 900 head of exotic breeds – mainly crosses
  - 500 head meat breed (Boer) - mainly crosses

- **7.9% in registered nucleus**

- **Near 80 000 breeding stock exported to Romania between 2008-2013**
Thank you for your attention!