

# LEONARDO DA VINCI PROJECT



## Sheep Farming in Hungary

Hódmezővásárhely, 19th March, 2013  
Prof. Dr. Imre Mucsi - Foundation of Knowledge

### In Europe' Heart: Hungary



## Sheep Farming in Hungary

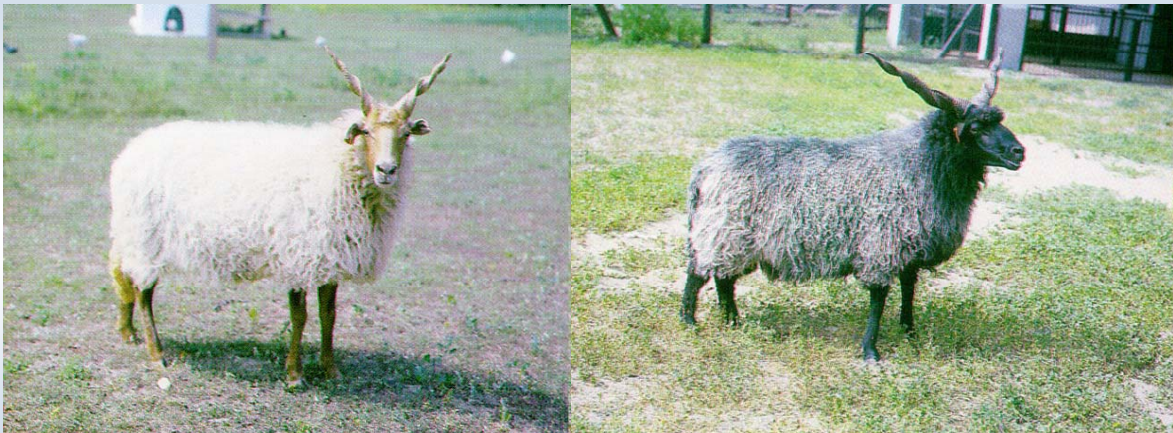
It is proved that the Hungarian is a stock-breeding and also a sheep breeding people for more than 1000 years now

The main Hungarian sheep species are the following: *Racka*, *Cigája* and *Cikta*.

Hungary was the greatest sheep breeding country within West- and Central-Europe in the XIX century.

In that period the species called *Merino* had got to the country and after 100 years it had a dominant number.

## Sheep Farming in Hungary



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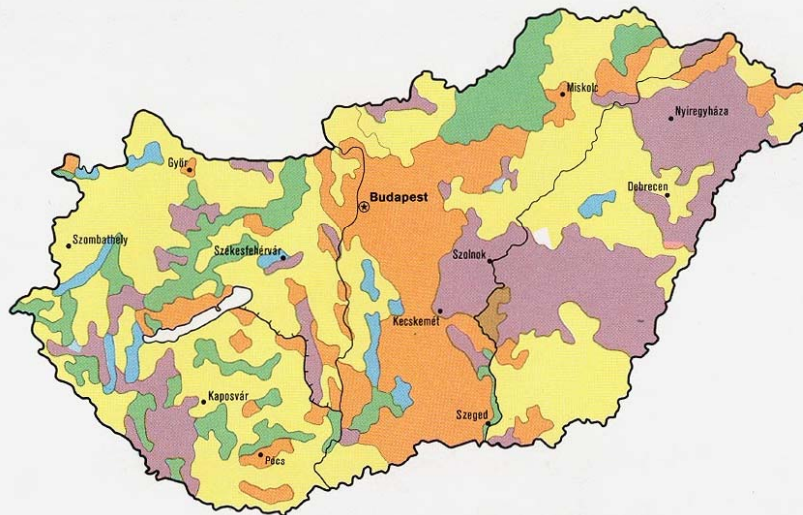
## Sheep Farming in Hungary



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# Sheep Farming in Hungary



## Land Utilization

- Forest
- Meadow or pasture
- AGRICULTURAL REGIONS
- Corn, wheat, potatoes, sugar beets
- Vegetables and fruit
- Mixed farming and livestock

## Sheep and Lands – Pasture Lands in Hungary

In Hungary we have more than 1 million ha pasture and grazing land can be utilised by the ruminants.

Only limited number of cattle and goats are grazing on these lands, not more than 200,000 ha are used by this species alone.

Most of these lands should be grazed by sheep but the sheep density is rather low in over the country.

According to our opinion 1.5-2.0 ewes per ha could be the expected minimum level of sheep stocking rate in our grazing lands.

## Sheep and Lands – Pasture Lands in Hungary

Concerning the whole agricultural land of Hungary (5,4 million ha approx.), the sheep stocking rate calculated to 100 ha is much lower.

As a consequence of this we do not have to face overgrazing on our grazing and pasture lands but we have problems with a lot of native pasture land which has become wild again.

There are similar problems with poor quality arable lands which are only partly cultivated now.







## The Flock Sizes

Nowadays in Hungary there are 7,046 sheep farms registered by Hungarian Sheep Products Council, but the flock size is changing between a very wide range: from 1 up to more than 5,000 head.

More than 90% of sheep farm have less than 300 ewes, which is more or less the minimum level of a profitable family size sheep farm.

These 300 head could give enough income to the farmer to get rams from nucleus farms and still be able to survive.

The shortage of animals (sheep) is our biggest problem now.

So, our basic breeding goal is simple: to recreate our sheep industry by increasing back the number of animals utilising our land.

## The Flock Sizes

The other reason of increasing our sheep number is to give possibility to the people living far from bigger cities and/or live on poor quality lands to be able to survive and keep them settled.

We would like to and have to increase the number of sheep and the sheep farms.

In this process we want to have economic and breeding effects on the breeding aims of our old and new farmers.

The meat as well as milk breeds and genotypes will be more desirable than the local sheep in this programme.

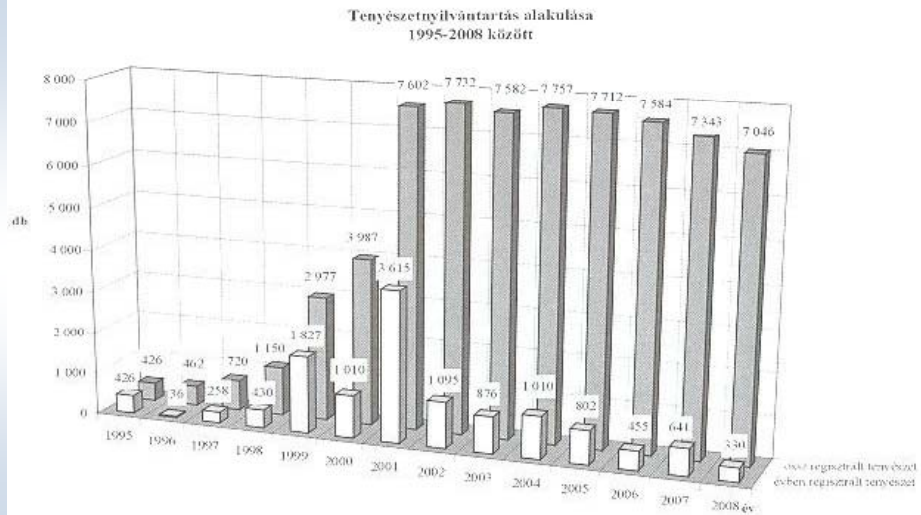
Only a few programmes combining the environmental conditions and the different breeding and production system are in progress.

## Number of sheep livestock and ewe in Hungary

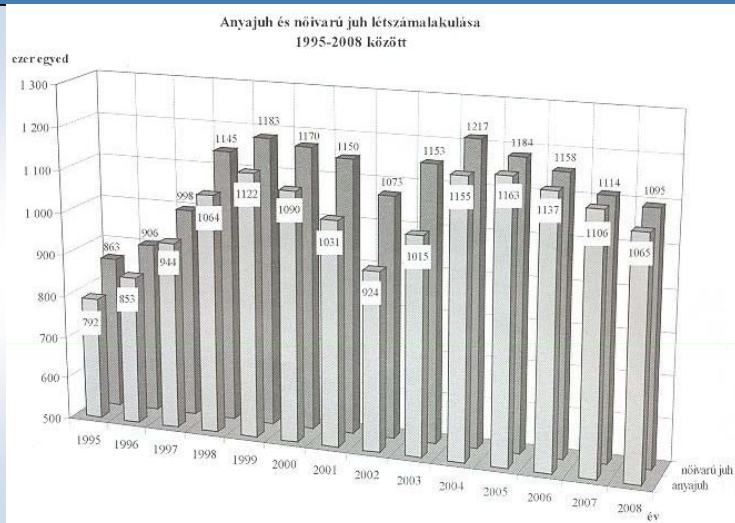
A tenyészelek és az anyajuh létszám megoszlása az állomány nagyságok szerint (2008)

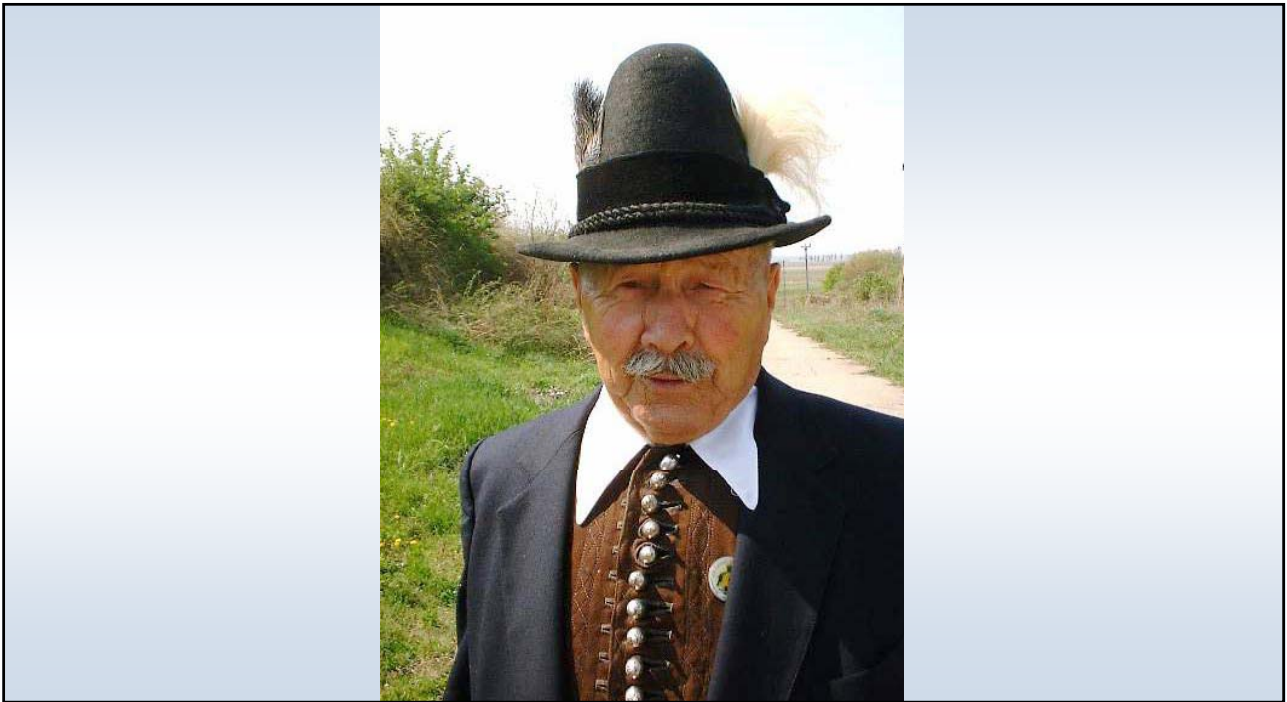
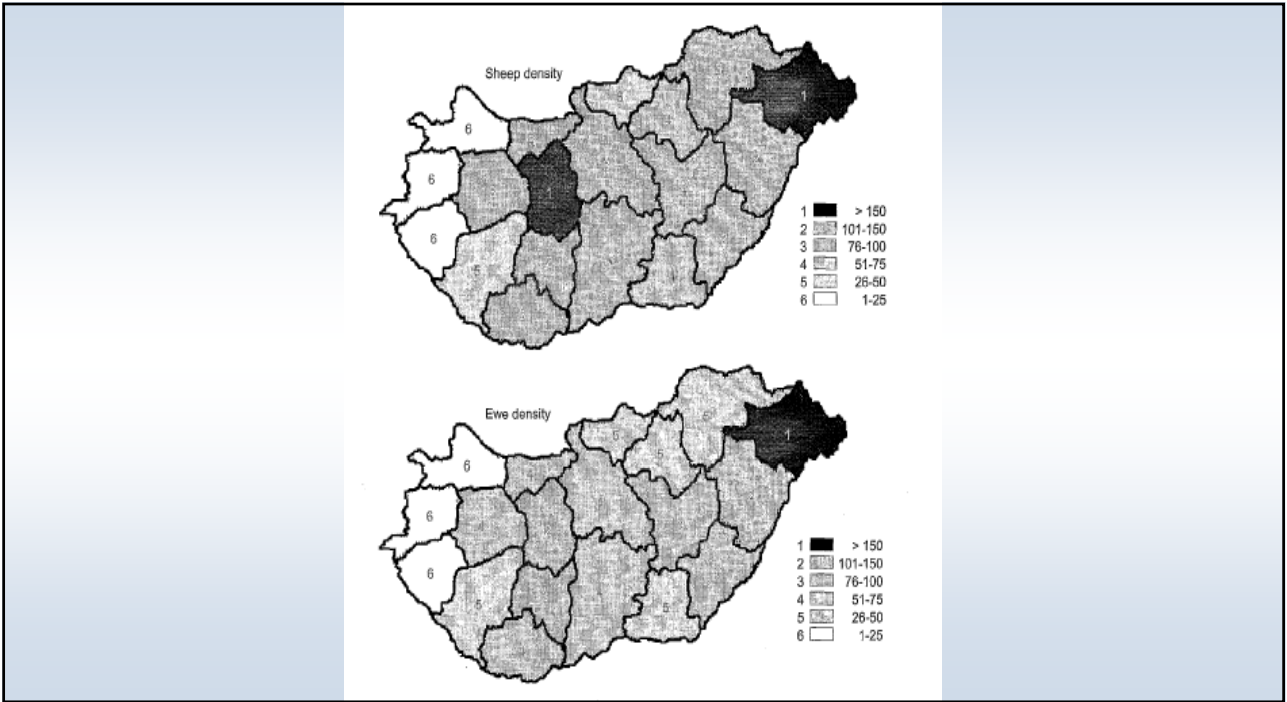
Állomány nagyság	juhtartó	összes juhtartó %-ában	anyajuh létszám	országos anyajuh létszám %-ában
1-9	333	4,73	1 785	0,17
10-20	1 121	15,91	16 477	1,55
21-50	1 616	22,93	57 774	5,42
51-100	1 197	16,99	89 227	8,37
101-500	2 356	33,44	526 778	49,44
501-1000	344	4,88	229 995	21,59
1000 felett	79	1,12	143 422	13,46
Összesen	7 046	100,00	1 065 458	100,00

## Sheep livestock (1995-2008)



## Number of ewe and female sheep





## Breeding Goals in Meat Production

Meat is the dominating product of the sheep industry, about 60-95% of the total income is obtained from selling lambs.

There are three main lamb marketing seasons during the year (Easter, Ferragusto and Christmas), however, the lambing is more or less continuous in the country.

On most of the bigger farms (above 150-200 head of ewes) a divided lambing system is used and many of them also utilize the frequent lambing method.

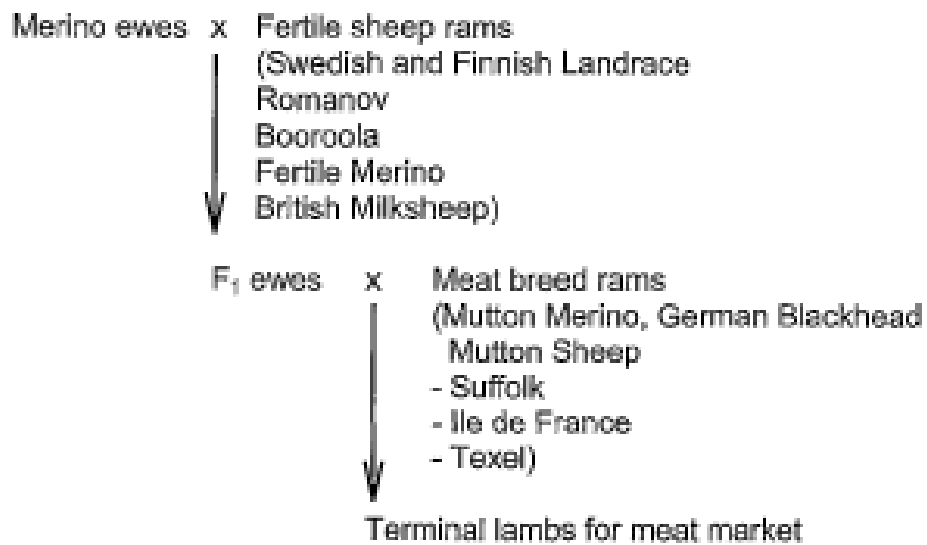
Besides organising lambings, different crossbreeding programmes are in progress in the commercial farms.

## Breeding Goals in Meat Production

These are mainly direct crossing to improve the individual meat production of the lambs where the local Merinos are mated by the rams of different meat breeds (German Mutton Merino, German Blackhead Mutton Sheep, Suffolk, Texel, Ile de France and Hungarian Merino, Australian Merino, Booroola Merino, Fertile Merino).

The German breeds and the Suffolk are the most favourable ones, the other two are not too popular in the country.

The indirect crossbreeding programmes are utilised only on few farms nowadays.



Indirect crossbreeding programmes for increasing meat production.

## Breeding Goals in Meat Production

On the first level of this programme (F<sub>1</sub>) we could manage to increase the lambing rate by 50-100% in comparison to the original Merinos.

In the second level, we have a good number of lambs with perfect meat production ability.

The basic goal of meat production is to increase the number of marketed lambs and the improvement of meat quality comes second.







## Breeding Goals in Milk Production

There are about 50-60,000 ewes milked in Hungary at present.

Ten years ago this number was more than double and at the end of 70's about one half of the total ewe population was milked.

The latest big decrease started in early spring of 1993 when animal health (foot and mouth disease) problems occurred in Italy and most of the lambs produced for Easter selling remained in our country.

Unfortunately, this event happened parallel with the reorganization of agriculture and many dairy and other sheep farms have gone bankrupt.

A big part of milked ewe population belongs to Merino breeds, however, there are some milk breeds available in the country.

## Breeding Goals in Milk Production

To increase the milking ability of Merino sheep several crossbreeding programmes were started.

The main production data of the milked sheep genotypes in Hungary are shown in this table.

### Milking sheep genotypes in Hungary

Genotype	Milk yield (litre)	Weaned lambs (%)
Awassi	300 - 336 l (150 - 200)	90 - 95
(Merino x Awassi) F <sub>1</sub>	80 - 105 l	90 - 95
Milking Cigája	160 - 200 l	130 - 140
Lacaune	64 - 10 l	130 - 140
(Merino x Lacaune) F <sub>1</sub>	60 - 80 l	125 - 135
(Merino x Plevén Blackhead) F <sub>1</sub>	60 - 80 l	100 - 109
(Plevén F <sub>1</sub> x Black East Friesian)	100 - 130 l	110 - 114
Merino	30 - 50 l	90 - 95
British Milkshoop	160 - 220 l (100)	180 - 195
(Merino x British Milkshoop) F <sub>1</sub>	90 - 130 l	160 - 180



## Commerce and Profitability

Originally the meat, the wool and the milk of Hungarian Merino can be utilized.

However, its wool is worthless now, the quantity of its squeezed milk is insignificant, so the production of lamb is the only possibility to make profit.

In Hungary 3-10 years old sheep are usually used to cook lamb stew in a stew-pot then eat it.

It is a very tasty and popular meal in Hungary and foreigners also like it very much.

Consumption of lamb is 0.5 kg/person in Hungary.

1/3 of the sheep population is for breeding animal and 2/3 of them, between the weight 14-25 kg, is for live animal export mainly to Italy.

## Commerce and Profitability

Only a little quantity of lamb gets to other EU countries.

Our slaughtered sheep export is insignificant.

The classification of the carcasses are typically coming under the category of "R".

The profitability of the sheep branch gives only a minimum profit, that is why the number of sheep farmers shows a decreasing tendency year by year, while the average age of life of shepherds shows an increasing tendency, and there are just few young people, who want to work at sheep farms.

## Training

Training and further training for shepherds is available at technical schools for agriculture or colleges of agriculture in Hungary, and this project can ensure the most appropriate education material for them.

The education material, that includes the international material of knowledge, contributes to the establishment of a more economic and environment friendly sheep branch.

## Courses



## Courses



## Courses



## Courses



## Courses



## Courses



### Shepherd in a Shepherd's Cloak

- he wears it inside out to cool down in summer
- he wears it outside in to warm up in winter











## Shepherd's Day in Hódmezővásárhely (2011)



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## Foundation of Knowledge

**Thank you very much  
for your attention!**