



ANIMAL PRODUCTION RESEARCH CENTRE NITRA

Survey study of economic parameters in Holstein and Slovak dual purpose breeds

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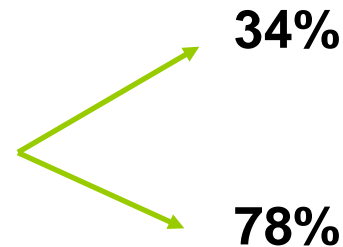
Slovak milk sector in 2007-2011 (1)



- Number of cattle 478,4 heads

- Number of cows 207,3 heads

- Number of dairy cattle 162,1 heads



- National consumption of milk and milk products
156 kg per capita per year

Slovak milk sector in 2007-2011 (2)

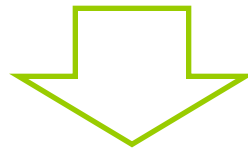
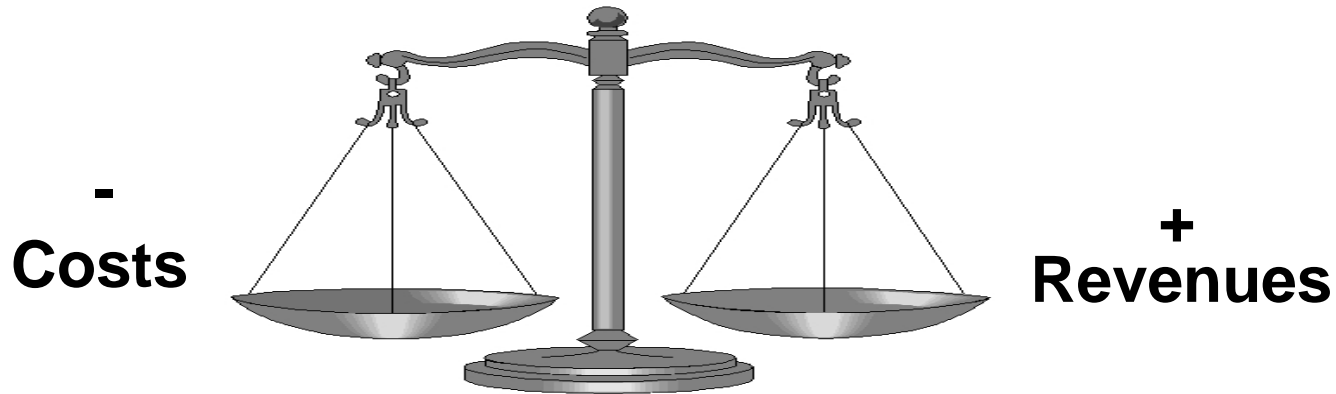


- **Gross agricultural output (GAO) 2 079 mil. €**
- **Gross output of milk production 16% from GAO**
- **Average milk purchase price at farm gate 29.16 € per 100 kg of milk**
- **Average milk production 6 728 kg per cow and lactation**
- **Fulfilment of milk quota 87%**

Balanced approach



???



Zero profit, zero loss

Biological approach



Start of animal production



**Natural
conditions**

+

**Suitable
breed**

**Assumption of successful animal
production**



Aim of the study (1)



- To define production and economic parameters of Holstein cattle and its crosses with Slovak dual purpose cattle in:

- lowland areas
(9 farms, L)



- mountain and foothill
areas (13 farms, F)



Aim of the study (2)



- **To evaluate the economic efficiency (farms L, F)**
- **To propose optimal parameters to achieve the economic sustainability**
- **Evaluated period 2007-2011**
- **The economic database of the Animal Production Research Centre in Nitra**



Results (1)

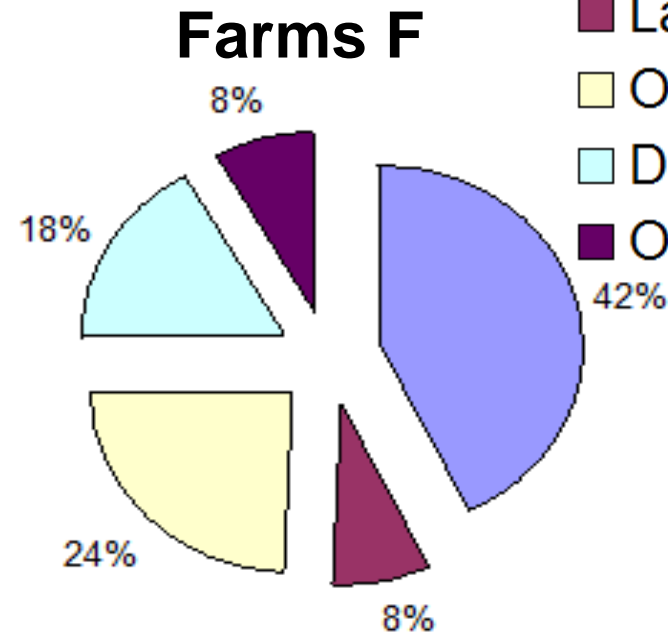
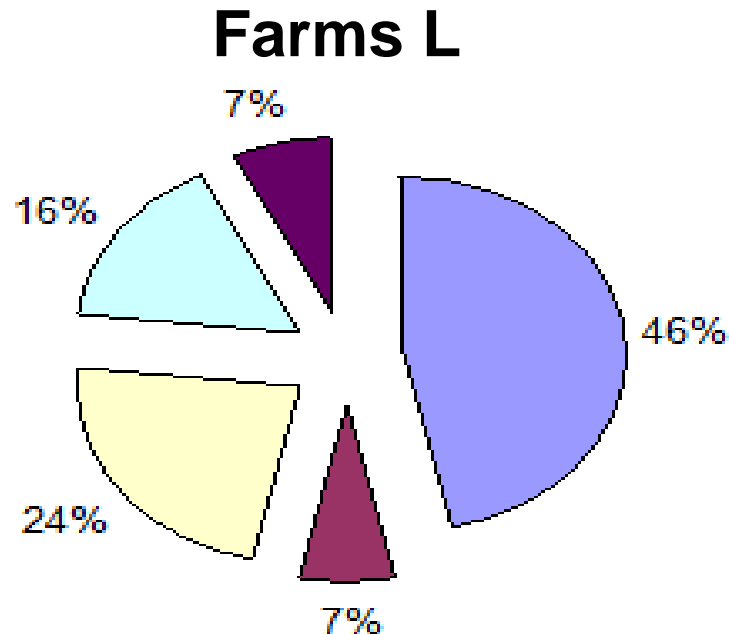
The production parameters in evaluated dairy cattle farms (2007-2011)

Indicator	Farms L	Farms F	"
Elevation of the farm (m above sea level)	353	547	-194
Heads per herd	447	234	213
Age at first calving (day)	897	1 032	-135
Calving interval (day)	455	427	28
Production life of cow (No. of lactations)	2.6	3.3	-0.7

Results (2)



The cost items proportion in dairy cattle farms (2007-2011)



- Feed costs
- Labour
- Other direct costs
- Depreciation
- Overheads



Results (3)

Changes in the individual cost items in the evaluated dairy cattle farms (2011 vs. 2007)

Cost item	Farms L	Farms F
Feed costs	-3%	27%
Labour	-28%	-5%
Other direct costs	2%	16%
Depreciation	-9%	7%
Overheads	-17%	14%
Total	-6%	16%

Why?
What happened?



Results (4)

Basic parameters of revenues in cattle farms (2007-2011)

Indicator	Farms L	Farms F	”
Average milk yield per cow and year (kg)	6 687	4 734	1 953
Marketability (%)	96	93	3
Milk price (€ per 100 kg)	33.02	32.81	0.21

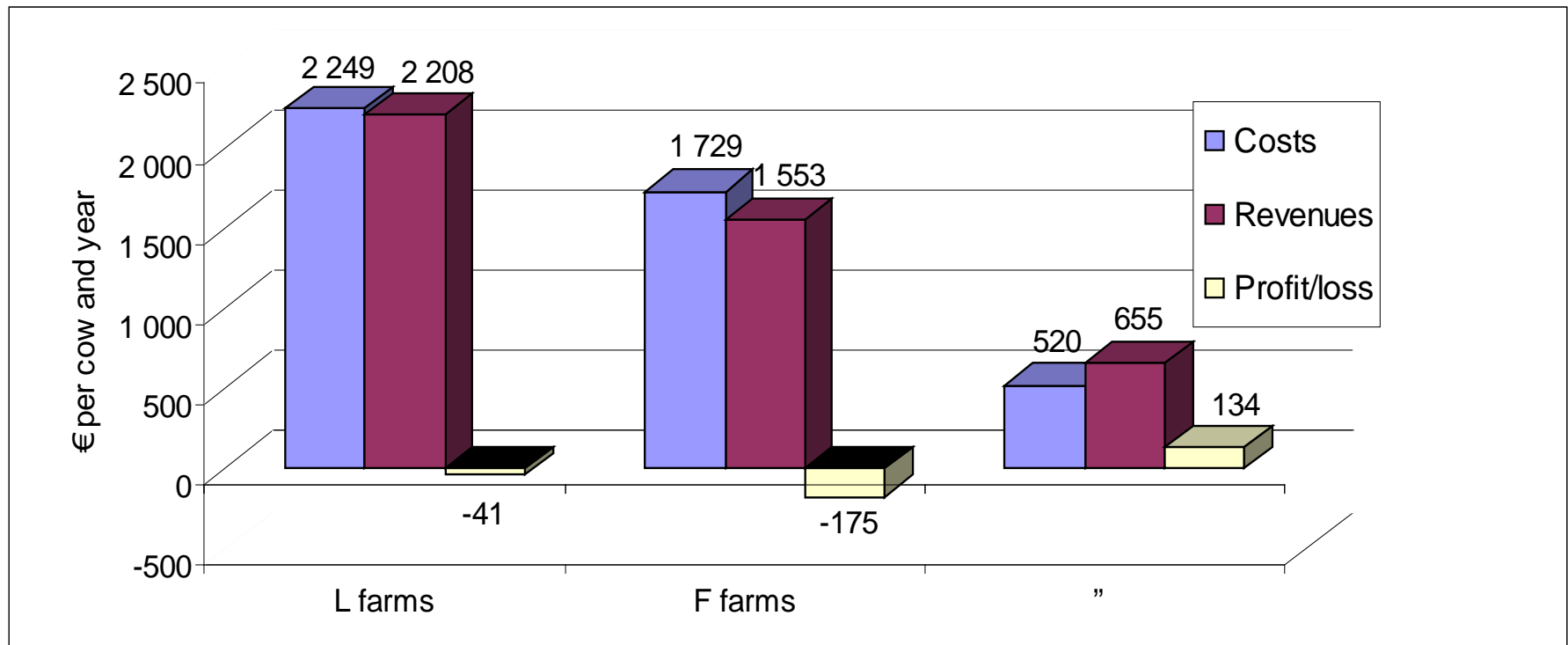


Revenues per cow and year in €	2 208	1 553	655
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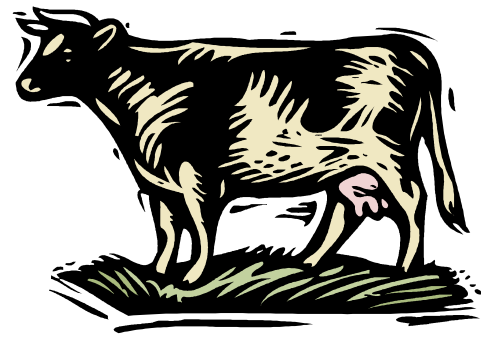
Results (5)

Profitability in the dairy cattle farms (2007-2011)



The economic database of APRC Nitra, 2007-2011

Conclusions (1)



- Suitable breed for natural conditions
- Quality of heifers rearing
- Promote to marketing associations
- Milk processing to final products and diversification
- Detailed recording

K
N
O
W

H
O
W



Conclusions (2)

Optimization in dairy cattle farms (L and F, resp).

- milk yield per cow and year 8 687 kg and 6 406 kg, resp.
- number of lactations per cow life 3.05 and 4.4, resp.
- calving interval 400 days and 390 days, resp.

Thank you for attention

Animal Production Research Centre Nitra

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Economic of:

- cattle, - sheep, - pig

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