



COOPERATION IN THE FIELD OF ANIMAL BREEDING IN BALTIC COUNTRIES

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ICAR, June 2, 2010, Riga, Latvia



BALTIC COUNTRIES

- Similar history
- Members of EU from 2004
- Dairy farming is the main source of income for agricultural holdings in three Baltic countries
- Smaller dairy farms in Latvia-Lithuania, larger in Estonia
 - Herd size in milk recording, 2009
 - Latvia 17.3 cows
 - Estonia 87.3 cows



BALTIC COUNTRIES

- Milk recording, 2009
 - Lithuania – 43% of cows
 - Latvia – 60% of cows
 - Estonia – 92.3% of cows
- Productivity of cows in milk recording, 2009
 - Estonia – 7447 kg
 - Lithuania – 6119 kg
 - Latvia – 5785 kg

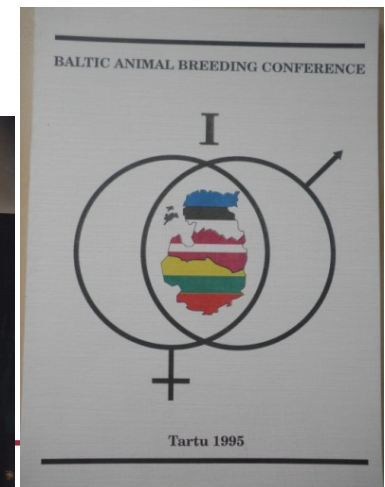


OUTLINE

- 15 years of Baltic Animal Breeding Conferences
- Collaborative research projects
- Cooperation between organisations and breeders

BALTIC ANIMAL BREEDING CONFERENCE

- A lot of common problems to be solved
- Share the experience
- Give floor to young scientists, PhD and MSc students
- 1995 – Tartu, Estonia



BALTIC ANIMAL BREEDING CONFERENCES

No.	Year	Place	Country
1.	1995	Tartu	EE
2.	1996	Kaunas	LT
3.	1997	Riga	LV
4.	1998	Tartu	EE
5.	1999	Baisogala	LT
6.	2000	Jelgava	LV
7.	2001	Tartu	EE
8.	2002	Kaunas	LT
9.	2003	Sigulda	LV
10.	2004	Tartu	EE
11.	2005	Palanga	LT
12.	2006	Jurmala	LV
13.	2007	Pärnu	EE
14.	2008	Vilnius	LT
15.	2010	Riga	LV

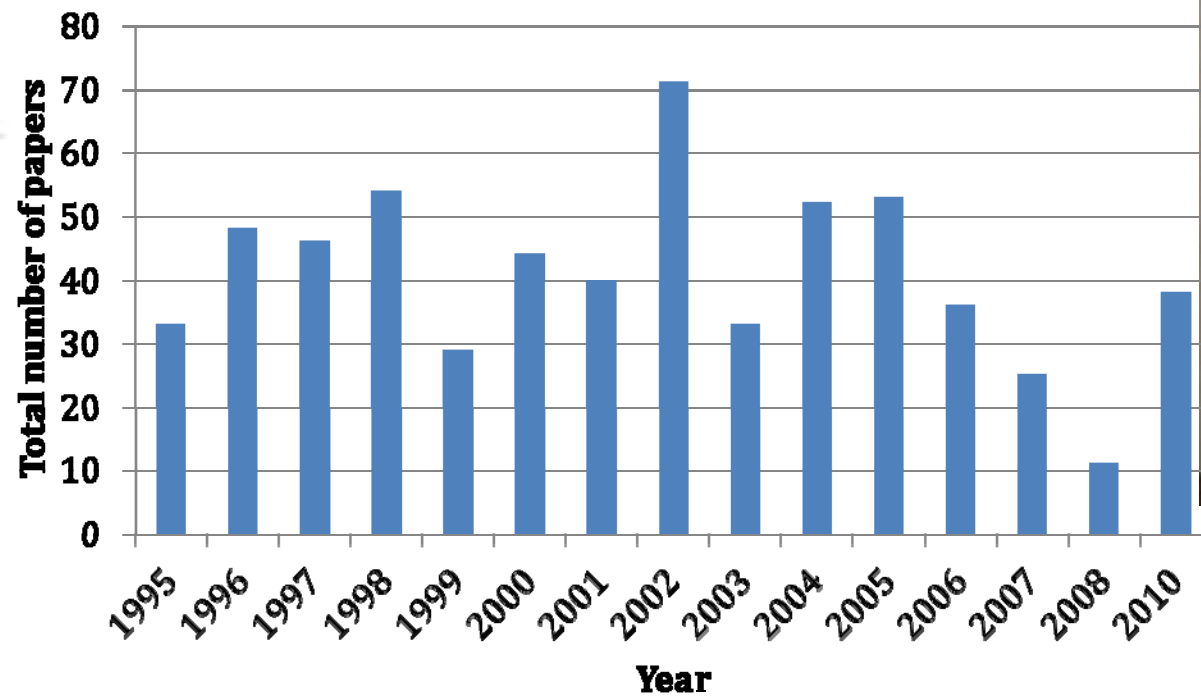


Baisogala, 1999

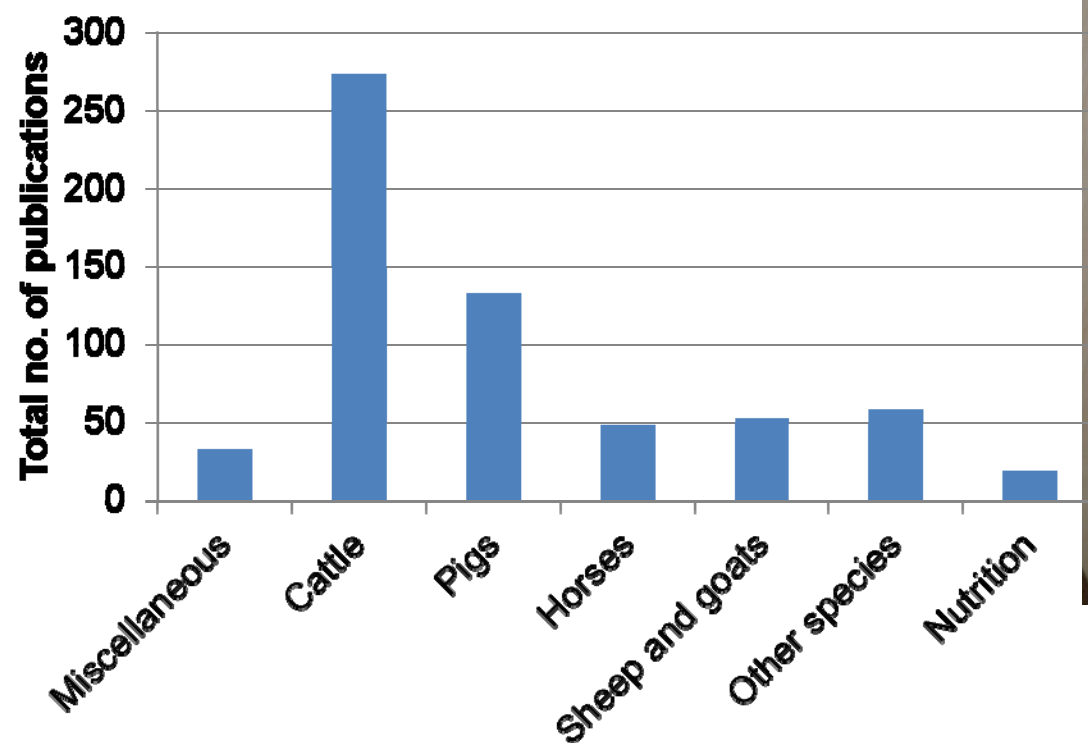


Jelgava, 2000

PUBLICATIONS



BABC PUBLICATIONS



BALTIC ANIMAL BREEDING CONFERENCES



Kaunas, 2002



Jelgava, 2000



Tartu, 2004



Tartu, 2004



Pärnu, 2007

BABC FIELD TRIPS



Piistaoja Farm, 2007, Estonia

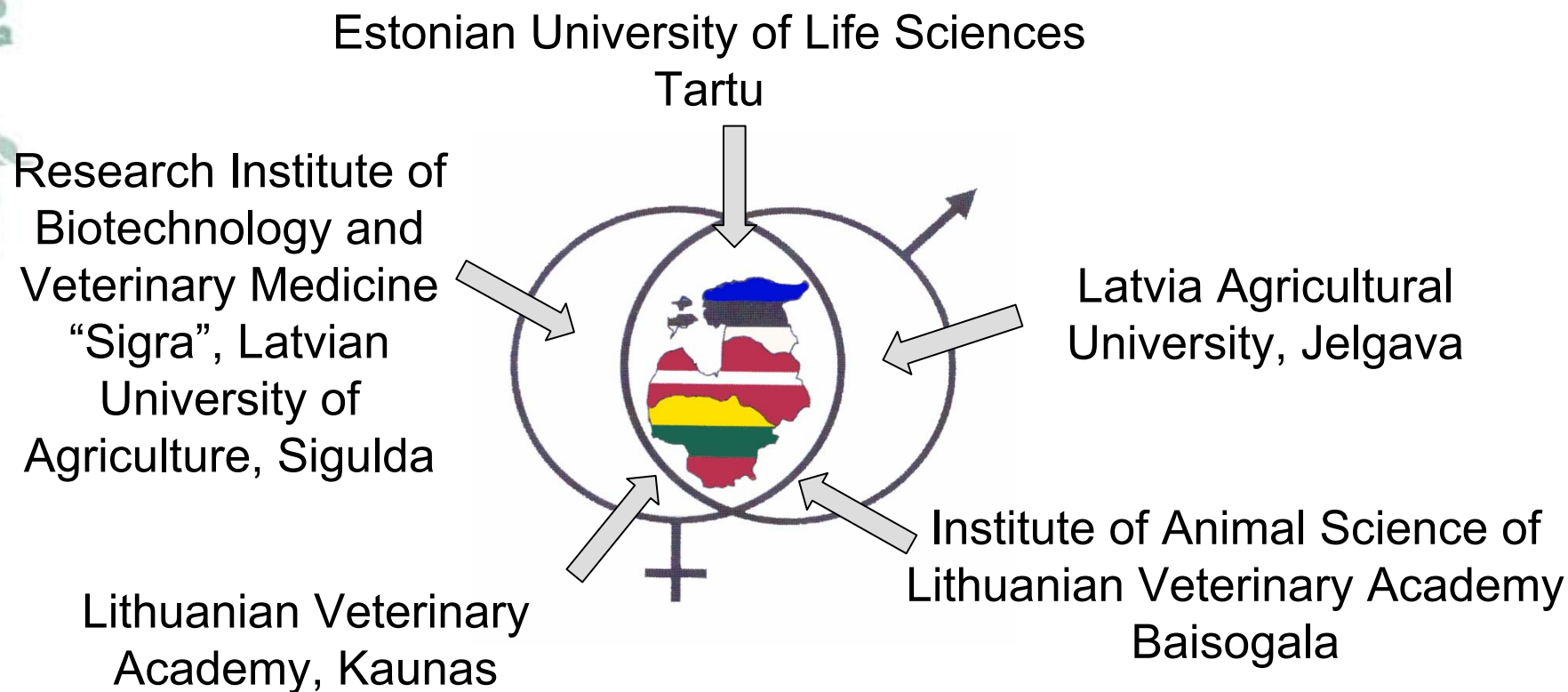


Tori stud, 2007, Estonia



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RESEARCH INSTITUTIONS





RESEARCH PROJECTS

- Origin and genetic diversity of North European sheep breeds
 - Funded by Nordic Council of Ministers, 1999-2001
- Partners
 - Agricultural Research Institute in Iceland, Iceland
 - Danish Institute of Agricultural Sciences, Denmark
 - Norwegian School of Veterinary Science, Norway
 - Swedish University of Agricultural Sciences, Sweden
 - Agricultural Research Centre, Finland
 - Latvia University of Agriculture, Latvia
 - Lithuanian Veterinary Academy, Lithuania
 - Estonian Agricultural University, Estonia



RESEARCH PROJECTS

- Analysis and Comparison of Genetic Diversity in Cattle Breeds of the Northern European Area
 - Funded by Nordic Council of Ministers, 2000-2002
- Partners
 - Norwegian School of Veterinary Science, Norway
 - Nordic Genebank – Farm Animals, Norway
 - Agrifood Research Finland, Finland
 - National Research Institute of Animal Production, Poland
 - Latvia University of Agriculture, Latvia
 - Estonian Agricultural University, Estonia
 - Lithuanian Veterinary Academy, Lithuania

GENETIC DIVERSITY PROJECTS

- 35 cattle breeds from Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Poland and Sweden
 - 20 microsatellite markers recommended by FAO
- 33 sheep populations from Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Sweden, Norway
 - 25 microsatellite markers recommended by FAO.
mtDNA





OUTCOME

- Network building – within and between countries
- Workshops on molecular genetics
- Workshops on population genetics
- Evaluation of genetic distances and genetic diversity of breeds
- Information for making decisions on sustainable management and conservation of cattle and sheep genetic resources
- 4 PhD thesis in Baltic countries



OUTCOME

- Transfer of knowledge to researches, authorities and decision makers, farmers, students
- Dissemination of information increased public awareness about AnGR
- Initiated collaboration within each of Baltic countries between people involved in activities on AnGR – farmers, breeding associations, governmental structures, research groups



ONGOING PROJECT - BALTFOODQUAL

Unlocking Animal Food Quality Research Potential in
Baltic Region by Developing Scientific and Technical
Capacities of the Research Institute "Sigra"

- FP7-REGPOT-2007-1
- Objective
 - to stimulate realization of research potential of the enlarged EU by unlocking and developing existing research potential in Baltics
 - strengthen capacity of researchers
 - improve technical capacity of the Research Institute "Sigra", Latvia

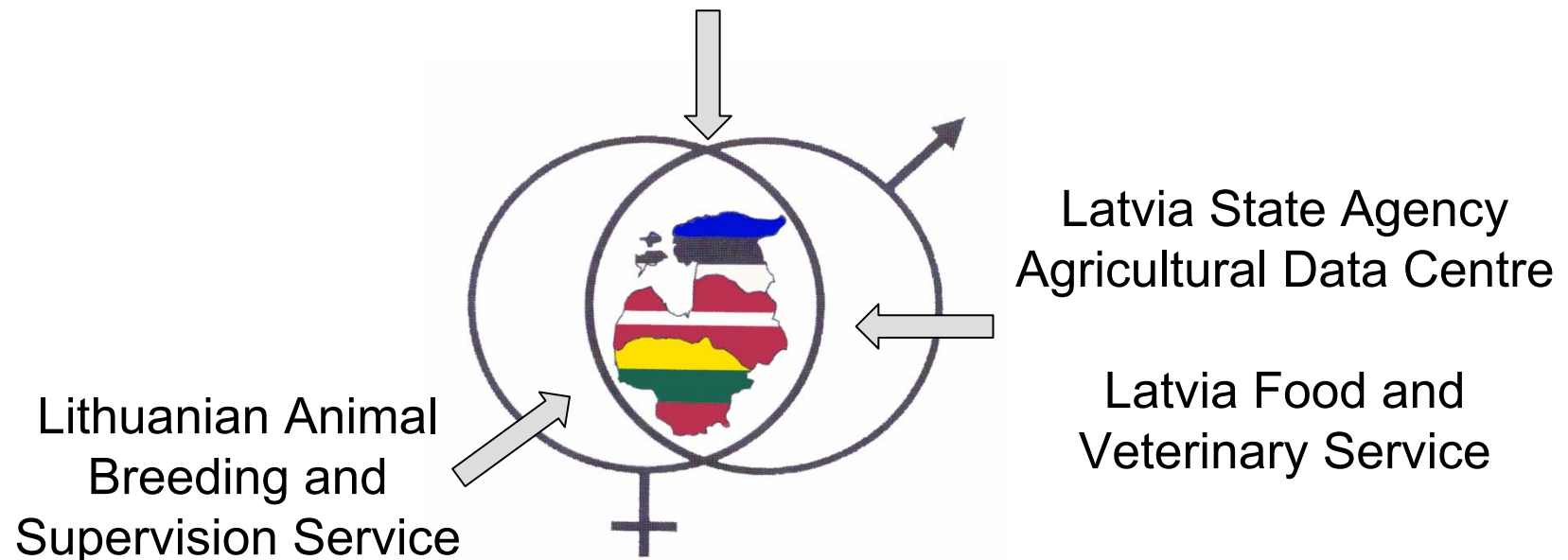


ONGOING PROJECT - BALTFOODQUAL

- Partners
 - Research Institute of Biotechnology and Veterinary Medicine “Sigrā” of Latvia University of Agriculture, Latvia
 - Institute of Animal Science of Lithuanian Veterinary Academy, Lithuania
 - Estonian University of Life Sciences, Estonia
 - Swedish University of Agricultural Sciences, Sweden
 - University of Aarhus, Faculty of Agricultural Sciences, Denmark
- Estonia – Methodologies in research of genetic potential in livestock breeding and pig breeding
- Lithuania – Methodologies in research of quality and quantity parameters of feed by animal species

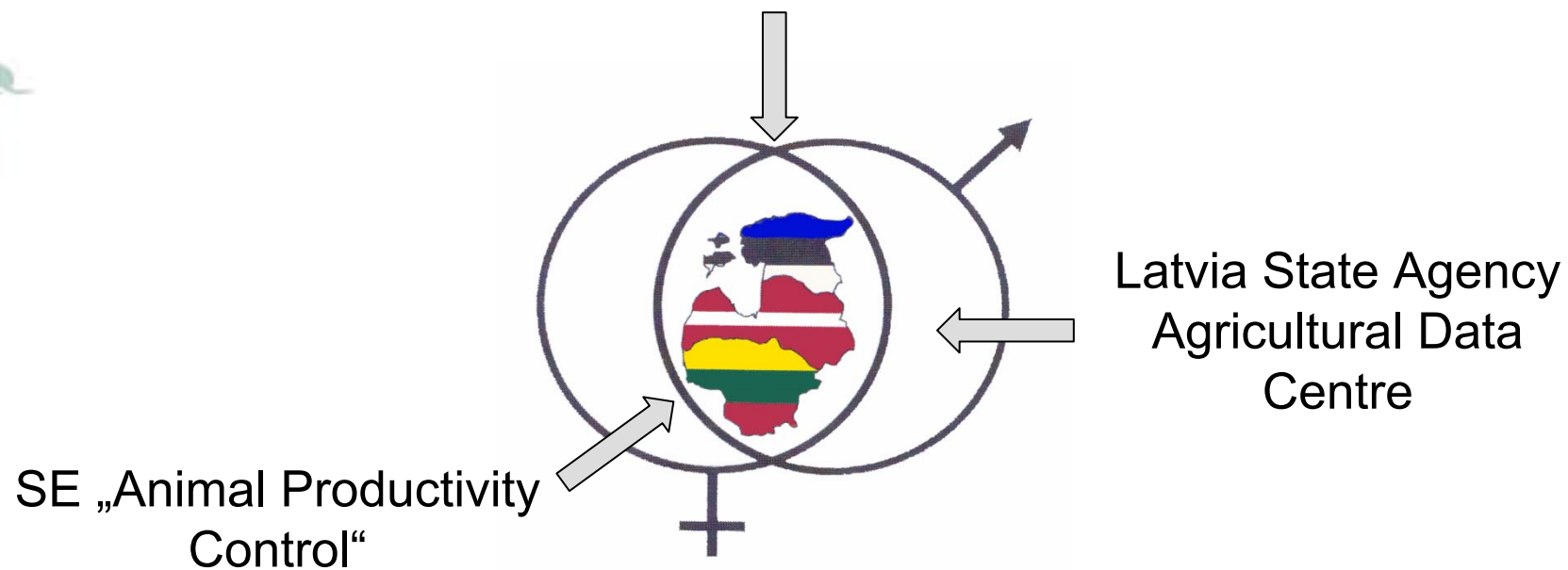
BREEDING COORDINATION AND SUPERVISION

Estonian Veterinary and Food Board



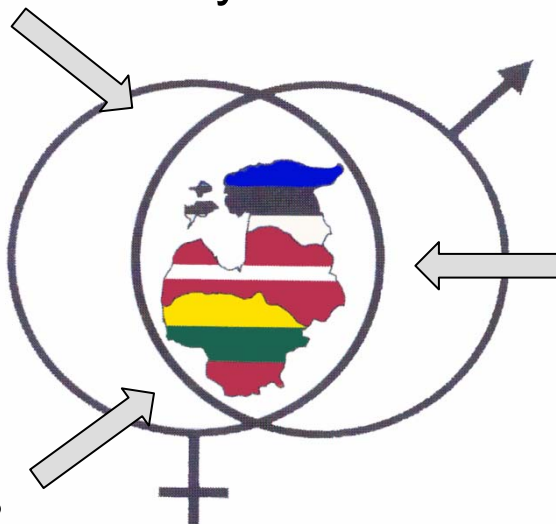
ANIMAL RECORDING

Estonian Animal Recording Centre



MILK RECORDING

Estonian Animal Recording Centre
Milk analysis laboratory



Milk laboratory, Kaunas

3 laboratories

Stock company "Sigulda
Artificial Insemination and
Stock Breeding Station" Milk
Quality Control Laboratory,
Sigulda

"Piensaimnieku laboratorija"
Ltd. Control Laboratory,
Ulbroka

Stock company "Station of
Pedigree and Artificial
Insemination of Latgale"
Laboratory of analysis of
milk, Viļāni

COOPERATION BETWEEN BREEDING ORGANISATIONS AND BREEDERS

- Beef cattle breeders in Baltic countries
- Regular meetings

2004	Latvia
2005	Lithuania
2006	Estonia
2007	Latvia
2008	Lithuania
2009	Estonia





COOPERATION BETWEEN BREEDING ORGANISATIONS AND BREEDERS

- Informal contacts and collaboration between breeding organisations of different species and breeds
- Both breeding organisations and breeders are invited to attend at the animal shows
- Exchange of breeding material (semen, live animals – cattle, sheep, horses, pigs)



CONCLUSIONS

- Tradition of Baltic Animal Breeding Conferences
- Very good cooperation in the field of animal genetic resources
- However
 - The cooperation could be comprehensive and more active
 - New joint projects should be initiated
 - Development of common testing of beef cattle
 - Common auctions of animals could be arranged