



Diversity of local pig breeds and production systems for
high quality traditional products and sustainable pork chains



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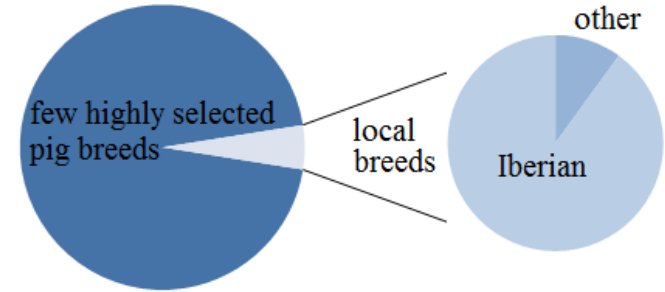
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Problem, objectives



- > 95% EU pig production with few breeds
- Local breeds < 5 % EU pig production



Local pig breed

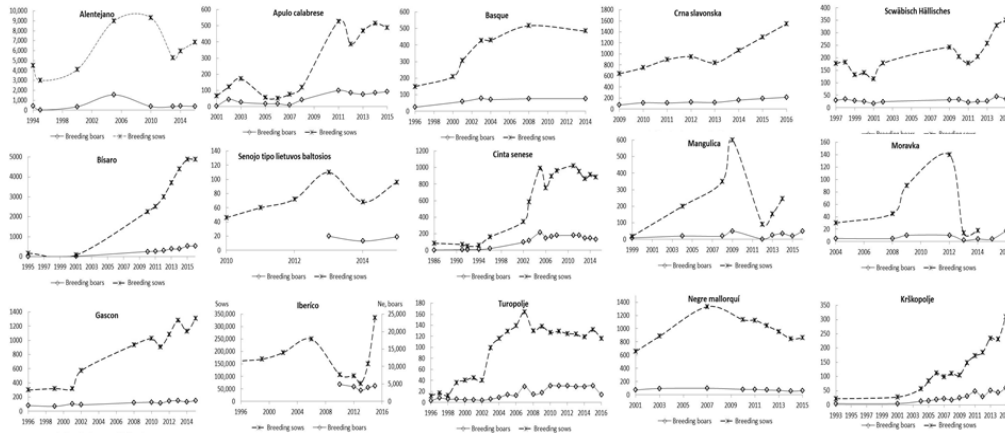
- agricultural biodiversity & ecosystem services
- unique characteristics
- special quality of their products
- adapted to local agro-geo-climatic conditions
- reared in variety of production systems



Problem, objectives



- Local pig breeds were abandoned and marginally exploited for many years
- despite revived interest many remain endangered or not maintained sustainably



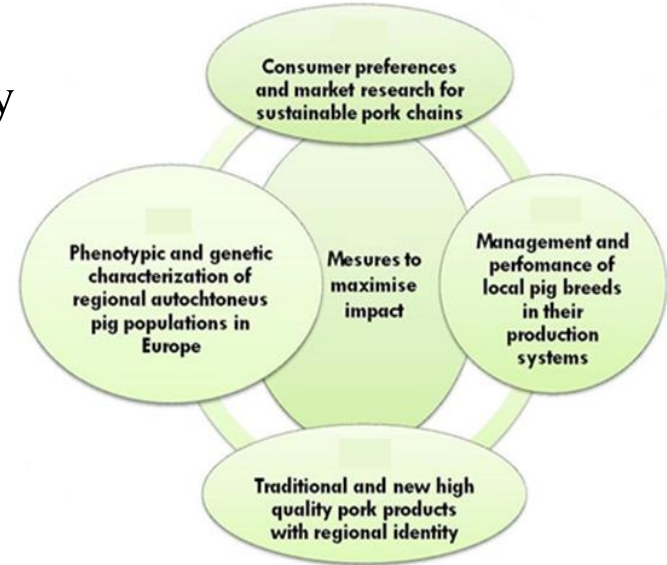
Breed	Year of register or herdbook est.	Data for	¹ No. of sows	¹ No. of boars
Alentejano	1985/1992	2016	6,861	394
Apulo Calabrese	2001	2015	489	93
Basque	1996	2014	517	76
Bisara	1995	2016	4,870	529
Casertana	2001	2015	545	31
Cinta senese	1986	2015	884	135
Crna slavonska	1996	2016	1,546	214
Gascon	1996	2015	1,310	150
Iberico	1987	2015	396,132	4,440
Krskopolje	1993	2015	311	60
Lietuvos Vietines	2001/2014	2015	30	11
Mangulica	1993	2016	247	35
Moravka	1993	2016	18	4
Mora Romagnola	2001	2015	270	67
Nero Siciliano	2001	2015	1,103	124
Negre Mallorqui	1997	2015	862	63
Sarda	2007	2015	61	20
Schwäbisch - Hällisches s.t.	1984	2015	350	35
s.t. Lietuvos Baltosios	2001/2014	2015	96	19
Turopolje	1996	2016	116	14
Greek black pig		2015	1,123	90
Celta	2000	2015	816	190
East Balkan pig	2006	2016	1090	48



Key challenge



- Conservation of traditional animal genetic resources through exploitation is the best strategy to secure biodiversity and food diversity.
- Research and innovation is needed for enhanced use (economical viability; sustainability)



Ambitions – results



- Characterisation at phenotypic, genomic and functional level
- Performances, Nutritional requirements; Locally available feeding resources; Multicriteria evaluation of production systems incl. environmental impact
- Product quality – link with production system – consumer evaluation – breeding programs
- Socio-economic aspects (cost-benefit analysis at farm and society level; consumer's motives; marketing strategies)
- Creating and exchanging the knowledge – creating functional networks between actors



Contribution to EU AGRI R&I strategy



System based approach for

- Better management and use of local pig breeds
- Sustainable primary production
- Food quality and diversity
- Ecosystem services (agricultural activity, landscape, tradition, gastronomic heritage)





Research gaps and needs



- Lack of basic information (for many breeds start-up)
- Insights into molecular basis of their specific properties, singularity, adaptive capacity; connection btw genotype#phenotype
- Multi-criteria evaluation: environmental impacts, welfare, economic parameters
- Optimisation of their exploitation: performances, nutrition, product quality, consumer attitudes, value chain building

THANK YOU
FOR YOUR ATTENTION

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