Genebanks for Farm Animal Genetic Resources

4 examples

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Austria (AT)

Founded 1997
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Owneship of material public/private

Support in situ conservation of rare breeds
Safeguard genetic diversity of mainstream breeds

Close collaboration with Universities of Agriculture and Veterinary Medicine

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BOKU

The Netherlands (NL)

Founded 2000
Centre for Genetic Resources, the Netherlands (CGN), National Focal Point AnGR
Part of Wageningen University
Ownership of material public/private

Support conservation in vivo
To be able to reconstruct breeds,
To be able to create new lines/breeds,
To be able to quickly modify and/or reorient selection,

Slovenia (SL)

Founded 2010
University of Ljubljana Biotechnical faculty, Public Service for Farm Animal Genetic Resource
Owner of material public/private

Conservation - providing long term storage
Supporting in vivo conservation
Reconstruct breeds in case of extinction
Support research

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Switzerland (SW)

Founded 2009
Swissgenetics (cattle, goats), Swiss Government (horses) SUISAG (pigs, www.suisag.ch), private owners (horses)

protection, improvement and conservation of AnGR

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4 genebanks – different approaches

Main Material semen – all
Task Conservation of local breeds – all
Backup for mainstream breeds – AT, NL, SW
Provide material for in situ conservation – AT, NL, SW
Research & Development - all
Part of NFP AnGR - all

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Restoring lost biodiversity

Semen mainstream cattle – AT, NL, SW
Semen mainstream other species – AT, NL, SW
Semen local breeds – all
Provide material for in situ conservation – AT, NL, SW
Rebuilding of breeds possible?

AT	no embryos, few somatic cells
NL	full rebuilding possible
SL	no embryos
SW	no embryos, no somatic cells

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Questions

International exchange of genebank material NOT complying with EU sanitary regulations but intended for use in breeding?
Use of material in case of an emergency?
Are national derogations in place?
How to link cryobanks to in vivo collections?
Genetic characterization of old material?
Last not least: Will the new EU Regulation be helpful?

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Many questions – lets try to answer them in

IMAGE

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