



European Regional Focal Point for Animal Genetic Resources



EUROPEAN GENE BANKS: STRONGER TOGETHER


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GOBIERNO
DE ESPAÑA
MINISTERIO
DE AGRICULTURA, PESCA
Y ALIMENTACIÓN







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1. What is a genebank?

EUGENA ToR: A genebank for AnGR **is a repository for ex situ conservation and sustainable use of AnGR held by a host institution authorized and/or recognized by a national authority to fulfill these tasks.** A genebank may be constituted by one or more repositories (in vitro or in vivo) collaborating as a network.

Regulation (UE) 2020/686: means a repository of animal genetic material for ex situ conservation and sustainable use of genetic resources of kept terrestrial animals, held by a host institution authorised or recognised by the competent authority to fulfil these task




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1. What is a genebank?

- Genebanks are the most trusted means of conserving AnGR in long term.
- Support the in situ conservation programmes of endangered breeds.
- Support breeding programs develop by breeding companies or breeders societies.
- Tool for the researchers.



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1. What is a genebank?

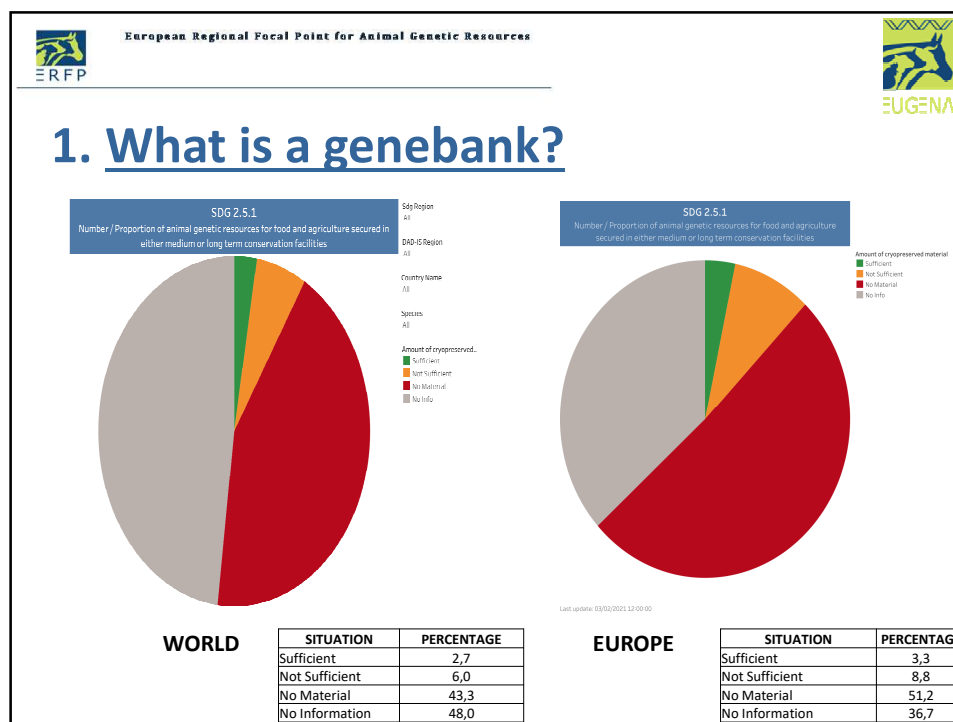
Target 2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

- **Indicator 2.5.1.b - Number of animal genetic resources for food and agriculture secured in medium or long term conservation facilities:**
The conservation of animal genetic resources for food and agriculture in medium or long term conservation facilities (ex situ in genebanks) represents the most trusted means of conserving genetic resources worldwide. This indicator will measure progress towards target 2.5.

Source: UN.

DAD-IS.



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2. Ex-situ conservation WG.

OBJECTIVES:


1. To exchange experiences and knowledge between European countries on Ex Situ conservation strategies;
2. To support the establishment, further development, efficiency and effectiveness of national genebanks for AnGR;
3. To develop the European Gene Bank Network for AnGR (EUGENA)

MEMBERS:
27 EXPERTS FROM 26 COUNTRIES AND 1 REGIONAL ORGANIZATION (NORDGENE)

MAIN ACTIVITIES:
Annual meeting, management of EUGENA, Ad Hoc Actions, collaboration with other WG or ERFP secretariat, collaboration with external projects, information dissemination...

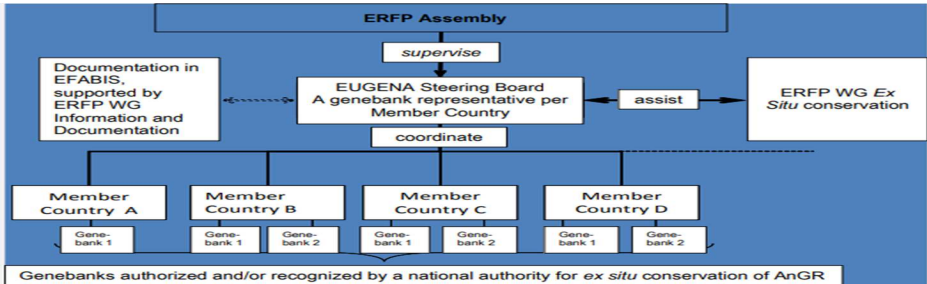


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3. European Genebank Network for Animal Genetic Resources (EUGENA).

1. The EUGENA is a network of Member Genebanks to support the ex situ conservation and sustainable use of AnGR in Europe.
2. Operates under the umbrella of the ERFP and in accordance of a Terms of Reference.
3. EUGENA itself does not constitute a legal entity but operates by its member genebanks collectively.





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3. EUGENA: Objectives.

- to support genebanks in European countries to fulfil their individual roles and objectives;
- to improve monitoring and assessment of AnGR kept in ex situ collections in European countries by sharing information on genebank collections;
- to improve genebank operations and procedures in European countries by sharing information;
- to use synergies for ex situ conservation and sustainable use of AnGR by joint activities of genebanks in European countries;
- to increase the efficiency of ex situ conservation and sustainable use of the genetic diversity of transboundary breeds;
- to promote harmonization of acquisition and access terms for ex situ conservation and sustainable use throughout the genebanks in European countries;
- to facilitate a quality improvement of the genebanks in European countries;
- to create an element of the European research infrastructure for conservation and sustainable use of AnGR;
- to facilitate a regional European approach for international cooperation and exchange of AnGR in the context of the implementation of the Nagoya Protocol for Access and Benefit Sharing.




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3. EUGENA. WEB-PAGE.

<https://www.eugena-erfp.net/en/>





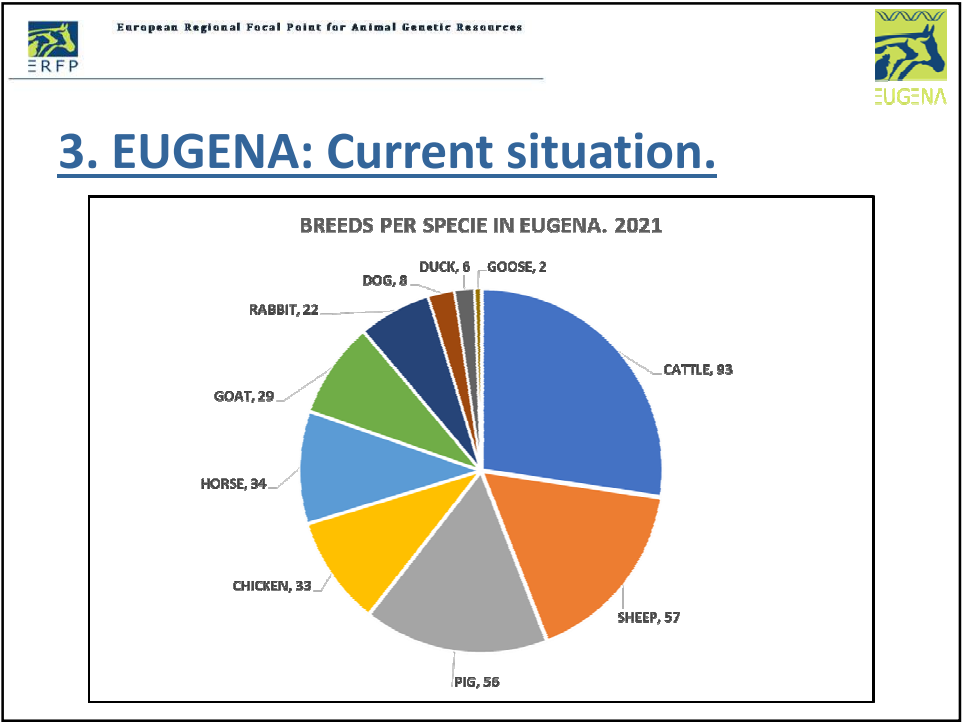
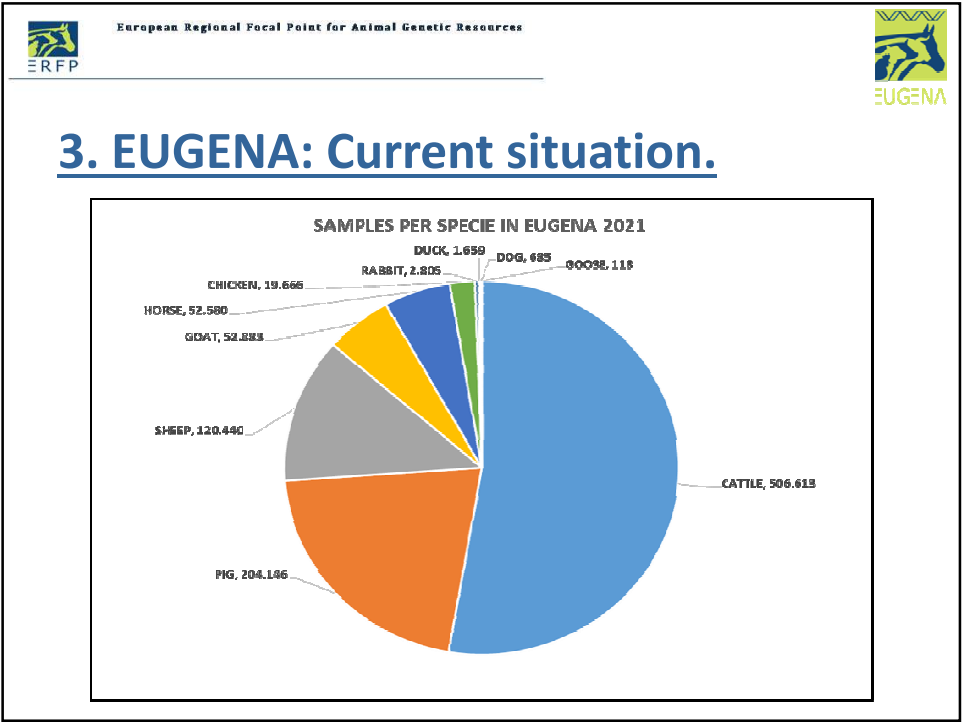
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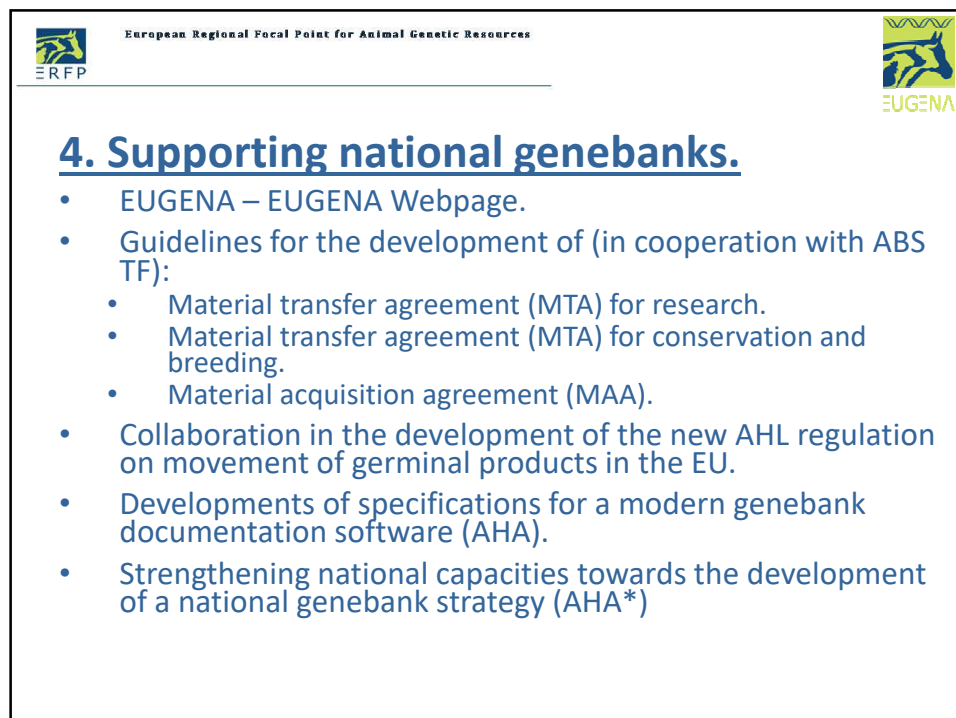
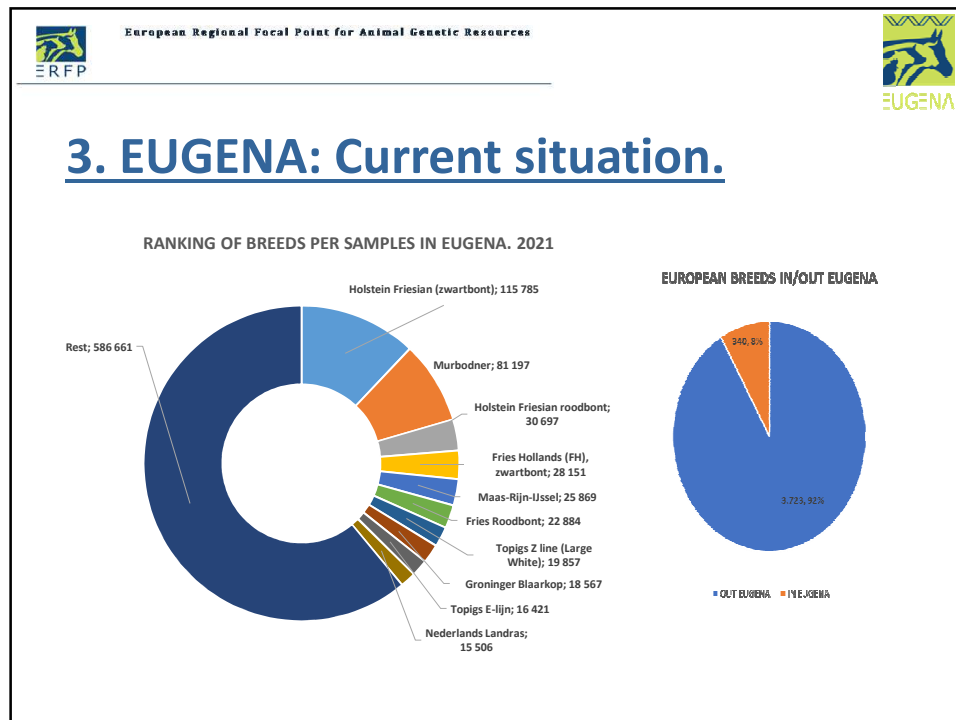


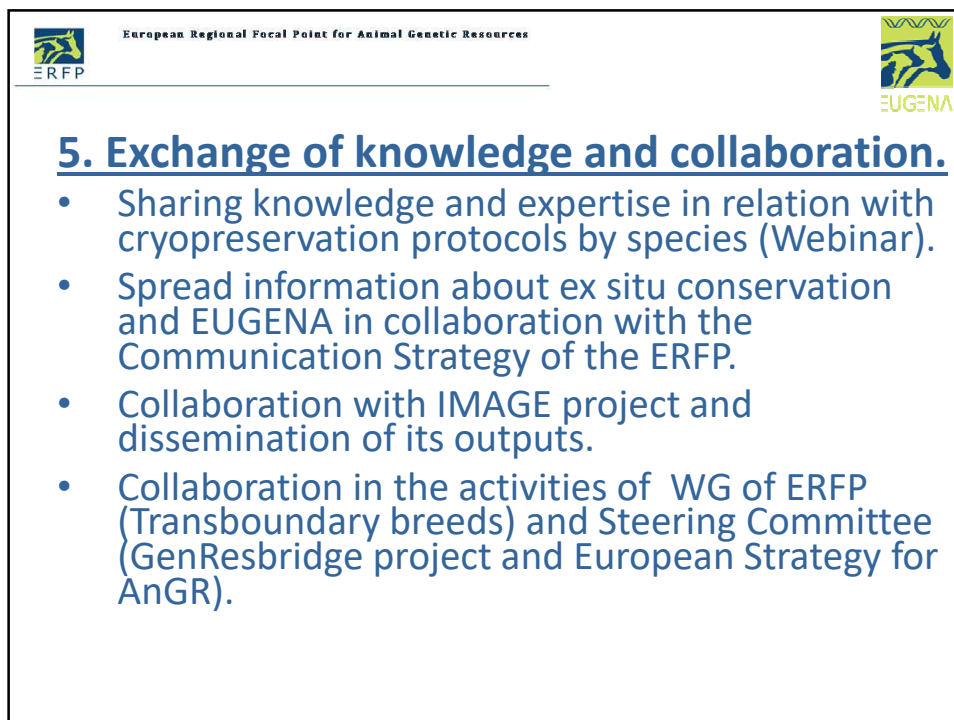
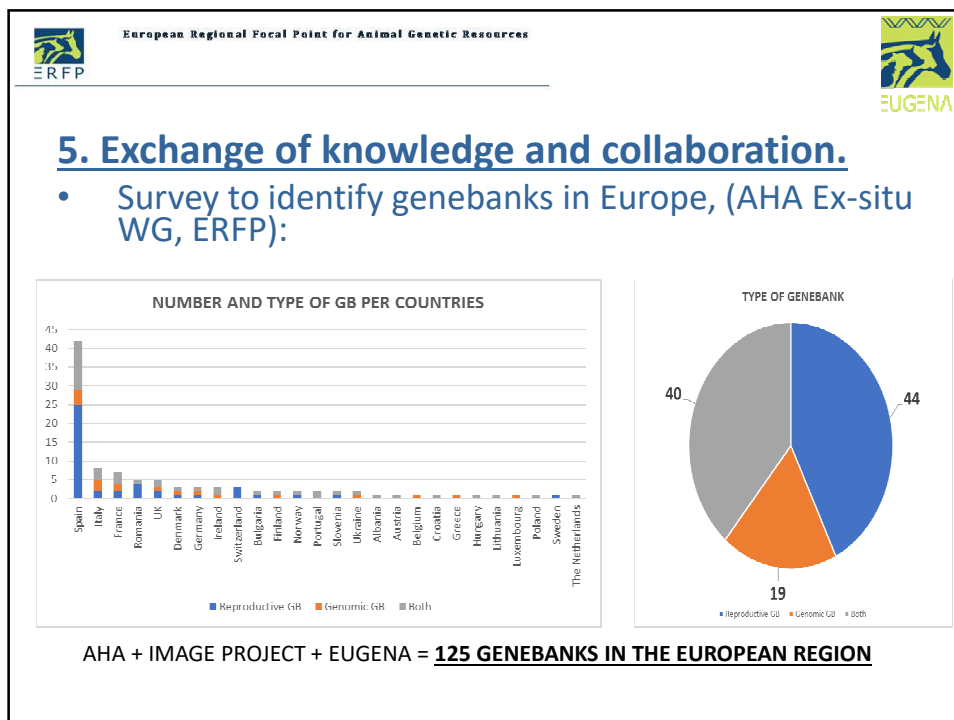
3. EUGENA: Current situation.

MATERIAL TYPE	SAMPLES 2020	SAMPLES 2021
Blood	1.397	2.864
DNA	0	1.066
Embryos	590	844
Hair	48	218
Semen	863.289	956.603
Total	865.324	961.595

MATERIAL TYPE	MALE DONOR	FEMALE DONOR
Blood	563	1.617
DNA	114	952
Embryos	56	121
Hair	165	45
Semen	11.095	0
Maximum	11.879	1.783










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6. FUTURE PLANS.

- Develop and enhance EUGENA.
- Support the incorporation of new documentation software into the European genebanks.
- Foster the incorporation of the specific measures for genebanks in the national animal health regulations. (Proposed AHA)
- Support the countries in the development of successful ex situ conservation strategies (AHA).
- Collaborate in the development of tools for the assessment of breeding programmes.
- Support the utilization of Quality Management Systems in Genebanks. (Proposed AHA)
- Continue collaborate:
 - Development and application of the European Strategy for Genetic Resources and European Strategy for ANGR.
 - With other WG and ERFP Secretariat.
 - Sharing point of experiences and knowledge on ex-situ conservation.



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ACKNOWLEDGES:

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- Previous chairs:
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 - Jelena Ramljak.