

## Ad hoc action: Assessment of breeding programmes for local breeds

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## Background


- AnGR strategy
 

Development of sustainable breeding programmes for **local breeds** aiming to improve performances maintaining the rusticity and resilience of the breeds  
=> ERFPP scope
- Regulation (EU) 2016/1012
 

**Breed societies of endangered breeds** are responsible for the development and implementation of breeding programmes  
=> EURC EAB scope



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# Objectives


Provide (self assessment) tools to assess the effectiveness of the breeding (and conservation) programmes of **local breeds** in Europe

- Setting of breeding goals,
- Management of genetic diversity,
- Agro-ecological principles ?

The AHA contributes to ERFP goals  
by supporting national capacities for the management of AnGR

- Links with the EURC-EAB goals (**endangered breeds**)

Cooperation of ERFP and EURC-EAB



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# Reviewing breeding programme (endangered breeds)

From EURC-EAB work programme (deadline 31-12-2024)

- Sub-activity 2.1
  - Harmonise methodology and framework to assess breeding programmes and in situ conservation of endangered breeds
- Expected output
  - Guidelines and (self)assessment tool to evaluate breeding programmes
  - For breed societies, third parties and competent authorities
- Underlying objective
  - Support the preservation of endangered breeds, and the preservation of the genetic diversity existing within those breeds



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## Reviewing breeding programme (endangered breeds)

**Different steps:**

- 1) Review on available knowledge to assess the effectiveness, quality and sustainability of breeding programmes (for endangered breeds)
- 2) Review translated into guidelines to evaluate breeding programmes.
  - For breed societies, third parties and competent authorities
- 3) Guidelines translated into an (self) assessment tool



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## First results – survey by e-mail


To collect information on:  
 Tools, methods and statistics used to assess breeding programmes at national level

Responses from 14 EU, 3 non EU

EU members	Non EU
Belgium	Norway
Czech Republic	Serbia
France	UK
Germany	
Latvia	
Lithuania	
Luxemburg	
Portugal	
Spain	
Slovenia	
Sweden	

The responses varied

- Detailed publicly available reports
- Protocols and documents
- Brief explanations



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## First results – survey by e-mail

- Animal Breeding Regulation + national legislation
- No specific indicators - BP are monitored and evaluated on each own goals
- Some indicators used or suggested
  - Annual Inventory / population numbers
  - Effective population size
  - Genetic diversity (endangered breeds)
  - Performance tests - BV estimation
- Other suggestions
  - Promotion activities
  - Breed sustainability
  - R&D activities

The responses varied in level of details and depth of assessment



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## Review to assess breeding programmes (for endangered breeds)

**What:** Assess the effectiveness, quality and sustainability of breeding programmes

**Input:**


- Survey ERFP
- Existing protocols and examples (e.g. Spanish protocol)

**Action:**

Discussion (on-line) meeting AHA members + EURC EAB experts



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## Setting up the guidelines for evaluation of breeding programmes Qualitative

**What:** translation of review into guidelines to evaluate breeding programmes

**Input:** Review of step 1

- Identification of key components
- Methods of evaluating key components with indicators
- Evaluation template(s)

**Action:** Writing guidelines by EURC EAB experts + AHA members



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## Development (self) assessment tool Quantitative

**What:** Guidelines translated into an (self) assessment tool for breed societies, national competent authorities

**Input:** results of step 2

- Methods of weighting indicators
- Summary of strengths / weaknesses (or risk scores)

**Action (>2024):** Development of (self) assessment tool EURC EAB experts + AHA members



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