



## Shaping the Future Towards Responsible and Balanced Breeding



EAAP, September 2024, Florence Geena Cartick

With EFFAB and FABRE TP chairs for the breeders' perspective





## Animal Breeding and Genetics Why is it even more relevant nowadays?

- Growing societal concerns about animal welfare and environmental impact.
  - · Need for ethical and sustainable breeding practices.





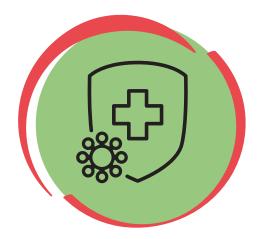
## Animal Breeding

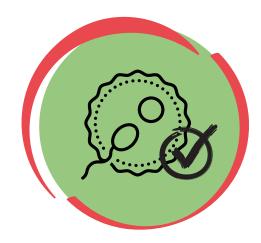


Animal breeding is **selectively** crossing domestic animals with **desirable traits** to produce **better offspring.** 

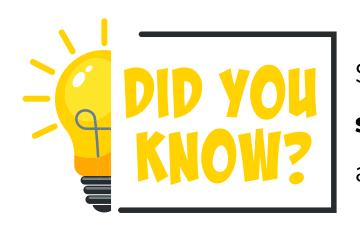




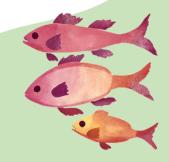








Selective breeding draws from fields like **genetics**, **statistics**, **husbandry**, **and reproductive physiology** and it has been practiced for **more than 10,000 years** 





## Animal Genetics



Genetics serves as the essential starting point at every breeding scheme's core.

• Breeders supply farmers with robust, resilient, and healthy breeding animals (including germinal products).

#### Key Benefits:

- Food Security: Ensures a stable and sufficient food supply.
- Animal Health and Welfare: Promotes the well-being of animals.
- Sustainability: Supports long-term agricultural practices.

Healthy, safe, and nutritious animal products reach your plate







## Animal Breeding and Genetics

- Helps to ensure European and Global food security
  - o To improve the sustainability of animal farming

HOW?



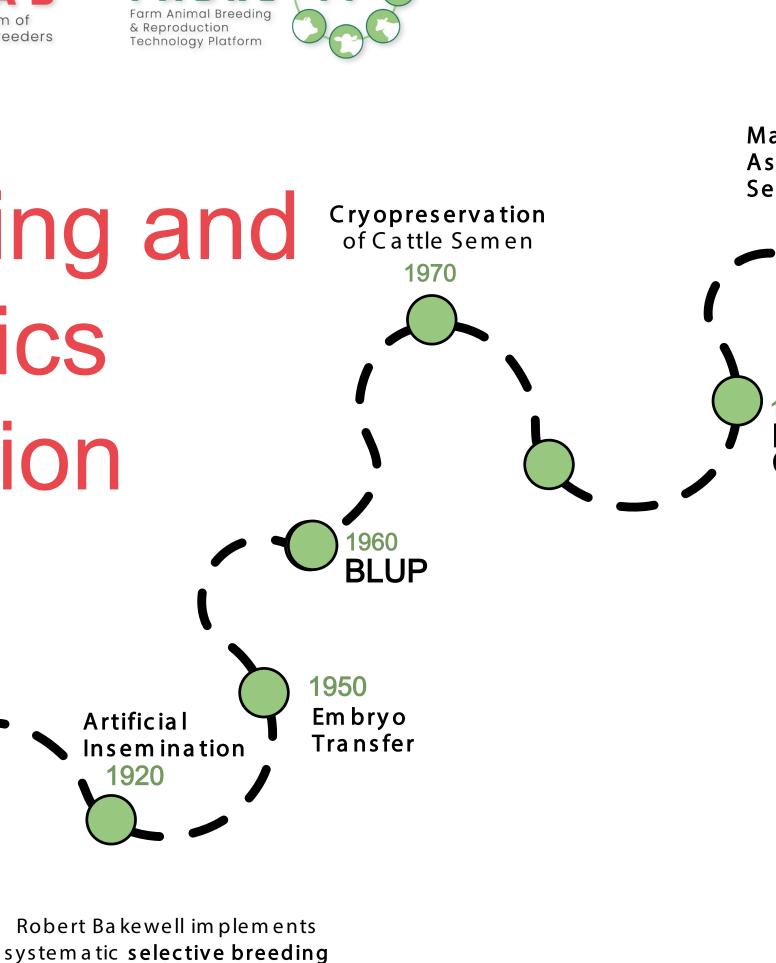


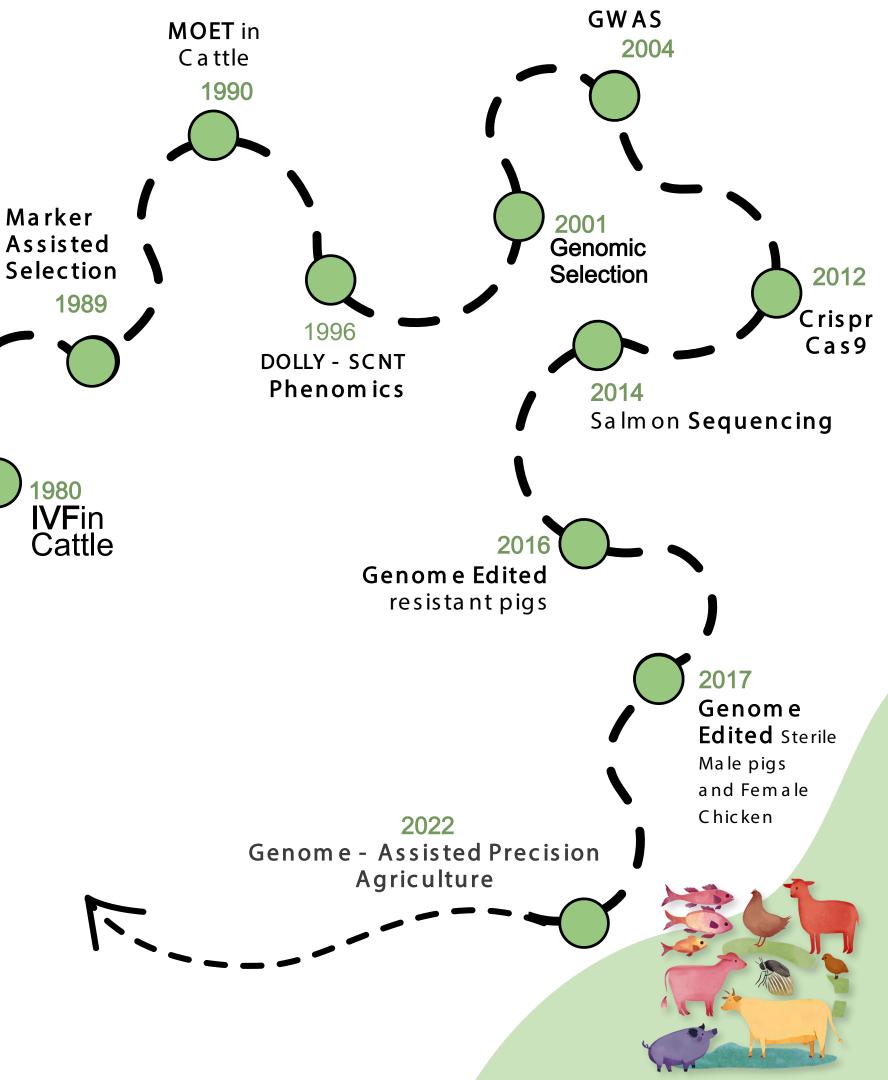


## Breeding and Genetics Evolution

1760

of lives tock.







## Modern Animal Breeding Reproduction Recognition Reproduction Recognition Recognition Recognition Reproduction Recognition Reco



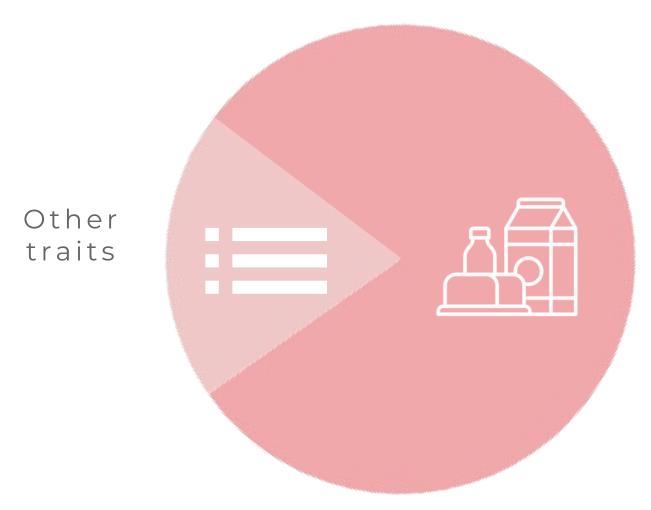
1970's - 1980's

2000's - Today

Improved animal health and welfare Better production and quality of the products

Better use

of resources



Production Traits



Reduction of environmental impact

Preserving genetic diversity







## What does it have to do

## with Code EFABAR in all

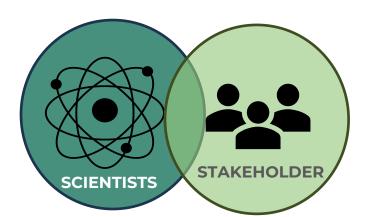
of that?





### Evolution of Code EFABARABRE







Initiative of breeding companies(EFFAB)

## SEFABAR EC-EU Network Funded Project 2000 2003

1998

1999

**RTD** 

**Farm Animal Breeding Society** 

4th Framework Programme for

**EC-ELSA Funded Project** 

2004

Code EFABAR version 1
EC EU Funded Food Quality & Safety

Code EFABAR - 5 editions V2008, v2011, v2014, v2017, v2020

2008

2020



**Code EFABAR 7th Edition** 

**1st Phase:** EFFAB Members **2nd Phase:** FABRE TP Members

Last Phase: External Stakeholders

Every three years
based on the
current
environmental,
societal & political
challenges

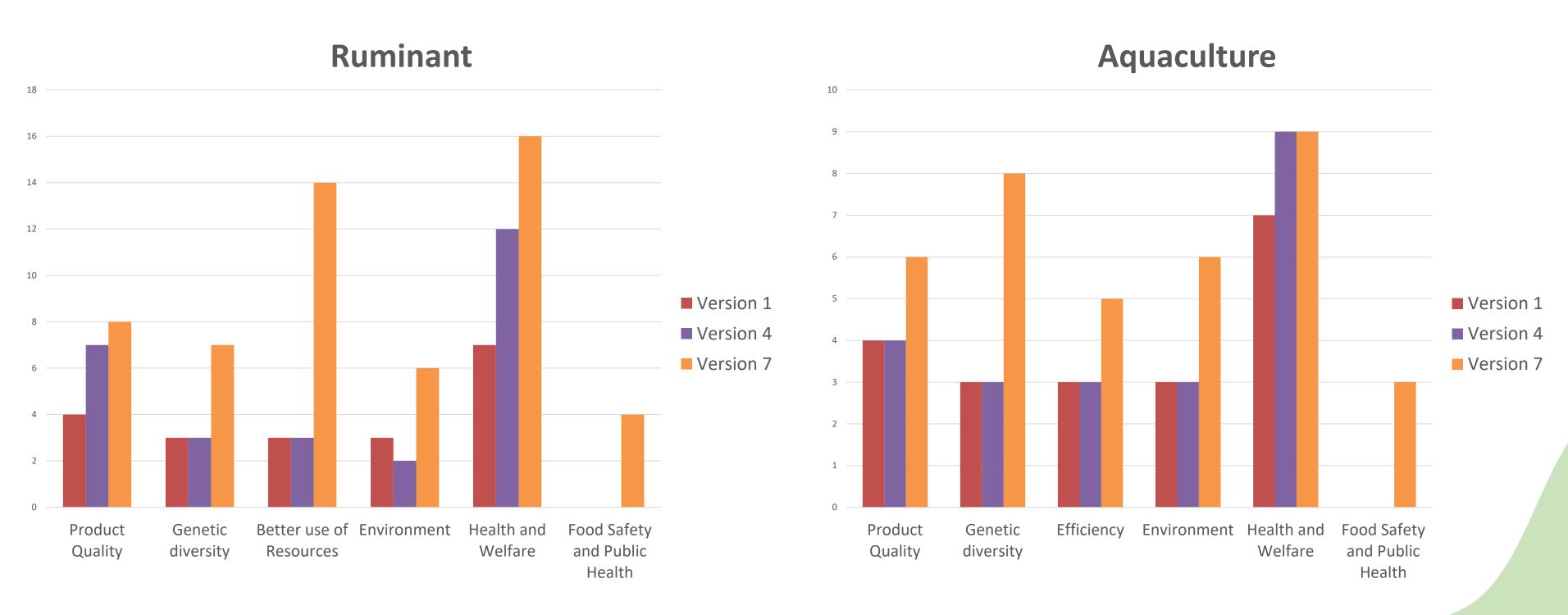






## Progress of Code EFABARFA Reproductive American Annie Rep





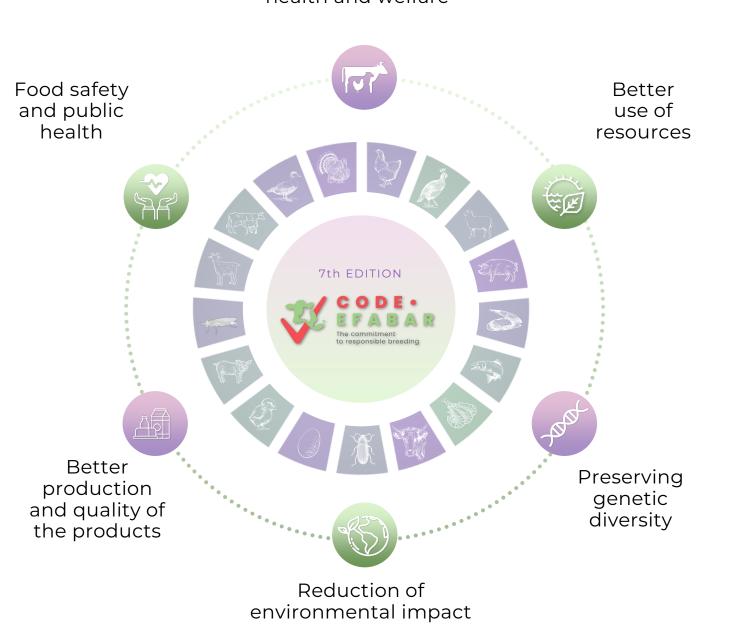
Change in the number of breeding elements included





## The Essence of Code EFALPABRETTPE

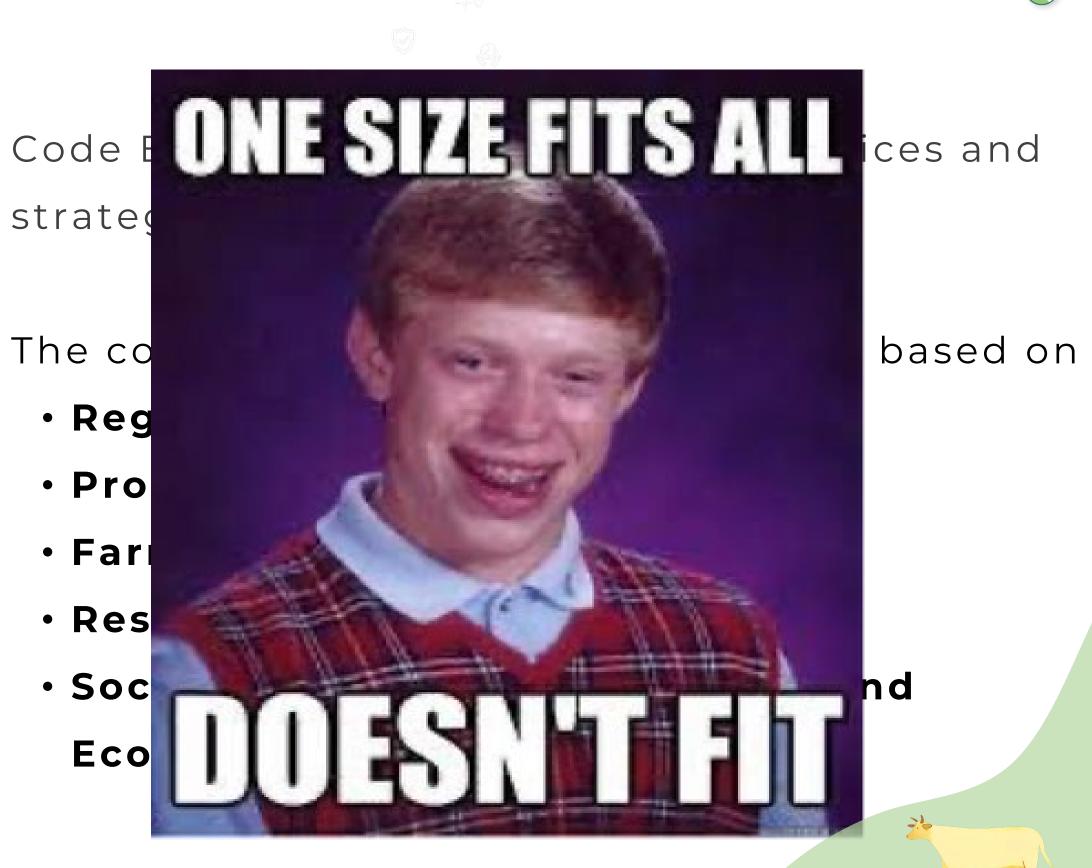
Improved animal health and welfare



Responsible use of technologies



Innovation and public perception





## Impact on informing policymakers, stakeholders, etc....





#### LONG TERM BENEFITS ON SUPPLY CHAIN

Integrating Code EFABAR principles at the breeding level ensures ethical sourcing and sustainability throughout the supply chain.

#### LONG-TERM BENEFITS ON LEGISLATORS

#### **Policy Development**

• Provides a framework for creating policies that support sustainable and ethical breeding.

#### **Regulatory Compliance**

• Assists in developing regulations that align with international standards.

#### Collaboration

• Encourages collaboration with legislators to promote responsible breeding practices and influence policy and regulatory frameworks.



## Impact on Society



## Commitment to responsible and balanced breeding

It shows how the sector contributes to the achieve Sustainable Developments Goals (SDGs) of FAO and the EU Green Deal





#### **Communication Tool**

Engage in dialogue with policymakers, stakeholders, and civil society about modern and balanced animal breeding programs.

To document, demonstrate, and propagate the work of the breeding sector

#### **Public Trust**

Demonstrates a commitment to ethical and sustainable practices, increasing public trust in breeding practices (agri-food production systems)







### Impact with Breeders



- Ensures organisation-wide discussions on
  - Animal health and welfare during breeding and transportation
  - Improved environmental sustainability
  - Preserving genetic diversity
  - Efficient use of resources
  - Food/feed safety and public health
  - Product Quality



- · Highlights the ongoing efforts of breeders in the above-mentioned areas
- Transparency in the supply chain







### Impact with Breeders



#### **Continuous Learning and Adaptation**

#### Internally and Externally

- Importance of staying updated with the latest advancements.
- Ongoing education and training in and beyond the sector

#### Collaboration with Research/Public Sector

- Integration of scientific knowledge and practical insights.
- Joint efforts to promote innovation and address societal concerns.
- A hub for breeding knowledge within the legislative space

#### Genetic and phenotypic time trends of litter size, piglet mortality, and birth weight in pigs

- Pieter W. Knap<sup>1\*</sup> Egbert F. Knol<sup>2</sup> A. Christian Sørensen<sup>3</sup>

  Abe E. Huisman<sup>4</sup> Dianne van der Spek<sup>2</sup> Louisa J. Zak<sup>2</sup>

  Ana Granados Chapatte<sup>5</sup> Craig R. G. Lewis<sup>6</sup>
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- <sup>4</sup> Hendrix Genetics, Boxmeer, Netherlands
- <sup>5</sup> European Forum of Farm Animal Breeders, Brussels, Belgium
- <sup>6</sup> Genus-PIC, Sant Cugat del Valles, Spain

#### Animal Health and Welfare, Diversity, and Environmental Impact

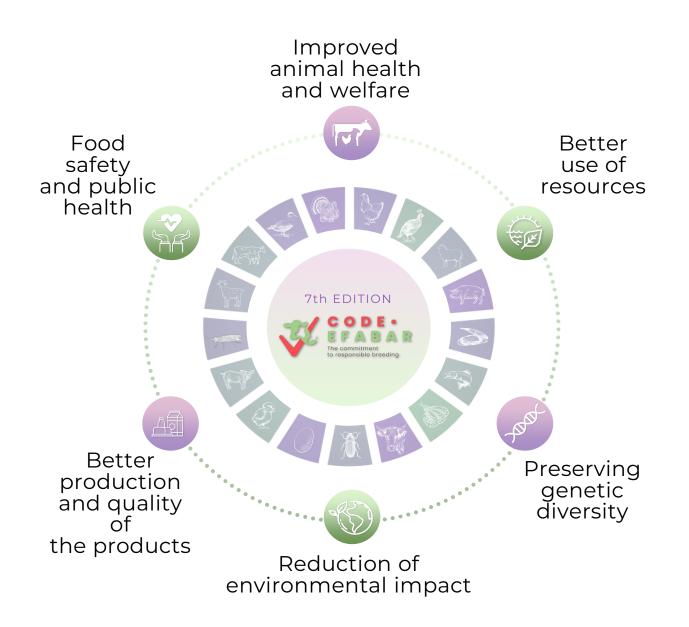
- Code EFABAR demonstrates breeders' commitment to best practices during breeding and transport of animals.
- Breeders go beyond legislative requirements.





### Impact with Farmers





Towards Societal, Environmental and Economic Sustainability

#### **LONG TERM BENEFITS**



#### **RESPONSIBLE AND BALANCED**

Our farmers collaborate with breeders who adhere to responsible and balanced breeding practices. This commitment ensures the delivery of healthy and safe milk and meat to consumers.



#### **EMBRACING SUSTAINABILITY**

Our farmers implement sustainable farming practices in line with the Sustainable Development Goals (SDGs). These practices contribute the reduction of resource use and to environmental protection.



#### **UPHOLDING ETHICAL STANDARDS**

Ethical treatment of animals is at the heart of our farmers' practices. They provide optimal biosecurity and other measures to ensure high levels of health and welfare for their animals.



## Code EFABAR Take Away Messages



- Understanding Genetics is key to responsible and balanced breeding.
- Animal Breeding programs simultaneously improve a group of traits, not only production but also health and welfare.
- Progress is measured and monitored.
- Self-regulation is in place and can be improved.
- Regulations that do not consider the whole picture of balanced breeding will only lead to limitations for breeding populations.
- As long as balanced breeding is performed --> Sustainability and Animal Health and Welfare is ensured







# Code EFABARhowcases the role of breeding and genetics in the sustainable transformation of the livestock sector.











SCAN ME

## THANK YOU!

#### Any Questions?

www.responsiblebreeding.eu
www.effab.info
www.fabretp.eu



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