



European Project n° 677353

Stakeholder Involvement and Ethics in Conservation of AnGR in Gene Banks

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EAAP, Ghent; August 28, 2019



Overview



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- Introduction to H2020IMAGE
- Stakeholder Involvement of IMAGE
 - Knowledge on and understanding of Gene banks (2016)
 - Sanitary Regulations (2017)
 - Economics of conservation (2018)
 - Access and Benefit Sharing (2019)
- Survey on Innovations and Ethical Issues

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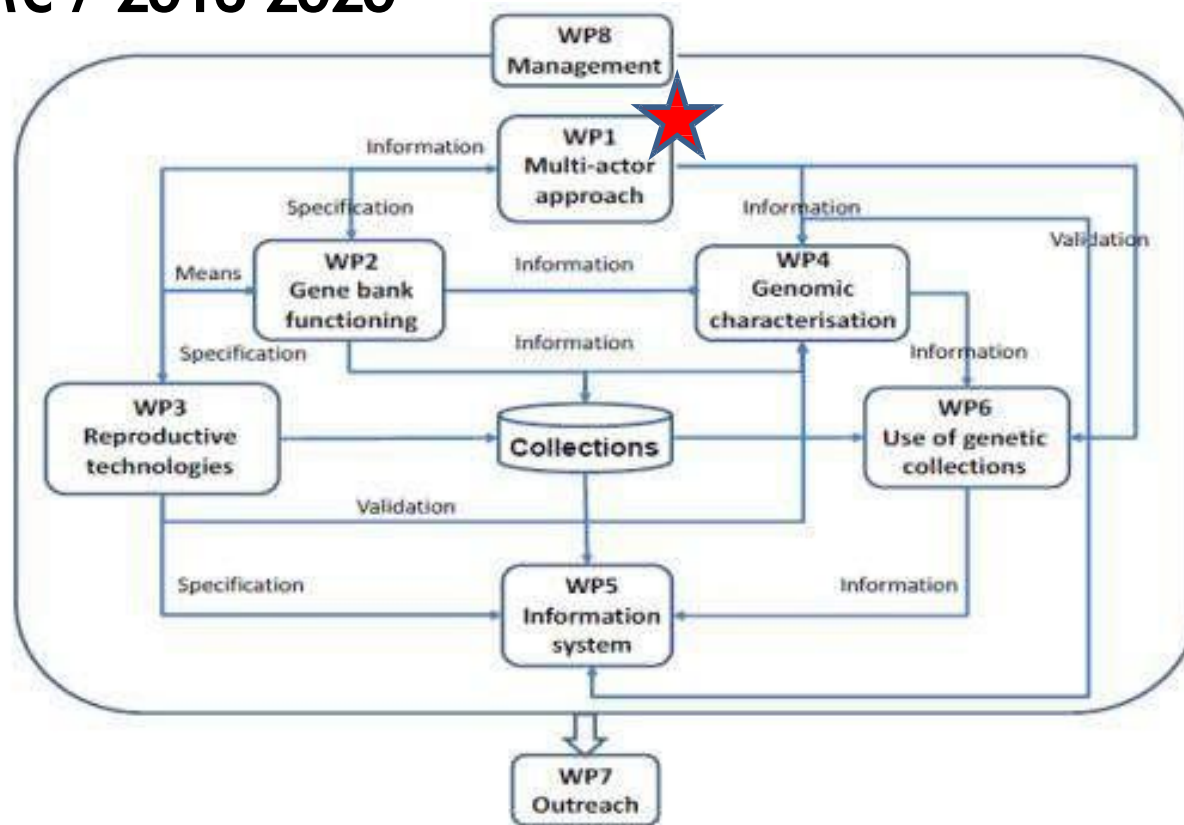


IMAGE



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Innovative Management of Animal Genetic Resources:
<http://imageh2020.eu/> / 28 partners / 7 Workpackages
 (WPs) / 7 M€ / 2016-2020



Multi Actor Participation / Knowledge Exchange

- Address different interest groups:
 - Science
 - Public Bodies
 - Commercial Breeders
 - NGOs
- Identify needs, attitudes, and preferences of Stakeholders
- Promote cross-links, collaboration



Multi Actor Participation / Knowledge Exchange Approach

- Research, Analysis, Rules and Stakeholders
- Surveys on different issues
- Dialogue Forum



Knowledge on and Understanding of Gene Banks (2016)

- Exchange of knowledge and options
 - international common access to genetic resources and data
 - standardization of gene bank management practices
 - conservation actions



Sanitary Regulations (2017)

- identify and list exceptions for the needs of gene banks
- start using PCRtest to guarantee safety (freedom from zoonosis)
- generally make rules and regulations clearer
- promote the European gene bank network (EUGENA)
- collect and publish success stories (e.g. countries with national derogations)
- raise awareness for the issues of gene bank management in the European Commission, responsible national ministries, stakeholders and general public



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Economics of Conservation (2018)

Role of Economics in the Value Debate of GenRes: In-situ and ex-situ conservation were contrasted

- In situ: economic value has to include the direct Values (private goods) and indirect values (public goods)
- Exsitu: Genebanks maintain future breeding opportunities (and R&D)
 - gap in harmonisation of ex situ livestock collections
 - Which breed under which conditions for cryoconservation



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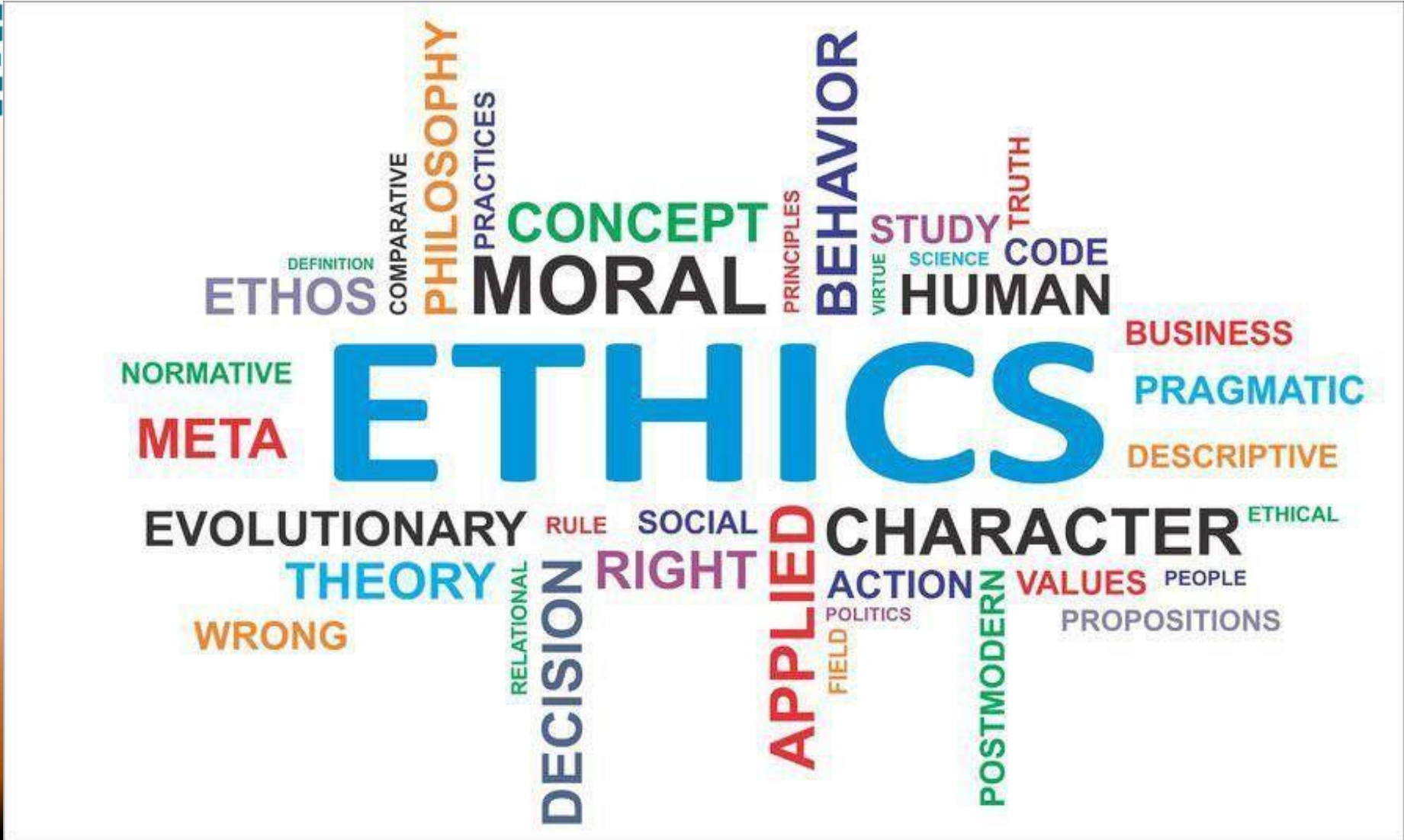
Economics of Conservation

- Genebank and public preferences and trends
- How to optimise the benefit of gene banks for breeding
- Incentives for conservation: Helpful or Hindrance?
- Pan European resource bank or national ones?



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Innovations and ethical issues for the cryoconservation of animal genetic resources

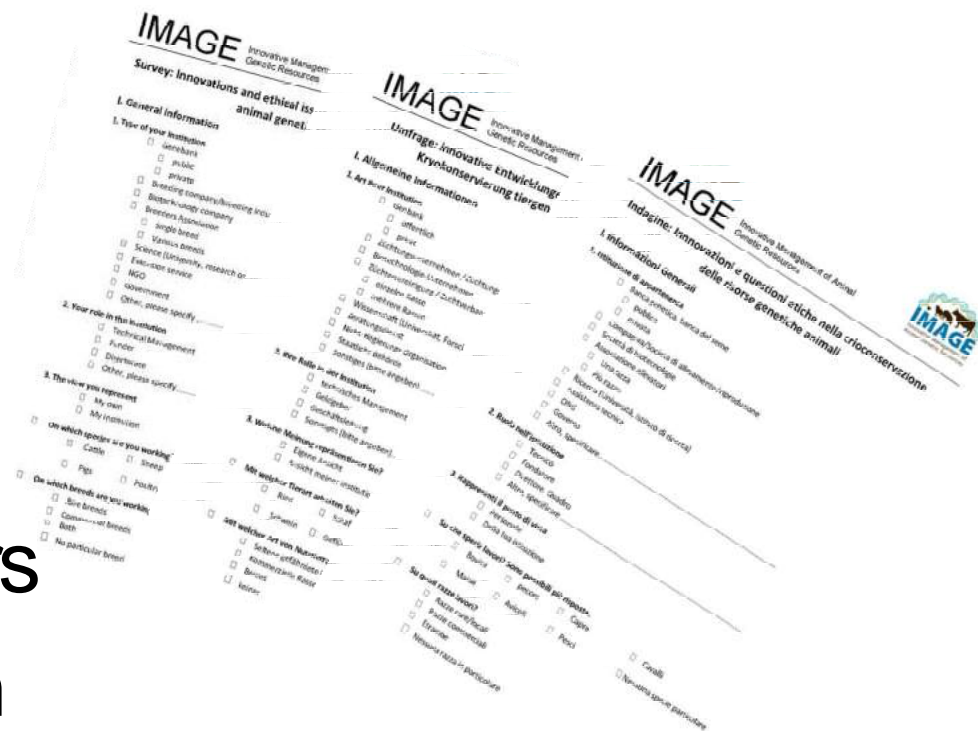
- Important H2020 requirement
- General questions on Conservation:
 - what are the criteria
 - Who should pay
 - Cryoconservation Methods

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Approach

- Short
- Clearly
- Anonymous
- single check answers
- Personal instruction



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Consultation

- *WG Ex Situ (ERFP)*
- *Side event / ITWG-AnGR (FAO)*
- *SAVE Meeting*
- *3rd Dialogue Forum IMAGE*
- *WUR Post Graduate course*
- *AQUAGAMETE*
- *On-line french questionnaire*
- *Italian questionnaire for It. NGOs (2019)*
- *It/EN/DE/ to single breeders of Arca-Net (2019)*
- *Answers from*
- *81 Research organisations or University*
- *35 Breeders associations*
- *22 Government representatives*
- *12 NGO*
- *2 Breeding companies*
- *2 Biotech companies*

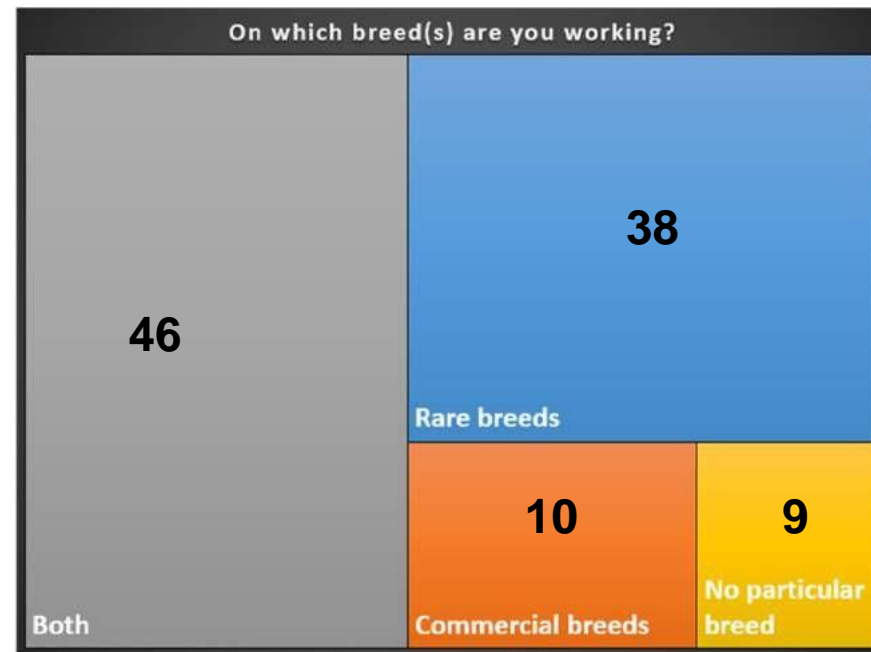
7 events, 159 answers (2018)

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Outcomes (2018)

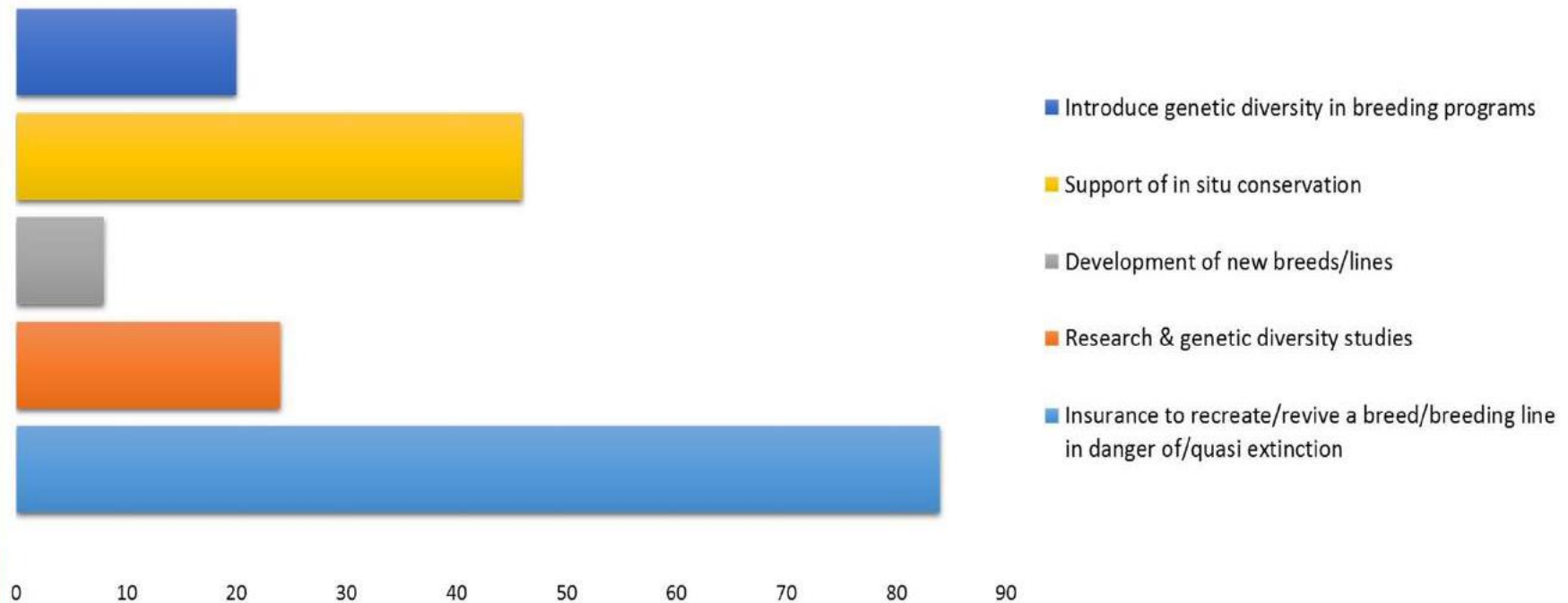
E.Charvolin-Lemaire – D.Laloe – INRA GABI



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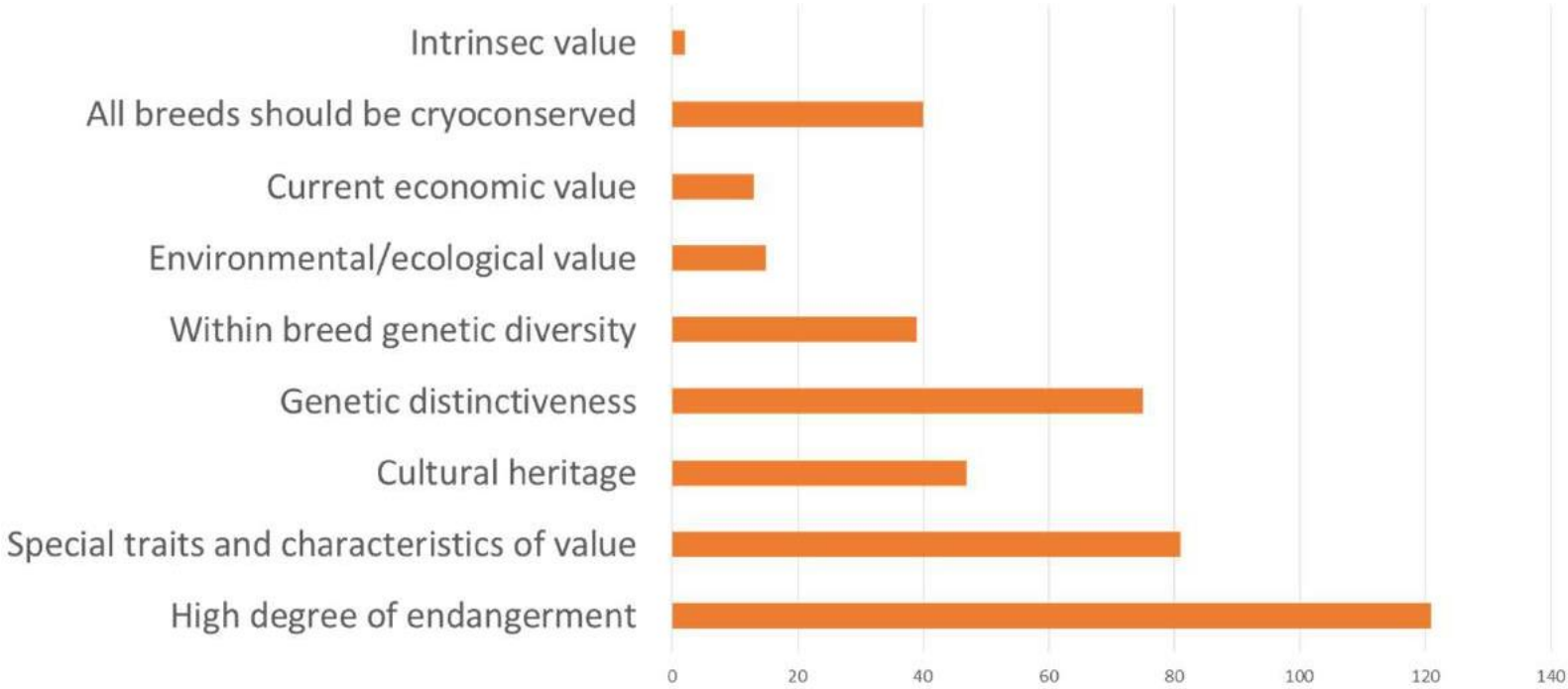
Objectives of Cryoconservation



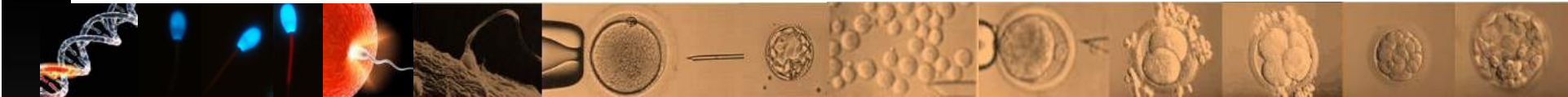
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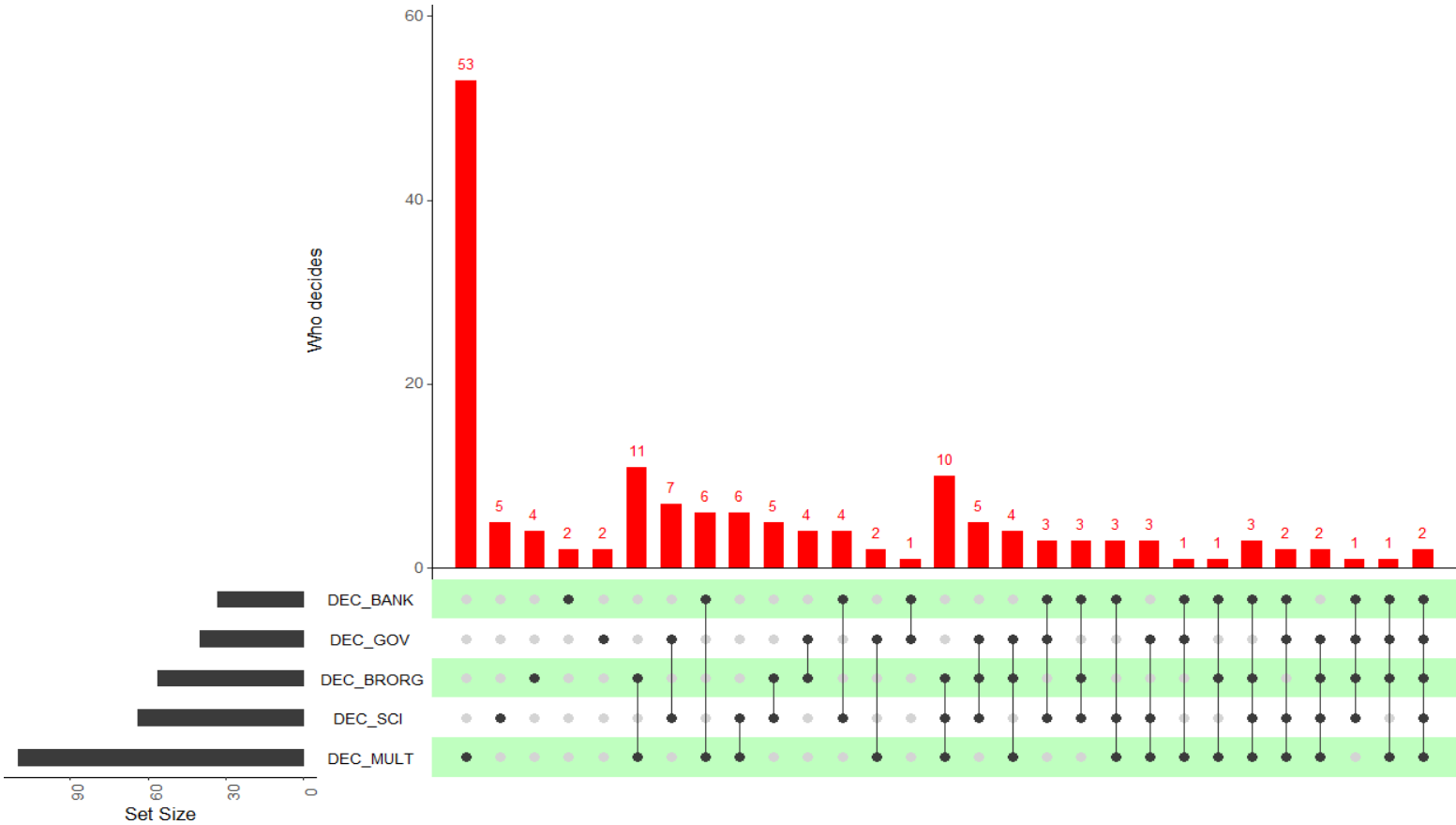
Which Breed for Cryoconservation?



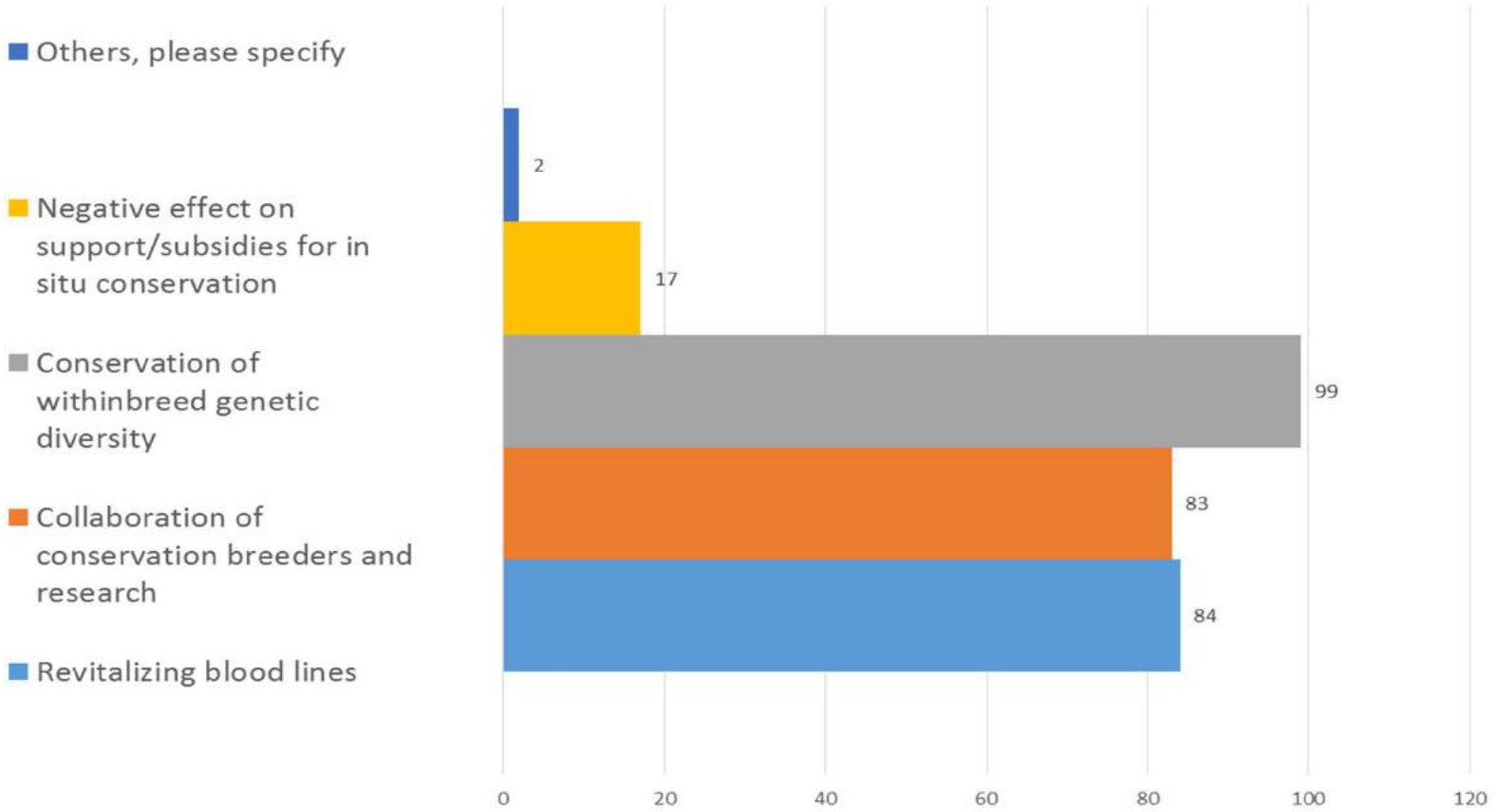
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Who shall prioritize and decide



Impact on in situ Conservation

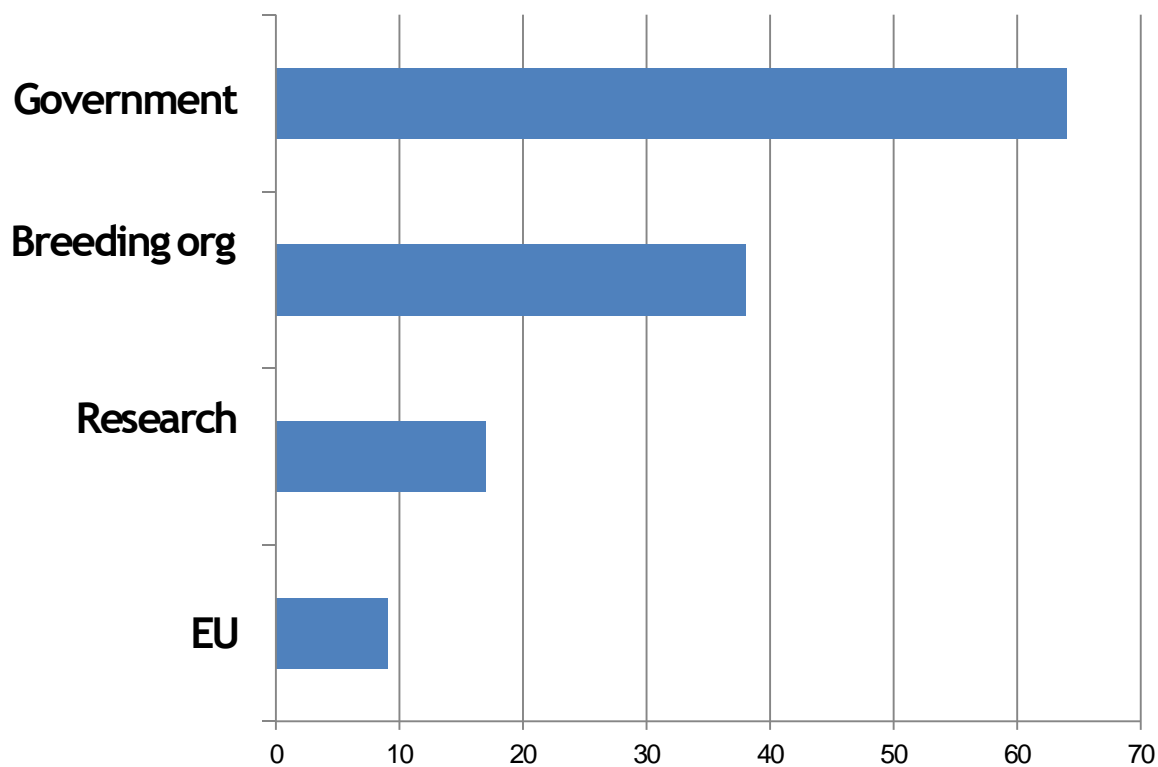


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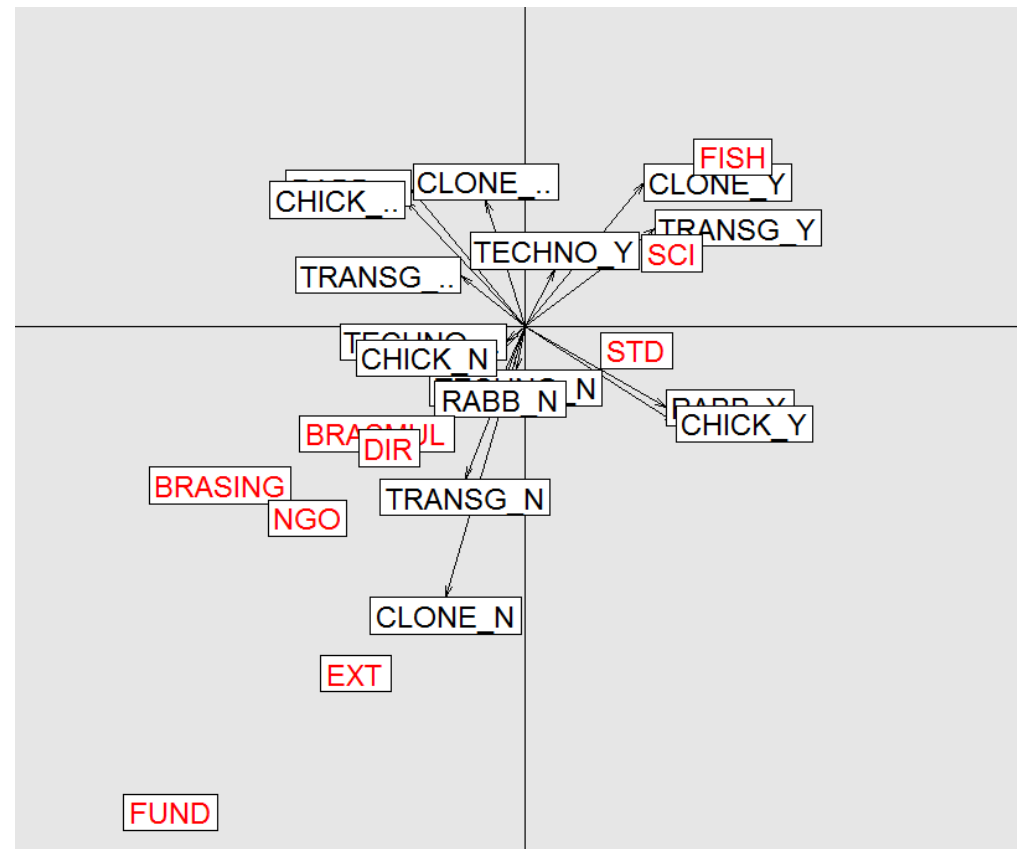




Who should pay



Innovations in bio banking and trades off



..., August 28, 2019



Conclusion

- Stakeholders show various profiles
- answers depend on profile
- Gene banks = kind of insurance
- Choice of breeds: mainly endangered
- Decision making: Multi Actor Board
- Payment: Governments
- Subsidies: 11% = negative effect on in situ
- Technology and Ethics:
 - Generally positive – except cloning



**THANK YOU
VERY MUCH**



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