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# **A global view of livestock biodiversity and conservation**

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# WHY GLOBALDIV?



Aviandiv  
Econogen  
Pigbiodiv  
Resgen

Nordic project?



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# GLOBALDIV Partners

**EAAP** European Association for Animal Production (IT)  
**ILRI** International Institute for Livestock Research (KE, CN)  
**FLI** Friederich Loffler Institut (DE)  
**MIGROGIS** (CH)  
**UCSCS** Università Cattolica (IT)  
**UNIESP** Universidad Estadual Paulista (BR)  
**UU-FDG** Utrecht University (NL)

UU-FDG

FLI

MIGROGIS

UCSC

EAAP

ILRI

UNIESP

ILRI

**FAO**  
**IAEA**  
**24 associated experts**



THE WORLD

WORLD GRID POSITION  
Longitude: 0° to 360° (East to West)  
Latitude: 0° to 90° (North to South)

EQUATORIAL SCALE (Longitude)  
0° 90° 180° 270° 360°

EQUATORIAL SCALE (Latitude)  
0° 90° 180° 270° 360°

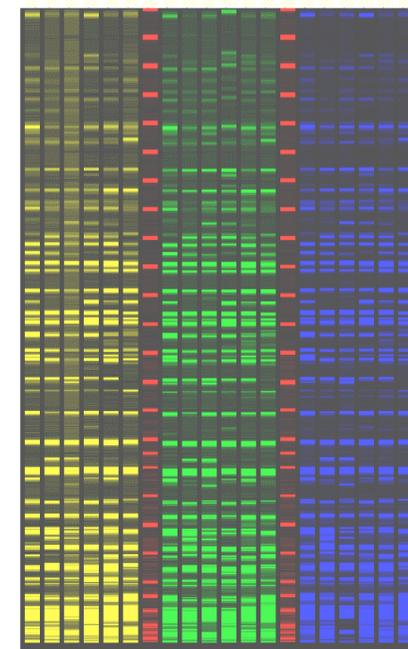
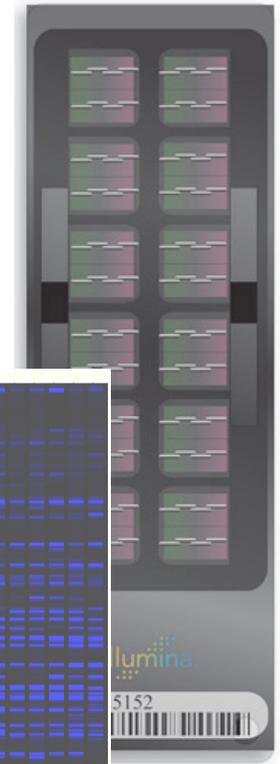
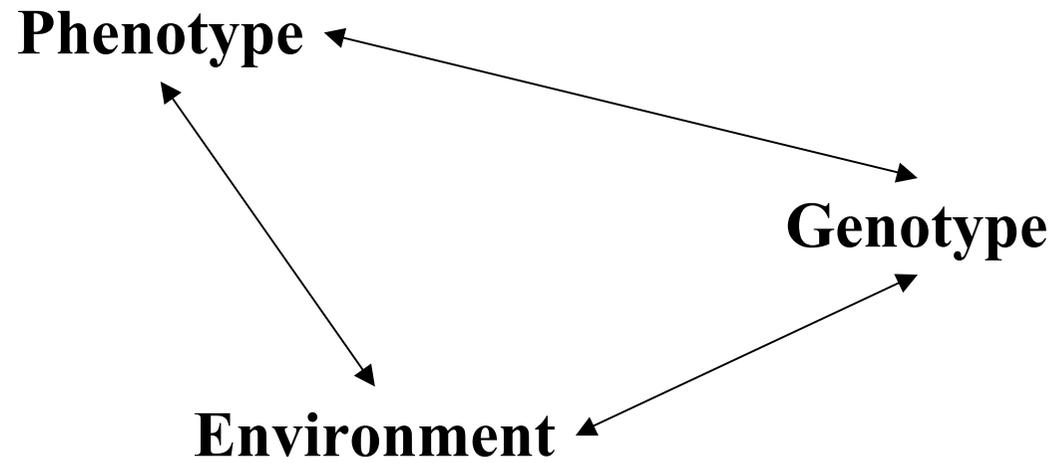
# **GLOBALDIV OBJECTIVE**

**Disseminate current advanced and integrated methodologies for the:**

- characterization**
- evaluation**
- prioritization for conservation**

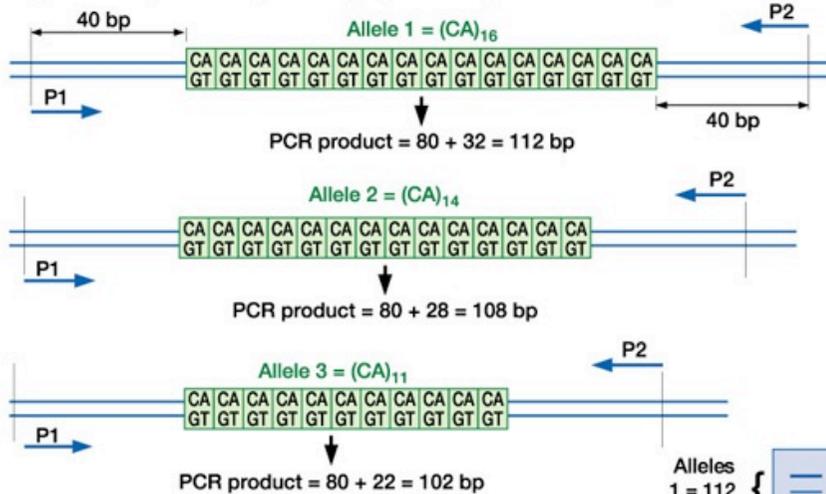
**of livestock genetic resources**

# WG2 Breed characterization



# WG3 Meta-analysis

① Use PCR primers P1, P2 to amplify alleles in genomic DNA samples



② Denature PCR products and size-fractionate by polyacrylamide gel electrophoresis

③ Autoradiography

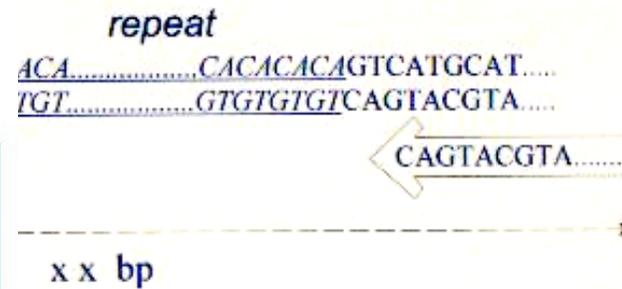
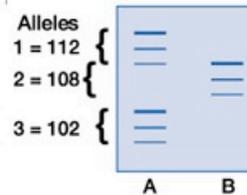
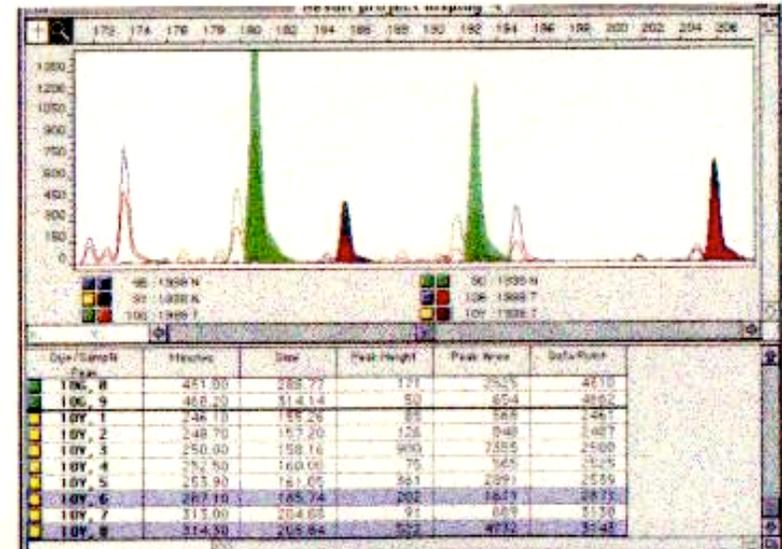
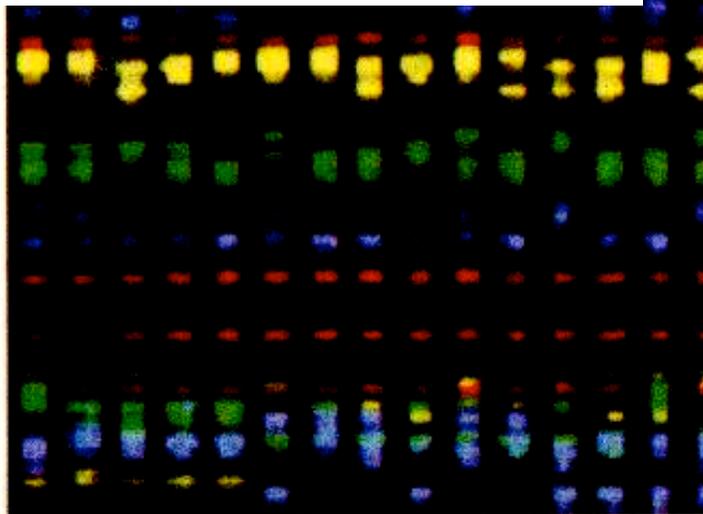
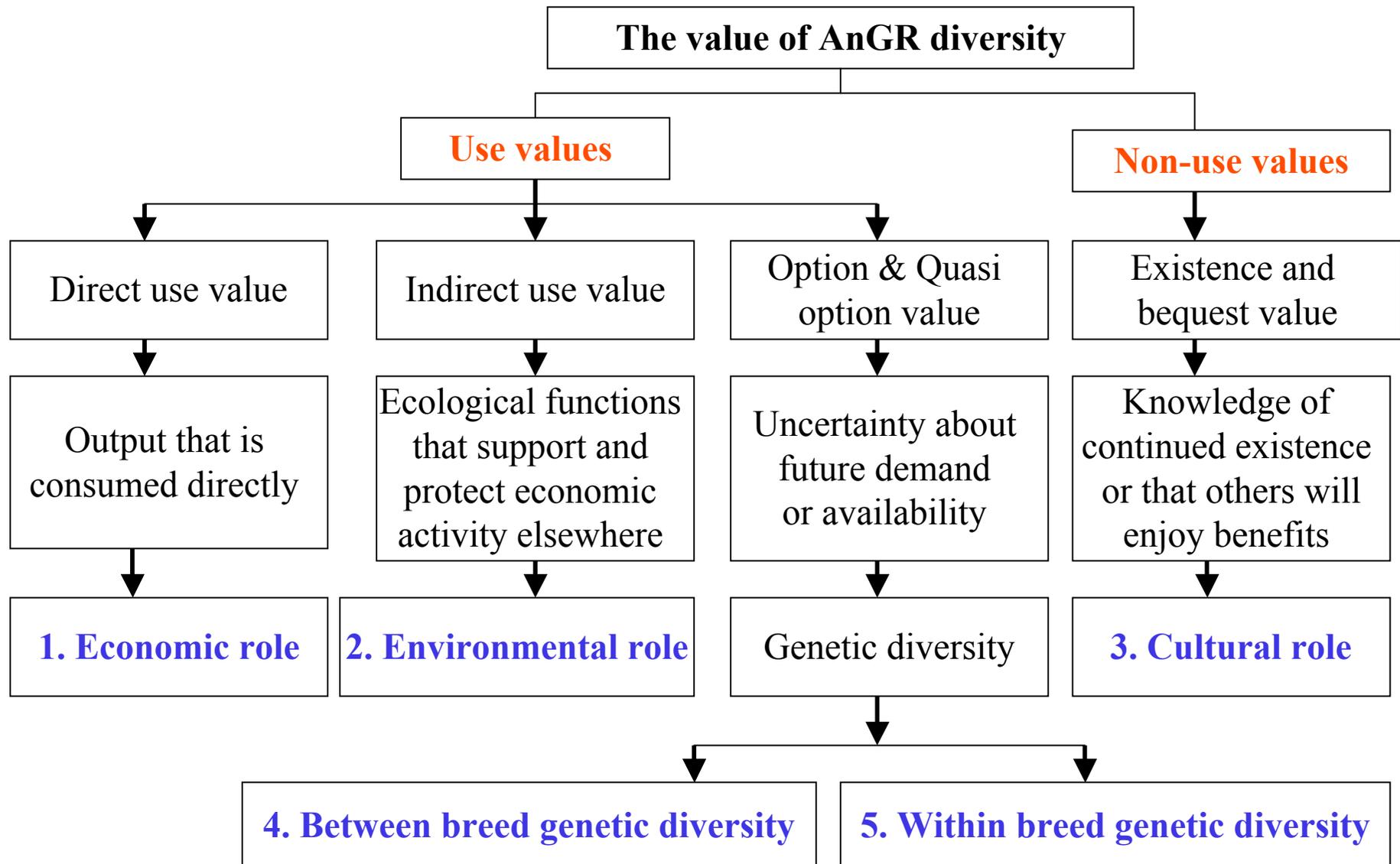


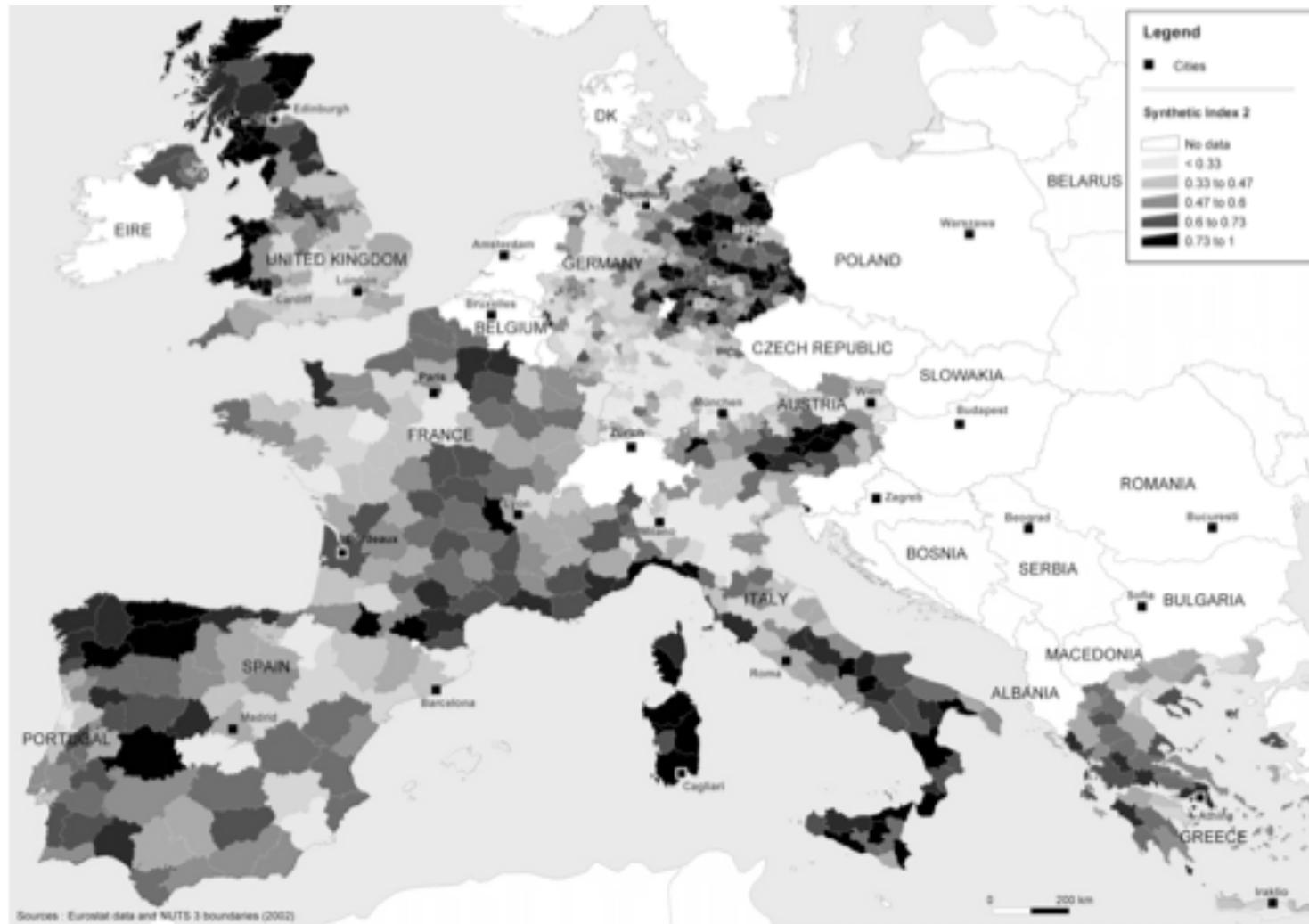
Figure 7-7 Human Molecular Genetics, 3/e. (© Garland Science 2004)



# WG4 Socio-economic aspects

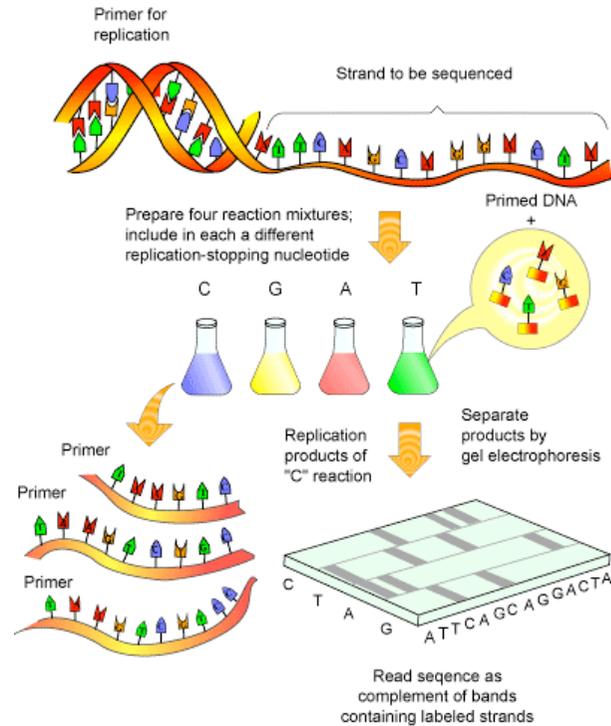


# WG5 Integrated analyses



- Map of a marginality index (Bertaglia et al., 2007)

# WG6 Future perspectives



Minimum sample preparation and reagents

$10^8 \text{ €} \rightarrow 10^7 \text{ €} \rightarrow 10^6 \text{ €} \rightarrow 10^5 \rightarrow 10^4 \rightarrow (?)$

Parallel assays or long reads

# Dissemination

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- Website ([www.globaldiv.eu](http://www.globaldiv.eu))
- Newsletter
- Congresses
- Review papers
- Summer school
- Workshops



# GLOBALDIV EVENTS

## Summer school

September 2008 Piacenza, Italy

## Workshop

March 18-19, 2009 University of Technology and  
Life Sciences in Bydgoszcz, POLAND

## Summer school

September 2009 Piacenza, Italy

## Final Workshop

March 2010 Rome, Italy

# **GLOBALDIV**

## **Past EU Diversity projects**

REGEN

AVIANDIV

ECONOGENE

PIGBIODIV

## **On-going EU GenRes initiatives**

HERITAGESHEEP

EURECA

EFABIS-NET

## **EU projects starting in the near future**



Thank you for your attention !