



75th EAAP 2024

European Federation of Animal Science

Florence, 1-5 September 2024
Florence Congress and Exhibition Centre



**“Global quality:
Environment, Animals,
Food”**



www.eaap.org

name	family name	position	institution
Roxane	Amarie	postdoc	Pisa University
Federico	Biagiotti	MS student	Pisa University
Viviana	Bolletta	PhD	Perugia University
Luca	Borzacchiello	PhD	Napoli University
Fabrizio	Cella	PhD	Pisa University
Andrea	Ceppatelli	PhD	Padova University
Claudia	Ciarelli	PhD	Padova University
Alessio	Cotticelli	PhD	Napoli University
Cecilia	Fanizza	PhD	Padova University
Matteo	Finocchi	PhD	Pisa University
Lucrezia	Forte	PhD	Bari University
Letizia	Forzoni	PhD	Pisa University
Elisa	Gasparoni	research fellow	Pisa University
Maria Vittoria	Graziosi	PhD	Bologna University
Roberta	Greco	PhD	Bari University
Emanuele	Lilli	Research fellow	Perugia University
Silvia	Magro	PhD	Padova University
Tiziano	Malizzi	Research fellow	Pisa University
Gilda	Malucchi	Research fellow	Pisa University
Federica	Mannelli	postdoc	Firenze University
Michele	Manoni	PhD	Milano University
Selene	Massaro	PhD	Padova University
Adja	Medeiros	PhD	Firenze University
Paola	Milia	PhD	Sassari University

name	family name	position	institution
Clara	Negrini	PhD	Bologna University
Parrini	Silvia	postdoc	Firenze University
Barbara	Polimeni	Phd	Bologna University
Andrea	Prete	PhD	Bari University
Selene	Righi	postdoc	Pisa University
Alice	Ripamonti	PhD	Pisa University
Federica	Scicutella	PhD	Firenze University
Elena	Senatore	PhD	Pisa University
Alina	Silvi	technician	Pisa University
Kalliroi	Simeonidis	PhD	Milano University
Sara	Tinagli	postdoc	Pisa University
Monica	Tognocchi	postdoc	Pisa University
Francesca	Vichi	research fellow	Pisa University
Sara	Viridis	PhD	Bologna University
Elena	Visentin	PhD	Padova University
Giovanni	Zucca	Research fellow	Pisa University
Carla	Marrazzo		Triumph
Ilenia	Biasiolo		Triumph
	Tomasini		Triumph



ANIMAL SCIENCE AND PRODUCTIONS IN ITALY:

a long history projected towards the future

Nicolò P.P. Macciotta, Marcello Mele,
Giuseppe Pulina, Bruno Ronchi



Italian Association for Animal Science
and Productions (ASPA)



A long tradition.....

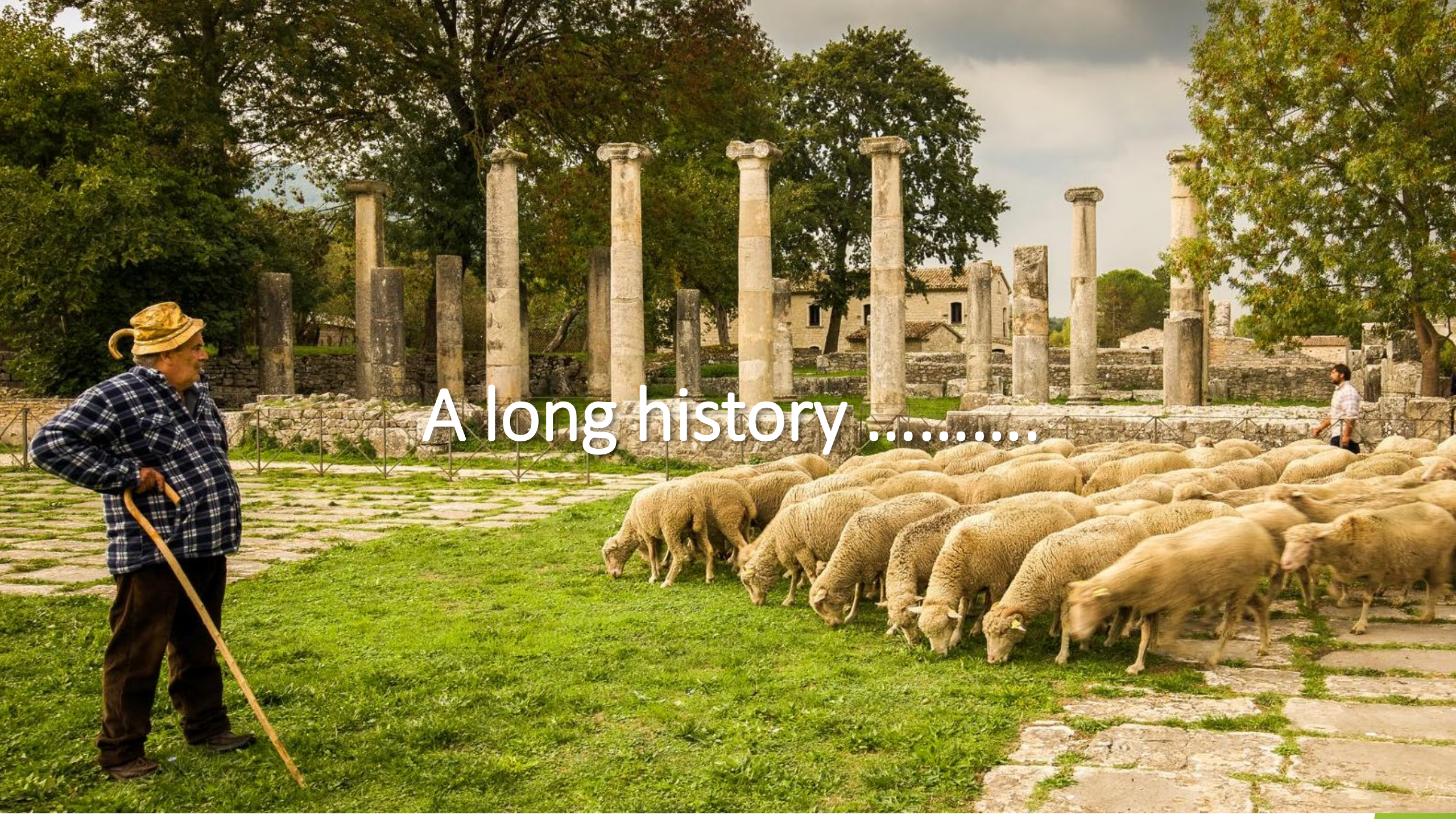
- *Nam cum in municipium Gaditanum ex vicino Africae miri coloris silvestres ac feri arietes sicut aliae bestiae munerariis deportarentur, Marcus Columella patruus meus, acris vir ingeni atque inlustris agricola, quosdam mercatus in agros transtulit et mansuefactos tectis ovibus admisit. [5] Eae primum hirtos, sed paterni coloris agnos ediderunt, qui deinde et ipsi Tarentinis ovibus inpositi tenuioris velleris arietes progeneraverunt. Ex his rursus quicquid conceptum est, maternam mollitiem, paternum et avitum rettulit colorem. Hoc modo Columella dicebat, qualemcumque speciem, quae fuerit in bestiis, per nepotum gradus mitigata feritate reddi. Set ad propositum revertar. [6] Ergo duo genera sunt ovilli pecoris, molle et hirsutum, sed in utroque vel emendo vel tuendo plura communia, quaedam tamen sunt propria generosi, quae observari conveniat. Communia in emendis gregibus fere illa: si candor lanae maxime placet, numquam nisi candidissimos mares legeris, quoniam ex albo saepe fuscus editur partus, erythraeo vel pullo numquam generatur albus.*

LVCII J·MODERATI COLVMELLÆ DE RE RVSTICA

TESTO LATINO E TRADUZIONE ITALIANA
A CURA DELLA DOTT. ROSA CALZECCHI-ONESTI



RAMO EDITORIALE DEGLI AGRICOLTORI · ROMA

A photograph of a shepherd in a blue and white plaid shirt, brown trousers, and a yellow hat, holding a long wooden staff. He stands on a grassy area in the foreground, looking towards a large flock of sheep grazing on the grass. In the background, there are several tall, weathered stone columns, likely remnants of an ancient temple or forum, surrounded by trees and a cloudy sky. The text "A long history" is overlaid in white on the image.

A long history

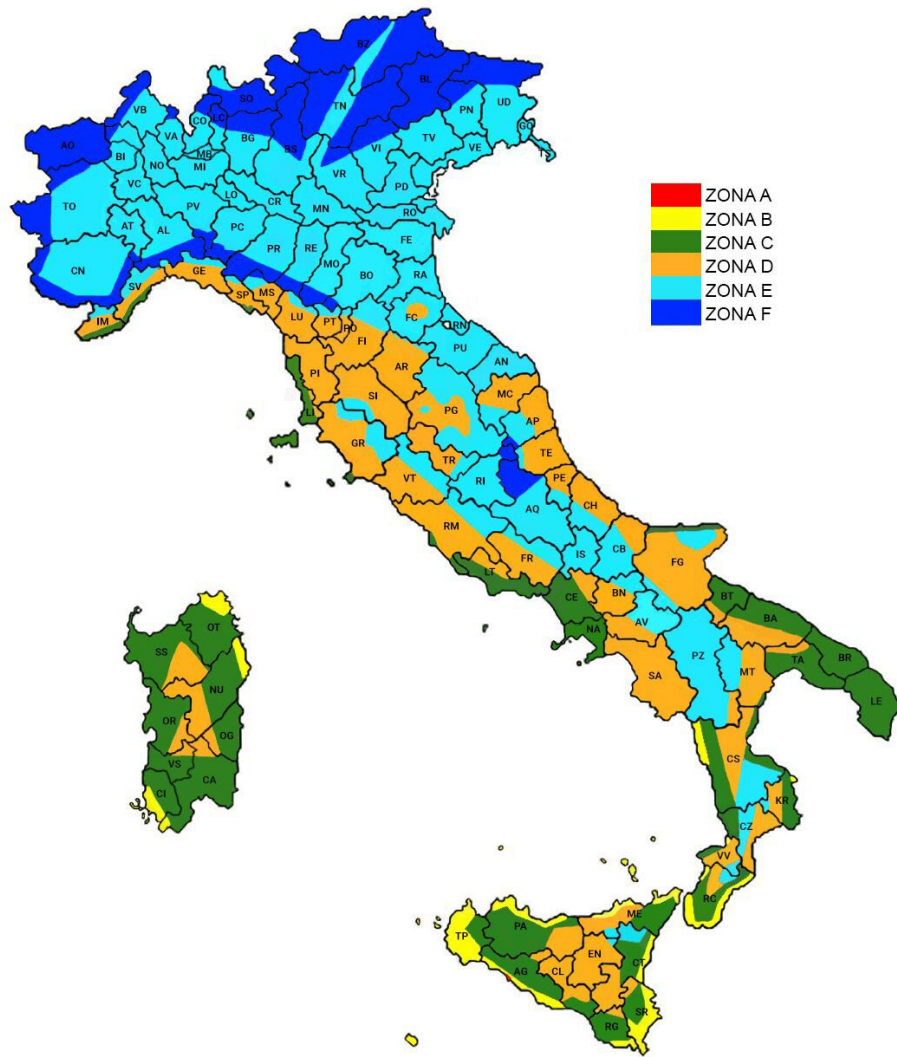


C'era un sogno che era Roma.....

There was a dream that was Rome.....

Decimo Massimo Meridio

Diversity = different environments, different people





Different landscapes



Different species,
breeds and
production systems

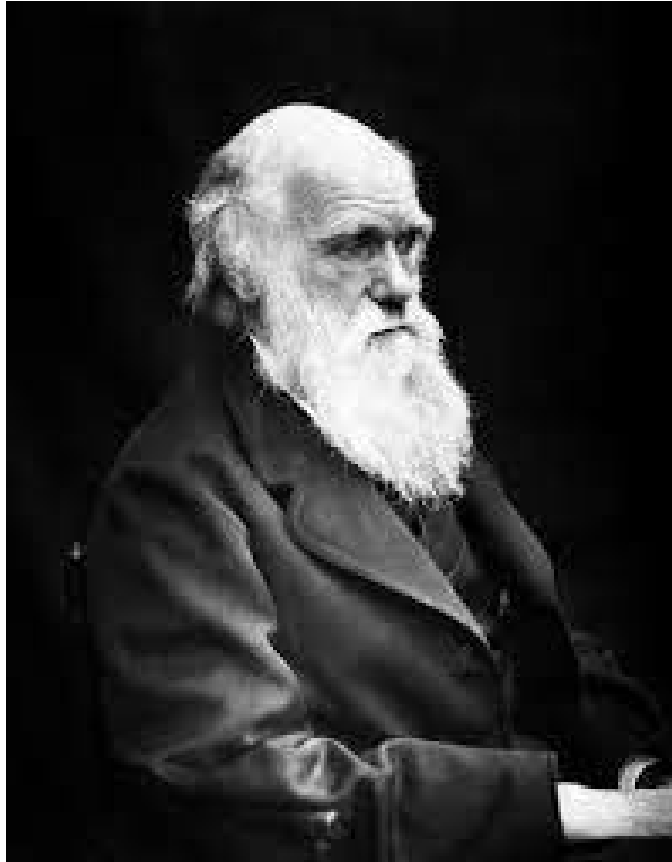
Agriculture and Animal production in Italy

- 302.868 km² (23.2% plain, 35.2 mountain, 42.6 hill)
- Different climates (Alps, river Valley, Peninsular, Mediterranean)
- 1.133.023 farms, 21.7% livestock farms.
- Industrial farms in the North (dairy and beef cattle, pigs, poultry), sheep and cow-calf systems in the center, buffalo and small ruminants in the South and main Islands
- Agri-food system generates € 549 billion in 2022 (15% of National)

The Italian
livestock
industry:
some
numbers

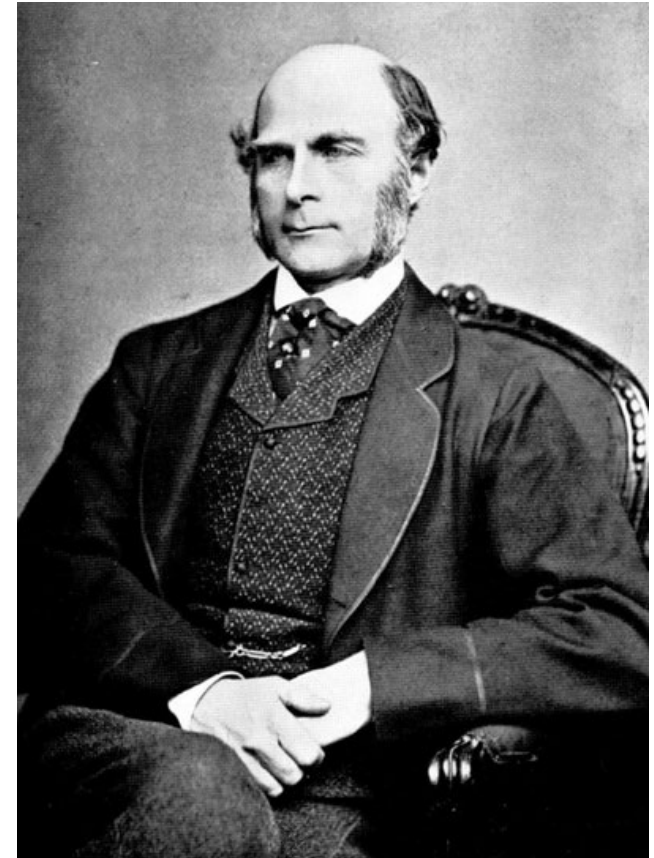
Cattle total	5.420.566
<i>Dairy</i>	2.634.870
<i>Beef</i>	2.342.794
<i>Crossbred</i>	442.694
Buffalo	436.164
Sheep	5.878.735
Goats	1.002.271
Pigs	8.168.335
Horse	474.759
Poultry	147.035.356
Rabbit	11.623.618
Bees	1.537.869

Diversity



Charles Darwin, 1809-1882

Richness



Francis Galton, 1822-1911

Differences

**Italy owns the
largest number of
PDO, PGI, and
STG products
853 in 2022**

**About 20% of the
income of the
agri-food chain**



VALUES OF ITALIAN PDO ECONOMY IN 2022

20,2 mld €

VALORE ALLA
PRODUZIONE 2022

11,6 mld €

VALORE
EXPORT 2022

20%

PESO DOP IGP SU SETTORE
AGROALIMENTARE

195.407

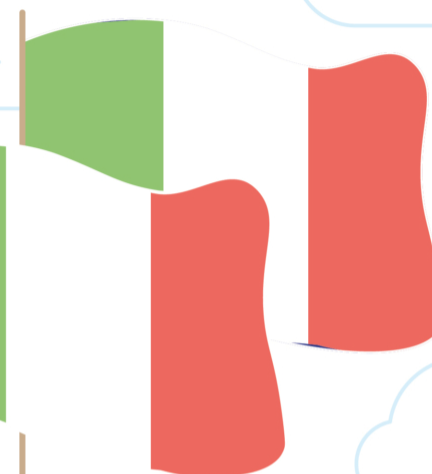
OPERATORI
FILIERE IG

890.000

OCCUPATI
FILIERE IG

296

CONSORZI DI
TUTELA

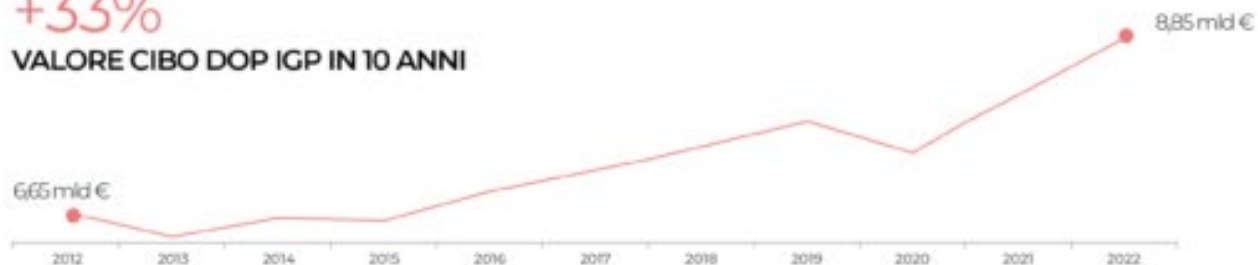


CATEGORIES OF ITALIAN PDO OGP AND STG FOODS



+33%

VALORE CIBO DOP IGP IN 10 ANNI



FIRST TEN PDO AND IGP FOODS



1°



Grana
Padano DOP

1.734 milioni €

2°



Parmigiano
Reggiano DOP

1.720 milioni €

3°



Prosciutto di
Parma DOP

932 milioni €

4°



Mozzarella di Bufala
Campana DOP

502 milioni €

5°



Aceto di
Modena IGP

381 milioni €

6°



Pecorino
Romano DOP

378 milioni €

7°



Prosciutto di
San Daniele DOP

365 milioni €

8°



Gorgonzola DOP

363 milioni €

9°



Mortadella
Bologna IGP

327 milioni €

10°



Pasta di
Gragnano IGP

267 milioni €

ANIMAL SCIENCE IN ITALY



ASSOCIATION FOR SCIENCE AND ANIMAL PRODUCTION - ASPA

- ✓ Established in Florence in 1973.
- ✓ About 540 associates (Academics, Researchers, People from industry)
- ✓ Aimed at promoting the progress of Livestock science and technology, training in Livestock Science topics, interaction with industry and Institutions
- ✓ Owns Italian Journal of Animal Science



Italian Journal of Animal Sciences



Taylor & Francis
an informa business

The **Italian Journal of Animal Science** is an international open access journal publishing research at molecular, cellular, organ, whole animal and production system levels.

It is the **official journal** of the Animal Science and Production Association and is **essential reading** for animal scientists, technicians and all those who research animal production.

Who We Are

The Italian Journal of Animal Science accepts **original research articles**, review articles, short communications, meeting reviews, book reviews, conference supplements, as well as **news** and **guidelines** from the Animal Science and Production Association (ASPA).

The journal operates a **single-anonymized peer review policy**. All articles will be made freely and permanently available online through [gold open access publication](#).

Why Choose Us



Usage

709K annual downloads/views



Citation Metrics

- **2.2 (2023)** Impact Factor
- **Q1** Impact Factor Best Quartile (Agriculture, Dairy and Animal Science; Veterinary Science)
- **2.3 (2023)** 5 year IF
- **4.9 (2023)** CiteScore (Scopus)
- **Q1** CiteScore Best Quartile
- **0.866 (2023)** SNIP
- **0.610 (2023)** SJR



Speed / Acceptance

- **34 days** avg. from submission to first decision
- **49 days** avg. from submission to first post-review decision

The Italian Journal of Animal Science encourages submissions of international relevance on the following subjects:

- Animal derived food quality and safety
- Animal genetics and breeding
- Aquaculture, companion and wild game animals
- Livestock systems, management and environment
- Non-ruminant or ruminant nutrition and feeding
- Production physiology and functional biology of farmed, companions and wild game animals.
- Animal behaviour
- Animal welfare
- In vitro studies that have an application to farmed livestock
- Tropical management

Education in Animal Science in Italy

Feature Article

Perspectives for the future in Italy: animal science higher education, employment, and research

Antonella Baldi,[†] Nicolò Pietro Paolo Macciotta,[‡] Giuseppe Pulina,[‡] and Bruno Ronchi^{||}

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[‡]Department of Agriculture, University of Sassari, Sassari, Italy

^{||}Department of Sciences and Technology for Agriculture, Forest, Environment and Energy, University of Tuscia, Viterbo, Italy



ts working with pigs in a hands-on laboratory. Animal handling skills will always be an essential



Figure 2. Location of Italian universities offering higher education courses in animal production.



Distribution of some bibliometric indexes in Italian Animal scientists (Pulina G., 2020)

Item	Statistic	Value
n. of papers	25% perc	28
	Median	46
	75% perc	64
n. of citations	25% perc	261
	Median	553
	75% perc	1,116
H index	25% perc	9
	Median	13
	75% perc	18



**Changes we
have
seen.....**



*«I've seen things you people wouldn't believe,
attack ships on fire off the shoulder of Orion,
I watched c-beams glitter in the dark near the
Tannhäuser Gate.
All those moments will be lost in time,
like tears in rain.
Time to die.»*

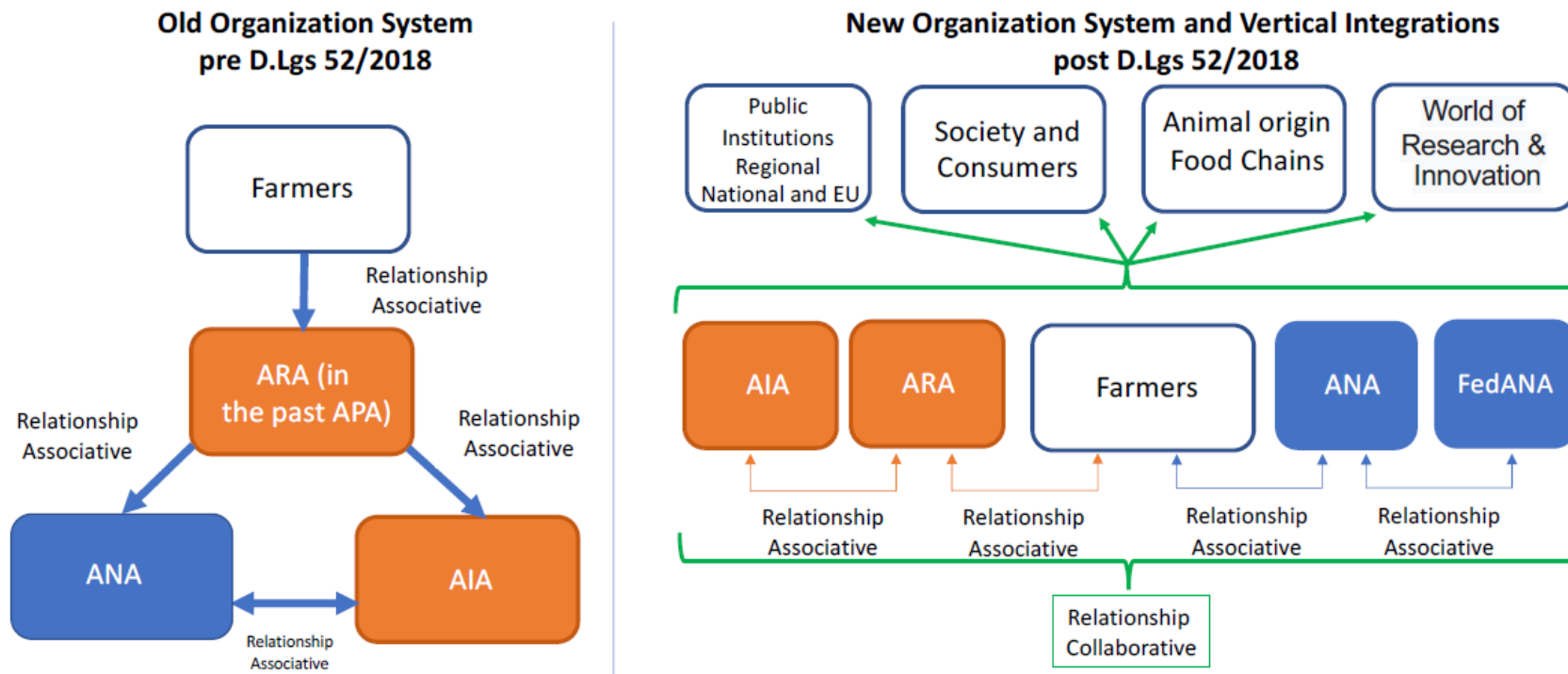
Roy Batty

How we have changed

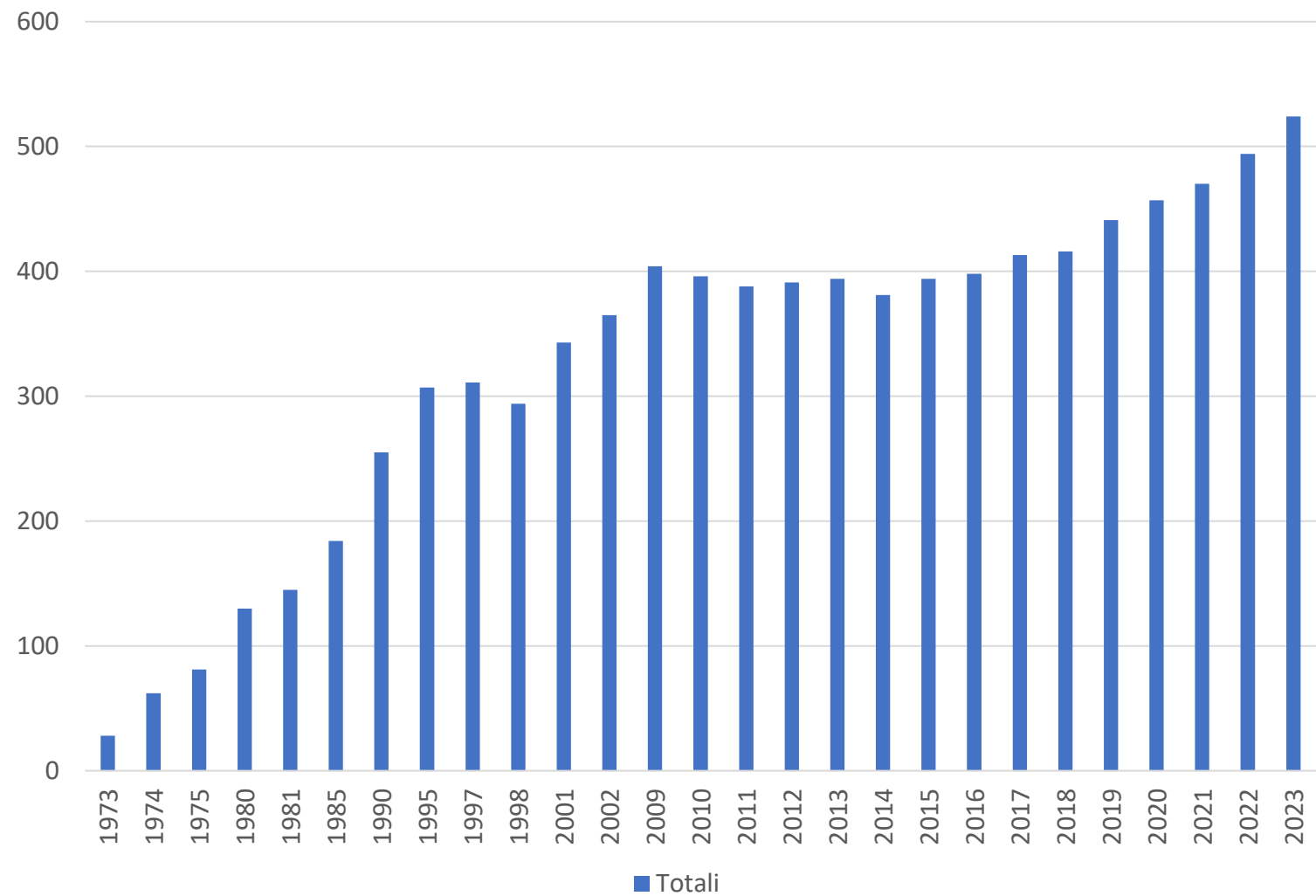
Organizational structure of the Breeders' Associations pre- and post-Legislative Decree 52/2018 and EU Regulation 1012/2016 on Animal Reproduction

Phenotypic activities (recording data): AIA = Italian breeders association; ARA = regional association of breeders; APA = provincial association of breeders;

Genetic activities (herdbook data): ANA = national association of breeders; FedANA = Federation of national association of breeders

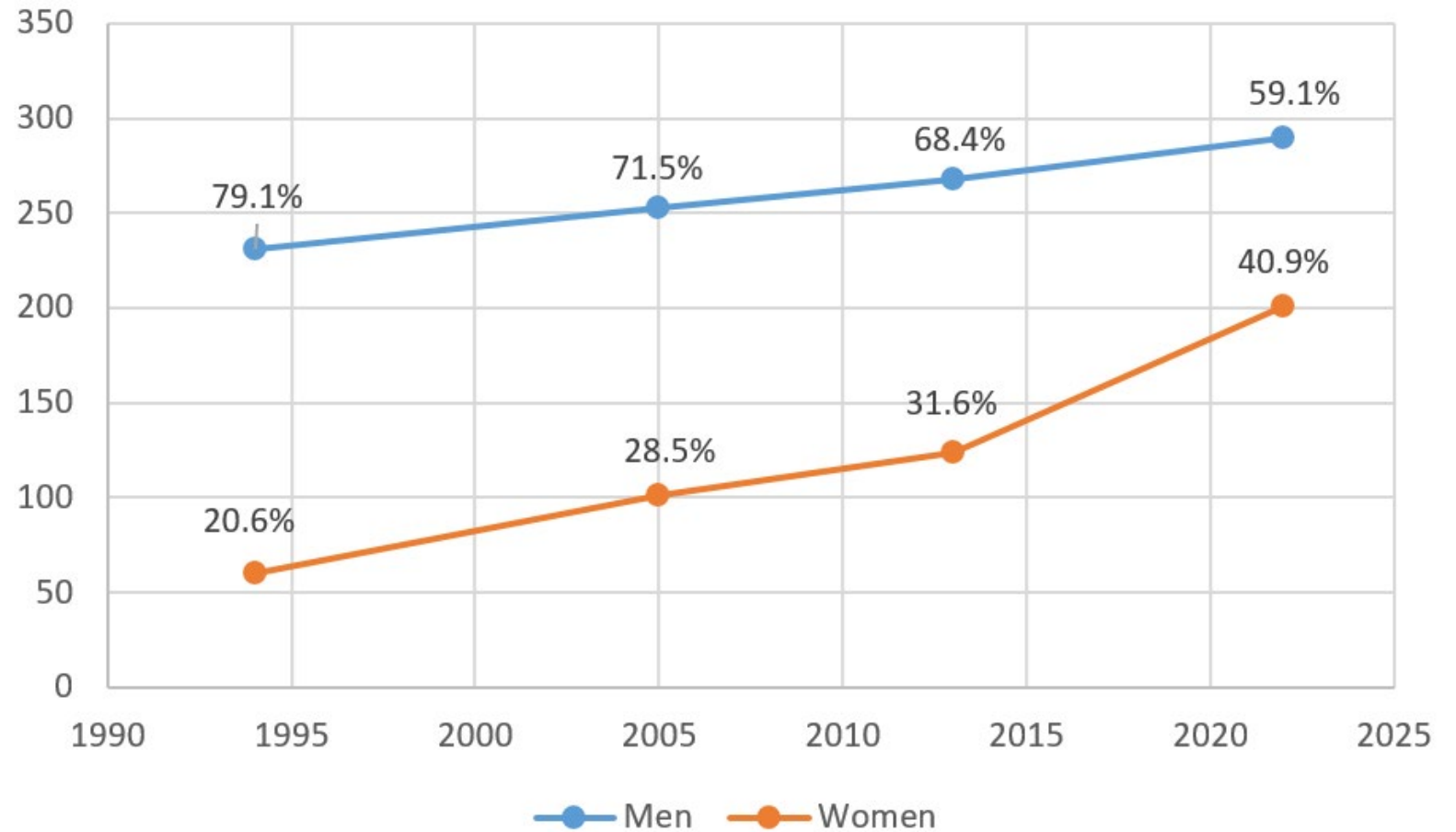
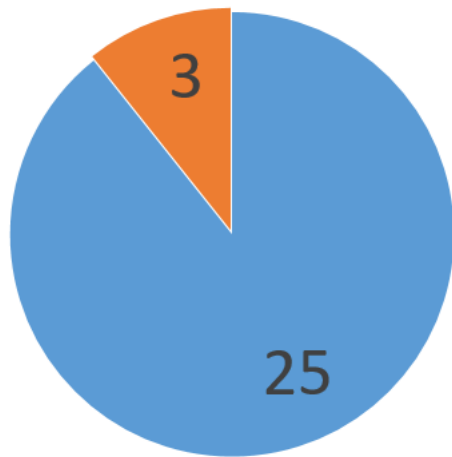


ASPA
associates
trend in 50
years



How we have changed

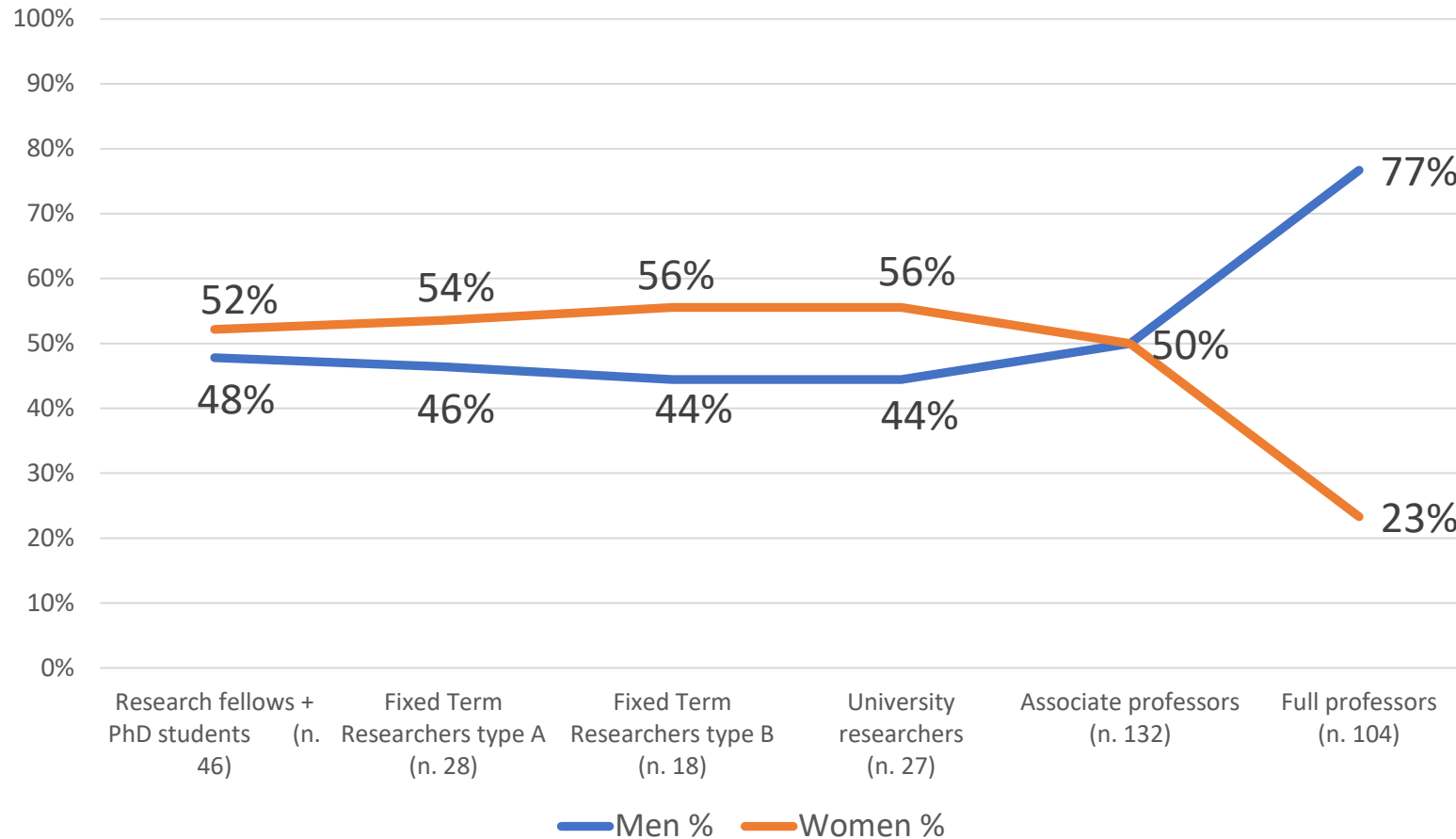
Founding members
1973



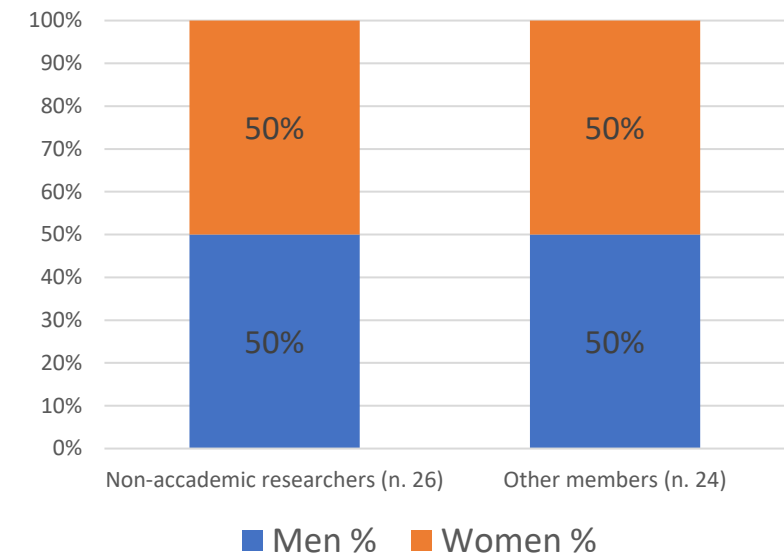
How we have changed



Academic position (no.354)



Non-academic members (n.50)



Lucia Bailoni, Paola Crepaldi, Anna Sandrucci

Source: ASPA, 2022



What about challenges?

Unexpected challenges



Challenges: sustainability

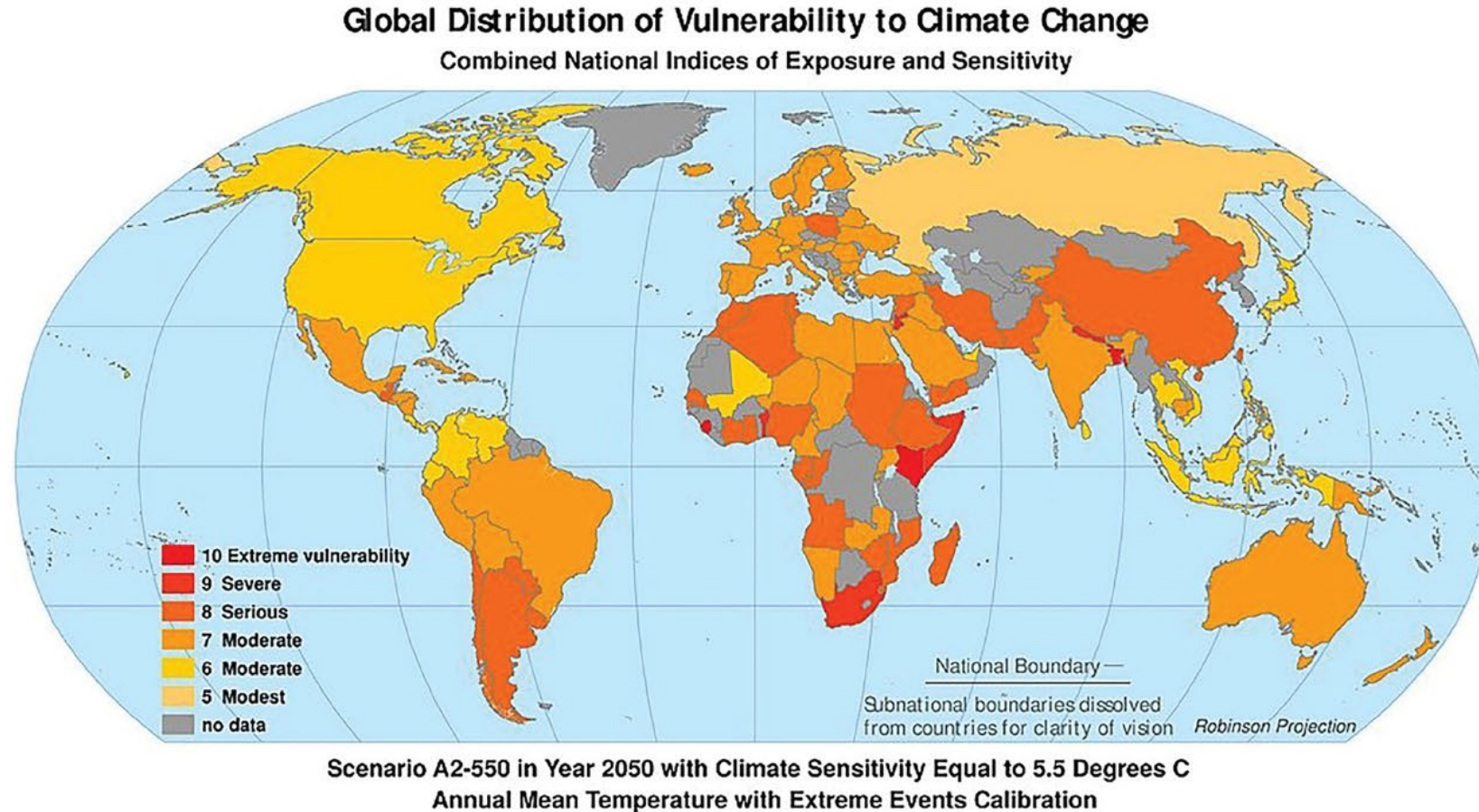
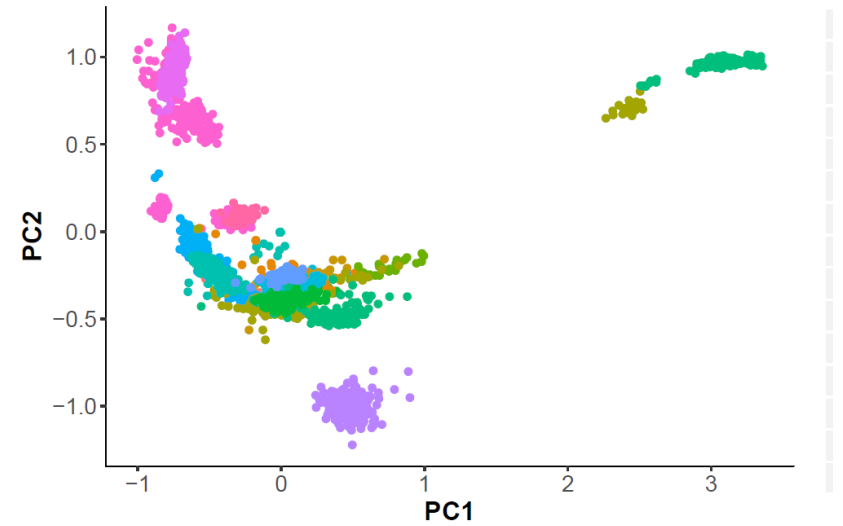


Figure 2. Scenario in year 2050 with climate sensitivity equal to 5.5 °C annual mean temperature with extreme events calibration (Source: figure taken from <https://sedac.ciesin.columbia.edu/mva/ccv/> ... and adapted for illustrative purpose only).

Challenges: the role of biodiversity



Challenges: animal welfare



Challenges: training of young scientists



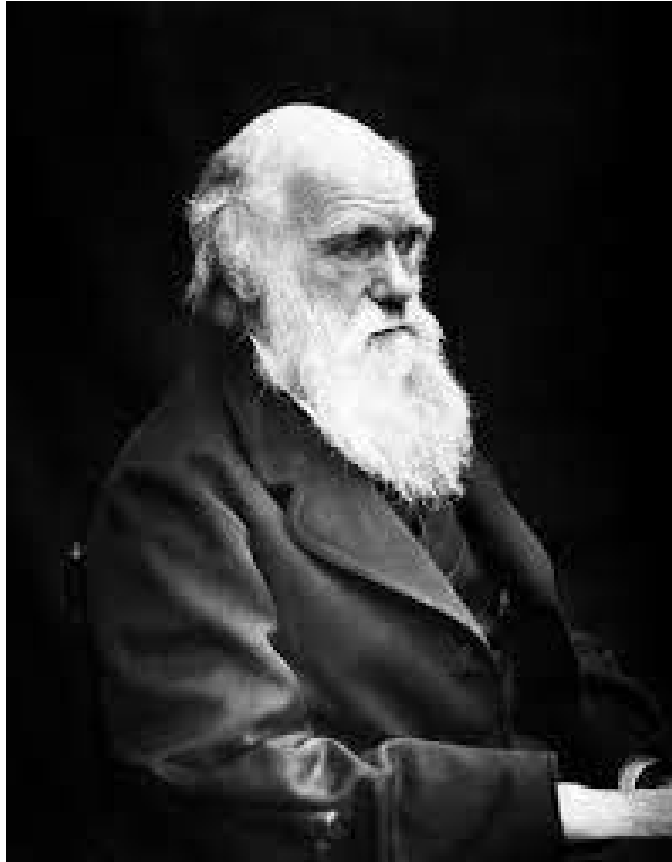
Future challenges:
training of young
scientists





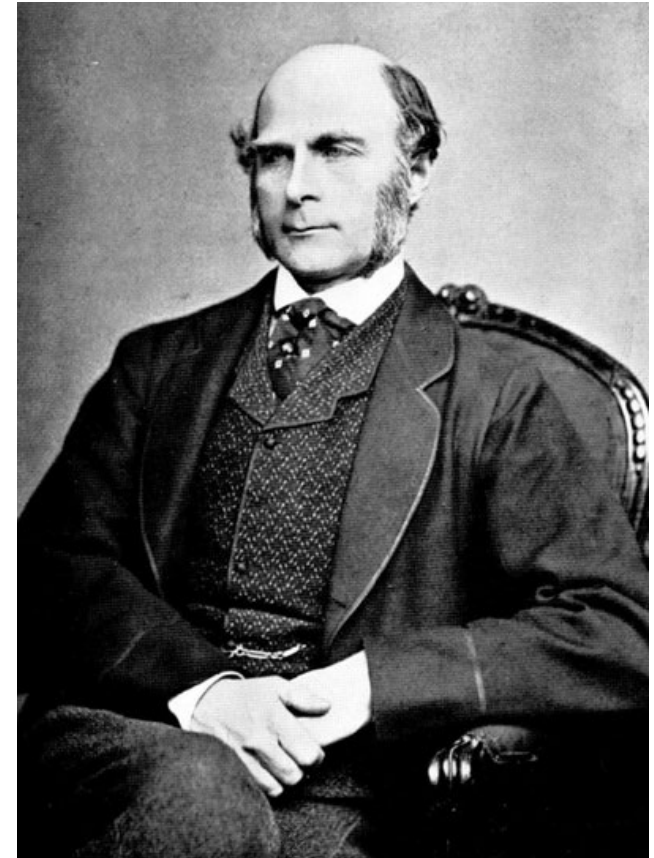
Future challenges
Natural vs Artificial I?

Diversity



Charles Darwin, 1809-1882

Richness



Francis Galton, 1822-1911

Differences

Richness is **GOLD**





Thank you
for your
attention