

66th
EAAP
ANNUAL MEETING



**S26 - INNOVATION AND RESEARCH
FOR DEVELOPING THE HORSE
SECTOR**

EQUINE PRACTICE IN SCIENCE

Top down session - Joint with EHN



**INNOVATION
IN LIVESTOCK
PRODUCTION:
FROM IDEAS
TO PRACTICE**

**Equine Practice into
science
what does this mean?**

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**31 AUGUST - 4 SEPTEMBER 2015
WARSAW, POLAND**



PPTimer

20:00

General Context

TRANSFER OF KNOW-HOW AND EXPERIENCE FROM SCIENCE TO PRACTICE

LIMITS

Exigencies coming
from practitioners

- Difficult comprehension
- Difficult application in the field



Coat color

Rationing

BLUP
Performance test

Artificial Insemination (1st step)
Cloning (2nd step)

Genomic



In the past...

horse people

- was not interested
- didn't know and didn't use results (exception in few countries)
- didn't trust in research
- didn't feel understood
- didn't want to invest money

horse researchers

- Were not interested into know-how transfer
 - Scientific results were finalized just to publication on scientific journals



General Context

Missing collaborations

resulting in

- missing synergies
- financial limitations
- lack of trust
- isolation from practice

- concurrence situations

- financial exclusivities

(industry, sponsorships,
foundation..)

- interdisciplinary approach =
domination of specialists (vets,
nutritionists, etc.)



More recently...

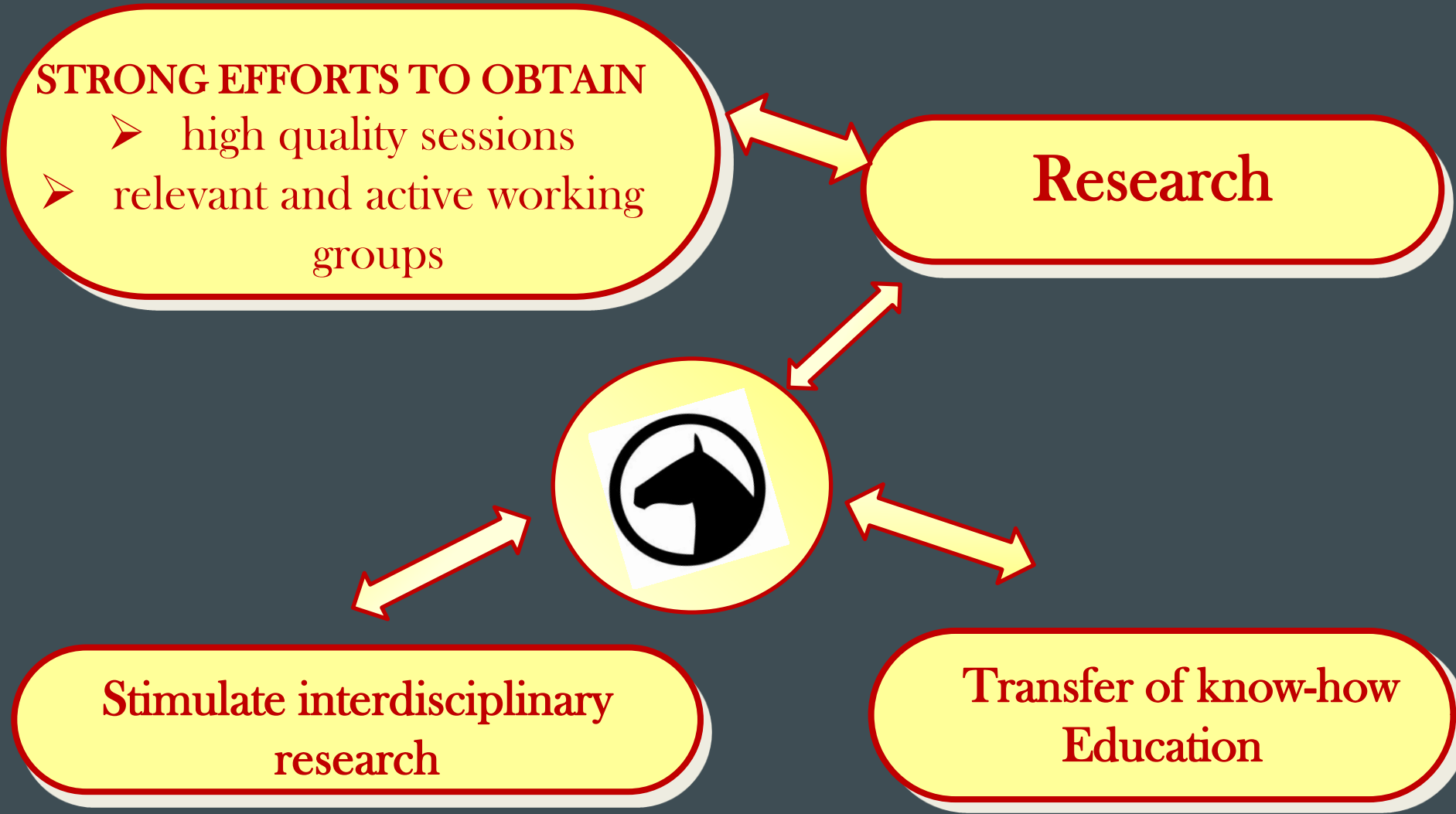
- Reduction of the knowledge gap
- Dissemination and transfer of knowledge
 - Transfer of technology

Science ↔ Practice ??



From 1998 on...

Fundamental changes in the Horse Commission structure





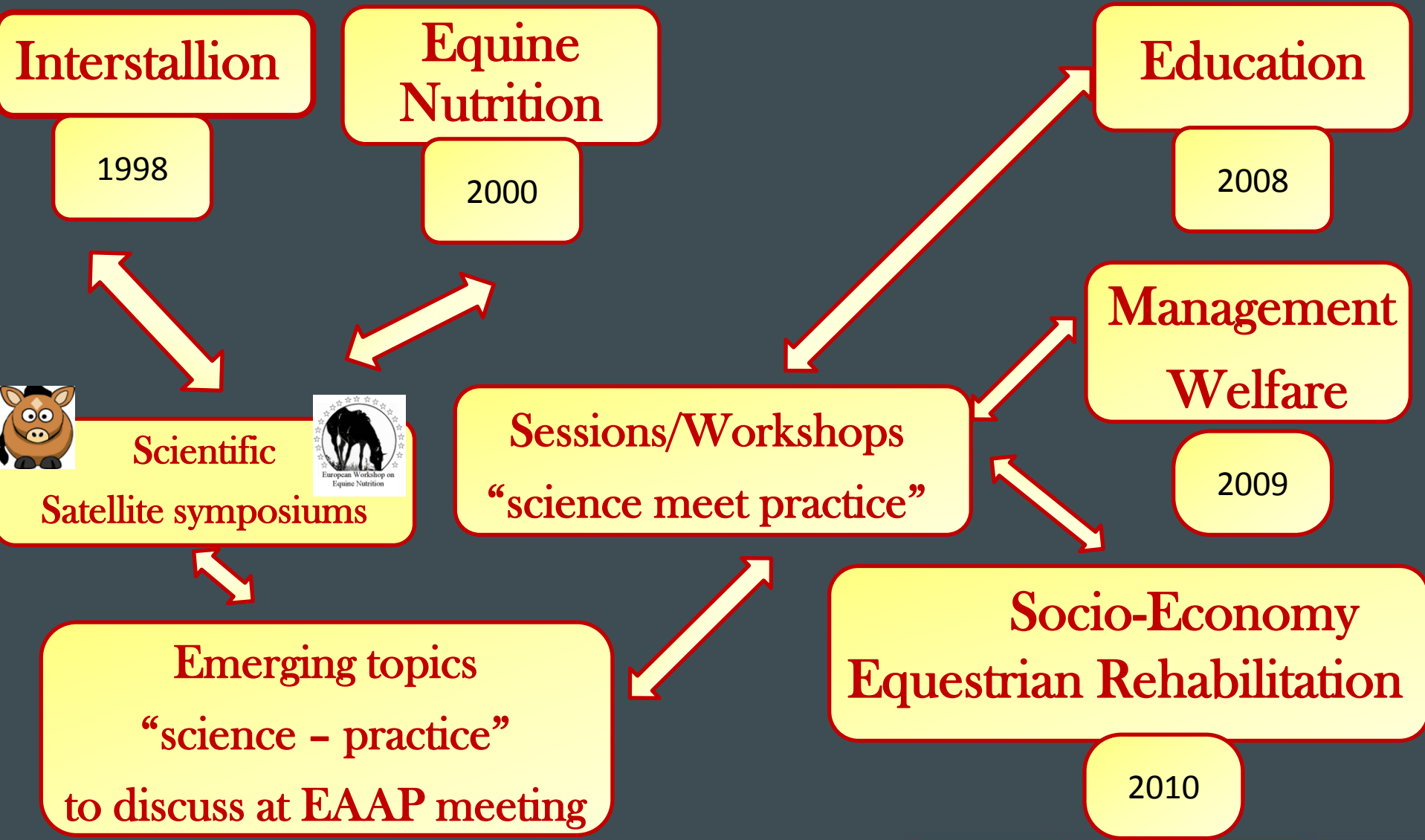
Some selected sessions of the EAAP Horse C. program

**EAAP
Special Issues**

Constitution of Working Groups



Horse Commission - Constitution of Working Groups



Horse Commission - Constitution of Working Groups

most important platform
for equine research

- ✓ scientific part
- ✓ interdisciplinary scientific approach
- ✓ interdisciplinary collaborations

more collaborations between
research institutions and
associations

- ✓ joint workshops
science practice
- ✓ emerging topics



Workshops

“science meet practice”

Demand side

persons connected to the horse world

link research and practice to limit the “gap” between them

promote improvement in equine services

disseminate the latest knowledge across the sector at a global and European level

Supply side

goods and services that perform business and professional activities



Horse Commissions Workshops “science meet practice”

60th EAAP meeting, Barcelona, 2009

Performance Horse. Open questions and challenges for research and practice

61st EAAP Meeting, Heraklion, 2010

Role of equids in socio economy and on human wellbeing

62nd EAAP Meeting, Stavanger, 2011

Equine Science Education Workshop

63rd EAAP Meeting, Bratislava/Slovakia, 2012

Genomics and horse production: from science to practice

64th EAAP Meeting, Nantes 2013

The new equine economy: growth in new sectors and activities in the 21st

65th EAAP Meeting, Copenhagen 2014

Know-How and future challenges for developing the Horse Sector in Europe (EAAP-ASAS)

The horse as key player of local development: looking to the future in the 3rd millennium

INNOVATION AND RESEARCH FOR DEVELOPING
THE HORSE SECTOR (EAAP-EHN) /2015



Key Words

Science meet practice

STARTING TOPICS

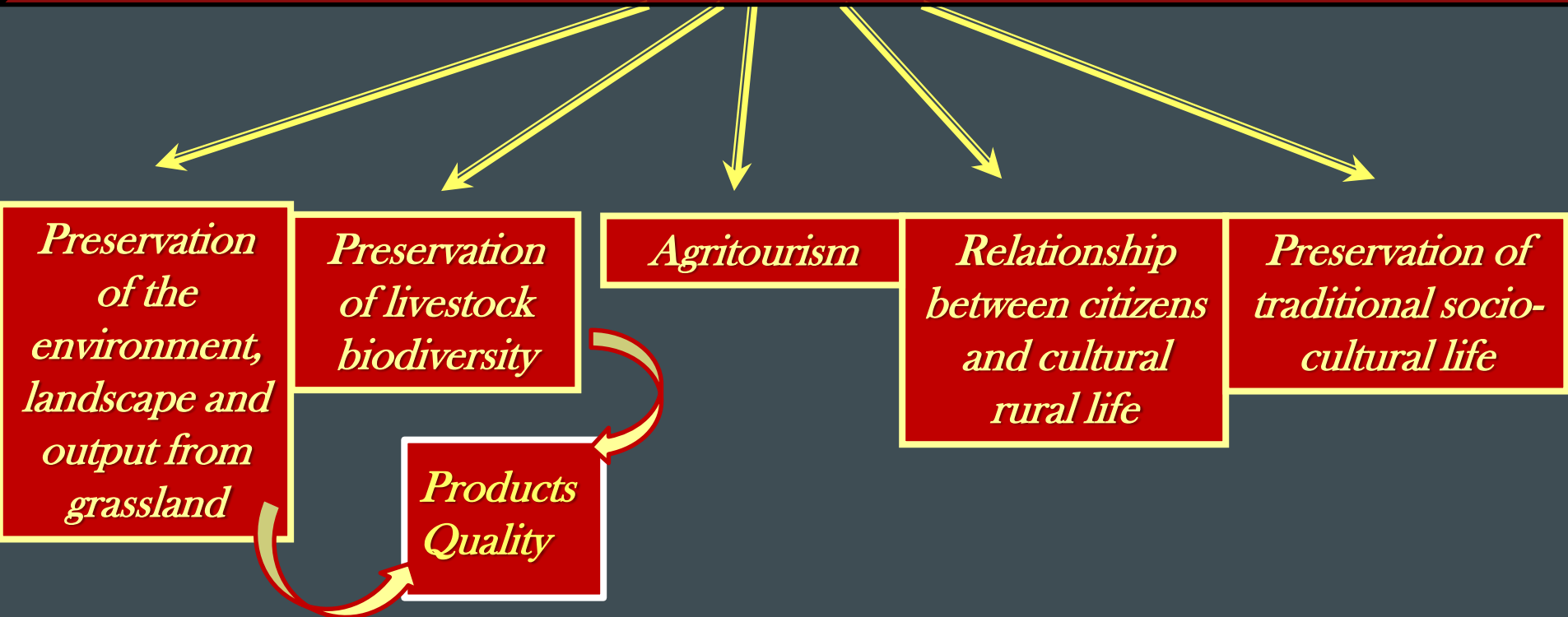
- ✓ Genetics/biotechnology
- ✓ Nutrition and feeding
- ✓ Management, Health, Welfare
- ✓ Reproduction

NEW ITEMS

- Socio-economic research
- Integration of horse in society
 - Horse welfare
- Livestock and Sustainable Agriculture
 - *exploitation of marginal lands*
 - *safeguard of landscape*
 - Therapeutic riding
 - Milk production



HORSES ARE PART OF TERRITORY MANAGEMENT



The horse as a key player of rural development

A CHALLENGING ISSUE



PLAYERS?

USERS?



PLAYERS

International

**INTERNATIONAL
RESEARCH**
(cooperation
between countries)

PRACTICE



EAAP



**ASSOCIATIONS
FEDERATIONS**

National

**NATIONAL
RESEARCH**

PRACTICE

UNIVERSITIES

FEDERATIONS
State National
Studs



USERS

Breeders

Trainers
Breakers

Owners
Riders
Riding
schools

Citizen

Production

Transformation

End-users

Society

Studbooks
Breeding associations
Private companies
Racing societies

Professional
associations
Private
companies

Professional
associations
Sport federations
Racing societies
Event organization
Technology
companies
Sport Competition
Equestrian Tourism

Individual
or Associations



USERS

Main activities

Horse industry

- Races
- Sports
- Leisure
- Hobby farming
- Sport facilities
- Equipment

New activities

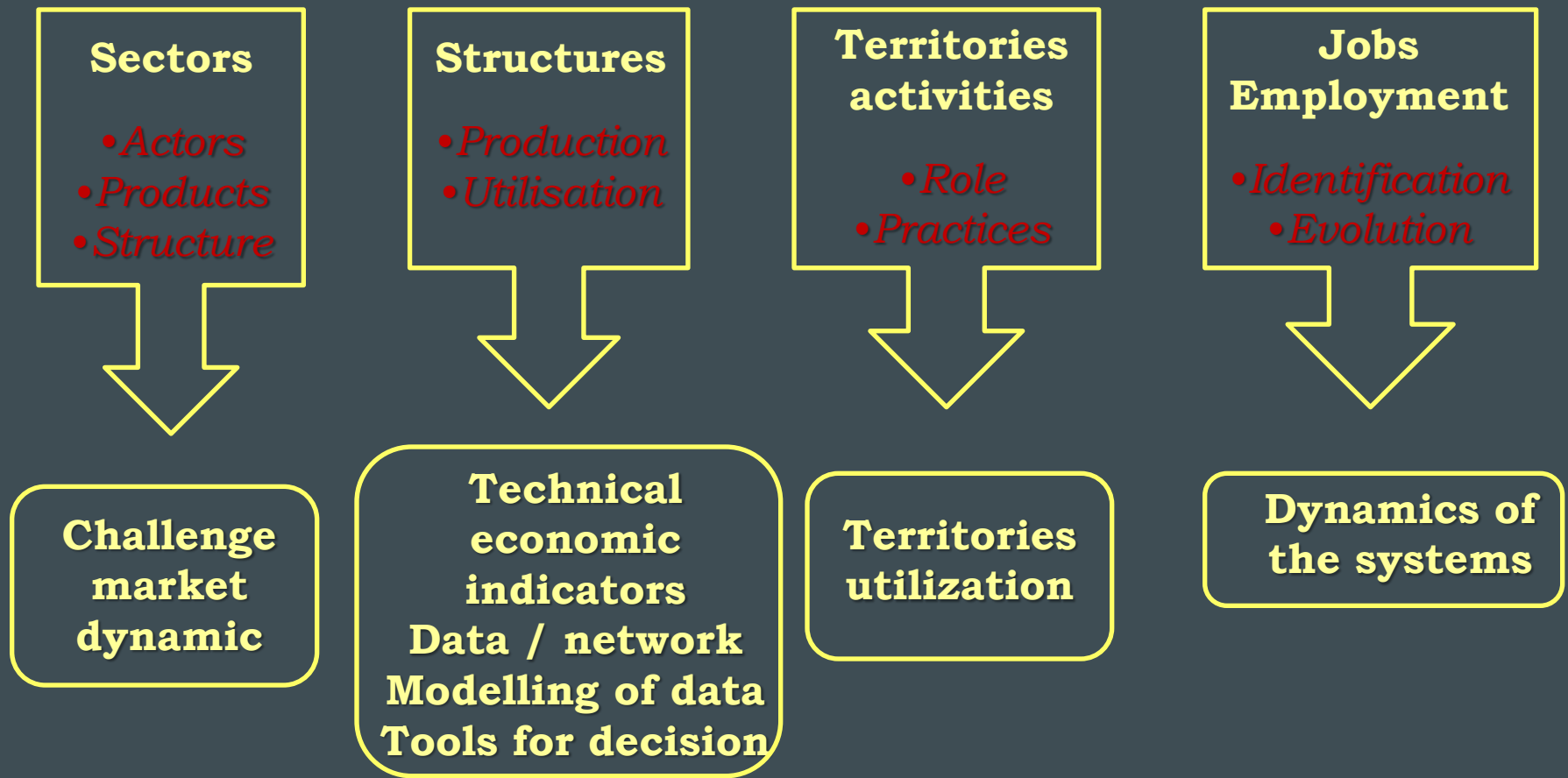
- Socio cultural events
 - Agritourism
 - Medical therapy
 - Social rehabilitation

Niche activities

Meat or milk



Technical & Socio economic evaluation of the chain components



USERS

Way back

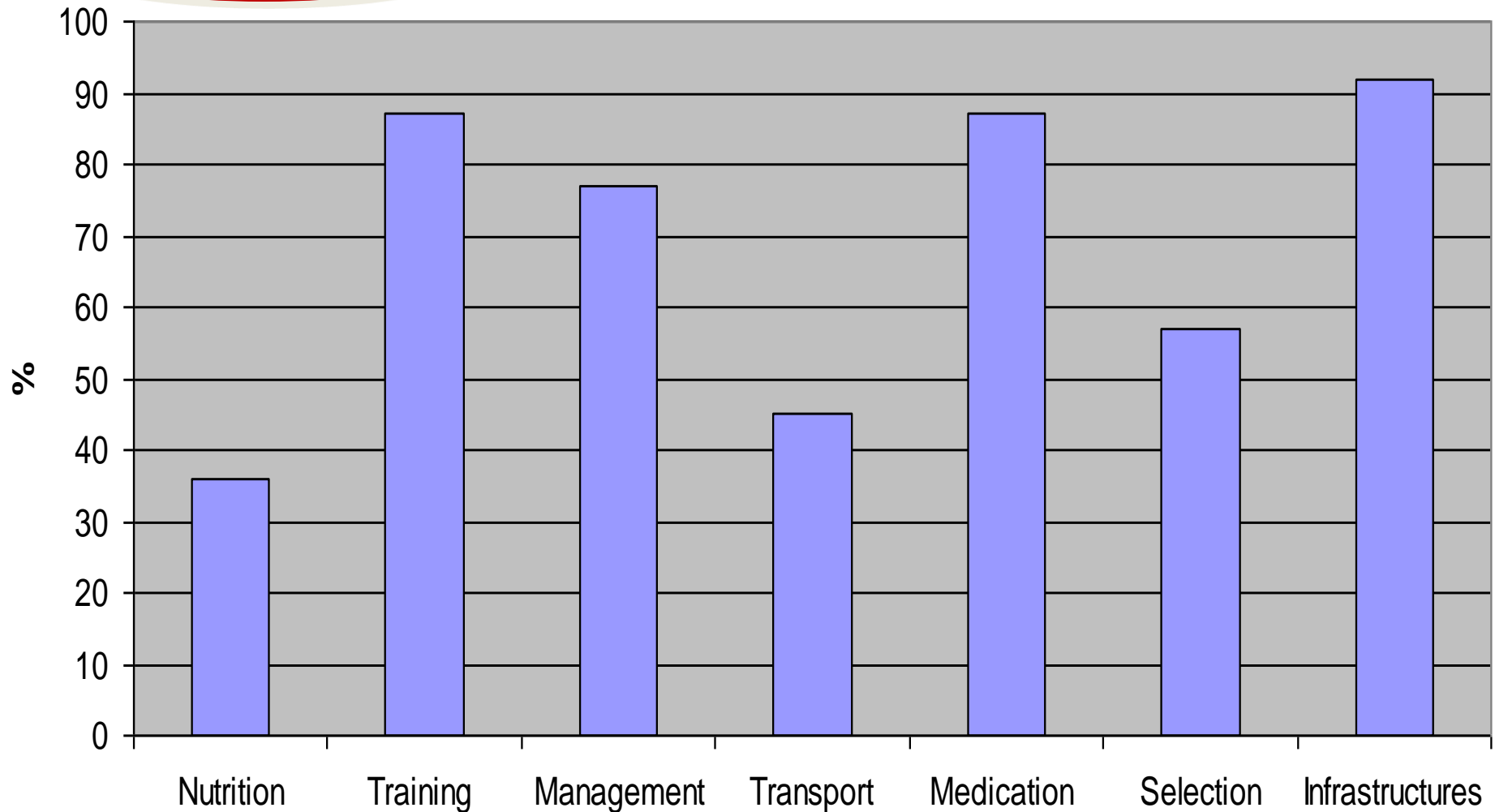
Associations/
Federation
Societies
Industries
.....

NEEDED RESEARCH



NEEDED RESEARCH

Priorities in the view of 23 team vets:



NEEDS OF THE HORSE INDUSTRY..

	2007/2008 (n=142)	2009 (n=115)
Diseases	3.65	3.56
Education of young horses	3.63	3.33
Selection of young horses	3.59	2.94
Welfare	3.58	3.48
Nutrition and food production	3.58	3.32
Fertility	3.52	2.69
Training of horses	3.52	3.45
Prevention	3.50	3.63
Behavior	3.49	3.35
Selection tests	3.36	2.75
Horse keeping and animal protection	3.25	3.34
Sociology/ Human sciences	2.99	2.49
Economics	2.83	2.80
History of the horse	2.74	1.97

4= big interest
1= no interest



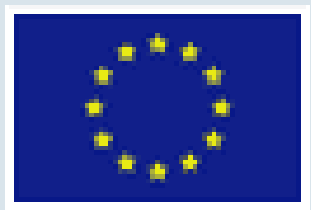
- ❑ Update **ESTIMATES OF HERITABILITY AND GENETIC CORRELATIONS AMONG THE TRAITS** of importance including showjumping, dressage and eventing
- ❑ Relationship between **CONFORMATION AND MOVEMENT TRAITS AND PERFORMANCE**
- ❑ Improved methods for the **ESTIMATION OF BREEDING VALUES** of horses including **GENOMIC SELECTION**
- ❑ Predictors of **FUTURE PERFORMANCE IN THE YOUNG HORSE**
- ❑ Methods for the international evaluation of the breeding values of horses
- ❑ The **SAFETY OF CLONES AND THEIR ACCEPTABILITY BY VARIOUS STAKEHOLDERS**
- ❑ Improved methods for the **PRESERVATION OF HORSE SEMEN AND USE OF AI**
- ❑ Improved methods for the determination of quality of horse semen
- ❑ Methods for the identification of horses that are safe, reliable and low cost
- ❑ **NUTRITION OF THE HORSE AND ITS RELATIONSHIP TO HEALTH**
- ❑ Causes, prevention and cure of **HORSE DISEASES OF ECONOMIC IMPORTANCE**
- ❑ Measurement of **HORSE TEMPERAMENT AND ITS RELATIONSHIP TO PERFORMANCE**
- ❑ **PHYSIOLOGICAL LIMITATIONS TO HIGH PERFORMANCE**
- ❑ **IMPROVED TESTING METHODS FOR PROHIBITED SUBSTANCES**



Current hot topics for EHN

- Animal health / exotic viruses / surveillance
 - Transport / Identification
 - Financing of sport
 - Practice of sport
 - VAT, taxation
 - Welfare
 - Economic development
 - Education of judges





europa.eu

Considerable impact of the European Union's legislation on:

- sport
- safe use of horses for sport,
- breeding and recreation in Europe using horses



FUNDS

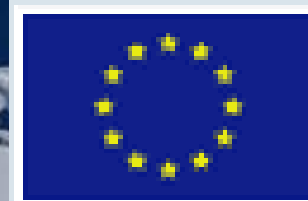
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Long term and positive relationship
with the European Union,
both at the
Commission and in the Parliament



europa.eu

AGRICULTURE
COUNCIL

MEP
Horse Group



Horses Working
Party
- COPA



How the equine sector
supports
the European Commission's
priorities for



❖ jobs, growth and investment
❖ employment in rural areas:
closing the jobs gap

14 members
Associations/
Federation





World Horse Welfare



The British Horse Society

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Conclusions

HORSES/EQUIDS

LEISURE HORSE

Optimization/cost
Welfare

COMPETITION HORSE
Maximization / Performance
Health

EQUIDS FOR
ALTERNATIVE PRODUCTS

ENVIRONMENT PRESERVATION



Conclusions

❖ research needs ↔ policy makers (EU)

❖ increased trust of horse keepers in research

❖ EAAP's scientific activities need to change in response

Sustain interdisciplinary research with direct results for the industry

➤ better understanding for needs of equine industry

➤ better communication and collaboration with equine industry

MOBILIZATION OF FINANCES

INTERNATIONAL NETWORKING





Thank
you for
your
attention