



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE AGRICULTURA, ALIMENTACIÓN  
Y MEDIO AMBIENTE










# **INSTITUTIONAL AND LEGAL FRAMEWORK FOR EX SITU CONSERVATION IN SPAIN.**

**SUBDIRECTORATE GENERAL OF LIVESTOCK INPUTS.**

# ANIMAL GENETIC RESOURCES IN SPAIN

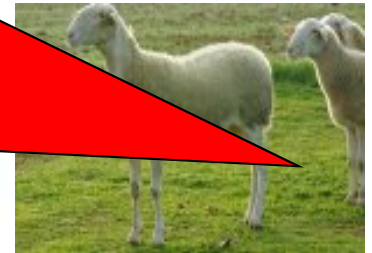
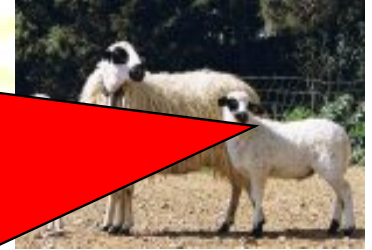
## ORIGIN OF OUR GENETIC WEALTH:

- Wide variety of agro-ecosystems
- Millenarian livestock practices.
- Introduction of foreign breeds.

RAZAS								TOTAL
AUTOCHTHONOUS IN DEVELOPMENT	7	10	6	1	1	0	1	26
AUTOCHTHONOUS IN RISK	31	33	16	8	14	6	19	127
BREEDS INTEGRED INTO SPAIN	7	6	0	6	4	0	0	23
EUROPEAN UNION BREEDS	0	1	1	0	0	0	0	2
BREEDS FROM THIRD COUNTRIES	0	1	0	0	0	0	0	1
OTHER REGISTERED EQUIDAE	0	0	0	0	1	0	0	1
TOTAL	45	51	23	15	20	6	20	181*

# ANIMAL GENETIC RESOURCES IN SPAIN

## MANAGEMENT -CHALLENGE



Source of the  
images: FEAGAS

# INSTITUTIONAL ORGANISATION OF THE ANGR CONSERVATION IN SPAIN



REGIONAL GOVERNMENTS (17).  
REGULATION OF BREED LOCATED MOSTLY IN THEIR TERRITORIES.

CENTRAL GOVERNMENT (MAGRAMA).  
REGULATION OF BREEDS LOCATED IN MORE THAN ONE REGION.

# HISTORICAL OVERVIEW OF GENE BANK DEVELOPMENT IN SPAIN

PRIORITY OF THE ANGR CONSERVATION POLICY IN SPAIN: IN SITU CONSERVATION.

BREEDERS ASSOCIATIONS:

- CHARACTERIZATION OF THE BREED.
- IN SITU CONSERVATION ACTIVITIES.
- EX SITU CONSERVATION ACTIVITIES.

## GENE BANK DEVELOPMENT

- CENSYRAs: Stations of Animal Genetic Improvement and Reproduction.
- RESEARCH INSTITUTIONS.
- UNIVERSITIES.

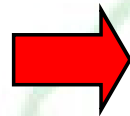
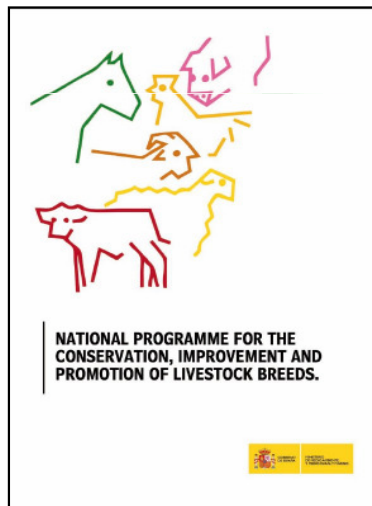
## MAGRAMA

OBJECTIVE: CONSOLIDATE THE GENE BANKS.

ACTIVITIES:

- BUILD UP THE COORDINATION.
- STRENGTHEN THE NATIONAL GENE BANK

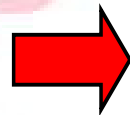
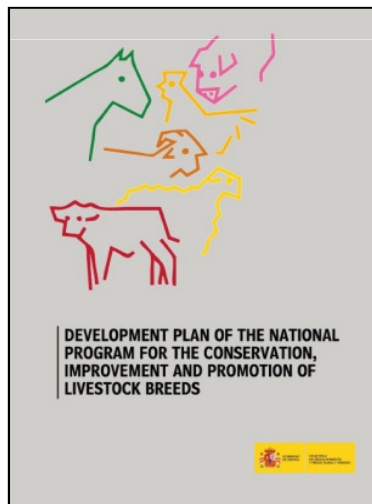
# OBJECTIVES OF THE NATIONAL POLICIES OF CRYOCONSERVATION



## DEFINITION OF GENE BANK.

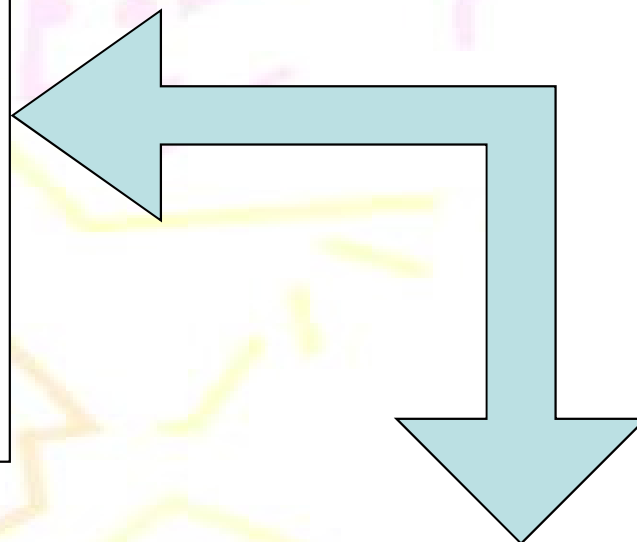
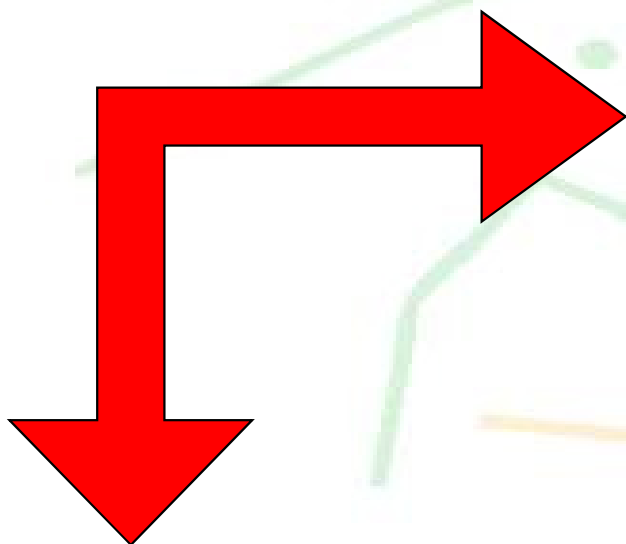
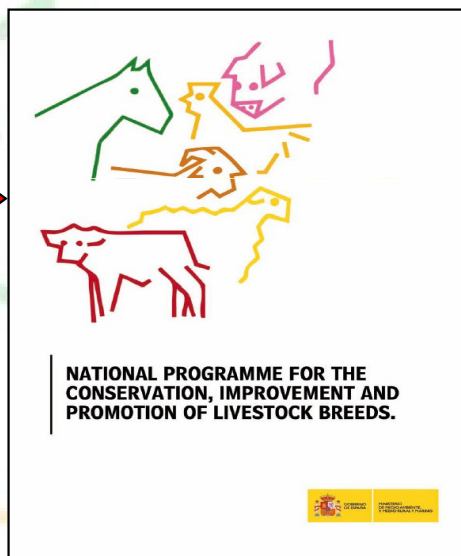
### PRIORITIES:

1. MATERIAL FROM BREEDS CLASSIFIED AS IN RISK OF EXTINCTION
2. MATERIAL FROM HIGH GENETIC QUALITY ANIMALS.
3. MATERIAL FROM BREEDS FOR WHICH IS NECESSARY TO ENSURE THE MAINTENANCE OF ITS GENETIC VARIABILITY.



1. PROMOTE STUDIES ON NEW EX-SITU CONSERVATION TECHNIQUES, STRENGTHEN THE COLLABORATION BETWEEN CENTRES, AND DEVELOPMENT NEW PROJECTS AND RESEARCH GROUPS IN THIS FIELD.
2. TO STABLISH THE CRITERIA TO CREATE AND MANAGE THE GENE BANKS.
3. TO STRENGTHEN THE ROLE OF NATIONAL GENE BANK.

# OBJECTIVES OF THE NATIONAL POLICIES OF CRYOCONSERVATION



## BREED CONSERVATION PROGRAMS.

- KIND OF TISSUE.
- NUMBER OF DOSES-EMBRYOS.
- NUMBER OF DONORS.
- "COPY" TO THE NATIONAL GENE BANK.

## TASK GROUP ON CRYOCONSERVATION

- COORDINATION.
  - ANALYSIS.
  - CRITERIA TO CREATE AND MANAGE THE GENE BANKS.
- MAGRAMA, FEDERATIONS OF BREEDERS AND NATIONAL GENE BANK.

# INVOLVEMENT OF STAKEHOLDERS ON THE CRYOCONSERVATION ACTIVITIES

## BREEDERS ASSOCIATIONS

### ADMINISTRATIONS.

- VERIFY AND APPROVAL THE BREED CONSERVATION PROGRAMS.
- FACILITIES FOR THE GENE BANKS (CENSYRAS).
- SUBSIDIES TO SUPPORT CONSERVATION ACTIVITIES.
- VERIFY APPLICATION OF THE BREED CONSERVATION PROGRAM. BREED INSPECTOR.

### BREED CONSERVATION PROGRAM

- CHARACTERIZATION OF THE BREED.
- IN SITU ACTIVITIES.
- EX SITU ACTIVITIES: GENE BANKS

### EXPERT IN ANIMAL GENETIC

ENDORSE THE BREED CONSERVATION PROGRAM

NATIONAL GENE BANK  
STORE A "COPY" OF THE BREEDERS ASSOCIATION GENE BANK

# DECISION MAKING PROCESS



## MANAGING COMMISSION OF THE BREED CONSERVATION PROGRAM.

TECHNICAL DECISIONS:  
TYPES OF MATERIAL,  
AMOUNT, DONORS.

KEEPERS, EXPERT IN ANIMAL GENETICS,  
TECHNICIANS OF THE BREEDERS  
ASSOCIATIONS, GENE BANK, BREED  
INSPECTOR.

NATIONAL COORDINATING COMMITTEE FOR THE  
CONSERVATION, IMPROVEMENT AND PROMOTION OF  
LIVESTOCK BREEDS (National Advisory Committee).

# STORAGE AND DOSSIER FILES

- NO NATIONAL RULES TO REGULATE STORAGE AND DOSSIER FILES.
- GENE BANKS SAME REQUIREMENTS THAN A COMMERCIAL STORAGE CENTRES (ROYAL DECREE 841/2011 = EUROPEAN REGULATION)

## NATIONAL GENE BANK

- APPLICATION FORM TO STORAGE GERMLASM IN THE GENE BANK.
- WRITTEN WARRANTY, SIGNED BY AN ANIMAL GENETIC EXPERT, OF THE CORRECT SELECTION OF THE DONORS.
- PEDIGREE OF THE DONORS.
- INFORMATION ABOUT FREEZING PROCEDURES.

# SANITARY ARRANGEMENTS

THE NATIONAL REGULATION (ROYAL DECREE 841/2011) ESTABLISH EXCEPTIONS AT THE SANITARY RULES FOR THE NATIONAL MARKETING OF GERMPLASM, IN CASE OF:

- BREEDS IN RISK OF EXTINCTION.
- GERMPLASM WITH DESTINATION TO THE GENE BANKS.
- DONORS ANIMALS FROM DIFFICULTY HANDLING BREEDS.

THE EXCEPTIONS HAVE TO BE APPROVED BY THE AUTHORITIES, HAVE NOT TO CREATE SANITARY PROBLEMS, AND THE GERMPLASM CAN NOT DELIVER, IN ANY CASE, TO OTHER EUROPEAN COUNTRY.

# LEGAL ASPECTS

EACH GENE BANK ESTABLISH OWN RULES TO REGULATE THE OWNERSHIP AND RELEASE OF THE GERMPLASM

## NATIONAL GENE BANK.

### IN THE PAST:

- MAGRAMA PURCHASE THE GERMPLASM.
- KEEPERS COULD USE THE STORED GERMPLASM IF THEY WILL RETURN THE SAME AMOUNT OF MATERIAL FROM THE DESCENT OBTAINED.

### NOW:

- THE STORED GERMPLASM IS OWNED BY THE BREEDERS ASSOCIATIONS.
- THE USE OF THE STORED MATHERIAL ONLY FOR:
  - BREED RECONSTITUTION.
  - TO INTRODUCE GENETIC VARIABILITY INTO ALREADY STABLISHED POPULATIONS.
  - TO RECOVER THE GENE BANK OF THE BREEDER'S ASSOCIATIONS IN CASE OF DESTRUCTION.

THE RELEASE OF GERMPLASM HAS TO BE APROVED BY THE NATIONAL ADVISORY COMMITTEE

THANK YOU  
FOR  
YOUR  
ATTENTION

