

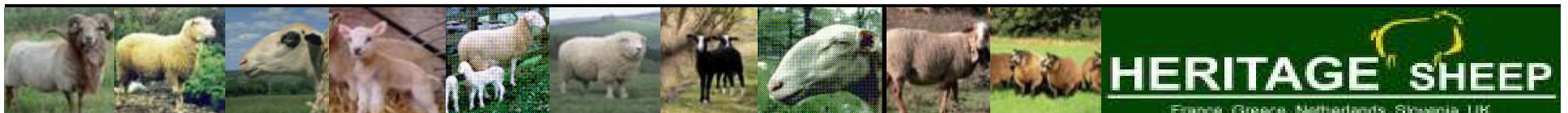
# Heritage Sheep breeds in Europe

## Strategies for sustainable development and conservation



[www.heritagesheep.eu](http://www.heritagesheep.eu)

(funded under European Commission Council Regulation (EC) No 870/2004)



# Partners

France

Delphine Duclos

Greece

Christina Ligda, Andreas Geogoudis

Netherlands

Lucia Kaal, Henri Woelders, Yvette de Haas

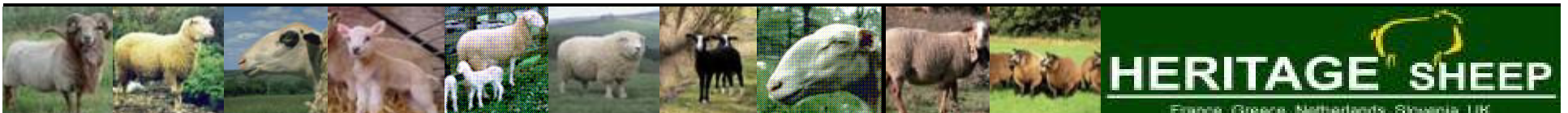
Slovenia

Drago Kompan

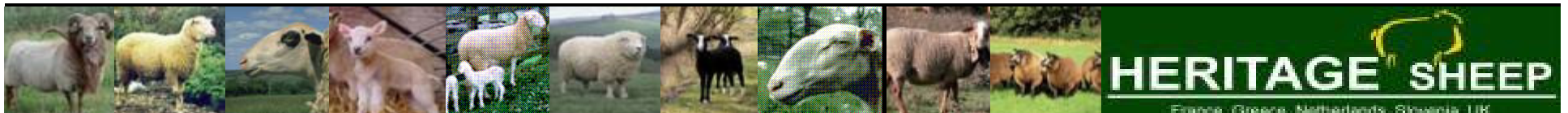
UK

Amanda Carson, Dianna Bowles

External advisors: Mike Roper, Dominique Planchenhault, John Woolliams

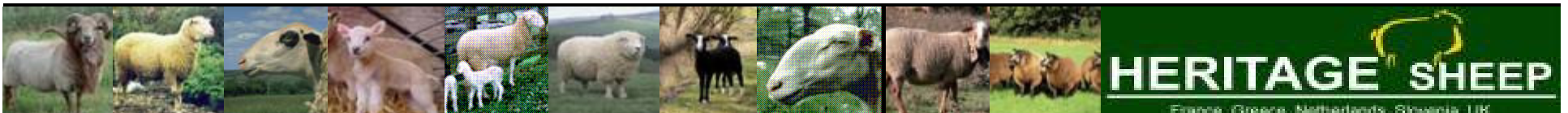


# ERFP SCOPING STUDY (2005)



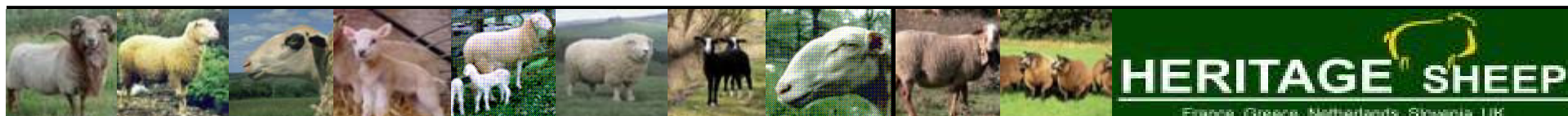
# HERITAGE SHEEP

- genetically distinct
- geographically concentrated
- adapted to their environments
- commercially farmed to economically support the local communities in which they are raised



# 45 participating breeds

France 10	UK 15	Netherlands 11	Greece 5	Slovenia 4
Basco Béarnaise, Bizet, Causses du Lot, Corse, Grivette, Limousine, Manech Tête Noire, Manech Tête Rousse, Mourerous, Rava	Brecknock Hill Cheviot, South Country Cheviot Clun Forest, Dalesbred, Derbyshire Gritstone, Devon Closewool, Exmoor Horn, Herdwick, Lonk, Romney, Rough Fell, Shetland, South Welsh Mountain, Southdown, Welsh Hill Speckled Face	Black Blazed, Blue Texel, Drenth Heath, Flevolander, Mergelland, North Holland, Schoonebeek, Swifter, Texel, Veluwe Heath, Zeeland Milkshoop	Boutsiko (Orino), Frizarta, Kefallinias, Sfakia Katsika	Bela Krajina Pramenka, Bovec Sheep, Istrian Pramenka, Jezersko – Solcava



# HERITAGE SHEEP

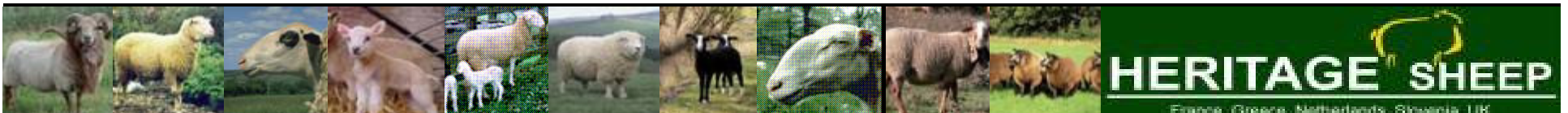
WP 1 Characterisation and Evaluation of HSBs (UK)

WP 2 In situ conservation - strategies and guidelines for success (France)

WP 3 / 4 Ex situ conservation - collection and cryopreservation (Netherlands)

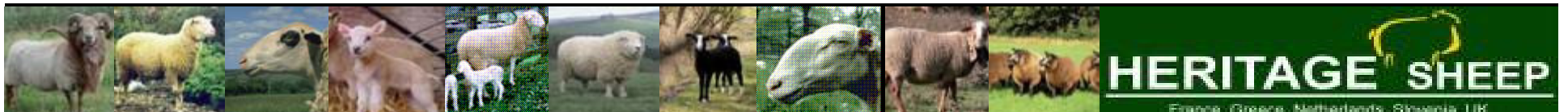
WP 5 Web based network of HSB genetic resources (Greece)

Slovenia contributing to all work packages



# Work Package 1

Collate information to characterise and evaluate HSB genetic resources across the partner countries, as an aid to conservation activities

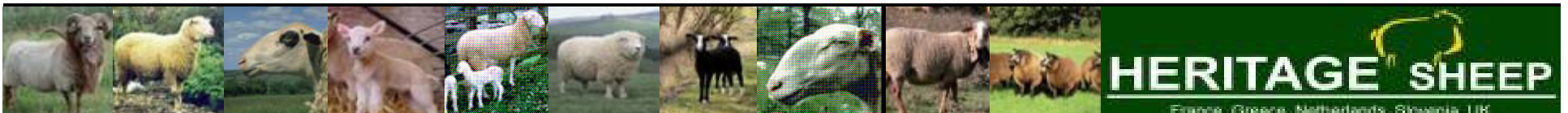


# Questionnaire

Designed and validated by the partners in liaison with an external advisor

Translated into local languages, partners collected data from their local breed societies

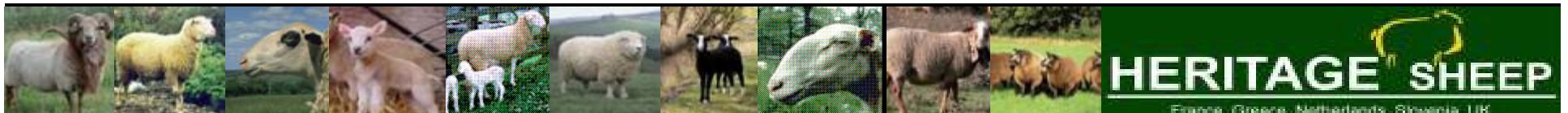
Design the database and entered the breed data





# Origin and History

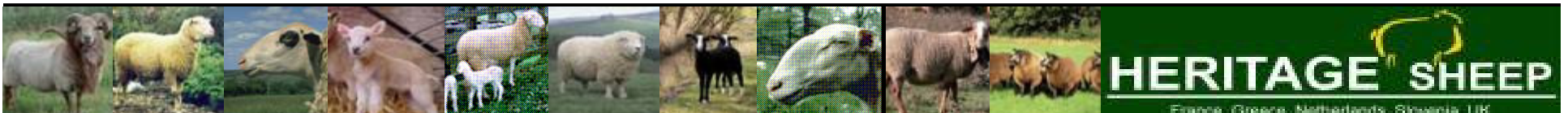
Breed description and history, current *in situ* and *ex situ* conservation activities, photo



# Values

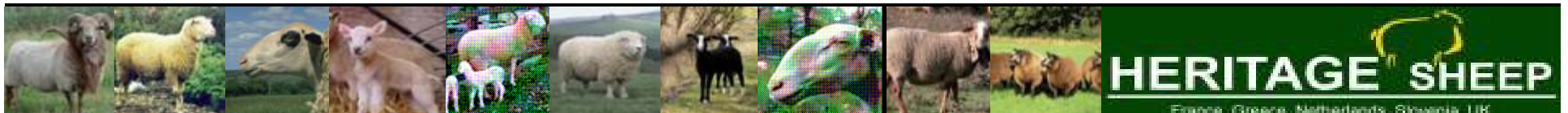
The importance of the breed to its region

- contribution to the local environment
- adaptation to and ability to thrive in extensive farming systems
- contribution to the local community- social cohesion, tourism
- contribution to the local economy - demand for regional products...



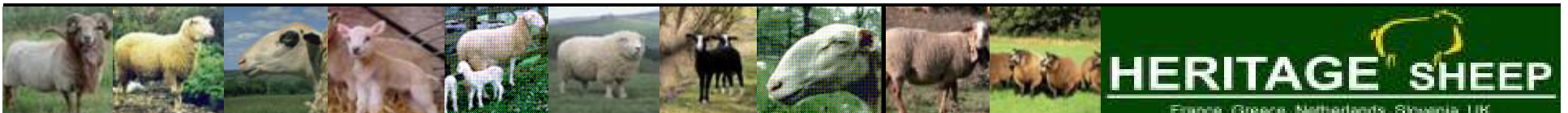
# Current Situation and Future Trends

Promotional activities, marketing initiatives, genetic improvement programmes, improved health plans and conservation activities.



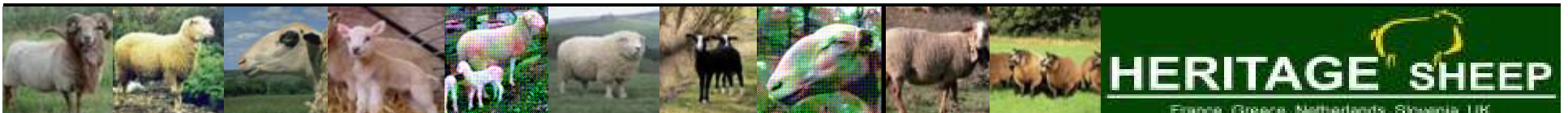
# Major Threats

- decrease in public funding
- lack of political will to support rural communities
- policies and legislation, including environmental schemes
- disease
- predators
- urbanisation
- poor return on product, competition from other livestock
- ageing population of farmers
- lack of marketing support
- inbreeding
- loss of skills



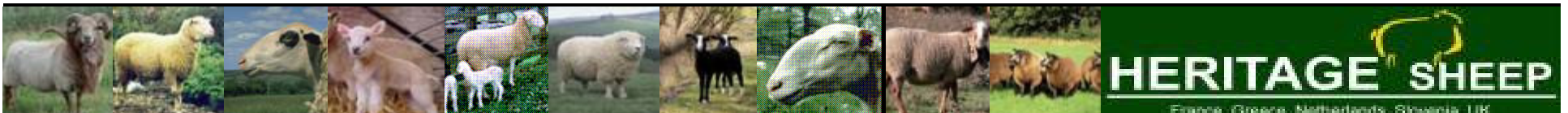
# Conclusions from WP1

- Breed societies do not always have up to date information nor quantitative data
- Some important insights into the perceived threats facing HSBs were revealed
- Urgent need for standardisation across sheep breed societies both nationally and internationally in terms of gathering, collating and maintaining quantitative data.
- Standardisation of methodology is essential to ensure that policy making in the member states and European Union is based on accurate information.





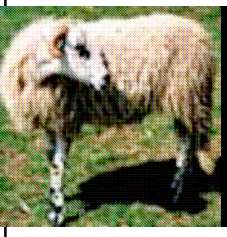
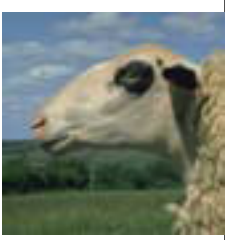

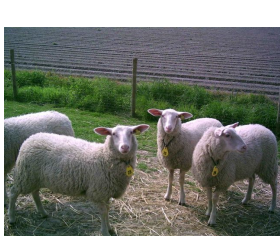
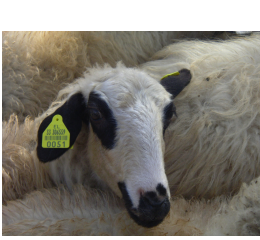



# WP2 - In situ conservation

- Detailed study of three French Pyrenean breeds
  - Basco Béarnaise, Manech Tête Noire and Manech Tête Rousse.
- Technical, economic and social means necessary to achieve a successful development programme



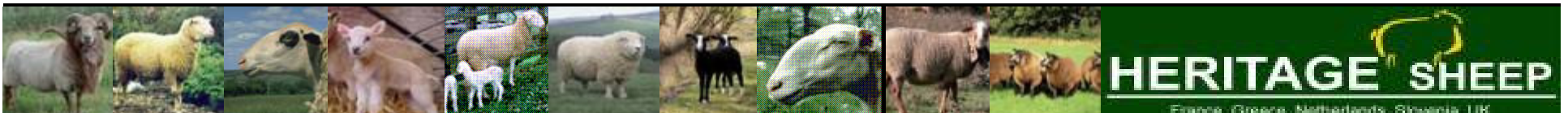
# Comparisons of different breed cases

France	UK	The Netherlands	Greece	Slovenia
<p>- Basco Béarnaise, Manech Tête Noire, Manech Tête Rousse -Causses du Lot</p>	<p>- Herdwick - Shetland</p>	<p>- Kempen Heath Sheep - Milkshoop (Friesian &amp; Zeeland)</p>	<p>- Frizarta - Katsika</p>	<p>- Bela Krajina Pramenka - Bovec Sheep</p>
				
				



# WP2 – in situ conservation

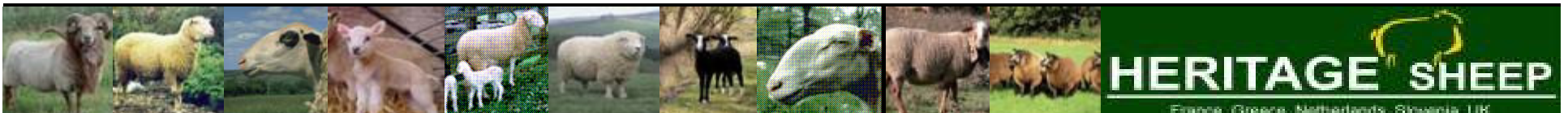
- Breed cases were different
- Common elements
  - Harsh environments
  - Positive impact in landscape
  - The sale of products is not always under a specific label / but the production is acknowledged as of high quality
- Most important: breeders with passion for their breed





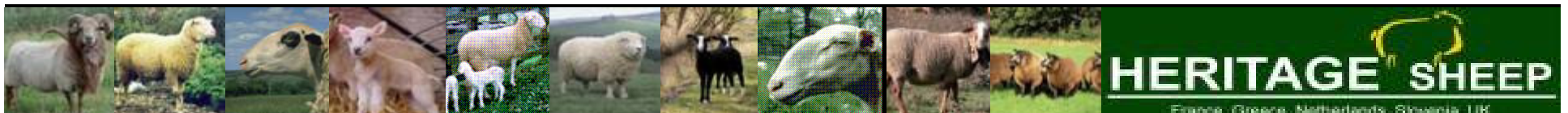
# WP3 - Ex situ conservation

- Strategies for collection
- Strategies for cryopreservation
- Survey of the organisation and stocks of germplasm in partner countries



# WP4 - Collection of semen

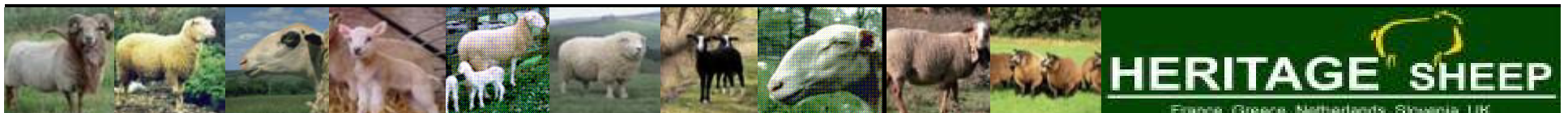
Netherlands	France	United Kingdom	Slovenia	Greece
Black Blazed	Limousine	Shetland	Istrian Pramenka	Boutsiko
Milksheep (Friesian and Zeeland)	Rava	Lonk	Bela Krajina Pramenka	Katsika
Kempen Heath	Bizet			Frisarta
	Causses du Lot			

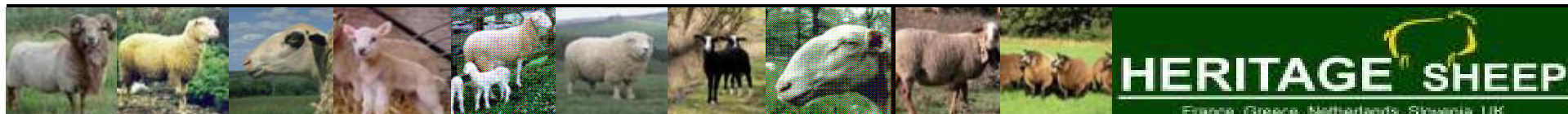
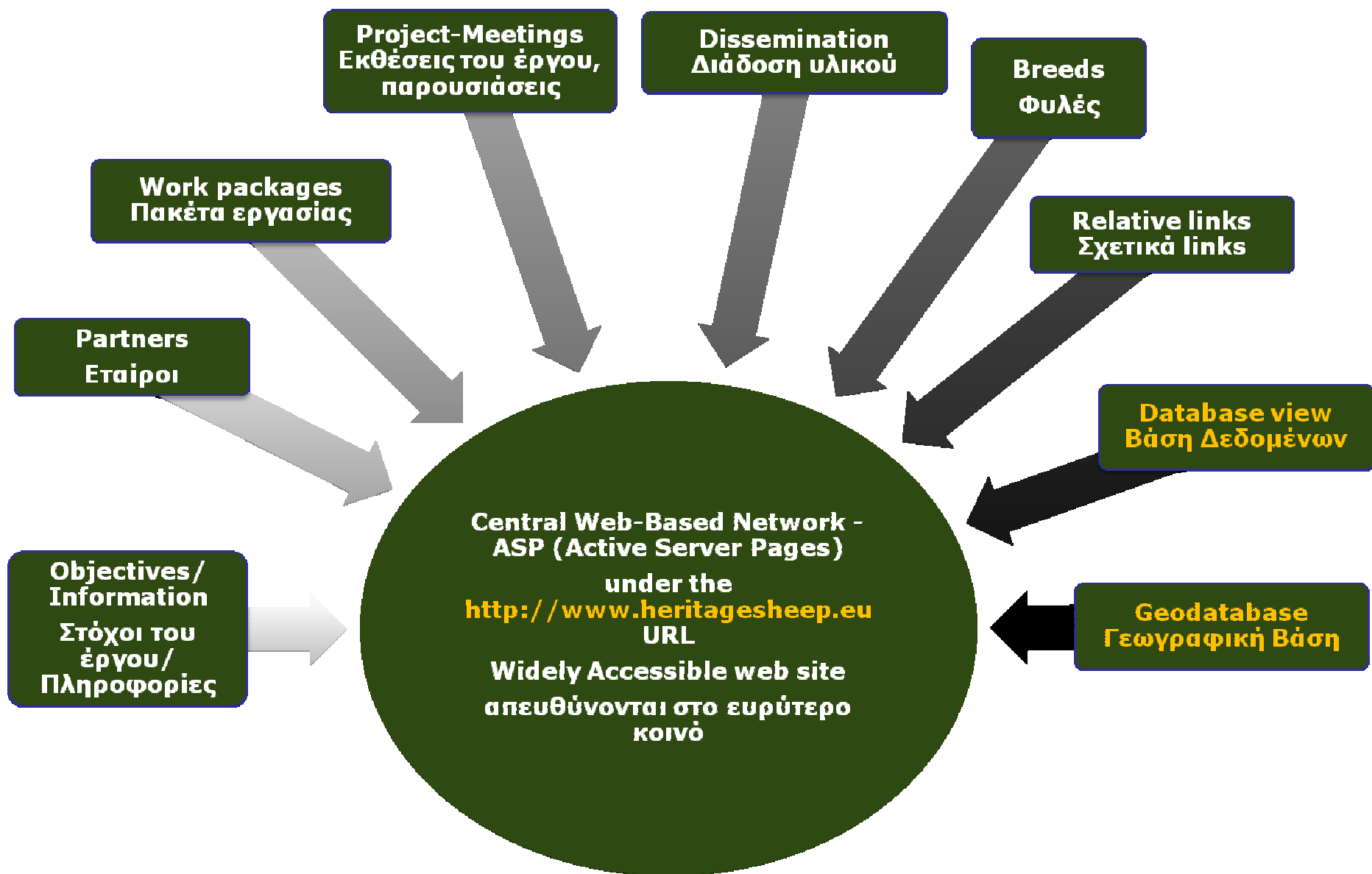


# WP5 – Development of website www.heritagesheep.eu



The screenshot shows the homepage of the HERITAGE SHEEP website. At the top, a dark green banner features the logo "HERITAGE SHEEP" with a stylized yellow sheep head icon above the word "SHEEP". Below the logo, the text "France, Greece, Netherlands, Slovenia, UK" is displayed. A vertical green sidebar on the left contains a list of navigation links: Home, Objectives, Partners, Coordinator, External Evaluators, Work Packages, Project Meetings, Other Meetings, Dissemination, Breeds, Links, and Heritage sheep data base. The main content area has a white background and is titled "HERITAGE SHEEP". Below the title, a paragraph states: "A international programme funded by the European Commission to conserve the genetic resources of Heritage Sheep Breeds". This is followed by a 4x4 grid of 16 small images showing various sheep breeds. Below the grid, a paragraph reads: "Heritage Sheep Breeds are regional breeds - playing an important role in local culture and the rural economy adapted to their environments - helping to sustain the countryside have important genetic resources - biodiversity needing protection." At the bottom of the page, there is a small European Union flag logo and a line of fine print text: "Action Heritage Sheep - AGR1 GEN RES 046 receives financial support from the European Commission, Genetic Resources in Agriculture, under EUR 2004 COMMISSION COUNCIL REGULATION (EC) NO 1708/2004 AGR1 GEN RES 2006 HERITAGE SHEEP".





# Breeds



France, Greece, Netherlands, Slovenia, UK



















### HERITAGE SHEEP - BREEDS

	United Kingdom	France	The Netherlands	Greece	Slovenia
	15 breeds	15 breeds	13 breeds	4 breeds	4 breeds
1.	<a href="#">Blackhead Hill Cheviot</a>	<a href="#">Bleue de France</a>	<a href="#">Black Headed</a>	<a href="#">Koumbika (Dionio)</a>	<a href="#">Bela Krkova Pramenka</a>
2.	<a href="#">Cheviot</a>	<a href="#">Rivet</a>	<a href="#">Blue Toned</a>	<a href="#">Fibozita</a>	<a href="#">Bovac Slunjski</a>
3.	<a href="#">Clun Forest</a>	<a href="#">Couscous de Lait</a>	<a href="#">Drenth Heeth</a>	<a href="#">Kafalinia</a>	<a href="#">Belton Pramenka</a>
4.	<a href="#">Daleland</a>	<a href="#">Coras</a>	<a href="#">Fleischlander</a>	<a href="#">Sfakia</a>	<a href="#">Bosanska Solovka</a>
5.	<a href="#">Derbyshire Southdown</a>	<a href="#">Grivotto</a>	<a href="#">Kroepen Heeth</a>		
6.	<a href="#">Dorset Downs</a>	<a href="#">Limousine</a>	<a href="#">Nieuwland</a>		
7.	<a href="#">Fleischschaff</a>	<a href="#">Mansch Tête Noire</a>	<a href="#">North Holland</a>		
8.	<a href="#">Herdwick</a>	<a href="#">Mansch Tête Noire</a>	<a href="#">Schosensbeek</a>		
9.	<a href="#">Lunk</a>	<a href="#">Houmouac</a>	<a href="#">Swiftor</a>		
10.	<a href="#">Romney</a>	<a href="#">Hecinos d'Azou</a>	<a href="#">Tweed</a>		
11.	<a href="#">Rough Fell</a>	<a href="#">Dava</a>	<a href="#">Yellow Heeth</a>		
12.	<a href="#">Shetland</a>	<a href="#">Taranconna</a>	<a href="#">Zwaland milksheep</a>		
13.	<a href="#">South Welsh Mountain</a>	<a href="#">Valer Black</a>			
14.	<a href="#">Southdown</a>				
15.	<a href="#">Wales Hill Speckled</a>				

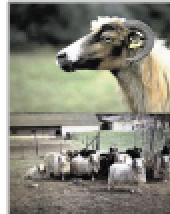


France, Greece, Netherlands, Slovenia, UK

### Corse/Corsica (local)

Non International	Corse
Non Local	Corse
Localised	Corse
Number of Breeds	108/100
Year of publication	2016



**Origine - Historique**

Depuis 1960, il existe une liste de races locales qui ont été reconnues par le ministère de l'Agriculture et de la Pêche de la Corse. Cette liste est mise à jour régulièrement.

**Description de la race**


Les ovins de Corse sont très variés. Ils sont élevés dans des conditions très différentes et ont des caractéristiques très variées. Ils sont élevés pour leur viande et leur laine.

**Conservation de la race**







La Corse est une île isolée et les races locales sont très précieuses. Elles sont élevées dans des conditions très difficiles et ont des caractéristiques très variées.

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France, Greece, Netherlands, Slovenia, UK

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**Description de la race**

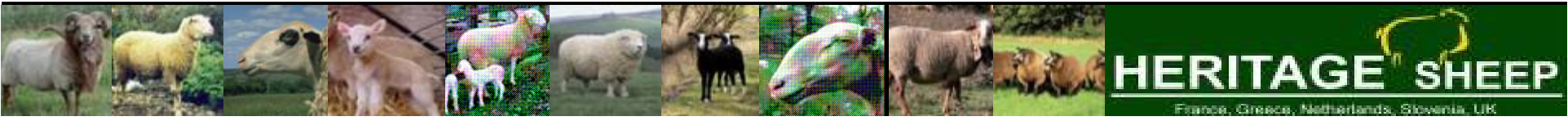
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**General Description**

BREED\_NAME: Anogeiano

Characteristics: Ram Ewe, Litter size

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**Members\_sheep**

BREED\_NAME: Bela Krajina Pramenka

Breed Soci

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**Factors Affecting Future Sheep Numbers**

BREED\_NAME: Basco Béarnaise

Success

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**Values**

BREED\_NAME: Basco Béarnaise

Environmental Adapt

- Withstand cold
- Withstand wet
- Withstand wind
- Withstand heat
- Adaptation to altitude
- Adaptation to terrain
- Ability to utilise sparse forage
- Ability to utilise poor quality forage
- Adapted to regional plants
- Adapted to regional mineral deficiencies
- Adapted to regional vitamin deficiencies

Climate

---

**Options**

BREED\_NAME: Basco Béarnaise

**Current and Future Breed Society Initiatives**

- Involved with non government organisation
- Participates in Research and Development schemes
- Organises breed promotion events
- Organises educational events for members

**Marketing and Branding**

	% Farms	Product	Comment
On farm sale of products	20	~20% (adhérents à l'ADRA)	Cheese produced on farm
Off farm sale	35		Producing animals
Auctions			
Private contracts	70		When the milk is not transformed into cheese by the
Internet sales	5		
Farmers markets			

Yes/No(□) Comment

- Special schemes for marketing of breed products  The breed is a major element of the region's products
- Special schemes for marketing of region products  They have for both Quality Official since the AOC
- Awareness of grant aid to help marketing
- Awareness of advisor services marketing

**Current Situation and Future Perspectives**

**Breed Improvement**

- Genetic improvement
- Artificial Insemination
- Semen stored
- Other material stored

The association has in charge de breeding selection. It's a very important element to create and in case of severe sanitary problem within the AOC Blood

	% Farms	Comment
Flock Health Plans (%farms)	15	Health plans are implemented by the association for the
% of farms have health plans in consultation with vet	15	
% of farms fully implement these plans	100	

Yes/No(□) Comment

- Are flock health plans considered a cross compliance requirement
- Actively promotion of Flock Health Plans

Most important advice given in Flock Health Plans (comment):

Necessity of being very cautious and very rigorous on the preventive measures to take when buying or mixing ewes (transhumance for instance)

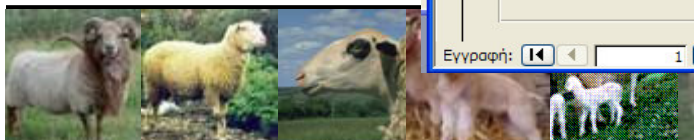
Most 5 important threats to the breed:

Sanitary problems and constraints  
Decrease of the public funding for the genetic improvement of

Most important characteristics of the breed:

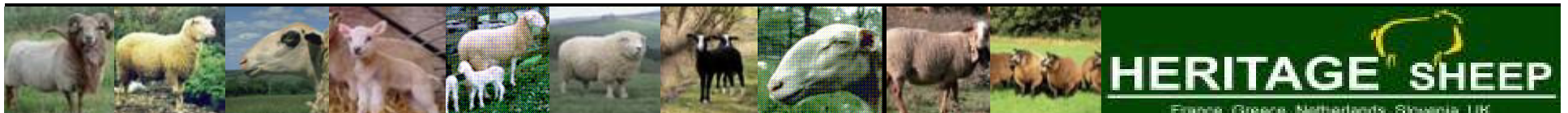
Implementation of Quality Official Signs (Cheese AOC Ossau-Iraty, red label milk)

Additional\_Comments:



## Further development of the website

- ❑ Exploitation of GIS and development of the website to a portal for the sheep breeds
- ❑ Increase the interested of the relevant stakeholders, but also the general public on the local sheep genetic resources









*Thank you for  
your attention!*

