

WP2: Development and evaluation of strategies for *in situ* conservation



The different breeds studied: numbers and trend

Country	Breed	Population	Nb herds	Trends since 2000
France	Basco Béarnaise	82 876	420	Stable
	Manech tête rousse	285 484	1 170	Increasing
	Manech tête noire	100 837	510	Decreasing
	Causse du Lot	106 000	250	Increasing
Greece	Frizarta	50 000	64	Increasing
	Katsika	1 865	6	Increasing
The Netherlands	Kempen Heath Sheep	2 030	8	Stable
	Milksheep (Friesian & Zeeland)	6 110	50	Increasing
Slovenia	Bela Krajina Pramenka	900	24	Increasing
	Bovec Sheep	3700	28	Increasing
UK	Herdwick	49 408	149	Decreasing
	Shetland	16 238	78	Decreasing

Breeding systems and geographical distribution

- All breeds in **challenging area**: mountains and/or adverse climate
- =>All breeds are characterized by their **adaptation to these harsh environmental conditions** of breeding
- Sheep grazing underlined for its **positive impact on the landscape maintenance** and to keep landscape “open”.



Breed management

- For all breeds => a **breed society**: specific for one breed or gather several breeds.

For example : “Dutch organisation of professional milk sheep farmers” for Friesian and Zeeland Milk sheep.



- Objectives: maintain the breed when it is a rare breed, and/or develop the breed.
- In France also a performance recording system accessible to each farmer whatever the breed concerned.

Reproduction and selection (1/2)

Country	Breed	Main criteria of selection
France	Basco Béarnaise	+ Standard + Milk production and quality
	Manech tête rousse	++ Milk production and quality
	Manech tête noire	++ Standard + Milk production and quality
	Causse du Lot	Rusticity, maternal
Greece	Frizarta	Milk production, growth and morphological traits
	Katsika	Milk production

Reproduction and selection (2/2)

Country	Breed	Main criteria of selection
The Netherlands	Kempen Heath Sheep	Phenotypic conformation traits
	Milksheep (Friesian & Zeeland)	Phenotypic conformation traits
Slovenia	Bela Krajina Pramenka	Prolificity (prefer twins) Slaughter and carcass characteristics
	Bovec Sheep	Milk yield and composition, fertility
UK	Herdwick	Rusticity (ability to survive, raise lambs and resistance to disease)
	Shetland	Rusticity (ability to survive, raise lambs and resistance to disease)

Valorisation of products

Most of the breeds developed their own system of products valorisation in a more or less structured way, but still some breeds haven't started such an initiative yet (for example Frizarta breed - Greece).

- Milk sheep breeds in Netherlands: any quality label but milk price is set on fat and protein contents, and on quality. For the farmers selling themselves their products, advertising in local news papers and billboards along the road.
- For Katsika: farmers association beginning to work on the products promotion. However, breed products already acknowledged by consumers as being high quality.

Valorisation of products

- For Bela Krajina Pramenka (Slovenia): marketing of the lambs meat not organised but famous locally for its quality => sold with higher prices than for other breeds to restaurants or through agro tourism.
- Meat products of Kempen Heath sheep: sold under the ‘Slow Food’-label.
- Meat lamb of Causses du lot sold as a “Label Rouge”, a French quality label for meat.



Valorisation of products : PDO

- 2 examples of cheese : **Bovec cheese** in Slovenia, and **Ossau-Iraty** for the three French Pyrenean dairy breeds.

Specifications allowing the production of these cheeses clearly in favour of the local breeds:

- for Bovec: a max of 20% of milk of other breeds
- for Ossau-Iraty: only the three local breeds authorized for the milk production.

- For the Shetland breed, one for meat production and one in progress for wool.

For meat production: pure bred or crosses lamb, born, reared and finished in the Shetland Islands. Concerning wool, PDO “Native Shetland organic wool”: involving 10 certified organic producers, but not accepted yet formally.

Breed's network organisation

- Initiators of the breed's network organisation : most of the time the breeders => decide themselves to set up a collective organisation to defend their breed.

Example: since 1916 for Herdwick and 1927 for Shetland in UK

- Very different levels :
 - in France the 2 examples studied are integrated in a very organised industry through an "interprofession": all partners integrated in the industry from the breeders to the consumers with special quality label to identify the products of these specific breeds.
 - Simpler organisation: a breed society gathering only breeders and supporters of a breed
=>principal objectives : breed protection and promotion.

Second activity development

- The most common : **landscape management**. Mentioned in almost all the cases studied but is more or less organised. (Specifically subsidies for maintaining the heath land.)
- **Agro-tourism and sale on the farm** : based on individual actions. Increasing in most cases, as the Bela Krajina Pramenka sheep breed in Slovenia.



Relation to regional, national and European policy

- Regional : few breeds receive subsidies, however not specifically for being rare or local
 - National and European : only European subsidies for the breeds with a small population in conservation are the AEM for the endangered breeds (direct payment to farmers). But not implemented by all the governments.
- => Almost no specific help for the breeding of endangered breeds.

Identification of the successful factors

- **Rusticity and capacity to live in harsh environments:** ability to live in difficult areas where other species or other breed of sheep are not as adapted. Heritage sheep breeds can valorise their qualities and not being in competition with mainstream breeds (which are not as productive in these environments).
- **Positive impact on the landscape management:** well known but rarely translated into a specific subsidy to encourage the maintenance of sheep production in these regions.
- **Support from national or European level** but limited (AEM for endangered breeds), and not even implemented in all countries.
- **Support from local and/or regional level** most of the time strong: not necessarily by means of special subsidies for the breed but through the support of the local sheep industry
=> organisation of the industry when the breed is not too small, or a support to the breed society.

Identification of the successful factors

- **Some specific products**, sometimes PDO. But difficult to see the real impact of such a quality label: however quite likely that without such a protection, the Heritage sheep breeds could have been replaced by a more productive breed.

But in most cases, no marketed product associated with the breed => find a niche product to be able to sell the production through sale on the farm or on local markets.

Often, even without specific label, products of these breeds recognised as high quality products.

- **Breeders interest in their own breed**: very attached to the phenotypic conformation traits, conscious of the qualities and abilities of their breeds. The challenge is to take advantage of them through an adapted farming system. In most cases low input system is the solution.



**Thank you
for your attention !!**

