Points of view on adaptation of local breeds to harsh conditions

The Corsican cattle breed case

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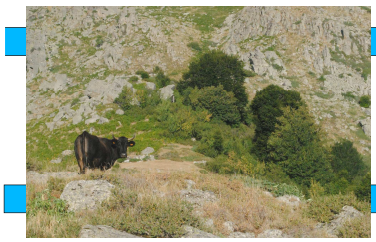
Understanding experts' points of view on the breed adaptation

Adaptation of local breeds to harsh conditions = question of great importance, particularly in a context of climate change

What means adaptation of local breeds? How to characterize it?

What are the point of view of stakeholders about this adaptation?



Picture A. LAUVIE

We also need to understand the breeding context of the breed: main caracteristics of collective breeding organization and LFS

We propose a study to gather such information interviewing experts in the case of the Corsican cattle breed

The Corsican Cattle breed

The corsican cattle breed is a local population of suckling cattle bred in the island. It can be considered as threatened as long as crossbreeding has been practiced on the local population without any real collective management either of the crossbreeding process or of the breed itself.

Recently a new program to manage the breed has been planed.

The population is used by various types of breeders, from moutain farming systems close to wildlife to more intensive plain farming systems.

Building a grid to gather experts' points of view

Our aim : build a grid informed throught interviews of stakeholders and adapted all along the interviews processes

The steps of the study

1-Construction of a first version of the grid
2-Test of the grid thanks to 7 experts interviews
3- Analyse of the information gathered
4-Adaptation of the grid all along the process
5-Final assessment of the grid and missing information

The GALIMED Project

The study is integrated in a larger study concerning 14 local cattle breeds in the Mediterranean area.

This project will combine for those breeds molecular genetics analysis with characterization of the way they are managed and how their adaptation is considered by various stakeholders.

We aim at understanding better the adaptation of those breeds to harsh conditions in a climate change perspective.

Information gathered and adaptation of the grid

First structure of the grid

Present situation of breed
Evolution of the breed animals number/ type of data available/ recent works about the breed

Choice of the breed
Reasons of the choice/ mean number of animal in a herd in plain system and mountain systems/ Mean number of breeders with the local breed/ crossbreeding

Breeding management
Is it controlled?/ way it is managed (dates, criteria, calving)

Feeding system
Main characteristics of the feeding systems in plain and mountains area / ability of the breed to valorize poor spontaneous feeding

Transhumance
Mean number of breeders practicing it / dates / way it is managed

Livestock farming infrastructures

Adaptation of the breed to territory and LFS
Their own point of view on adaptation (and for which criteria) / ways for the breeders to take this adaptation into account

Add Value
Way to add value/ existing Trademarks or GI

Collective action
Types of actions/ Who initiates/ who takes part and how/ aims and interactions/ assessment

Information gathered and problems met

Lack of **precise** information on the breed animals number but they are probably **decreasing**

Lack of **precise** information on the mean animals number in herds but most experts quote figures **between 40 and 50**

Lack of **precise** information on the number of breeders using the local breed

Rusticity and adaptation are quoted as main reason to choose the breed (5/7)

For most of the interviewed persons (4/7), local breeds'herds are mostly located in moutain areas

For most of the interviewed persons (6/7), there are often crossbreedings (with Aubrac, Limousin, Gascon, Charolais, Salers and Blonde d'Aquitaine)

For the interviewed persons, breeding is not controlled, except for a few breeders and calving are without help

About reproduction and calving figures are variable among people, as no precise information is available

For most the interviewed persons, the cows valorize quite well poor rangelands and are able to make the « accordion » but the necessity to buy high price hay is a problem

For 6/7 of the interviewed persons, most of the breeders practice transhumance from april-june to october, but most of the time herds move on their own

All interviewed persons agree about the adaptation of the breed, criteria quoted being: *Knowledge of the territory, resistance to diseases, rusticity, wildness, ability to valorise scrubland, state of calves after transhumance, morphology*

The main aims mentionned for collective action are official recognition of the breed and quality sign for the products

Adaptation of the grid

After a first test with one expert-> validation of the relevance of the questions and precisions on a few questions (about feeding systems and about how breeders takes into account adaptation –giving concrete exemples)

Transformation in multiple choice questionnaire to ease the analysis (completed thanks to the answers of the first interview, and leaving possibilities to add new categories)

BUT Multiple choice questionnaire well adaptated to the Corsican situation but probably not relevant in other situations!

A grid based on expert knowledge to characterize a local breed situation strongly depends on the amount of information available on such a breed and its breeding systems. Such a grid built on a multiple choices structure has to be adaptated to the local situation and is difficult to use as a generic grid for various situations.

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