The *Blanc de l'Ouest* pig breed conservation: being a "good pupil" of genetic management is not enough

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Abstract: This paper illustrates, thanks to the case study of the conservation programme of the Blanc de l'Ouest pig breed, the limits of a strict conservation approach. We report the history of the conservation programme and show that even if the breeders were considered as "good pupils" of conservation, the animal population faced a worrying recent evolution (decrease of the number of sows bred for reproduction). This evolution is explained by the breeders by the fact that they face problems to find economical outlets. We show that conservation finally can't be conceived without taking into account the local specificities and exchanging with the breeders to co-imagine a way to manage the breed beyond the strict conservation aspects.

Keywords: rare breeds, conservation, development, Blanc de l'Ouest pig breed.

In France, five rare local pig breeds are concerned by a conservation programme managed at the national level. Even if the rules of genetic management and the national stakeholders are the same for the five pig breeds, local variations may occur in the way the programmes are organized and followed by the breeders and in the evolutions of the five animal populations concerned (Audiot, 1995). We focus in this communication on the *Blanc de l'Ouest* breed, located in the Western part of France.

The *Blanc de l'Ouest* case study to analyse how a conservation programme is set up locally

The Blanc de l'Ouest pig breed and the questions addressed

The population size of the *Blanc de l'Ouest* pig breed has decreased during the last years. Nevertheless the breeders were, until this near period, in line with the genetic management requirements. The question of livestock biodiversity conservation being a stake for various people, this case raises the question of the limits of such a management programme.

Thanks to this case study and adopting a practical perspective in the light of the recent evolution of the animal population, we address the following questions: How is the programme set up locally and how can we explain the difficulties met with? How both national and local stakes are locally confronted or combined in the programme?

Data collection

We conducted interviews of fifteen breeders and of one agent of each regional or national organization involved. We attended a national show of the breed and the general assembly of the breeders' association. We participated to a touring day in various farms with people involved in the genetic management aspects. We consider that organizational and technical aspects are linked (Lauvie et al., 2006) and both were addressed in the interviews. We wrote the history of the programme so as to characterize the dynamics of its construction. We took into account what is called a *dispositif* in French (Mormont, 2003), that is to say the network that connects stakeholders, knowledge and know how, animals, various objects so as to manage the animal population. We organised the information coming from the interviews so as to distinguish several stages in the history of the programme.

Results and discussion: the interaction between conservation and development aspects

History of the programme

The first stage: set up of the scheme at the national level, without any organization of the breeders at the local level

The *Institut Technique du Porc* (or ITP, the national technical institute for pig breeding) started a programme of genetic management of the rare pig breeds in 1981. ITP take a census of the breeders and identified the animals. It established breeding advices, based on scientific knowledge in genetics, to manage the genetic variability in the population. The interviews have shown that the perception of the breed is rather well shared by the breeders, which is not always the case for the rare breeds.

The second stage: the creation of a local organization of the breeder

A breeders' association, which took the form of a union of the breeders, was created in 1994. A regional organization, the Natural Park of the Armorique Region, has given a support to the association, in particular with the secretarial work of the association. The association has also got a financial support from the local and regional authorities. The breeders are regarded as "good pupils" of genetic management as they mostly follow the mating prescriptions from the ITP.

The third stage: the project to find collective commercial outlets

Several plans were established to find collective commercial outlets (for instance a plan to work in partnership with a pork butcher). The plans failed but in parallel several breeders have organized individual ways of finding outlets: for instance, direct selling of cooked pork, farm inns offering meal with grilled suckling piglets. According to some breeders, the failure of the collective projects is mainly due to their location in a region were industrial pig production is dominant.

The forth stage: the worrying evolution of the animal population

For the last years, the assessment of the ITP (now called Ifip-Institut du porc-) has shown a decrease in the number of sows bred for reproduction. Some of the breeders also explain this phenomenon by the fact that it is difficult to slaughter as some public slaughter houses have closed (the industrial pig production works with private slaughter houses), and by the difficulty to find commercial outlets. The breeders have to find their place in an environment where a conventional pig production is dominant.

The limits of a strict conservation approach

Public action in this scheme is mostly focussed on the strict conservation, in a more or less classical top-down situation. We have shown that this type of organization, divided into sectors and descendant, can appear as efficient when the breeders follow the advocated breeding practices. However, this case study also reveals the limits of such an approach: conservation finally can't be conceived without taking into account the local specificities and exchanging with the breeders to coimagine a way to manage the breed beyond the strict conservation aspects. Local stakes (development aspects, conservation of a local resource, identity and cultural stakes) and extra local stakes (conservation of a genetic resource, a common good) are both expressed locally. Development aspects are individual and diverse among the interviewed breeders, who used to have Blanc de l'Ouest animals for from less than one year to 17 years. This situation is quite different from the Gascon pig breed where some breeders are involved in a collective action to produce Noir de Bigorre ham, with the aim to get a PDO. Values of rare breeds linked with niche products or adaptation to specific environment should be considered (Verrier et al., 2005). As the Ifip's mission is strict conservation, if a collective organization to find commercial outlets is possible (geographic scattering in particular) and if it is what is wished, a way to support this process should be found. If not, how to support the breeders to achieve a satisfactory way of individual commercialization? In such a situation, could experience sharing be the first step towards collective action in the favour of development?

This case has also opened research perspectives around this question: Are local knowledge and scientific or technical knowledge concretely combined in the set up of collective action?

And in a context where globalisation, intensive agriculture and market extension are pointed at as causes of the loss of rare breeds (Tisdell, 2003) two specific questions can be raised: Living together in the same region, how do two opposite production systems question public intervention? To what

extend the breed becomes an element in the set up of a professional identity in contrast with an environment where a "good" pig farmer is obviously industrial?

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