CONSERVING LOCAL GOAT BREEDS AND TRADITIONAL PASTORALISM IN SOUTHERN FRANCE

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Summary

Extensive livestock productions is historically linked to local, traditional breeds. Both these production systems and traditional breeds have markedly declined or even disappeared in some areas, as a result of global trends toward intensification, specialisation and abandonment of marginal areas. More recently, interest in the preservation of livestock biodiversity has been revived. Concern over the livelihood of marginal rural areas and landscape management accompanies the political debate over rare breeds. Parallel to institutional activity, and in many cases as forerunners, social actors have undertaken action to avoid both breed extinction and the loss of pastoralist traditions. In this paper, we present the findings of a qualitative survey of local goat husbandry in Southern France. Non-directive interviews of extension experts and breeders of two local goat breeds, the Rove and the Provençal, revealed a strong link between the breeders' perception of local breeds/pastoralism and their broader worldview. Most breeders are "back-to-the-landers". Their choice to raise local breeds in the pastoralist way is linked to a vision of society as a whole. Their account is interpreted as the will to resist to mainstream discourse and practice of rural development in marginal areas.

Keywords: extensive livestock, goat breeds, livestock biodiversity, marginal areas, back-to-the-land.

1 Introduction

Marginal areas in Europe have known massive abandonment trends in the last four to five decades. More recently, they undergo various articulations of those complex phenomena commonly referred to as "rural restructuring". As far as the former dynamic is concerned, the very "creation" of marginal areas and indeed the construction of the marginality concept are to some extent linked to the specialisation of agriculture. Specialisation has led to intensification, including a shift in social perception and economic practice of land cultivation. Farms have undergone mechanisation and a shift towards livestock breeds that were more productive under controlled conditions.

Land more difficult to cultivate mechanically has been abandoned, especially in mountain or remote areas. Depopulation of rural areas and reduction of stocking levels is a long-term trend that is now omnipresent in marginal areas, e.g. throughout the Alps. This dynamic is considered as one of the major driving forces behind changes in ecosystem function and dynamics (Cernusca et al., 1999; Dirnböck et al., 2003). Studies have also shown the influence of these trends on diminution of ecosystem biodiversity (e.g. Laiolo et al., 2004 on the consequences of pastoral abandonment on diversity of the alpine avifauna).

The dominant political discourse of "modernisation" climaxed in the Sixties. Under this discourse, local livestock breeds have disappeared at an increasing rate (Hall and Ruane, 1993; Hammond, 1996) In Europe, approximately 35-40% of all livestock breeds are presently considered as endangered, ii has been estimated that about one third of those existing at the beginning of the twentieth century have already been lost (Hammond and Leitch, 1996). More recently, both an interest in the preservation of endangered breeds and an attention to rural development in marginal rural areas have at least partly shifted the focus of policy and action.

In parallel to these dynamics, counter-productivist movements have focused interest on rural spaces and, more recently, a "revolution" of agricultural policies has allegedly occurred through a series of reforms at the EU level. While the extent of change brought by these reforms has been

contested (e.g. Walford, 2002; 2003), both dynamics elucidate a certain transformation of perception and practices in (marginal) rural spaces.

Here, one caveat is necessary when it comes to the term "rural". This is a concept that the recent literature and debate have somehow decried. It might seem awkward to use it. Indeed, as outlined amongst others by Frouws (1998), Halfacree (1993) and Mormont (1990), it has become increasingly difficult to delimit what is "rural" from what is "not rural". Phenomena such as "counter-urbanisation", or the pressure from urban areas on "rural" land, are well known and contribute partly to the larger and complex phenomenon of "rural restructuring". More and more people live in "rural" settings but work in town. City-dwellers increasingly own property in "rural" areas, for holidays stays and the like. As Bolton and Chalkley (1990) stressed, there is a broad heterogeneity with respect to the lifestyles and motives of migrants, leaving no room for simplistic stereotyped analyses.

While the issue is relevant, it is argued that this concept of a "disputed rural" is actually an element of tangible conflicts in practices. A given representation or perception of "rural" (as well as of "marginal", for that matter) is one facet of the question. This is linked with conflicting dynamics in use, as this paper will illustrate.

The term "rural" is used here and it is considered useful as a label for the commonly perceived geographical (and broadly speaking "agricultural") sense that defines as "rural" certain given characteristics of landscape – both those perceived as "natural" and those perceived as shaped by man (namely through agriculture in general and in our case husbandry in particular). Also, the term "rural" is the common reference for policies such as the Common Agricultural Policy (CAP) and its "second pillar", Rural Development Programmes (RDP).

In this context, some caution is also needed with respect to the term "marginal areas". As Wright (1997) put it, the term is not precisely defined. Here, we assume that marginal areas are those where there are limited possible agricultural land uses because of higher altitude, shorter growing season, steeper slopes, more limited soil fertility and generally lower productivity. These areas are mainly suitable for extensive livestock farming. Another term which has been used in Council Directive

75/268/EEC is "less-favoured areas" (Commission of the European Communities, 1975). The use that is made here of the former term should be intended to include the latter as well.

In European marginal rural areas as defined above, the following brief and simplified account generally applies. After the massive exodus from these areas to major urban centres and from agriculture to industry, especially rapid since the end of World War II, a counter-exodus is observed more recently (Halfacree, 1994).

Policy choices investing in fast long-distance travelling (e.g. high speed train or "Train à Grande Vitesse", TGV, in France) have enhanced mobility of people living and/or working in major city centres. This enhances re-location opportunities for top-management corporate workers or international institutions' bureaucrats from major towns. In doing so, it brings more purchasing power into the market for real estate. Prices increase and conflict over resources in marginal rural areas may ensue, noticeably over access to land.

Sencébé (2002) cites results of surveys in France where most interviewed people associated "rural areas" or "the countryside" with idyllic views of quietness, beauty, nature, freedom. The majority of interviewees affirmed that they wanted to live in the countryside. The rural space, however, was significantly perceived as "an empty container". Very little reference was made to agricultural activities. Livestock was rarely associated with the vision of the countryside or rather of what has been called the "rural idyll". As Boyle et al. (1998, p. 142) put it: "the rural idyll […] can be a strong force guiding migration".

In synthesis, while some regions are marginal with respect to a given type of agricultural development, they may be considered as regions offering opportunities for other social demands, such as tourism or urban counter-exodus, or for minorities seeking alternative lifestyles. They can also be the "haven" for traditional production systems or professions.

Thus, this paper aims to show that the issue of livestock biodiversity conservation may be interpreted as an illustration or a particular form of the debate in the topic of "rural restructuring". It

implies land-use and geographic issues that go well beyond genetics and agronomy, which need to be tackled too in order to find a sustainable way of livestock conservation.

2 Livestock biodiversity and marginal rural areas

It is recognised that in most marginal rural areas pasture grazing is often the most appropriate land use, in some cases the sole possible. One factor that may partly explain abandonment of marginal areas could be linked to a dynamic common to many European countries, noticeably though not exclusively to more Southern ones, i.e. a large increase of in-stable type of animal rearing conditions. This increase has also been possible with policies that financed investments in infrastructures and mechanisation, and more generally with all market-distorting agricultural policy subsidies that have accompanied the development of intensification, specialisation and reduction in number of farms as well as enlargement in size.

Capital intensification of livestock production has been accompanied by an increase in genetic uniformity of livestock. Hennessy et al. (2004) have recently shown how this appears to be a necessity for a certain type of large-scale capital-intensive agricultural development. For example, most of the pigs reared under commercial farming systems in Europe and North America belong to two or three breeds. Ninety percent of all North American dairy cattle and 60% of all European cattle belong to only one breed, the Holstein-Frisian (Drucker et al., 2001).

Presently, a greater understanding of, and interest in, the preservation of biological diversity is gradually shifting the focus to the conservation of rare breeds. Moreover, the recent literature on controlled comparisons of performance of "improved" breeds in more difficult environments, in contrast to locally adapted traditional breeds, have shown that local breeds may be the best choice, when results are expressed in terms of net benefit per unit input of each major limiting resource (e.g. Ayalew et al., 2003). In a study on minority British sheep for meet production, Hall and Henderson (2000) found that, although economic advantages of using rare or minority breeds in comparison to numerically stronger genotypes were not demonstrated, any economic penalties were not demonstrated either.

The "discourse of modernity" in previous decades envisaged a drive towards more mechanisation, more industry and subsequently more services, increase of productivity and reduction of work force in agriculture. Larger farms and differential geographical development resulted, with farmers being marginalised in areas that could produce less or needed more extensive management or more manual labour. In what some have called the "discourse of postmodernity", marginal areas have known a revived interest, parallel to a different outlook on environmental issues, evolving gradually since the late Sixties. Thus, two main waves of back-to-the-land movements can be grossly distinguished, one in the aftermath of 1968, another one more recently (started in the late 1980s and early 1990s but somewhat more spread over the years than the first wave and, in a sense, ongoing). Contemporarily, governments and institutions such as the Commission of the European Communities have put a focus on "rural development" and the importance to protect marginal areas from total abandonment, on the one hand, and to preserve local livestock breeds, on the other hand.

Parallel to, and often prior to, governmental action, local actors have realised that certain breeds were endangered and have initiated actions aiming at their protection or recovery. This has been performed with some differences and some commonalties between countries. A country-based case study (Southern France) is presented here, and the assumption is made that while certainly some aspects are relevant to Southern France only, others are either common to many other countries and regions or even universally valid.

3 A case study in Southern France

3.1 Background

The region of this case study is known as Provence and corresponds roughly to the administrative region of Provence-Alpes-Côte d'Azur (PACA). In contrast to most of Europe, husbandry in this region is particularly characterised by the rearing of small ruminants. While it has about fifty to sixty thousand bovine LU (livestock units), sheep sum to a total of approximately 125-130 thousand LU and goats to about five thousand (AGRESTE, 2002). As shown in Table 1, between 1970 and 2000 agricultural land use has declined of approximately 20% while non agricultural land use has increased

of about 37%. Assuming a steady change, this would have occurred at a rate of 1% per year over this 30-year period.

Partly, our investigation has included some other geographically Provençal sub-regions, belonging administratively to Rhône-Alpes (Department of Ardèche) and Languedoc-Roussillon (Department of Gard). We have limited our survey to breeders in the area deemed to be the "traditional zone of breeding" of the two focus goat breeds, the Rove and the Common Provençal.

Our research question was initially the following one, in two parts:

(1) How to explain that in the same region, of two endangered goat breeds, one, the Rove, is the object of successful actions to preserve it, so that after declining to about 400 animals in the early Seventies, it has now revived to more than 5,000 in 2001 – data according to the European Association of Animal Production (EAAP) database – and spread outside the original region;

(2) and why is the other, the Common Provençal, still considered as endangered, while some action is presently being taken?

Subsequently, though, the key question appeared rather to understand in which territorial and social dynamics local breed conservation is grounded. A corollary that demanded attention was how breeders' worldviews influence action in livestock biodiversity conservation. In the following, the two goat breeds are briefly presented. Then the objectives and methodology applied to the case study are described.

The Rove goat breed is a quite typical goat: large (males' withers height is about 85 cm, and their weight is about 80 kg), with multicoloured coat and very large, twisting horns. One of its special characteristics is to have been used in transhumance accompanying sheep herds. Farmers raising large herds of sheep in the plain usually kept some goats for their aptitude to guide the herd of sheep and adapt to harsh conditions from sea level to more than 2,000 metres of mountain altitude. They especially kept castrated males called "menons" in French, with large bells at their neck, and these would be able to thrive on scarce food and pull the herd of sheep up and back down the mountains,

including passing through snow, opening the path, as the snow glides on their hair while it would stuck to mutton wool freezing the sheep possibly to disease or even death.

Perceived as beautiful, these goats are still proudly kept by some sheep breeders, despite being less useful and even hard to manage now that transhumance is organised using trucks. This was one reason of endangerment of this breed. However, the breed was used somewhat differently elsewhere.

The first researchers investigating on this peculiar breed, even before it was considered as such, were told little about them except that they should go where the largest concentration was to be found, in the village of Le Rove, near Marseilles. The origin of the name is not unanimously attributed to this village. Amongst other interpretation, one possibility is the reference to the Provençal "roure", referring to oaks (Quercus robur L.) that covered the hills around Marseilles in the past. Accordingly, the name of the village would have the same origin.

In this village, its main use was to produce a particular kind of cheese, the "brousse", obtained quite uniquely by curding milk with vinegar instead of rennet. The "brousses" were sold in Marseilles, by the breeders themselves, who went around shouting in the streets to call for customers. While no denomination of origin protects this particular cheese and you may buy cow-milk imitations, only one producer is still making it with this breed and in the traditional way in the village. Conversely, many newcomers have settled in several Provençal areas where they produce and sell various types of goat cheese.

The history of the Common Provençal is quite different. This breed is linked to the typical mixed farm of the past, with various types of cultures and many animal species on the same farm. There, it was mainly up to the women to deal with e.g. poultry and goats, while culturally "more manly" activities dealt with arable land and sheep rearing. Specialisation, the disappearance of that type of mixed family farm and the cultural bias against goats were some of the drives that dramatically reduced the number of goats.

The revival of both breeds is largely due to a few distinct waves of newcomers, most of them neither of agricultural family background, nor originally coming from the region where they decided

to settle as breeders. One important first wave of newcomers markedly happened in the aftermath of the events of 1968. Subsequent setting-ups of incomers in more recent years are more difficult to be seen as spurring from one single event or period.

However, some authors in various countries have interpreted similar events as grounded in the existence of a re-emergence of a "new" counter-culture in the early 1990s (McKay, 1996). According to Halfacree (2004), the new counter-cultural relationship with the rural was central from the onset, and this is a distinguishing element compared to post-1968 waves of incomers. While this seems to be at least partly the case here, it is argued that the trend of incomers belonging to a vaguer "second wave" is ongoing. While present general public awareness of environmental issues blur the distinction between mainstream and counter-cultural, young people are still presently launching farms based on pastoralism and on rearing these local breeds, partly as a "counter-cultural reaction" to a certain "mainstream" view of agriculture and economic development.

As far as the Rove goat is concerned, this breed was little known and particularly neglected at the administrative level. Having known the breed for the first time in 1960, A. Sadorge, a breeder and pastor, started undertaking personal initiatives, driving forces around him. In the early Seventies, the "Societé d'Ethnozootechnie", founded by R. Laurans in 1971, assigned to J. Blanc a study on the situation of the breed, which revealed itself as "desperate". Actions were undertaken, people interested, enrolled and mobilised (see Evans and Yarwood, 2000, for an account and an actor-network theory analysis of how a similar association of people around the issue of livestock breeds evolved in the UK). A. Sadorge was a key person, eliciting interest and enrolling important actors, including academic-level institutions as the national Institute for Agronomic research (INRA) as well as Universities and persons within such institutions.

The history of the Common Provencal breed is somewhat more conventional. The breed was present in the typical mixed family farm of the past, and typically managed by women with poultry and the general life of the family-farm courtyard. As production has become more and more market-oriented, farmers specialised in developing activities like sheep husbandry and crops. Both a cultural bias against goat breeding as a "less-manly" activity and a (perceived) greater ease with sheep rearing

determined that goats in general tended to disappear along with the general disappearance of the small-scale mixed family farm. Some newcomers, since the late sixties and early seventies, rather decided to base their activities on local breeds and chose the Common Provencal rather than the Rove. The reasons for this choice are also investigated in the present research.

3.2 Objectives, methodology and "sampling" of interviewees

The general aim of this study is to understand the meaning and implication of the idea of the conservation of rare breeds. More precisely, we want to analyse the agricultural and territorial dynamics in which the preservation of livestock breeds factually develops.

While much of the mainstream political discourse focuses on subsidies as a (supposed) necessity to overcome the differential in productivity between traditional versus so-called "improved" breeds, the assumption underlying this study is that perceptions and life choices of breeders are the most important factors for successfully retaining or attracting breeders, that marginal areas and less productive but less demanding breeds are reciprocally adapted to each other (Wright, 1997; Brand, 2000), and that motives for breeders are inherently different from unit productivity of animals under controlled conditions.

In-depth, non-directive interviews were used to collect the discourse of farmers and a few experts. The approach adopted is grounded in an interpretive epistemological perspective (Kaufmann, 1997). A first wave of non-directive interviews (Rogers, 1942; 1945; Pages, 1970) was conducted in September 2003 (three experts and three farmers) and formed the explorative phase.

These preliminary interviews gave some hints for the subsequent semi-directive interviews that were based on a very flexible structure. In the survey, the target group were farmers and two more experts. Face-to-face interviews were conducted in October 2003 and January 2004. All interviewed farmers belong to the respective association "for the defence and development of the breed". The president and vice-president of the two associations were amongst the interviewees. Overall, in the two phases of the survey, five experts, seven out of seventeen farmers rearing the Common Provencal

breed and twenty-two out of seventy Rove breeders were interviewed. The latter were also divided in subgroups (Table 2 and Table 3).

It is important to understand that the guidance of the interview has only been used as a general reminder for the interviewer to make sure that all important points are discussed. At no time has it been used strictly or to ask direct questions. There is no fixed duration and a delicate balance is to be obtained between a general freedom of speech and the need to focus on matters of interest for the research. The interviewee's free flow of narration provides a richer texture and greater insight into each individual's construction of the sense of his/her practices. As Blanchet and Gotman (2001) put it, if the interviewer poses a lot of precise questions, the interviewee usually ends up letting the interviewer guide him/her and waits passively for the next questions, becoming less prolix, less spontaneously associative and less articulated around a certain internal logic.

While no qualitative research generally aims at representative sampling, we paid great attention to interviewing enough farmers from groups with slightly different characteristics. As far as the Common Provençal goat is concerned, all of the very few breeders produce milk and cheese on the farm, and basically all of those who rear the pure breed, and are members of the breeders' association, are back-to-the-land newcomers.

The picture for the Rove breed is more heterogeneous. On the one hand there is a lively tradition, amongst sheep breeders, to keep some goats. They may own as many as a few thousand sheep (the largest farm associating two farmers have together 8000 sheep but average farms would have a few hundred sheep). Besides sheep, they also keep a few goats (in variable numbers from just a couple to a few dozens). However, they consume their goat produce directly and sell very little or none at all. They generally do not make cheese except for own consumption and they have no significant financial revenue from goats.

On the other hand, there are the "specialised" goat breeders, who principally or exclusively rear goats. One important finding was that these were mostly newcomers, or "back-to-the-landers" ("néo-ruraux" in French). However, as far as the type of production is concerned, there are again some different subgroups amongst them: those selling milk, those producing cheese directly on the farm,

those selling kids (goat meat) and lastly those producing both meat and cheese, the Rove being originally a double-purpose breed.

Another subdivision may be made on the basis of time of settling into farming activities, this happening either immediately after 1968 or more recently. While this was more difficult because of lack of data in the available census of Rove goat breeders, a combined sampling approach was adopted, making large use of the "snow-ball technique". Overall, careful attention was paid to selecting interviewees from all different groups (Table 2). The size of herds is classified in small, average and large, obtained by measuring three quantiles for the herd size of farms in each type of production (Table 3).

Each interview lasted from a minimum of one hour to well over three hours, with the odd informal, non-recorded addition of sometimes a whole evening spent on the farm. Such interviews allow seizing the contours of a very broad picture of life at a local breed farm, as well as it permitted to gain a thorough insight into the perceptions of farmers, including those concerning interactions with other actors and networks.

3.3 The discourse of back-to-the-land breeders

From the interviews a complex picture emerged of the functioning of the two associations whose aim is to protect and develop the respective breed. It appeared that almost all farmers for whom these two breeds are the sole or major source of income are newcomers, or "back-to-the-landers". These have pursued a precise life project, that was to move away from something they did not like, either town-dwelling or a given type of job, and come and raise goats "so to live in closeness with nature", as Farmer R1 puts it. Farmer C1 says

> "It was my objective, you see. I wanted to have a mixed farm, so I have now 42 goats, 20 sheep, six cows, about 500 meat-producing chicken and 60 laying hens, as well as half an hectare of emmer. And I was lucky to find someone who sold 10 local does [female goats] which was my objective…"

Mostly, this process was initiated personally and in some cases against all odds. It has many commonalities with other back-to-the-land movements. These actors can be defined as people who have chosen to settle in "isolated rural" (so defined in French official statistics), breaking with their

previous style of life, in some cases even including a stable profession, and who carry a project of professional activity localised in the rural space. Generally, as Halfacree (2004) puts it, this move is "underpinned fairly explicitly by a critique of mainstream society".

Indeed, mainstream society might as well counter-criticise or oppose their project. Raisers of both breeds describe the following situation: mainstream goat breeding is performed in-house, with large numbers of goats and large infrastructures; people who wish to revive a tradition of pastoralism are suspiciously looked at and they do not get credit easily. Farmer R2 when asked the initial question to kick-off the interview replies "welcome to the Middle Age". He explains:

> "when I started, I had absolutely no funding. I live like it's Middle Age. I have no farm, I live here in this house and have to keep my goats in some fields at some kilometres' distance, there's no water, no light, nothing at all, and I have built some housing from scratch, on my own, but I'd need very little infrastructure, you know and I am tired of this because now I've realised I can really live of this, I wasn't sure, well, I didn't give a damn, it was a passion, but now I'd like to do better and I'd need little money you know, but if I asked – no way – and should I ask the same amount for a new car they'd give that immediately but for doing my job, no way!"

Later on he affirms "anyway if you want to rear the Rove you're a fool, an utopian". In fact, deepening the question further and developing on this theme, he reclaims his personal "utopianism" as the essence of his professional endeavours: "you see, there’s people who make a lot of noise, scream on the street. I do it more silently. I do good work with my goats, it’s my way to do my personal battle.” (Farmer R2)

Another farmer, starting her activity more recently, had to attend an agricultural school so that she'd gain access to assistance and recognition as a farmer. She affirms "and when I said I wanted to start an activity with the Rove goat breed, they laughed at me, they scorned me and more than that they would not let me pass my examination anymore!" (Farmer R14).

However, these people generally appear to be spurred from a strong inner motivation. They do not give in. They do not look for subsidies either. They certainly do not subscribe to recent policy trends of "landscape management" as the main reason for their existence.

"They call us landscape managers now, we're not there to produce anymore, production should be in milk-factories elsewhere, I don't know, where they can force production to enormous levels per doe, it's horrible, I went seeing that in Poitou, 700 does, all attached to machines… but they want us to be there for folklore, whatever… They'd pay us to be out there and to manage landscape, we don't like that…

"Interviewer: you mean you don't like subsidies?

"We want to live with our own resources and sell our produce at a just price. No, we do not like subsidies, anyway we get very little, you certainly know that, a few big ones get 80% of the pie, don't they?" (Farmer C6)

While some aspects are common between the different "subgroups" of Rove breeders, namely the attitude towards subsidies and the love of the breed, perception was somewhat different amongst sheep breeders that raised the Rove goat in comparatively small numbers. Most if not all of them, in contrast to goat breeders, are sons and grandsons of sheep breeders. They keep the Rove goat breed more as a tradition:

"Well, I do not have much to say, I keep them, they've always been there, so, well, I also like them very much, they're beautiful, and they're for my pleasure, I actually do not live off them, but it's part of my farm, it's part of pastoral traditions…" (R8)

However, an interesting finding reveals that they are also sheep breeders as a choice, a strong identity with a given occupation, that of being more a pastor than a livestock breeder. Despite the apparent difference in being a sheep rather than a goat breeder, there's a lot in common in the type of link that is established with the animals and with the land.

In essence, these breeders pose a strong choice, they want to raise a particular breed in a particular way. They choose a profession that is not the same as farming in-house but is based on a different concept: pastoralism. In respect to this, as well as to their personal attraction for it, they explain their choice of the breed.

3.3.1 Breeders love the breed

When asked to explain their choice of the Rove breed, almost all farmers give the same first answer: "because it's beautiful". Some Common Provencal breeders also say that, while most of them

underline the importance it had for their choice the fact that they wanted to raise a local breed. Rove goat breeders often utter with emphasis "I love this goat. Does are gentle, beautiful, strong, binding" (Farmer R22). When asked why things happened around this breed, what drove this conservation action, they seem to voice that it is self-evident:

> "Why something happened? Well, very simply, because there are breeders who love this breed, that's enough, is that not?" (C3)

After these initial statements about the beauty of the breed, Rove breeders particularly stress the rusticity and adaptation to harsh conditions. "These goats thrive on nothing at all. They can eat small branches of wood and still produce milk. Not enormous quantities, but well enough. And you know, what's interesting is, their milk, the fat content is extremely high. That's good, because you make great cheese." (Farmer R11).

3.3.2 Environment, food quality and the "good old taste"

Generally, explicit reference to environmental issues is rare. Even in relation to these rare breeds, the concept of biological diversity is not explicitly formulated. However, many breeders show some broad, imprecise apprehension about the world being generally in a bad predicament. A few of them go further and worry about climate change and similar issues.

One aspect that those amongst the goat breeders who produce cheese particularly stress is food quality. They are proud to speak up for their breed and pastoral management as a way to "produce more in harmony with nature" (farmer R3):

> "The elders say they find the good taste of their old times… we do not work with those Rhône-Poulenc additives!" (farmer R21)
>
> "and there's also people coming to buy that say we do not ask enough for our cheese, and even one who paid us, er… we ask 1.60 he paid 1.90" […] (R22)
>
> and concerning more productive breeds
>
> "because, the Saanen, the Alpine, kept in stables, you see, they produce a lot, but when producing ever more and more and more milk, you end up making water, you see these poor cheese floating in litres of water! [laugh earnestly]" (farmer R2)

Quality cheese is one particular combat. A difference is evident between the two associations. The Common Provençal breed society fought a long battle to get recognition of their typical cheese with a controlled denomination of origin (AOC, Appelation d'Origine contrôlée, in France): the Banon goat cheese. Wishing to link this to a pastoral or grazing management of land use, they also obtained that this cheese be compulsorily linked to three breeds, the Common, Rove and Alpine, particularly excluding the Saanen breed, that –they say – is always reared in "off-the-land" conditions.

The Rove breed is a dual- or even multi-purpose breed. We express here the empirically grounded theory that breeders of the Common and of the Rove approach two different "main" professions: cheese-makers and pastoralists, respectively. Whereas many Rove breeders are also cheese-makers, they expressly choose a breed that is adapted to a pastoral lifestyle, and to grazing range and clearing forest undergrowth. Some of them do not even produce cheese at all. Despite the fact that their discourse focuses on quality as well and that for many of them this is directly linked to cheese quality in particular, their personal and collective combat is not in the field of denominations of origin. However, some of them have their own "private" label or other ad hoc marketing strategies.

3.3.3 Land use and access to land

One issue that almost everybody raised was the problem of access to land. Some data show an impressive increase in real estate prices in recent years (Table 4). Agricultural census data also show that in the PACA Region, utilised agricultural area (UAA) shrank by 21% from 1970 to 2000, amounting in the latter year to slightly more than nine hundred thousand hectares, i.e. about 29% of total area. At the same time, non agricultural land increased by 37% (cf. Table 1).

Here is one answer to the question "would you tell me something about the difficulties someone wishing to start a pastoralist farm encounters?":

> "The land! Here things are getting absolute nonsense. You know, you see this house, small as it is, well, with some land here and some poor buildings for the animals, well a correct price for someone who'd like to do this job would be about one million [French Francs, i.e. slightly more than 150,000 Euro] … and then one day someone by mistake came here and he was looking for a house for sale, he offered two and a half

millions! [French Francs, i.e. slightly more than 380,000 Euro] …so, such a price is impossible for young people wishing to start as we did some years ago!" (Farmer C4).

When asked to tell more, most breeders explain about how infrastructures such as the TGV linking Paris to Aix-en-Provence in slightly less than three hours has made it easier for people to either buy second residences or even live there somewhat permanently:

"About five years ago we were 700 in the village, now we're 1400, we used to have a lot of land and let the goats graze freely now we can't do it anymore, all is fenced, trespassing forbidden… I don't know, they work in Paris, maybe some official or civil servant working two or three days, I don't know or getting some arrangement to work their 35-hour week on three days…" (Farmer R22)

The access to land is perceived by most breeders as a problem that is out of their control. Many of them recriminate against this choice of society saying that all is done for the sake of money and there is no perception of the importance of animal grazing, e.g. to avoid forest fires, etc. They complain about "these villages that are becoming tourist deserts living a few months per year" (Farmer R8) and they advocate their permanent presence so that land is kept alive.

3.3.4 Two (or more) worldviews

Overall, the aspects sketched above converge to suggest that a given and particular worldview explains the choice of pastoralism and of this breed, of life in sometimes remote marginal rural areas.

As it has been mentioned, a few different types of breeders can be identified and each group consistently shows a given worldview. One group is formed by sheep breeders. These come from a long family history of farming and they keep their breed for pleasure. Their worldview is conventional, and rural development the way it is intended in mainstream policies is more or less accepted, with the occasional criticism of subsidies and of the obstacles to the pastoral profession they're attached to, e.g. obstacles to the free movement of animals. Another broad group is constituted by newcomers, but these split into various subgroups. There is a part of them who chose the pastoral way of raising the breed in the specific marginal area as a personal combat against a certain way of conceiving economic development:

"There's those who shout in the street, go on TV, destroy McDonald's, I make less noise but this is my way, my personal fight, I try and do proper work with this breed…" (Farmer R2)

In fact, these farmers affirm clearly their stance against a kind of "more technical" way of raising livestock:

"Technology is perverse, it ends up against a wall. It's a funnel, you push and push, and produce ever more ever more, it cannot but crash. One should see things more globally." (Farmer C1)

And this is clearly linked to the general perceived state of the world:

"Things are going very badly, we're going crashing against a wall" and "well, OK, I'm pessimistic, er… but you can't be optimistic when you see the way the world goes!" (Farmer R2)

"Why, everything is done for money and things are quite going badly, mankind don't care about nature anymore… For me it's spirituality, you may think I'm a bit crazy, sort of enlightened, but, well, it's all bundled together. For instance, my children are not vaccinated and I believe they're stronger because they're closer to Nature…" (Farmer R3)

Some younger breeders of more recent farm installation announce a slightly different motive, more personal:

"Well, we came here 'cause we wanted to live in this far-off area, and then I felt somewhat isolated and all this countryside, so I wanted to do something of it and I decided to get some goats" (farmer R13)

"Goats came later. We wanted to live here and get something done, work the land, we didn't know in the beginning, then goats came to our mind and of course it was self-evident that it had to be a local breed" (Farmer C1)

However, engaging further in the interview, the will to live "a simpler life" underlying the motive became evident:

"And I love Nature, being there, guiding the herd and it's not my stuff to work all the time and certainly not in an office" (Farmer C4).

One could still get grasps of a worldview where organic farming, small-scale craftsmanship and phytotherapy completed the picture, in contrast to monoculture, "conventional" cropping in arable land, large-scale industry and antibiotics.

Conversely, some younger breeders, having started their activity recently, and in some cases having the particularity of being "a son of the land", i.e. being native of the region although not of an agricultural family, showed another approach:

> ["would you tell me something about how it all began for you, why this breed, etc.?"] "Well, I wanted to be a farmer. […] So why this breed, because it's quite en vogue, quite popular now, and I wanted to sell my cheese on the farm and also to selected "gourmet" restaurants and so it was good for marketing" (Farmer R9)

This choice is also consistent with the kind of occupation. Farmer R9 define himself as a farmer, mainly a breeder, but certainly not a pastor: "so my way of doing, you see, some do not like, they say it's not the tradition, they'd say the Rove should graze in free range but I plant some alfalfa and my goats graze there, in fenced pastures, I do not like guiding and following the herd! I just do not like it, you see, it's a personal taste, I need to be always on the move, I need to be doing things, well, sometimes I go out there in the wood with them, because they sometimes do need more woody plants, but I don't like it, and I also cultivate some other things, it's a mixed farm, and I go selling my produce my own, you see […]". Consistently, a different worldview is explicitly uttered:

> "[the other breeders] criticise everything, and they should use no technical advances, and their animals could not produce more milk, and they don't like it, but I am enrolled in the official milk control and I don't see why this breed could not produce some more milk!" (Farmer R9)

Strikingly, in some instances a direct and involuntary opposition is also found, as one farmer cited above declared himself against vaccination, while another belonging to this latter subgroup – drifting a bit outside the scope of the interview – narrates about its participation in a campaign of international aid where he "raised funds to provide refrigerators for *** [an African country], so that they may correctly preserve vaccines" (Farmer R9).

3.3.5 The perceived future of the breed

As far as the future of the breed is concerned, contrast is even greater, with some breeders showing a certain pessimism about the future and considering themselves lonesome fighters that have

been somehow abandoned even by the association of breeders. Others are more hopeful and what is apparent is that it's those who are presently in the core of the association who are the most optimistic.

> [Question: "How do you see the future of traditional breeds?"]
>
> "How do you see the future of cultural minorities all over the world, it's me who ask you" (Farmer R2)

And talking about the way a breed should be:

> "we shouldn't make of the Rove a goat of 4 litres a day, we must keep control of the breed! […] And frankly, the future, I see it very dark. If the future of the Rove is to industrialise, that goes bad, well, I have nothing against [R9], but that's not tradition anymore!"

3.4 The importance of people and networks

Evans and Yarwood (2000) provide a synthesis of the process of network creation and operation. They describe four overlapping phases: problematisation, interessment, enrolment and mobilisation; and they underline how a fifth moment of "dissidence" may happen, where some actors may no longer consider themselves in accord with the initiating actor(s) and this may lead to a collapse of the network, or at least to a major restructuring.

There is evidence of the great importance of key people that catalyse the collective action. Almost all breeders speak about [Expert E1] in these terms:

> "then now, there's Mrs. [E1] and things are going very well with her. Have you met her? I suggest you do, she knows a lot and since she's there we do good work" (Farmer C1)
>
> "and it's good that Mrs. [E1] is there now, because I know the association will survive and she helps with advice, so that we exchange males, you know, that's good for the breed and it has to be done properly" (Farmer R15)

Another breeder suggested an interview with Ms. ***, an extension expert of the local Chamber for Agriculture, and then learned that she had just stopped working there a few days before. The reaction was "oh my god! We're done for!"

When asked about the single most important aspect to consider when attempting to preserve local breeds, extension experts generally agree: "you should have a solid unified group of intrinsically profoundly motivated, intelligent breeders who work together" (Expert E1). However, when

questioned about conflict inside the Rove goat association as compared to the much smaller one for the Common Provençal, the same expert explains that "goat breeders are independent. They're the least supported by the CAP and they're proud of their independence. But it's hard to make a collective-action group out of independent people. You see, I've done Genetics, but all the technical stuff here is very simple. I had done better, had I chosen a Master's in Conflict management!"

[Expert E1] goes on to explain that the Rove goat is a beautiful, impressive, very peculiar goat breed. "[in the Rove association] there is more passion. For the Common, that's indeed a much more common goat, it's more intellectual, less passionate, you just choose it because you reason on its importance and you want to preserve a breed and a tradition".

The main approach of our research was not historical, so that it's not an easy task of charting the various stage of development of the two associations. However, some major aspects emerged thanks to the non-directive aspect and the fair length of the interviews.

As far as the Common Provençal is concerned, the association is very small, young, and know almost no conflict at all. Breeders of this breed affirm they were unified by their common struggle to get a ruling in favour of a protected denomination of origin for a local traditional cheese (Banon). Historically, the Common goat population was not well described. Besides, its appearance – more common in comparison to that of the Rove breed – has supposedly influenced its attractiveness. As one extension expert puts it, "you need some more intellectualisation to love the Common Provencal, the Rove is very beautiful, it's easy to fall in love with it. Now, there's as many Common as there was Rove goats twenty years ago, but I am not sure we'll get to 4,500 in twenty years time." (Expert E1). In this association there's less conflict "because there's less passion, more reasoning" (Expert E3).

As it has been summarised above, the initiator of the Rove breed society was A. Sadorge. He was very successful in the first phases, particularly at involving and enrolling people. Successful action and an expansion of the association were realised. The role of A. Sadorge was regularly underlined by those breeders who have been there since the beginning. As one breeder says, "it was a great loss, 'cause he died and then the association collapsed!" (Farmer R15).

Expert E1 compare this to a completely different context. Some cattle breed became endangered or their number was greatly reduced in the second half of the twentieth century. In parallel, she explains, money was allocated to extension (mainly aimed at in-vitro fecundation and genetic improvement) and that meant the existence of regular contacts with an extension expert. "He didn't do anything for breed conservation, he had no time, no money for that, but the simple fact that he was there, well, we realised that numbers of animal in the breed increased again".

Presently, the association appears to be split in four subgroups. Of these, only one is active, members of the other group pay their membership dues "to contribute, because it's important to support the breed anyway" but do not participate actively. One subgroup is formed by the sheep breeders. They deem that it is up to the goat breeders who really make a living out of the breed to develop and protect it and to manage the association. They disagree on the standard of the breed and the type and focus of selection: "well, we [the sheep breeders] like it red, one colour, or black, but they [the newcomers] want every colour,… Well, ok, each of us has his own taste… Besides, you see, we're also far apart, and it's not the same job, well, yes, we're part of the association but, well, we don't have much time to be active,…" (Farmer R13)

Another less active subgroup is formed by those who affirm that they are geographically too distant. Or they may just feel alright with the state of things. This group include also those who are "young" with regard to the husbandry of these breeds. This group of people in some cases just utters the single comment about the "poor association which is a bit sleeping now" (Farmer R14), without showing signs of conflict or dissatisfaction. They actually do not appear to be interested in actively taking part in it either. Their attitude can be interpreted as a confirmation of the argument of Expert E1 about the independency-seeking attitude of these farmers and the clash between this and the need for at least some collective action.

The remaining two groups are those in overt conflict. Both are mainly constituted by long-time members of the association. One of the two is formed by some of the "dissident" members. Conflicting views regarding the development of the breed, what actions to prioritise and "good pastoral practices" have caused a sort of "imperfect" internal secession. While most of them are still official members

paying their affiliation, they are no longer active. The other subgroup includes some "ancient" members and a few young, recent ones. Both subgroups overly explain their dislike of the other or their discord.

> ["would you tell me more about the association?] "well, you see, there's been some stasis, then now there's this new president and I succeeded in having [***] as vice-president and to have him come to Paris to the International Agricultural Show,[…] And you see, there's some breeders within the association, after these people put all that time and energy and they go to Paris to make the breed known, then some say, alright, you're going to Paris to sell your doe kids! But that's not true!" (Farmer R15)

Some large differences appear within each of these two groups. Thus, generalisation is quite complicated. However, broadly speaking, it could be said that the latter group is formed by a few "normal" people, who happen to be farmers and express a somewhat milder version of social critique. They are more entrepreneurial and include Farmer R9 (cf. above) as well as some media-prone breeders who have either appeared on TV, be at the forefront of organising participation in the International Agricultural Show in Paris, wrote books about the Rove, and so forth. They have well-managed marketing strategies, such as on-farm sales or even a private label for sale of a "veritable brousse" in Marseilles.

The other group is mostly formed by post-1968 back-to-the-landers, who show a more radical critique of society overall. These breeders show disappointment with the other group and recent major choices of the association. They typically express their choice of being shepherds and they generally do not show much interest in such marketing strategies as labels. Some of them admit to having a problem with marketing, having disregarded the importance of commercialisation in order for the farm to be viable. At one extreme, they survive on little financial benefit, out of a chosen "simple living" and anti-consumerist lifestyle.

4 Discussion and Conclusions

Most breeders of the two local goat breeds are newcomers, or "back-to-the-landers". They are strongly motivated to pursue a life project based on rearing these animals. Most of them have the

explicit objective of reviving a pastoral tradition. Collective action for breed conservation is the direct result of a few individuals determined to invest human capital into action to preserve and develop this type of husbandry.

One of the most relevant obstacles these breeders face presently has to do with land, and this is particularly accentuated by the phenomenon of counter-urbanisation.

The concept of counter-urbanisation often conveys a somewhat partial vision of the repopulation of rural areas. In particular, it tends to ignore or take little notice of less mainstream forms of "counter-migration". In this paper, we have focused on one such "alternative" form of counter-migration: back-to-the-land or "agricultural immigration". Paradoxically, we may in resume say that the conflict over land is intense between two groups of "newcomers" with different perceptions of rural development: the "idyllic" group people working in "urban" settings, migrating into a rural space where they simply do not imagine farm animals as a presence, and the "back-to-the-land" migration of those starting an agricultural (pastoral) activity based on extensive livestock management.

Boltanski and Thevenot (1991) provide a framework to discussing conflict over different uses of the land. Their thesis is that individual and collective behaviours are underpinned by a common reference to a superior principium. According to this, the magnitude of things is evaluated as beautiful/ugly, fair/unfair, good/evil, and so forth. On this basis, accord or conflict are the two possible outcomes. The Authors describe the existence of "different worlds", each having its own coherence and common superior principium. These different worlds can enter in conflict because, they argue, of these differing principia.

Thus, following this framework, the same rural space is actually a contested meta-space belonging to different worlds. It can be considered a collective good of universal interest by an environmental activist (world of civil society), a factor of production by a "conventional" farmer (world of "productivist" agriculture), a quiet home place for urban commuters (world of "the rural idyll") or a profit opportunity for a property developer ("world of business").

Another major hindrance for the breeders to develop is conflict within the breed society and/or conflict of worldviews relative to more global trends of society and of policy. Most breeders rearing these breeds share a worldview that has been designated as "resistance to globalisation". In the following, this is summed up in a simplified, artificially dualistic way.

On the one hand, globalisation is apparent in policies that aim at concentrating farming in large units in given areas and envision rural development in marginal areas as driven by tourism, recreational amenities and landscape management. In this perspective, markets are mainly supplied by large-scale and long-distance food-chains and uniformity of solutions is generally devised, e.g. standard "improved" breeds reared in-stable.

"Resistance" translate here into smaller farms acting for the revival of a pastoral tradition, a way of life and a profession. Most interviewed breeders envisage local food chains, quality food and a productive permanent presence on the land. Local, adapted solutions are looked for and individual choice is affirmed as the main motive that make it possible for marginal areas to be "re-colonised" in a way other than by second residences.

In synthesis, we consider that conservation of rare breeds is not so much a result of policies but rather of two dynamics, namely the survival of traditional professions and the quest for alternative lifestyles and production systems carried by back-to-the-land movements. The people in this movement have some common viewpoints but hold different worldviews, hence they face some difficulties in cohesion. Conflict is a major issue since some collective action seems to be necessary.

Reflecting back on the first research question, the success of the conservation of a local breed seems to rely upon the charisma and strong will of a limited number of key people. This is also considered to depend on the particular perception of the qualities of the breed and interest in it. These qualities are not so much linked to production performances alone. Different groups of breeders have different preferences regarding the desired qualities of a breed. These may have to do with a red coat colour or very long, twisted horns. It may have to do with an "image", a perception, a symbol. This can be either the attractiveness of a pastoral lifestyle or an entrepreneurial choice to exploit niche products within a mainstream view of rural development and "deluxe" food chains.

It is argued that the Rove attracted attention by people having the resources to enrol other key people and built a network around the issue of the conservation of the breed. This breed also happens to have a striking, particular phenotype that is apparently more effective in eliciting interest in newcomers. The combination of the two played a role in the successful conservation of this breed. Moreover, in contrast with the Common Provencal, alongside the important group of newcomers, the Rove is also still reared by sheep breeders descendants of a long family tradition of husbandry.

There was a cultural bias against the Common Provencal breed, which were kept by women. This breed did not survive in traditional farms. Presently, farmers who are interested in this breed express difficulties they encounter in improving the genetic status of the breed because of the very limited numbers of pure bred males.

Conversely, the Rove was the pride of transhumance-oriented sheep breeders. It walked magnificently in front of the herd of sheep, in its beautiful red coat, with a hand-carved wooden collar and a hand-made bell. These breeders did not consider goats are "less manly". Today, all interviewees in this group still proudly affirm that it is *them* who saved the breed.

Today, as explained above, there is evidence that the presence or absence of key people is an important factor that may enhance the chances that an endangered breed escapes from extinction. It is argued that the creation of breed societies is an indicator of a fundamental consciousness of the importance of networks of people who share at least some basic goals.

Rare breed survival is less a "biological" problem and more one of the survival of different agricultural land uses. It depends on a certain relationship between livestock, the land and the human actors. The human factor plays a major role. Biological diversity cannot be conceived without a certain, parallel diversity of professions and of agricultural models of development, including a diversity of products, lifestyles and perceptions.

In reference to the recent social aspiration to preserve local livestock breeds, one aspect policy and future action should take particular heed of is the conflict over land. It is argued that access to pasture is fundamental for breeders and herds. Negotiation, mediation of knowledge, multi-level

dialogue between all actors concerned is essential. One focus could be put on education, as perception of pastoralism and in fact of the very presence of livestock and agricultural activities seems to be biased for most rural newcomers in the "idyllic" group.

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Table 1 – Change in land use in the Provence Region, between 1970 and 2000

Land Use	1970		2000	
	1000 ha	**%**	**1000 ha**	**%**
Utilised Agricultural Area	1,157	36%	917	29%
Non cultivated Agricultural Land	324	10%	278	9%
Plantations and forests	1,172	37%	1,262	40%
Non-Agricultural Land	527	17%	724	23%
Total Land Area	**3,180**	100%	**3,181**	100%

Source: AGRESTE, 2002.

Table 2 – Sample of interviewed Rove breeders, by type of production and herd size

Type of production	No. of	Interviewed breeders			Interviewees' herd size	
	farms	Small herd	Average herd	Large herd	Total N	% of total
Sheep meat and goat meat	31	2 out of 13	2 out of 9	5 out of 9	358	45%
Goat meat only	12	1 out of 5	0 out of 4	1 out of 3	425	47%
Goat cheese and meat	8	1 out of 3	1 out of 2	1 out of 3	223	40%
Goat cheese only	19	3 out of 7	2 out of 6	3 out of 6	670	48%
TOTAL	**70**	**7** out of 28	**5** out of 21	**10** out of 21	**1676**	**46%**

Source: Institut de l'Élevage, 2001 and own calculations. Data on size based on year 2000.

Table 3 – Smallest and largest herd size of farms, by type of production

Type of production	Herd size of farms (number of goats)			
	Smallest	< 1/3 quantile	< 2/3 quantile	Largest
Sheep meat and goat meat	3	12	23	74
Goat meat only	4	15	30	230
Goat cheese and meat	15	20	108	150
Goat cheese only	12	53	78	190

Source: Institut de l'Élevage, 2001 and own calculations.

Table 4 – Change in real estate prices from 2001 to 2003 in Provence-Alpes-Côte-d'Azur

Sale price (EUR/m^2)	2001	2003	% increase
Individual houses	2 407 €	3 404 €	+ 41%
Multiple dwellings	2 823 €	3 224 €	+ 14%

Source: Ministère de l'équipement, transports et aménagement du territoire, France, 2004.