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Pastoral tenure problems and local resource management: the case of northern Senegal

Kristine Juul

Herders in the Sahel in general have few legal means available to protect their grazing lands from the encroachment of agriculture. In the Barkédji/Velingara area of northern Senegal a group of herders has taken up the challenge by soliciting their own private leasehold titles to the rangelands. This, however, appears a short-sighted solution as it opposes one of the major pillars of the extensive Sahelian grazing systems, free and open access to rangelands. The article analyses some of the shortcomings of the legal practices in the area which have led to the present conflicts and points to some of the problems likely to arise as a consequence of the current laissez-faire attitude of government officials.

In recent years the creation or strengthening of local institutions capable of managing local natural resources has become a sort of panacea in environmental planning in developing countries. The assumption is that if control over natural resources is transferred from state to appropriate local level, resource management will become more efficient, more sustainable and more responsive to local needs. Nonetheless, while much effort is invested in the process of the devolution of power, little attention is given to some of the issues likely to generate considerable constraints on collective action, i.e. the heterogeneity of the user group, the effects of opportunistic herd management strategies, settlement patterns and migration.

The present case study focuses on experiences gained from local resource management in the agro-pastoral zone of northern Senegal, the Ferlo region. Compared to other Sahelian countries Senegal has a fairly long tradition of decentralised management dating back to the 1972 administrative reforms which devolved responsibility for local resource management to locally elected rural councils. Nevertheless the advantages of this devolution of power have until now been limited. This is mainly due to the restricted means given to the rural councillors

which left a lot of room for arbitrariness in the planning and execution of policy as well as increasing conflict between different user groups competing for access to available resources. The article points to some of the difficulties likely to arise in this process of devolution, such as the adequacy of the existing institutions, the ambiguity of the legal framework and the problems related to the establishment of more long-term planning with regard to land use and resource management.

The agricultural bias of the legal framework

The 1964 land law put into effect four years after the independence of Senegal attempts to combine the best parts of African customary law with a modern and democratic tenure system. The basic principle is a freeze on private property leaving the state as the legal owner of 95 percent of the national territory not yet under formal private ownership. Land¹ can thus be attributed individually only in the form of leasehold to producers who will assure its productive use by either physical or financial investment in the land (*mise en valeur*). These leaseholds are allocated through the rural

council², which ensures that the land is being used productively in agreement with national law and in accordance with the productive capacity of the beneficiary and his family. It is thus the productive investment on the land rather than formal ownership which is recognised as the value prone to indemnization. As long as the peasant uses his land productively he will not be deprived of his means of production.

For herders the situation is less simple. As a result of the extensive character of the Sahelian grazing systems, grazing as such is not considered as a form of productive land use and can not therefore serve as justification for obtaining private leaseholds. In fact a government decree³ establishes that access to grazing lands is open to all nationals.

As no means exist to establish secure tenure rights to grazing lands, the law can be characterised as being strongly biased in favour of agricultural production. A number of legal instruments to protect rangelands from the encroachment of agriculture are available to the rural council (protection of watering points, tracing of cattle tracks and the possibility to reserve areas for certain productive purposes), but in general, the legal framework remains ambiguous and unclear. A decree from 1980, for example, prohibits the clearing and cultivation of pasture lands and establishes that within areas dominated by pastoral production agriculturalists are responsible for protecting their fields with fencing. But the legal value of this decree is limited as pastoral areas have no strict boundaries, apart from a restricted number of classified forests and pastoral reserves.

The Barkédji/Velingara case

Seen in this context it was certainly surprising when in 1990 large numbers of herders from the Barkédji/Velingara area in northwestern Senegal started soliciting private leaseholds for large parcels of land formerly managed as open access.

But what pushed the herders to initiate this privatisation? Does it constitute a rupture with traditional extensive Sahelian grazing systems or does it merely reflect a growing frustration in the herder community with the few legal means available to protect their pastures from the encroachment of agricultural production, a process in most cases taking place with the blessing of the state?

The case area, the *arrondissement* of Barkédji and more specifically the municipality (*communaute rurale*) of Velingara, is located in the southwestern part of the Ferlo region. The area constitutes the borderline between the southern, mainly agricultural zone, and the northern, predominantly pastoral, production systems. Traditionally it has been inhabited by semi-sedentarized Fulanis who combine pastoral production with limited agricultural production to cover part of the family's consumption of cereals. Alongside these, Wolof farmers have produced millet and groundnuts on a larger scale while a small minority of black Maures, former serfs of the Arab-Berber Mauritians, have specialised in the extraction of gum Arabic from the Acacia Senegal tree combined with small-scale agro-pastoralism.

Conflicts between herders and agriculturalists, between herders and gum extractors or between herders practising various degrees of mobility are of course nothing new, but tensions over access to natural resources have become more severe as demographic pressure has increased and ethnic specializations have lost their former importance⁴. In the study area competition for land has become more pronounced as a result of the population movements following the great Sahelian droughts of 1972/73 and 1983/84.

On one hand a large number of Fulani herders from the Fouta area along the Senegal River Valley who moved southwards in the aftermath of the drought have decided to settle in these more abundant pasture lands. On the other hand Wolof peasants from the so-called Peanut Basin are moving

northwards in search of virgin land for peanut production as the soils in their traditional territory are becoming increasingly exhausted while population pressure in the area is rising. Both groups have introduced systems of production that challenge the traditional resource management systems.

The group causing the fewest problems in terms of land use policy are the herders from the Fouta region, the Foutankes⁵. Contrary to the semi-sedentarized Fulani herders who long ago settled in the area, the Foutanke herders have a highly mobile and a quite productive economic system considering the conditions faced. Most Foutanke herders own large herds of cattle yet it is the small stock, of which they possess herds of 500 to 1000, that determine their production strategy.

In order to assure the quick regeneration of herd losses experienced during the drought these herders have displayed great mobility in their search for pastures in the years following the drought. Nonetheless, more and more have given up migration over longer distances since precipitation improved after 1985 and now limit their sphere of action to a radius of 15 to 20 km around one of the many deep-wells that provide water for humans and animals throughout the dry season. Within this area camps are moved several times during the year in order to secure access to fresh pastures for the young or weak animals.

This practice has, however, made them rather unpopular among the original population as it gives the "newcomers" a clear advantage in the access to the grazing lands. By establishing of their camps at a fair distance from the deep-well herds belonging to the Foutankes may be watered at the deep-well every second day while being able to reach distant pastures in the opposite direction the following day. Contrary to this, herds managed by the semi-sedentarized Fulani herders living closer to the deep-well graze in a centrifugal movement from the well. As the dry season progresses these herds are likely to end up in pastures already grazed by Foutanke herds. The ef-

fect of these diverging grazing strategies is that Foutanke animals in much better shape than the "resident" ones and their herds are also larger due to more rapid reproduction.

More problematic for the development of the range system is the influx of Wolof farmers. These can be divided in two groups: a) the farmers who settle individually and cultivate in the same way as the original Wolof population and b) those who are part of the religiously organised farming communities, the so-called Mouride *daara's*.

The Mouride brotherhood is one of the 3 Sufi Muslim orders which between them claim spiritual allegiance to the Muslim population of Senegal. The rise of Senegalese Mouridism is closely connected to the expansion of the peanut economy. This is due to a particularity of the Mouride brotherhood: the central role given to physical work, preferably for the Mouride saint, as a means of gaining access to paradise. This ideology proved to fit well with colonial attempts to introduce peanut production in Senegal at the beginning of the century. Through a social, religious and economic organisation of pioneer farming communities, the *daara's*, the Mouride saints provided the framework for a mass movement of agrarian settlement, which enabled them to expand their activities into vast, hitherto sparsely cultivated areas. The key role played by the Mouride in the expansion of peanut production has endowed its leaders not only with considerable economic power, but also with tremendous political capital⁶.

Since its start Mouride colonisation of new lands has followed a standard pattern whereby young, unmarried men are set out in work groups to clear forests and establish large fields for groundnut production. No previous tenure rights were recognised, which meant that this practice brought about regular and bloody conflict between the settlers and the pastoralists of the area. As the official attitude of the colonial administration was that Mourides peanut production contributed more to the national economy than pastoral production, so the pastoralists were usually forced out. In the

rare cases where disputes were taken to court, or—the even rarer—where courts supported the Fulani ancestral rights, the Mourides simply disregarded the decisions and continued cultivation. Casting a blind eye on Mouride transgressions in order not to antagonise the highly organised and economically productive Mouride brotherhood has been widely practised both by the colonial and the post-colonial administration. As a result of the strong political pressure from the Mouride community on post-colonial administration large parts of the forest- and pastoral reserves established by the colonial administration during the 1950s have been declassified since the independence.⁷

While the southeastern municipalities of Barkédji arrondissement have dealt with the Mourides since the 1930s, it is only during the last 10 years that the Mourides have started installing *daara*'s within the limits of Velingara. Since then development has been fast. Only in the year of 1990 the Mourides submitted claims for more than 8000 ha. added to requests presented the previous year of 5000 ha. Until 1990 no land claim coming from the Mouride marabouts had ever been turned down despite the fact that the rural council had a large majority of Fulani herders.

Despite the vastness of the Velingara municipality (2611 km²) the Fulani herders

are becoming increasingly worried by the perpetual diminishing of their grazing lands and the lack of reaction by their elected leaders. So in the wake of the agricultural campaign of 1990, the rural council of Velingara was presented with no less than 100 requests for individual parcels of land. As can be seen in table 1 below, the area requested in a single year amounts to around 15 percent of the municipality⁸. Whereas the 36 requests for plots of less than 0.1 km² all were requested by agricultural producers, the candidates applying for plots larger than 1 km² almost always turned out to be Fulanis who gained their prime source of income from livestock raising.

Obviously attribution of these allotments is neither in conformity with the spirit of the law concerning national domain, nor with a sensible spatial distribution of different forms of land use. Nonetheless the large majority of attributions were granted and later approved by departmental authorities (the *préfet*) during the year of 1991.

But what brought about the present situation and why haven't elected leaders reacted in order to protect the rangelands crucial for the survival of both their own herds and those of their fellow herdsmen? And why has the obviously illegal allocation of land been approved by the regional authorities?

Table 1. *Distribution of plots requested Rural Council of Velingara, May 1990*

| SURFACE (ha) | NO. REQUESTS | TOTAL SURFACE (ha) |
|--------------|--------------|--------------------|
| 0-10 | 36 | 203 |
| 11-100 | 3 | 108 |
| 101-500 | 30 | 11,060 |
| 501-1000 | 20 | 16,100 |
| > 1000 | 8 | 12,440 |
| TOTAL | 97 | 39,983 |

Land requests by Mourides 1990 8,140 ha
 Total requests by Fulanis and Wolofs 31,843 ha
 Total surface of Velingara mun. 261,170 ha

Until 1990 the reaction of the Fulanis was, with a few exceptions, peaceful and calm. In order to avoid animals trespassing into the unfenced fields of the Mourides, herders have, in most cases, preferred to move their camps into less populated areas. But because of the rapid increase of land ploughed by the Mourides, this strategy has become increasingly problematic.

It is not only the size of plots requested by the Mourides that poses problems to the herders' communities. In many cases the land claimed is located within the limits of forest reserves where cash production is formally illegal and/or in areas where the most important ponds used to water herds during the rainy season are situated. Due to the aggressive attitude of the Mouride *talibé*s⁹ in trespassing into cultivated fields, the range of pastures lost is in fact much greater than that legally assigned. Trespassing is a common source of conflict in agro-pastoral societies but due to the size of Mouride holdings, the lack of fencing and surveillance¹⁰, as well as the location of several *daara*'s in areas formerly used as rainy season pastures, it has become increasingly difficult for herders to avoid conflict. In several cases beasts owned by Fulani herders grazing in the vicinity of Mouride cultivation zones have been captured by the *talibé*s. The animals have then been impounded and only released on payment of exorbitant fines fixed unilaterally by the *talibé*s. According to herders in the area this is practised not only during the cultivation season but also during the dry season when normally grazing is permitted in all areas. On several occasions it has led to the death of animals left without fodder or water while impounded.

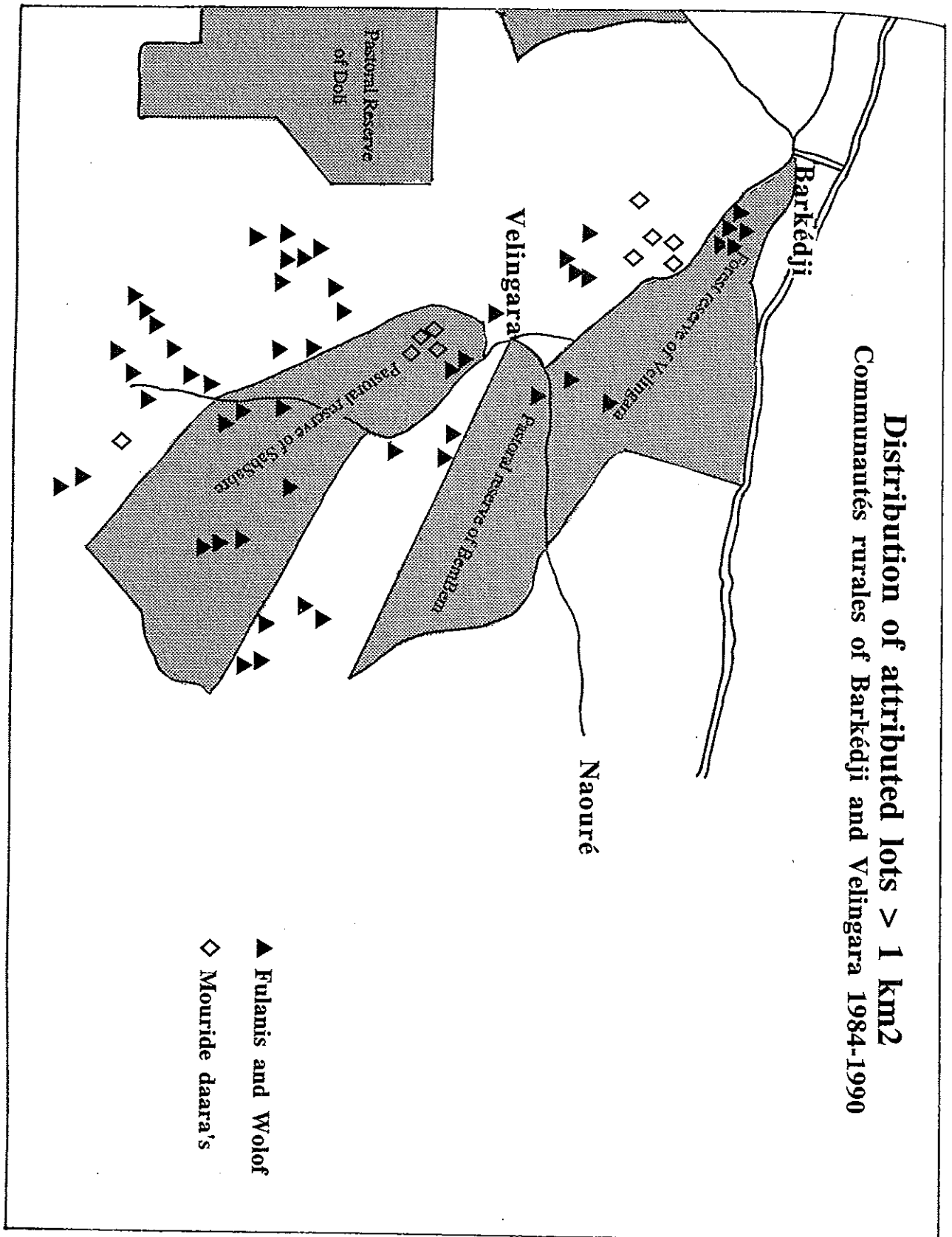
To this is added the large numbers of individual Wolof farmers (vast majority of which are also devoted to Mouridism) who have installed themselves in the vicinity of the *daaras*, without any legal authorisation. These farmers exploit the Islamic tradition of *Masalaha* (agreement on friendly terms), where, in cases of land dispute the right to harvest sown grains is always granted to the intruder¹¹.

The event that finally brought about a reaction from Fulani herders was the allocation of a 1400 ha. plot for a new *daara* with the view to extensive mechanised groundnut production. The *daara* was to be located in one of the most important wet season grazing areas, where the largest ponds which can hold water several months after the rainy season are situated. Although the question of the location was put to members of the rural council, the establishment of the *daara* was considered a great development opportunity for the area and was approved unanimously by the councillors.

Confronted with the lack of ability of their elected representatives, who constituted the majority of the council, to defend the interests of herders, a group of herders from Velingara decided to react on their own and present requests for private titles to the next meeting of the rural council.

As shown on Map 1, most Fulani claims were located in the southern part of the Communauté Rurale in the area most favoured by the Mourides. As several herders are known only to possess agricultural tools and manpower sufficient for the cultivation of 1 or 2 hectares cultivation opportunities were obviously not the prime motivation. Questioned on their priorities Fulanis unanimously expressed the view that their action was motivated more by a wish to halt the progression of "Mouride colonisation" than any attempt to establish exclusive rights to the pastures. As a matter of fact all herders interviewed on the issue confirmed that they had no intention of restricting the access of other herders to their now private pastures, nor controlling the land through fencing. Indeed the allocation of the requested plots seemed driven more by the need to create a sort of buffer zone around the already established *daaras* than to secure, for example, ancestral rights to certain grazing lands. According to herders the granting of individual titles is only important as a means to ensure that land is not attributed to Mourides.

Map 1. *Distribution of attributed lots > 1 km²*
Communautés rurales of Barkédji and Velingara 1984-1990



The rural councils and the legal framework

As mentioned earlier the problem in Vellingara is not so much the allocation of large parcels of land, but the lack of any long-term planning, which has led to greater pasture loss than the formal allocation of land for agricultural purposes.

The difficulties confronting rural councillors when dealing with land use planning are many. On one hand the legal framework is contradictory and difficult to handle, while on the other councillors lack sufficient training and planning tools to implement and sanction existing rules. All this makes councillors easy prey for politically influential groups from within or outside the community.

Part of the problem can be related to the above mentioned agricultural bias of the legal framework. Even though the law provides councillors with a number of legal means to reserve certain areas for pasture (areas near the ponds or on the tracks leading to water points), the means to secure free and open grazing lands are limited.

Another aspect is related to forest reserves. Although the legal framework here is relatively clear, prohibiting cash crop production inside the reserves while permitting pastoral settlement and grazing, it remains difficult for the local administrators to manage. In fact all forest and pastoral reserves fall under the auspices of the central administration. The forest department, however, has a very limited capacity to survey them. In addition the exact limits are not known either to councillors or local foresters. As can be seen on the map, a large number of plots allocated by councillors have turned out to be located within the limits of the reserves. Finally the possibility of declassifying part of forest reserves mentioned above, has been used frequently by politically powerful Mouride leaders.

The absence of the precise registration of allocated land adds to the problems. As no tools are available to the councillors statement of size and location of the attributed

plots can only be mere approximations. In fact most rural councils have until recently failed to keep records of lands allocated¹² although this is prescribed by law. The absence of records, of course, makes it extremely difficult to verify the real size or location of plots with respect to watering points etc., let alone to establish any verification of the productive investments liable to take place.

The central concept of *mise en valeur* (investing into the land) is indeed extremely difficult for councillors to handle, a fact reflected in the minutes from council meetings by recurrent references to all applicants as "great workers". It may indeed be demanding enough to determine the number of hectares likely to be cultivated by a standard family with simple agricultural equipment, but it becomes almost impossible to determine the productive capacity of more modern farming units as, for example, the *daaras* often use tractors and other technical equipment (Caverivière 1991:20).

The matter is further complicated by the lack of training of the councillors of whom the majority are illiterate¹³, and of the absence of even the most elementary means of controlling land use or carrying out long-term planning. The councillors lack maps of the territory. They do not have access to reliable data concerning the soil, existing forms of land use or even the exact borders of the forest reserves. They do not have vehicles to visit areas of dispute and receive no salary or honorarium that could encourage them to invest themselves in the resolution of local problems.

All these shortcomings make it difficult for councillors to turn down one proposal to the detriment of another which results in a completely chaotic policy of land allocation where lots are given to almost anyone presenting a plea.

Attribution of individual pastures—a solution for future cohabitation?

Because of the forthcoming November 1990 elections for the rural councils the final decisions on how to handle the requests were postponed until a new team of councillors was elected. The decisions on herders requests were therefore only taken in May 1991. In two cases the allotments were moved some kilometres away from the originally requested sites in order to avoid hindering access to certain ponds, in other cases requests were turned down because the petitioner had failed to renew the claim¹⁴. The rest were concurred and later approved by the administrative authority, the Prefet. The land totalled 277.44 km² of which 155 km² were attributed to those whom the president of the rural council identified as primarily pastoral producers.

There seems to be no doubt as to the success of the herders attempt to limit Mouride expansion in their community. Although the new rural council suffers from many of the same shortcomings as the one mentioned above they appear more aware of the necessity to protect herders interests by, for example, avoiding land allocation in areas close to larger ponds. The central question, however, is whether the privatisation of rangelands is an adequate response to the problems of cohabitation inherent in agro-pastoral societies, as the results remain to be seen.

Despite the fact that the allocation of private rangelands was in this case purely an act of self-defence, it remains a contradiction to one of the principal pillars of the extensive Sahelian grazing systems, the free and open access to all users of pasture lands. Although certain methods of regulating access exist (heavier taxation of newcomers at deep-wells etc.), the restriction of access to water and grazing has, until recently, been considered alien to proper Fulani conduct.¹⁵ The introduction of exclusive rights through

the allocation of private plots might easily turn out to be a double-edged sword.

At present mobility remains the most adequate solution to most calamities occurring in pastoral societies. In cases of bush fires, the recurrent breakdown of deep-wells, or limited or extended drought, withdrawal to neighbouring areas constitutes a key strategy for risk management. In fact the limited losses registered on Senegalese herds during the 83/84 drought can largely be attributed to the promptness with which herders decided to move southward once the failure of rains became clear. Also the successful regeneration of the Foutanke herds is largely attributed to their opportunistic strategy of limiting herd movements in accordance with the return of good rains. Finally the production structure of the Barkédji arrondissement is based on the cohabitation of different systems of production. Different resources are used successively by different groups of producers in various seasons (gum collectors, semi-sedentarised agro-pastoralists, agriculturalists etc.) This cohabitation is based on a certain rotation and mobility, which in spite of certain immanent conflicts, manages to satisfy a large majority of the user group.

Obviously the establishment of exclusive rights does not interest the large majority of herders with entitlement to large plots. Nonetheless the bloody xenophobic clashes between the Senegalese and Mauritians in April 1989 which started as a dispute between herders and agriculturalists showed how quickly year long cohabitation between different ethnic groups could explode. Considering the already existing frictions between richer and more efficient herders recently settled in the area, and the more sedentarized Fulanis, one might fear that the owners of "private rangelands" will try to exclude these newcomers in times when pastures become scarce.

Privatisation of rangelands is also likely to deliver the final deathblow to the control black Maures have over the tapping of gum Arabic. At the moment many Maures possess recognised tenure rights over the trees

they tap but not to the land on which they grow. During recent years they have come under serious threat from Fulani herders moving into the tapping business as a new sphere of economic activity. Private titles to lands on which gum trees grow will inevitably lead to increasing conflict over these issues and create serious problems for the future cohabitation of different systems of production.

As in many other countries, the civil administration in Senegal is strongly in favour of accelerating the sedentarization of herders. Nevertheless decisions taken by the local and regional authorities to recognise rights to individual grazing lands seem more the result of a fear of political conflict than an attempt to find a viable solution in the long run. If land granting continues at its previous speed, the municipality is likely to end up with hardly any communal land left.

For the time being existing local institutions in charge of managing local resources do not have sufficient means either to make any long-term plans or to enforce existing regulations. In order to elaborate a proper management plan which could take into consideration the needs of all groups using local resources rural councillors must be able to combine a large range of mainly geographic and economic criteria. This appears to be an immense task considering the means and tools they have available. In spite of all these shortcomings it nevertheless seems crucial to maintain rural councils as the core unit in local resource management, particularly as they retain a social legitimacy making it possible to contain the conflicts of interest between different production systems using the same natural resources. Sensible spatial distribution of lands is, obviously, not only obtained through better access to information and other planning tools. More important are the possibilities given to each group of producers to express their needs and negotiate regulations concerning use-rights over resources used over different seasons. Here the actual composition of rural councils is far from ensuring

the representation of all groups of producers.

As could be seen recently in the violent clashes between Fulanis and Hausas in Niger in which more than a hundred Fulanis were killed by Hausa agriculturalists, the consequences of the immense population movements which occurred in relation to the big Sahelian droughts are yet to be seen. Certainly, lack of clarity concerning tenure rights combined with ad hoc planning seems to be a dangerous cocktail.

Notes

- ¹ Apart from the urban zones, wildlife sanctuaries and forest reserves and the so-called pioneer or development zones which are placed directly under state authority.
- ² Despite of the attempts to decentralise, close links are maintained with the central administration, as all decisions concerning land attributions have to be confirmed by the Prefet
- ³ Article 16 of the decree no. 72-1288.
- ⁴ The decline of ethnic specializations was accelerated by the increased diversification of households economies employed as a risk management strategy during and after the severe drought periods in the 1970s and beginning of the 1980s.
- ⁵ As both groups are Fulanis I have preferred to distinguish between Foutanke herders and semi-sedentarized Fulanis.
- ⁶ For a fascinating analysis of the Mouride expansion in Senegal, see Donal Cruise O'Brien: "The Mourides of Senegal", Oxford, Clarendon Press 1971 and "Saints and Politicians", Cambridge University Press 1975.
- ⁷ The forest and pastoral reserves were established by the colonial administration in order to limit the expansion of groundnut production and protect some of the more fragile soils by reserving them for grazing. In these areas cash crop production is prohibited.

According to statistics from the forestry services, close to 40,000 ha of the reserves located central Senegal have officially been declassified since independence in 1960, in the large majority of cases to comply with demands from Mouride marabouts. Lately 45,000 ha of what used to be the forest of Mbegue was handed over to the Khalife General of the mourides, and was chopped down in order to give way to the establishment of peanut fields. Considering the large amount of donor funding invested in afforestation projects and the declining prices of peanuts on the world marked

this created a (limited) scandal in Senegal by the end of 1991.

Finally large areas were taken over by Mouride farmers without official declassification.

- 8 i.e. communauté rurale, the lowest administrative level headed by a local elected rural council. 3 or 4 communautés rurales form an "arrondissement" headed by a centrally appointed civil administrator, the "Sous-préfet" acting on behalf of the Ministry of Interior. Also at higher administrative levels, the *départements* and the *regions*, power is concentrated with the *Préfet* and the governor.
- 9 Disciples of the Mouride marabout.
- 10 In most pastoral areas of Senegal it is the responsibility of the agriculturalist to survey his fields during daytime, while the herder has to pay for damages caused by his animals during the night. This customary rule is, however, not respected by Mourides.
- 11 We were informed of cases where this practice was manipulated by the peasants in a very intelligent manner. Instead of sowing the field from one end to the other, they preferred to sow in small scattered dots over a large area. In case of disputes before the end of sowing the authorities would be unable to control the extent of the area and they would be able to sow and harvest the entire field.
- 12 In most cases the registration of decisions concerning attributions can only be found in the minutes kept from meetings in the rural councils. In several cases even these do not exist.
- 13 In a survey from 1985 regarding the level of education of rural councillors, Vergroff and Johnston showed that only 8 % of the councillors had completed their primary education. 60% had attended Koranic school while 24% had not participated in any form of formalised education. The elections for the rural councils held in October 1990 generally provided younger and relatively more educated councillors although they still reflect the relatively low level of formal education prevailing in the countryside.
- 14 This was the case for certain requests proposed by mouride marabouts.
- 15 Recent fieldwork carried out in February 1992 seems to indicate that fundamental changes in this attitude are underway. After two consecutive

years of failing rains in the Senegal River Valley, herders from the north have been forced to spend the dry season in the southern and central part of the pastoral zone where precipitation has been more favourable. Numerous accounts from these herders described how well-comittees demanded exorbitant fees for single waterings of cattle or merely prohibited the access of "foreign" herds to the wells. As the formal ownership of the deep-wells is retained by the state this behaviour is clearly illegal.

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