

# The Experience of Pastoral Organisation in African Countries

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Ministry of Livestock Animal Resources  
and Pastoral Hydraulics,  
Republic of Chad

Pastoral Unit

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**IIED**

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DEVELOPMENT

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To this end, it was deemed useful, before looking towards the future, to proceed with a comparative analysis of project and programme experiences:

- between West and East Africa
- between anglophone and francophone countries
- between projects financed by NGOs and those financed by international, bilateral or multi-lateral institutions.

## II COMPARATIVE ANALYSIS

### 2.1 Organisational approaches

A meaningful way of approaching attempts to organise pastoral communities could be to draw up a typology of the organisational approaches adopted (S. Sanford, 1983). In fact, using various examples, one can comprehend them in all of their complexity and diversity with reference either to technical topics, objectives, historical contexts or category of beneficiaries.

For ease of analysis, we shall deal with 10 major organisational approaches which in many cases overlap in the same projects and programmes and complement each other to a greater or lesser degree.

#### 2.1.1 Pastoral organisation according to environmental stratification

Let us take the case of SODESP (Livestock Development Agency in the Sylvo pastoral zone) in Senegal. This project has tried to organise herders and those working in the meat trade in accordance with a dual stratification, viz:

- a) intensification of production at three levels: breeding, rearing and final fattening
- b) production itself: by undertaking activities supposedly adapted to a particular ecological area (breeding in the Sylvo-pastoral zone, rearing in the groundnut-growing area and in the river valley, fattening in the groundnut-growing area and around the major urban centres).

The project aimed to achieve "a vertical and functional integration of the main stages of producing meat animals with the aim of increasing the overall value added of the system and the distribution of same in the most equitable way amongst the various parties" and "a horizontal integration of the various socio-economic functions complementary to herding" (B. Ndong and D. Ndiaye 1986). The various parties involved were thus organised into groups of animal breeders, groups of animal rearers and groups of fatteners in the three areas described under b) above. It is not at all clear that this theoretically well-prepared stratification, which was the stalking horse of USAID at one time, ever suited grassroots herders or contributed towards the consolidation of any complementary relationship, for several reasons:

- the marketing circuit was extended, draining off more of the animals' value

- prices of meat became higher although if the producers themselves had negotiated directly with the abattoirs, both herders and consumers would have benefited
- the profits obtained by the fatteners seem to have been much higher than those of the herders themselves
- the herders could have been better organised to sell their animals directly for slaughter
- with the drought of 1984-5, it became clear that the scarcity of pastoral resources had a more dramatic effect on herders in the breeding area, as they are the ones who actually take all the risks, inasmuch as the five boreholes around which they are organised were subject to unbearable animal and human pressure from numerous pastoralists coming from far away
- the interests of all parties in the meat production chain were difficult to reconcile in the absence of an arbitration structure which could better safeguard prices paid to producers and which could mitigate the economic and political power of animal fatteners in the towns.

#### 2.1.2

##### Regional approach

After several years working in Burkina Faso on a programme of support to village groups, CIDR (International Centre for Development and Research) began to develop a regional herders' organisation in Djibo province based on livestock marketing and commodity supply activities. "The programme's objectives are linked to the fact that as the desired changes at grass-roots level in respect of livestock are dependent on decisions taken beyond the village level ... the province (whose pastoral vocation is acknowledged) must be in a position to defend its interests ..." as there is "a need for increased representation of herders firstly at provincial level, then in association with other Sahelian provinces whose pastoral vocation is well established" in such a way as to "lead villages and pre-cooperative or cooperative movements to a development logic which is no longer isolated from its context" (P. Leconte 1988).

More emphasis is thus placed on creating pastoralist structures at provincial level, although these must in reality be based on village groups.

As the CIDR programme is quite recent, it is too early to draw all the lessons from it. However, it is known that in organisational processes a time comes when one

must go on to set up federations or unions. There are plenty of cases in Europe of satisfactory trade union organisations at departmental or provincial level. However, these have been built from the bottom up and it has taken a lot of time to reach this stage. The democratic climate in which socio-professional claims could be made was also a favourable factor.

The case of ACORD is similar. When the "programme to revive the cooperative movement in the sixth region of Mali" began in 1976, the NGO dealt with all the cooperative structures in the region, an area of about 500,000sq km. This geographical cover was provided on the basis of a division into two agro-ecological zones (river zone and pastoral zone) and distinct groups of people (nomads and sedentary farmers), through diversified activities taking account of the regional development problems of the former sixth region. The aim was to redynamise lethargic cooperative structures in order to achieve a lively and powerful cooperative movement able to take over responsibility for the development of the whole region.

However praiseworthy this objective, it became evident later that it led to a scattering of activities, made it difficult to follow them up, required a heavy administrative system, was very expensive and needed to be backed up by close, good quality supervision which was always lacking (ACORD 1987).

In general terms, the regional organisation approach has the advantage of avoiding a juxtaposition of micro projects with little link between them within the framework of a long term regional development problematic, but the risks of ending up with a top down bureaucratic process are enormous (ACORD 1983).

### 2.1.3

#### Herder-only organisation

The aforementioned CIDR programme, while dealing with provincial level organisation of livestock marketing and commodity supply, aims to involve herders above all. "It therefore proposes an intervention taking account of the particular characteristics of this social fabric" as "for several years, it has been clear that herders consider it unjust that the majority of development programmes should deal exclusively with the problems of farmers. This perception means that the very notion of groups and village organisations is in their eyes connected only to working the collective fields after the construction of the warehouse. Even for very forward looking herders, this does not offer any appreciable prospect of change and improvement, nor does it encourage them to become involved in such movements".



Moreover "with the tendency of livestock keeping to pass from the hands of traditional pastoral herders to those of farmers or investors (especially traders), the activity loses its capacity to restructure itself and thereby what is left of its potential" (P. Leconte 1987).

The difficulties with such an approach are related to the socio-political interpretation which may be given to it in a context of inter-ethnic tension:

- in the region in question, conflict in the relationship between farmers and herders is a constant factor
- there is a risk that the programme will be interpreted as being too specifically concerned with Paulh herders who seem to suffer from unfavourable prejudices
- there is a risk of destroying intra-village social cohesion, however fragile this may be, by deliberately dissociating ethnic interests.

Nonetheless, this approach has the advantage of dealing with the main activity of a precise group which already has knowledge and proven experience in that field and is thus likely to be motivated to cooperate.

#### 2.1.4

##### Pastoral organisation around a key theme

When the local NGO Accomplish (Action Committee to Promote Local Initiative and Self-Help) was created in Southern Sudan in 1979, the pastoral Mundari communities had many needs in terms of pastoral development: animal health, water, roads, education, etc. After consultation with the Sudanese government, Oxfam gave its support to this NGO to implement an animal health programme based on the training of indigenous Mundari para-vets. The choice of animal health was justified by the existence of numerous epizootics and the poor general state of livestock in the region largely due to the civil war which is still going on there (Oxfam 1988).

The originality of the approach lies in the great importance given to animation and communication, to establishing a relationship of trust with the communities concerned from the outset, by working in the field of animal health and training para-vets to deal with the problems affecting their livestock. Over time, this approach will be backed up with activities in the field of managing commodities and equipment, financial management and finally organisation of community activities. To this end, it is planned later on to set up a more formal structure of herders' organisations.

The object is to work by stages and in particular to avoid creating structures too rapidly, as these could prove artificial and be in danger of becoming overloaded with the management of various activities. It is thus hoped that animal health will be the catalyst in the process of popular participation and the credibility of Accomplish will be thereby enhanced for the future (M. Almond).

It is relevant to consider the concerns expressed about this programme, inasmuch as NGOs have rightly acquired their reputation through this concept of integrated activities which approaches the development problematic via a single entry point, an activity which must be mastered before a new topic is introduced. However:

- the risk of overconcentration on one sector remains
- while animal health is one of the easiest topics to tackle, as the changing circumstances in pastoral areas ensure a good response from the people it is not clear that other activities will be so readily accepted
- what is the timetable for introducing new activities in such an approach? Who will decide? On what criteria will the decision be based?
- for instance, must one wait for an excessive growth in herd size which always follows an improvement in animal health, before considering measures to conserve and regenerate pastures?

#### 2.1.5 Multi-functional organisations

Starting from the principle that production systems are integrated and that people can have many equally pressing needs, the first ACORD programme to revive the cooperative movement in the sixth region of Mali worked through the cooperative groups to support various actions in the river valley (hydro-agricultural improvements, seed banks, market gardening, fishing, cereal marketing, land-use management, commodity supply and general support services) and in the pastoral zone (hydraulic projects, commodity supply, livestock marketing, training, herd reconstitution, cooperative herds, rangeland management, individual credit, animal health, human health and cooperative veterinary posts). Like all other approaches, this one has both strengths and weaknesses.

As far as strengths are concerned, one must remember that the NGO intervened in a post-crisis situation (just after the 1972-3 drought) which demanded the total rehabilitation of a whole region which was far removed from the government's concerns. The urgent need to intervene and the size of the needs expressed by the

people at the time amply justified the multiplicity and diversity of activities. In this respect, the NGO did indeed contribute towards staving off disaster and helping to lay the foundations for a resumption of normal life by hard hit communities in the region (M. Nieuwkerk, B. Thebaud and D. Sylla 1983).

Another advantage of multi-functional organisations is the fact that they generally go beyond mere problems of livestock development and tackle a whole range of bottlenecks. The introduction of a cereal supply project, for instance, may be a judicious way of meeting other concerns:

- pastoralists do not live only on the produce of their livestock, but also on cereals and wild grasses
- the drain on herders' budgets exerted by the retail purchase of cereals with no organised supply system prevents them from restocking their herds and encourages them to sell livestock even when their minimum subsistence requirements are not met
- as pastoralists are generally confined to isolated regions, transport costs for cereals are high especially when intermediaries act between the herders and the wholesale markets.

Organisation of cereal supply at community level can mitigate or even solve this type of problem.

Multiple functions can thus be a relevant way of fostering pastoral development, enlarging the field of analysis and intervention in respect of a given community, without becoming bogged down in essentially sectoral concerns.

Finally, this approach is not irreconcilable with the need to organise sub-groups within a given structure, according to affinity or common interests. In ACORD's case, it was possible to achieve dynamic groupings on a smaller scale around the management of particular water points, market gardening or women's activities within a larger overall structure.

The weaknesses relate to the following points:

- the implementation of several activities at a time is always complex and the necessary elements are not always available at the outset to evaluate the absorption capacity of the communities concerned
- the people themselves can be overloaded by an ever-increasing number of meetings and management concerns

- activities can become scattered
- finally, this approach requires perfect synchronization between the many government technical services involved, who do not always have the necessary material means or skills (ACORD 1983, 1987).

2.1.6 Organisational approach based on small scale structures  
 By choosing to work with smaller groups, certain generally acknowledged advantages are, a priori, present:

- immediate interest and therefore likelihood of better participation by the people involved
- reduction in social and geographical distance between members
- the members know each other and greater internal democracy is thus likely
- greater facility in animation and consciousness raising work
- the limited material, financial and human resources required make management by groups easier
- evaluation of the results and their impact is easier.

The "rangeland management" project at Tahoua in Niger, launched at the beginning of the 1980s, applied this approach until its termination during its second phase as a result of "administrative difficulties".

Apart from an important two-year component of joint research and analysis with the pastoralists concerning their problems and ideas for future development, 10 pilot associations were set up within two ethnic groups (Kel Tamasheq and Wodaabe), each association comprising 15 to 30 families who generally cooperated in pastoral activities for at least part of the year and who accepted the more formal cooperation proposed by the project. Project activities included credit for herd reconstitution, animal production activities and cereal banks, together with a human and animal health component carried out by auxiliaries drawn from the local population (J. Swift and A. Maliki 1974). "Although the programme was too limited for a real assessment of its technical impact on animal and human health ... it seems to have been well designed. The evaluation showed that it was successful with the pastoralists themselves and that it met a substantial demand which had hitherto not been met for improved services in an accessible form" (J. Swift 1988).

Nonetheless, it was clear for the project that these small groups could only be the starting point for an experimental and gradual bottom up process, as the project would have had difficulty in monitoring them if they became too numerous, quite apart from the fact that there would have been problems of legal recognition at the state institutional level.

This example shows that small groups can validly be considered as the first level of intervention. However, smallness in itself is not a sufficient argument. It must be included within the perspective of larger groups which raise other problems.

As of 1982, ACORD also undertook a process of decentralisation of the large cooperatives existing in the sixth region. This was to lead to the creation of cooperative sectors and smaller partner groups. What happened in Menaka Circle in particular provided important lessons and partly confirmed the experience of Tahoua.

"Decentralisation took the following form: in the area previously covered by the central cooperative, cooperative sectors were allowed/encouraged to develop. These sectors were independent in terms of finance and management from their central cooperative (although they still did not have an autonomous legal status). During the decentralisation process, the central cooperatives gradually lost all their operational functions which were taken over by the cooperative sectors".

Following the 1984-5 drought, decentralisation took on a form and a pace in Menaka which can only be called epidemic.

The two main factors behind this proliferation of cooperative sectors are as follows:

- the semi-sedentarisation of Kel Tamasheq nomads gave rise to a collective need to organise activities such as commodity supply and thus to create cooperative sectors for each settlement
- in order to obtain cereals during the drought, the people set up their own structures to compensate for the absence of activities by the central cooperatives which at the time had been frozen by ACORD and the DRC as a result of the poor management practices for which they had been responsible.

The cooperative sectors in Menaka highlighted four advantages:

- considerable social cohesion inspired by the need to find a collective solution to the problems posed by drought

- strong financial participation of the members in setting up the revolving fund
- in-depth knowledge of the activities by all members
- innovative character as a result of being created at the grassroots by the members themselves.

However, their main disadvantages are of a technical nature:

- their ability to ensure that funds revolved through activities was limited, because they did not cover an economically viable hinterland and in most cases they concerned numerically small groups
- the limited amount of investment capital hindered bulk purchases and uninterrupted supply
- the creation of numerous cooperative sectors did not allow for effective monitoring, because ACORD was not in a position to provide the necessary training in the situation of anarchy which developed (M. Winter 1987).

#### 2.1.7

Organisational approach on the basis of new structures  
This approach may concern two types of new structures:

##### a) Existing formal structures

The livestock development operation in Mopti (ODEM), funded by the World Bank, tried to work with the formal herder cooperatives which existed prior to the start of the project in 1976. These cooperatives, which were usually created in the "socialist" euphoria of the first years of Mali's independence, have statutes, a governing board and internal regulations. The motives for their creation were more ideological than sociological. In fact, the government of the time had systematically set up herder cooperatives at the arrondissement administrative tier and all herders in the area had to join. With time, the complete breakdown of the democratic façade put an end to the patience of the herders who became disillusioned with the very word "cooperative". The ODEM had a lot of trouble in overcoming this attitude. One of the lessons drawn from this experience is the need to avoid giving in to an unfortunate tendency to set up development structures on the basis of political will frequently imposed by decision makers at a higher level.

Moreover, the creation of cooperatives in accordance with administrative divisions may turn out to be a soft but inefficient option, considering that arrondissements and circles are not sociological units in the strict sense of the term, which would be able to deal with the concerns of herders at the grassroots.

Setting up cooperatives at arrondissement level does not necessarily mean that decentralisation is thereby achieved (Y. Maguiraga 1984).

Another lesson learned is that if pastoralists have had unfortunate experiences with poorly managed and ineffective formal structures, they will be likely to be reluctant to join any other organisation, at least at first.

Examples of the contrary are the ACORD programme in Mali and the Thaba Tseka Association in Lesotho, which seem to show that formal structures can be a way to organise pastoralists, offering a great advantage in terms of time saved in making programmes operational in the very short term.

By working with existing cooperatives which were the only viable organisational structures in Gao region, ACORD was able to solve emergency problems. The Thaba Tseka Association was able to add rangeland management to the activities of an already functioning organisation of wool producers (ACORD 1983 and 1987, Devitt and Oxby 1985).

- b) New structures based on grassroots solidarity  
ODEM is also developing another approach based on the creation of structures on the request of the people. Following increased overgrazing in the interior delta of the Niger and frequent epizootics, new groups of herders were set up on the dry fringes of the delta. These groups comprised pastoralists of diverse origins: Peulh, Kel Tamasheq and Moor. They came together for several reasons: the need to find alternative grazing for their livestock outside the delta which had become a hostile environment for them, the need to shorten their traditional transhumance circuits and the existence of a hitherto unexploited borehole. There are now four associations of this type which are supported by ODEM, which supplies water drawing equipment on credit, health monitoring and training, as well as developing a programme of management and protection of the rangelands. For almost four years now, these associations have been giving satisfaction in terms of structure, cohesion and operation (ODEM 1987).

ODEM provides another example, i.e. the self-managed livestock market in Sofara. Herders in this area used to travel almost 100km to sell their animals at different markets. Apart from the distance, they encountered numerous problems of livestock thefts and pressure from the intermediaries operating in these markets who often imposed very low prices on the herders. In most cases, after such a long trip and in view of the urgent need to have cash in hand, the latter often sold their animals below their true value. In order to tackle these problems, they decided to organise locally, building a brick enclosure on about 1ha they had been allocated by the local administration. ODEM supplied a loan of FCA2,500,000 and some veterinary products, the remaining funds, i.e. about 56% of the market value, coming from the members and the association's activities. Since its creation in 1986, the self-managed market has enabled the herders, through a small surveillance and enforcement committee, to avoid all administrative hassles (police, tax authorities) and all the intermediaries who took their cut in the other markets in the region. Self-management also makes it possible to check the health of the animals before they come into the market area. The herders are also assured of finding buyers and getting a reasonable price. Finally, they become "the partners of the intermediaries and the traders and no longer their prey or the prey of all the other predators teaming in the region" (R. M. Rochette 1989).

To sum up, the creation of new structures on the basis of grassroots solidarity can be an interesting option if it meets a need for collective action and a genuine common interest. In the case of ODEM, this approach was able to alleviate the deficiencies of the former herder cooperatives, fill an organisational vacuum which was preventing the full exploitation of existing boreholes and finally to organise self-help by grassroots producers around the marketing of their livestock.

#### 2.1.8

##### Organisational approach based on traditional structures

Several programmes have tried and abandoned this approach, while others are trying to revive it. In the Malian sahel, attempts were made to work on the basis of the traditional organisation into fractions which are one of the traditional organisational structures in nomadic society. The aim was to take advantage of the affiliation felt by the nomads themselves to this structure. It became apparent later that certain



traditional chiefs had not only creamed off the profits of the activities, but also widened the gap between themselves and the most disadvantaged layers of the population. This was clear within the ACORD programme, which had considered the appointment of chiefs or members of their family to responsible posts within the cooperatives as inevitable in view of the extremely hierarchical nature of Kel Tamasheq society. However, it was hoped that a process of democratisation would make it possible to alter this orientation in future. Although in many cases chiefs were removed from their posts and sometimes even denounced to the administration by the cooperative members, many of them considered cooperative activity as a way to re-establish the traditional hierarchies which were running out of steam because of drought and other changes. Some traditional chiefs used their position to enrich themselves personally and it should be added that they were not amongst the most dynamic members (A. Marty 1986).

The problems encountered with the traditional structures were linked on the one hand to the fact that the ideals of cooperation and joint activity did not correspond to the perceptions and practice of power amongst the chiefs and, on the other hand, to the fact that the fraction structures, although efficient in terms of collecting taxes, were not always appropriate to carry out development activities. Furthermore, numerous voluntary groups of nomads were set up later, avoiding either the geographical proximity of the chiefs or their involvement in the new projects that these communities were planning.

In Niger also, the temptation for chiefs to co-opt activities existed within the integrated Tahoua development programme. Although this programme did not last long enough for the whole truth to be known, the instigators were aware that the risk of traditional chiefs taking over the new community structures was quite real and that it would have negative consequences in terms of priorities and working methods to the detriment of the most marginal people (J. Swift 1988).

However, systematically to exclude chiefs or traditional structures can sometimes lead to failure if the traditional institutions are part of an appropriate socio-economic environment and if they are run relatively democratically.

It can still be seen within the ACORD hydraulic programme that the users of numerous water points cannot succeed in organising their management in the absence of the powerful and just traditional chiefs.

In the Sudan, the problem is particularly acute as the government, after having begun by abolishing the power of the traditional chiefs in part of the country, changed its mind and began gradually to rehabilitate them in their prerogatives and functions and is planning to extend this measure to the whole country. In this way, traditional chiefs and institutions would again be responsible at local level for certain development initiatives in the Sudan (J. Swift 1988).

2.1.9

Organisation by stages

In all examples considered, the projects or programmes have a certain concept which they apply in terms of planning and especially of future development of pastoral organisations. However, this concept often remains very vague or confused and is most often not explicit. The livestock development project in the Western Sahel of Senegal (PDES0) provides an example of a blueprint which seems monolithic in many respects. The planning stages are given below:

- a) The different levels: group development occurs in five phases

Levels	Content	No. of Years
3	Training completed - internal and external relationships dealt with by the economic interest groups which settle their problems without the assistance of PDES0	9
2	Training completed. Internal relationships dealt with correctly. (The economic interest group takes initiatives in respect of management of infrastructure and land). External relationships are non-existent or tentative.	7
1	Training completed, but economic interest group structures, auxiliaries and monitors not functional at the same time.	5
0	The structures receive training and supervision from PDES0, but the training of officials of the economic interest group, monitors and auxiliaries is incomplete.	3
00	Traditional relationships. No specific supervision or training.	0

b) Timetable for withdrawal of supervision and training

Years	1985	1986	1987	1988	1989	1990	End of PDES0
No. of autonomous pastoral units	0		13	14	12	6	6
No. of livestock extension workers remaining	22		17	8	4	4	4
No. of remaining literacy trainers	15		6	4	4	4	4

(Source: A. Kane 1986)

2.1.10 Women's organisations

Like other rural development sectors, pastoral organisations only belatedly began to tackle the question of women's integration and role within such structures. It is true that the female sex is sometimes represented on management committees and it is also clear that this is often a purely token representation.

Difficulties in including women in pastoral organisations relate to: insufficient knowledge about their real place in the pastoral production system; the numerous shifts affecting this place; and the particular status they have vis-a-vis pastoralist men in decision-making within societies which are entirely dominated by men.

Despite this, experiments have been attempted along two main lines:

a) The development of exclusively women's activities.

The advantages are that:

- women, belonging to a particular social category, may have special needs (collecting their daughters' dowry for instance)
- some activities or problems fall within women's sphere (processing of dairy produce, fine leather work, fetching water and firewood, etc.)

- women are allowed to express themselves away from men and attempts are made to avoid the latter co-opting women's organisational structures.
- activity begins around a specific focus which may be a good entry point for organisational training (e.g. nutrition)
- delicate questions relating to women's health may be more easily tackled.

Some projects or programmes such as those of PRODESO, ACORD and Oxfam and the Leo/Burkina integrated project have followed this route.

However, it is essential to widen the scope of activities as there is the danger, on the one hand, of ending up with one form of segregation while attempting to avoid another and, on the other hand, of creating an artificial position for women vis-a-vis the society in which they live.

b) Development and enhancement of women's role in a broader productive process

This is the approach which raises the greatest number of problems, precisely because of cultural constraints and the danger of co-option by men. Moreover, in a situation where the actual position of women has not been consolidated, there is little hope of creating interesting dynamics enabling women to improve their living standards. Nevertheless, various agencies have included women in their herd reconstitution programmes (ACORD and Oxfam) in recognition of the growing role of women as heads of household in the pastoral zones.

Most programmes continue to link the question of women to the prior collection of base line data before planning any activities. Others try to work with the women within a pastoral organisation which is developing an activity in which women's participation is essential. This is true in respect of the dairy units set up by ACORD with nomad groups, providing assistance to women in the production and marketing of milk and cheese, while herding, feeding and caring for the animals is the men's job.

### III CONSTRAINTS IN IMPLEMENTING ACTIVITIES

In most cases, pastoral organisations have developed various activities in an isolated or integrated way within their action programme. These activities may be grouped together under the following main themes:

- improvement and management of pastoral resources
- reinforcement and improvement of veterinary structures and animal health
- supplies of basic commodities
- marketing of livestock and pastoral produce
- human health
- education and training of herders
- functional literacy
- activities to benefit women
- pastoral credit and mobilisation of savings

To compare the constraints of each of these activities would certainly be a tedious task, but it is necessary for the future. Consequently, the present report will confine itself to analysing some of the constraints linked to the first two themes, in accordance with terms of reference.

#### 3.1 Improvement and management of pastoral resources

Generally speaking, African pastoralists do not view activities to improve resources with disfavour. Their enthusiasm for water points frequently exceeds the capacity of donors, as the advantages of water points are immediate and well known.

Where other activities are concerned, in view of their sometimes innovative nature and the fact that their results are only visible in the medium to long term, it is sometimes difficult to motivate herders. One way to achieve such motivation has been to provide food for work. Examples are the fodder tree plantation project implemented by Oxfam in the Turkana region of Kenya and the project to regenerate riverine fodder grasses (*echinocloa stagnina* - bourgou) implemented by Veterinaires sans Frontieres in Youvarou, Mali. It was considered necessary in order to compensate for the economic risk taken by the herders in respect of an activity dependent on rainfall, keep work going during a period when food is traditionally short or simply help communities who were practically destitute. As has been stated on many different occasions, one must be vigilant with regard to the phenomenon of false motivation, which gives the impression that activities are needed when they are in fact often abandoned by the people as soon as the food is cut off.

World Vision can sadly testify to this, its programme to protect seedlings against goats in Mali having lasted only as long as the distribution of food.

Experience in improving pastoral resources has in any case demonstrated that improvement is not enough in itself. A certain number of complementary factors must be taken into account to make it more effective. As an illustration, we shall take three of the main constraints encountered.

### 3.1.1 The nature of the technology adopted

In the area of Boni, ODEM provided a borehole equipped with a solar pump in 1977. After a few months' use, the pump broke down at a crucial period of the year. Despite their goodwill (numerous trips to the project headquarters, payment of dues, etc.), it was clear that the repair was beyond the means of herders: costs, problems in spare part supply for solar pumps, technology not yet mastered at the local level, etc. The repeated delays and breakdowns brought a temporary scattering and demotivation of the pastoral group organised around the borehole. Fortunately, the project subsequently abandoned this water drawing technique. However, by installing a new pump working off a generator, ODEM does not seem to have altered the nature of the problem facing the herders, despite the fact that there are now different sorts of technical breakdown.

The FAO is implementing a project of reforestation and recovery of impoverished soils, using cuttings and erosion control dykes, in the Keita arrondissement of Niger, funded by Italy, the WFP and the Niger government. After several years of operation, it has been noted that women are by far the major participants. "The technical operation of reclaiming plateau and glaciais land was undertaken by qualified staff and mechanised brigades. The method of applying the technique cannot be replicated by the population" (Rochette 1989). Although the technique of cuttings for replanting hills and slopes is theoretically replicable, it arouses no enthusiasm with beneficiaries for quite different reasons.

### 3.1.2 Expected economic results and the economic environment

"In Keita, activity to conserve water and soil demands very hard work for a very limited (economic) result which is not guaranteed for each individual. No peasant took cuttings himself for himself, any more than he constructed dykes of the PDRI/Keita type in his fields" (Rochette 1989). In fact, pastoralists or agro-pastoralists also take account of their own capacity to implement proposed activities .

Both the Oxfam fodder tree plantation programme in Turkana and the VSF programme to regenerate riverine fodder grasses in Mali realised that these activities brought a greater demand for labour from pastoralists who also had to deal with rural exodus, field work and other necessary activities (C. Oxby 1989).

Using the example of the ACORD pastoral hydraulics programme in MALI, it is possible to place this type of difficulty in the context of the herders' economic environment and its consequences for their participation.

Begun in 1982, this programme digs pastoral wells and installs handpumps at existing boreholes. The methodology stresses the fact that all work must be carried out through pastoral organisations both to strengthen them and to use them as a mobilising structure for the beneficiaries. The herders' participation was required in three ways: in choosing the site of the water point, a contribution in kind (supply of meat for ACORD well diggers during the well digging period and supply of unskilled labour) and in cash, paying a fixed sum for the maintenance of the handpumps.

During the first two years, herders' participation in this programme was very satisfactory. As of 1985, the impoverishment of pastoral communities following the drought led to a decrease in participation and difficulty for the pastoral organisations in mobilizing their members :

- the decimated herds made it impossible to supply meat for the well diggers
- the extreme mobility of the pastoralists seeking water and grazing for their animals reduced their presence at the sites
- the drop in purchasing power made it impossible for the cooperative sectors to pay their dues to maintain the pumps.

### 3.1.3

#### The link between improvement and management

In the case of Keita, the pastoralists were opposed to development of the plateaux, "because they fear they will lose their rights to them subsequently" (Rochette 1989), showing the need for the project rapidly to draw up an appropriate contract. In Turkana, the rights of the people who planted trees were neither recognised nor supported by the local authorities, which led to demotivation. In Mali, the regenerated fodder areas are at the centre of permanent conflicts between those who worked on them and other pastoralists with regard to exploitation rights, in view of the fact that these areas were open to all prior to the regeneration work.

It is obvious that the heart of the problem is at this level. Resource management implicitly involves improvement of resources and improvement of resources itself must be undertaken within the framework of sound management.

### 3.2 Management of pastoral resources

Throughout Africa, "modern" pastoral organisations with various names (group ranches, pastoral associations, management committees, etc.) have tried to manage resources in different ways (enclosed areas, small dairy units, management of areas immediately surrounding wells or entire rangelands, etc.).

These various experiments began long ago. Thus, Lesotho began its attempts to manage its highlands in 1930 within the framework of western colonization, before seeking more participative solutions for pastoralists on its accession to independence in 1966. In Kenya, the first attempts go back to the middle of the 1960s. In the Sahel, they only began in the 1970s.

In view of the fact that pastoral resources represent the main production factor in pastoral systems, their management poses the most important and most complex challenge for pastoral associations. Amongst the experiences considered, some have been totally stopped (Thaba Tseka Association in Lesotho) or put on the back burner (ACORD Mali's expensive rangeland management programme), having failed to overcome their problems, while others continued despite multiple constraints.

- 1) The first constraint on management of resources is that they are becoming scarce. Attempts at management are very often disrupted or indeed wiped out by the arrival of drought or by the appearance of its recurrent effects.

The SODESP borehole management committees bear witness to this. The plans for rotation and exploitation of pastureland around the borehole ceased to operate as soon as drought set in. As the water was free at the time, the borehole became a focus for herders from the banks of the Senegal river. Apart from the direct pressure of the livestock on the rangeland, this movement contributed towards a reduction in pastureland as a result of the extension of cultivation, the latter fostered by a new desire to settle around a free water supply.

With ACORD in Gao, the rangeland management programme experienced the same setbacks, to such an extent that the good resolutions made and applied in good years tended to go up in smoke in the face of frenzied herders set on uncontrolled and sometimes even suicidal exploitation of available resources.



Also with reference to ACORD, a contradiction was noted. Abundant pasture tends to mean that management is not operational when annual needs are met. The herders think it is not necessary to make any additional effort as long as management has no effect on the food security of their livestock.

2. The scale on which land is set aside or managed may also be a constraint. Be it large or small, it poses a problem for the pastoral organisations in terms of management capacity. ACORD attempted to set aside pastures on whole rangelands, without taking account of the monitoring difficulties inherent in geographical extension as a result of scattered living patterns. It became clear that the herders were not in a position to set up a rigorous and effective control system everywhere at the same time.

Other experiments in Sudan, Lesotho, Botswana and Kenya also show that, even on a small scale, "set-aside pastures" can suffer from degradation (Oxby and Devitt 1985), because when they are opened up, they are literally besieged. The constraint in terms of participation and communication, especially for large areas, comes from the fact that consensus and respect for same must be achieved through broad, regular consultation, in which pastoralists are often unable to take part because of distance. This weakness in representation can only have negative consequences for such a complex decision making mechanism.

3. Herders consider water and pasture of transcendental origin (A. Maliki 1989) and the resulting perception of drought may be fatalistic. It must be acknowledged that this attitude is not an incentive for management. Some experts have therefore proposed beginning to manage resources around key points having market value such as water (J. Ridell 1982), which could be excluded from excessively open access, while encouraging financial contribution from the herders. Unfortunately, even in cases where private wells have been built, the problem recurs in the event of drought (G. Faye 1983).
4. Despite the aforementioned difficulties, it is always necessary to have at least a legal framework for resource management, even if it is unsatisfactory.

In Senegal, despite inter-ministerial decree no. 6057 of 28th May 1983, setting the modalities for user participation in the running costs of the pastoral borehole managed by SODESP, payment for water was never enforced in the absence of an appropriate legal framework or governing body. Setting prices for water supply was always left in abeyance until the law of 11th May 1984, which provided the necessary legal framework for the water point committees to take action.

Nevertheless, delays in applying this law led to further deterioration of the situation until the issue of decree no. 85066 of 19th January 1985, granting rights to the boreholes to the water point committees and ministerial ordinance no. 005180 of 13th May 1985, establishing charges for water supply from boreholes (Ndong 1986).

5. The degree of wealth or power of certain members or persons external to the organisations may have negative effects on management efforts. This is illustrated by the case of heads of fractions who took money or presents in exchange for letting outside herds enter prohibited areas, or who misappropriated funds collected from fines (ACORD 1985). This also affected ODEM in the immediate vicinity of the regional capital, where the centre of decision-making is very often not found in the managed areas, but rather in the hands of traders and officials in town who use their influence to gain access to the rangeland. This external influence becomes even more dangerous when it leads to client relationships with the state, which tend in the long term to exclude traditional users from their normal grazing areas.
6. Attempts to manage a given area must not be the result of a mere technical or economic concern which ignores local management practices and structures. The creation of artificial ranches in East Africa is the best example of attempts to imprison herders within patterns which do not suit them (C. Oxby and Devitt 1985, Moses Olang 1982, Swift and Lane 1989). The symptoms of the straitjacket are as follows:
  - the gap between the herders' priorities and those of the decision-makers. Many herders have not enough animals to provide for their families and are therefore neither interested nor prepared to reduce the size of their herds, whereas decision-makers have always considered ranches as structures to stimulate destocking, livestock productivity and rangeland management. The herders much appreciated title to pastureland and access to funding to invest in water points and anti-parasite dips, whereas the promoters were looking for an increase in the rate of livestock marketing.
  - a gap between traditional leadership structures and management committees. Although the status of ranch members is based on the idea of a family having customary rights within the ranch, the legal representatives are not the traditional chiefs, but are usually young people who have received a few years formal education or individuals who have other commercial or administrative interests beyond the ranch.

- the non-convergence of ecological conditions and the system of allocation and access to pastoral resources. In view of the variability of rainfall, several ranches are not large enough to support all the livestock in dry years. Informal movements of livestock between different ranches, as used to happen traditionally, have thus resumed.
- a legal gap between the herders' satisfaction at having clear title to a specific area and the inability of the management committees to apply decisions taken in respect of non-reimbursed loans, as the only theoretical option is to seize the indebted ranch, which is quite obviously impossible in practice.

West Africa has not escaped this temptation either. In Burkina Faso, the experience of the collective ranching development centre (CAR) shows similar difficulties:

- "economic criteria predominated in the design and setting up of the project.
- The notion of losing private property in favour of collective management under the responsibility of the committee was not accepted by the herders, who saw in this a devious manoeuvre by the state to gain control of their livestock, in particular to raise the statutory taxes." In parallel, the project designers were seriously confused about the difference between collective management of rangelands for individual herds and the management of collective rangelands for a collectivised herd
- "The project was designed to deal exclusively with cattle production. Farmers who raise few or no cattle did not feel at all involved and did not join in the activity.
- herders living in an area or using it for transhumance, certainly had problems, but did not see how they could suddenly go from extensive transhumant herding to sedentary or intensive herding where they were supposed to manage their livestock to reimburse a credit as high as that which would be given by the project to install infrastructure and purchase inputs.
- As the area had been allocated to the project, herders not wishing to participate could not stay there. The choice came down to remaining and joining the system or leaving the zone to be developed. Most herders opted for the second alternative." (G. Tanga 1986)

7. Another important question relates to the way in which rights must favour the members of pastoral organisations without excluding possible outsiders. It is difficult to distinguish between the interests within pastoralist society on the one hand and the interests of herders and other socio-ethnic groups on the other. The tendency to try to confine pastoralists to so called animal production is indefensible. In some areas, herders use crop residues in the fields of sedentary farmers or have some pastureland in the agro-pastoral areas. Animals belonging to sedentary farmers also use rangeland under the political control of pastoralists in the broadest sense.

In view of the nature of these exchanges, the mobility of herders and the widespread migratory movements, an attitude seeking to protect or manage resources on the basis of a dividing line between rangeland and rainfed crops (Niger and Cameroun) or along an international frontier (Mali, Niger, Burkina) may seem both naive and derisory. Efforts at management in the sixth region of Mali never attempted this, still less did they prevent the Guelgodji Peulh from Burkina and the Wodaabe from Niger from driving their herds wherever there was water and pasture. In order to clarify further the question of rights to pastureland, experience shows that four factors must be considered:

- the problem must be approached not from the angle of "what belongs to everyone in fact belongs to no one", but rather in terms of exclusive rights on the one hand and residual rights on the other and the way in which these two rights may be complementary and quite distinct. Once this principle has been accepted, it must be applied to:
- the use of a single area by different groups. For instance, the whole pastoral range covering parts of Mali, Senegal and Mauritania (the programme areas of PRODESO, PDESO and the Guidimaka Integrated project respectively) was set aside exclusively for herders, whereas from time immemorial activities such as honey collection and charcoal manufacture have been of economic importance. To try to control or prevent bushfires in such an area without taking account of those who actually work with fire is an error which may lead to serious conflict.
- the use by a given group of several areas sequentially. It frequently happens, as with the Maasai, that people go beyond their traditional lands although such movements are preceded by negotiation. The SODESP experience has also shown how the groups around the boreholes were unable to exclude herders from clans or lineages which were not members, nor to avoid moving themselves towards ever more distant territories.

- The distribution of different rights within a pastoral organisation over a given area and different resources (trees in the case of the Maasai, wild grassland and lily ponds in the case of the Bellah Kel Tamasheq, Harrima in the case of the Peulh in the Niger delta, hostels and enclosures in Botswana).

This is the dilemma which confronts pastoral organisations regularly in seeking to manage rangelands. What flows from this is that exclusive rights should be preserved as a way to achieve rehabilitation and empowerment, while reciprocal rights are an ecological and social safety valve.

Nonetheless, it is necessary to understand better what already exists traditionally before seeking and employing new ways to apply such principles.

### 3.3 Improvement of animal health and husbandry

- 3.3.1 Background to the development of veterinary care  
The first contact between African pastoralists and veterinary science took place during the great immunisation campaigns which were carried out in colonial times. The good results and the effectiveness of preventive measures convinced the herders of the advantages of veterinary medicine (J. Swift, C. Toulmin, S. Chatting 1987).

Since then however, a gap has opened up between the growing demand for veterinary care and the actual provision of same. In most cases, veterinary services are far from the pastoral areas, confined to the capital or administrative centres, making access difficult or impossible for herders. It was necessary to bring the vets closer to the pastoralists. At the time, some countries had developed immunisation camps along the transhumance routes close to the grazing areas (S. Sandford 1983). However, this solution rapidly became inadequate, as the pastoralists now wanted and needed a permanent and no longer seasonal service.

The challenge was to move from centralised provision to a genuinely decentralised system allowing for frequent intervention.

The Chinese experience of barefoot doctors gave rise to the idea of applying a new approach to animal health on the basis of providing individuals from the communities with basic training (S. Stanford 1983).

Most if not all African countries adopted this approach, as is shown by the wide variety of names used: veterinary scouts, barefoot vets, veterinary auxiliaries, para-vets, grassroots veterinary worker, etc.

In parallel, despite the diverse institutional support supplied by major donors, the veterinary services themselves became aware of the need:

- to extend their scope to cover animal husbandry practices and environmental concerns
- to train their workers in accordance with this new need
- to use the pastoral organisation approach to become more effective and to make the herders take responsibility for the recurrent costs of veterinary care.

3.3.2 The methods used by the various countries include:

- a) removing veterinary care from the state sector  
This is currently being considered in Mali and is likely to be applied soon in Kenya.
- b) partial or total payment by herders of products which were hitherto free: mainly vaccines.
- c) Review of service provision
  - organisation of refresher courses in veterinary medicine for the veterinary services, complemented systematically by instruction in animal science and situational analysis.
  - developing the participation of pastoral organisations: the role played by pastoral organisations in terms of service provision may take two forms:
    - the first is limited in scope and in Mali at least relates only to participation of the pastoral organisations in vaccination campaigns (in this case, the pastoral organisations are responsible for collecting funds to cover costs, informing their members about the dates and places of vaccination and mobilising labour to handle the animals) or extended campaigns to poison predators (the pastoral organisations supply the bait and pay for the travelling and lodging costs of the veterinary workers).
    - the second is more ambitious and relates to preparing herders for the gradual take-over of animal health and sometimes animal science.

Teaching methods used vary:

- firstly, short training sessions for herders in recognising veterinary products, using equipment and managing stocks.
- subsequent follow up visits in the field by the extension services to check that work is going smoothly and to keep in contact with the pastoral organisations.
- the use of literacy and post-literacy training to improve and consolidate new skills. This method, which is particularly widespread in Mali and Senegal, provides literacy training for one or several groups of about 30 to 50 people amongst the members of the pastoral organisation. The officials, including the veterinary auxiliaries, are usually the first to be trained. The preparation and distribution of brochures on animal health and elementary husbandry techniques then allows the knowledge to be spread more widely within the communities.
- Use of audio-visual aids: preparing audio cassettes and videos on topics such as vaccination or castration discussed by herders during seminars. These cassettes may be used directly in other pastoral organisations or for further training of the communities where they were recorded.
- Finally, exchange visits between pastoral organisations with a view to developing a grass-roots communication network.

### 3.3.3

#### Constraints encountered

- a) The legal framework of veterinary intervention  
The first problem relates to the definition of the types of animal health activity to be carried out, the most appropriate level of implementation and the qualifications of the people who are to carry them out. The legal framework for veterinary intervention is basically the same throughout Africa. In Kenya for instance, it is organised around three points: the diagnosis of disease which is a duty for all citizens; the provision of veterinary care through surveillance of veterinary ontology and through restricting veterinary intervention by saying that "only a vet can work as a vet and take money for doing so"; the use of pharmaceutical products, making a distinction between two types of product, one of which may be purchased and used directly by pastoralists and the other requiring a prescription and being administered only by professionals.

However, with the planned privatisation of veterinary medicine in Kenya, these three principles will be more stringently applied and the clause dealing with veterinary practice itself will have to change, as private vets will most likely confine themselves initially to the rich zones, which will result in a reduction in services offered to the arid zones, which produce less profit (Oxfam 1989).

The second problem, which is linked to the first, is the reluctance of professionals to hand over veterinary care to pastoral communities. PRODESO's animal health programme was greatly delayed for this reason (A. S. Kane 1984).

- b) The motivation of government workers and their attitudes towards the local people.  
In some countries, working conditions for veterinary workers are particularly difficult (delayed salaries, insufficient equipment and means of transport, etc.), which explains why they are not very committed. It should be noted also that the attitude of some workers (disdain and condescension towards herders) contributes towards reducing the effectiveness of veterinary activity.
- c) The relationship between the quality of pastoral organisations and that of veterinary intervention.  
This is obvious. When pastoral organisations are operating badly, this has repercussions on the policy of veterinary intervention. The ACORD cooperative veterinary posts in Tessit and Inekar were greatly affected by the general tone of cooperative life (misappropriation of funds, authoritarianism, etc.) which hindered the herders' identification with this activity and led to supplies of veterinary products running out (D. Sylla 1985).
- d) Institutional linkages between decentralised veterinary care and extension services  
Confusion often arises about the status of veterinary auxiliaries who are torn between their duty to be at the disposal of the pastoral organisations, whence they came, and the desire of the extension services to consider them as merely a link in the veterinary chain which may be mobilised at any time for tasks which in fact are within the remit of the state services. This situation shows the vulnerability of the para-vets if they are not protected by their pastoral organisation, especially as it is the latter who pays them even if barely enough to cover their expenses (Swift 1988).



Another difficulty in institutional linkages may arise when there is a conflict between different technical services. This often occurs between cooperative extension services and livestock services, each thinking that the other does not perform its tasks on time or in the best possible way (D. Sylla 1985).

e) Restriction to specific needs

Veterinary care through pastoral organisations often deals only with large livestock. Moreover, the move from simple health care towards the animal science aspect of herding has yet to be made in most cases, with the exception of projects which consider this a central concern (ODEM, PRODESO, etc.).

The experience of the Intermediate Technology Development Group (ITDG) in Kenya did, however, show that para-veterinary organisation when applied to poultry-keeping can achieve notable success and can work with women (J. Young 1987).

Finally, it is important to take advantage of the pastoral organisations and veterinary auxiliaries, to listen to the herders and to exploit their vast knowledge of traditional veterinary science. There remains a lot to be done in this respect.

#### IV LESSONS FOR THE FUTURE

This small review has to some extent brought us back to our starting point. There is no such thing as a miracle solution or ideal pastoral organisation. However, some lessons may be drawn. It is important to take these on board in good time while seeking answers to certain issues.

##### 4.1 Political issues

The key questions are the following:

- who will benefit from setting up pastoral organisations? who will not?
- is there any room between the centralising tendency of some African administrations and the need to ensure genuine participation of herders at the grassroots?
- is it possible to direct or stimulate from the outside a process whose dynamics should come from inside?
- what influence will structural adjustment policies have on pastoral life?
- what priority should be given to pastoral areas in national development?
- how can priority be given to the most disadvantaged sectors within the pastoral organisations?

##### 4.2 Land tenure issues

The future of pastoral organisations in respect of resource management will be intimately linked to the way in which land tenure questions are solved. Furthermore, the land tenure issue goes beyond the narrow framework of renewable resources to affect the structure and the functional and economic viability of the pastoral organisations, as land represents the most important production factor in the pastoral areas. Suggestions for the future include:

- enlarging the concept of land tenure to include traditional rules
- defining groups holding collective or individual rights
- allowing reciprocal access agreements
- maintaining the existing flexibility of the land tenure code and methods of land use
- providing the best mechanisms for applying the code and
- better defining the role of the government services in relation to the land tenure code.

#### 4.3 Institutional issues

It is obvious that the institutional issue will have to be settled between the new and traditional organisations, small or large. Everything will depend on the aims set for the pastoral organisations and the levels of organisation which will offer the best chance of success in diverse contexts.

It is also obvious that the strength of these institutions will lie in their capacity to resolve their problems and those of their members. This capacity itself will depend on their power to negotiate and decide autonomously - if one is not to fall into the well known trap of creating institutions for the sake of it.

Despite the praiseworthy efforts of various African governments, there is still a lack of legal clarity around the idea of pastoral organisations. The shifting legal terminology bears witness to this, as does the frequent inadequacy of the overall legal framework within which these pastoral organisations must fit. Looking more closely at two of the most important roles of the pastoral organisations, i.e. the management of pastoral resources and the channelling of community investments, it is clear in the first case that legal and institutional means may be lacking and that, in the second case, a frequent reproach is that pastoral organisations do not have legal status to gain access to credit or that they do not have any collateral. After all, the saying goes that one lends only to the rich.

The danger of entrapment in a vicious circle is thus real. It is therefore worthwhile pursuing efforts to:

- facilitate the creation of pastoral organisations
- define a clearer legal framework which will be understandable to herders, by adapting the current framework to the needs of the pastoral organisations
- bring government organisation and pastoral institutions together as quickly as possible .

#### 4.4 Economic issues

Some economists consider that pastoral development has had little impact so far. For this reason, others draw attention to the fact that current investments, which often come from loans granted to African governments, mortgage the future of generations to come. There is a growing trend towards the process of transferring economic and financial responsibility from the government to local and pastoral communities. If pastoral organisations are to take on such responsibility, they must be economically stable. They will have to demonstrate more and more clearly that the fact of being organised increases yields appreciably.

The pastoral organisations are already showing encouraging results in terms of cost sharing, economies of scale and collective benefit.

However, the economic issue may also be considered in other terms. What are the economic consequences of a lack of organisation? This question is vital, particularly in the case of drought. Experience shows that the existence of organisations attenuates the consequences of ecological crises by reducing economic losses.

In any event, the transfer of responsibility must enable individual economic interests to be protected within a collective organisation, as otherwise the membership and participation of the herders will have no meaning.

## Bibliography

Detailed list of research, training and documentation institutions and organisations dealing with pastoral organisations.

Information and research networks.

Research/training.

International organisations.

Non-governmental organisations.

Documentation centres.

On line information.

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## Annex

### Detailed list of research, training and documentation institutions and organisations dealing with pastoral organisation

#### Information and research networks

As pastoral activities are often carried out in regions far from communication centres, people working on livestock projects feel cut off from similar projects in other regions or countries. Sometimes they have no contact with other people in other parts of Africa who are having similar experiences and encountering the same sort of problems. This is why the exchange of information and experience is particularly important for them. A list of useful information sources is given below.

Two northern periodicals should be mentioned: The Pastoral Development Network Newsletter of the Overseas Development Institute (ODI) in London, which publishes research reports with a bibliography of new documents on pastoralism, in English. The Institute intends to have some selected articles translated and published in French. The Institute has a documentation centre containing several unpublished reports on pastoral development. Contact: Pastoral Development Network, ODI, Regent's College, Regent's Park, London, NW1 4NS. Tel: (01) 487 7413. Nomadic Peoples is published by the Commission on Nomadic People, International Union of Anthropological and Ethnological Sciences of McGill University, Canada. Contact: Nomadic Peoples, Anthropology Dept, McGill University, 855 Sherbrooke Street West, Montreal, Quebec, Canada, H3A 2T7. (Unfortunately, the Paris University publication on Pastoral Production and Society ceased to appear after issue no. 20, published in Spring 1987, due to lack of funds).

There are two new networking initiatives:

Oxfam's Arid Land Unit publishes Baobab two or three times per year in English and French, destined for the staff of NGO programmes in the arid regions of Africa who are interested in pastoral questions amongst others. Contact: Ced Hesse\ Olivia Graham, Arid Lands Unit, Oxfam House, 274 Banbury Road, Oxford, OX2 7DZ. Tel: (0865) 56777. Fax: (0865) 57612.

IIED's Arid Zone Programme publishes Haramata on a quarterly basis in English and French. Its aim is to establish contact and information links between those working in the arid zones of Africa on resource management (national governments, NGOs, researchers, donor agencies).

CIPEA network on sahelien grazing land. Research programme on monitoring of grazing land in nine sahelien countries, set up after the seminar held in Niamey in February 1989. Members of this network will meet periodically to develop comparative methodologies for the monitoring and analysis of data on pastoral resources. Contact: Pierre Hiernaux, CIPEA, B.P. 60, Bamako, Mali.

The Food Strategy Network has set up a livestock group which organises periodical meetings to discuss some policy problems relating to the development of the livestock sector in Africa. Contact: Groupe d'élevage, Réseau Stratégies Alimentaire, Solagrail, 13 Bd Saint Martin, 75003, Paris, France. Tel: 42.78.61.69.

R3S Research Network on Resistance to Drought is a research network dealing with several aspects of resource management in the sahelien region, including production systems and land use management by rural groups. Contact: Prof. N. Laomaibao, Institut du Sahel, B.P. 1530, Bamako, Mali and Mr. F-N Reyniers, IRAT, B.P. 5045, 34032 Montpellier, France.

RZA, the Arid Zone Network, is a network of researchers working in the arid regions of the world which aims to share knowledge about research on similar themes. Contact: J-C Bille, RZA, CEPE, B.P. 5051, 34033 Montpellier, France.

In Africa itself, networking initiatives are less frequent or perhaps less well known and less formal. NGOs in some sahelien countries are now beginning to set up informal working groups with the aim of improving the exchange of ideas and information on their experiences in pastoral development. Oxfam has organised a series of seminars on pastoralism and development in Kenya, attended by members of Oxfam Kenya and other NGOs working with herders on different projects in Kenya. In December 1988, a seminar was held on pastoral land tenure in Southern Africa, in Arusha, Tanzania. This seminar brought together the staff of several NGOs and grassroots organisations working in the pastoral field and having special interest in land tenure problems. A coordination committee was set up to monitor the results of this seminar and to act as a contact point in future. Contact: Betty Wamalwa, East African Interim Pastoral Committee, c/o African Centre for Technology Studies, P.O. Box 45917, Nairobi, Kenya. Tel: 505920. Telex: 25481.

#### Research/Training

The Centre for Development of Co-operative Organisations and Economic Development has published an inventory of research and training institutes dealing with development in Africa. Available from the OCDE, this inventory gives a wealth of detail on the different institutes. Contact: Publications, OCDE, 2 rue Andre Pascal, 75775 Paris, France.

The Pan African Institute for Development has training programmes for government and NGO staff, specialising in rural development. Contact: IPD, B.P. 1756, Ouagadougou, Burkina Faso.

VEERU/PAN Livestock Services, University of Reading, UK. The Veterinary Epidemiology and Economy Unit, set up in 1977, is an inter-disciplinary grouping dealing with the training of senior and intermediate staff in the planning and analysis of policy with regard to productivity and animal health. Contact: Dr. A.D. James, PAN Livestock Services, Dept. of Agriculture, Early Gate, P.O. Box 236, Reading, RG6 2AT. Tel: 0734 64888. Telex: 846029 PANLIV G. Fax: 0734 62431.

IEMVT, Livestock and Veterinary Medicine Institute for Tropical Countries. Research, training, support to projects and programmes dealing with animal production and health and the management of pastoral resources in tropical countries. An excellent documentation centre for everything connected with the tropical livestock sector. Contact: The Director, Documentation, IEMVT, 10 rue Pierre Curie, 94704 Maisons-Alfort, France. Tel: 43.68.88.73. Telex: 262017 F.

FAPIS Training Courses: Training in integrated pastoral development in the Sahel, a joint UNDP, UNSO, UNESCO, CILSS-Sahel Institute, EISMV (inter-state school for veterinary science and medicine) and ENCR (national school for rural workers in Bambey, Senegal) joint project. Began activities in 1980, with courses aimed at skills-upgrading of senior and intermediary staff in designing, planning, implementing and monitoring projects, programmes and agro-sylvo-pastoral development operations. Two training programmes:

- post-graduate course for training senior staff, 9 months
- refresher course for intermediary staff, 3 months.

218 staff from 13 sahelien and sudano-sahelien countries have been trained (as at end 1988). The FAPIS has also organised 8 regional seminars on different aspects of the agro-sylvo-pastoral sector in the Sahel and 6 study visits in various sahelien countries. FAPIS also tries to support the association of former trainees, the latter representing a potential network for further training, exchange of experiences and documentation. Contact: FAPIS Project, c/o UNESCO, 12 avenue Roume, B.P. 3311, Dakar, Senegal. Tel: 22.50.82/21.46.14/21.66.27. Telex: 51410 UNESCO SG.

ILCA/CIPEA training course for senior staff in the fields of animal production and health, resource management, livestock policy and economics. Research in various aspects of the livestock sector. Excellent documentation centre. Contact: ILCA, Training Programme, P.O. Box 5689, Addis Ababa, Ethiopia. Tel: 18.32.15. Telex: ILCA Addis 21207.

CESAO/GRAAP, West African Centre for Economic and Social Studies and research and support group for peasant self-reliance, Burkina Faso. Training of development workers at local level and development of a consciousness-raising and motivation programme at village level. The CESAO programme 1989-90 covers various sectors such as community organisation, cooperatives, environment and health. Contact: CESAO, B.P. 305, Bobo Dioulasso, Burkina Faso and GRAAP, B.P. 785, Bobo Dioulasso, Burkina Faso.

Third World Environment and Development (ENDA-TM) deals with several aspects of research, training and publications on natural resource management, including grazing land. ENDA has published a series of brochures prepared for training purposes by A. Maliki on sahelien pastoral societies. Contact: ENDA-GRAF, B.P.3370, Dakar, Senegal. Tel: 22.42.29/21.60.27. Telex: 51456 ENDA TM SG.

Wageningen University, Research on Sahelian Pastoral Systems and training courses on productivity of sahelien rangeland. Contact: Dept. of Theoretical Production Ecology, P.O. Box 430, 6700 AK Wageningen and Centre for Agro-biological Research (CABO), Bornsesteeg 65, P.O. Box 14, 6700 AA Wageningen, Netherlands.

Christian Michelson Institute, Bergen, Norway. Research into pastoral systems in Sudan and Ethiopia. Contact: Johan Helland, Christian Michelson Institute, Dept. of Social Science and Development, Fantoftvn. 38, N-5036, Norway.

In Sweden, the main researchers into pastoral systems are based at the Dept. of Social Anthropology, University of Stockholm, S-10691 Stockholm, Sweden. Tel: (08) 16 20 00 and at the Scandinavian Institute of African Studies. Research programme in collaboration with Somali Academy of Sciences, on improvement of camel production in Somalia. Contact: Prof. Anders Hjort, Director, SIAS, P.O. Box 1703, S-75147 Uppsala, Sweden. Tel: (018) 15.54.80.

In England, the main researchers into pastoral questions are Dr. Jeremy Swift, Institute of Development Studies, University of Sussex, Brighton, BN1 9RE. Tel: 0273 606261. David Seddon and Nick Abel, School of Development Studies, University of East Anglia, Norwich, NR4 7TJ. Tel: 0603 56161.

The Wisconsin Land Tenure Centre has research programmes into various land tenure aspects of development, including pastoral areas. Contact: Land Tenure Centre, University of Wisconsin-Madison, 1300 University Avenue, Madison, Wisconsin 53706, USA. Tel: (608) 262 5538. Telex: 265452.

In France, the main universities in pastoral development are the Centre of Tropical Geography at the University of Bordeaux and the University of Rouen. The Institute of Regional Development and Environmental Studies in Montpellier has just begun a research and ecological monitoring programme in Gao region, in collaboration with the ISFRA in Mali.

#### International Organisations

The FAO has a group dealing with rangeland management and land tenure problems. Contact: James Riddell, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy. Tel: 57971.

UNESCO's MAB programme covers research and pastoral resource management and has ongoing programmes in the north of Kenya, Tunisia and Lesotho. Supports the FAPIS training programme mentioned above.

The ILO deals with rural employment questions, including the livestock sector. The ILO has recently published a report by Brigitte Theubaud on herders and development in Niger: What future for sahelien herders? Contact: Responsable Sahel, ILO, CH-1211 Geneva 22, Switzerland. Tel: (22) 99 61 88.

IFAD, which has two major projects in Niger and Mali, deals with pastoral management questions and the role of pastoral associations in the development of this sector. Contact: Responsable Mali/Niger, IFAD, via del Serafico 107, 00142 Rome, Italy.  
Tel: 5459452. Telex: 61416.

ILCA/CIPEA mentioned above.

#### Non-Governmental Organisations

This list covers several NGOs with experience in animal production and health in sahelien countries.

Veterinaires sans Frontieres works in several countries on the training of para-vets, reconstitution of herds, rehabilitation of grazing land and poultry-keeping. Contact: Dr. Bruno Rebelle, Director, VSF, 12 rue Mulet, 69001 Lyon, France.  
Tel: 78.27.77.76. Telex: 389000.

The Intermediate Technology Development Group has programmes in Kenya, Sudan and Zimbabwe in Africa. Para-vet training programmes in Kenya and India. Contact: Agriculture and Water Programme, ITDG, Myson House, Railway Terrace, Rugby CV21 3HT.  
Tel: 0788 60631. Telex: 317466 ITDG G.

Oxfam gives support to animal production and health programmes in several African countries, as in the case of ACCOMPLISH in Sudan mentioned in the body of the document. For a general view of such work within Oxfam programmes, contact the Information Network on Arid Lands (RITA), Oxfam House, 274 Banbury Road, Oxford, OX2 7DZ.  
Tel: 0865 56777. Telex: 83610. Fax: 0865 57612.

ACORD, Agency for Co-operation and Research in Development, has projects dealing with pastoral development in sahelien areas, particularly in the sixth and seventh regions of Mali.  
Contact: ACORD, Francis House, Francis Street, London, SW1P 1DQ.  
Tel: 071 828 7611 and the Coordinator, ACORD Project, Gao, Mali.

IUCN, International Union for Nature and Natural Resource Conservation, has several projects linked to the management of resources by local communities, including grazing land. Pilot projects in Mali, in the interior delta of the Niger river (in the Air-Tenere area of Niger). Carries out studies on management of fauna in pastoral regions, e.g. the Ngorongoro national park in Tanzania. The Sahel Unit of the IUCN has recently published studies on the Sahel, 1989, which contains sections on food production, rainfall, conservation areas, land tenure code and conservation of pastoral resources. Contact: Per Ryden, Director, Sahel Unit, IUCN, Avenue du Mont Blanc, CH-1196 Gland, Switzerland.  
Tel: (22) 647 181. Fax: (22) 644238.

## Documentation Centres

The Club du Sahel Documentation Centre, 94 rue Chardon Lagache, 75016 Paris, France, publishes an annual bibliography of all new documents in its collection, covering several aspects of sahelien development. Contact: Mme Beudot, Documentation, Club du Sahel.

IBISCUS, an information system on developing countries, with access to 50,000 bibliographical references and 900 descriptions of public and private French cooperation agencies. Enquiries by telephone or mail to IBISCUS, 1 bis avenue de Villars, 75007 Paris, France. Tel: 45.51.93.12.

AGRIS, information systems set up by the FAO on several aspects of world agriculture with a database of 1,600,000 bibliographical references, accessed by Agrindex - monthly bibliography in English, French and Spanish. On line access by DIMDI or DIALOG (details below). AGRIS can give you a bibliography on certain key words. Contact: Mr. A. Lebowitz, Head of AGRIS Co-ordinating Centre, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy. Tel: 57971. Telex: 610181 FAO I. Fax: 6799563.

TROPAG, bibliographical database on tropical agriculture. Contact: TROPAG Documentation, Royal Tropical Institute, Mauritskade 63, 1092 AD Amsterdam, Netherlands.

CAB Abstracts, in particular rural development abstracts, gives a bibliography by key topics on several aspects of tropical agriculture. An annotated bibliography is published quarterly. Direct access by DIMDI and DIALOG. Contact: CAB International, Wallingford, Oxon, OX10 8DE. Tel: (0491) 32111. Telex: 847964 COMAGG G. Fax: (0491) 33508.

### On-line access

DIALOG Information Services, 3460 Hillview Avenue, Palo Alto, California 94304, USA. Tel: (800) 227 1960. Telex: 334499 DIALOG.

DIMDI Information Services, P.O. Box 420580, Weissshausstrasse 27, D-5000 Koln 41, West Germany. Tel: (0221) 47241. Telex: 8881364.