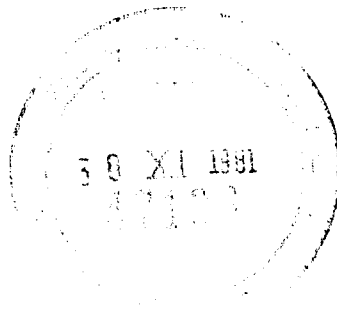


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the future of pastoral peoples

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**proceedings of a conference held in nairobi, kenya,
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sedentarization of nomadic pastoralists and “pastoralization” of cultivators in mali¹

Salmane Cissé, *International Livestock Centre for Africa, Bamako, Mali*

Pastoralists are sometimes defined as groups for whom pastoral activities (herding and caring for animals) account for more than 75% of working hours and provide more than 50% of total income. They are also defined as groups for whom milk and dairy products supply more than 20% of caloric intake (Swift 1979b).

Such definitions, if accepted, greatly increase the number of people considered pastoralists (between 4 and 5 million in West Africa — Swift 1979b) and remove any notion of purity of activity from the term. In other words, herders make their living by practicing some combination of three activities — husbandry, agriculture, and trade. Thus, although subsistence of the herd is the dominant concern of pastoral activity, the life or survival of the herders depends on their ability to deal with not only the bucolic realm but also the realms of agriculture (even if just in the exchange of products) and commerce (the introduction of animal products to the marketplace).

The pastoral economy of Africa in general and Mali in particular is thus linked to both an agricultural and a commercial economy; any study of the future of pastoralism in this region necessarily involves an examination of current interrelationships as well as a consideration of possible future interconnections. It is in this perspective that I shall attempt to trace the growing tendency among nomadic pastoralists to settle in one spot and among cultivators to turn to livestock rearing as a major occupation rather than merely a sideline.

sedentarization

the mobility of herds

The primary concern of all peasants, whether cultivators or herders, African or otherwise, is to have a secure food supply. They pursue this goal within the cultural boundaries of their ethnic group, within the limits imposed by the topographic and climatic conditions, and with the aid of tactics designed not necessarily to eliminate obstacles but to allay the effects of obstacles or turn them to advantage. Whatever form these tactics take, they are essentially characterized by:

¹ This paper was originally French and was translated into English by IDRC for inclusion in these proceedings.

- The use of several types of animals;
- The existence of small animal and family units;
- An ecological rationality involving movement, the distances involved depending on the particular circumstances; and
- A dependence on agricultural communities.

These elements do not always appear together, and, when they do, they do not all have the same importance. Ecological grounds, which are often advanced as an explanation for the movement of nomads, do not always account for certain situations where the nomads or part of their herds remain in one place despite less-than-ideal living conditions.

The sedentarization of nomadic populations may be viewed as a movement within society, a continual process of social structure modification leading to dramatic change in the physical management of space as well as profound alterations in the customs and behaviour of social groups. The adoption of a sedentary lifestyle restricts the individual's social contacts to a physicosocial space, where the physical and social advantages of the open nomadic life must be relinquished. In other words, whereas nomadism is a free and natural way of life (the search for the natural conditions favourable to human life, wherever they be), sedentation involves direct intervention by humans in the natural or ecological processes of a spatially restricted environment. Here, ecological conditions are not always adapted to; they are created — at the expense of certain social customs and sociological attitudes proper to nomadic life as well as certain features of the physical landscape. The proximity and the permanent nature of spatial occupancy that inevitably accompany settlement both alter and enrich the relationships of an individual with others.

The sedentarization of traditionally nomadic populations rarely takes place because of concern for them or because of ecological factors. Usually, it is merely the outcome of a particular social, historical, and economic situation rather than the result of concerted, studied action on the part of those involved. Sedentarization is a tactic adopted by the nomadic herder to overcome or make the best of a difficult situation. This is why the drought of 1973, while it led to a widespread migration of peoples toward supposedly better regions, also contributed to the settling of many who stayed to develop vacant land and make it agriculturally productive.

Although pastoralists view this conversion to agriculture as merely a temporary measure while they rebuild their decimated herds, their plans to return to herding seldom materialize. The phenomenon of sedentation holds an important message in that it can be a symptom of, or a solution to, problems affecting nomadic society as well as a reflection of (among other things) deep-rooted social determinants.

It is most important to recognize in this process the determining factors that, through their effects on a given society, compel its members to renounce their former identity (as nomadic pastoralists) and adopt a different way of life. The most apparent determinant is ecology, and, though important, it is seldom sufficient and is not even essential. Other factors are economic and social.

Nomadic herders who settle despite ecological factors generally have two practices in common: they maintain the mobility of their animals and they abandon single-species breeding. This is the case with Fulani herders of the interior delta of the Niger, where the major part of the herd continues to migrate between the Sahel (of Mali and Mauritania) and the rich pastures of

the flood plains of the Niger River. Another practice taken up by settled nomads is cultivation, although their attitudes toward it vary widely. For instance, the Fulankiriabe in the Gourma often neglect their herds in favour of agricultural work, bothering only to water them in the dry season and to milk them.

The process of sedentarization, which occurs despite inhospitable or hostile living conditions as a result of social, economic, and historical factors beyond the control of the individuals or their group, takes place on two levels. The first concerns physical space: a group begins to settle basically in one location while its herds continue to wander over a fairly wide area. The second is sociological: the group adopts a new way of life and adapts by raising other species or by making the land productive agriculturally. The current preference among pastoral populations in general for small stock is likely related to the drought, because they require less food and water than do large animals and reproduce faster.

economic and social constraints

Sedentarization is based on, and presupposes, the agricultural development of land that may previously have been used for raising animals. In cases where these lands are already available, and there is no objection to their use for agricultural activities by another group claiming ownership, the availability of skilled labour is the only hurdle to be overcome. In a traditional, livestock-based system, labour needs are few, and an increase or decrease in the number of workers has little or no effect on yield. In agriculture, however, the situation is quite different, as the size of the work force has a direct impact on production.

The semisedentarization of Fulani pastoralists in the Macina was possible under the Dina empire because of the existence of organized slave labour. The beginning of sedentarization among the Fulankiriabe can be traced to the development of a wage system based on a migration of young people, during the rainy season, from flooded zones to the unflooded areas occupied by the Fulankiriabe.

Indeed, the slowness of the process of sedentarization noted at the turn of the century is not so much a consequence of reluctance on the part of nomadic populations to abandon their wide-open spaces (although this feeling may well exist) as it is an indication of their difficulty in grappling with certain social, economic, and technical problems that the transition to a sedentary life would inevitably raise. The nature of husbandry (which is extensive), the nomads' total reliance on family as a source of labour, their lack of familiarity with agricultural techniques — all these hinder sedentarization.

Agriculture is something new for pastoralists; very few Fulani in the Macina have plows, and none of the Fulankiriabe do. Instead, they must rely on the services of those who already own plows — and who will work for others only after their own work is finished. Thus, even though they sometimes have draft animals, they come to depend on agricultural communities for labour or equipment, the hiring of which demands a cash outlay. Their emphasis on raising livestock declines in favour of laying in a store of grain not because of sedentarization but rather because they are obliged to draw on a sporadic source of labour that requires payment in cash.

The major socioeconomic factor encouraging sedentarization of pastoralists in this part of Mali is the imbalance between population and available resources, the most important of which is land. Agricultural production requires a much smaller plot of land than does livestock production; this difference in yield between traditional agriculture and husbandry leads to an increase in agricultural activities to the detriment of pastoral activities when land becomes scarce. Years of drought and population growth reinforce this trend.

The sedentarization of the Fulani herders has not come in the wake of a political decision (as was the case with the semisedentarization of the Macina Fulani in Mali during the reign from 1818 to 1862 of Seku Ahmadu) but rather in response to the combined effects of the drought (leading to a staggering loss of livestock) and various economic, social, and legal changes that have occurred or seem likely to occur in the management of herds and pastureland. And experience has shown that a plot of ground put to agricultural use is a more profitable proposition over the short term than is a plot developed by or for pastoral use, given the same climatic conditions.

pastoralization

Two apparently contradictory trends characterize the rural society in this part of Mali: the transformation of nomadic herders into cultivators and the tendency for cultivators to become herder-farmers. In reality these two movements are complementary. Bridging the gap that exists or existed between cultivators and pastoralists is not a new concept *per se*; the impetus that motivates some to cultivate fields is the same as that which induces others to raise livestock — that is, the search for a socioeconomic balance that will result in a steady food supply. The approach used by both those involved in agricultural production and those involved in pastoral production is the same; they try as much as possible to minimize human intervention in the natural development of plant and animal species. Although these populations have devised solutions for many social, economic, and physical problems — a good example being the adoption of animal and plant species adapted to the harsh climatic conditions — the separation of cultivating and livestock-rearing activities does not provide for a comprehensive strategy to deal with natural disasters and current problems.

Moreover, herders in this region of Africa (Kal Tamacheq, Fulani, Moors) have always participated in agricultural activities through their domination over certain “servant” classes — specifically, the Bellah, Maccube, and Haratine — and accordingly benefited from the results of agricultural work. The “purely” agricultural workers, in turn, whether ex-slaves or members of other ethnic groups, have never been blind to the advantages of raising small stock (sheep and goats and beasts of burden such as donkeys and horses) to complement and support agricultural activities.

The seemingly new element lies in the fact that the current trend toward agropastoralism appears to be a general phenomenon occurring among both herders and cultivators and exceeding the limits of traditional agropastoralism, where the complementary nature of activities is usually apparent only as far as the exchange of commodities (milk-millet, manure-millet, and so on) is concerned. It is from this perspective that I shall examine cultivators’

increased interest in and respect for the traditional occupation of livestock raising.

Livestock, as a capital good, represent a much more secure investment than do crops, as the mobility of herds is in both the physical and the sociological sense (use of the system of loans that exists everywhere in one form or another, division of the herd to suit various geographical areas, and so on) and allows the owners to confront natural disasters with minimal disruption of their lives.

There are two reasons for the use of livestock as a long-range investment. First, grain fed to livestock promises greater profits than does stored grain; it not only improves the quality of existing animals but encourages long-term increases in herd size, whereas stored grain not only does not increase in weight (an upsurge in its value is merely a reflection of market speculation in poor seasons), but in fact depreciates in value after 3 years and becomes inedible. Alongside this crucial economic argument runs another significant one of a social order: to wit, there is social prestige, which can also be seen in monetary terms, in ownership of a sizable herd.

In their traditional form, pastoral activities (especially in relation to production) involve fewer people than do agricultural activities and result in a higher ratio of goods produced per unit of labour. This explains some of the popularity of husbandry within traditionally agricultural social strata.

Proof of this popularity can be seen in the massive investment in pastoral activities on the part of agriculturally based populations. Thus, besides the agricultural surplus, which is converted into money for buying livestock (perhaps just one or two goats), the cash flow generated by the rural exodus or siphoned from the wage or trade income of family members is often used to set up or increase the family herd. The alleged greediness of Fulani herd owners (payment in kind is usually limited to giving the labourers milk from the first calving, clothing them, and allowing them to keep a 1–2-year-old bull calf, depending on their length of service) or their alleged poor management of the animals in their care induces farmers to look after their own animals by releasing a member of their family from agricultural duties or by hiring a paid herder.

The use of hired workers entails client relations as well as class relations, an outcome of the quest for profit. Cost effectiveness did not figure among the preoccupations of the livestock breeder in former days, but it is coming to the fore now that the process of pastoral production is undergoing transformation. Instead of being content to rely on natural development (natural increase of the herd without control of breeding, use of natural grazing areas) herd owners prefer, for example, to raise oxen to rent out for farm work or transportation — in the Mopti area one breeder is reputed to have 200 pairs of oxen for rent. Some are now following the price levels in various markets so as to sell when prices are high and buy when they are low, rather than simply selling part of the herd as dictated by social needs such as marriages or baptisms.

What is most striking in this regard is the startling change in mentality among herders of the Central Niger Delta in Mali: pastoral activity, through its links with agriculture and trade, shows signs of turning into a form of agribusiness. The association between husbandry and agriculture may be at the root of this trend: the Rimaybe of Macina use plows and carts and rear bull calves from their herds to replace aging oxen.

Although, until recently, the association between husbandry and agriculture often appeared as an alliance between two distinct ethnic and social groups (primarily nomadic pastoralists and sedentary agriculturalists), it is now undergoing a transformation that means increasingly pronounced integration and intermingling of the two ways of life. The cultivator is finding it ever more necessary to be a herder and the herder, a cultivator.

A partial explanation, and perhaps a parallel, for these developments, which give rise to a readjustment in mentality within both production groups, can be found in changing soil and land-use characteristics. To meet the needs of an expanding population, farmers have expanded not only the amount of land under cultivation but also the cropping period. The result has been reduced soil fertility. At the same time, growing numbers of cattle and other livestock are concentrated within a shrinking amount of pasturable space, and the result is the deterioration of pastureland. The effects sharpen the long-standing conflict between users of agricultural space and users of pastoral space. In terms of principles, this conflict can be viewed as the struggle between two value systems: the concept of personal or family property, providing for limitations in space and time on the use of pastures, opposed to a system without private ownership that implicitly sanctions the destructive agricultural or pastoral development of land — in practice, the remodeling of the physical landscape through unregulated exploitation. The solution, which would commit both sides to an investment in management of land areas, consists in guaranteeing everyone some form of ownership, the sole criterion being that the land not be misused — in other words, ensuring all involved the use of the land and the yield therefrom on a lasting basis.

conclusion

The problems faced by herders, whether of a physical nature (decrease in the number of animals that can be accommodated, because of unprecedented growth in herds and the overgrazing of grasslands) or involving human factors (the refusal, for economic and social reasons, to thin herds by selling or slaughtering some “unneeded” animals), can be remedied through an intensification of agricultural and commercial activities. Headlong flight and other rash, often apparently irrational, reactions to natural disasters and certain market phenomena are characteristic of today’s herd owners, sedentary or nomadic. Deliberate, possibly concerted, efforts — such as organizing use of pasture — to encourage herders to settle in given locations would undoubtedly render traditional pastoral practices obsolete and would aid breeders to exploit the full potential of their herds.

The problems of stock raising include the opposition between pastureland and agricultural land, which takes on the appearance of a conflict between the traditional and modern use of space inasmuch as agriculture, encompassing flood control methods and new techniques such as plows and fertilizers, seems to be more advanced than does husbandry where even the use of feed supplements is not yet common. In the past, an association between those involved in stock rearing and those in agriculture resolved the conflict; however, today, an integration of pastoral activities with agricultural activities, and vice versa, may be the only solution.

The integration already taking place in the operation of development goes beyond the traditional association between husbandry and agriculture,

whereby different ethnic groups with divergent and even conflicting ways of life are simply juxtaposed in space and time. In true integration, investments in pastoral activities profit agriculture and those in agricultural activities benefit stock breeding. The current trend, if it continues, will inevitably lead to the demise of traditional pastoralism. In its place will emerge the rational development of herds and grazing land, which will include a reduction in the current livestock population as well as its confinement to relatively fixed areas. Better management of fewer animals is a response to the systematic theft of animals, known in the region as *teréré* or *jula-basel*. Herders' associations have been unsuccessful in attempts to curb this practice.

The disappearance of the traditional pastoralist will mean that herding will no longer be considered an ethnic specialization characterized by indisputable technical know-how and a certain mythical, esoteric knowledge; it will, instead, be recognized as an economic activity that, as such, is concerned with yield and profitability. For one to be able to speak of yield and profitability, the benefits obtained must surpass the strict marketing profits, based on the interplay of supply and demand, which prove illusory in the medium term.

discussion

Bourgeot: The presentation of Salmane Cissé is interesting, because he has described the actual situation in the Gourma. It confirms what Xavier de Planhol has called "sedentarization through impoverishment" of nomadic pastoralists. It further analyzes the conditions under which certain cultivators adopt herding. Ovines are being commercialized in increasing numbers, a tendency that rests on increasingly large monetary needs. Such needs are characteristic of the Tuareg but are even more salient among the Fulani of central Gourma, who began to herd ovines around 1973. The movement to sedentarization by the Fulankiriabe began a relationship with the Tuareg who dominated them by right of first arrival.