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# Conflicts between farmers and herders in north-western Mali

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Translated from French by Lou Leask

### About the author

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## Acronyms

ADISSAH	<i>Association pour le Développement Intégré dans la Savane et le Sahel</i> Association for integrated development in the Savannah and the Sahel
BACR	<i>Bureau d'Appui Conseil aux Collectivités Rurales</i> Bureau for local government support and advice
NGO	Non-governmental Organisation
NRM	Natural Resource Management
ODIK	<i>Opération de Développement Intégré du Kaarta</i> Operation for integrated development in Kaarta
PREGESCO	<i>Prévention et Gestion des Conflits liés à l'Accès et au Contrôle des</i> <i>Espaces agro-sylvo-pastoraux</i> Prevention and Management of Conflicts relating to the Access and Control of agro-sylvo-pastoral Areas
Sida	Swedish International Development Agency
SLACAER	<i>Service Local d'Appui Conseil, d'Aménagement, d'Équipement Rural</i> Local service for support, advice, development and rural amenities
SLRC	<i>Service Local de la Réglementation et du Contrôle</i> Local service for regulation and control

# Preface

This publication presents the main findings of a study undertaken with the support of Helvetas Mali as part of the identification and formulation phases of the PREGESCO project. The aim of this project, which is co-funded by the Swedish International Development Agency (Sida), was to help prevent and manage conflicts related to access to and use of agro-sylvo-pastoral areas.

Through this study, Helvetas Mali gained much valuable knowledge about the traditional institutions and mechanisms for resolving and settling conflicts, and how natural resource management in the area has changed over time.

The study findings were presented at the local level so that they could be shared with local actors and feed into their thinking and growing awareness of change in the area. This is important in conflict management, and one of the ways it has helped reinforce the programme approach is by making it more sensitive to the principle of “Do No Harm”.

Helvetas Mali hopes to be able to use this paper to disseminate information that will filter into approaches and research undertaken by other development actors working on the same theme or in similar areas.

To find out more about the programme, Helvetas or Helvetas-Mali, or to exchange ideas and information, go to the website at [www.helvetas.org](http://www.helvetas.org) and look for the link with Mali or staff email addresses. The full study is also available through the author, who can be contacted at [sabrinabeeler@yahoo.de](mailto:sabrinabeeler@yahoo.de)

Map 1.



# 1. Introduction

## 1.1 Context and issues

This study was carried out in the context of the Helvetas Mali development programme “Conflict prevention and management in Kaarta and Fuladugu”, whose aim is to improve relations between farmers and herders. This paper presents the result of research conducted in 2003-2004 on natural resource management (NRM) and conflict over the use of natural resources in the regions of Kaarta and Fuladugu.<sup>1</sup>

These two regions, which are located in the Region of Kayes in northern Mali (see Map 1), are extremely important to many transhumant and sedentary herders as well as large numbers of farmers. The most important natural resources for the local population, who are mainly Soninké, Fulani and Maure, are land, pasture, water and wood. Management and use of these resources are not only affected by major seasonal variations caused by the climate, but also by economic, technological, institutional and political change (colonial policies, independence, decentralisation, etc.).<sup>2</sup> As more and more farmland has come under cultivation and the number and concentration of livestock needing pastures have grown, so has the overlap between the interests of different natural resource users. Relations between farmers and herders have deteriorated as resources are increasingly over-exploited, and the economic and social cost of the ensuing (and sometimes bloody) conflicts has been very high.

## 1.2 Research objectives and methodology

The objective of this study is to assess the local institutions that regulate common pool resources, identify the causes of conflict and analyse the mechanisms for resolving them. This last point is primarily a matter of analysing the factors that influence the nature and conduct of negotiations, and examining the power relations between the different groups and sub-groups concerned.

The starting point for this study was a number of reports on the regions of Kaarta and Fuladugu, most of which were commissioned by Helvetas. As there is little scientific literature available on the subject (see Bibliography), this study is based on additional information gathered through interviews with civil servants, non-governmental organisations (NGOs) and key informants, particularly in the regions of Kingui and Kaarta. The study sites were selected in collaboration with ADISSAH (Nioro du Sahel and Diéma), according to their location in relation to various transhumance routes and their susceptibility to conflict between different user groups (see Table 1).

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1. Here, “natural resources” refers to pastures, land and water points, and “conflicts” to conflicts related to NRM.

2. Here, “institutions” refers to the formal and informal norms regulating interactions between different members of society.



<b>Table 1. Sites retained for the study</b>				
<b>DISTRICT</b>	<b>MUNICIPALITY</b>	<b>SITES RETAINED</b>		
		<b>Predominantly Soninké (or Bambara, in the municipality of Dioumara)</b>	<b>Predominantly Fulani</b>	<b>Predominantly Maure</b>
<b>Nioro du Sahel</b>	Troungoumbé	Troungoumbé		
	Diarrah	<ul style="list-style-type: none"> <li>● Diarrah</li> <li>● Dombone</li> </ul>	<ul style="list-style-type: none"> <li>● Toumboutchina (encampment in the vicinity of Diarrah)</li> <li>● Wailake (neighbouring encampment to Diarrah)</li> </ul>	
	Koréra-Koré	<ul style="list-style-type: none"> <li>● Koréra-Koré</li> <li>● Gakou</li> <li>● Djabagella</li> <li>● Gadjaba</li> </ul>	<ul style="list-style-type: none"> <li>● Fulani encampment of Gakou</li> <li>● Kompo</li> <li>● Ba-Kara (hamlet of Kompo)</li> </ul>	Falke (hamlet of Kompo)
	Banieré-Koré	Baniéré-Koré	Keitene	Rizzi
<b>Diéma</b>	Dioumara	<ul style="list-style-type: none"> <li>● Dioumara</li> <li>● Diguitala</li> <li>● Zambala</li> </ul>	<ul style="list-style-type: none"> <li>● Tonko</li> <li>● Mangara</li> </ul>	

The initial objective was to interview all local natural resource users in each site and its surrounding area: Soninké and Bambara farmers and agro-pastoralists, and Fulani and Maure herders and agro-pastoralists. In the event, time constraints meant that we had to focus on Soninké farmers and agro-pastoralists and sedentary Fulani herders and agro-pastoralists.<sup>3</sup>

Interview guides, questionnaires and natural resource maps were used to gather information during meetings with villagers, individual interviews (with Soninké farmers, Fulani herders and herders from the village or surrounding area, as well as married women, the elderly and young men) and meetings with target groups.

3. In this study, any reference to Soninké farmers or Fulani herders implicitly includes Soninké agro-pastoralists, who primarily see themselves as farmers, and Fulani agro-pastoralists, who primarily see themselves as herders.

## 2. General characteristics of the study area

### 2.1 The physical environment

Kingui, the study area, includes the area to the east of Niore du Sahel (see Map 2).<sup>4</sup> Natural resources in this area are subject to significant climatic variations over the two main seasons: the rainy season, which lasts from June to October, and the dry season, which lasts from October to June and can be divided into a cold dry period between October and January and a hot dry period between February and June. The availability and quality of resources are determined by considerable inter-annual variations in the climate, characterised since the 1970s by several increasingly closely spaced droughts and declining rainfall (Lachenmann, 1989).

Natural water resources in the area include perennial and semi-perennial waterholes and watercourses. All are dependent on annual rainfall. Vegetation is typically prickly shrubs and acacias in the north, bush savannah further south, and tree savannah in the extreme south (Cissé and Diallo, 2002). Natural resources in the study area are very scattered and vary unpredictably over time and space. According to Ostrom (1990), they can be defined as “common-pool resources”:

*The term common-pool resource refers to a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use (Ostrom, 1990: 30).*

*We define the concept of a common-pool resource based on two attributes: the difficulty of excluding beneficiaries and the subtractability of use (Becker and Ostrom, 1995: 113)*

### 2.2 Population

The Soninké are the numerically and politically dominant ethnic group in Kingui. Although they originally specialised in farming, most are now agro-pastoralists, known for their commercial activities and for migrating to other countries.

Other inhabitants of Kingui include sedentary and semi-transhumant Fulani, and, on a temporary basis, transhumant Fulani herders.<sup>5</sup> Most rear livestock, and some do a little farming. Some of the sedentary Fulani live in longstanding Fulani encampments, some in recently established Fulani hamlets near Soninké villages, and others in Soninké villages. The latter are often herders for the village, and are well integrated into the community. Some of the herders in encampments in northern Kingui are semi-transhumant, which means that only certain family members (usually the young men) take the family livestock on transhumance, while the rest of the family is sedentary.

4. The municipalities of Koréra-Koré, Troungoubé, Banière-Koré, Gogui and part of the municipality of Béma (Diéma District).

5. The term “transhumance” refers to structured migration, such as annual movement from site A to site B. With semi-transhumance, part of the family stays behind. Nomads move around on a more informal basis, following water and grazing. There is a gradual transition between these three forms of mobility.

Apart from semi-transhumant families, these herders only go south on transhumance when there is a drought and they can find no more water or fodder in the locality. However, even when they remain in the north, they are highly mobile and take their herds wherever they can find water or grazing.

There are different sub-groups of Fulani herders that can be distinguished by their origin and customs. In the study region, they include the Toranké, the Dangadjo, the Kaartanpoulo and the Diawambé.

The **Toranké** traditionally owned more livestock than the Dangadjo. They used to go on transhumance before the major drought years and were highly respected by the sedentary groups, who benefited from both the manure deposited as their livestock grazed the fields during the dry season and from gifts of milk and livestock. The sedentary groups would welcome the Toranké by digging wells and making sure they had what they needed to set up camp in the fields that were to be manured. The transhumant herders would often return to the same field each year, and thus built up close relationships with the host farmers.

The **Dangadjo**, on the other hand, have been sedentary since the arrival of Sheik Omar Tall in the 19th century.

The **Kaartanpoulo** or Kaartanké (“Fulani from Kaarta”) are another group. It seems that they are seen as being the ‘closest’ to the Soninké, in that two groups speak the same language and are linked by inter-marriage.

The **Diawambé** live among the sedentary Fulani.<sup>6</sup> They have longstanding status as intermediaries between the Fulani who live in the bush and sedentary groups in villages and towns (selling livestock, purchasing clothes, etc.).

Another group consists of young Fulani incomers who look after other people’s livestock. Many originate from Macina, coming into the region to work far from their family and friends in order to build up some savings.

The Maures are another significant group in Kingui. The Maures *blancs* mainly live in Mauritania, while most of their former slaves, the Maures *noirs*, live in Mali. This group is generally seen as having a less extensive knowledge of livestock rearing than the Fulani, and being more interested in livestock for their economic value. The Maures *blancs* mainly specialise in rearing high quality animals, which are given fodder, and also do a lot of trade. This group includes both sedentary and transhumant families living in encampments or Soninké villages. They also farm, and many of their young men seek paid employment at home and abroad, although this is becoming less common as farming plays an increasingly important role in their lives.

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6. Sidibé (1999) describes the Diawambé as primarily transhumant herders. However, as former merchants and intermediaries between the Fulani, who live out in the bush, and sedentary groups, I feel that it would be more accurate to classify them as sedentary.



Photo : Sabrina Beeler

Livestock market in Troungoumbé (District of Niéro du Sahel)

## 2.3 Productive activities

### Farming

The Soninké mainly produce millet, sorghum, groundnuts, maize, peas, okra and green beans. They also grow other market garden produce and tobacco, which are primarily produced by women to supplement the family income. Women are usually responsible for ensuring that the family has condiments and clothing and that the children go to school, etc., while it is up to the men to make sure that their families have millet and salt.

### Livestock rearing

Livestock in this area are reared under both sedentary and transhumant systems (see section 2.2). Every year transhumant herders follow the routes north in the rainy season (from Djoumara up to Mauritania) and south in the dry season. Some set up camp on cultivated fields during the dry season, in which case the farmer benefits from the manure left by their livestock. As the grazing becomes poorer two or three months into the dry season, when annual plants take over and water points dry up, the herds move south in search of fodder and new water points, feeding mostly on the millet stalks left in harvested fields.

The areas where transhumant herders stay, the duration of their stay and their itinerary are largely dictated by the availability and quality of water and grazing. Their movements appear to be determined by the requirements of their livestock and the location of water and grazing rather than the course of the common transhumance routes.

Most sedentary Fulani keep their livestock in their local area during the dry season, unlike the transhumant herders. However, nearly everyone sends their animals north to Mauritania in the rainy season, apart from those kept for their milk, which remain in the encampment. This departure is said to be timed to avoid using fields that are being cultivated – and thus to prevent conflict. The salt cures are another reason to head north, as herders believe them to be highly beneficial to their livestock.

Soninké that own more than a certain number of livestock often give them to herders to look after. These are usually Fulani who have never owned livestock or have lost their herd and become sedentary. Sometimes all the livestock in the village are looked after by one herder, in which case their Soninké owners are responsible for watering them. Although livestock belonging to the Soninké only go on transhumance when there is a drought, they are moved around the locality in order to make the most of the crop residues left in fields after the harvest.

One of the major problems associated with rearing livestock is theft. This generally increases at times when there are a lot of animals in the area, although it should be noted that the owners of missing livestock often assume that they have been stolen when they have actually gone astray. Relatively few animals tended by Fulani herders are stolen, and it seems that Soninké agro-pastoralists are more affected by theft. The Soninké suspect the Fulani herders or herdsmen who look after their livestock of being directly responsible for these thefts or being in league with the organised gangs operating in the region, and that these gangs are associated with the authorities. For their part, many herders blame the thefts on Soninké children. Lack of pastureland and fields blocking access to waterholes are further constraints to livestock rearing.<sup>7</sup>

#### **Supplementary activities: migration and waged labour**

Migration to other countries is most common among the Soninké and the Maures noirs. The latter tend to migrate in search of paid seasonal employment, particularly during major droughts, while the Fulani tend to try and find work as herders for the Soninké or for other Fulani when times are hard.

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7. Local people also reported that they had problems due to the lack of organised livestock vaccination programmes, illnesses towards the end of the rainy season and, for Fulani herders, lack of state support for schooling and emergency aid.

## 3. Rules governing access to and use of natural resources

### 3.1 Access to natural resources<sup>8</sup>

#### Access to land

Anyone wishing to cultivate a field has to seek permission from the village chief, who will either allocate a field or suggest a family that can be approached and asked for the right to use one of their fields. Land is not sold, and the family retains the right to reclaim the field when they need it. The Diawara are considered as owners of the land in Kingui.<sup>9</sup>

**1950-1960:** No change in the procedure for accessing land, although land was more abundant.

#### Access to grazing

No part of the bush is exclusively reserved for grazing. Pastures are made up of uncultivated land (including fallow), and therefore change as farmlands evolve. However, while pastoral areas are determined by the availability of nearby water, and sometimes topography, land around some villages is managed through annual local agreements that define which areas are to be set aside for grazing and which are to be used for farming.

Access to grazing is free of charge, but subject to certain restrictions:

- Permission to live in the village and/or use village water (and therefore to use the pastoral lands around the village) must be obtained from the village chief;
- Some herders may have limited access to and use of water – for example, they may only be permitted to water livestock in the evening, after the villagers have had their turn.

**1950-1960:** No change in the regulations regarding access to grazing.

#### Access to crop residues

Herders believe that millet stalks are good for their livestock, and crop residues are frequently used as fodder. Access to these residues differs between zones and villages. The example in Box 1 below shows how it is organised in one village in Kingui.

Although farmers are generally happy with the date set by the village chief, many herders feel that it should be earlier because the millet stalks have often dried out by the time their livestock get to them. This situation has led to claims by farmers that herders sometimes try to influence the village chief.

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8. In this section, notes on the rules regulating access to different resources are followed by a summary of the situation in the 1950s and 1960s.

9. Although they are seen as landowners, their role is more of land managers. Every family in the village holds lands that they may dispose of, but which they cannot sell.



### **Box 1. Access to crop residues (*Sammandé*) in one village in Kingui**

The village chief is responsible for determining how millet stalks are disposed of after the harvest. He and his advisors set a date when all the crop residues in the village will be made available to livestock, so that everyone has time to complete the work in their fields. The two-day period when the fields are opened up is known as the *Sammandé*. No-one is permitted to let their animals onto the fields before this date, and young men from the village patrol them day and night to ensure that no-one breaks the rules. Any livestock found in the fields before then are taken to the pound and their owners made to pay the village chief a fine of 15,000 F CFA, plus pound fees – even if the owner of the field had given them permission to use the field. Access to crop residues is free of charge, although herders sometimes give a sheep or goat in exchange.

**1950-1960:** *Sammandé* was organised differently in the past (see Box 2 below), when fields were further apart and used by fewer people. The chiefs of neighbouring villages would consult and inform each other about the opening date. This tended to be set earlier than it is now, before the millet stalks dried out too much. Farmers with village fields would pile the harvest up in the middle of the field and erect a thorn fence around it, while those with bush fields would tell herders that residues were available as soon as they had finished the harvest. Even if a field was open to livestock, there was little risk of them straying onto neighbouring fields because they were much further apart than they are now.

### **Box 2. How *Sammandé* evolved in one village in Kingui**

Until the 1980s *Sammandé* was organised in two stages. Sheep and goats spent a day in the fields eating climbing plants before the cattle were let in for the first stage, which lasted eight days and was only open to villagers. Larger numbers of incomers were then allowed into the fields during the second stage.

No distinction has been made between the small and large *Sammandé* for the last twenty years or so, and everyone goes into the fields at the same time now. This change is due to the growing number of participants and the fact that incomers began paying village chiefs and the elite so that they could join villagers in the first round of *Sammandé*.

### **Access to waterholes**

Livestock have free access to waterholes over the rainy season, although they can be difficult to get to due to the large number of fields and gardens located around them during the growing season. In the dry season, incomers often have to pay to water their livestock at perennial waterholes, and resident herders sometimes have to pay as well. The amount and methods of payment vary according to relations with the village chief and dignitaries, but herders generally have to pay more in years when rainfall is low than when it is plentiful.

**In the past:** Access to waterholes was free all year round before the major droughts occurred.

### **Access to wells**

Livestock are mainly watered at wells over the dry season (large diameter wells, boreholes, traditional wells and those dug each year in the beds of dried-up waterholes). People living in the village are not charged for this, while resident herders are charged according to their relations with the villagers, particularly the village elite. Incoming

herders need authorisation from the village chief, and are usually charged to use the well for a season (paying in cattle or sheep). Herders that have good relations with the village chief or influential figures pay these fees, but still have to give priority to indigenous users and are only allowed to water their livestock in the evening.

In some villages herders are allowed to dig a well for their livestock to use over the dry season. Payment for this, and for the labour, which is often provided by young men from the village, is made to the village chief in cash or in kind (often with a goat or sheep). The well then belongs to the herder until he leaves the village, when it is made available to villagers.

**1950-1960:** Access to all types of well used to be regulated according to certain conditions which could be met by the large majority of users: sedentary people had to help maintain the wells; livestock belonging to villagers were watered before those of incomers; incomers would usually give the village chief a small gift as a sign of respect; and anyone who became a resident of the village had to help deepen the well or dig their own well.

### **Statutory law on NRM**

Although there is a multiplicity of laws relating to NRM policies in Mali, many (such as the Pastoral Charter or the framework Agricultural Law) are not yet in force, some are contradictory, and there are no rules determining how the different laws should be coordinated. These problems are unlikely to diminish noticeably in the near future, given the frequent restructuring of the various ministries. Customary law continues to play an important role at the local level. Furthermore, for NRM responsibility has still not been transferred from the central State to the municipalities, and there is little information on the topic available at the municipal level.

## **3.2 Local conventions**

Local informants said that in order to avoid conflict between farmers and herders, some villages post their NRM rules in and around the village each year when work in the fields begins and transhumant herders are starting to move their livestock around. These rules may change every year.

A study on local NRM practices in the District of Nioro commissioned by the SLRC found that all 52 villages in the study had established a practice of drawing up local conventions. The village chief and influential individuals meet every year to agree on the routes to be used to move livestock, which side of the village will be used to rear livestock and which will be used for farming, and how water points will be managed.

These agreements have been used for the last 80 to 100 years or so, since farmers began rearing livestock and herders started farming. However, conflict and change have intervened over time, and respect for them has declined (see sections 6 and 7). Local actors feel that this is partly due to the growing number of incomers in the locality and the fact that they do not feel obliged to abide by local conventions.





## 4. Conflicts

Conflicts related to resource management can be divided into those within communities of resource users and those between communities. While it is not the main focus of this study, the first type of conflict is important insofar as it interacts with the second, given the strong internal social cohesion and high levels of tolerance within communities, particularly among the Soninké. For example, damage caused by a neighbour's livestock is usually tolerated by the victim, who knows that the tables could easily be turned and understands the importance of good relations between neighbours when the harvest is poor. Despite this tolerance – or maybe because of it – there is a much less forgiving attitude to damage caused by incomers, even if they live in the same village.

### 4.1 Conflicts within communities

#### Disputes over land

Most disputes over land involve farmers and are sparked by the owner of a field wanting to reclaim it from the person to whom it was loaned. This is usually a fairly straightforward process – although obviously problematic for the losing party – which sometimes requires intervention by the village elders. However, some disputes do end up in court.<sup>10</sup> The most common cause of conflict is where the land user assumes that they have acquired some kind of ownership rights over the borrowed land. Often there are no witnesses to the original transaction because the loan was agreed by the grandparents of the parties concerned, who may be émigrés returning to their village of origin.

#### Latent conflict between generations

Many young Soninké farmers have very limited opportunities to earn a living and may spend most of their time working for the extended family in the collective field, even if they have their own immediate family to support.<sup>11</sup> The prospect of going abroad to save money for several years can be very appealing to those with few alternatives at home, especially if they have seen how others have made their way through migration. However, the heads of families where several young men have already emigrated are often reluctant to lose any more of their workforce, and will try to prevent remaining members from following suit. In the end, some young men end up having to run away to go abroad.

In this situation, every opportunity to earn extra cash is welcome. So young men monitoring the fields for livestock may decide to take any strays they find directly to the herder rather than the owner of the field or the village pound. Any money changing hands through a discreet deal with the herder then goes straight into their pocket.

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10. Most of the conflicts that go to court involve land assets.

11. The oldest member of the extended family retains decision-making power, manages the land, harvest and income and authorises or forbids the cultivation of individual fields for one or two days a week.

Young Fulani herders are in an even more difficult situation than their farming counterparts, as they need to have their own cattle to make a living and meet their growing needs. One way of raising the money for this is to sell off their father's cattle without his knowledge.

### **Conflict between sedentary and incoming herders**

Conflicts between herders often involve sedentary herders and incomers. Disputes usually flare up over access to water and fears that incoming livestock are carrying diseases, and tend to worsen during drought years.

## **4.2 Conflicts between herders and farmers**

Although there were disputes long before 1997 (see Sidibé, 1999), this date is seen as a defining moment in relations between farmers and herders in the Kingui area. Along with civil servants and technicians, they believe that this is the point when conflict between herders and farmers became an issue in Kingui, especially between the Soninké and the Fulani. It was a time when crime was rife in the region, and the situation was exacerbated by the conflict between Mauritania and Senegal.<sup>12</sup> The situation has improved over the last two years thanks to political, NGO and municipal interventions, but there are still problems, which worsen every year during the growing season. Opinion is divided over the nature of the problems and how they might be resolved.

### **How sedentary Fulani herders see the situation**

Many herders feel constrained by the limited amount of land set aside for grazing, the lack of recognition for various encampments and hamlets, and by routes and areas around waterholes being obstructed by fields. They complain that there is nowhere for their livestock to graze and that access to waterholes is blocked.

This problem is linked to the expansion of land under cultivation, which not only obstructs tracks, waterholes and areas used for grazing, but is also pushing the sedentary Fulani back into their encampments, where many feel increasingly hemmed in by the encroaching farmland.

Relations between the different groups can become particularly strained just after harvest, when the livestock forage for millet stalks. Herders are fined if they don't keep to the date set for *Sammandé* or get it wrong because they have seen other animals in the field – leading some to claim that farmers deliberately leave the harvest lying out to attract livestock so that they can earn some cash by fining the herders responsible for them.

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12. This began in 1989, creating many refugees on both sides of the border, some of whom fled to Mali. The whole area was rocked by expulsions and several massacres during this conflict.

Farmers take various measures to protect their fields, from organised surveillance and getting youth groups involved in resource management<sup>13</sup> to tracking down offenders and impounding stray animals. Several herders reported that they have been accused of

*If an animal gets into a field the farmer will take it to the pound, so herders have to go and look for their livestock in the village where the pound is located. During the rainy season, if we haven't seen an animal for several hours we go and look for it in the pound and discuss the fine with the owner. This pound was here before decentralisation. It costs 50 francs CFA per day for sheep and goats, and 1,000 francs CFA per day for cattle, plus damages to the farmer. The field isn't checked, but you have to give the farmer what he wants otherwise you won't get your livestock back (Fulani herder, 10 June 2004).*

damage done by others if the farmer hasn't been able to find the guilty party, and that their livestock are sold if they don't come and reclaim them quickly.<sup>14</sup> In some villages stray livestock or animals found damaging fields are taken to a pound, which is often managed by the youth groups involved in monitoring the fields.

### The Maures<sup>15</sup>

The Maures we spoke to divide their time between raising livestock and farming. They do not have many problems with damage to fields. The Maures in one village in Kingui said that livestock don't go near

their village and fields because there's no water there, while those in another village believe their fields don't get damaged because they farm and raise livestock.

### The viewpoint of Soninké farmers

Damage to fields is a serious issue for farmers. This is particularly true when the rainfall isn't very good, so their relationship with herders is more strained in drought years.

Damage done before the harvest may be due to lack of surveillance over fields and livestock, or the result of more deliberate attempts to find something for the animals to eat. For many, this is the worst time that damage can be done. Many farmers feel that transhumant herders arrive too early as they come just after threshing, when the harvest is left to rest in the field before being transferred to the granaries. They see this time – when livestock may get into the fields and spoil the harvest, or herders fail to respect the rules of *Sammandé*<sup>16</sup> – as the most difficult moment in relations between herders and farmers.

*Livestock prefer grazing in the fields because the pastures that are set aside for them are full of other animals (Soninké farmer, 9 June 2004).*

*Some Fulani say that an animal will stay healthy all year round if it eats millet stalks, even if there's a drought, so they let them into the fields at night-time (Soninké farmer, 5 May 2004).*

13. In Kingui, youth groups play an important role in conflict management; in Kaarta it is the Hunters' Association (see Diarma, 2004). In the north, the hunters' associations wanted to monitor the fields but the Diawara turned them down because they thought they would be held responsible if the hunters didn't do their job properly.

14. Sales probably take longer than the herders think, as the judge has to give the mayor authorisation to sell livestock.

15. Although it was only possible to visit two Maure villages during the study, the information obtained was confirmed by interviews with experts of the area.

16. If livestock get into the fields and eat the millet stalks before *Sammandé* has taken place, it is more a matter of the rules being broken than the harvest being spoiled. Such cases are rarely resolved at the town hall because the rules regulating *Sammandé* are not legally formalised.



Photo: Valérie Rossi

Fulani encampment of Gakou (District of Nioro du Sahel)

The Soninké villages we visited told us that the sedentary Fulani herders that live in the vicinity cause more damage than other herders, and that they find transhumant herders more respectful of other people and their activities. However, cases of damage caused by transhumant herders are more difficult to resolve.

Soninké women also have problems with damage to their gardens and fields, mainly because they are so busy with other household activities that it is very hard for them to watch over their crops. Some women said that most of the damage to their gardens is done by their own livestock, and that sheep are the worst culprits.

*Herders who want to use the crop residues don't always wait until the date set for the opening or abide by the rules and conditions laid down by the village chief. But if you go to the mayor, he'll just tell you to go home and watch over your fields (Soninké farmer, 1 May 2004).*

## 5. Conflict resolution

Cases of damage caused by livestock straying into cultivated fields usually involve two parties: the owner of the field and the owner of the livestock. In principle, they will try to come to an agreement.

### 5.1 Modes of regulation

#### A. Negotiation between the two parties

The first option is for the two parties to negotiate a settlement. The owner of the field usually wants to be compensated for the damage, although the animals' owner is sometimes let off and the claim for compensation dropped. Negotiations may involve an intermediary, such as a friend or imam (but not the village chief), whose role is primarily as a witness (to assess the damage and set the fine). Sometimes Fulani herders whose livestock have caused damage will call on a Soninké friend to negotiate the fine, especially if it is high.

All the herders interviewed said that they will pay up if they are responsible for the damage and the farmer is not asking for too much money, but not otherwise. If the two parties cannot reach an agreement one of them (often the farmer) usually asks the village chief to intervene. Alternatively, they may go straight to another authority, such as the local council, the gendarmes or the courts.

#### B. Negotiations before the village chief and his advisors

The customary approach to conflict management is to take the matter to the village chief. The herder is summoned, and the village chief either goes and assesses the damage himself or selects some young advisors to accompany the two parties to the field to see what has happened. At this level, the damage assessment is not really accepted, and is seen as arbitrary by both Fulani herders and Soninké farmers.

*When the village chief's representatives go and look at the damage there's a lot of talking, but it's not a real assessment because all they do is look at the evidence and say that the crop has been spoiled (opinion expressed by two Soninké, 23 April 2004).*

Once the damage has been assessed, the next step is to determine the fine. The village chief acts as an intermediary in discussions with his advisors, religious chiefs, friends and others. If a herder from a neighbouring encampment is involved, the chief of the encampment is usually asked to intervene. In the region of Troungoumbé, when a Mauritanian Maure is implicated in damage to fields, one of their chiefs is appointed to discuss the case with the Diawara chiefs. This approach seems to have been very successful, as none of these cases have gone to court. The village chief usually receives 5,000-10,000 francs

CFA (USD 9.50-19.00) for his services, while the advisors get 1,000-2,000 francs CFA (USD 1.90-3.80). This sum is paid by the herder.

Many herders and even some farmers feel that the village chiefs sometimes set the fines higher than the damage warrants. The situation has improved over the last three years or so, though, thanks to local information campaigns led by the NGO Jam Sahel.

While many herders accept the village chief's judgement because they want to maintain good relations with their neighbours, this is by no means always the case. Refusal to do so may be viewed by agro-pastoralists as evidence of lack of respect for the village chief or as an attempt to slow down the process.<sup>17</sup> If one party does not agree with the proposed solution, they can call on the offices of the local council and its delegates, or the police or sub-prefect.

### C. Intervention by the local council

The local council intervenes if the village chief has been unable to negotiate an agreement, or if the injured party goes directly to the gendarmerie or the technical services. In this case they will be asked to get the damage assessed by the technical service SLACAER. If less than three days have elapsed since the incident, an agent will be sent to the field with a delegation to assess the damage.<sup>18</sup> The cost of this service (some 13,000 francs CFA in one case in a village in Kingui) is initially borne by the farmer, who will be reimbursed by the herder if he is awarded damages.

The technical services measure the affected portion or portions of the field to assess the damage. These assessments are generally considered to be fair, and despite some residual doubts, more and more people are approaching the technical services for assistance. However, this seems to be more popular among herders, and some farmers have accused them of bribing technical agents to say that the damage is less extensive than it really is, amid claims that the technical service is more supportive of herders than it is of farmers.

*Some herders have been bribing people on the local council and getting the technical agents to downplay the damage. Farmers may still have a chance of winning their case if it stops there, but they're finished if it goes to court (Soninké farmer, 9 June 2004).*

The fine is set on the basis of the damage assessment done by the technical service. If the herder doesn't accept what the local council or technical service says, the farmer, the herder or the mayor may then take the case to court.

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17. See C. Intervention by the local council. The technical services cannot assess the damage if more than three days have elapsed since it was done.

18. In one example in Kingui, the delegation consisted of someone from the local council, the village chief or his representative, a representative of the youth association, the owner of the field and the owner of the livestock, and a member of the security services (such as a policeman).

## D. Courts of law

As incidents involving damage or stray livestock are dealt with by criminal law (as damage to property), the judiciary will make a final attempt to negotiate a resolution before resorting to the law. However, reconciliation has become more difficult over the last few years, and some farmers have taken to dispensing justice themselves instead of going to the court and asking for the damage to be assessed. This can be counter-productive, as pursuing and threatening herders and their livestock makes them guilty of assault and potentially responsible for the loss of livestock, and assault is usually dealt with more severely than damage to property.

Many cases come before the courts as the rainy season approaches – after sowing and as harvest gets under way. This signals a breakdown in relations between the two parties involved.

It seems that herders normally win the cases that get taken to court, regardless of their social status. This has led to farmers claiming that they bribe the judges, and some herders admit that:

The Fulani see going to prison as very shameful. People who are sent to prison are ridiculed, so they'll do anything to avoid it, even if it means paying out large sums to the courts...(Fulani herder, 5 June 2004).

Cases that go to court tend to drag on, as the protagonists have to appear in court several times and proceedings are often postponed from one week to the next because witnesses or translators<sup>19</sup> don't turn up.

## 5.2 Conflict resolution before decentralisation

Everyone interviewed agreed that it used to be easier to resolve disputes in the past, and most felt that people were more willing to forgive and slower to take matters to court before decentralisation. Most informants felt that people did not try to make money out of the process and that fines were not too high; that people had a lot of respect for the customary authorities regulating conflicts, and there was a lot less corruption than there is now. In colonial times, the first line of authority responsible for conflict resolution was the village chief; any cases beyond his jurisdiction went to the canton chief.

In Kingui, the oldest Diawara still plays the role of a kind of canton chief and has a seat in Ségué.<sup>20</sup> He is responsible for managing problems with land assets, trouble between villages, clans and the Diawara themselves, and dealing with theft and other crimes. While more research is needed to clarify what role the patriarch played in managing conflicts between herders and farmers before decentralisation, it is clear that he is no longer an important player in this respect.

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19. There have been cases where judgment is handed down and the protagonists then say that they didn't understand what was going on. When the process is explained to them they claim that they never said certain things, which either means that the translator got it wrong or that he has been bribed.

20. The oldest Diawara in Kingui, known as the "Patriarch of Ségué", is always based in Ségué, which is an important village for the Diawara.

## 6. Changes seen from local perspectives

Most of the herders interviewed said that life is more difficult now than it was for their great-grandparents. While all felt that this was primarily “the will of God”, the other most common reasons given (in descending order) were climate change, institutional and technological changes, demographic growth and political change.

Fulani and Maure herders believe that it has become harder to rear livestock because of declining rainfall and longer dry seasons, which now last for nine months instead of six. Climate change has reduced woodlands, adversely affected the quality of grasses, made soils sandier and made it harder to dig wells. Many reported that they had lost the herds that used to constitute their wealth.

The Soninké, on the other hand, have prospered. In the past it was they who were poor, and reliant on the Fulani and the Maures for the milk and manure produced by their livestock. Despite claims that they have always reared livestock, it was the money generated by their mass migration following major droughts that enabled them to buy their own animals – thereby increasing the number of livestock in the area.<sup>21</sup>

Everyone agrees that there are far more fields now than there were before the drought. This is either due to the increase in “mobile farming” among the Soninké or because more and more herders have taken up farming. The economic benefits have increased too. The farmers we spoke to said that they have benefited from new technologies like ploughs and oxen, although this is counteracted by the fact that they have to work harder for smaller yields per hectare due to more frequent droughts, impoverished soils and damage from insects, birds and livestock. Herders feel that conflicts with farmers have also made it harder to rear livestock. They think that the situation deteriorated while Alpha O. Konaré was president (1992 to 2002), and that relations between farmers and herders were better under Moussa Traoré (1969 to 1991). Many farmers believe that the government is responsible for the increase in conflicts because people no longer respect the village chiefs and local authorities, although some thought it a good thing that the traditional authorities have lost their power. One SLRC agent in Nioro du Sahel explained that decentralisation initially caused a lot of problems because local governments appropriated all the natural resources in their municipalities, thinking that they were to be privatised, and villagers and mayors banned neighbouring villages or municipalities from using the natural resources on their territory. The local elite were also profoundly disturbed by decentralisation and its potential to undermine their power base.

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21. Some Soninké and Bambara have become large-scale herders since the mass exodus that began during the major droughts, as a result of investing their surplus income in livestock.



## 7. Analysis

### 7.1 Analysis of institutional change

Ensminger (1992) has argued that studies of conflict and the over-exploitation of natural resources must take account of factors such as institutional change and the ideology and bargaining power of the individuals and groups concerned, as these are affected by changes in the physical and social environment, in the population and by technological change.

In Kingui, the changes that have had the most significant impact on the way that natural resources are managed now began during colonisation by the French,<sup>22</sup> when tax collection and the introduction of a new currency had a huge impact on the social organisation of the population. Although there had been tax collection and monetary systems well before the arrival of the French, colonial money, and especially the transition from one form of currency to another, was a trigger for change (see Gardi, 1985: 56-59). These new elements created an urgent need for profit and money to pay the taxes, while the introduction of new agricultural technologies (ploughs, oxen) reduced the amount of time and effort required to work the fields. One consequence of this was that families started cultivating more land.

Although savings were still largely put into gold during this period, farmers were increasingly investing in animals and also starting to rear livestock. According to Doutressoulle (1952: 23), Soninké and Maure farmers began rearing cattle when the French arrived. Until then the Maures had mainly concentrated on small ruminants. New medicines and vaccines facilitated livestock rearing, and new technologies allowed other actors to focus intensively on these activities too: it was no longer necessary to be a specialist in the field or have a lot of time and labour available. In the 1960s in particular, when rainfall was good, the amount of land under cultivation and number of livestock being raised increased dramatically. Monetary reforms between 1962 and 1967 (and again in 1994) changed the price of livestock and thus its value, making it a more attractive investment option; while new markets stimulated production, created new needs and increased the need to save.

The fact that Mali became independent in 1960 seemed to have little impact on the remote region of Kingui. The Diawara elite (who had collaborated with the colonial authorities) retained their power, and while they co-operated with the new regime, it took a long time for political change to filter through.

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22. We had to rely on what we could learn about this topic in the field, as there is little information about it in the literature. Our sources were limited to the period between the 1930s and the present day – the period that coincides with some of the greatest political, economic and climatic change. The French invasion of West Africa began in Senegal in 1854, and the first administrative changes on what is now Malian territory came into effect in 1886 (for a history of French colonisation, see Ki-Zerbo, 1979 and M'Bokolo, 1992).

Several periods of drought after the 1970s reduced crops yields and available water and grazing, and soils became increasingly eroded and impoverished. Another factor in soil degradation was the decline in the importance of fallow in the 1960s. Large numbers of Soninké sought work abroad so that they could support their families at home, and herders lost many livestock. To avoid being totally ruined Fulani herders began selling their livestock, much of which was bought by civil servants. As droughts occurred more frequently they had less and less time to reconstitute their herds between droughts, and with little government aid getting through it became very difficult for them to re-establish themselves. Despite these losses, they remained focused on their principal activity, although many were forced to become more sedentary, working as herders for the Soninké and taking up small-scale farming. The Maures, on the other hand, tried to start again by diversifying their activities. The Maures noirs worked as seasonal labourers in towns or on farms and turned increasingly to farming, and now spend as much, if not more, time farming as rearing livestock,<sup>23</sup> while the Maures blancs focused on commercial activities and rearing high quality livestock.

Transhumance routes have also been affected by climate change in the 1970s and 1980s. For example, Doutressolle (1952) reports that some transhumant herders used to travel northwest to spend the dry season between Kayes and Yelimané, in the vicinity of the Takoutala lakes. When these dried up, they began going south to Fuladugu and Birko, although several sources claim that many herders stopped going south and started heading north again after several wells were sunk along the southern border of Mauritania. Those that do go south have begun to extend their travels further southwards, instead of stopping before the Boucle de Baoulé as they used to prior to the major droughts. There has also been an increase in the number of sedentary Fulani encampments in Fuladugu, to the south, as there is less flooding and mud there during the rainy season now. One of the consequences of these changes has been the breakdown of friendly and socio-economic relations between transhumant herders and their hosts.

There is growing tension between the processes entailed in sedentarisation – the expansion of land under cultivation on the one hand, and the concentration of livestock on limited grazing on the other. Lower yields, impoverished soils, the individualisation of work in the fields (particularly among women and young men) and herders farming have all contributed to the unregulated expansion of fields; while the sedentary Soninké have become large-scale herders thanks to remittances from migrant workers, their commercial drive and the absence of other forms of saving as gold lost its value due to declining purity. Livestock rearing has also been helped by the possibility of buying fodder in emergencies and improvements to the northern road network. As the markets have made money an increasingly necessary commodity, monetarisation has begun to affect certain customary institutions (such as the cost of marriage among the Soninké), and émigrés and new actors have emerged as a new type of large-scale livestock owner (civil servants or traders from Bamako who own a lot of livestock that is

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23. Our sample only included two Maure encampments; however, this information was confirmed in subsequent interviews with Soninké farmers and experts on the region.



kept in the Kingui region). Even now, many migrants to Europe invest in livestock in Kingui, although they are starting to put more money into cement-built houses, which are seen as a safer and more durable investment than livestock.<sup>24</sup>

Political factors that have had a major impact include the conflicts between Mauritania and Senegal (which began in 1989) and conflicts in the Timbuktu region in Mali (1990-1993), which substantially increased the amount of violence and arms in the region. This was also reflected in the worsening relations between farmers and herders, the way people react to damage and the increasing difficulty of resolving conflicts. Directly or indirectly, remittances from abroad have further reinforced the proliferation of arms.

Decentralisation is another political factor that has had significant impacts. Although it initially made the elite feel insecure about losing their power, having a common enemy allowed them to consolidate their position – and may have helped worsen the image of Fulani herders and the relations between the two groups. In the early years of decentralisation the municipalities kept a jealous guard on their natural resources. In the long term, the new authorities that were put in place, such as local councils, have weakened the position of the village chiefs and elite, while the political parties have gained influence and now play an important role in relations between different elements of the population.

All these new conditions surrounding the exploitation of natural resources have resulted in institutional, ideological and organisational change and changes in bargaining power that have been reinforced by demographic growth and have led to new forms of behaviour and ways of distributing assets.

The most striking change at the institutional level is the disappearance of socio-professional specialisation, which has led to overlapping and more heterogeneous interests. The activities of different user groups, which used to be complementary, are now conflicting and competing.<sup>25</sup> The most obvious example is manure and the relationships of exchange: while it was once understood that herders stayed in the fields during the dry season to manure them and exchange grain, milk and meat with farmers, this is no longer necessary. The Soninké have their own livestock, and many herders have their own fields. Moreover, cow dung is no longer entirely suited to current climatic conditions, as it will burn the crops if there is not enough rain.

The new socio-economic conditions have also altered the balance of bargaining power between different actors. Over time, the strategy of diversifying their activities, strong social cohesion and foreign remittances have made the Soninké more prosperous than other groups and increased their negotiating power. To a lesser extent, the Maures have also diversified their survival strategies and adapted quickly to the new conditions. Their bargaining power has increased – or at least not diminished – due to their good rela-

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24. Herds can sustain serious losses during droughts – for example, up to 60% of herds were lost in 2003.

25. We would like to point out that this is not a matter of idealising the past, as conflict has always been one element of the relationship between farmers and herders all over the world.

tionship with the Soninké (the Maures noirs have marriage ties with the Soninké and the Diawara). Fulani herders, on the other hand, have been disadvantaged by losing many of their livestock, by their weak social network and organisation (compared with other groups in the Sahel) and their lack of education as a result of their mobility. They have been slower to diversify their activities than other groups and have lost much of their bargaining power. However, Fulani herders that have managed to re-establish or retain their herds over the last few years have regained some bargaining power and, knowing how many farmers will react, have developed their own strategies for dealing with stray livestock, accusing the farmers of assault or resorting to bribery to influence the process of negotiation.

## 7.2 Analysis of the factors influencing negotiations

While negotiation is central to conflict resolution, the nature and procedure of these negotiations are open to influence by the different actors concerned, who have developed several strategies for furthering their own interests.<sup>26</sup>

Economic and social capital are decisive factors influencing the type and procedure of negotiations. Social capital plays a more important role at the local, village level, while economic capital is more important at the level of the local council and the courts. Social capital is generally determined by ethnic affiliation and class (noble, cast, former slave). In negotiations involving the village chief, membership of an ethnic group usually works in favour of the sedentary Soninké, as the village chief will also be a sedentary Soninké who has longstanding links, knowledge and reciprocal and interpersonal relations with fellow villagers. Because of this, damage caused to Soninké fields by livestock belonging to the Soninké is usually tolerated, while the same damage done by animals belonging to the Fulani would not be.

Social capital may also be influenced by economic capital, as social relations are generally maintained through gifts. This is how some Fulani herders have managed to establish a good relationship with the Soninké elite.

However, the social capital that works in favour of sedentary groups at the level of the village chiefs does not have the same effect in the local council or the courts. Although the technical services try to play a neutral role, a herder whose livestock are responsible for causing damage may seek to further his cause by bribing civil servants or undermining the farmer's position. Farmers think it grossly unfair that if a herder says that he lost his livestock because a farmer chased the animal off his fields (which may be true), they can end up paying a larger fine than the one imposed for the damage done by the livestock. Knowing that farmers generally prefer matters to be settled by the village chief, herders may also threaten to take the case to the local council or court in the hope that the farmer will reduce his claim for compensation. However, many Fulani herders are hesitant about taking their case to the town hall or court – for religious reasons, to

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26. Here, "negotiations" always refers to disputes between the owner of a field and the owner or herder of livestock.





Watering livestock during transhumance (District of Diéma)

avoid souring or even destroying relations with the Soninké or because they don't have much money and are worried about losing their case.<sup>27</sup>

Negotiations are also influenced by time and the seasons that determine productive activities. For example, transhumant herders – who often disappear after an incident when their livestock have damaged fields – have plenty of time to negotiate if arbitration takes place in the area where they have set up camp, but will not have time to do so while they are on the move. Both scenarios have certain advantages for them.

Other, secondary factors include uncertainty over who owns the livestock that have caused the damage and the difficulties of proving ownership. In such cases negotiations can take a very long time and may end up in court; and the same applies to cases of damage to fields where weapons are involved. However, cases where youth groups have been monitoring the fields before *Sammandé* tend to be dealt with quickly: herders will comply with their demands as they want to avoid the case being taken to a higher level – in some cases, even if it was not their animals that were involved. Here, the farmers are in a much stronger position than the herders due to their social capital.

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27. It is worth noting that the modern system of conflict resolution aims to settle conflicts by creating winners and losers, rather than trying to reach a consensus between the opposing parties, which is the objective of customary procedures. This contributes to the fact that many conflicts are not resolved in the long term, and to the eventual breakdown of relations.

## 8. Conclusion

The disappearance of socio-professional specialisation triggered by technological, economic, political and climatic change has been accompanied by increasing heterogeneity in the interests of different natural resource users and much greater competition between them. This has led to growing pressure on natural resources, a marked deterioration in relations between farmers and herders and to both latent and open conflict. This opposition is most serious because it is based on ethnicity, and has the potential for serious escalation.

Conflict is not a taboo subject in Kingui. Local people talk openly about relations between Soninké farmers and Fulani or Maure herders, and ask what can be done to improve the situation. This openness to discussion is a precondition for any improvement in relations, and a major advantage for the positioning and success of the Helvetas programme supporting conflict prevention and management in Kingui.

In a context of pressure on natural resources and growing competition over their use, the absence of clear rules on NRM that take account of the seasonal movements of transhumant herders has serious consequences. This kind of regulation is a pre-requisite for improving relations, as this level is the starting point for conflict resolution. The formal framework for this has been set out in the Pastoral Charter.

The next step is to establish clearly defined areas designated for pastoral and agricultural use, taking account of inter-and intra-annual variations in the areas where natural resources are found. Herders and farmers should be aware of and respect the different areas, even though this will not be easy to enforce and will require a huge effort because of these variations. Areas designated for grazing need to take account of certain factors, such as the availability of water, quality of grass and carrying capacity. All the actors concerned should participate in defining these areas as they know the conditions required to undertake their activities. One way of controlling the unregulated expansion of agricultural land would be to reinforce existing rules that are commonly flouted, such as the need to obtain permission from the technical services before clearing a new field. Therefore, the practice of establishing local rules in villages (see Section 3.2 on local conventions) should be revitalised and supported by Helvetas. To reinforce the legitimacy of these rules, all stakeholders should participate in their formulation – not only the sedentary elite, but also herders from neighbouring villages and encampments as well as transhumant herders. This will not be an easy task, however.

Compliance with all the rules should be monitored, and fields and livestock watched over during the rainy season, with the backing of committees representing all sedentary groups (Soninké, Fulani and Maure). The sedentary Fulani would benefit from this surveillance as they are sometimes accused of being responsible for damage done by transhumant herders, who quickly disappear from the scene.



The mechanisms for conflict resolution are flawed. Local mechanisms could be reinforced by involving all the protagonists in the damage assessment and subsequent negotiations. As the herders accused of doing the damage are often in the minority, one way of tackling the problem could be to bring in mediators who are recognised and respected by all actors, as in cases involving livestock belonging to the Maures blancs. Local councils should play an important role supporting local mechanisms, calling the protagonists to order, and possibly reviewing cases where the parties do not carry equal weight and no neutral mediator is involved. However, this can only be done if the local council has no stake in the process and is not susceptible to economic or social influences. Resolution at this level, on the basis of assessments made by the technical service, should also be promoted among local people, who are not always aware of these mechanisms.

The consultative committees that Helvetas has supported could play a very important role in this respect. In order to gain greater credibility among local people it is important that they involve everyone concerned, and that every group is always represented. Moreover, their role needs to be clarified, as it is still unclear. This could be done by taking every opportunity to publicly underscore their role – at workshops, through information campaigns, on the radio, etc. It is absolutely essential that the consultative committees do not further undermine existing mechanisms for conflict resolution (by reinforcing the position of the Soninké, for example), and that they concentrate on supporting existing mechanisms rather than becoming a separate authority for conflict resolution.

Measures also need to be put in place to accompany the formalisation and introduction of clear regulations governing the use of natural resources. Installing infrastructures such as wells is one such measure. It should be remembered that these infrastructures can be a way for local people to regulate access to grazing, carrying capacity and the number of herders in the area, and that wells can also generate conflict.

Certain measures will require more time and necessitate ideological, institutional and behavioural change. These are outlined below.

It is very important to support alternative economic activities, not only for herders, but also for farmers. Many herders recognise that their economy is very fragile, and are therefore receptive to messages about change.

Competition between the different groups of actors is increased by the fact that livestock are also a form of investment – albeit a rather insecure one. Identifying and promoting other forms of investment could contribute to better management of the production imbalances characteristic of the region, and reduce competition between livestock owners over access to grazing and water. This other form of investment should take account of one factor in particular that makes livestock a relevant form of investment: livestock is not a commodity that can be redistributed as easily as cash, for example. A family member who regularly asks for money has to be given some every now and then, or the potential donor risks being marginalized by the family. Gold (of

recognised purity) could possibly be used as a form of investment, but this idea would need to be promoted and the necessary conditions would have to be created.

As villages where farming and livestock rearing are practised in equal measure have fewer problems than others, steps need to be taken to improve mutual understanding of the two activities. The approach based on the use of family portraits is promising,<sup>28</sup> but it is important to ensure that any measure taken can reach a broad sector of the population.

Another task would be to reinforce existing mechanisms for conflict prevention and management. One of these is *cousinage*, which is still seen as important and is a source of pride in Kingui, despite having lost much of its significance.<sup>29</sup> However, the information available on *cousinage* is contradictory and would therefore require further research. Another mechanism that could be revived is the relationship between hosts and transhumant herders. This could be done by using adapted publicity campaigns to underline the positive aspects of this relationship. Several farmers said that they would like transhumant herders to use their fields during the dry season as the manure would be useful, but that herders prefer to use other fields nearer villages or which have trees that provide shelter. Herders could be tempted back if the conditions were conducive, for example, if farmers revived the practice of providing the materials that transhumant herders need to build huts on their fields.

Another important step would undoubtedly be to implement and disseminate the Pastoral Charter at various levels and clarify other legal measures, in order to reduce the risk of laws being broken and clarify the various legal processes.

Other measures should also help make the local economy less fragile and better able to withstand the effects of drought and other phenomena such as locusts.

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28. The family portrait is a tool that makes it possible to gather information about how the family is organised (in this case, especially around the economy and natural resource management), and to describe and analyse these aspects. This tool facilitates better understanding of local realities and if shared, can be used to improve mutual understanding between different groups of natural resource users.

29. *Cousinage* indicates relationships where different groups can jokingly say things to each other without causing offence.



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