Farmer-herder relations and conflict management in agro-pastoral zone of Niger

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ABSTRACT

Farmer-herder conflicts are enduring features of social life in the Sudano-Sahelian zone. A survey was carried out between August and December 2004 in four sites in Niger, namely Bokki, Katanga, Sabon Gida and Tountoubé to determine the proximate and long-term causes of conflict over natural resource use, to evaluate the appropriateness of existing institutional arrangements for managing conflicts and identify innovative options and incentives to reduce the incidence and severity of conflicts. The research was implemented in three phases: (1) collection of village and household level socioeconomic information, (2) social network mapping, and (3) collection of conflict history and conflict management strategies. Additionally, governmental and NGO agencies in Niamey that address conflict management and/or resolution at the regional and national levels were interviewed. The research employed both quantitative and qualitative survey instruments. Surveys collected information on: historical micro-geographies of cropping and herding in the area encompassing village territory; local day-to-day relationships between transhumance herders, settled herders, and farming households at the study site; nodes of communication under different types of disagreements and negotiative settings; documentation of past conflicts and role of government officials, customary authorities and NGOs in conflict management. Results from this study showed that in all sites, damage to crops was the first reported cause of conflict between farmers and herders. Crop damage is not limited to damage to growing crops on the field but also included unauthorized grazing of crop residues after harvest. Other causes of conflict reported were access to watering points, expansion of crop fields across corridors for animal passage and thefts of animal. The ability of rural communities to prevent and manage conflict is largely based on the strength of networks of communication between herding and farming interests, respected community leaders, and leaders in neighboring communities. Overall, the local institutional arrangements are functional and a high percentage of conflicts are effectively managed at local levels. In all the study sites except Bokki, there was a high level of involvement of internal mediators.

BACKGROUND

Fundamentally, conflict is a part of life. Social conflict can be broadly defined as the opposition between individuals and groups on the basis of competing interests, different identities, and/or differing attitudes (Schellenberg 1996). Social conflict is not limited to the more violent or confrontational forms of opposition. Violence may or may not be involved, though violence is often one of the subjects of special interest. Social conflict is

not necessarily bad as commonly portrayed. Conflict is so fully part of all forms of society that we should appreciate its importance – for stimulating new thoughts, for promoting social change, for provoking policy change, for defining our group relationships, and for helping us form our own senses of personal identity. Conflict with another group often leads to the mobilisation of the energies of group members and hence to increased cohesion of the group. Having a right attitude to social conflict is therefore necessary for conflict resolution.

Farmer-herder conflict is an enduring feature of social life in the Sudano-Sahelian zone. The phrase "farmer-herder conflict" is typically used to refer to conflict between herding and farming groups. The use of this phrase can be highly misleading since it can suggest that "herders" and "farmers" are separate groups when in fact most herders are nowadays farmers and many farmers may herd their livestock at least on seasonal basis. Moreover, the conflict between a "herder" and "farmer" often implicate other farmers and herders on both sides of the conflict. For example, Breusers *et al.* (1998) argue that many conflicts between farmers and herders actually result from tensions within farming communities – tensions that are most evident with conflicts with outsiders – particularly herders.

Many outside observers report that farmer-herder conflicts have increased over the past 25 years (e.g. Bennett 1991). Others question the empirical basis for such arguments (Hussein *et al.* 1999). There are a number of barriers for clarifying this debate. First, the data remain largely anecdotal with real difficulties of collecting comparable data on a regional level. An additional difficulty is the fluidity of the meaning of conflict and the misperceptions generated from references to "farmers" and "herders". Those that herd animals and those that farm will at least seasonally experience a conflict of interest. Whether a conflict of interest leads to socially-degenerative conflict leading to violence or inhibiting production decisions depends on the capacity of local communities to manage conflicts and not allow them to escalate. Most members of ethnic groups whose identity is linked to animal husbandry (e.g. Fulani, Maure, Tuareg, Bouzou etc.) farm as well and many "farming" groups own and manage livestock. Farmer-herder conflicts can therefore occur among "herding groups" and among "farming groups."

Understanding farmer-herder relations is key to conflict resolution or management. This will help our understanding of the proximate and underlying causes of conflict, the behavioural patterns that are most conducive to provoking or avoiding conflict and the main mechanisms by which conflict between the groups are resolved or managed. The relationships between farmers and herders in the Sudano-Sahelian region of West Africa have always been multi-dimensional and like most social relationships have involved both cooperation and conflict (Turner 2003). There has always been a strong seasonality to this relationship with conflicts associated with crop damage and field encroachment onto key pastoral sites common during the rainy season while cooperative relationships of milk barter and manure contracting are more important during the dry season (Turner 1999).

Over the past twenty years, there have been changes in livestock ownership and management that have worked to increase both the inherent conflicts of interest between farming and herding and the potential for these conflicts of interest to escalate to degenerative conflict in many parts of the Sudano-Sahelian region (Turner 2003).

Conflicts of interest have intensified in many areas due to the greater proximity of livestock and cropping during the growing season due to a number of reasons including:

- Movements of people and shifts of livestock ownership toward the south where rainfall is more dependable and agricultural pressure is greater;
- A shift of livestock ownership away from historic livestock managers along with a growing dependence on farming by pastoral peoples, has contributed to a reduction in the seasonal mobility of livestock herds;
- Continued security problems in the northern pastures of Niger (for all herders) and the southern pastures in Nigeria (for Konni and Tahoua herders) and Benin (for Say herders) which may increase the year-long presence of livestock in home regions.

In addition to these changes that are likely to increase the risk of farmer-herder conflict, there have been a number of changes that have affected how local communities manage farmer-herder conflicts. The continued erosion of the local authority of elders, while welcome on a number of levels, have increased the number of poles of authority which may potentially reduce local communities' ability to manage conflict effectively. The number and nature of social ties between farmers and herding professionals have changed as livestock wealth has become more concentrated, availability of cropland have declined, and the range of herd movements have shrunk and become more erratic. The nature of livestock husbandry and farmer-herder relations are changing and the potential for conflict management failure increases unless systems of governance change accordingly.

In this study we have chosen to focus on the factors contributing to local communities' ability to manage conflicts - particularly those that could be called farmerherder conflicts. This involves research on the changing social relationships among farmers and herders, the social networks utilized in conflict management, local institutions, and political governance. Contrary to standard approaches to the problem of farmer-herder conflict, we have chose to first gain an understanding of the changing nature of the productive relations between farming and herding and the social networks utilized to manage village conflicts before asking direct questions about farmer-herder conflicts within study villages. "Farmers" and "herders" are connected to each other though multiple social networks (Heasley and Delehanty 1996). It is important to understand the evolving nature of these relations before proposing innovations to improve conflict management. Despite the publicity surrounding the most dramatic and violent confrontations, most farmer-herder conflicts are managed effectively at the level of the village. It is important to have an empirical understanding of conflict management processes in order to understand how and why some conflicts are ineffectively managed and allowed to escalate.

The research objectives of this study were to analyse natural resource (pasturage and water) use patterns, social relationships between farmers and herders, and past conflicts that were variously managed in four study villages in order to:

• Determine the proximate and long-term causes of conflict over natural resource use;

• Evaluate the appropriateness of existing institutional arrangements for managing conflict and.

METHODOLOGY

The study focused on the formal and informal institutional aspects of village, districtlevel, and national governance that affect lines of cooperation and conflict mediation among "farmers" and "herders" in four regions in south-western and south-central Niger: Say (Bokki), Fakara (Katanga), Konni (Sabon Gida), and Tahoua (Tountoubé). The study sites were chosen to span a range of biophysical, social, and political conditions that affect the forms in which conflict and conflict management take (Table 1). Specific study sites (villages) in each region were selected based on a history of previous contact by researchers, in order to capitalize upon established levels of trust.

Table 1. General characteristics of the four study villages relevant to farmer-herder relations

	BOKKI	KATANGA	SABON GIDA	TOUNTOUBÉ
Power of herding interests:	Medium	Low	High	Low
Organization of herders:	High	Low	High	Medium
Cropping pressure:	High	Medium	High Medium	
Mean rainfall:	High	Medium	Medium	Low
Access to ground water:	Medium	Low	High	Low
Population estimate:	2500	450	875	750
Major Ethnic group:	Fulani, Djerma	Djerma, Fulani	Hausa, Fulani	Hausa, Tuareg

This study was conducted over four phases between August and December 2004. Each phase involved a mix of survey instruments and qualitative research activities. These phases were: (1) Collection of general village-level information through group interviews stratified by major social groups within the village and gender. Topics covered in these initial interviews included: village history, ethnic composition, major livelihood strategies, distribution of resource access (livestock and cropland), and general information on farmer-herder relations. (2) Basic demographic and socioeconomic data were collected from all households in the four study villages. For each household, information was collected on household composition, ethnicity/caste, livestock ownership, agricultural and non-agricultural activities. (3) Seventy-nine households, representing the major social groups found within the four study villages, were surveyed as to their household composition, productive activities conducted by each household member, and the social networks implicated in these livelihood pursuits. (4) Interviews of representatives of major social groups within each village were conducted to collect information on past conflicts, conflict management strategies, and impressions on reasons for farmer-herder conflict. Additionally, the governmental and NGO agencies in Niamey that address conflict management and/or resolution at the regional and national levels were also interviewed.

RESULTS AND DISCUSSION

Conflict should be expected in an environment of highly fluctuating resource availabilities on unfenced land. A basic premise that we bring to this study is that conflicts that necessarily arise as people pursue diverse livelihood strategies are largely managed effectively at the level of local communities. Rather than focus our interviews on past "conflicts" – e.g. highly publicized, sometimes violent, confrontations that are produced in part by the failure of local conflict management approaches, we have focused our work on understanding how conflicts are managed on a day-to-day basis by investigating how the interests of farmers and herders diverge, the social networks they utilize to pursue their livelihoods, and local strategies to manage conflict. This approach is directed at building upon local institutions and strategies in order to improve the effectiveness of conflict management at the local level. In this paper, results of interviews on access to productive resources, social relations of livestock management, and farmer-herder relations and conflict management are presented and discussed.

Access to productive resources in four study villages

People's ability to gain access to the productive resources that are required to pursue a livelihood plays a strong role in shaping resource-related conflicts such as those that exist between herders and farmers. For example, a herder who loses access to local pastures due to the encroachment of fields onto livestock paths will not only have a more difficult time moving his animals to pasture without causing crop damage but also may be less inclined to avoid causing crop damage. A poor farmer whose single field is damaged by a neighbour's livestock is likely to harbour bad feelings about his rich neighbour. A farmer who owns livestock is more likely to have relations with herders from other social groups and understand the constraints faced by herders. In these and other ways, the distribution of access to productive resources helps shape social relationships and how conflict is managed at the level of rural communities.

Access to natural Pastures

In group interviews, informants from the main social groups in each village were asked to rank local pastures with respect to their quality to support cattle, sheep and goats during the cropping and dry season (Table 2). Except for the village of Tountoubé, local pastures were seen to have been of lower quality during the year prior to the study compared to the 1988-1990 period. Among the three villages at which groups were asked to assess changes in the quality of pastures (Bokki, Tountoubé, and Katanga), it is at the most southerly site of the highest mean rainfall, Bokki, where interviewees expressed the most concerns about the loss of pasture quality. Common reasons given by the informants for decline in pasture quality include decline in pasture area due to extension of cropped area (crop fields), changes in species composition or productivity of local pastures, changes in the pressure on local pastures due to changes in local livestock population, changing availability of natural pastures due to harvesting of grasses by humans and changes in the density or composition of tree and shrubs on natural pastures.

Table 2. Characterizations of local pasture quality in 1988-1990 and 2003-2004 for major livestock species (goats, sheep and cattle) as reported by representatives to major social groups of three study villages. Pasture quality is characterized by good (G), sufficient (S), less than sufficient (LS), and not sufficient (NS).

Village	Social Group (ethnicity/ Caste)	Pasture Quality						
		1988-1990			2003-2004			
		Goats	Sheep	Cattle	Goats	Sheep	Cattle	
Bokki	Fulani (women)	S	S	G	LS	LS	NS	
	Djerma (former slaves)	S	S	G	NS	NS	NS	
	Fulani	S	S	G	LS	LS	NS	
	Djerma	S	S	G	LS	LS	NS	
	Hausa	S	G	NS	S	LS	NS	
Katanga	Fulani (1)	G	G	S	S	S	NS	
	Fulani (2)	G	G	G	S	LS	NS	
	Djerma	G	G	S	S	S	NS	
Tountoubé	Bouzou	LS	LS	LS	G	NS	LS	
	Hausa	G	LS	NS	LS	NS	NS	
	Fulani	NS	LS	NS	G	G	G	

The most commonly stated reason for decline in pasture quality is the extension of crop fields. This is especially true in the case of the village of Bokki where both pastoralist groups (Fulani) and others cited the extension of fields as the most important reason for pasture quality decline. In the other two villages, there is a stronger difference between Fulani, who generally see cropland extension as the major cause, and farming groups, who are more likely to cite declines in the productivity of natural pastures.

Access to cropland

In all villages, women gain access to land through loans from their husbands or from neighbors with greater land endowments. Bokki and Katanga, two villages lying to the west, show much lower rates of land rental or purchase. For many households in these villages, access to cropland is generally less secure – relying on the loans from a relatively small group of landowners. A higher fraction of Djerma fields are reported as being owned than fields of the Fulani. In Sabon Guida and Tountoubé, informants reported much higher rates of traditional field ownership supplemented by measurable fractions of purchased fields, which are virtually nonexistent in the Bokki or Katanga. As a result of higher rates of field ownership by households in Sabon Guida and Tountoubé than other two villages, the reliance on borrowed or pledged fields is much lower and therefore security of cropland access is presumably higher. These results should be

interpreted within the context of different land endowments, different social histories, and different forms of local governance in the four study villages. These differences help shape variations within and across villages with respect to the distribution and security of cropland access. Since herding families rely on farming as part of their livelihood strategies, the relationship between farmers and herders is strongly mediated by how land access is distributed between and within these groups.

Access to labour

Along with land, the availability of labour is a major constraint to both crop and animal husbandry. Particularly during the cropping season, the simultaneous labour demands from cropping and animal husbandry contribute to less than desirable husbandry of crops (weeding) and animals (herding). Withdrawals of labour from herding can not only lead to more constricted grazing patterns, which threatens animal nutrition, but an increased potential for livestock-induced crop damage—a major cause of farmer-herder conflict. The major source of labour for most households in the four study villages is the family— particularly family of the household concession.¹ Family labour is strongly influenced by the age of the family unit with respect to the family development cycle. Young families, made up of a husband, wife and small children are notoriously labour deficient. Labour availability in the household grows from this point on until sons (if/when they leave) and daughters leave the concession for marriage.² Large concessions are established when the nuclear families of brothers, nephews, and sons of the household head remain in the concession.

Access to livestock

Livestock is both a store of wealth and a means of production. Livestock also play an important role in the mediation between farmer and herder interests. Farmers that invest in livestock are more likely to have developed a working relationship with a herder. This relationship can be used to facilitate communication between affected parties when conflicts arise. Self-reported livestock ownership is highly skewed in the study villages. It is clear that while there remains a clear difference between ethnic groups that have historically managed livestock (Fulani) and those that have been historically farmers (Djerma and Hausa) in Bokki and Katanga, there is no such difference in Sabon Guida and Tountoubé. In the latter two villages, the relationship between investments into the productive capital necessary for cropping and livestock husbandry are similar while in the case of Bokki and Katanga, Fulani show a much higher preference for investing in livestock.

The social relations of livestock management

¹ One major exception to this is that of households headed by marabouts who often benefit from the labor power of their students.

 $^{^2}$ "Household" can be defined in many different ways – from the group of people that live in the same house, to those that share the same cooking pot, to those that live in the same walled concession. For the purposes of this research, we define the household as those living within the same walled concession which for the ethnic/caste groups of this study, is generally associated with the kinship group that works common fields from which grain is stored in a common granary (individual fields are common within the household).

A household's agricultural production is affected not only by the actions of household members but those outside of the household within or outside of the household's social group. Crop production often involves the hiring or sharing of labour, renting/borrowing fields from land owners, engaging in contracts with herders for manure or for herding services, managing disputes concerning field boundaries, and managing disputes concerning crop damage ... etc. Livestock production involves herding contracts with livestock owners, managing disputes concerning crop damage, negotiations to gain access to pasture outside of village territory, negotiations to gain access to water for livestock... etc. While most social relationships implicated in agricultural production occur within the household, inter-household relationships are very important. Members of representative households of the major social groups in the four study villages were interviewed about the productive activities they are involved in and how these activities are meaningfully affected (if at all) by people outside of their household. The results of these interviews are presented in Table 3. Of the 500 identified social relations enumerated in these interviews, 57% involved people outside of the interviewee's social group of which 62% were relations between farmers and herders. This finding supports the argument that agricultural production does not involve members of the "decision unit" but relies for better or for worse on relationships within and outside kinship and ethnic/caste groups. Farmer-herder relations are not only important for local politics but also for increasing agricultural productivity.

Table 3. The reliance on extra-household social relations on household productive activities. Tabulation of the results of 139 members of 79 households on the major productive activities of household members and the reliance of these activities on others.

Unidentified relation	Relation with members of same social group		h members of ocial groups outside village		Total number of extra- household relations
90	214	218	68	178	590

Farmer-herder relations and conflict management

In this study, we attempted to trace out the social networks that people use when conflicts arise in relation to their productive practices. We did this by interviewing members of the seventy-nine households representing the major social groups about the people who they rely on to help them manage conflicts as they arise in their production activities. In all the villages, at least 75% of the cases of farmer-herder conflict between 2002 and 2004 reported by the informants during our interviews were resolved (Figure 1). In Tountoubé all cases of conflict were resolved. The results support a basic premise that conflicts that necessarily arise as people pursue diverse livelihood strategies are largely managed effectively at the level of local communities. In all the villages, the elders, marabouts and chiefs are the main channel for mediation. For example, all resolved conflict cases in Sabon Guida and Tountoubé were through village elders and chiefs. The high level of success of internal mediation in both villages could be attributed to the high respect for the authority of village chiefs and council of elders by all social groups. The opposite is

the case in Bokki where the village chief is much less respected. Hence, there is a relatively high involvement of external mediators in resolving conflict in the village (five of 16 cases of conflict reported to be resolved by the informants were by local court and police).

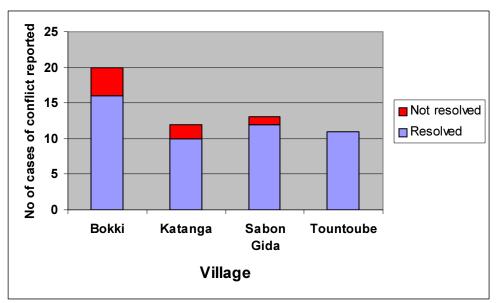


Figure 1. Reported cases of farmer-herder conflict in study sites between 2002 and 2004.

From the responses of the informants in all the four villages, damage to crops was the first reported cause of conflict between farmers and herders (Figure 2). Crop damage is not limited to damage to growing crops on the field but also included unauthorized grazing of crop residues after harvest. The increasing number of conflicts due to unauthorized grazing of crop residues is a reflection of the change in farmer-herder relations from that of mutual trust that characterized manure and entrustment contracts to more inherently conflictual relationships based on wage and tenancy contracts (Turner 2003). Other causes of conflict reported were access to watering points, expansion of crop field to corridors for animal passage and theft of animal.

CONCLUSIONS

This study on farmer-herder relations and conflict management has shown that conflict, in some form or another, is common in agro-pastoral communities of Niger. It is clear that conflict has the potential to affect the livelihoods of farmers and herders alike. The relationships between farmers and herders in the Sudano-Sahelian region of West Africa are multi-dimensional and like most social relationships involve both cooperation and conflict. To understand farmer-herder conflict one needs to consider the farmer-herder relationship more broadly than the social interaction concerned with use of common natural resources. The ability of rural communities to prevent and manage conflict is largely based on the routes and strength of communication between herding and farming interests, respected community leaders, and leaders in neighboring communities. Overall, the local institutional arrangements are functional and conflicts are effectively managed at local levels based on results from interviews in the four study sites.

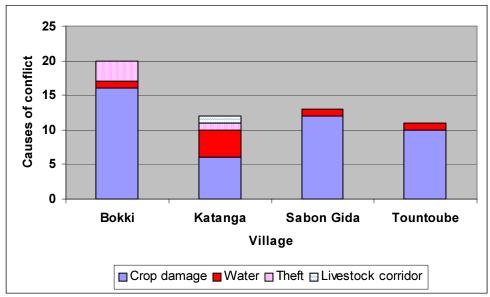


Figure 2. Reported causes of farmer-herder conflict in study sites between 2002 and 2004.

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