The Arena of Conflict Management between Farmers and Herders in the Southwest of Burkina Faso: Obstacles for Empowerment

Maria Brockhaus[1], Ernst-August Nuppenau[1]

1 Justus-Liebig-Universität Giessen, Institute of Agricultural Policy and Market Research, Senckenbergstraße 3, 35390 Gießen; e-mail: Maria.Brockhaus@agrar.uni-giessen.de ; Ernst-August.Nuppenau@agrar.uni-giessen.de

Abstract

In today's political realities there is a strong tendency for bargaining and negotiation policies. An inclusion of organisations and organised interests has taken place not only in western political decision making processes. In times of political, economic and social transformation in West Africa, conflicts of interests over natural resources, particularly between `farmers' and `herders', are common problems and of growing concern. Instruments like decentralisation and land tenure reform may empower actors and actor groups to support successful negations for peaceful and equitable natural resource and conflict management. But the question for `who empowers whom and how' arises immediately. Therefore, an analysis of frame conditions, institutional arrangements and actors' roles and networks is necessary.

Between 2001 and 2003 a study on conflict management was undertaken in the Southwest of Burkina Faso. 124 households and the local authorities in six villages participated in semi-structured interviews and group discussions. Also representatives of the regional and national meso- and macro level were interviewed to identify their involvement in and perception of conflict management.

Beside the `farmers' and `herders' different actors in the arena of conflict management could be identified: local authorities (mediators); administration (local/regional as mediator, national as frame condition donor); `politicians', influencing decision making processes at local as well as at national level; development projects and NGOs, supporting negotiation processes. Local-level solutions for management problems are preferred and capacity building due to its impact on sustainable and equitable land use planning and resource management has been seen as a prerequisite. Although the actor groups pointed out their own potentials to serve e.g. as catalysts for negotiation processes, the ties between them, if they exist, are dominated by information gaps, hierarchical influence and distrust. Numerous obstacles for the fulfilment of theirs or other's roles were listed: actor's lack of means and abilities, state's unwillingness to share power with the civil society, and the feared abuse of power by powerful individuals for the realisation of their personal stakes.

It seems that empowerment has to be seen not only as a question of who, whom and how, but also as a question of control of power relations.

1. Introduction

In a period of environmental change, economic transformation and political uncertainty throughout West Africa, the problems of competition for and conflicts over natural resources are of growing concern. Farmer-herder conflicts are common and widespread. But although conflicts are commonly perceived as conflicts between "farmers" and "herders", which introduce ethnicity as a factor into the equation, the fundamental issue is about reconciling and integrating different land use systems, and especially about access to strategic resources at specific moments of the year. This is particularly the case in an environment like the southern Soudanian zone, where most people practise, to different degrees, both farming and livestock keeping activities.

In the Southwest of Burkina Faso conflicts between 'farmers' and 'herders' are reported to be becoming more and more frequent and sometimes violent, according to common perception, even though statistics about an increase are not available. These conflicts originate in competition for

access to natural resources, and appear to be caused by population growth and migration as well as land shortage and degradation. Differences between competing groups in cultural values and in the acceptance of modern and traditional law may contribute as well (Hagberg 1998). The conflicts take the form of a mixture of social tension and avoidance, of political action and of violent confrontations (Turner 2003).

A number of different actors and authorities at local level as well as State authorities are involved in the attempted management of these conflicts. The processes of mediation at local and regional level between farmers and herders are embedded in a broader legal and institutional context. This context is a result of policies related to natural resource management (NRM) and is developed at national and/or international level. Land tenure policy is part of such a legal framework and capacity building at all levels is a prerequisite due to its impact on sustainable and equitable land use planning and resource management. The process of decentralisation in Burkina can be seen as a tool to empower the different actors, particularly at local level. Again a multitude of actors and authorities participates in the development of such policies related to NRM. Their motivations, interests or stakes are influencing the design of an adapted institutional framework for efficient resource and conflict management to avoid a further escalation of the conflict situation between farmers and herders (North 1990). Therefore, besides the concerned and the mediators a wide range of actors and actor groups performs and operates at different levels in the arena of conflict management. Their performance is related to the structure in the arena, which is affected by personal and collective stocks of social trust, norms and power and the existing formal and informal networks (Putnam 1993).

If conflict management at local level is the most effective in economic (transaction costs) and social terms, the national (and inter-national) policies have to design a flexible institutional framework for a peaceful and equitable land use (Brockhaus et al. 2003). They should guarantee participation of all actors and interests in the negotiation processes, at local as well as at national level. But for successful negotiation processes about divergent interests with divergent actors the arena needs to have a structure, which enables a constitutive participation of all actors and actor groups, at local, regional and national level. Empowerment has been identified as a key factor but is still little perceivable in Burkina Faso. Therefore, the hypothesis for this paper will be that the potentials as well as the obstacles to achieve empowerment in the arena are linked to (1) actors' interest, problem perception, visions and contributions; (2) actors' embeddings, the structural conditions and networks in the arena; and (3) the power relations between the actors.

In a first step, the arena of conflict management will be introduced in presenting the roles, problem perception and visions of the different actors in the arena. This is followed by an analysis of the actor's strength and weaknesses in the mediation process. The structure in the arena will be analysed in identifying actors' networks, related to the variables contact, information and influence and their closeness to and impact on the political bargaining and policy-making for NRM. Potentials and obstacles for empowerment to achieve a successful and equitable natural resource and conflict management will be pointed out.

2. Methods and Approaches

For the research an actor-oriented approach has been chosen. Basis of the research was a case study of conflict management done by a multi-disciplinary team from October 2001 to June 2002 in six villages in the research area, followed by investigations at the regional and national level in Burkina Faso from October 2001 to June 2003.[1]


The general objective of the research project was to identify strength and weaknesses of mediators in the arena of conflict management and to analyse the potentials and obstacles for successful conflict management. The specific objectives were

- at micro-level (households, villages) and meso-level (Prefects, High Commissioners, Technical Services, Development and Research Projects, NGOs): the identification and analysis of actors, conflicts and conflict management strategies (conflict inventory); role and relevance of newer laws related to NRM
- at macro-level (national government and parliament): the identification and analysis of key actors and conditions with impact on natural resource management and conflict management; identification and analysis of actors' networks
- the synthesis of the results at micro-, meso- and macro-level to identify strengths and weaknesses of these management processes and to analyse potentials and obstacles for peaceful and equitable conflict management in the arena.

Micro-Level

The methods used to carry out the study at micro-level and meso-level were PRA tools like structured, semi-structured and open interviews as well as focus group discussions and participant observation in the research villages.

Figure 1. The research area and sample villages in South West Burkina Faso
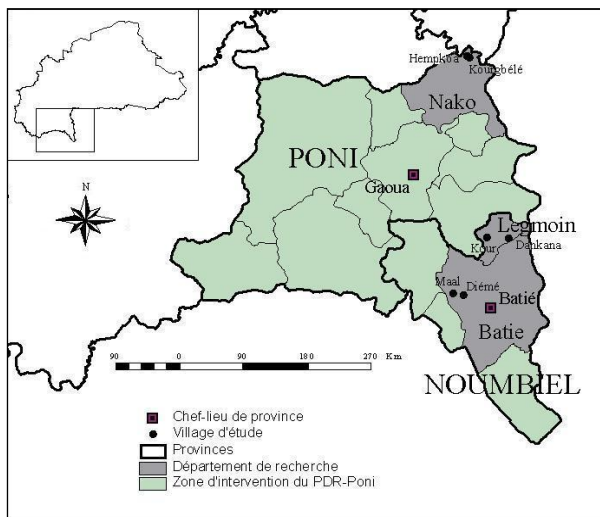
Six villages (Maal, Djeme, Kour, Dankana, Kourgbélé, and Hemkpa) were chosen covering the two provinces of Poni and Noumbel (Figure 1), on the basis of previous PRA surveys and of personal information from local project agents. In total, 124 household heads participated in semi-structured interviews. The questionnaires covered issues like natural resource management (access to and management of land, water and wood), socio-economic data, social relations (inter- and intra-ethnical) and conflicts and conflict management. Further it was asked how, when and where communication over conflicts (particularly between farmers and herders) takes place in the village and how the interviewees perceive their relation to mediators referring to trust and influence.

In each village, at least 30% of the total number of households (HH) were interviewed; however not more than two HHs per compound (a compound is formed by one or more households, which are members of the same extended family, e.g. the father's household together with the households of his already-married sons). Nearly all investigated farmer households (predominant activity agriculture) were part of the 'first-comer' or so-called 'autochthonous' population (Dagara, Birifor, Lobi). All interviewed herders (predominant activity: cattle keeping) were Fulani who have recently immigrated into the villages and are practising agriculture as a second activity.

Meso-and Macro Level

For a deeper understanding of the farmer/herder conflict situation in Burkina Faso representatives and experts at the meso-level (Prefect, High Commissioner, Technical Service, Development and Research Projects, NGOs) and macro-level (national government, Parliament) were interviewed. Their involvement in and perception of conflict and conflict management, as well as their views on current political processes such as land tenure reform have been investigated as well as their

ideas on the form of future conflict management between farmers and herders. Another part of the questionnaire concerned informants' networks with regard to the subject and these were inquired into by the variables contact, information and trust. The interview length varied between 60 min and 2, 5 hours. In total, 38 individuals, representatives or experts have been interviewed. The methods chosen to analyse the data were descriptive statistics and network analysis.

Network analysis, network boundaries and actors' identification
The network analysis faces two central problems: the definition of the boundaries of the network itself and the identification of the relevant actors (Jansen 1999). These problems are related to the complexity of political decision making and to the flexible In and Out of relevant actors in the networks. In this research, the focus is on conflict management between farmers and herders at local/regional level and on the dynamics in the accompanying institutions and policies related to natural resource management at macro level. Therefore, the question is, which networks are influencing (1) conflict management between farmers and herders and (2) the policy making with impact on NRM. This leads to a network analysis at different spatial levels, local, regional and national. Then, the identification of relevant actors depends on the criteria: 1. actors participating in mediation processes at local/regional level; 2. actors at macro and meso level, influencing the policy making for NRM, due to their hierarchical position (administration); 3. related actors at all levels, influencing the policy making for NRM, due to formal and informal ties to the actors identified by the first or second criteria.
To sample the ties between the actors the snowball method was applied; focal set of nodes (actors) are those involved in conflict management at local and regional level. Actors' identification by the first criterion took place by the results of the micro studies in the research villages. Members of the Technical Service, the Prefects at departmental level and the High Commissioners were mentioned as involved in the conflict management. In addition, two development projects in the area, as well as two scientific research projects were identified and the project chiefs and the responsible professor at the University of Ouagadougou, respectively, were interviewed. Further on, one current and two former members of the parliament as well as one retreated senior official were named in formal and informal interviews because of their impact on conflict management and on the decision making processes in the research area. Each of these actors was asked to name all of those actors, who are in close contact with the informant and, in his view, relevant for the research topic. Then, actors named (who were not part of the original list) are tracked down and asked for their ties. As a result, actors in the ministries of agriculture, animal production and decentralisation and members in national and international organisations and associations have been interviewed, to identify their networks of information and consultancy. During field work, typical problems for network research were faced: actors named by another informant, but long-term absent or refusing participation in an interview; actors refusing particular responses; actors personally named by others but as representatives of an organisation sending a representative of themselves; informants not naming an actor but an organisation. In total, 38 actors have been investigated; thereof 24 interviewees in the focal set (local/regional level), 6 in the second zone and another 8 in third zone (national level). All these actors were asked to name their most important informants, their most important consultants and vice versa (both relations – information and trust - are measured in a nominal way). Further they were supposed to name the actors which are, in the informant's view, the most important actors in the arena of conflict management between farmers and herders (ordinal – ranking of the best).
Some of the interviewed actors were aggregated to actor groups because of their belonging to the same administrative unit or organisation or because of sharing other similar attributes in the arena of conflict management. If aggregation for analysis has taken place, the answers of the sub-group members were added and weighed with the total sub-group size.

3. Networks in the arena

Negotiation processes with regard to interests in natural resources and in the management of those between the involved actors in the arena take place at all levels. Particularly in an expected decentralised environment policy making will take place not only at national level in Ouagadougou, but also at regional and local level. What are the determinants of the outcomes for the negotiation processes? Already a divergent problem perception among the involved can lead to absolutely different policy outcomes; the agenda setting may determine the efforts and financial resources for formulation and implementation of policy. At all phases we have negotiations with an outcome: an accepted perception, opinion, or proposition, either if it is a compromise or a dominant position (Jann et al. 2003). Factors and frame conditions of formal or informal nature are shaping the outcomes in the different parts/steps of the policy process – but we also have actors, embedded in a network of actors and interests, making policy (Schneider 2003). In this paper, the research focus is on the networks of the different actors in the arena to identify potentials and obstacles in policy-making for equitable natural resource management and successful conflict management - related to the structural settings of the involved actors.

3.1 Network actors, their problem perception, visions and contributions: the focal set
Starting point for this part of the research is the local arena of conflict management (Figure 2).

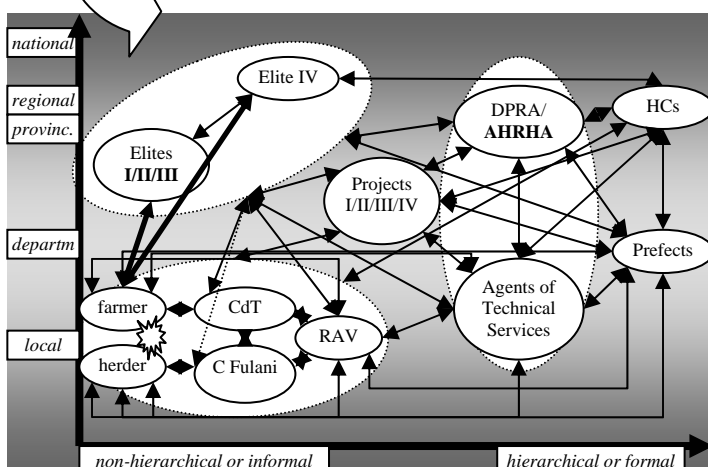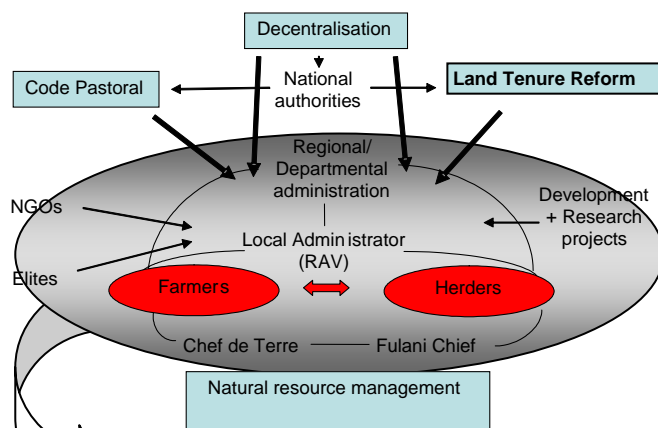**Figure 2. The arena of conflict management**

Relations between the actors involved are manifold, but not all actors are in contact with each other. Some of the ties between the actors exist for formal or hierarchical reasons (e.g. administration at departmental and provincial level). In the case of the development or research projects there are contacts and relations due to planned or already implemented activities in the villages. Ties can exist because of family relations (elites) and contact may be a result of common political activities or engagement in the same committees. Figure 3 gives an idea about the complexity of the ties between the different actors. The actors are arranged in the figure according to their spatial position, if the actor is positioned in the village, at departmental, regional or national level and according to actors' degree of hierarchical respectively formal correlation. All actors at the local/regional level are in more or less close contact to the other key players in the arena of conflict management. One exception are the members in the group of elites, which have followed a career at the national level but still dispose over strong influence in villages' decision

Figure 3. Contact between actors involved in the local/ regional arena of conflict management

making processes. They mentioned very strong ties to the autochthonous part of the population and none to the migrant group of Fulani herders in their respective home village and understand

themselves as 'defenders of the autochthonous rights'. But even here weak contact exists as they know at least the Fulani Chiefs because of common village meetings. Out of this netting of contacts the focal set of actors for the network analysis has been identified and they are agglomerated to actor groups because of similar positions or impact in the arena (Figure 3). All these actors have in common that they are involved in daily life or at least professional life with conflicts and conflict management between farmers and herders in the research area.

In their view the number of conflicts has increased (one exception was one of the two High Commissioners, who had not observed an aggravated situation) in the research area over the last years, even though statistics were not available or not complete. Reasons for this development have been seen in an emerging competition for natural resources due to (1) growing need for rangelands because of the immigration of pastoralists from the north (droughts in the last decades) and south (political crisis in the Ivory Coast) and (2) growing need for arable land because of re-migrated family members (political crisis in the Ivory Coast) or changes in the production techniques (rice production).

Most of actors in the focal set share the same platforms of communication about 'conflict and conflict management'. Village meetings (e.g. with participation of locally engaged projects, agents of the Technical Services, with other members of the administration and with the locally linked members of the group of elites) as well as administrative meetings in the prefecture and with the High Commissioner have been mentioned as such platforms. The actors in the focal set not only share the same problem perception and the same platforms of communication of and on the subject, but also they have in common almost similar visions for a better conflict management in future. The empowerment of the local population, farmers and herders, has been seen as a prerequisite for an equitable and peaceful resource and conflict management.

Figure 4. Contributions to conflict management of actor groups at local/regional level
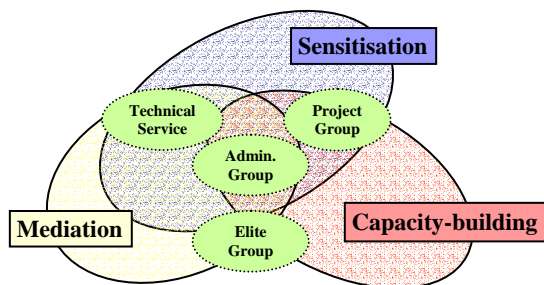
At this point mostly all mentioned contributions to conflict management started, as the informants have not seen a priority in their role as mediator but in the more preventive part of their contributions, like sensitisation and capacity building, e.g. by the support or animation of the population to found associations or organisations. Figure 4 shows the main contributions of the different actor groups. The administration group is placed in the inter-section as they contribute to all three main activities. All actor groups at local/regional level have strong impact on the arena due to their potential of catalysing impact as multipliers of information and competence, as initiators of organisations and associations and as facilitators for empowerment.

Strength and weaknesses for empowerment: the focal set
Most of the perceived own strengths or of the other focal set actors in the arena have been linked to the subject of empowerment (e.g. because of bridge functions between government and population or as multiplier and distributor of information) but here also most weaknesses were seen by the actors: the concerned farmers and herders are too disorganized and also their frequent illiteracy is a strong hindrance for empowerment; the project activities may create conflicts and in the research region pastoral interests are not always included; the administration is seen as too inflexible and often too far away from the specific problem. It shares with the Technical Service the susceptibility for corruption and often a lack of transparency in decision-making; the elites dispose over cohesive ties to the autochthonous population, but this may be a source of inflexibility, as their scope for negotiations with the herder group may be limited by expectations of their families. In the view of other informants they have rarely altruistic interests and their activities are mostly inscrutable. Overall the lack for efficient systems of control at all levels has

been mentioned as a core problem by members of all actor groups and for all actor groups. Therefore the introduction of new stakes and stakeholders in the region (e.g. the newly created CVGTs, Comités Villagois de Gestion des Terroir, by the on-going land tenure reform) has been feared by the informants as an uncontrollable source of conflict. These even as the CVGTs are perceived as an important step towards empowerment and locally managed resources.

The second central subject in the arena of conflict management in the view of the different groups in the focal set has been the management of natural resources, in particular land use management. In the competition for natural resources they see the main reason for conflict. Most of them demanded a flexible legislation for land tenure and also an on-going process of decentralisation due to its impact on the local capacity building and to the necessary transfer of responsibilities for NRM to the village level. The central weakness identified by the focal set for the macro level has been seen in the – up to now - failed transfer of power to the village level and the hesitations in providing a flexible and adaptable legal framework.

3.2 Network actors, their problem perception, visions and contributions: the national level

To identify further actors at the macro level, the 24 actors of the focal set have been asked to name other – in their perception – competent key players with influence in the arena, to whom they have personal contact. Most contacts have been given by the project group (Figure 5).
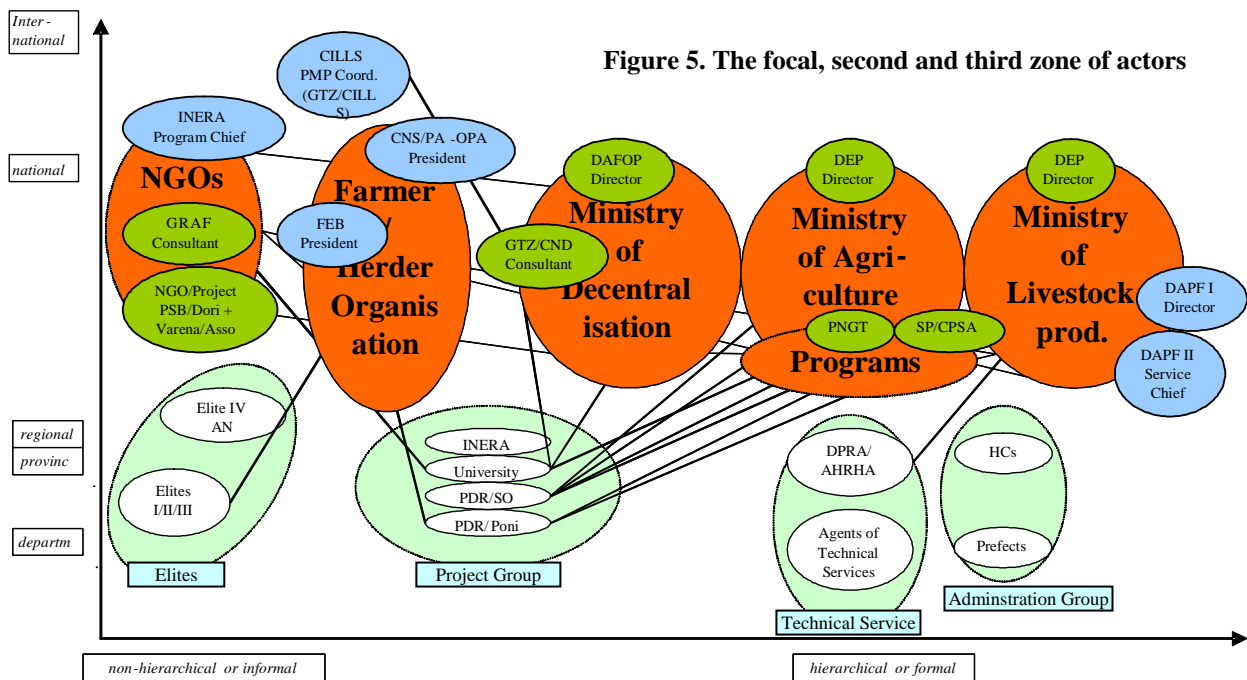

Figure 5. The focal, second and third zone of actors

Mainly this group links the local/regional with the national level. The administration group could not name key actors outside the regional level and therefore the focal set of actors. The subject, as they explained, had not been of relevance neither in their regular meetings at macro level nor at other occasions at national level. This also applied for the agents of the Technical Service, as here only one director mentioned as a contact person the director of the department for strategies and research in the livestock ministry.

In the second zone of the snowball research, 8 actors (in green) were interviewed and these actors named other key players. In the third zone, another 6 actors (blue) were interviewed. The 14 interviewed actors of the second and third set can be linked to the ministries of agriculture, livestock production and decentralisation and national programs. Also members of different organisations were identified: the CILLS (Comité Inter-Etats de Lutte Contre la Sécheresse dans le Sahel), INERA (Institut de l'Environnement et de Recherche Agricole), the PSB Dori (respectively Varena Asso, provider of a training program for alternative conflict management)

and GRAF (Groupe d'Action et de Recherche sur le Foncier: a research network created in 1998, focussing on land rights and land policy in Burkina Faso). Representatives of a farmer organisation (CNS/PA-OPA) and of a herder association (FEB) were part of the research too. The most central actor in this network of contact and estimated competence has been the informant of the PNGT (national land management program; among other things, it aims at the development of land management plans and the implementation of committees for land management in the villages (CVGT)). The named key actor in this program has been working as a geographer in the PNGT since 1987. He is at present engaged in drawing together experience from current projects for discussion between the various people and organisations involved in rural development. He is a member of the GRAF network. This actor has the highest in-degree (0.29) in the network of contact/competence, as he has been chosen most often by the other 13 actors in the socio-matrix at national level.

Table 1. Network In-degree contact/competence

$$id_j = \sum_{i=1}^{N} \frac{x_{ij}}{N-1} \ \textit{für } i \neq j$$

| Position	Actor	id_j
1	PNGT	0.29
2	GRAF	0.21
3	PSB/Dori	0.14

Not all actors at this level are linked with each other and they do not share the same communication platforms on the subject as it was the case for the local/regional level. If there are discussions on the subject, these take place mostly with colleagues of their own organisation or department or in villages in case of field missions. Meetings in the ministries where the subject is the first topic or the only one have not been reported by the informants, but it is an accompanying topic in all discussions around NRM, as the informants explained. One exception are the seven members of the loose GRAF network, using this as a common platform for discussions. Nearly all informants at the national level of actors have seen an aggravation of the conflict situation in Burkina over the last decades. Key word for this assessment has been the 'competition for natural resources' caused by droughts in the North, migration from the South and from the Central-plateau. Together with population growth this has lead to a concentration of resource users in parts of Burkina, particularly in the South West. In their view, institutions or 'rules of the game' for the peaceful management of the resources with multiple users and interests are not that highly developed. However, the informant from the DEP in the ministry of agriculture denied the perception of the situation as a problematic one and pointed out the positive and - in his view - successful actions for a peaceful land management already undertaken by the administration. He sees no need for action except an on-going reform process to achieve land security.

The 14 actors on this set confirmed what the actors at in the focal set had already indicated: the crucial role of state and policy in the field of conflict management: they design and develop legislation, which forms the framework for all activities related to NRM at local level, whether this activities are negations on or conflict over resources.

However, the opinions on what is a necessary law to achieve a peaceful future, what is equitable and who may be responsible for the implementation, vary remarkably. The actors at this level have in common the vision (like the actors at local/regional level) that a desirable future comprised a resource and conflict management by an empowered local population assisted by a sensitised administration. An exceptional vision to achieve a peaceful future has been given by the president of the national herder organisation: he proposed the sedentarisation of all herders in Burkina, supported by subsidies like tax-free fodder.

The contributions of the actors at the national level are linked to their domains of competence.

Figure 6. Actors' domains of competence
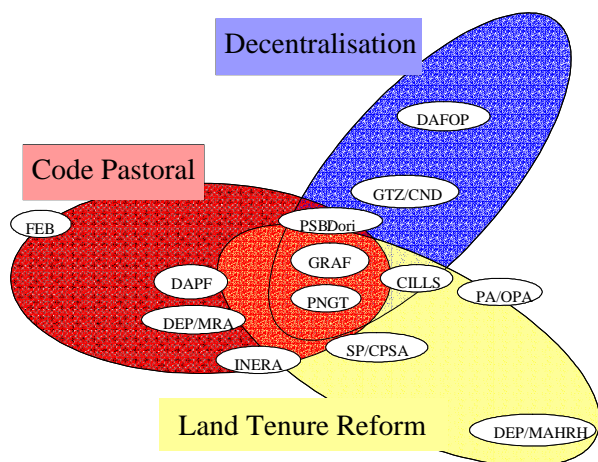
These competences and therewith their impact in the arena are linked to the design of an adapted, flexible institutional framework for empowerment. Decentralisation, the on-going land tenure reform and the development of a Code Pastoral have been identified as the central policy fields for such a development. In figure 6 the informant from the PNGT together with the informant of GRAF are in the intersection due to their impact and competence in the policy fields. This corresponds with the PNGT-informant's high in-degree in the network of contact and competence. Therefore, one would expect a similar high in-degree of this informant in the networks of information and consultancy.

But the network of contact/competence finds no analogy in the networks of information and consultancy (Table2).

Table 2. Networks of Information and Consultancy: In-degrees

Information				Consultancy			
Info-Source		Info-Requestor		Advice-Source		Advice-Req.	
Actor	id_j	Actor	id_j	Actor	id_j	Actor	id_j
DAPF	0.21	DAPF	0.14	DAPF	0.14	DAPF	0.21
PNGT	0.14	PNGT	0.07	GRAF	0.14		
FEB	0.14			PSB/D	0.14		

In case the 14 actors at national level have need for information or advice, they make no use of their network of contact/ competence. Asked for their sources or requestors for information and advice, the informants mentioned mainly their own departments, organisations and hierarchical instances. For the requesting of advice and information a network structure between the 14 actors could not be identified, as only one, respectively two actors out of the 14 in the network of contact/competence were mentioned.

Strength and weaknesses for empowerment: the second and third set
In the view of the 14 informants manifold actors and interests play key roles in the arena of conflict management. Beside the customary actors (traditional and religious authorities) new powerful groups have entered the arena. Local elites, opinion leaders, deputies, projects, organisations and associations were mentioned. They can act as multipliers and distributors of information as well as manipulators in polarising the social climate in a village. As informants pointed out, they play a lobbying part in the arena for their associates or their own stakes at local and at national level. The newly created CVGTs in the villages could bring in new dynamics and open negotiation platforms but may abuse their power or may be abused by others. The central weakness of this new group of actors has been seen in the difficult controllability of their power. The question of control has arisen for the administration as players at local and regional level by two informants; the other informants have seen the weakness of this actor group in their limited financial and human resources and in their distance to the field. The state authorities as providers of legal frame conditions have been seen critically by the informants, because of synergetic losses between the ministries of agricultural and animal production and the suspected unwillingness to share power with the local level or, as one informant explained: "perhaps the willingness is there but no courage to change anything!" (interview 26).

The results of the comparison of the network in-degrees leads to one central weakness identified for the national level: the waste of competences and the sticking to hierarchies as a source of rigidity. The problem of legitimacy has to be mentioned too. Regarding the vision of the president of the national herder organisation (total sedentarisation of all herders), one may assume that this vision is not shared by all herders in Burkina Faso. But this informant disposes over strong contacts to the ministries of livestock production and agriculture. Also to be mentioned is the case of a lacking problem perception. No problem perception means as a consequence no political agenda, or only a biased one, as we have seen by one informant in the agricultural ministry with a complete focus on land security.

4. Empowerment: Potentials and Obstacles

A multitude of key players are involved in the arena of conflict management. They all confirmed the need for empowerment to achieve an equitable and peaceful natural resource and conflict management. Potentials are also manifold: regional projects and national programs like the PNGT and organisations can be broker for local interests at national level, as they link the two niveaus. Independent organisations like GRAF can be provider of negotiation platforms and may, due to their transparency and objectivity, ensure a stimulated discussion with equitable outcomes in the different policy fields. There is a plurality of competent actors at all levels and they participate already in negotiations for the design of an adapted and flexible institutional framework.

However, these potentials are not fully used due to the unsolved question of control of power and power relations, particularly at the local/regional level with the introduction of new stakes and stakeholders. The same applies at national level, due to the question of network use and abuse. As long as there is a waste of competences, supplemented by structural gaps between all levels and between the actors, and the question of control and the problem of legitimacy are unsolved, the transfer of competences, power and resources to the local population will remain hesitant. A stronger development of transparent negotiation platforms may be one answer.

5. References

Brockhaus,M., T.Pickardt, and B.Rischkowsky. Mediation in a changing landscape: Success and failure in managing conflicts over natural resources in Southwest Burkina Faso. 2003. London, IIED. Issue Papers 125.

Hagberg,S. Between Peace and Justice: Dispute Settlement between Karaboro Agriculturalists and Fulbe Agro-Pastoralists in Burkina Faso. 1998. Uppsala, Uppsala studies in Cultural Anthropology.

Jann W. and Wegrich K. Phasenmodelle und Politikprozesse: Der Policy Cycle. In: Lehrbuch der Politikfeldanalyse. Schubert K. and Bandelow N.C. 107-146. 2003. München.

Jansen D. Einführung in die Netzwerkanalyse: Grundlagen, Methoden, Anwendungen. 1999. Opladen.

North D.C. Institutions, institutional change and and economic performance. 1990. Cambridge, Cambridge University Press.

Putnam,R. Making democracy work: Civic traditions in modern Italy. 1993. Princeton Press.

Schneider V. Akteurskonstellationen und Netzwerke in der Politikentwicklung. In: Lehrbuch der Politikfeldanalyse. Schubert K. and Bandelow N.C. 107-146. 2003. München.

Turner,M.D. "Multiple holders of multiple stakes: the multilayered politics of agro-pastoral resource management in semi-arid Africa." Proceedings of the VII International Rangeland Congress July 26 - August 1 2003. Durban. (July 2003-August 2003):1715-1725 (CD).