1   Introduction

1.1   General 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. However, although conflicts are commonly perceived as being between "farmers" and "herders", which introduces ethnicity as a factor into the equation, the fundamental issue relates to reconciling and integrating different land use systems, and especially access to strategic resources at specific times 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.

According to common perception, conflicts between 'farmers' and 'herders' in the Southwest of Burkina Faso are becoming increasingly frequent and sometimes violent. However, statistics relating to such an increase are not available. These conflicts originate in competition for access to natural resources, and appear to be caused by population growth, migration, and land shortage and degradation. Differences between competing groups in terms of cultural values and in the acceptance of modern and traditional law may also contribute (Hagberg, 1998). The conflicts take the form of a mixture of social tension and avoidance, and of political action and of violent confrontations (Turner, 2003).

A number of different actors and authorities at the local level as well as State authorities are involved in attempts to manage these conflicts. The personal, organisational, and structural strengths and weaknesses of these actors determine the outcomes of the management processes. Additionally, the processes of mediation between farmers and herders at local and regional level are embedded in a broader legal and institutional context. This context is a result of policies affecting 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 may enhance capacity building to empower the different actors, particularly at the local level. Again, a multitude of actors and authorities participates in the development of such policies related to NRM. Their motivations or interests influence the design of institutional frameworks for efficient resource and conflict management, which aim to avoid further escalation of the conflict situation between farmers and herders. Therefore, besides the concerned parties and

the mediators, a wide range of actors and actor groups perform and operate 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 as well as by the existing formal and informal networks (Putnam, 1993).

If conflict management at local level is the most effective in economic and social terms, the polity has to design a flexible institutional framework for peaceful and equitable land use. They should guarantee participation of all actors and interests in the negotiation process at local as well as at national level. In order to achieve a successful negotiation processes involving divergent interests and divergent actors, the arena needs to have a structure, which enables a participation of all actors and actor groups at local, regional, and national levels. Although the actors and actor groups at the different levels underlined their own potentials and capacities to serve e.g. as a catalyst for negotiation processes, the ties between them, if they exist, are characterized by information gaps, hierarchical influence and distrust. Numerous obstacles to the fulfilment of their or others roles were listed, which include actor's lack of means and abilities, the state's unwillingness to share power with civil society, and the perceived abuse of power by powerful individuals in pursuit of their personal interests.

In the literature on the subject there is a strong demand for in-depth analysis of the resource-related conflicts themselves, of the actors (or stakeholders) involved, and of the conflict management. There is a need for an institutional analysis and/or a policy analysis. However, in recent research, the analysis often remains limited to the local arena of conflict, to local institutional framework or to a policy analysis at the national/international level. As such, the analysis is not focused on the local problems of conflict over natural resources and the management of this conflict. Additionally, there seems to be an 'either-or-paradigm': either actor-oriented or structure-oriented. To respond to the demand for a comprehensive research and to bridge the gap between isolated research efforts at the local or national/international level, this work is designed as actor-oriented, multi-level research, which analyses by means of the network analysis the structural determinants of institutional change.

As a first step, the arena of conflict management will be introduced by presenting the institutional framework and by identifying existing mediation processes as well as the roles and strategies of the different actors in the arena. This is followed by an analysis of the actors' strengths and weaknesses in the mediation process. The structure in the arena will be analysed

by identifying actors' networks, related to the variables "competence/contact", "information" and "advice" and their closeness to and impact on political bargaining and policy-making for NRM. Potentials and obstacles in relation to successful conflict management over natural resources will be pointed out.

1.2   Problem Statement

Conflicts of interest over natural resources are of growing concern to a broad variety of actors in West Africa. The successful management of those conflicts (e.g. between nomads and settled farmers) is of increasing interest, because a 'new' view of pastoralism's ecological and economic efficiency and sustainability (Scoones, 1995; Blench, 1998) has been introduced. Additionally, as Hendrickson (1997) explained, conflict management is of great interest because of the "new aid paradigm". In his view that paradigm leads to a competition between NGOs for donor funding with a focus on 'conflict resolution' as the term may have become a fashionable catchword.

Following Scoones (1995), the efficiency and sustainability of pastoralism noted above, result from herd mobility, which allows an adaptation to the highly variable climatic conditions, and enables the herders to use in a sustainable way grazing resources, which vary in time and space. Mobile animal husbandry is the most widely practised form of land use in the arid regions of West Africa, where precipitation is the limiting factor for productivity (Behnke & Scoones, 1993; Scoones, 1995). The situation in semi-humid locations, such as those found in the research area of this study, which has average annual amounts of precipitation of 1000-1300 mm is different. The potential exists for more intensive land use systems like crop livestock combinations (Williams et al., 1999). In the Southwest of Burkina Faso, the number of cattle has increased greatly in the past years. Reasons for conflicts therefore are not primarily to be seen in an intensification of the agriculture by crop-livestock combinations, but also in the numerous years of drought in the Sahel. They have led to a strong movement directed into the more humid zones in the south. As another reason for growing livestock pressure in the South West can be seen the political changes in the neighbouring country, Ivory Coast, which borders to the south. Here, at the beginning of the 90's, cattle were politically desired. Vaccination campaigns made settlement in these more humid regions possible for herders. Than, the 'political will' changed and due to the new, uncertain, situation in the Ivory Coast remigration resulted, which led to increased cattle pressure in the border regions. Migration within Burkina Faso, in particular from the more populated central plateau into the south of the country, led not only to a change in the cattle numbers, but also to a

changed ethnic composition and to changed land use systems. Now, 'autochthonous' farmers, immigrant farmers and agro-pastoralists, semi-settled or settled herders, and transhumant herders co-exist in the research area and compete for limited natural resources. In the research area in the Southwest of Burkina Faso, competition and associated conflicts were reported as increasing in frequency and intensity between farmers, herders, farming herders and herding farmers. Particularly in the neighbouring region of Banfora, these conflicts were expressed in a more and more violent way. However, statistics were not available on conflict scales. Over recent years, the impression has evolved that conflicts over natural resources and conflict management are a highly important but also a highly fashionable topic, particularly in the international donor community. This may lead to an over-estimation of the actual conflict potential in a region. Therefore, the first step of this research is a conflict inventory in certain villages in the research area to gain insight into the actual state of the conflict situation and into the nature and management of such conflicts. The research will answer the following questions using an actor-oriented approach:

1. What are the conflicts in the research area?
2. What are the roles and relations of those involved?
3. Who are the mediators?
4. What is the outcome of mediating process and how satisfied are those concerned?

Aided by the results in this manner obtained the actors' strengths and weaknesses in the local arena of conflict and conflict management will be analysed. By revealing and tackling the weaknesses and supporting the strengths of those involved, a first step is undertaken to support peaceful and equitable conflict and natural resource management.

However, conflicts are not locally isolated phenomena. They are embedded in a broader institutional environment of political, social, and legal rules: customary institutions governing the management of natural resources (NRM) in the research area and the accompanying national policies and laws also affecting NRM. In Burkina Faso, a land tenure reform (RAF) is ongoing for more than two decades. Even if more land tenure security is achieved, the introduction of new structures for natural resource management at the local level as well as the introduction of new interests and stakeholders may lead to further uncertainty. Decentralisation is another on-going process in Burkina Faso. It aims at empowerment of the population and should enhance capacity-building at the local level. In the research area, none of the processes was yet visible, even if there was some sparse indication on their future

arrival. Delay in realising the aims of both processes may be explained by a) the lack of consensus as to how to implement the RAF and what is to be achieved for whom and b) the lack of willingness to share power with the civil society. The latter may result from the fact that decentralisation in Burkina Faso seems to be more outside or donor-driven according to fashionable principles like 'good governance' and its design as a top-down approach. Even if both processes have strong potentials to avoid conflicts or to support conflict management, the question arises of how both processes will avoid marginalising areas and actors who are not able to benefit, e.g. because of their lack of information or participation, or because of being excluded rather than included. Therefore, both processes, together with the on-going design of a pastoral law in Burkina Faso, will have strong impacts on the conflict situation. The changing institutional conditions in the research area will further determine the success or failure of conflict management over natural resources (Cousins, 1996). However, customary mechanisms for conflict management exist and they react to the changing conditions. Hence, a further question to be answered by this research is:

5. What and where are the institutional dynamics and gaps in the research area?

Again, a multitude of actors is involved in the design and change of these institutions and/or policies in Burkina Faso. Actors' scopes for negotiations on the policies are limited not only by exogenous conditions, but also by endogenous factors like their personal or group 'beliefs' (Sabatier & Jenkins-Smith, 1999). Factors and frame conditions of a formal or informal nature are shaping the outcomes in the different stages of the policy processes – and these outcomes are negotiated by actors embedded in a network of other actors and interests (Schneider, 2003). The actors, acting at different spatial levels, exchange goods such as information and advice in these policy networks; they form groups or sub-groups, coalitions or conflicting parties. The resulting structure in the arena determines the outcomes of the policy process and, therefore, influences conflict and conflict management on natural resources, particularly if some actors have structural advantages or weaknesses in relation to their ability to assert their interests. The resulting questions, which are to be addressed by this research, are answered by means of network analysis:

6. Who are the actors involved in the policy arena, what are their contributions, problem perceptions, and visions for future conflict management?

7. How are the local and the regional level connected to the national or international level and by whom?

8. What are the networks of contact/competence, information, and advice in the arena like, where are structural holes, and who disposes over which structural advantages and weaknesses?

In a framework of existing institutions and ongoing institutional change which may support successful conflict management, governmental and non-governmental actors act in a tense field of new challenges and existing obstacles. To identify and evaluate these potentials and obstacles in the arena of conflict and natural resource management in Burkina Faso there is a need for a comprehensive analysis: of the actors and institutions involved, the change of institutions, and of the policies negotiated in the emerging policy networks. Therefore, this research is not limited to a single level but includes the local, regional, and finally the national level.

2   Literature Review and Theoretical Frame

Conflicts of interests over natural resources and the accompanying conflict management are parts of a process of multiple inputs and outputs, influences and effects. Therefore, the reviewed literature includes conflict theories, institutional analysis, policy, and change.

2.1   Conflicts and Conflict Management

The forms conflicts can take are manifold, and they can be carried out and institutionalized in as manifold ways – from verbal disputes up to violent clashes and wars - and take place at all levels – from the individual up to the national and/or inter-national level. Considerations of conflicts by the different philosophers and sociologists experience a similar range as the manifestations of conflicts. For example, Thomas Hobbes (1588-1679) recognized as a cause of conflicts a destructive human, who could be regulated only by social rules. Hence, a "war of all against all" could be avoided (Hobbesin Leviathan). For Karl Marx (1818-1883), the cause of conflicts is a fundamental contrast of interests between the social classes. Only after a class struggle, in a classless society without private property, occurring then, this fundamental conflict is repealed.

Coser (1965), following Durkheim (1858-1917) and Simmel (1858-1918), regards the positive effects which a conflict can cause. He refers to the socializing function of conflicts and regards these as a condition for social change. During the dispute process, the participants become conscious of the existing rules and a new creation or an adjustment of social standards and rules in response to changed basic conditions is the consequence. In Dahrendorf's conflict theory this functional approach is rejected, just as Marx' reasoning for the emergence of conflicts (the property of production means) is. R. Dahrendorf designates the dominion as the general reason of conflicts as such, which, consisting of an organised minority, confronts the excluded majority. Thus society is an ever explosive structure with an unstable equilibrium, which is held together only by dominion and force. Therefore, conflicts are finally unavoidable and unsolvable; an accomplishment can be obtained only by regulation (Dahrendorf, 1992).

A regulation of conflicts becomes however impossible if the society is in a condition of "anomie", i.e. if the effectiveness of norms and standards is undermined (Durkheim, 1897). Following E. Durkheim, such a situation is characterized by a loss of dominant standards, a loss of the committed and accepted values and orientations, a strong shock of the group moral along with a loss of efficient social control. Usually, these features can be observed if societies are in rapid social change. The danger of such a situation lies in the erosion of

regulatory abilities because of society's loss of confidence into its own rules and the transition into a society without an accepted legal framework.

In a society, which is characterized by pluralism of interests, ideologies and values, the ability for the management of conflicts is of central importance. New, suitable procedures must be developed again and again, to design conflict regulations which encounter a broad acceptance within such pluralistic societies.

This brief overview of some historic assessments of conflict and conflict management shows that conflict as such is nothing new to the world. Further, the divergent evaluation of conflict as a positive change-stimulating phenomenon or a destructive one is perceivable in historic reflections on conflict as well as in literature that is more recent. Additionally, the important role of the institutional environment and its determining endogenous and exogenous factors (e.g. interests, strategies, beliefs, values, norms, laws) has already been underlined, e.g. by Hobbes and his idea of a state's role or Durkheimers' definition of 'anomie'.

2.1.1   Conflicts

Conflicts can be understood as disputes occurring in all types of societies, grounded in divergences of interests (or stakes) among different social groups or actors. Not only divergent interests, but also problems at the level of personal relations, communicational disturbances, different problem perceptions and interpretations as well as divergences in values and norms may be the cause of conflicts. In addition, structural divergences in societies, e.g. the power relations between individuals and groups, play an important role in the genesis of conflicts. There are manifold attempts to classify conflicts. The OECD for example proposes the following typology of conflicts in West Africa:

1.   Political crises involving armed revolt or state-sponsored violence;
2.   Border disputes between states;
3.   Conflict related to culture, group identity or ethnicity;
4.   Conflict related to population movement, particularly economic migration, forced migration and refugee flows;
5.   Conflicts over natural resources or *ressources partagées* (e.g. mining, water, fisheries, pastures, forests);
6.   Structural violence (e.g. slavery, bonded labour or political subjugation);
7.   Socio-economic crises (e.g. violence emerging from unequal distribution or mismanagement of publicly managed resources, deep-seated corruption etc.). (OECD, 2002)

The focus of this work will be on the fifth point, the conflicts over natural resources. Further on, Lo et al. (1996) distinguishes between conflicts of horizontal or vertical orientation.

Throughout West Africa, as they explain, conflicts occur between farmers and herders, among communities, or within user groups or communities (horizontal conflicts). They also occur between resource users or communities and governmental agencies and development projects (vertical conflicts). However, a categorisation remains difficult, as most conflicts have multiple causes and multiple expressions (Lo et al., 1996). Therefore, categories will often overlap, as it is the case in the West African context.

Today, in particular within the environmental field, conflicts and conflict management are of increasing concern. This field is characterized by its sector-spreading and global character and the multitude of interest (or stakes) and actors. As the focus is on conflicts over natural resources, an early well-reported farmer-herder conflict can be found already in the bible: the story of Cain and Abel (Graves & Patai, 1964; van den Brink et al., 1995). In the literature conflicts over natural resources are commonly esteemed as "ubiquitous", as defined by Buckles (Buckles & Rusnak, 1999; Hendrickson, 1997). As Turner (2003) explains, in dryland areas of Africa, conflicts of resource-related interests are unavoidable. Following Turner (2003), the expression of conflicts can take various forms:

> "Resource-related conflict refers to social conflict associated with both struggles to gain access to natural resources and struggles resulting from the use of natural resources. (…) Conflicts of interest can be expressed as a mixture of social tension/avoidance, political action, and violent action. (…) The vast majority of conflicts of interest are treated (…) through a combination of social avoidance, arguments, and longstanding disputes with little deliberate action to manage or resolve the conflicts of interest. (…) Political action is seen as socially-organized action within existing legal, administrative, or customary institutions to revolve the conflict. (…) It is generally preferred over violent conflict which may lead to injury, loss of life, and is more likely to lead to persistent deterioration of inter-group relationships." (Turner, 2003:1716)

While conflicts of interests are often closely linked to general competition for resources and may find a violent expression, there is no necessary link between them (Hussein, 1996). An actual increase of violent conflicts over natural resources can be doubted (Hussein et al., 1999). But even if an increase can be doubted, conflicts over natural resources are and have been reality all over the world.

The underlying causes for conflict over natural resources have been assessed in different ways. Homer-Dixon (1999) sees the main reason for conflict in resource scarcity, which is founded by environmental change, population growth, and unequal social distribution of