Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility

Niger/Nigeria Desk Review

October 2008

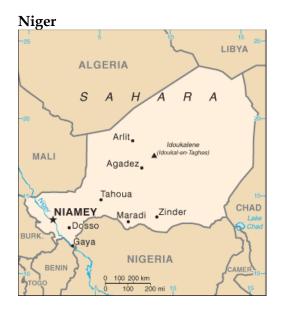


Wodaabe herder and cattle, Niger © Marie Monimart

Mansour Moutari Su Fei Tan

Introduction

This is one of a series of desk reviews produced as part of the project 'Securing Pastoralism in East and West Africa: Protecting and Promoting Livestock Mobility'.





The desk review was asked to focus on livestock mobility in Niger and examine linkages between Niger and Nigeria. This context was chosen as it offers a wealth of experience in the promotion of livestock mobility through the development of livestock corridors linking Niger's drylands with Nigeria's markets, grazing reserves and agricultural areas. The issues to be addressed include: livestock mobility as a response to seasonal and inter-annual variations in pastures and water, including drought avoidance; livestock mobility to access Nigeria's growing urban markets and demands for livestock products; the efficacy of national and regional policy in support of pastoralism and livestock mobility in particular; and the lessons to be learnt from developing in-country and cross-border livestock routes. The paper also looks at the work of key development and research actors involved in the promotion of livestock mobility.

The report has five sections:

- 1. A brief overview of the nature of pastoralism in Niger and Nigeria.
- 2. An analysis of the institutional context affecting livestock mobility in Niger and Nigeria.
- 3. An analysis of how livestock mobility is changing in Niger and Nigeria.
- 4. A summary of the work of key development and research actors in promoting livestock mobility in Niger and Nigeria.
- 5. An indication of the issues that need to be addressed.

Table of Contents

Introduction	2
1. A brief overview of the nature of pastoralism	4
1.1. Pastoral Production	
1.2. The Economic Contribution of Livestock	
2. An analysis of the institutional context affecting livestock mobility	
2.1. NIGER	
2.2. NIGERIA	
2.3. NIGER/NIGERIA linkages	13
3. An illustration of how livestock mobility is changing	15
3.1. Increasing competition for land and natural resources	15
3.2. Changing land management	15
3.3. Sedentarisation	16
3.4. Impact of Poverty Reduction Programmes and other development	
initiatives	16
4. A summary of the work of key development and research actors in pr	omoting
livestock mobility in Niger	_
4.1. International Donors and NGOs	
4.2. Civil Society	
4.3. A Case Study in Securing Mobility: the PASEL experience	
5. An indication of the issues that need to be addressed	26
5.1. Legal, Policy and Institutional challenges	
5.2. Civil Society	
5.3. International challenges	
5.4. Emergency Aid	
5	

1. A brief overview of the nature of pastoralism

Niger

Niger is one of the poorest countries in the world. The UNDP ranks it 174 out of 177 countries in its 2007/2008 Human Development Index. The vast majority of Niger's 12 million inhabitants live in rural areas and depend on agriculture (crops and livestock) to survive. Mobile pastoral production systems play a central role in providing a livelihood for rural people, ensuring the productive use of marginal lands and contributing to Nigerien export earnings. Cross border movement of animals between Niger and Nigeria is an important feature of livestock production in the region. The northern pastoral zone in Niger can only be productive if there are linkages with grazing and markets in the south.

"Everyone is a pastoralist in Niger" is a common saying and it is partially true, but not all rural people rely to the same degree on pastoral production to secure their livelihoods. It is possible, therefore, to distinguish communities by their dominant production system. While most people grow crops to secure their livelihoods, a significant minority, about 2 million people, consider themselves as pastoralists. Generally these include the Toubou, Touareg, Fulani and Arab groups.

Nigeria

Nigeria is the giant of the region. It has the largest population in Africa (148 million, inhabitants (UN 2007), the worlds 7th largest nation by population) and the largest economy in the region. The rate of urbanisation is 5.3%, one of the highest in the world, with the accompanying increasing demand for energy and food. It is linked to Niger in a relationship of trade and complementarity. Nigeria's livestock economy is directly affected by what happens in Niger's pastoral zone (Mortimore, 2000).

1.1. Pastoral Production

Niger

Niger is one of the rare sub-Saharan countries where pastoralism has been integrated into territorial development plans since the colonial era (Arrêté no 311-SA of 1- Feb 154 fixes the northern limit for cultivation). This integration has continued into independence with the legal recognition of the pastoral zone (law 61-5 of 26 May 1961 which fixes the northern limit for cultivation) although, historically, this limitation has not been respected (see box).

An artificial separation

Although the pastoral zone has legal recognition in practice this separation of activities is not respected. Following independence the limit was recognised in law during the 1960's, a time of unusually high levels of rainfall in the Sahel. This allowed agriculture to move northwards of this official limit. More recently pressure on land and natural resources in the south of Niger has pushed agriculture further northwards. In addition pastoralists themselves have begun to cultivate as a way of securing livelihoods and trying to combat poverty.

In Nigeria pastoral production takes up ¾ of its territory involving all of the Northern States and a good part of the central States corresponding to the Sahelian and Sudanosahelian agro-ecological zones. Out of a population of 140 million people the pastoral community represents about 12 million people or about 8.5% of the populations (1991)

estimate). The vast majority of pastoral people in Nigeria come from the Fulani and Haussa Fulani ethnic groups. And in the north of the country pastoral production is a vital element of the local economy and food security. For example in Kano State, transhumant livestock rearing represents 65% of beef, 40% of sheep and goat's meat, and 70% of milk available on the market. Mobility is crucial for Nigerian livestock production (involving approximately 85% to 90% of animals in northern Nigeria) as well as for herders and livestock coming from Niger, Cameroon, Chad and Benin. As such it is important for pastoral production within the region not just nationally.

Patterns of mobility

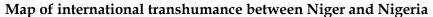
Pastoral production in Niger and Nigeria requires flexibility and mobility to allow the opportunistic use of available grazing and water resources. There are several patterns of mobility within this region but the dominant one is the cyclic north/south seasonal movement of livestock. Seasonal grazing and water points in the northern pastoral zone

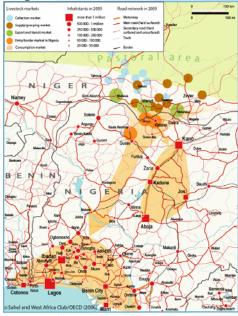
"We are obliged to go to Nigeria in the dry season because Niger does not have enough water for the thousands of animals which graze there during the rainy season, our only salvation are the dams in Nigeria were we can water our animals without effort and free of charge"

Abdou A, a transhumant pastoralist from Guidan Roumdji, Niger

are exploited during the rainy season with movement to southern agro-pastoral and agricultural zones in the dry season when resources are scarce in the north. This cyclical movement requires a system of north/south livestock corridors or transhumance routes. While these routes have long been established, precede colonisation, and have persisted through colonial and post-independence eras, today they are coming under threat.

Seasonal north/south transhumance is a system with its own internal rationale and logic. To function in a context of environmental variability, where grazing and water resources are unpredictable, the system requires a number of elements. These include livestock routes, rest or transit areas, enclosed grazing areas (for longer stopovers), strategic water points, scouts to identify pasture and water points which lie ahead, markets for buying provisions and selling livestock and their products, and social relations with other pastoral and sedentary groups. Successive generations of herders will use the same corridors to reinforce and take advantage of the social capital they have nurtured in the sedentary villages along the route. However, in times of crisis (e.g. drought), these itineraries can change in order to find available grazing. Amongst Fulani pastoral groups, all of these elements come together under the aegis of a pastoral guide called the *Garso or Ardo or Rougga* depending on the context. Important decisions on pastoralism are taken by a council of elders or *Dot'en*.





Source: (SWAC 2006)

A study by Anderson (2007) in Eastern Niger revealed that even within this dominant pattern of movement there are variations of mobility:

- Daily movement of livestock in search of grazing and water returning to the same camp at the end of the day
- Occasional movement of herds to deal with temporary constraints e.g. lack of pasture due to the late arrival of rains
- Seasonal movement of livestock in search of pasture in relation to rainfall patterns
- Exceptional displacement of the herd as a result of conflict or drought
- And migration as a last resort in face of insurmountable socio-political or environmental constraints

Other patterns of mobility

While the cyclical north/south movement of animals is the most common form of mobility found in the regional there are many other patterns. For example, instead of going south into Nigerian agricultural areas, some pastoralists from Niger may seek refuge in and around conservation areas as is the case with the Park W. Each year during the dry season, Fulani pastoralists and their herds gather in the Park's buffer zones to find grazing and water. This can be problematic because the park's forest rangers charge heavy fines if they find animals in the zone. The laws governing the Park W differ among the countries which in borders (Burkina Faso, Benin and Niger) and this legal plurality poses a particular challenge to pastoralists. Fines and legal confusion can result in confrontations and sometime deadly disputes between pastoralists and forest rangers.

Map of Parc W



Source: http://www.parks.it/world/NE/parc.w/Emap.html

The ability of livestock to move in search of water and grazing is a key strategy underpinning pastoral production systems. It enables seasonal exploitation of available resources and is important for managing the concentrations of animals in areas and avoiding overgrazing. Finally it is important to note that people and animals do not always move together depending on circumstances the length of transhumance, access to services, size of the household and demands of herding (number of people required to tend the herd) etc. (Anderson 2007)

Nigeria

In Nigeria there are the predominant types of pastoral mobility run along north/south axes. Generally the movement of herds is from bordering countries toward pastoral zones and dams in Nigeria. Transhumance between Nigeria and Niger is the most important from of mobility because it occurs all along the 1,500 km shared border. This type of transhumance has changed a lot over the years in response to population growth, climatic crises and changing policies.

1.2. The Economic Contribution of Livestock

Niger's National and Local Economies

In 2007, the national herd in Niger was 33 million. In 2005, livestock contributed 12% to GDP or about a third of the total contribution from the rural sector. Niger's poverty reduction strategies recognise the important contribution of livestock to economic growth and international trade.

Livestock is also very important for local economies for example in 2005 taxes collected at livestock market at N'guigmi were 78,000,000 FCFA for the year or about US\$140,000 (Anderson, 2007). In addition to direct taxation the contributions of livestock to local level economies include the exchange/sale of livestock products (milk, meat, hides etc)

for cereals, payment for vaccines and animal health services, and the purchase of household items, clothes, education, health care etc.

International Trade

Countries in the Sahelian zone of West Africa, including Niger, have the environmental conditions—low incidence of disease and vast rangelands with good quality pastures—that favour livestock production to enable them to produce surplus animals. These are consumed nationally but also exported to coastal countries such Nigeria, where average per capita income and demand for animal protein are relatively higher than in the Sahelian zone. This trade has historically linked the Sahelian countries in the arid and semi-arid parts (as livestock exporting countries) to the humid coastal countries as net importers. Livestock represent the highest valued agricultural commodity in intraregional trade and for many of the Sahelian countries, livestock are a major contributor to foreign exchange earnings (Shapiro 1979; Holtzman et al. 1991; Fafchamps and Gavian 1998, cited in ILRI 2006).

Livestock from Niger is the second export after uranium and accounts for 60-70% of revenue from agricultural exports. The export of live animals represents the majority of revue from livestock products. Niger's main export to Nigeria is livestock as it is the most important market in the sub-region and is the destination for more than half of total imports in the region. It is a market that will continue to expand due to demographic growth and to increases in demand per capita. Niger's large wholesale markets are situated along the border with Nigeria. From there, supply is sufficiently large to be transported to export markets in northern Nigeria, like Jibia and to consumption markets in southern Nigeria such as Lagos, Ilorin, Ibadan, Port-Harcourt etc. (SWAC 2006).

Table 1: Import and export figures for cattle and small ruminants

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	Livestock (x 1 000 heads)		Imports (x 1 000 heads)		Exports (x 1 000 heads)		Consumption of cattle and small ruminants meat (kg per inhabitant)
	Cattle	Small ruminants	Cattle	Small ruminants	Cattle	Small ruminants	
Nigeria	15 200	51 000	350	780	0	0	4.6
Niger	2 260	11 400	3	1.5	74	309	7.3
West Africa	45 518	143 563	606	1 450	264	1 171	5.2

Source: SWAC 2006

2. An analysis of the institutional context affecting livestock mobility

2.1. NIGER

Legislati	on with relevance to pastoral mobility
1993	Ordonnance no. 93-015 du 2 mars 1993 portant Principes d'Orientation du
	Code rural
1997	Décret no. 97-007/PRN/MAG/EL du 10 janvier 1997 fixant le statut des
	terroirs d'attache des pasteurs
1997	Décret no. 97-006/PRN/MAG/E du 10 janvier 1997 portant réglementation
	de la mise en valeur des ressources naturelles rurales
2001	Loi no. 2001-23 du 10 août 2001 portant création des circonscriptions
	administratives et des collectivités locales
2002	Loi no. 2002-12 et no. 2002-13 du 11 juin 2002 Loi no. 2002-13 du 11 juin 2002
	portant transfert de compétence de l'Etat aux collectivités locales
Draft	Projet de Loi sur le Pastoralism (2007)

Niger has one of the more progressive legislative frameworks governing livestock mobility, however, there are problems of implementation, overly rigid productive land use conditions and pastoralist representation in local government.

A pioneering piece of legislation: the Code Rural and Decrees

Niger's 1993 *Code Rural* was a pioneering piece of legislation. It brings together in one document the diverse legislation regulating rural areas, it explicitly raises customary law to the same status as statuary law (Article 5), and recognises customary property rights (Article 8). Article 23 gives pastoralists the "right to freely access natural resources". The *Code Rural* is supplemented by two Decrees (1997) on (1) the status of pastoral home areas (*terroirs d'attache*) and (2) productive land use of rural natural resources.

Priority rights of use

The Code and subsequent decrees give pastoralists two levels of access to natural resources: (1) common rights of use and (2) priority rights of use (Articles 24-28). Pastoralists have common rights of use over land generally reserved for corridors, pasture or grazing (Articles 24 and 25). They have priority rights of use in their *terroirs d'attache* or 'home areas' where pastoralists often spend much of the dry season. The introduction of the concept of *terroirs d'attache* is new, and helps strengthen pastoralists land tenure security.

Definition of *terroirs d'attache* :

An area of land determined and recognised by custom and/or legislation where pastoralists live for most of the year. An area of land to which they feel attached when they are travelling whatever the reason for transhumance may be.

Article 2

Productive land use (mise en valeur)

The Decree on productive land use of natural resources, has a potential discriminatory

¹ Le droit d'accéder librement aux ressources naturelles

impact on the pastoral system, as it tends to recognise agricultural or ranching patterns of land use (such as fencing, creation of artificial water points) as 'positive' and does not recognise positive impacts of livestock mobility (such as rational and flexible use of resources, provision of manure for fields, spreading seeds etc.). Nonetheless, the general definition of productive use of pastoral areas does give some scope for pastoralists. Article 10 of the Decree defines it as any action or activity by which a herder exploits pasture and water to increase or improve the production and reproduction of his herd.

Code Rural in the balance

Although it is too early to judge, the Code Rural appears to be an advance on earlier legislation, as it provides a framework to move forward and simplify the vast number of laws in relation to rural areas. But problems of implementation of the Code have been cited as leading to a, "de facto privatization of common property resources", and, "wealthy influential individuals have been given titles to large tracts of pastoral land" (IIED, 2006). This is not a universal picture and there have been successful examples of the registration of collective management of common property under the legislative framework (Vogt et al, 2006 cited in IIED, 2006).

Decentralisation: COFO and COFO de base

In Niger, changes in pastoral legislation have been closely associated with the decentralisation process (2002-2003 in its most recent phase), and local government bodies have considerable powers under the *Code Rural*. The *Code Rural* set up an estimated 57 Land Commissions (COFO *or Commissions Foncieres*) at municipal level, with planning and decision-making powers including registration of customary rights (Alden Wily, 2003). They are responsible for the implementation of the Code and prepare deeds and control land development (SWAC, 2006). Certificates and proofs of tenure are issued at community level by the COFO. The COFO are responsible for ensuring that land is being put to productive use and are empowered to withdraw land if they consider it is not (IIED, 2006).

But the COFO are administrative structures largely staffed by technicians that often have little experience of rural areas. While there is a provision for one pastoral representative to sit on the Commission, there have been criticism for the underrepresentation of marginalised groups such as pastoralists, farmers and women (SWAC, 2006). There are anecdotal reports of COFO giving agricultural land uses priority over pastoralist uses (Yahaya, pers com., 2008). The location of COFO at the district rather than village-level also reduces their accessibility (SWAC, 2006).

In order to address these problems, the government has established a new level of COFO at the village level, the so-called *COFO de base* (SWAC, 2006). The *COFO de base* brings together all the communities in a given area, including settled villages and pastoralists and agro-pastoralists. This is a positive institutional development, which could provide an essential framework to dialogue to settle land tenure disputes.

Overlapping legislation

Despite the aim of the Code Rural to codify all legislation relating to rural areas in Niger,

there are areas of confusion and overlap with other legislation notably the Water Code (Hesse and Thébaud, 2006). The *Code Rural* includes water rights and gives herders priority rights and access to water through negotiation, reflecting pastoralists' traditional use of access to water for regulating access to grazing areas. However, the Water Code promotes an open access policy for water points and does not make a link between water access and grazing rights. The philosophy underlying the Water Code is one based on the management of water points by settled communities in villages, and thus fails to account for livestock or pastoral mobility.

In addition, legislation governing forests restrains pastoralists' mobility. The state maintains a central role in the management of forest, with little scope for participatory management. There are problems with a lack of awareness and demarcation of different classifications of forest areas. The state officially owns classified forests, and access is reliant on payment of taxes (Yahaya, pers. Com., 2008).

Draft Pastoral Law

The proposed *Projet de Loi sur le Pastoralism* has been developed by the Permanent Secretariat of the Rural Code, and is, in part, the outcome of sustained lobbying by pastoral civil society groups to improve the land tenure security of pastoralists. Article 3 specifically recognises pastoral mobility as a rational and sustainable form of land use that can only be restricted temporarily and then only for reasons of security of people, animals, forests or crops. Article 5 prohibits the granting of exclusive land rights that would restrict pastoralists from free access to natural resources. The Draft Law also expands the legal definition of productive land uses to include both modern and tradition uses such as the creation of traditional wells (Article 44).

The Draft Pastoral Law is a promising development that could be expected to markedly improve the legislative environment as regards livestock mobility if it were passed and implemented.

Key points

- The Code Rural and Decrees provide a solid legal framework to improve pastoral land tenure
- Productive land use clauses still prioritise agricultural land uses above animal rearing land uses, and their application by COFO needs to be carefully monitored
- A new Draft Pastoral Law would reduce the marginalisation of pastoralists
- Lack of capacity by government and other actors to implement good provisions within laws seems to be a key point in many countries.

2.2. NIGERIA

Legislation with relevance to pastoral mobility		
1916	Land and Native Rights Ordinance (repealed)	
1962	Land Tenure Law (repealed)	
1965	Grazing Reserve Law	
1978	Land Use Act of 29 March 1978	
1999	Constitution of the Federal Republic of Nigeria	

Nigeria has not followed its West African francophone neighbours in reform of land tenure legislation in the last two decades. The current legislation governing land tenure is the 1978 Land Use Act, which officially abolished customary land management systems. The 1965 Grazing Reserve Law, which sought to define and demarcate specified grazing areas, has not successfully defended pastoralists land rights in northern Nigeria.

Management of rural lands

Dual statutory and customary legal systems operate side-by-side in rural areas. Nigeria operates on a structure of federal states, and each state government is must pass legislation to ensure democratically elected local government councils, according to Article 7 (1) of the Constitution. Local Governments are aided in the management of rural spaces by Land Advisory Committees (SWAC, 2006). However, in rural areas customary institutions still play a significant role in land management, this dualism has been described as a "traditional-modern administrative continuum" (Hoffmann, 2004: 86).

Land Reform in 1978

The Land Use Act from 1978 swept away previous statutory and customary land tenure systems in the country. It nationalised all land and vested it under the control of the military governor of each state who is given authority to manage land for the benefit of all Nigerians (CIEL, 2006). Management of rural land was given to local government (Art. 2). They have the power to grant customary rights of occupancy for agricultural, residential, grazing or other purposes (Art. 6 (1)). The Act also placed heavy restrictions on the transfer of statutory and customary land rights. However, legal dualism has continued: "Despite the national law aiming at regulating land use, rights to land are most frequently determined by customary tenure rules." (Hoffmann, 2004: 86).

The Land Use Act does not provide a supportive legal framework for pastoralist livelihoods. "The Land Use Decree of 1978 does not provide traditional pastoralists with any legal rights over land. They are still at the mercy of their host communities" (Hoffman, 2004: 86). The Land Use Act is considered controversial. Whilst it

"Today, access to pasture and water resources [in Nigeria] is still not clearly regulated... the Land Use Decree of 1978 does not provide traditional pastoralists with any legal rights over land. They are still at the mercy of their host communities

(Hoffman, 2004: 86)

aims at an equitable distribution of land, there have been reports of local communities being deprived of land and an increase of corruption (SWAC, 2006). As regards access and ownership to water points, there is no distinct legislative or institutional framework outside a few river basins (Olofin, 1987 cited in Hoffmann, 2004).

Formation of Grazing Reserves

The 1965 Grazing Reserve Law aimed to settle herders in northern Nigeria, through the acquisition of 'native land' for gazing. The Law gives state governments and local governments the power to establish grazing reserves. However, less than 1% of targeted grazing reserves had been gazetted in the northern states by 1980, and the situation has remained largely unchanged (Hoffman, 2004: 86).

An ambitious programme to support pastoral livelihoods was launched by the 1988 National Agricultural Policy which aimed to grant 10% of national territory, as "grazing reserves for lease allocation to herders" (CIEL, 2006). CIEL call this policy a "conscious effort by the central government to protect pastoralism" but note that it has not been enforced (CIEL, 2006). By 1998, of the 313 grazing reserves acquired, only 52 had been gazetted, and even in these areas reserves have been intruded into by agricultural cultivation (CIEL, 2006). In addition, the provision of grazing reserves did not take sufficiently into account the dynamics of the pastoral system, in particular in not providing dry season grazing and hence forcing herder to leave the reserves.

However, in northern Nigeria the strength of the Fulani in urban and rural areas generally equates into a less marginalised position for pastoralists than in some other countries. As Hoffman states, "there is still relatively extensive grazing land available, and conflicts are not always solved to the disadvantage of the Fulani" (Hoffman, 2004: 86).

Key points

- ➤ The Land Use Act of 1978 does not provide pastoralists with clear rights to land
- Legal provisions to create grazing reserves have not been implemented
- Pastoralists in Nigeria are not as marginalised as other countries due to close ties between urban and rural Fulani

2.3. NIGER/NIGERIA linkages

The Joint Niger-Nigeria Commission (*Commission Mixte Nigéro-Nigériane de Coopération -* CMNNC) was established in 1971 following two bilateral Presidential summits.

The Commission has a number of bodies. The 'High Authority' brings together the two Heads of State for an annual meeting. The 'Council of Ministers' brings together high-ranking ministers from both countries for an annual meeting. These bodies are supported by Joint Expert Committees. Of these there is an expert committee that deals with issues of animal health and transhumance. Administrative and support services are provided by a Permanent Secretariat, based in Niamey (Secretary General of the Commission is Ambassador Kabiru Garba, the Deputy Secretary General is Ambassador Sandy Yacouba).

The objective of the Commission is to increase cooperation along the 1500km long shared border between Niger and Nigeria according to Article 2 of its Convention:

"The Commission has the general and exclusive jurisdiction for identifying ways and means of coordinating and harmonizing the economies of the two countries in all fields with a view to achieving increased and more effective cooperation between them." (SWAC, 2007: 37)

The Commission has carried out a range of activities in the livestock sector amongst others (for example electrification, building roads, strengthening telecommunication links). As regards livestock, the Commission has attempted to manage mobility through mapping of livestock corridors, animal heath programmes and conflict resolution. It has, "created a control framework for livestock health at the common border in order to combat epizootic. It also established cattle control posts, markets and a cattle path map of 1/1000.000 to facilitate implementation of animal health programmes and reduce conflicts between livestock breeders and farmers." (SWAC, 2007: 35)

3. An illustration of how livestock mobility is changing

Pastoral production in Niger is under pressure. Changing rainfall patterns, increasing populations, reduced soil fertility, and difficult access to inputs and farming equipment, have all contributed to the doubling of land under cultivation, farming has shifted toward "marginal" lands in the North. Pasturelands have shrunk and livestock corridors through cultivated zones are under threat (République du Niger, 2002).

3.1. Increasing competition for land and natural resources

The population in Niger is increasing at a rate of over 3% per year, resulting in more and more demand for land. In 1927 there were approximately one million people in Niger in 1997 this number jumped to 9 million and in 2007, 12 million. In 2025, the population is projected to be 23 million inhabitants.

Soil fertility is also declining as traditional methods for soil fertility restoration, such as shifting cultivation and bush fallow, are in decline due to increased population and pressure on land (Gavian and Fafchamps, no date). Decreased soil fertility contributes to pressure on land as yields decline and areas under cultivation increase to compensate.

In addition, more and more pastoral communities are cultivating crops to diversify their livelihoods increasing competition for land. In the Diffa region of Niger, Anderson describes the growth of an agro-pastoral class (formerly pastoral) who are very poor and have limited mobility. This group of people carry out semi extensive production as one element of a diverse range of activities undertaken by poor families (2007). Diarra and Monimart (2006) observe a similar trend in Zinder region where fields are being opened up on the margins of pastoral and agro-pastoral lands. Very poor pastoral women who no longer have or have never had livestock are beginning to grow crops in very precarious conditions.

Finally, the growth of a class of "new actors" in rural land tenure contributes to pressure on resources. This includes the granting of large land concessions for a variety of economic activities such as ranching, agri-business and mining.

3.2. Changing land management

Before the establishment of the Rural Code and land commissions in Niger, land management and administration was controlled by central government. With the advent of decentralisation local governments it is anticipated that responsibility for land and the management of natural resources will be devolved to municipal governments. This process has just begun and it will require long-term engagement to build the understanding, skills and capacity at the local level to take on these tasks.

The challenges of decentralisation

A question of scale: While decentralisation is one of the central pillars of the poverty reduction strategy in Niger, local government authorities may not be the best placed to manage, maintain and reinforce livestock corridors. Pastoral mobility takes place on many levels, international, national, regional and local. Management of these livestock corridors could be compared to that of a road network. International and national motorways require management by central governments while provincial and village

roads can be dealt with at district or local levels. Nevertheless, it is important that one authority have oversight over the whole network to ensure its smooth running.

Intercommunalité (Enabling cooperation between local government authorities): Within the legal framework for decentralisation there is provision for the establishment of agreements between local government authorities. This institutional arrangement can be an important instrument for securing mobility. Pastoral production spans several municipal, district and regional administrative boundaries as herds travel from the northern grazing areas to southern agricultural zones. It therefore requires a mechanism to enable consultation and collaboration among different levels of government. Intercommunalité allows for any number of local government authorities to come together to address questions of common concern, for example the management of a forest resources which span several local authorities.

The power of the vote: Sedentary farmers are the majority in most constituencies and this may make it hard for locally elected officials to resist pressure to allocate land for cultivation in pastoral areas because of their interest in being re-elected. Pastoralists are poorly represented at all levels of government. They are low in numbers and they may only be in the locality for some of the year. This makes is doubly hard for them to ensure that their interests are addressed and rights are respected when local development plans are drawn up and resources are allocated.

Taxation: Related to the power of the vote is the question of taxation as it may be politically more expedient for local government authorities to impose taxes on pastoral resources. This may lead to increases in taxes generally for pastoral groups, for example, some local governments tax access by transhumant pastoralists to water points and grazing areas. The question of taxing transhumance is very complex because of the regional nature of the production

3.3. Sedentarisation

There is some evidence to show that some parts of pastoral communities are sedentarising in order to access services, health, education etc, gain political/administrative recognition (establishment of villages) or to capture emergency relief aid. Poverty and the in ability of some groups to adequately reconstitute their herds after the droughts in the 1970s and 80s may also have an impact as it requires a certain size of herd to make the effort of long distance transhumance worth the trouble (Anderson 2007).

3.4. Impact of Poverty Reduction Programmes and other development initiatives

Donors and government agencies in Niger carry out a wide range of programmes and projects in rural areas to reduce poverty and promote economic development. However, if these initiatives do not take a holistic view of rural production they may have adverse effects on pastoral production. For example, projects that promote the cultivation of late maturing varieties of cereals in order to improve agricultural productivity have a severe impact on pastoral mobility as crops are still in the field when pastoralists are moving through agricultural areas.

4. A summary of the work of key development and research actors in promoting livestock mobility

NIGER

4.1. International Donors and NGOs

Most support to pastoral production comes from international donors. Those which specifically aim to support livestock mobility include:

- **Projet de sécurisation des systèmes pastoraux** (PSSP) in Zinder funded by the French Agency for Development (7,000,000 euro) with a focus on pastoralists' access to water. This project falls under Programme 12 of Niger's Rural Development Strategy on pastoral development and the securing of pastoral production systems. The project aims to secure pastoral mobility in the Zinder region in light of the progression of cultivation into pastoral grazing areas. Securing mobility will depend on the construction and rehabilitation of pastoral water points, the development of livestock corridors and on the delimitation of grazing areas.

The approach taken is one of involving actors in a situation analysis, the development of decision making criteria and in the decision making process for the allocation of pastoral resources. This approach creates the opportunity to develop a new kind of governance involving all actors (authorities, technical services, communes, land commissions etc) and of citizenship for the pastoralists and farmers with regard to the management of natural resources. Through this process stakeholders are able to analyse their production systems to construct a future for mobile pastoral production.

Contact details: Dominique Herault, BP 473, Zinder, Niger telephone: +227 20 51 08 61, email: mrapsspz@intnet.ne

- Projet pilot d'appui à la gestion de la transhumance dans les zones transfrontalières du Niger avec le Mali et le Burkina Faso is a smaller scale project (200,000,000 FCFA or about US\$400,000 over 18 months) funded by the EU. The goal of this project is to guarantee the mobility of livestock and herders, peaceful co-existence between sedentary villagers and transhumant pastoralists and land tenure security in the project zone. The programme has a focus on security and accompanies the peace accords signed between these governments and different rebel factions.
- Projet de sécurisation de l'économie pastorale (PASEP) in Tahoua is a large project (7,866,352 euro over 3 years) funded by the EU. The PASEP aims to contribute to poverty reduction and food security. Its objective is to reduce the inherent risks linked with pastoral production by promoting a more balanced exploitation of agropastoral resources and improving the value added during production.

Activities are groups under four strategic objectives

- 1. strengthen pastoral associations
- 2. support the implementation of the Code Rural
- 3. improve animal health services
- 4. facilitate the commercialisation of livestock and livestock products

Contact details: Dr Abouba, BP 309 Tahoua

Telephone: + 227 20 61 06 27, email: pasep-cc@intnet.ne

- **Programme d'appui au secteur de l'Elevage** (PASEL), funded by the Swiss Cooperation, aims to secure livestock mobility and the use of land for pastoral production by facilitating exchanges at the local level on pastoral land use and facilitating pastoral communities' access to development projects. The experience of this project is discussed as a case study below.

Contact details: Elhadj Moutari Mansour, BP 728 Telephone: + 227 20 72 23 25, email: pasel@intnet.ne

There is also a multitude of integrated projects, which focus on territorial development, natural resource management, food security or local development which have a livestock component. These larger programmes include (among others):

- The work of the Cellule de Recherche Action Concertée sur la Gestions des Ressources Naturelles (CRAC/GRN) in Zinder.
- ZFD² in Zinder and Diffa which focuses on putting in place spaces for intercommunity exchange
- The Belgian cooperation project which focuses on the selection and dissemination of specific livestock breeds, the *Chevre Rousse* in Maradi and the *Zebu Azawak* in Toukounous.

4.2. Civil Society

Niger has a strong potential with regard to pastoral associations and NGOs. Their levels of intervention range from the local to national with the beginnings of networking at the regional level. Generally, they aim to defend the interests of pastoralists. There are more than 20 pastoral associations and NGOs registered in Niger. Those who have national coverage include AREN³, FNEN DADDO⁴, ANPME OUMP, CED Anmudhal. These associations play a double role:

- lobbying to defend the interests of pastoralists, and promote their participation in decision making, for example, the development of the pastoral law.
- implementing agencies for micro-projects at the local level which reinforces their links at the community level.

Pastoral associations and NGOs tend to place more emphasis on the second role to the detriment of lobbying and advocacy activities. This is partially because it is easier to

³ Association pour la Redynamisation de l'Elevage au Niger

² A German Development NGO

⁴ Federation National des Eleveurs au Niger

obtain funding from donors for development activities can more easily be seen to contribute to the achievement of the Millennium Development Goals. Funding for lobbying and advocacy programmes is harder to come by.

4.3. A Case Study in Securing Mobility: the PASEL experience

The PASEL Project began in 1998 and works in the Maradi and Tillabery regions of Niger. It is a 10 year project which will come to an end on June 30, 2008. The goal is to secure pastoral mobility and the use of pastoral resources by promoting local level consultation on pastoral land tenure and facilitating access by pastoral communities to development initiatives. The total budget over the 10 year period is 3,204,788,039 FCFA (circa US\$7,540,654).

Table 2: PASEL Results

1,868 km	Of transit areas, international and national livestock corridors delimited
	with concrete markers
1,661 km	Of international and national livestock corridors delimited by planting
	hedges
139	Community forums
169	Local management structures established which will be come local land
	commissions (COFOB)
13	Communal Land Commissions (COFOCOM) established
25	Pastoral wells dug in transit areas
5	Human health centres established
1	Veterinary Centre established
7	Pastoral enclaves and zones seeded

Calculation of cost per km of corridor secured: £7,540,654*30.42%/(1,868km+1,661km) = US\$646 per km

Creating consensus for securing livestock corridors

The guiding principle which underpins the PASEL project is to invest in upstream processes of building social capital involving all stakeholders so that the project outcomes will be sustainable in the long term. The active involvement of stakeholders is fundamental. A permanent dialogue has to be maintained with communities whether this is done via State structures, community associations or directly with producers.

Addressing pastoral land tenure (livestock corridors, pastoral enclaves, pastoral water points etc) requires the involvement and collaboration of the State. In Niger the Code Rural and its offices are the structures which should be involved. Therefore, particular effort should be made to strengthen Code Rural's ability to function efficiently and its understanding and use of principles of good governance (transparency, broad-based participation in decision-making, accountability etc).

The PASEL process for establishing and securing a livestock corridor is made up of the steps below. Although the PASEL process began BEFORE the establishment of Land Commissions the table below shows the process which would happen today, taking into

account these commissions. This was a key lesson coming out of the PASEL process: The need to take into account decentralisation and adapt project processes to do so.

Table 3: The PASEL Process

Activity	
i.	Establishment of Departmental Land Commissions
ii.	Initial mapping of the corridor
iii.	Inter community forums
iv.	Establishment of local land commissions (commune
	and village level).
v.	Tender for works
vi.	Delimiting the corridor
vii.	Socio-legal forums
viii.	Official mapping of the corridor
ix.	Legal recognition
x.	Maintenance, upkeep and monitoring of corridors.

i. Establishment of the Departmental Land Commissions

These commissions are established at the level of each departmental and local government authority to manage natural resources in their area. The commissions bring together all actors: producers, administrative and customary authorities, technical services, pastoral associations and farmers. The choice of corridors to be demarcated is made by the departmental Land Commission and one criteria for selecting the routes to be demarcated should be the incidence of conflict.

ii. Initial mapping of the corridor

At a departmental land commission meeting an initial map of the corridors (including associated services and resources – rest areas, water points, etc) is transposed onto a topographic map by pastoral leaders and customary chiefs. Field visits are then carried out to identify all the territories and communities along the livestock corridor. This allows:

- A first assessment of the state of the corridor, associated rest/transit areas and water resources.
- Identification of the villages and camps along the corridor which should be involved in the community forums.

iii. Community forums

After the initial field visit and the mapping of the livestock corridor, the land commission organises forums to raise awareness and discuss the formalisation of the route. These forums provide a space for farmers and herders to come together to discuss:

- The need and purpose of the corridor
- The type of material with which to demarcate the routes, for example, concrete markers.
- The minimum width for the corridors normally not be less than 50 metres
- Community participation during the process of demarcating, maintaining and monitoring the use of the corridors.

Decisions taken at community forums are formalised and given official recognition in the minutes (*Proces verbale des forums*).

iv. Establishment of local land commissions (municipal and village level)

In order to ensure local appropriation and sustainability of the corridor and associated services, it is important to establish local level land commissions (*COFO de base*) in each locality or village crossed by the corridor. These structures should have equal representation of farmers and herders and have the main responsibility for ensuring respect for the width of the corridors and the upkeep of the concrete markers. In each village the land commission is made up of 3 farmers, 3 herders and the village chief. Women's representation should also be sought. If need be, these commissions can also play a role in conflict resolution.

v. Tender for works

In order to contribute to local economies, tenders should be directed toward local businesses. Contracts with these businesses stipulate that they must use local labour coming from villages along the corridor. The positioning of the markers is done with the members of the local land commission who will supervise the work.

vi. Delimiting of the corridor

The corridor is delimited using artificial (concrete posts) and natural (hedges) markers. The selection of the business to carry out this work is done as follows:

- a committee presided by the vice-prefect (president of the land commission) and composed of the donor, other land commission members, some contractors, launch the tendering process.
- the proposals are given to a private consulting firm for assessment
- the results of the technical analysis are given to the land commission for assessment.

Planting natural markers is done by the communities which line the corridor. Hedges are planted between the concrete posts better to mark the limits. Each farmer whose fields line the corridor plants euphorbia as a contribution and sign of recognition of the process.

vii. Socio-Legal forums

The objective of these forums is to establish a mechanism for the management and regulation of the corridors. These mechanisms must take into account the existing legal provisions contained in the Code Rural and in customary systems as it is these structures that often have to resolve disputes between farmers and herders.

viii. Official mapping of the corridor

The mapping of the demarcated corridors and transit areas is done with the aid of GPS. These maps identify the location of the concrete markers which are situated every 500 metres in staggered intervals, the corridors' width, the materials used to demarcate it, available water points, areas for transit, rest and pastoral enclaves as well as their size.



ix. Legal recognition

Once the corridor has been demarcated and geo-referenced it is registered with the departmental Land Commission. This ensures the legal as well as physical record and recognition of the corridor.

x. Maintenance, upkeep and monitoring of corridors

It is during this phase that local government plays an important role. For example, the rest and transit areas, and pastoral enclaves are often located on marginal land with poor grazing, access to water and other social services (veterinary and health services for example.) The development and improvement of grazing in these areas, the provision of services (water and access to animal and human health services) are the responsibility of local government.

Lessons Learned from the PASEL process

The relations between farmers and herders in the project zone had really deteriorated as is demonstrated by these two quotes taken from the research done by the transhumance observatory

The only enemies we can in the world are the transhumant livestock herders who lead their animals during the night onto our fields to devastate our crops, this is way we cultivate in the livestock corridors, so that they only have a sliver of space, only enough to pass.

Statement from a farmer from Mayaki (Kormaka) ⁵

There are markets that we hesitate to visit in order to do our shopping, we are afraid of being harassed by sedentary villagers.

Statement by a Fulani herder on transhumance to the North of Dakoro.⁶

Positive Lessons

A question of scale: Addressing pastoral resources should take a territorial development approach (*gestion des terroirs*). The involvement of administrative (for example land commissions) and customary authorities, is crucial for the success for the project. Dealing with development on this larger scale means dealing with the State and this authority has been devolved to local authorities. The State must fully play is role as supra-community mediator to ensure respect for commitments taken during forums and to validate the administrative decisions taken during meetings.

The process of securing mobility must be viewed in its entirety at all stages of the process, when corridors are identified, physically demarcated, developed, and obtain legal recognition with out a holistic view of mobility the sustainability of activities will be undermined. The management of secured pastoral spaces must be carried out at the village or camp level as well as the local communal level on the basis of a clear and precise local agreements.

Enabling dialogue

The success of the project depends on the establishment of a functioning space for intercommunity consultation. However serious the situation may be if the mechanisms for exchange are created, rural communities are in a position to overcome their differences as is demonstrated by the commitment of actors during the intercommunity forums organized for securing an international transhumance corridor (rural communities, administrative and customary authorities and technical services. For example, in the PASEL project, for the only international transhumance corridor in Toda, secured in 1998, 48 intercommunity forums allowed more than 6000 people to meet and discuss the management of this crucial pastoral resources from both the herder and farmer perspectives

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⁵ Nous n'avons point d'ennemi dans ce monde que les éleveurs transhumants qui conduisent leurs animaux la nuit pour dévaster nos cultures, raison pour laquelle nous grignotons les couloirs de passage pour leur laisser un espace interstitiel, juste pour passer

⁶ Il existe des marchés que nous redoutons de fréquenter pour faire nos achats, par peur d'être molestés par les sédentaire.

Reinforcing physical delimitation (i.e. concrete markets) with natural borders planted by communities is important for marking the boundaries of the corridors but also for ensuring the buy in and acceptance at the local level. However it is important to continue to hold forums to strengthen understanding and ensure the success of the project.

Starting slow and being flexible

The process is slow and expensive at the beginning but once stakeholders have understood and accept the need for securing mobility it becomes easier. Projects and initiatives should take a long term, participative and iterative engagement. Establishing partnership agreements between actors is not easy at the start of the process. To address this all parties must maintain a certain amount of flexibility

Legal pluralism

Pastoral spaces are at the interface between customary and statutory rights, a situation of legal pluralism, which can be a source of intercommunity confusion and conflict because of the multiple mediation and adjudication mechanisms (customary, administrative and judiciary). Rules and laws may be called into question and even quashed as depending on the regime (customary or statutory), rulings may be contradictory, fluctuating according to personality. This situation blocks the sustainability of solutions to the challenge of legislation for the management of pastoral resources. Once the Nigerien Pastoral Code has been adopted it will provide precise responses to some questions which remain unclear because the legal clarification of the status on pastoral spaces is the guarantee of the sustainability of the action.

Not everyone will agree

There has been some contestation of the livestock corridors (for example, 12 markers were up rooted at the water point in Gatsoguirdé in 1998 and 15 markers uprooted in 2000 in the transit area of Kalagawa-Dan Tourké). It is clear that this type of work will never be welcomed with the same degree of support from each individual in the community. What is important is that the majority of the population supports the objectives of the work. What is important in this kind of process is to establish a consensus in the community which is validated and recognized by legal and administrative decisions.

4.4 Nigeria

International donors, and government

Most projects working on pastoralism in the north of Nigeria have been implemented by state governments with support of external donors. These include:

National Livestock Programme Development: This project used participatory approaches to demarcate livestock corridors between the Niger/Nigeria border (near Konni) to Niger State, Nigeria (774 km) and from Damasak to Mararaba in Taraba State (1187 km).

JEWEL Project: To reduce poverty of the primary stakeholders (farmers, herders and fisher-folk) who rely on the Wetlands of the Hadejia-Ja'amare-Kamadugu-Yobe basin. The project approach depends upon facilitating increased co-ordination, collaboration and information exchanges among key stakeholders (mainly civil servants, NGOs and the primary beneficiaries) as a means of improving management of the natural resources of the Wetlands.

FADAMA III: Financed by the World Bank by Implemented by various Ministries and Departments. The development objective of Fadama III Project is to increase the incomes of users of rural land and water resources on a sustainable basis. The Project's approach relies on facilitation for demand-driven investments and empowerment of local community groups and to improve productivity and land quality.

National Commission of Nomadic Education: The National Commission of Nomadic Education (NCNE) is responsible for reaching the unreached, integrating the nomads into the National life and providing them with relevant and functional basic education. These nomads include- migrant fishermen/women and their children and pastoral nomads.

Civil Society

The **Miyetti Allah Association** was established in 1972 to promote the welfare of Fulani pastoralists and to represent their interests before government bodies. It is a movement aimed at encouraging Fulani to claim their rights through education and settlement

The Pastoralists Resolve: In 1997 the Pastoral Resolve (PARE) was founded by a group of eminent Nigerians concerned with the problems pastoralists face, but PARE was not formally registered until early 1999. It is a national organisation aimed at improving livestock production, managing and preventing conflicts between pastoralists and farmers, and at improving the livelihoods of pastoralists. PARE works with a participatory problem diagnosis and analysis, mobilises pastoralists, carries out advocacy and lobby on their behalf, and supports the planning and implementation of viable projects that improve livestock productivity and people's wellbeing

The Confederation of Traditional Stockbreeders Organisations in Africa (CORET): is a federation of networks of livestock keepers' organizations in the Sub-Saharan Africa. CORET actively pursues an agenda of improving pastoralists' livelihoods by better access to grazing resources, freeing stock routes, facilitating land acquisition and settlement issues with governments and policy makers

5. An indication of the issues that need to be addressed.

In order to support livestock mobility in Niger and between Niger and Nigeria the following issues will need to be addressed.

5.1. Legal, Policy and Institutional challenges

Legal Pluralism: While the *Code Rural* goes some way to providing a mechanism for aligning customary and statutory systems in Niger there is still work to be done. Land commissions are not found evenly throughout the country as support for their establishment is largely donor driven and patchy. In addition understanding of the role and responsibilities of these commissions is weak (both on the part of civil society and representatives on these commissions) and pastoral groups are poorly represented within these structures. Unless pastoral groups can voice their interests and claim their rights through these structures pastoral mobility will continue to come under threat.

Further work needs to be done to understand the legal, institutional and customary contexts in Nigeria and how policy and legislative links between Niger and Nigeria can be strengthened or harmonised better to facilitate transhumance between these States.

At a national level in Niger there is scope for harmonisation between State laws and policies as they relate to pastoral land tenure. The Water Code, for example, is based on the principle of free and open access to water resources. In pastoral areas this kind of access can have grave consequences for surrounding grazing lands as water is the key to access surrounding pasture. If free and open access is provided to a pastoral water point this may result in free and open access to surrounding land increasing risks of conflict and overgrazing.

The draft pastoral law: A first draft of the pastoral law is one part of the puzzle for securing pastoral mobility but the law still needs to be passed and then once passed its implementation will provide the next challenge. Pastoral associations need to be supported to continue to monitor this process and lobby for the enactment of the law and subsequent legal texts for its application.

Poverty reduction initiatives: Many development and poverty reduction initiatives recognise that livestock production is important for rural livelihoods but do not incorporate an understanding of the logic which underpins pastoral production systems.

The PRSP in Niger for example states that "rural development has been a major policy concern in Niger for the past forty years. Thus, agriculture, livestock rearing, and combating desertification were clearly identified as the areas driving that development" p36. It then goes on to explain its strategy for the development of production sectors: "Any rural development strategy to be implemented must above all seek to minimize if not break with the dependence of rural production (agricultural and pastoral in particular) on the highly uncertain rainfall cycle. In the medium and long term, strategies will have to be geared towards improving irrigated farming, which is necessarily conditional upon a policy of water resource mobilization." (Republique du Niger, 2002: p. 77) What the implications are for pastoral production are not clear.

The subsequent Strategy for Accelerated Development and Poverty Reduction explicitly states that future development scenarios require "the intensification and modernization of agriculture and livestock rearing⁷ (Republique du Niger 2007: p. 77). Although what this means in practice is not detailed in the document.

Decentralisation: As stated in Niger's PSRP "decentralization is one of the fundamental pillars of the struggle against poverty insofar as it allows the communities to take charge of their own destiny" (Republique du Niger, 2002: p.56). But the implications of the establishment of local government structures for pastoral production are complex. Local government councils tend to be dominated by sedentary farming populations which may (although not necessarily) develop local development plans, bye laws and regulations which disadvantage and penalize mobility.

Mobility requires passage through several municipalities in order to reach grazing, water points or markets. The maintenance, management and sustainability of livestock corridors which cross municipal and international borders require the collaboration of many different actors at different levels. It is not clear yet how this type of cooperation can be facilitated and at what level.

5.2. Civil Society

Although there are national NGOs and associations present in Niger, pastoral civil society is relatively weak in terms of capacity to represent the interests of their members and constituents. Pastoral civil society groups need support for developing arguments to defend their interests and to develop advocacy and communications plans

5.3. International challenges

There is a lack of delimited livestock corridors which cross and continue beyond international boundaries. The corridors demarcated by projects reviewed in this study all stopped at the border with Nigeria and it is not clear from the literature what happens once the border has been crossed. In academic and development literature, the discussion of livestock movement between Niger and Nigeria focuses on trade and markets. There seems to be very little documentation of the regional exploitation of natural resource exploitation. Donors and researchers have confined their activities within national borders. More needs to be done to document and understand the holistic exploitation of resources in the region, a review, understanding and mapping of movement which crosses national boundaries.

5.4. Emergency Aid

There is some evidence to suggest (references) that a part of pastoralist groups may settle around villages in time of crisis in order to capture food aid. It is unclear as yet what the effects of this kind of opportunistic sedentarisation are on mobility.

⁷L'intensification et la modernisation de l'agriculture et de l'élevage.

REFERENCES

Alden Wily, L. 2003. Governance and Land Relations: A review of decentralisation of land administration and management in Africa, IIED, London.

Anderson, S. 2007. **La Mobilité Pastorale, Diffa, Niger**, Consultation report for ZfD Service civil pour la Paix, Diffa

CIEL, 2006. **CBPR Database – Nigeria**, Center for International Environmental Law, available at http://www.ciel.org/Publications/CBPR Nigeria 9-18-06.pdf

Diarra, M and Monimart, 2006 Landless women', hopeless women? Gender land and decentralisation in Niger IIED Issue Paper 143, IIED: London

FAO, 2005 Niger Livestock Sector Brief FAO: Rome

FAO, 2005 Nigeria Livestock Sector Brief FAO: Rome

Gavian, S. and Fafchamps, M. (no date) Land tenure and allocative efficiency in Niger Downloaded from

www.economics.ox.ac.uk/members/marcel.fafchamps/homepage/tenure.pdf accessed 28.4.08

Hesse, C. and Thébaud, B., 2006. 'Will pastoral legislation disempower pastoralists in the Sahel?', **Indigenous Affairs** 1/06

Hoffmann, I, 2004, "Access to Land and Water in the Zamfara Reserve. A Case Study for the Management of Common Property Resources in Pastoral Areas of West Africa", **Human Ecology**, Vol. 32, No. 1, February, pp. 77-105

IIED, 2006. Innovations in Security Land Rights in Africa: Lessons from experience, Briefing Paper, IIED, London.

ILRI, 2006, Improving Livestock Marketing and Intra-regional Trade in West Africa: Determining Appropriate Economic Incentives and Policy Framework ILRI: Nairobi

Mortimore, M. 2000, **Hard questions for 'pastoral development': a northern Nigerian perspective** Paper presented at a regional workshop on "Les approches de la gestion des pasturages et les projets de developpement, quelles perspectives?" Niamey, Niger, 2-6 Oct 2000

Republique du Niger, 2002 Full Poverty Reduction Strategy

Republique du Niger, 2007 **Strategie de developpement accelere et de reduction de la pauvrete**

SWAC 2006 Food Security and Cross-Border Trade in the Kano-Katsina-Maradi (K2M) Corridor CILSS/FEWS NET/OCHA/SWAC/UNICEF/WAMIS-NET/WFP Joint mission report, part of the West African Borders and Integration Series, www.africacrossborder.org Sahel and West African Club Secretariat, Paris

SWAC, 2006, Land Reform Processes in West Africa: A review, Sahel and West African Club Secretariat, Paris

SWAC, 2007, Cross-border Diaries: BULLETIN ON WEST AFRICAN LOCAL-REGIONAL REALITIES, Issue No. 6, (June), Sahel and West Africa Club-OECD