Central Chad revisited: The long term impact of drought and war in the Guera (draft, do not quote)

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# 1. ADOUM

We met Adoum in N'djamena, in September 2002, the capital city of Chad. He was a (our) guard, a job he got by chance. He is a Bidiyo, who form a subgroup of the Hadjerai. His home village is Bourzan, in the Guera Central Chad, a sahelian mountainous area. Gradually we came to know him as a specialist of the history of his people, a knowledgeable person with regard to management of the environment. Back in his village where we met him about a year later, he appeared to be a very much-respected old man.

His life was shaken by the great events in Chad that changed life in his village fundamentally. Adoum related this history to us. As a young man life was good, but after independence under the regime of the first president of Chad problems started. The payment of taxes became so high that many men, including Adoum fled the village. He went with 6 others to Sudan, where he worked in Khartoum. In the meantime in Chad a rebellion broke out directed against the government. He was asked there in Sudan to become rebel to fight in Chad, which he refused. He decided he could better return, a very risky decision: all people who returned were regarded as traitors and were killed. He escaped by telling the commandant about the things that happened in Sudan. In fact he had to betray his friends. Adoum is the only one of the seven that returned to the village. The rebellion continued.

Adoum married. He lived as a slash and burn farmer and saw atrocious things happen. His wife gave birth to two girls, but both died. Life was hard she told us. Harvests were bad and there was widespread famine. During her life she experienced some good years, but most years from the 1960ies onward were bad. The granaries were empty. Adoum said that the situation worsened due to the behavior of armed groups in the bush who forced people to give food, burned the villages and who forced them to abandon their own belief (Margay cult). People became Muslim, Adoum as well, because they were afraid. On the other hand the government soldiers also exploited the population. Life became unbearable.

In 1983/84 a new famine broke out and as nobody had reserves due to the war this famine became a real killer. Adoum left his family to go to N'djamena. He hoped his family could live of the small reserves that rested. In this period his wife gave birth to her third daughter, after two boys who survived so far. Just after she gave birth she had to leave the child crying, to search for food in the bush. After two years of hardship they followed Adoum to N'djamena. Many people in their village died, men, women and children. The village of Bourzan became deserted.

In 1986 Hissène Habré took over the government and officially the war came to an end, which did not mean that violence ended. Habré started a campaign against the Hadjerai, especially educated Hadjerai. It is said that 40 000 men were killed. More villages got deserted. The war changed into a situation of continuous repression.

Adoum and his family went back to Bourzan. They started anew to work their fields. They do not have a plough, or any other modern equipment, only a hoe and an axe. Many men from Adoum's age left or died. Neighbouring villages collapsed.

The story of Adoum and his wife shows us how the life of ordinary villagers is deeply influenced by various events caused by a very insecure environment and how this had a decisive impact on their life. The exposure to all these hazards makes people very vulnerable.

# 2. INSTABILITY AND SOCIETY

From September 2002 to May 2003 we did research in Chad both in N'djamena and in the central part of Chad, the Guera. The aim of our research was to unravel the effects of droughts, ecological insecurity, and war, political insecurity, on the lives of ordinary people at the local level. Research was conducted in N'djamena and in the Guera in four villages and among the nomadic population: the Arabs. One of the basic ideas behind this research is that the Sahel is a region where instability or insecurity in ecological and political domain is part of history. Going back to the 18<sup>th</sup> and 19<sup>th</sup> century the Sahelian history is a record of successive periods of ecological variability and political instability. The creation of empires, with economies based on warfare, the raiding of others, and on slavery, go together with a highly variable climate leading to periodic famines. Research in Mali has shown that such long-term processes have a profound impact on Sahelian societies. They are organized around the management of instability. Descent systems, land tenure, mutual aid evolved in reaction to this long-term insecurity. The post-colonial period with its severe droughts was a variation on this theme of insecurity in this area (de Bruijn & Van Dijk 1995, 2003**a**).

In Chad we see a parallel historical development. Economic, ecological and political instability have dominated the history of Central Chad. Central Chad, the Guera, was one of the areas where people sought refuge, against slave raiding by the troops of surrounding empires of Ouaddai, Kanem and baguirmi. Because of the battles the Hadjerai fought against these slave raiders, they have become known as ferocious fighters.

Each historical period has its proper dynamics. In this paper we concentrate on the period after independence, which Chad gained in 1960. This period was marked by great political and ecological instability that has led to profound changes in society but at the same time seems to be a continuation of the turbulent history of the Sahel. Investigating periods of insecurity and its effects on the population may give us more insight into the way societies are formed under the influence of instability. The difference with former research in Mali is that post-independent Mali did not experience the same intensity of political violence, as did Central Chad.

The impact of 30 years of ecological and political insecurity is not easy to describe. How to unravel the experience of ordinary people? How can we describe the effects of this instability or insecurity? Can we use the term violence, as done by various authors, such as Suarez-Orozco & Robben (2000) who describe the effects of the holocaust, of wars in Latin America and label these as long-term violence? They explain the effects mainly in terms of social change and trauma. However, the use of trauma and related analysis of the situation may be a too western notion, by not taking into account people's own experience of the instability and focussing too much on the individual experiences and too little on the effects on society at large (Bracken & Patty 1998). Summerfield (1998) argues that the most important change in such periods of violence or insecurity is the profound change in social institutions, like mutual aid, social relations, land tenure, etc. that also affect individuals.

The term social suffering may describe best what people experience. We cite Kleinman et al (1997:ix) to explain what social suffering means:

Social suffering(...) brings into a single space an assemblage of human problems that have their origins and consequences in the devastating injuries that social force can inflict on human experience. Social suffering results from what political, economic, and institutional power does to people and, reciprocally, from how these forms of power themselves influence responses to social problems. Included under the category of social suffering are conditions

that are usually divided among separate fields, conditions that simultaneously involve health, welfare, moral and religious issues. (...) health conditions; yet they are also political and cultural matters. (...)

Of course we can only describe social suffering if we understand the context and environment in which people have this experience and how the people define their own situation.

In this paper we try to unravel the social suffering of the people of the Guera during the post-independence period marked by war and droughts. We argue that people's vulnerability has increased enormously and that this is visible through the changes in social environment, but also in the physical condition of the people. In this paper we first present a reconstruction of the past 40 years in the Guera and the violence that took place. As a point of reference for the description of this history will serve the studies of Fuchs (1970) and Vincent (1962) based on fieldwork done in the 1950ies and beginning of the 1960ies, a period of relative welfare all over the Sahel. As we have not reference whatsoever to the atrocities of the war on the local level we depend totally on the reconstruction of this period through interviews with local informants.

After a short inventarisation of the effects on society in the Guera we concentrate on two domains: the nutritional situation of the people. The measurement of the nutritional status of mothers and their children in four different villages and a combination of these outcomes with individual and village histories in relation to the period of instability shows how the physical vulnerability of people has increased due to the crises. The second domain we explore is the social domain. Religious change, changes in social relations and changes in land tenure over time may be the result of the way the crises links up with these social domains. In this paper we will go into detail on the way land tenure was affected by the war.

# 3. THE GUERA: GEOGRAPHY AND ANTHROPOLOGY

The Guera is a mountainous area situated in the centre of Chad. Positioned in the neighbourhood of a number of empires the Guera was always a peripheral region where refugees could hide. It was also a slave reservoir for the economies of these empires. The population in the Guera is a complex whole composed of groups of various origin that are still distinguished today. In our research the Bidiyo, Migaame and Dangaleat figurate, but there are many more groups. Collectively they are called Hadjerai<sup>1</sup> which is a name that was given by the Ouaddai and which means people from the mountains. Each group has its own history.

The Hadjerai have a reputation of being fierce and courageous fighters. They deserve this denomination from their history. Some parts of the Guera have ferociously defended their area against the armies of the surrounding empires (Ouaddai, Baguirmi, Kanem) that came to raid the Guéra for slaves and other goods. The Hadjerai in the east successfully chased away the Ouaddaien army in the 19<sup>th</sup> century. Stories about the way they opposed these Ouaddaien are numerous. The big warriors of the Hadjerai-Bidiyo who live in a valley next to Abu Telfan are still admired by the Bidiyo and have entered the realm of the Margay. On whom the religion of the Hadjerai is centred (Vincent 1962, Fuchs 1970).

Under colonial rule many Hadjerai joined the French army. The French who must have had the idea that they were good soldiers stimulated their participation (see archival

<sup>&</sup>lt;sup>1</sup> Hadjer means rock in Arabic.

document). The Chadian army after independence also took them as military. They also joined the armed groups of the opposition. They were among best soldiers. Rumours say that they were so good because they have their altars of the Margay that protect them. They are also known as the powerful sorcerers. That is also a reason why they are employed in great numbers as watchmen in N'djamena today.

The descriptions of Fuchs and his films from the 1960s reveal a picture of a land that was more prosperous than today; an impression that is also reflected in interviews with the older inhabitants of the region. The personal impressions of Fuchs reinforce this image. He revisited the area in 1996 and he was struck by the many displaced villages, but also by the resilience of the population (Fuchs p.c.).

The Guera, like any Sahelian region, is struck by periodic droughts. Rainfall is around 600 mm per year with a high degree of variability between the years and many irregularities in the course of the season. A reconstruction of this variability is impossible because there are no reliable data. During the period of the war measures of rainfall were not taken regularly. From the interviews we get the impression that the years with sufficient rain were scarce after independence. Harvest information is also almost absent. So we have no reliable information on agricultural production and household consumption in the area during the long period of instability.

#### 'Civil' war in Chad: 1965-1990

In 1965 the first peasant rebellions broke out in central and eastern Chad. One of the causes of these rebellions was the heavy tax imposed on the population. Many analysts of the Chadian civil war position the beginning of the war with this event (see Buijtenhuijs 1978, 1987, Lanne 1984, Azevedo 1998, Netcho 1997). Since independence the opposition to the Chadian government organized itself in Sudan, among Chadian migrants and refugees. This Chadian movement in exile which was the precursor of the Frolinat, the *Front National pour la Liberation du Tchad*, that was formed in Sudan in 1966. In 1966 Frolinat started the attacks in the central and eastern parts of Chadian territory, joining the existing peasant rebellions. Its leader was Ibrahima Abatcha, until the beginning of 1968.<sup>2</sup> The end of 1968 confronts the Chadian government with another opposition movement in the Northern provinces, the B.E.T.

From then on, there begins a period of civil war and political conflict, between a multitude of factions and foreign powers, such as France, Lybia, Sudan and the United States, that is too complicated to summarize in a short paper. From 1968 to 1975 Frolinat fought the regime of N'Garta Tombalbaye, the first president of Chad. This period is characterised by a low intensity of warfare with little means and ends with the coup d'Etat against Tombalbaye in 1975. After a brief period of relative calm under president Felix Malloum, outside agitation by Lybia headed by Goukouni Oueddey and Hissène Habré, brings back political instability. Rebel forces take over the north and finally come to power after fierce fighting all over the country and in N'Djamena. In this period the foreign interventions from France and Lybia have a decisive influence on the war. This is also the period in which the war becomes more violent, also because of the circulating weapons, from the French and the Lybians. This period last until 1986 when Hissène Habré becomes president. From 1986 to 1990 Hissène Habré is firmly in charge. His method to keep his power is brutal repression of forces opposing his regime. In this period many mass killings

 $<sup>^2</sup>$  Buijtenhuijs (1978) indicates the opposition with the French word '*Maquis*' which is the underground resistance against the Nazis in France. It is curious that a liberation movement uses this word, which originates from the much-resented colonial power. It also serves to indicate that they regarded themselves as an anti-imperialist liberation movement.

are reported. In 1990 Habré is removed from office by a coup d'Etat of one of his high military, Idriss Deby, who becomes the new president. Atrocities of this government are reported but there seems to be at the same time a very slow move towards political reform and more stability in the country, however often ruptured by armed rebellions since 1990.

### Instability and violence in the Guera

#### The role of the Hadjerai in the national arena

In a general picture of the role of the Hadjerai in this war we do not reveal all individual differences, but present a general picture that appears from the reading of the events. Many Hadjerai migrated to Sudan during the colonial period, which they experienced as a period of oppression. These Hadjerai who often had been there for decades, were recruited by the Frolinat. As Adoum's story makes clear refusal was difficult. As the peasant revolts started in the Guera the accentuated terrain provided protection, the Guera became a central battleground. It was 'occupied' by opposition forces, the 2<sup>nd</sup> armée. The Chadian government was also active in the Guera to restore law and order, as a quotation Buijtenhuijs found in a military document from the end of the 1960s makes clear:

"Passons au Guéra, où d'énorme efforts ont été faits par les forces armées, mais où malheureusement les résultats n'ont pas été concluants. La situation est stagnante, et la population nous échappe. C'est d'ailleurs l'endroit où il y a le moins de milices villageoises susceptiles d'être constituées... Au Guéra donc , un gros effort est à accomplir sur la population...." (Buijtenhuijs 1978:174)

The situation in the Guera further deteriorated from the point of view of the Chadian government. In 1979-1980 a fraction of the opposition (CDR) occupied Mongo. At various stages in the period of anarchy the Hadjerai come to be regarded as enemies of the state and raids were held in the Guera and the capital N'Djaména and numerous Hadjerai were killed. This drove them again in the arms of the newly formed opposition movement. In this way Many Hadjeray youth were driven in the arms of Hissène Habré, and were recruited in Sudan to take service in his armed movement and subsequently helped him to power.

The same happened in 1987. Hadjeray politicians turned against Habré and the latter took revenge and killed many Hadjeray intellectuals in N'Djaména and youth and men in the area around Bitkine. Many Hadjeray turned to Deby when he confronted Habré in 1990 and took service in Deby's army. In 1991-92 they were prosecuted by Déby, when he perceived the Hadjeray as a threat to his power.

So, the Hadjerai supported both successive leaders, but their ascent to power was directly punished with raids on their young men. Many young men and educated people were killed in this way. Exact numbers are not known, but the situation in the villages (especially around Bitkine) indicates that many men have died over the past decades, leading to an increase in the number of female-headed households.

#### Village life and the war

To understand how a war affects ordinary people's lives we should know about the form this war took on the local level. From literature on the 'civil' war in Chad we only get glimpses on how it was to live the reality of war, or even how the war was rooted in the countryside. How did people organize daily life and agricultural production? Was 'normal' life possible? What kind of violence was used?

Since the beginning of the conflict Frolinat claims to be in charge of a popular revolt against imperialism, and to have control over a substantial part of Chad. As can be read in a

text of the Frolinat from 1969: 'Grace à la confiance et au soutien de nos masses populaires le Frolina a réussi à se renforcer militairement et politiquement à l'intérieur du pays en libérant des regions entières du territoire national... '(Buijtenhuis 1978:197-180). Buijtenhuijs remarks that differences between the regions and between ethnic groups may have been very big.

The reconstruction of the war on the local level is not easy. People still feel insecure and are very reluctant to speak. When talking about today's chiefs and masters and even the president, people start whispering and don't want others to hear what they have to tell. This gave us the impression that the war is not yet over, or at least the rivalries and conflicts that were created by the war situation and existed in the community are still very present.

We tried to reconstruct the impact of the war at local level from various interviews.<sup>3</sup> From the stories we heard, it appears that the grip of the Chadian government on the Guera loosened in the course of time. The Guera became gradually a different country where law and order was not clearly regulated than through the threat and the use of violence that was in the hands of armed groups who belonged to the so called 'rebels' (opposition) or were linked to the government (see de Bruijn & van Dijk 2003b).

The stories reveal a very loose organization of plundering and looting groups, armed forces, hiding in the countryside. Some warlords are well remembered. They headed troops of about 60 men who lived in the bush protected by camps of nomads, and living as nomads themselves. These camps did not consist of huts but were simple open spaces, the men slept under trees and from time to time they attacked a certain village. The order to attack came from a superior, or in some cases it was their own initiative. These armed groups were called differently: 'Arabs', 'gens de la brousse', strangers. In the interviews it is often not clear whether people talked about armed groups linked to the government or linked to the opposition. The word rebel is not used.

In the first period, until about 1975, there was hardly any modern armory. The second period was much harder when we consider the use of weapons and the harshness of the attacks.

What came clearly to the fore in the interviews is that there was no central food provisioning and organization of these armed groups. So they had to loot the villages in order to survive. One rebel told about his suffering during the periods of drought, when they suffered as much as the villagers. Attacks on the villages were always by surprise. Sometimes they came by night, sometimes they came in a friendly way just sitting under a tree but consuming all the goods of the village. Women became victim of these men, though some women still remember their alliances with these men as a chance to survive. Life was very uncertain.

Weapons were in short supply, but were often gathered during attacks on military bases. For instance Baro was a place where the Chadian military had an outpost. It was a place whereto other villagers were summoned to live in order to receive protection from the soldiers. When the rebels attacked this place they took all the arms and consequently the *chef de canton* fled Baro and joined the rebels. The government would have taken him as a traitor that handed over his arms to the rebels. So he had no other choice.

Attacks of the armed forces of the opposition were also directed against villages where the Catholic mission had its roots. During these attacks many of their goods were stolen and destroyed, just as infrastructure in the form of hospitals, artisan working places, etc. These forces did not accept any western attribute in the houses of the people for which they were fined. This may direct us to a certain ideology of the rebels in which an antimodern, anti-western tone is present. This attitude goes together with their ideas about

<sup>&</sup>lt;sup>3</sup> We do not give the names of our informants, because of the political situation in Chad. It is never known which information one is allowed to communicate and which not.

religion. Although it is never officially stated and we cannot find it back in documents of the Frolinat (Buijtenhuis 1992) they seem to have adopted an anti-Christian and a pro-Islam attitude in the Guera. In numerous interviews reference was made to the violence/force the interviewed experienced to press them to abandon the Margay cult and to become Muslim. It is clear that today the Catholic mission has much less adherents than before the war. In Korlongo as well as in Baro the Catholic quarters have shrunk to one-tenth of their original size.

Where were the Chadian military in this story? We do not know their position. The stories we collected reveal that the soldiers became similar to the opposition. They also looted and attacked villages when they were in need of food. They also attacked and burned down the villages where they suspected rebels.

The effects of the droughts of the 1970s and 1980s compounded the impact of war. These droughts alone had already a severe impact in neighbouring countries (see De Bruijn & Van Dijk 1995). Because of the insecure situation there were few outside interventions, or aid-agencies, no nothing to alleviate the effects of the droughts. Infrastructure to supply food or provide income was non-existent. Older women told us how they were forced to leave the village and to beg elsewhere, often with their children, living under a tree. Many people died, and men migrated. Migration was not new for the Guera, but during these drought periods it has become really institutionalised as an economic strategy.

Concluding we can say that the war and drought situation at local level was a very insecure period with the series of attacks, threats to people's personal life and to the integrity of their culture.

# Four different villages

The experience of these atrocities was not the same for all people of the villages, nor was it the same for the different villages where we conducted research. Their stories reveal different war stories. These situations must be investigated separately to understand the differences in socio-cultural and economic changes. In the following sections we will present an analysis of nutritional and socio-economic data (section 4) and an analysis of the impact of war on the allocation of land and land use (section 5)

Chadide was relatively little affected. As the chief of the village assured us there were no people from the village who went to the army or to the rebellion. The village, situated at the foot of the mountains, a remote area, was outside the scope of armed groups of rebels and of the government.

Baro on the contrary, a much larger village, was constructed during the war. This village was used first by the government and later by the opposition as a stronghold. Villages in the surrounding were summoned to move to the land of Baro so that protection could be guaranteed. The chef de canton of Baro joined the armed forces. In Baro the Catholic mission became a prime target village as it represented Western, non-Muslim culture. Being crushed between the rebels and the government the population was exploited from two sides. Political intrigues in the family of the chief contributed to political instability.

Bourzan is a village situated along the road from Mongo to Abou-Deia, and thus easily accessible. As Adoum mentioned this village was also exploited from two sides, but they did not take side themselves. For the villagers the time of rebellion was a time of repression. Today the young Bidiyo say that their valley still contains places where the opposition forces are hiding. In this village the history of islamisation is especially linked to the rebellions. Here the stories on forced conversion are the strongest.

Korlongo is a special case. Early in the war this village became a stronghold of the opposition. The warlord who vested himself in Korlongo also protected the village. As you will see this village has been best able to organize itself.

In all four villages the droughts had a severe impact. As the practices of the armed opposition forces were directed against modernism they also did not allow any technical innovation in the area. The stocks of the villages were plundered. Any structure to organize food aid on a large scale was absent. In this context we understand the disastrous effects of the war and drought as described for Bourzan by Adoum. Many people left and tried there luck elsewhere. Only a few did return.

### Socio-cultural change

A French priest referred to the Guera as being in a stage of the little improved neolithic. Here he pointed to the backwardness of the Guera in all domains of development. Indeed the war and droughts put a stop to all technological innovation and this has not been made up over the past decade of relative calm. Ploughs are nearly absent and people hardly make any gardens. Cemented wells were only constructed over the past decade and they are still very rare, so clean drinking water is a severe problem. People construct their own wells that dry up during the long dry season, leaving some villages without water for a few months.

The Guera was a region in which people lived partly of gathering and hunting, but the war changed this economy. People were afraid to leave the villages to gather and this attitude did not disappear totally. The armed groups that lived in the bush killed wild animals on a large scale. Local knowledge on the environment and on agriculture is no longer transferred to the young generation, because the time of war and droughts have profoundly changed the mentality of the youth. The youth is more and more directed to migration labour and less to the investment in their own land.

Migration to N'djamena has much developed in the past four decades. Though migration was not new, many men left for N'djamena, it seems that the number of people migrating has indeed increased and that this has led to a different orientation of the economy. However, remittances of the migration are low and the main result of this migration, mainly of men, is the increase in female-headed households. The consequences of this will be explained more elaborately in the next section of the paper.

It is difficult to retrace the islamisation of the area. Islamisation has a long history in the area that stems from the time of the Ouaddaian Islamic scholars and teachers who came through the region also to spread their ideas. Massive changes in religion however seem to have occurred over the past decades. Various informants affirm this. This development went together with a decrease in the number of Christians in the Guera. At least the stories from Adoum, and many others indicate that force was used to impose Islam by armed groups in the Guera. Islamisation by violence is certainly part of the story in Bourzan and Baro. Korlongo's story seems to be different. The Islam already influenced this village when the Ouaddaien took it as their stronghold to control the Guera (Fuchs 1970). Nevertheless a comparison between the numbers of Muslims as reported by Fuchs and the present situation in the village does not contradict the observations in other villages. The inhabitants of Korlongo however do not refer so clearly to Islamisation by force as in the other two villages.(cf. De Bruijn fc.) This change in ideology however does have deep implications for the division of tasks between men and women, for alliances people may

develop and for the attitudes of people towards work and production. This will be explained in the following sections of this paper.

# 4. NUTRITIONAL STATUS AND SOCIO-ECONOMIC CONDITIONS

# The impact of war and drought on people's lives

The effects of wars, drought and conflict may constitute the major causes of chronic vulnerability and food insecurity of numerous households in the affected countries (Gunatilleke 2001). Chad is one of these African countries that has known a long period of civil war alternated with ecological crises and droughts. These events have had an enormous impact on socio-economic conditions of the population (disruption of the economy, mass killings, social and political oppression (Buijtenhuis 1987). Today the majority of the Chadian population lives constantly in a condition of general instability and has fundamental problems to survive. This situation leads to a high degree of vulnerability, especially in rural areas, exposes people to abject poverty and puts them in a position of chronic food insecurity and a condition of permanent malnutrition.

The Guera is a mountainous area in the centre of Chad that has historically been marginalized (De Bruijn *et al.* 2003). As in all the other rural areas of Chad, agriculture is at the basis of the economy, but after all the successive crises, attacks by armed groups, mass killings and the like the majority of the population has lost the motivation to cultivate. Others cultivate just enough to feed their families forgetting that ecological and climatic calamities are very frequent in mountain areas (Tobert 1985, 213-223, Torry 1978, Jodha 1999). Many people have reduced their agricultural activities. Other, mainly men prefer to look for alternative sources of income in town. All these, problems together have pushed the Guera into a situation of continuous suffering, from which it cannot recover from today to tomorrow.

Demographic and public health data show that this region is indeed deeply affected. Figures concerning migration rate, infant mortality, and life expectancy are all worse than the national averages (BCR 1995, MSPAS 1991). The interviews below show that preceding crises have caused a lot of suffering at the moment of the field research in the beginning of 2003.

# Hawa Balimé

She is a woman of about 45 years old. She has been married since she was 12 and has given birth to nine children. Before she used to live near the mountain range with her family. Her husband cultivated large fields of millet and groundnuts, and she grew sesame and cowpea. All went well and they had always something to eat in their house. Their difficulties began with the drought that began in 1980 and lasted for five years, and especially the constant threat of the armies that occupied the region.

'Armed groups came from time to time to maltreat people and to burn their houses. When they entered the village they were shooting to intimidate us, and the whole village fled into the mountains. After some months they discovered our hiding place and we could no longer escape them. When they attacked the village they took all they found useful. My husband and the other men were beaten and maltreated all the time. I had to prepare meals for them even if the children w ere dying from hunger. Between 1980 and 1986 I lost three children and my husband die because of the beatings of the invaders. I was obliged to go and live with my parents in another place. We preferred to leave our cursed village. I can no longer achieve anything in my life. I muddle through just to take care of my children while our suffering continues. I cultivate some land with millet, groundnut and sesame, but the soil is already exhausted, but I have no choice.'

# Halimé

She is a woman of about 38 years old with a timid smile. She has given birth to ten living children of which six are alive and four died. She is a widow and handicapped. She cannot do any agricultural work, whereas it is her sole source of income.

'I am in this situation because of the war that began in 1979. My husband was a military, and we were based in Mangalmé when the war broke out. There were many military men in town, when they attacked early in the morning. Two months before I gave birth to my tenth child. Our hangar took fire and our house burnt down. I ran from the house when a bullet hit my shoulder and went through my chest. I fell unconscious. The bandits fled and many were killed. It took two days to bury all the dead, and even after many were left unburied. A military plane came to take the wounded away. My husband asked for me to join them, but they refused saying that women were not allowed to travel with soldiers. This affected my husband greatly and he left military service to take care of me. Subsequently he was punished by his superiors because he disobeyed.

We suffered enormously. We sold the little we have to eat and to pay medical expenses for me. Because this was not sufficient my husband died, and I was left behind with the children under my care. No-one helps me. This suffering will eat me out until my last days and my children will never be able to get out of this mess. This is perhaps our destiny, but God is great.

This interviews show that the current situation is intimately linked to the circumstances they experienced during the period of war and drought. The suffering and the poverty in which they find themselves today may affect on its turn their nutritional status of today (D'Souza 1985, Bernard 1988).

The evaluation of the nutritional status and the food situation is a practical and concrete way of assessing the condition of people and their well-being. It is a measure that gives an idea of the current condition of an individual (Dowler 1982, Rayne 1982). These data are complementary with more qualitative data as abstracted from interviews. Life histories permit to comprehend contextual factors and may facilitate the interpretation of quantitative measures. They also give an indication of the impact of past event (in this case drought, war political oppression) on their current life conditions.

# The sample: Why women and children?

This part of the study is focused on women and children. This choice is based on the fact that women are more vulnerable for nutritional problems than men as a result of their inferior social and economic position (Kabeer 1990, Gittinger *et al.* 1990). In rural areas, and also in the Guera, women play an important role in agricultural and household activities, but often their role is masked by the domination of men in the public sphere. Women are obliged to take an even greater part of the household chores and agricultural

work when being widowed or divorced or abandoned. Many men migrated to the city to look for work and income, but they do not always return (or contribute to their family).

Women are very active at all levels of the food chain, and the growth of children. They have the responsibility for household food security and the education of the children, and contribute to the production of food and cash crops. A Hadjeray women is at the basis of her hearthhold. Her physical responsibilities make her more vulnerable as she has to do everything by herself, even the clearing of land. The lack of resources at the level of the household affects systematically household food security, which depends to a large extent on the health and the well-being of the woman. The malnutrition of women has severe effects on the household. The reduction of her productivity and her labour capacity also limit the capacity of earning revenues for the household. Women are also very knowledgeable about their difficulties and survival problems. Moreover, when she is in a bad health and nutritional condition she is incapable of leading a normal and active life. This will affect the birth weight and growth of her children rendering them more vulnerable to infectious diseases and a higher rate of child mortality (Cook 1999).

#### Methodology

The assessment of nutritional status of women and children is done by anthropometrical measures. This method consists of taking a number of measures of the body to acquire information on the nutritional status. These anthropometrical measures give an indication of the living situation and the external constraints under which the individuals have to live (Galvin 1988). The degradation of nutritional status is one of the most immediate consequences of crises, and enhances the vulnerability of an individual for diseases and leaves people without force and in a lethargic condition that reduces their capacity for work (Borton *et al.* 1991).

In this study a sample was taken in each research village. In each of the sampled villages a representative sample was taken out of the complete list of all the households in the village as established by the village chief. The measured variables, weight, height, brachial circumference, gender, age, presence of oedema, whiteness of the eyes, were compared and interpreted according to the data from the NCHS which have been adopted by the World Health Organization as international standard (James *et al.* 1988, Tames 1994)

For this provisional paper, we used only the relation between weight and height and the brachial circumference. This relation is not affected by age, since in rural areas it is often difficult to determine age with precision, since no registration of births is present. However, local informants may help. The relation weight for height gives an indication of the underdevelopment of an individual (Gallin Masson *et al* 1984)

For the women we used the Body Mass Index (BMI), that is the relation between the weight in kilo with the height in square metres. This measure permits the assessment of the level of nutritional risk for adults and adolescents, for whom the indicator weight for height cannot be determined. Brachial circumference at last, permits to identify individuals at risk in a rapid manner (James *et al.* 1988).

The indicator taken for the assessment of anaemia is the level of haemoglobin in the blood, which was determined with the help of a system Hemo-Cue. The scores on this variable were also interpreted in line with WHO norms.

A standard questionnaire was used to assess the level of agricultural production and a number of socio-economic conditions, vaccination coverage and other information helping to assess the vulnerability of the women and children sampled. Information on agricultural production was acquired by asking about the stock of cereals at the level of the household.

This is not per se a good indicator of agricultural production since cereals and other food items may be sold to cover other expenses, which quite frequently happened (James *et al.* 1988, Frankenberger *et al.* 1991).

# Preliminary results

Field research on nutritional status was done in four villages in the Guera, the peripheral quarters of Mongo, the provincial capital of the Guera, and in N'Djaména, the national capital and in camps of nomadic Arabs, who frequent the Guera. Here we will present a preliminary analysis of the results of the research on nutritional status in the four rural Hadjeray villages, Baro, Korlongo, Chedidé and Bourzan. These villages have been selected to differ on a number of variables (size, location, presence of health centres).

# Baro

This is one of the biggest villages in the Guera. Recently it has become a sub-district. The village was deeply immersed in the war. There is a dispensary, primary and secondary education, a catholic and a protestant mission and a mosque. The results of the study show that 31 per cent of the women have received education with 10.3 percent up to secondary level. 24.1 per cent of the women live alone with their children.

Despite the presence of a dispensary, the access to health care is low. Only 13.8 per cent of the women visit it. The others 86.2 per cent say they do not have time to go there, do not have the money to pay for treatment or it is not necessary to go there. More than 50 percent of the children are vaccinated. Still, child mortality is 32 per cent and the rate of malnutrition of infants is at 19.2 per cent. The women sampled suffer enormously from anaemia, 56 per cent have a level of haemoglobin below normal of which 34.5 per cent is associated with malnutrition.

# Korlongo

This is also a village with a dispensary, primary and secondary education. Contrary to Baro there is no protestant, only a catholic church in a neighbouring hamlet, though the great majority of the people, 99 percent, is Muslim. The health centre is rarely frequented, only one per cent of the women go there. The others prefer traditional healers and the consultation of marabouts. 8 per cent of the women received some education.

Here the women play an important role in subsistence farming. They have access to fields around the homestead, which are fertilised by the livestock f the compound. Almost 67 per cent of the women associate cultivation with some livestock rearing and the weaving of mats, that all contribute to household income and the supply with basic food. The main dish is a sorghum porridge with a sauce on the basis of Hibiscus leaves, tree leaves, sesame oil and cowpea. Meat is consumed rarely, only four per cent of the household consume meat at least once a week. Bush meat is forbidden, because of Muslim prescriptions. Moreover, women are not allowed to consume chicken because of food taboos.

As a result 28 per cent of the women are malnourished, with 55 per cent being anaemic. The rate of malnutrition among children between 6 and 59 months is 30.6 per cent. Only 16.2 per cent of the women consider the stock of food they have sufficient.

# Bourzan

This village is located along the road that connects Mongo with Am-Timman. There used to be a school, but it has been closed as there were no teachers. There is no health centre, but the inhabitants may go to Niergui, at 7 kilometres, where there is dispensary. Unfortunately only 0.2 per cent of the people go there.

This village suffered enormously under the impact of war and drought. At the moment of the field research 45 per cent of the households was headed by a female. Normally women only cultivate sesame and groundnuts, but those that have no man in the household also cultivate millet or sorghum. The weaving of mats is a source of income for 64 per cent of the women, just as their men if they are present, which brings in some cash, as traders come to the village to buy the mats. However, most of the money earned is spent on tea and sugar.

The harvests of the women are destined at home consumption. They are investing a lot of effort to ensure the provisioning of food to their families. However, the level of production is too low, and the other tasks women have limit their contribution to food production. As a consequence the majority does not succeed in supplying sufficient food, 89 per cent of the households eats only once a day. Child mortality is at 42 per cent, the level of malnutrition among infants is at 64 per cent. The women do no better, 62 per cent Is malnourished of which 27 per cent are severe cases. Anaemia is also an important problem. 65 per cent of the women is anaemic of which 3 per cent are severe cases (Hb < 7 g/dl).

# Chedidé

This small village is situated at 10 kilometres from Baro at the foot of a range of mountains with around 340 inhabitants in 2001. There is no infrastructure in the village (school, dispensary, market). Because of its hidden position it has escaped political oppression and attacks of armed groups, but is nevertheless been affected by the droughts and pests. The population is 100 per cent Muslim.

Almost all, 99 per cent, of the women never visit a health centre because of lack of time, the distance to Baro or ignorance. The village disposes of a single well that dries up early in the dry season, so that the women are obliged to look for water at a long distance of the village.

The main dish is porridge of red sorghum with a sauce based on tree and hibiscus leaves and ocra. Meat is rarely consumed, only five per cent of the households once a week. In addition women do not eat chicken and bush meat. The main problem for women is anaemia, 34.8 per cent are affected by it and 31.7 per cent of the children is malnourished.

|          | Percentage<br>female-headed<br>households | Infant<br>mortality 0-<br>5 years | Percentage of<br>children between<br>6-59 months<br>malnourished | Rate of<br>Malnutrition<br>of women | Rate of<br>anaemic<br>women | Sufficient<br>stock of food |
|----------|---|-----------------------------------|--|-------------------------------------|-----------------------------|-----------------------------|
| Baro     | 25.1                                      | 32                                | 39.2   | 34.5                                | 56                          | 10.3                        |
| Korlongo | 24.3                                      | 30.1                              | 40   | 28                                  | 55                          | 16.2                        |
| Bourzan  | 41  | 42.3                              | 64.3   | 58.7                                | 65                          | 2.6                         |
| Chédidé  | 15.6                                      | 24                                | 31.7   | 26                                  | 34.8                        | 27                          |

| Table 1: | The | main | results | of the | nutritional | survev |
|----------|-----|------|---------|--------|-------------|--------|
|          |     |      |         |        |             |        |

#### Analysis

A comparative analysis of the four villages shows a difference in the degree to which they have been affected by the droughts and the war, and the manner in which they are organized and the degree to which socio-economic factors impinge upon the nutritional status of women and children. Differences within the villages are also great. In every village there are relatively well-to-do households, some that suffer on average and those that are in great difficulties to survive. Every household has its own specific history in relation to the war, the drought and the trajectory it developed.

In general one can say that female-headed households have more difficulties coping with the situation than others. There is a significant correlation between the marital status of women their nutritional status and agricultural production (Clark 1995, TR and L. Unnevehr 1985). They have less access to the means of production, which not only affects their production capacity, but also their entitlements to food, which aggravates their nutritional status and the perpetuation of poverty.

There is also a relation between the Body Mass Index of women, their agricultural production and the nutritional status of their children. This shows clearly that the physical well-being of children, the accessibility of food and the risk to become malnourished depend closely on the nutritional status of the mother (Dey 1984, Heywood 1974).

The category of women that are heading a household, especially those whose husband disappeared without a sign of life has even more difficulties. Their suffering is not only related with poverty, but also linked with lack of social protection and disregard from the side of other individuals in the village.

Not only single women have problems. The marital status and the life she lived before deeply influences her social and economic situation. The following example of a woman in Baro will illustrate this.

#### Achta Béchir

Achta Bechir who lived peacefully wit her husband in Baro. Under the pressure of the war they were obliged to leave for N'djaména where she lost her husband. When she returned to Baro she married to another husband in a polygamous union as his second wife. She is 43 years old, mother of six children. Her husband is 67 years old, has three wives of which the youngest is a girl of 15 years old.

He has 20 children of which 7 have died, because he has no force to cultivate for his whole family. He reckons on the benevolence of God, and every wife has to take care of her own children. We found Achta sitting on an old sac with her back against the wall of her small hut of straw, nursing her baby of six months, who seemed to be one month old. She welcomed us with kind words and made us sit next to her on a clean mat that her son took out of her hut. After a brief moment of greeting and introduction she started to tell us about her life.

'I was born of a father and mother Migaamé, and I spent my youth in my family. At the age of 13 years old my parents gave me into marriage to a military man, a Moubi from Mangalmé. He worked here in Baro and disposed of some wealth. My parents preferred to marry me to this stranger, instead of a cousin, which is usual, because they expected him to protect them against armed rebels and to have some more freedom. As my husband was away all the time, he left me with my parents. Despite this he charge of my whole family.

In 1984 with the drought, life was very difficult, so my husband decided that we would go to N'Djaména. We spent a lot of time getting there and when we arrived we settled in the house of one of his cousins. After some days he started his work there. He earned half of his salary and with all kinds of other income we ate better than before. Unfortunately, after two years my husband died in a traffic accident. I had two children, one of two years and a baby of 6 months. Forty days after the funeral I returned to Baro to my parents.

I spent three years with my parent. It is difficult for a widow to find another husband. People thought I was cursed. Men avoided me, because they were afraid to die like my first husband.

I thought I would not remarry until my present husband came to see me who wanted to take me as his second wife. This is not ideal, but it provides protection. The people in the village would respect me more in my quality as a married woman.

However, I live in greatest suffering. I have to work for other women to have some money or millet to feed my children. My two children with my deceased husband live with my mother, and I have six children with my second husband. When my father lived he helped me much, and gave me millet at each harvest. Since he died I have nobody to support me. The family of my husband only have consideration for his first wife, and he only looks at his third wife, one of his great nieces, whom he married just one year after my father died.

When my father lived my husband paid me much more respect, because all we had came from him, and that pleased my husband, because he was able to still his hunger. Now we have nothing and in addition we have many children. I have to manage on my own to feed my children and to maintain my hearth. The worst thing is that I have another baby every rainy season. It is very hard to work a field when you a baby to take care of.

My old mother still lives in Baro with my other two children, but I cannot help them either. Mostly she supports me instead. She helps to gather fire wood and tree leaves to sell to have some money. I Cannot undertake other activities, my husband forbids to make millet beer, that could yield me a lot of money.

Once I asked my neighbour to prepare millet beer for me in hiding. She earned a lot of money for me. But here in the village secrets cannot be kept. Some people told my husband and he threatened me that when I persisted doing this he would send me away. With a lot of regret he forced me to promise and swear to never do it again.

I have a difficult life, but I am not a unique case in Baro. There are women who suffer more than I do. I stay here in this situation, because I fear to find myself with all my children with my mother. Already the family of my first husband do not bother about the children of their deceased brother. I do everything to survive in this misery that will not end tomorrow.

#### Conclusion

A comparative analysis of the four rural Hadjeray villages shows inequality at the level of infant mortality, agricultural production and malnutrition of women and children. It is clear that women who live on their won have more difficulties than others. However, the degree of suffering varies form one village to the other. There are many other variables that may explain the differences in situation. In fact, when analysing life histories every family and individual has its own history that predisposes them to differing opportunities and

constraints to improve their economic situation and to gain access to natural resources for agricultural production.

However, the observed differences show that specific parameters have more weight than other. There are specific obstacles for every village that constrain the activities of women, notably in the domain of religion, and social organization and the opportunities to have access to natural resources. The next section will go into more detail in relation to these aspects.

# 5. LAND USE AND SPATIAL ORGANIZATION

### Violence, land use and spatial organization

One of the areas in which the impact of long-term historical processes is particularly visible is in the domains of land use and the spatial organization. In these domains the relations of power are expressed and the decisions people have taken in response to in this case drought and war and other factors of influence. The role of violence or the threat of violence has hardly been investigated. Almost all research of land use and the spatial allocation of land operates under the assumption that the state exerts an effective monopoly on violence. Even when it is clear that this monopoly is not or cannot be maintained, the role of violence is only made explicit at the empirical level and not at a theoretical level, whereas ecological degradation, technology, market prices, legal institutions are taken as the main drivers for change.

In the Guera one can speak of a situation of legal complexity in the sense that various legal systems co-exist and that people trying to settle legal and distributional problems refer themselves to these legal systems and try to 'negotiate their way' to the most acceptable solution. Terms like legal pluralism and forum shopping are used for this kind of situation. In a warlike situation like we have in the Guera we encounter a situation in which legal systems or jurisdictions do not only co-exist in time but also follow up upon each other in a fast sequence. War is a situation in which different rules and norms are in force when compared to non-war conditions. The settling of land claims during a war situation may later on be considered illegitimate or unfair as the people were coerced to accept these solutions under the threat of violence. War-born solutions may therefore give rise to new conflicts.

War (and drought) can also promote extremely fast socio-cultural changes, and may disrupt settlement patterns, land use practices, think for example about the effect of mines on the accessibility of land or the impact of drought on the production capacity of land, or the effect of the killing or migration of men on the organisation of rural labour and the force of the claims of their female family members and widows on the land.

The effect of war may even be more profound on the functioning of structures of governance such as the official administration and traditional authorities. Often the whole administrative system is disrupted and in some instances governance structures may lose their legitimacy because of their role in the war. During the war people may change from one normative system to another, compelled by new power holders, or out of the feeling that their former ways of organizing and sanctioning norms and rules are no longer valid in the difficult situation they encounter.

# Land use systems in the Guera

The situation with respect to food security and the nutritional status of women and children is directly related to the way in which food production is organized in the present. The land use systems in the villages, where this nutritional research was done, on their turn are deeply affected by the situation during the war and the droughts. In responding to these calamities these land use systems have evolved towards their present state.

In the Northern Guera an amazing variety of land use systems can be found. The main cereal crops are pearl millet (*Pinnesetum thypoides*) and a number of varieties of sorghum (*Sorghum bicolor*). Over the past years the share of pearl millet has diminished enormously as the crop is considered too vulnerable for pests and birds. The most resistant crop, red sorghum, is now taking over gradually. In the lower lying areas in the plains far from the villages a variety of sorghum (berberé) is cultivated that grows on the water that remains in the soil after the rainy season.

The women have their own crops. They grow groundnuts (*Arachis hypochea*) and sesame often in combination with osseille and ocra. Groundnuts and sesame are either cultivated as cash crops, or for the production of cooking oil. Leaves of the osseille are used for the sauce and the production of aromas for the sauce. Ocra is also an important ingredient for the sauce.

Hardly any modern technological innovations were introduced. Because of the isolation of the area, people had to rely on their own ingenuity, and what migrants brought with them. Hardly any inputs like chemical fertilisers and pesticides are used in the area. Some vegetable gardens are present outside the provincial capital of Mongo and some of the larger villages. The market for vegetables is extremely limited. Locally only tomatoes and tobacco are cultivated and consumed on a larger scale. These are dried and sold on the local markets. The growing of mangoes and guavas begins to develop in larger villages. However, most fruits and vegetables are collected in the bush. The main fruits are wild dates (*Balanites aegyptiaca*), *Sclerocarya birrea* et *Detarium microcarpa*. Leaves of the wild date (*Balanites aegyptiaca*) constitute the main ingredient for the sauce accompanying the local dish of millet and sorghum porridge.

In addition to the Hadjeray there are numerous Arab herdsmen living in the area. Partly they are nomadic and remain only temporarily in the area with their herds of camels and cattle. Others have settled in the Guera, even before independence, though the majority has settled during and after the droughts. They have occupied land in the Hadjeray villages, after having demanded land from the *chef de village* or the *chef de canton*. A large part of these Arabs have cleared fields as well and want to settle permanently in the Guera, which meets with resistance from the Hadjeray.

This variety of land use systems is partly a reflection of different agro-ecological conditions, a criterion used to select the four research villages, but also of the various histories of the population groups inhabiting these sites. The events of the past 40 years are visible in the way land is used, how various functions are positioned in space and how labour is organized. This can be shown by an analysis of the changes in land use in the four research villages.

#### Spatial organization, land tenure and labour organization at village level

#### Korlongo

The village of Korlongo has around 4.000 inhabitants. They live spread over a vast area, in large compounds consisting of 5-15 related families. These compounds are surrounded by fields where the women cultivate sesame, peanuts and some sorghum and millet. Between the fields cattle routes have been laid out to conduct the livestock each night form the pastures to the inside of the compounds, where the animals are corralled during the night. The dung is utilised to fertilise the field surrounding the compound.

The fields of the men are located away from the village sometimes as far as a three hours walk. Given the size of the village there is a lack of good land in the immediate surroundings of the villages. On these fields the men cultivate millet and sorghum and in the low-lying plains sometimes mouskwari (berberé).

Among the villages we studied in the Guera, the land sue system here is of an immense complexity compared to most other villages. Not only is there an elaborate organisation of land allocation between various crop types, but also an extremely complex system of cattle routes, which requires great efforts to maintain. This requires a high degree of organisation on the compound level as well as on the level of the village. This high level of organisation is maintained to a strict organisation of village life with Islam at the basis. According to the village officials, they have done away with the Margay cult. The village chief is now the one in charge of land allocation, and if necessary, in case of conflict, in consultation with the *chef de canton* and the *sous-prefet*.

The contrast with the situation in 1965 as described by Fuchs (1970) is enormous. The village was in its entirety located at the foot of the mountains. Most of the villagers were still adhering to the Margay cult. There was a dual system of ritual and political control over land allocation. After a large fire, which reduced most of the village to ashes, it was decided to spread the village over a larger area, and compounds were set up on other parts of the village territory.

When the civil war started, the village soon became under the control of a rebellion leader, who guaranteed a state of relative security for the village. Contrary to other locations there was hardly any pillaging and the village was not set to fire as happened to other villages in the region. The step to convert to Islam was soon made as the outside occupants were adhering to Islam and coerced the population to follow their example. As a result, the impact of war was quite limited on the level of wealth. After the war, the population still disposed of assets like livestock, and they had been able to develop an entirely new landuse system based on a combination of cereal cultivation and livestock keeping.

One of the most spectacular aspects of these changes is the change in the spatial allocation of habitation sites, fields, and cattle routes. With a growing population, the internal dynamics of this system is expansive. Part of this population growth is taken away through the migration to urban areas such as Mongo the regional capital, where we found many impoverished former inhabitants of Korlongo, and N'Djaména, the national capital where a number of migrants live in the peripheral quarters. Contacts between migrants and the village are limited. It seems that the poorest move away, since they can no longer sustain their existence in the village.

In the village itself, settlement patterns indicate that every now and then fragments of compounds move away from the original compound. Here, it also seems that the wealthiest parts of the compound remain, whereas the poorest part moves away. Mutual assistance among the families composing a compound is almost absent and extreme poverty exists amid the relative wealth of people who own cattle and are able to buffer bad harvests by selling livestock.

Though there are few indications of conflicting claims on land, there are important political struggles over leadership positions in the village. As political leadership is nowadays synonymous with control over the regulation of access to land, these can also be regarded as struggles over land. Changes in land tenure occur quite frequently. People often move their compound from one location to another, away from the densely inhabited centre towards the less densely populated periphery. Fragments of compounds break away from old compounds and set up units of their own. As there are no clear rules for regulating these movements, most cases are regulated through negotiations between individuals, groups and

village officials. Therefore, the position of village officials and their legitimacy has become an important subject as is testified by the frequent changes in these positions.

Women have specific difficulties. Because of the conversion to Islam, they have become limited in their room for manoeuvre. They have become confined to the small fields around the compound to cultivate sesame, groundnuts, oseille and ocra. If their husband has livestock, these fields receive manure. However, female-headed households rarely dispose of livestock, and consequently are face with declining soil fertility. Women have less access to cereal fields far away, and only work there on the fields of their husbands. Several women reported that they also feel limited to go into the bush to gather wood and other bush products, because of Islamic norms that restrict the freedom of women. This is an important limitation for female-headed households to provide for food and income.

#### Bourzan

This small village of about 100 families was located in the heartland of another opposition group. Located between two mountain ranges this and a number of other villages were deeply affected by the war. The people were forced to settle at the road, which connects Mongo with the south. The area has been an important corridor for military transports and a number of heavy battles were staged in the valley. As a result, the population was under constant pressure. Entire villages disappeared, their inhabitants being forced to move because of the war and the droughts who compounded the effects of warfare.

Contrary to the other two villages systems of land use did not evolve. Because so many people fled, there was sufficient land available to continue operating the slash and burn land use system. The inhabitants of Bourzan, who remained in the area, have started to clear land on the territory of neighbouring villages. They pay some compensation to a representative of the original population – in the case of a neighbouring village of Bourzan this was a 18 year old boy -. However it is clear that these people were not able to prevent the encroachment on their territory, and that the compensation had token value only and did not imply the recognition of their authority since they were to weak to resist competing claims form outside.

As a result, of these cultivation practices there are large areas of degraded land, that has been set aside as fallow land, surrounding the village. In a circle of 1 kilometre around the village there is no longer any field, except for some small fields of old men and women, that do not have the capacity to walk long distances

Within the village territory, land is cleared in a quite anarchistic way. As long as there is no competing claim, anyone seems to be able to clear land where he/she wants. Women may claim land for cultivating sesame and groundnuts form their husband, but in case they have no husband they are also entitled to land, both to cultivate women' crops and to cultivate red sorghum.

However, female-headed households have great difficulties in getting access to new land. Normally they need a male relative to clear the bush for them. In case no man was available to do the work for here, she would have the possibility to organize a work party and invite a number of male, to cut the trees and clear the field for her. As a reward she would organize a beer-drinking party for these men. With the growing influence of Islam, beer-drinking parties are less an option, because it concerns am alcoholic drink, and women loose the opportunity to get access to land. Alternatively, she may organize a work party with tea and food, but the price of sugar is very high compared to that of sorghum.

The margay priest, who had some power over regulating access to land, has been pushed aside, as the people have been forced to convert to Islam. The person that normally should hold the title does not want it, because he converted to Islam. The man, who took over, does not have the authority to organize the required fertility rituals. Local marabouts prevent overt expression of adherence to the Margay cult, and intervene for example, when beer-drinking parties are organized for elder men, who are not yet willing to give in totally to Muslim proselytising. As a result of this the Margay cult as a ay of regulating access to land and organizing agricultural production has fallen into complete disuse.

### Chedide

There are many similarities between Chedide and Bourzan, from the point of view of land use and the organization of agricultural production. Soils and relief have the same characteristics, and more or less the same slash and burn system is practised. The difference is that Chedide has been much less touched by the war. This translates itself in a lower share of female-headed households, and apparently also in a better and more independent position of women, unlike that in Korlongo, where limitation are imposed on women' mobility, and in Bourzan, where women have less access to labour for clearing land.

One of the consequences of this difference is that the proportion of land allocated to the typical female crops, sesame and groundnuts, is significantly higher than in the other villages. The share of women in land may even attain 50 per cent. As it appears, women are also allowed to gather extensively in the bush, notably Arabic gum, and aromatics that serve to produce perfume. Despite the fact that the inhabitants of the village have 100 per cent converted to Islam there are few restrictions on female mobility. The location of the village at the border of the game reserve Abou Telfan, indicates that there is still a lot of bush land where gathering activities can take place.

The processing and marketing of sesame and groundnuts is also an important cash earner for women. Sesame and groundnuts are converted into oil, which are subsequently sold on the market. Recent milling technology for the processing of sesame, introduced from Sudan, has however been monopolized by the men.

#### Baro

Baro is the capital of the *canton* Migaame or Djonkor Abou Telfan. It is located east of the massive of Abou Telfan at the entrance of a valley cutting into the mountain range. The history of the village is an indication of the impact war may have on settlement patterns and land tenure regulations.

Until the 1950s the village of Baro did not exist. Only when the catholic mission asked the chief of Douram for a place to settle, he gave them a site located on his own fields, some kilometres away from the village, because the village was squarely opposed. The chief was killed soon after by a stroke of lightning, indicating that he had been punished by the local Margay for his deeds. At this site, the mission built its compound, and started a school and boarding school. Until today a large number of highly educated Hadjeray originate form this area, since they visited the mission school.

When the civil war started this site was of course an attractive point for the forces opposing the government. Soon they were occupying strongholds in the surrounding villages. Several villages no longerrecognized the authority of the *chef de canton*. The *chef de village* and the *chef de canton* decided to relocate the villages at the site of Baro and concentrate the population for safety reasons. The population was settled on the land east of the compound of the Catholic mission. The former villages were emptied, some of them remained deserted forever. Due to population pressure at the new site people had to change farming systems from a fallow-base systems into a system of permanent cultivation.

This alone disrupted former patterns of land allocation. Agricultural land of some villagers was occupied to resettle the villagers. Land in the former villages was abandoned

and could no longer be used for agriculture, since it became unsafe to cultivate there. Fields had to be positioned in the neighbourhood of Baro only.

After stiff resistance, finally the village and the chef de canton had to give in to pression of the opposition forces. The chief joined the opposition, the adherence to Catholicism was interdicted, and the remaining animists were pressed to convert to Islam. The area remained unsafe well after the ascent to power of the present regime.

After the political situation calmed down, tension remained between the Muslims and Christians. Fundamentalist Islam began to have influence. There were political struggles over power. By 2001 the *canton* was turned into a *sous-prefecture*, and land had to be set aside for administrative purposes. The latter was no problem, since a large zone around the village has been degraded to such an extent that cultivation is no longer possible. In the mean time fields now extend as far as the territory of neighbouring villages, so that agricultural expansion is no longer possible, only at a very long distance of the village. Consequently, women have no land around the compound to cultivate their crops. At the border of the village, where compounds are larger women are not allowed to grow their crops. Instead, cereals are cultivated here. Therefore, the only possibility for women to cultivate is at a far distance of the village. However, some women are not allowed to leave their compound by their husband because of religious restrictions. Nevertheless, many women have fields.

Contrary to Korlongo no permanent settlement takes place on the village territory. A number of families settle temporarily during the rainy season in cultivation hamlets to cultivate. In these cases, women have the possibility to cultivate alongside their husband. However, they are dependent on their husband for acquiring access to land.

So, in a short span of time the village was relocated, changed religion and was turned into an administrative centre, while its population increased enormously in size. This has led to a very complicated interaction between traditional authority over land, state interference in land tenure, and Western and Muslim notions of land ownership. The position of women and minorities in this situation is very unclear, and it seems they have become dependent on the power struggle between authorities over land, and have come to rely mainly on the benevolence of their male relatives to have access to land.

#### Changes in Land Use

The changes at local level caused by the civil war and conversion to Islam are tremendous. In most villages the political organisation has changed from a system of dual control by the Margay priest and the *chef de village*, into a single source of power embodied by the *chef de village*. The impact of drought and war had great influence on the organisation of land and landuse. Many people were resettled during the war for safety reasons or to bring them under control of the army, were killed or fled their villages, so that traditional land use patterns have become totally disrupted. In combination with the demise of the Margay priest this has led to great uncertainty about land tenure.

This uncertainty is exacerbated by the way the area is governed. At present, the power of the *chef de canton* is great in the Guera. He was and still is the first administrative layer where political, administrative and legal problems are dealt with. Even for civilian cases, such as divorce, adultery he is often regarded as the administrator, judge and prosecutor. He does so in situations in which rules and norms are derived form several normative and legal frameworks. Given the demise of the Margay cult, the sudden prominence of Islam, the disruption of economic life and the displacement of people because of 30 years of calamities, people are often confused about rules and norms. This is compounded by the physical insecurity most people have experienced. Though the situation has much improved, the threat of physical violence, torture, and intimidation still looms large over attempts of the population to deal with conflicts and administrative and legal problems.

An administrative decentralisation process in the Guera was on its way during the fieldwork we conducted in 2002-2003. The prefecture of the Guera was originally subdivided in four subunits, Mangalmé, Mongo, Bitkine and Melfi. These subunits on their turn were subdivided into cantons, headed by a 'traditional' *chef de canton*. Basically this administrative structure was inherited form the colonial era. The course decentralisation took in the Guera consisted of making the Guera into a region, divided in two subunits the *prefecture* of Melfi, and the *prefecture* of Mongo. The *prefectures* are being subdivided into smaller *sous-prefectures*, which coincide with the former *cantons*. At present, a number of *cantons* have been transformed into *sous-prefectures*. Other *cantons* are still waiting to be turned into *sous-prefectures*. Yet, no municipalities have been formed in the Guera.

The suggestion embodied by the word decentralisation that this process is geared towards democratisation is false. All new officials are appointed by the central government. No elections are held, nor are there bodies to represent the population within the new administrative bodies. It is extremely difficult to get any reliable information on what is decentralized, why and in which form, which decision-making power has been transferred, how the relation with neo-traditional political positions such as the *chef de canton* and *chef de village* is organized, how the competences are distributed over the various layers of the administration and so on.

When the division of decision-making powers and procedures are not clear for the administration they will even be more unclear for the population, which is already in a state of uncertainty as to what to expect from the administration. In addition to the *chef de canton* they are faced with a *sous-prefet*. In their perception authorities, regardless whether they are state-appointed, neo-traditional or elected are people who want money. In case of administrative affairs, conflicts between villagers and villages, between nomads and sedentary farmers, when intervention of the administration is needed or imposed because people have been fighting and killing each other lots of money are tapped from the village economy. Obviously this has an impact on the way in which conflicts about access to land are dealt with.

Even when the authorities are seeking to defend the interests of the local population it is clear that power has not been decentralised. After the rainy season of 2002, which was bad, the *sous-préfet* of Baro decided to close part of the valley west of the capital of the *sous-prefecture* for Arab camel herdsmen. This valley belonged to a game reserve, and consequently exploitation was subject to limitations. He wanted to preserve the tree resources in the valley for the local sedentary population. As the harvest had been bad, tree fruits and tree leaves would be important for the survival of the population. Moreover, there was a plague of locusts, which had destroyed most of the tree fodder.

The Arab camel herdsmen protested, but the *sous-prefet* stuck to his decision. The Arabs took their case to the *prefet* and even to the president of the republic when he was on his way from the battlefields with the MDJT of Togoimi in the east to N'Djaména and was visiting Oum-Hadjer in the Batha province. Some weeks later the *sous-prefet* received a letter from the office of the president ordering him to annul his decision and to admit the Arab herdsmen in the valley.

Violence or the threat of violence, is therefore one of the main factors influencing for the organization of land use. In pre-colonial times people lived on the mountains and cultivation was limited to areas on or near the mountains, in order to be protected from slave raids. With colonialism this changed. Slave raiding was ended through French military domination, and cultivation expanded on the plains adjacent to the mountain areas.

The French promoted the installation of villages at the foot of the mountains, so that they were better able to control the population. As peace settled the population began to grow.

After independence, during several decades of political turmoil and climate instability, the population was crushed between groups of rebels, the government and natural disasters as a result of drought and pests. The government forced the last villages to descend from the mountains and to settle as near as possible to the main transport axes, to be able to exert more control. Because of the political situation the institutional response to tackle the consequences of the droughts and pests was almost absent. Unlike other countries in the Sahel there was hardly any food aid, opportunities to obtain food via markets were limited because there was no infrastructure and transport facilities. No outside assistance was present to combat pests. The population had to deal with all the calamities at the level of the village or at individual level.

The combined impact of all these sources of hazard rendered the population extremely vulnerable, as the whole economic infrastructure of the Guera was destroyed. From a technological point of view agriculture stagnated. As a result of tense relations between nomadic and sedentary population groups, collaboration and exchange between livestock and cultivation systems failed to develop.

The four villages represent clearly four very different cases. There is a clear relation between the current agricultural situation, and the history of the villages during the period of political turmoil and ecological calamities. The differences in this agricultural situation embodied in access to resources, technologies for agricultural production, the organization of labour and gender relations may explain differences in the allocation of natural resources, agricultural production between the villages and its distribution over various groups within the village. In Korlongo more resources are available, which is for a great part due to the relative moderate impact of the war. However, due to religious and political change at the level of the village, the distribution of resources and production is unfavourable for the poor and the women are constrained in their activities. In Bourzan the war had much more impact, leading to a lower level of assets and production a higher proportion of female-headed households and deeper poverty. In contrast Chedide where the war had little impact, the relation between the sexes is more equal, and wealth is more evenly distributed, despite the conversion of the village to Islam. Baro at last provides a case, where the war had a tremendous impact; it was at the basis of the present organization of the village. Religious change and the suppression of old modes of land use, have led to ecological degradation and difficulties for women to acquire land for cultivation.

#### 6. DISCUSSION AND CONCLUSION

The first question that must be answered is whether the situation in Central Chad is special. At first sight people seem to live in a perpetual crisis. Over the years they have been pushed back to the bare minimum of existence. Assets like livestock, jewellery, farming equipment have disappeared from most households or have never been there. Only in one village there is substantial stock of capital in the form of livestock. Stocks of cereals are non-existent; around 80% of all the women interviewed regard their stock of cereals as insufficient to make it to the next harvest. An extremely high percentage of the children and women suffer from malnutrition. A large part of the households in the area are incomplete, with mostly the men who is away, leaving women and children unprotected in a harsh environment.

Given the duration of this period of calamities these conditions have almost become normal features of life, and people have learned to live with it somehow. It has been shown that there are large differences between villages in the northern Guera with respect to their exposure to warlike conditions. As a result these villages differ systematically with respect to social organization, wealth and nutritional indicators. Land use systems have also been deeply affected by the specific exposure to violence and drought during the past decades.

This situation, when comparing it to other, neighbouring countries such as Niger and Mali, is not unusual. Here too, child mortality is high and life expectancy low (see Hill 1991). However, the war and the droughts have led to an acceleration of some processes of social change that were already under way during the colonial period, such as a gradual conversion to Islam and Christianity and the migration to urban areas. In other areas, such as technological innovation and economic development stagnation is the main result.

The events of the past have deeply influenced all aspects of life in the villages studied. At the level of the village, there is a relation between the events that shook the villages during the period of war and drought, socio-cultural change, basic indicators of the nutritional status, and land use. At the level of individuals, a relation can be established between the experiences during the past decades and their current situation.

People face multiple constraints to improve their situation even in the present, more than a decade after the war and the severe droughts. There is no institutional capacity to promote a number of changes in the field of technology to ameliorate the agricultural situation. Bad governance continues to hamper the emancipation of the common people and serves as a constant drain on the resources of the villages. Health care is (perceived) inaccessible for the large majority of women and children. Family relations have been ruptured as a result of the early death of individuals, the large-scale migration of men, and the incapacity of people to provide protection among each other. Labour is increasingly organized at the individual level, providing little recourse for household and family units that have problems mobilizing labour.

There has hardly been systematic research into the long-term consequences of drought and war in Africa. Most research moreover has centred on the immediate consequences of these phenomena. However, the effects and impact on the affected populations, the economy and society at large may last for a much longer period. After calamities there is no simple return to normal. People have changed and society has changed as well. In this paper, we have presented some of the preliminary results of a research project, which aimed at investigating these long-lasting effects.

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