

Regional Research Study

The Different Impacts of the Security Crisis on Land Tenure in the Lake Chad Region

RESILAC Project



Juillet 2020





*Regional Research Study: The Different Impacts of the Security Crisis
on Land Tenure in the Lake Chad Region*

Study Report - RESILAC Project

Final Version

July 2020

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Quality control sheet

Project Name: Regional Research Study: Contrasting Impacts of the Security Crisis on Land Tenure in the Lake Chad Region

Title of Report: Study Report

Report Versions

Version	Date	Description of the changes	Nb of pages
2.0	17/07/2020	Final Report	210

Customer Details

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Acronyms

ACDES	Communal economic and social development agent of the commune
ACDIC	Cameroonian Association for the Defence of Collective Interests
ACF	Action Against Hunger
AFDB	African Development Bank
AFJT	Association of Chadian Female Lawyers
Anader	National Rural Development Support Agency (Chad)
Apess	Association for the promotion of livestock breeding in the Sahel and Savannah regions
APLFT	Association for the Promotion of Fundamental Freedoms in Chad
Aren	Association for the revitalization of livestock in Niger
AU	African Union
CBLT	Lake Chad Basin Commission
CDD	Diocesan Development Committee
CED	Centre for Environment and Development
ECOWAS	Economic Community of West African States
CELIAF	Liaison and information unit for women's associations in Chad
CEMAC	Economic and Monetary Community of Central Africa
CFJA	Young Farmers' Training Centre
CIFOR	Center for International Forestry Research
CNCPR	National framework for consultation with rural producers in Chad
CNCR	National Rural Code Committee
Cofob	Basic Land Commission
Cofocom	Municipal Land Commission
Cofodep	Departmental Land Commission
COMIFAC	Central African Forestry Commission
CSO	Civil Society Organisation
GICS	Global Initiative for Civil Stabilisation
IFAD	International Fund for Agricultural Development
IOM	International Organisation for Migration
IRC	International Rescue Committee
ISWAP	Islamic State West African Province
ITC	International Transhumance Certificate
JAS	Jamat Ahl al-Sunna li-I Dawah wal Jihad (branch of Boko Haram)

LGA	Local Government Area
LTDH	Chadian League for Human Rights
MINADER	Ministry of Agriculture and Rural Development (Cameroon)
MINEPIA	Ministry of Livestock, Fisheries and Animal Industries (Cameroon)
MNJTF	Multinational Joint Task Force
NGO	Non-governmental organisation
OFT	Chad Land Observatory
OIFM	International Women's Organization for the Millenium
ONAHA	Office national des aménagements hydro-agricoles (National Office of Hydro-Agricultural Developments)
OPA	Professional Agricultural Organisation
PAOEI	West African Province of the Islamic State
PASGIRAP	Support programme for the security and integrated management of agro-pastoral resources
PCD	Communal development plan
PDR-EN	Far North Rural Development Programme (Cameroon)
PGRC-DU	Disaster Risk Management and Urban Development Project
PWYP	Publish What You Pay
RBM	Billital Maroobe Network
RELUFA	Anti-Hunger Network
REPPADD	Pan-African Network for Peace, Democracy and Development
RESILAC	Inclusive Economic and Social Recovery Around Lake Chad
RGPH	General Census of Population and Housing
SAF	Land development scheme
SNE	National Strategy of Engagement on Land Governance in Cameroon
SNV	Netherlands Development Organization
Sodecoton	Cotton Development Corporation (Cameroon)
Sodelac	Lake Development Corporation
SP/NRC	Permanent Secretariat of the National Rural Code Committee
SPR	Regional Permanent Secretariat
UN	United Nations
UNHCR	United Nations High Commissary for Refugees
WFP	World Food Programme

Lexicon

Population categories

Displaced person	Person who arrived in the territory in connection with the security crisis (category used in population displacement statistics)
Internally displaced persons	This category includes displaced persons, the returnees and the returnees
Migrant	A person who arrived to settle in the territory for reasons not directly related to the security crisis.
Native	A person from the territory who has not moved or who has migrated and returned to the territory for reasons not directly related to the security crisis.
Host population	This category includes both natives and migrants
Repatriate	Former refugee who has returned to their country (category used in population displacement statistics)
Refugee	A foreign person who has left his/her country of origin in connection with the security crisis and who is entitled to international protection (category used in population displacement statistics).
Returnee	A person who is from the territory, who migrated due to the security crisis and has returned (category used in population displacement statistics)
Returned migrant	A person who is from the territory, who migrated for reasons not related to the security crisis and who has returned due to the security crisis
Residency status	Criterion for distinguishing between categories of the population according to whether or not they have moved in connection with the security crisis. The different types of residency status that are taken into account in the survey are displaced persons, migrants, natives, returnees and returned migrants.
Transhumant	A mobile livestock farmer who moves between dry and wet season pastures

Modes of access to agricultural land

Purchase	Definitive transfer of ownership at a fixed cost; old agreements may lack precision on the finality of the sale and be questioned by new generations
Gift	Final and free transfer of ownership (or for a symbolic cost); old agreements may lack precision on the finality of the gift and may turn into a loan
Inheritance	Definitive transfer of ownership when a person dies
Rental	Temporary transfer of the right to use land for a fixed, non-token consideration regardless of the harvest (either in kind or cash or both)
Sharecropping	Temporary transfer of the right to use land in return for a non-symbolic contribution proportional to the harvest or the income from the harvest (either in kind or in money form or both), which can involve various terms and conditions
Pledge	Money is borrowed in exchange for the use of a plot of land until repayment, which can involve various terms and conditions
Loan	Temporary transfer of the right to use land free of charge or for a symbolic contribution. Its duration can be limited or unspecified

Others

Armed or insurgent groups	Groups that use arms and violence to control the territories of the Lake Chad region
Red Zone	Area where armed or insurgent groups are active; in Chad, the " <i>red zone</i> " refers to areas where people are banned from entering (state of emergency measures).

Executive Summary

The Resilac project "*Inclusive Economic and Social Rehabilitation Around Lake Chad*" aims to provide a mixture of emergency, rehabilitation and recovery assistance in the Lake Chad region (bordering Cameroon, Niger, Nigeria and Chad) - an area affected by an economic and social crisis, recurrent climatic shocks and a regional security crisis. The objective of this **regional study "The Different Impacts of the Security Crisis on Land Tenure in the Lake Chad Region"** is to identify and precisely describe the land tenure dynamics in the Lake Chad region, in order to specify existing frameworks, local land tenure situations and the impacts of the security crisis in areas at varying distances from its epicentre. Nine territories were chosen based on this criterion among the Resilac intervention zones:

territories directly impacted by the crisis due to the presence of armed insurgent groups and refugee and displaced populations: the outskirts of Maiduguri, Jere Local Government Area (LGA) in Nigeria; and the communes of Chetimari and N'Guigmi in Niger;

territories indirectly impacted by the crisis due to the disorganization of activities and the arrival of large numbers of displaced persons and refugees: the canton of Nguelea and the commune of Bol in Chad, and the commune of Koza in Cameroon;

non-impacted territories: the communes of Mindif and Dargala in Cameroon.

The security crisis began in 2009 in Maiduguri and its periphery, in 2013 in the commune of Koza, in 2014 in the rest of the Far North in Cameroon, and in 2015 in the Diffa region in Niger and the Lake Chad province in Chad.

The study is based, on the one hand, on the analysis of land tenure systems at the national and local levels in the territories selected for the study, and, on the other hand, on field investigations. A survey was conducted in February 2020 with 436 people in the 4 countries and completed in Nigeria in May 2020 with 60 surveys. Similarly, interviews were conducted with the main land management stakeholders in the 9 territories of the study.

Analysis of the legal frameworks in each country and practices in the different territories shows that there are significant disparities in national policies and laws, but that customary authorities always play a major role in land management. They are generally responsible for the distribution of agricultural plots and the regulation of access to pastoral and fishery resources, as well as for managing conflicts over these resources. The need for security in a context where there are a variety of ways of gaining access to land (sharecropping, renting, purchasing) has led to the formalisation of land transactions initiated either by development projects (this is the case in Cameroonian communes), by national regulations (the case of the Communal Land Commissions in Niger), or spontaneously by individuals. These documents are often signed by the customary authorities, and sometimes by the administrative authorities, and are established to protect rights holders from having their plots taken away from them. In Chad, there has been a particularly high level of insecurity in the archipelagos since the early 2000s. This is due to the unequal distribution of plots in the polders and by the increasing number of land disputes being brought before the courts, where positive law is applied, and which are often exploited by urban elites. The decentralization process, which is more or less advanced depending on the country, has not had a major impact on these practices.

The survey results confirm that the consequences of the crisis on land tenure depend on proximity to the epicentre of the crisis: **the diversification of activities and the proportion of activities related to land resources (crop farming, livestock farming, fishing and wood collection) are lower where insecurity is higher.**

Crop farming is the dominant activity in the sample surveyed, regardless of the head of household's residency status (native, migrant, displaced person, returnee or returned migrant). The surveys show that there is significant inequality between the size of farms observed, with plots ranging from less than 1 ha (the majority) to more than 60 ha (Nguelea in Chad). Although 53% of the plots observed are inherited, the study highlights that a significant proportion of land contracts are monetarised, with 26% of plots rented/sharecropped and 2% purchased, with prices that vary greatly and depend in part on the relations that exist between stakeholders. Out of the 332 plots surveyed, 83 had at least one conflict during the 10 years preceding the study: i.e. a high conflict rate of 25%. This rate varies greatly depending on the territory: it is particularly high in the Chadian territories (60% in Nguelea, 68% in Bol) and in Koza (36%), and is between 0 and 21% in the other territories.

Conflict resolution appears to still be in the hands of family councils and customary authorities; very few conflicts are settled by public institutions and none of the documented conflicts were brought to court.

Livestock farming is only included in the quantitative data for sedentary populations. In all the directly and indirectly impacted territories, there has been a systematic increase in the cost of access to fodder and water points, even for those with limited herds of small ruminants, who are in the majority. While access to the vast majority of pastures remains free (85%), cases were noted of fees being paid for access and, most significantly, 82% of farmers have to buy fodder during the year. Access to water sources is also mainly free, but a quarter of farmers cannot water their animals free of charge in the dry season and 15% are unable in the rainy season. The scarcity of existing and accessible pastoral resources has therefore led to the development of market-based mechanisms for access to water and fodder, and there have been numerous conflicts related to access to pasture, particularly in Koza. There is considerable room for improvement in how these conflicts are managed. Changes related to transhumant livestock farming were analysed on the basis of interviews with land and territorial management stakeholders.

Fishing is poorly represented in the sample because this activity is in sharp decline in all the territories studied. In certain cases, the acquisition of an official licence does not exclude also having to request an authorization, sometimes at a fee, to gain access to the resource. A wide variety of bodies control fishing areas: (i) public administrations, through permits; (ii) user associations, local authorities and private individuals through authorizations; (iii) and, in N'Guigmi, agreements give armed groups exclusive control. The latter was noted during the interviews rather than the quantitative survey.

Timber exploitation for money has become *the "refuge activity"* for the most destitute people. In our sample, 84% of heads of household collect or cut wood for their households, and 27% of these have to ask for authorisations. Many of the respondents are unable to obtain sufficient supplies from a single resource area and are therefore forced to request several authorisations. There are significant variations between territories, both in terms of the need to obtain authorisation and the levels of conflicting access to timber resources.

87 per cent of **displaced persons** farm plots of 3 ha or less. Indirect tenure (loans, very short-term rentals and sharecropping contracts) is very common. It concerns 81% of the plots displaced persons cultivate, compared to 26% among natives. Farming a plot through indirect tenure does not necessarily mean that one is in a situation of land insecurity. However, such a high proportion does reflect land tenure insecurity to the extent that access to land depends on the goodwill of the plot owner, who may decide not to renew the rental or sharecropping contract or to terminate the loan.

Our **gender** analysis confirms that there is significant inequality of access to land resources between men and women, a situation that is reinforced in territories directly impacted by the security crisis where women's multi-activity rate is particularly low. Land ownership is much weaker among women farmers compared to male farmers. Though inheritance is the main way that women gain access to land, despite being contrary to certain customs, they only get 43 per cent of their plots from their families. Women receive twice as many gifts of land as men and also receive more loans. However, 40 per cent of the plots of land farmed by women are plots of 2 ha or less that do not belong to them. They are therefore farmed on the basis of very short, renewable agreements.

Young heads of household are predominantly involved in crop farming and are rarely involved in livestock farming. As crop farming provides a means of becoming autonomous, young people are more dependent on access to land resources than other categories, and they are less likely to be involved in multiple activities. Land ownership is very different between young people and their elders: young people are more dependent on their families, who transfer land to them other than by inheritance, and are more likely to farm small plots of land through indirect tenure. However, our sample includes a significant proportion of young heads of household who have more land than the majority of young people, which may be because they have received their parents' plots earlier than normal due to the security crisis.

In territories where customary authorities continued to function and were well respected before the security crisis (the case of Niger), conflicts related to natural resources are perceived to be less significant compared to territories where there was already a high level of land tenure insecurity before the crisis (Koza) and where certain powerful actors circumvented the customary authorities in order to control developed land (Nguelea canton and Bol commune). In the wetlands (Komadougou Yobé, Lake Chad), which are inaccessible to farmers due to insecurity and state of emergency measures, even since they were relaxed in 2019, armed insurgent

groups impose various taxes for access either to pastoral resources, which are vital for some livestock that are dependent on green pastures all year round, or to fisheries resources. These taxes are generally very high, discriminatory from an ethnic point of view and illegal under national and international law. As insurgent armed groups are able to provide access to natural resources that are otherwise prohibited due to the state of emergency, some alliances have been formed between certain armed groups, transhumant pastoralists and the most vulnerable populations (displaced persons, natives and migrants who no longer have access to their plots). In the southern basin of Lake Chad, armed groups support Boudouma territorial claims, which has exacerbated inter-community conflict.

In the worst-affected territory (Jere LGA in Nigeria), land ownership is concentrated in the hands of a few stakeholders; the most vulnerable farmers decapitalize and sell their land to seek safety. While this phenomenon was not quantified in the survey, it was described in interviews with land tenure actors in the territories of Chetimari, Nguelea and Bol. The situation of "returned migrants" - former residents who left a number of years ago and who have returned to their native territories because of the crisis – varies between different territories: the returns seem relatively peaceful in Niger, where the stakes are not very high regarding the rainfed lands, but they are very conflictual in the Chadian territories because they are combined with a land claim by the Boudouma in the areas developed in the 1980s and 1990s.

The perception of changes due to the security crisis varies greatly from one territory to another. In total, nearly 50% of respondents believe that conflicts have increased and that they have been forced to modify their activities (82% concerning fishing) and/or have had to abandon some of them. These averages are systematically higher if respondents from the non-impacted territories are removed, as there have not been any particular changes in these territories due to the security crisis.

There are many factors that account for the winners and losers of this crisis. Most of the people in the rural territories controlled by armed groups have got significantly poorer. Outside these areas, some transhumant pastoralists have found themselves stranded in unfavourable areas and have to negotiate illegal access to the bourgou pasturelands on which their livestock depend. Many farmers face the risk of their land being occupied by new occupants or being recuperated by the original inhabitants. Conversely, traders are moving into juicy markets and wealthy individuals are taking advantage of plots being abandoned or sold to acquire large areas. This reorganization of land can also benefit regular farmers, who farm abandoned plots of land. Further departures and returns of IDPs may mean that today's winners will not be tomorrow's winners. The rules that are applied to decide what happens to the abandoned plots will be crucial. In the meantime, growing land ownership inequalities are placing many households in a precarious situation and fuelling the crisis.

The security crisis that has been **raging** in the Lake Chad region for the past 10 years is **precipitating developments that had already taken place** in the Sahelian zone; population density has doubled in a few months, increasing pressure on the environment and **accelerating the commodification of access to natural resources**. It is **also causing unexpected developments**, such as the change in specialisation of wetlands, where anthropogenic pressure has dropped considerably, and their takeover by armed groups who tax access to resources and exclude or accept certain stakeholders. We are thus observing the **reorganization of power relations at the local level**, not only in the areas that armed groups control but also in those where displaced populations are concentrated and where rapid and uncontrolled readjustments are having a major effect on land transaction methods. In all the territories studied, more or less directly impacted by the security crisis, there is a **need to improve land governance**. It will be necessary to lay the foundations for a multi-stakeholder debate to define, together, how new arrivals will be received and how resources will be shared (length of stay, access rights), and it will be necessary to re-establish a hierarchy between conflict regulation bodies and local rules for land transactions.

Introduction

Context, issues and objectives

Since 2014, the security crisis in the Lake Chad region has resulted in one of the most serious humanitarian emergencies in the world, with 10.7 million people dependent on humanitarian assistance, including nearly 4.5 million internally displaced persons, refugees and returnees (IOM¹, 2019). The origins of the crisis have been analysed in several important studies that have underlined its complex, multifactorial nature (Pérouse de Montclos 2015, 2017; Magrin and Pérouse de Montclos, 2018; Mac Eachern, 2018; Seignobos, 2018; Chauvin et al., 2020). It began in 2009 in Maiduguri (Borno State, Nigeria), due to an insurrection led by the Islamist group Boko Haram ("*Western education is a sin*" in Hausa). This was violently repressed by the army, and the conflict spread to the entire region due to significant local recruitment and attacks perpetrated in the border territories of northern Nigeria. The various factors behind the crisis include tensions over land ownership, identity- and culture-based tensions, and states that are failing in their isolated territories, with weak public services and a loss of legitimacy among the population.

The Resilac project "*Inclusive Economic and Social Recovery around Lake Chad*" aims to provide a mixture of emergency, rehabilitation and recovery assistance in the Lake Chad region. The main objective of Resilac is to contribute to economic recovery and to strengthen the resilience and social cohesion of the territories of the Lake Chad Basin most affected by the security crisis and climate change. In order to achieve this, Resilac is structured around four pillars, with the following objectives:

- Pillar 1: Strengthening human capital, social cohesion and the collective and sustainable management of natural resources in the targeted territories;
- Pillar 2: Promoting economic recovery in the targeted territories and increasing the resilience of the most vulnerable people, particularly young people and women, through access to employment and intensified agro-sylvo-pastoral production systems adapted to climate change;
- Pillar 3: Working with local actors in the targeted territories by promoting dialogue and action, and using the skills and roles of different actors to build capacity;
- Pillar 4: Producing knowledge that is useful for the quality of project activities in a crisis context and for decision-making by local actors.

In order to 'strengthen human capital, social cohesion and the collective and sustainable management of natural resources in the targeted territories', the project implements activities to promote and enhance the democratic governance of access to and management of resources. It also provides support to dialogue and mediation bodies for the development of negotiated rules of use. From an economic point of view, the project will contribute, through medium- or long-term actions, to sustainable improvement of agricultural production systems, in particular through the development of hydro-agricultural infrastructure, the development of arable land and improved access to it, as well as the intensification of production systems.

One of the results of the crisis is that the relations between resources and populations that were the basis of the regional system have been seriously called into question (Magrin and Pérouse de Montclos, 2018). The resilience of this regional system to climatic, economic and political hazards was based on the very high productivity of the wetlands (Lake Chad and the river valleys), the complementary nature of the different regions, and the mobility of the population, activities and products exported to the two major cities in the region: Maiduguri and N'Djamena. However, this system has been blocked due to the insecurity in many territories. The army has evicted the inhabitants from the wetlands where armed groups have taken refuge, and has imposed bans on movement, purchasing supplies and selling agricultural products in order to "*dry up*" the income of the insurgent groups.

After 10 years of violence and insecurity in Borno State and 7 years at the regional level, the impact on rural livelihood systems is greater the closer we move to the epicentre of the crisis in the Maiduguri region, where there has been a severe and long-lasting food crisis. Since 2015, the crisis has become entrenched, and states have been unable to regain control of large areas at the margins of their territories. The insecurity is compounded by a large number of armed gangs. The landscape of the Islamist insurgency has also changed, as the Boko Haram group has split. One of the branches, the Islamic State West African Province (ISWAP or WAPIS – French acronym), is becoming more organized and is exerting increasing pressure on the territories

• 1 International Organization for Migration

it controls, while using local networks to establish its legitimacy (GICS, 2019). The same study analyses the financing of this group and shows that it is based on taxes levied on various economic activities (including fishing and pastoralism) and trafficking, and on direct income from selling fish, rice and red peppers. Parallel governance has thus developed in areas not controlled by the state, where local rules of access to resources have been reshaped, to which some populations have had to adapt and over which states have no control. Outside these "red zones", the increase in displaced populations, the impossibility of gaining access to certain resources, the vulnerability of certain categories of population and the loss of influence of traditional authorities to the administrative authorities in charge of crisis management are changing the way that access to land and natural resources is being managed. It is necessary to improve understanding of these new dynamics in order to intervene in favour of regional economic recovery and a transition from a humanitarian aid regime to development aid.

The objective of this study is to identify and describe precisely the land tenure dynamics in the Lake Chad region (bordering Cameroon, Niger, Nigeria and Chad), in order to specify the frameworks, the local land tenure situations and their evolution in the context of the security crisis. It seeks to understand the impacts - direct and indirect - of the situation created by the presence of armed groups on access to land and natural resources, and how this access is controlled.

Access to land and natural resources depends on different norms and authorities where the main references of local actors are (neo)customary norms, where the different authorities are in varying relationships of cooperation and competition, and where informal or semi-formal mechanisms manage market transactions. There are also significant differences in land tenure systems between different national set-ups (legislation, presence of the state, etc.) and between ecosystems. The rules depend on the resources and the land available. The context of Lake Chad and its periphery is characterised by a wide variety of ecosystems and resources: multi-purpose areas (crop farming, fishing, livestock farming), flood plains, rain-fed agricultural areas, flooded pastures and dry pastures, with a distinction between plains and mountains, and specific localised configurations (notably peri-urban and amenities).

The impact of armed groups depends on where they have settled, again with variations between:

- areas controlled by armed groups, where it is not possible to investigate directly but where insecurity prevents the exploitation of certain areas and where armed groups have been able to gain control over access to resources and to obtain rents from them to finance themselves. People have fled these areas in varying numbers and have settled elsewhere;
- areas where there is insecurity nearby, where the exploitation of certain resources may be impossible and where part of the population has had to flee;
- areas not directly affected by insecurity, but which are experiencing influxes of refugees and/or displaced persons, with increased pressure on resources, variable modalities of access offered to displaced persons and/or refugees, and wider effects in terms of access to land and resources for host populations, increased conflict, and the calling into question of authorities.

The combination of this diversity of situations produces regional recompositions in the distribution of the population and pressure on resources, and brings to the fore the question of inequality and exclusion in terms of access to resources.

The study uses a reasoned sample of sites selected at the regional level to study the direct and indirect impacts that the presence of armed groups has on access to the main resources (land, pasture, forests, and fishing areas) among different groups of actors (host populations and IDPs) as well as on how access is controlled, and how this affects the authorities. By placing these sites in the overall dynamics of the region, as studied elsewhere, this study attempts to draw regional perspectives.

The focus of this study is limited to the security crisis. For analysis of the other factors of the crisis we have referred to the study "*Crises et développement. La région du lac Tchad face à Boko Haram*" (Magrin and Pérouse de Montclos, 2018). These include : (i) the climate (increase in temperatures, accentuation of rainfall variability, disruption of endogenous rainfall forecasting systems, recurrence of disasters), (ii) the economic context (repercussion on state budgets of the drop in the price of raw materials, increase in the cost of inputs, recomposition of commercial networks, establishment of an aid economy, lack of infrastructure, etc.) and (iii) the social context (low investment in education, health, unemployment, and changes in mentalities and lifestyles). These elements are taken into account in the study, but in a non-exhaustive way in all the target territories and only to analyse the local land tenure developments linked to them.

The study is based on two hypotheses. The first is based on the localized nature of the crisis, with decreasing impacts as one moves away from its epicentre in Borno, Nigeria, and from the main wetlands, which are difficult to control and where insurgent groups have taken refuge. In order to analyse these impacts linked to geography, which also informed the Resilac project's choice of intervention areas, nine territories were chosen (see map 1):

territories directly impacted by the crisis due to the presence of armed insurgent groups, and refugee and displaced populations: the outskirts of Maiduguri and the LGA of Jere in Nigeria; the communes of Chetimari and N'Guigmi in Niger;

territories indirectly impacted by the crisis due to the disorganization of activities and the arrival of large numbers of displaced persons and refugees: the canton of Nguelea in the commune of Baga Sola and the rural commune of Bol in Chad, as well as the commune of Koza in Cameroon;

non-impacted territories: the communes of Mindif and Dargala in Cameroon.

The study's second hypothesis is that of differentiated impacts, in each territory, between the host, internally displaced and refugee populations, but also between men and women, and between young people under 30 years old and adults over 30 years old. Indeed, access to land and other natural resources (pasture, water, and wood) varies *a priori* between a person who is from the studied territories, a migrant who has been settled there for a certain amount of time and an internally displaced person who has suddenly arrived in the territory. Even among these displaced persons, the situation will be different for a person who may or may not have links with the host population, with whom they will have to negotiate in order to settle with their family and perhaps gain access to a plot of land for cultivation, or for a person who is from the area, and who had left and has returned because of the security crisis. This raises the question of how they will be received and whether they have rights to land. Given that resources are in short supply, climatic hazards are common, and mobility is restricted, having to share the land with those who have recently arrived can lead to change and conflict. Such a situation is open to exploitation by a variety of actors, including armed insurgent groups. We will therefore seek to identify who are the winners and losers in terms of access to natural resources in the context of this crisis.

More specifically, in order to answer the question raised by the Resilac project, this study aims to:

- describe the normative frameworks for land management at national and local levels in the selected territories;
- characterize the selected sites from a regional perspective, in relation to ecosystems, population density, the presence of armed groups and population displacement;
- contextualize each case and analyse, in this precise configuration, the dynamics induced, directly or indirectly, by the presence of armed groups in the region, in particular in terms of:
 - o reshaping populations and activity systems;
 - o access to resources for IDPs, and possible differences with that of the host population;
 - o broader re-organisation of the modes of access to resources and the role of the authorities in organising/controlling this access, particularly in terms of differences between groups of actors that lead to inequality, exclusion and conflict;
- draw general conclusions at the regional level.

Methodology

The analysis is based on a multi-scale approach ranging from the level of territories managed by customary and/or administrative authorities (village, sultanate, canton, commune, or *Local government area* (LGA) in Nigeria), to national land policies and laws and international regulations. A diachronic perspective is applied to assess changes since the emergence of the crisis in the territories being studied (2009 in Borno, 2014 in the Far North of Cameroon, 2015 in Niger and Chad).

The study was carried out over a very short period of 6 months, between January and June 2020. In order to compensate for this and to support the qualitative analysis of land-related changes in the territories, a quantitative survey was carried out on a sample of 496 people spread over the 9 territories. The methodology is based on four successive phases:

a bibliographical review of the legal framework, the modalities of access to land and natural resources to identify the land issues for each territory;

a field mission carried out in February 2020 for one week in each country and coordinated by national experts combining two aspects:

- Interviews conducted by national experts (4 to 6 days) with land management stakeholders on how land-related issues have evolved in each area;
- Surveys² carried out by 8 interviewers (2 per country for 6 days) on a sample of 496 heads of household chosen according to 4 criteria: sex, age, size of farm, how long they have been in the territory;

an analysis phase based on:

- the statistical processing of the survey, carried out by Insuco, C. Raimond and V. Basserie;
- country reports synthesizing interviews and surveys from each study area;

the drafting of the final synthesis by C. Raimond and V. Basserie.

The organization of the work and the preparation of the survey questionnaire were carried out during a workshop held from 21 to 23 January 2020 in N'Djamena, to share the objectives of the study and prepare the format of the country reports. At the end of this workshop, the survey form was generated using the ONA.io/Geo Open Data Kit (ODK) system, which is a data aggregation and processing platform for managing and applying questionnaires on smartphones. For this study, the form was designed with closed questions and a drop-down list system to limit typing errors, and was blocked to prevent interviewers from moving on to the next question until the answer was entered correctly. Training of interviewers was provided by country experts.

The other face-to-face workshops were replaced by internet exchanges and a 3-hour videoconference with each of the national experts separately, when the country reports were received (24 April with Watang Zieba / Cameroon; 28 April with Alexis Gou / Chad; 5 May with Souley Kabirou / Niger; 8 May with Jerome Gefu and Abel Abdoulaye / Nigeria). During these exchanges, certain aspects and the main conclusions on land tenure developments were clarified. An additional survey was commissioned on 10 May to rebalance the sampling and to have data for Nigeria that was comparable with those of the other countries.

All the quantitative data provided on land tenure (activity systems, terms and conditions of access to land and other natural resources, types of conflicts and resolution methods, perception of land tenure changes) are therefore first-hand data whose reliability and limitations we can assess (see below). The analysis is based on statistical processing, the views of different land management stakeholders about how local situations have changed collected in interviews and literature on the regional crisis.

In addition to the choice of study territories (to account for the more or less intense impacts of the security crisis) and the sampling of heads of household (from different categories of host and displaced populations), seasonality is systematically taken into account in the surveys as a major factor in the organization of activities governed by access rights that may vary for the same area depending on uses. Thus, the survey distinguishes conditions of access to pastoral resources (grazing and watering) and fishing resources according to the seasons, takes into account the occurrence of conflicts over access to dry and rainy season grazing, and specifies changes in activities (crop farming, livestock, fishing, collection) and perceptions of how conflicts linked to the security crisis have evolved over the 10 years.

As is often the case in targeted studies on rural land, the field surveys were too rapid to take into account transhumant livestock farming: its evolution is nevertheless analysed in the literature review and interviews conducted by national experts. In particular, they interviewed the heads of transhumant herder groups/associations and pastoral authorities. Thus, the sampling of the systematic surveys targets not only agro-pastoralists, but also farmers and fishermen present in the territory, who may also raise livestock, and they were asked about this in the interviews.

The number of female heads of household is often higher in crisis contexts. How their situation has evolved is analysed through the processing of the systematic surveys. The terms and conditions of access to land and natural resources and the difficulties and conflicts they encounter are specifically analysed.

The problems that are specific to young people in impacted areas are also covered in the systematic surveys through targeted sampling of this category and specific analysis.

• ² The survey form is available here :

• https://drive.google.com/file/d/1LAuMp4o21F_DgrU4Rg7Q_E_HVroRd00c/view?usp=sharing

In order to locate the major resource areas by territory, the study also proposes a simple mapping based on Google Earth images. These maps show the major agro-ecological zones where activities and land management are contrasted with multiple activities and/or mobility linked to seasonal cycles and climatic hazards. The fact that it is difficult to gather information about geographical boundaries, which are often contentious or simply unclear after having been redrawn several times by administrations, or to gather population data for individual communes, is in itself indicative of the issues that need to be explored and shows that local land management units are still administered in a very centralized way.

Limitations of the study

This study, which has been commissioned by the Resilac project, is very ambitious given its format, conducted over a short period of time, with an operational objective. The diversity of the territories being studied (in Lake Chad, along the Komadougou Yobe river, in the vertisolic floodplains, and in the mountainous areas of Mandara) and the variety of production systems involved (family farming and urban investors; rain-fed, irrigated, recession agriculture ; sectors with polders, and village and peasant irrigated areas; small/large ruminant livestock; fishing) in the contrasting climatic contexts from the Sahelo-Sudanian to the Sahelian zones, and the legal and political frameworks relating to land tenure in 4 different countries, make comparisons difficult and generalisations hazardous. Moreover, the limited time available to carry out the study meant that the time required to prepare the methodology (in particular to set up the survey form), to train the interviewers (2 hours on smartphone forms), on complex land issues, even if we tried to limit the open-ended questions, did not allow us to take the necessary precautions to avoid all pitfalls. A few of these are explained in the relevant sections.

Another constraint was the heterogeneity of the national experts' specialties: the four experts recruited: a sociologist, an agro-pastoralist and two geographers, had different field approaches and produced reports that were equally different, despite the common instructions and frameworks formulated together during the workshop. The heterogeneity of the country reports made it difficult to write the synthesis presented here.

Given these conditions, we regret that we were unable to maintain a village level analysis, which is the first level of land management where the relationships between human beings and their environment are best understood. We hope that this limitation, which particularly concerns Nigeria, about which the writers of this synthesis had the least previous knowledge, will be compensated for by our attempt to quantify, analyse and describe the current state of land issues in a variety of situations in the Lake Chad region at varying distances from the epicentre of the security crisis.

The quantification of the trends observed also raises questions. While the total sample of heads of household surveyed is relatively large, their distribution within the nine territories limits the possibility of statistical analysis. What is more, the interpretation of the numerical results is hampered by the lack of reference elements, both from a diachronic point of view in the territories studied and from a comparative point of view with other African regions: there are very few quantitative studies on land issues and it is difficult to compare their data with ours. However, as the nature of our data is clearly explained, our results can be used as a reference for future studies.

Organization of the report

The report is organized into four chapters. The first chapter presents the national systems regulating access to natural resources in the four countries. The history of land policies is briefly presented, then national laws are detailed by comparing the categories of land used per country, the actors involved in land management from the local to the national level, security measures and the land management modalities described in the texts. In addition, existing agreements at the international level and land access terms and conditions and land tenure security mechanisms at the local level in the four countries are analysed.

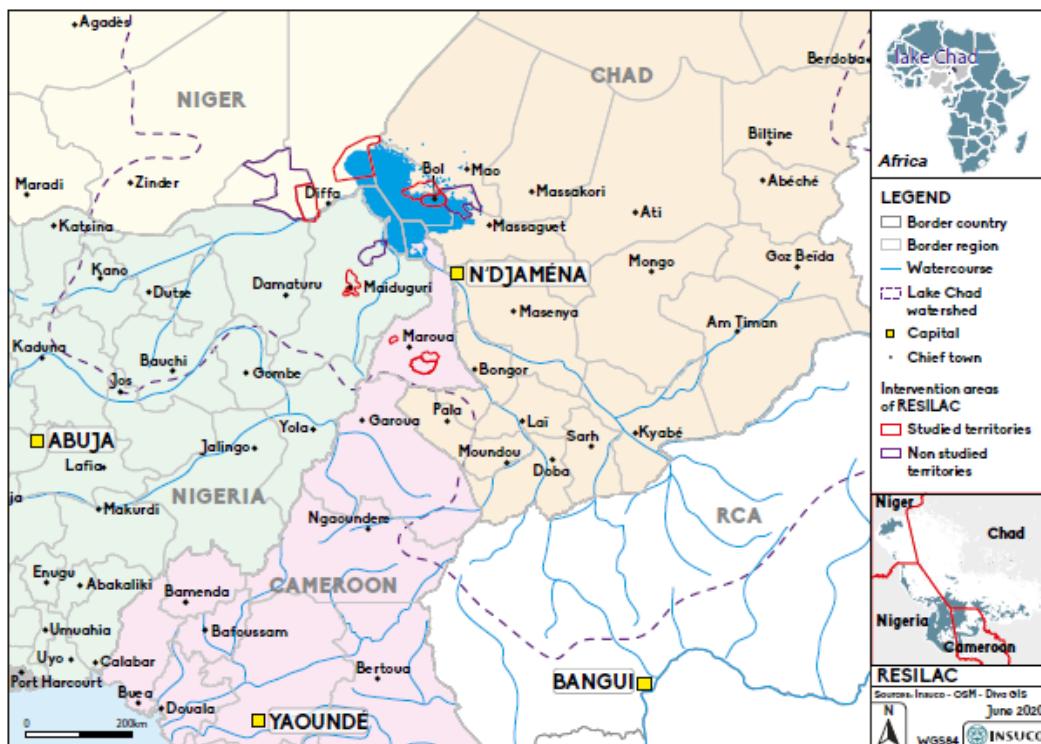
Chapter 2 presents the nine territories being studied, specifying the specific land issues in each, and contextualizing these in relation to the security crisis based on the literature review. The territories are presented in order, from those most affected to those least affected by the security crisis.

Chapter 3 begins with a summary of the security situation in the Lake Chad region, the population displacements it has caused, and the role taken locally by insurgent armed groups in territorial management. The current situation regarding access to natural resources for the populations residing in the territories (host populations and IDPs) is then analysed on the basis of quantitative data from the survey. These are processed by territory, by category of population and by type of resource.

Finally, the changes observed in land management in the Lake Chad region as a result of the security crisis are analysed for each territory (Chapter 4).

Given the difficulties in distinguishing between the armed groups operating in the region and their local affiliations, we do not use the simplified term "*Boko Haram*", but "*armed groups*" or "*insurgent groups*" to refer to groups that use arms and violence to impose their control over the territory. A few exceptions are made when the information, often from the literature review, is sufficient to clearly identify a particular group.

As the administrative level of the territories observed is not always the '*commune*', which is the basic reference level for the Resilac project, we refer to 9 '*territories*' in this study. These include (from the closest to the epicentre): the periphery of Maiduguri, the LGA of Jere, the rural communes of Chétimari and N'Guigmi, the canton of Nguelea (in the rural commune of Baga Sola), and the rural communes of Bol, Koza, Mindif and Dargala. A summary table of the main characteristics of each territory is presented in section 2.6.



Map 1: Location of Resilac's intervention areas and those under study in the Lake Chad region

Analysis of national systems regulating access to natural resources in the Lake Chad region

The objective of this first chapter is to describe and compare the national and local land management systems in the four countries affected by the security crisis in the Lake Chad region. The review of land policies and their technical, legal and institutional implementation mechanisms is based on an analysis of the literature about the four countries (Nigeria, Niger, Chad and Cameroon) and aims to show what progress has been made and the limits that remain in terms of land management. We address issues related to agricultural plots, but also those related to access to pastoral resources (grazing, fodder, water), fishery resources (fishing areas) and wood resources (wood collection, logging, protected areas). The way that land policies have evolved in the four countries is presented in the introduction and shows the differences in land management between English-speaking Nigeria and the three French-speaking countries. The following section analyses modes of access, regulation and land tenure security and looks at: (i) land categories used in national laws, (ii) land management actors at national and local levels, and (iii) land tenure security deeds and land management

terms and conditions described in the texts (see list of texts in Annex 1). Lastly, formal and semi-formal land access protection procedures are analysed.

Presentation of land policies in the 4 countries

During the colonial period in Africa, land policies aimed to clarify the rights of settlers and colonial companies in order to protect their investments. They did not recognize the "*customary*" land rights of farmers, reduced the amount of land available for their activities, and made it possible to evict them in order to conduct the productive activities of the colony. These policies are based on the system of land registration, whereby the administration issues "*land titles*" conferring the private appropriation of land. After becoming independent, states maintained the land registration system, despite the fact that its characteristics (complexity, length and cost) are unsuited to the realities of rural Africa: registration is "*inevitably inaccessible to a rural population that is mostly poor and uneducated*" (Ouédraogo, 2011). At the same time, states relied on the principle of public ownership, whereby any land without legal land rights held by a natural or legal person belongs to the state.

Thus, in **Nigeria**, property can be classified into three main eras - pre-colonial, colonial and post-independence – with specific forms and organisation of land use (Gefu, Resilac literature review). During the pre-colonial period, land was governed by customary land tenure systems. In these systems, which varied according to ethnicity, control over land was exercised by communities and families, who allocated it to all members of the community and family (Omuojine, 1999). Thus, the land belonged to the community or to a large family, many of whose members were dead, and with a few members that were alive and countless others who were not yet born. Individual rights to land were *derived* rights. This meant that land could not be sold or alienated, but was allocated on the basis of need and the ability to use it for productive purposes. In the northern part of the country, soil fertility was reproduced by set-aside and, in less densely populated areas, by slash-and-burn agriculture. In the south, the establishment of a plantation economy by settlers in an already densely populated area with very specific lineage systems led to a much more complex land situation.

With the colonial period and to provide for their needs for land for public purposes, governors put in place laws and regulations governing land ownership and use (Ade - Ajayi, 1962; Dike, 1960; Oyebola, Oyelami, 1967; Onwubiko, 1976). The 1861 Treaty of Cession, signed with the traditional leaders, transferred ownership of the communities' land to the British Crown (Elias, 1971). The delegation of all rights to indigenous lands in northern Nigeria to the colonial governor was enshrined in the Land and Native Rights Act of 1916. These laws were implemented not only to make land available to the colonial government, but also to facilitate private ownership of land, especially in the south with its plantation economy. As a result, land began to be sold and leased to individuals or groups (Namso *et al.* 2014).

After independence in 1960 (the Republic was created in 1963), private ownership of land by individuals, families and communities had already become the predominant land tenure system in the southern states, while all land in the north was considered "*indigenous land*" owned by the state. These lands, whether occupied or unoccupied, were placed under the control of the minister responsible for land issues, who administered them for the use and common benefit of "*indigenous people*", defined as persons whose fathers were members of an indigenous tribe. Under the 1962 Act, no title to occupy and use land by a non-indigenous person was valid without the consent of the Minister. Indigenous people could apply for the right to occupy land in the form of a land use and occupancy title. Such a right was for a limited period of time. It could be sold or transferred with the Minister's authorization.

This Land Act was repealed and replaced by the Land Use Act in 1978, which in 2020 still governs the ownership, alienation, administration and management of land within the Federal Republic of Nigeria. The main change is the transfer of ownership of land to the Governors of each state, who hold the land in *trust* and administer it for the common use and benefit of all Nigerians. The aim is to attempt to normalize access to land and its use for productive purposes by abolishing all existing land tenure systems. The Act was adopted in response to problems relating to private and public acquisition of land, particularly to facilitate investment by agricultural entrepreneurs.

The Public Lands Acquisition (Miscellaneous Provisions) Act No. 33, enacted by the Federal Military Government in 1976, consolidated the previous Act by regulating the compensation to be paid in case of land requisition. For the northern states, such compensation is paid only for improvements made by native occupants and not for the acquisition of the land itself. Thus, the government has formally established the rule

that land titles do not confer full ownership but they can recognize a right of occupation. The situation is different in the south of the country, where the federal State adopts "*benevolent neutrality*" in relation to land titles, which are the responsibility of the *Regional Governments*, and can include full ownership (Namnso *et al.*, 2014).

The 1978 law was highly controversial because it affected the basis of family ownership of land and linked land ownership to the productive use of land (Famoriyo, 1979). However, like all previous laws, it has not succeeded in abolishing the customary land tenure systems that are still prevalent in the country, especially in the North where local authorities (*local governments* and traditional leaders) continue to control land issues, especially for rural and agricultural land.

In practice, customary rules remain largely dominant in local modes of regulation in the North. In a constraining climatic context with exponential population growth, these local land tenure systems are struggling to regulate land transactions, to deal with the increasing number of conflicts, particularly between farmers and herders, and to ensure equity in access to land. The land appropriation system is based on rights that are acquired through the development of the land, which makes it very difficult to secure land tenure for transhumant herders who use the communal areas, and are increasingly marginalized. The rules of exclusion enacted by some States are indicative of local tensions and the difficulty of taking into account a mobile and multifunctional system in the way the territory is being developed (Gefu, 1996; Olayoku, 2014; Higazi and Yousuf, 2017).

The same sequences - pre-colonial, colonial and post-independence - can be found in the **French-speaking countries of Africa**, which have not, however, had the same land occupation policy nor, above all, the same method of *indirect rule* as the English-speaking countries (Magrin and Pérouse de Montclos, 2018). Despite an initially more intrusive intervention vis-à-vis pre-colonial powers, customary land tenure systems had and still have the same major characteristics and remain prevalent.

Cameroon, which shares a geography similar to that of Nigeria, with a South with a very wet coastline that is conducive to a plantation economy and a Sudano-Sahelian North characterised by family farming combining crops and livestock, has maintained a land tenure system inherited from the colonial period that is sufficiently based on precedent to be able to manage the conflicts specific to these two zones. The 1974 land laws (Ordinances 74-1 and 74-2) are still in force and were only amended for cities in the context of the rapid urbanisation since the 1970s (W. Zieba, biblio Resilac review). They confer ownership of the land to the State and recognise only a right of use for the resident populations. The land role of traditional leaders is not explicit in the law, but they are recognised as users (see below). As in Nigeria, there is very strong pressure, particularly in the South, to reform this law, which is considered obsolete by agricultural investors, often from the urban elite. A review is underway, in which civil society organisations are actively defending the recognition of customary rights, based on arguments and objectives that do not always converge (Iyébi Mandjek *et al.*, 2015). The recognition of customary rights is one of the main points of debate in the land law reform project: it raises the issues of indigenoussness on the one hand, and the power of traditional leaders in northern Cameroon on the other, which are sensitive political issues in Cameroon (Iyébi Mandjek *et al.*, 2015). Finally, a land grabbing observatory was set up in 2019³.

In **Niger and Chad**, countries entirely located in the Sudano-Sahelian to Saharan zone, land issues related to the plantation economy are absent. Land policies have therefore essentially aimed to make territorial planning possible (development projects, town and road planning, forest management and biodiversity).

In **Niger**, in contrast to Cameroon, the first independent governments very quickly affirmed the political will to challenge the management of land by customary chiefs and created the conditions for greater access to land for citizens (S. Kabirou, Resilac literature review). The droughts of 1973 and 1984 prompted the authorities to formalize their political vision of land management through the elaboration and adoption in 1993 of the guiding principles of the Rural Code (Ordinance 93-015 of 2 March 1993). The main areas of this policy are: land tenure security for rural actors, the organization of rural areas, sustainable management of natural resources and territorial planning.

³ <https://www.foncier-developpement.fr/actualite/accaparement-des-terres-le-cameroun-se-dote-dun-observatoire-du-foncier/>

The Rural Code is the product of broad consultations that enabled the concerns of the people of Niger to be expressed from the local to the national level. The 1993 Ordinance is the first West African legal text to clearly recognize the existence of customary land rights and to provide for their security. None of the other three countries has ratified this option to date. The Rural Code claims to be a pragmatic and iterative process organised around a legal and institutional mechanism:

The legal framework includes all the legislative and regulatory texts relating to land and natural resource management;

The institutional mechanism is based on institutions set up from the village to the national level, which are responsible for implementing and monitoring the established rules: the land commissions.

The essential mission of these Rural Code institutions is to secure land tenure for rural producers and prevent conflicts. Various security tools are used by the Rural Code to this end (see below). Niger was thus one of the first African countries to opt for local and multi-stakeholder land management, in order to secure the rights of rural producers and regulate the use of natural resources. It is also characterized by the legal existence of⁴ a northern limit for crops. The country is therefore divided in two: to the north of this limit is the pastoral zone where crops are officially prohibited and to the south the agro-pastoral zone.

A quarter of a century after the adoption of the guiding principles of the Rural Code, Niger has embarked on a process of policy reform. A certain number of shortcomings had indeed been noted: limitations specific to certain legal texts and lack of coherence between different texts, problems related to the functionality of certain structures of the Rural Code, quantitatively inconclusive results of land tenure security activities, non-compliance with rules related to the pastoral zone, increasingly frequent violent land conflicts, etc. A study establishing the results of 20 years of implementation of the Rural Code was thus carried out (CEFEP, 2013). On this basis, the *Etats Généraux sur le Foncier Rural* (EGFR) were organised in February 2018. The need to develop a new rural land policy was one of the main recommendations of this event. A participatory process, involving the organization of dozens of consultation workshops, has since been implemented to design this policy document, a preliminary draft of which was technically validated at a national workshop organized in November 2019 (Republic of Niger, 2019). It is split into 4 main policy guidelines, which are themselves broken down into strategic orientations and measures. These guidelines are as follows:

guideline 1: reorganising the institutional and legal framework and improving its performance (4 orientations and 21 measures);

guideline 2: strengthening the efficiency and standardizing the security of the legitimate land rights of rural populations and operators (3 orientations and 21 measures);

guideline 3: improving the management of shared land and resources (3 orientations and 25 measures);

guideline 4: setting up efficient and effective mechanisms to regulate land markets and land dynamics that lead to inequity or conflicts (4 orientations and 23 measures).

Overall, the foundations of the approach chosen in 1993 are not questioned. However, the preliminary draft policy does provide for a number of readjustments: changes in the institutional framework of the Rural Code in terms of its anchorage, form and functional organization, with readjustments in the composition and remit of certain structures; broadening of the range of land security services, improvement of the quality of security measures and strengthening of their legal weight; positive discrimination measures in favour of women, young people and persons with disabilities; improvement of the management of State domains, the gradual creation of local authority domains and improvement of the management of specific, developed or restored land resources; the establishment of a land observatory; the definition of measures to regulate definitive or long-term market transfers and to combat speculation and land hoarding; the restoration of the rule of law with regard to land tenure by putting an end to illegal procedures and cancelling all illegal acts; the definition of an appropriate framework for better management of land conflicts.

In **Chad**, the 1967 land laws are still in force. Their unsuitability to the current social and land tenure context is widely recognized. This land tenure system is based on the principle of presumption of State ownership: any rural plot that is not registered and has not been officially recognized as having been developed is part of the private domain of the State, which corresponds to the vast majority of rural land. Customary rights are simply

⁴ Law n° 61-05 of May 27, 1961 setting a northern limit for crops, amended and completed by Law n° 2008-37 of July 10, 2008.

tolerated on both the public and private domains of the State. Registration is the only way to secure land in rural areas. However, fewer than 7,000 land titles have reportedly been issued to date, and the vast majority of them are in urban areas. This figure remains particularly low compared to those of other African States. Very few rural actors use this procedure.

A draft State and Land Code was initiated in the first half of the 2010s, in order to merge and update the three 1967 laws and their implementation decrees. A committee to review the draft Code was set up in December 2018 in order to relaunch its finalisation. In its version of September 4, 2019⁵, the draft introduces positive changes compared to the 1967 texts. In particular, it introduces the domain of the Autonomous Communities and recognizes the existence of customary land, which is defined as land where the *"holders' rights are established or acquired according to local practices or where it is obvious that the land has been worked on and has been clearly developed"*. Sites used by pastoralists are included in this category *"even though their occupation is seasonal"*. As such, the draft Code recognises the existence of unwritten individual or collective land rights, acknowledges the fact that they can be *"granted"* and defines 4 written land deeds: the land title, the decree of transfer by mutual agreement, the land concession and the land certificate. The latter is intended to formalize customary land rights, in the form of usage rights. However, the text does not provide the necessary guarantees to secure the rights of rural actors: it confirms the importance given to land development, already present in the 1967 laws, without defining the content of this development; the land certificates do not seem to provide real legal security for their holders, particularly because they are required to convert them into land titles within 4 years, which is unrealistic; it contains no specific provision either to secure the rights of women and young people, or to combat land concentration and speculation; etc.

Moreover, this draft Code does not incorporate the interesting provisions introduced by the Ordinance on Agro-Sylvo-Pastoral and Fisheries Guidance (Ordinance No. 043/PR/2018 of 31 August 2018) relating to customary land rights and gender issues. It stipulates, for example, that individual and collective customary rights are guaranteed by the State and must be formally established and validated. They *"can apply to reserves of arable land, fallow land, pastures, rangelands, water bodies, community forests and sacred sites regularly used by the local community"*. The Ordinance introduces the notions of land *"speculation"* and *"abusive possession of land"*, against which the State must fight to ensure *"equitable access to land resources for all agro-sylvo-pastoral and fisheries farmers, natural or legal persons"*. It provides for *"the establishment of participatory, concerted, transparent and effective management systems for water bodies, forests, national parks and nature reserves"* and the introduction of positive discrimination measures for young people, persons with disabilities and women.

With regard to pastoralism, the text currently in force is Act No. 4 of 31 October 1959 regulating nomadism within the Republic of Chad. This Act has never been applied. Its main purpose was to regulate the movements of pastoralists, but it has proved to be far too rigid. It requires herders to carry out a census before they leave on transhumance, the date and routes of which must be fixed, which has always proved impossible, since the availability of pastoral resources and health conditions cannot be predicted in advance (Barrière *et al.*, 2019).

A draft Pastoral Code was adopted by the National Assembly on 11 November 2014 despite criticism from the opposition and civil society. It was then decried by the Head of State who called for its withdrawal in early December 2014 and was then rejected by the Constitutional Council for *"violations of the Constitution"* after a complaint from the opposition that it was unconstitutional. Provisions of the draft law were considered too favourable to pastoralists⁶. The bill had affirmed the principle of freedom of pastoral mobility and granted a non-exclusive priority right of use for pastoralists in pastoral areas. Transhumance corridors, livestock tracks and stopover areas could not be privately appropriated. While obstructing the mobility of livestock was prohibited, pastoralists were obliged to monitor and control livestock, negotiate social agreements with indigenous peoples and prior agreements with farmers, and adhere to an administrative calendar for access to cultivated areas after harvest (Barrière *et al.*, 2019).

Whether in Nigeria, Cameroon, Chad, or Niger (a precursor in the recognition of customary rules and production systems specific to Sahelian zones), legislative mechanisms are struggling to provide land tenure security to actors because of their low relevance or application in the field in a context of institutional pluralism

⁵ The elements of this paragraph are drawn from an analysis of this draft Code (Basserie, 2019).

⁶ <http://www.hubrural.org/Tchad-le-projet-de-loi-portant.html>

(Chauveau *et al.*, 2001; Lund, 2001). There are also numerous inconsistencies in relation to other texts governing access to natural resources, particularly concerning forests (land clearing, grazing lands), the protection of animal biodiversity (national parks, the protection of particular species) and water (fishing rights). The multifunctionality of land and its resources and the seasonality of their use are not sufficiently taken into account. Moreover, the texts that exist contain too few provisions aimed at regulating the development of rural land markets, protecting rural actors against various forms of spoliation and regulating large-scale land transactions.

Categories of land recognized in the laws of the 4 countries

In **Cameroon**, the Land Law of 1974 recognizes the following main categories of state and private land ownership.

The public domain, which is determined by certain specific provisions of Order No. 74-1 of 6 July 1974. It includes all movable and immovable property that is assigned either for direct public use or for public services. These assets are inalienable, imprescriptible and unseizable. The public domain includes both the natural public domain and the artificial public domain.

The private domain of the State and other legal persons governed by public law.

Land that is governed by the **land tenure system, i.e.**, on which a private property right is recognized, either by a land title or by another authentic document.

The **national domain**, which contains "*land that is not classified in the public or private domain of the State or other legal persons governed by public or private law*". It includes two categories of land:

- residential, cultivated, plantation, grazing and passage lands where there is clear human use and development. This corresponds, in fact, to land subject to customary rights. Cameroonian law is very ambiguous on this subject and relies on jurisprudence (the work of judges and the doctrine collected in the writings of legal authors) to settle land disputes;
- land free from effective occupation ("*vacant and ownerless*" land under colonial law).

This categorization is found more or less in the land laws of other countries, but with nuances. In **Chad**, the national domain is defined as all property belonging to the State, i.e. its public and private domains⁷. The definition of the State's private domain is such that it encompasses virtually all rural land, with the exception of the small amount of registered land.

As far as Niger is concerned, it should be noted that the pastoral zone located north of the rainfed crop limit and the pastoral areas listed as such in the agro-pastoral zone are in the public domain of the State. All forests that are not used belong to the State. Those that are classified are in the public domain, while those that are not are in the private domain. The definition given to forests is so broad that many areas can be considered both pastoral areas and unclassified forests: their legal status is therefore highly ambiguous. The texts cover land owned by local authorities, but no State land has been officially transferred to them so far. Ownership of land by private individuals requires a land title or an act of the Rural Code formalizing the property.

In the Lake Chad region, where there has been little development in the four countries, most of the land is owned by the State and is managed by the customary authorities and in the families of rightful claimants.

Land management actors

States and their local departments

In the land tenure systems of the four countries concerned, the central States establish or formalize the land rights of the various actors. They are therefore the main actors in land management.

In the case of the Federal State of Nigeria, the State is represented by the State Governors; in the centralized States (Cameroon, Chad, Niger), the state is represented by state property and land registry administrations

⁷ The draft Land and Property Code amends this definition. The national domain is all land that "*is neither classified in the public or private domain of the State, Autonomous Communities or Public Establishments, nor part of a private property right by virtue of a land title*".

(the Ministry of State Property, Surveys and Land Tenure in Cameroon ; the Ministry of State Property and Housing in Niger; the Ministry of Land Management, Housing Development and Urban Planning - for land registry - and the Ministry of Finance and Budget - for state property - in Chad) and its local representatives, which can either be Governors, Prefects and/or Sub-Prefects. In Niger, the Rural Code is steered by the *Comité national du Code Rural* (CNCR), which is an interministerial committee chaired by the Minister of Agriculture. The activities of the Rural Code are coordinated by the Permanent Secretariat of this committee (SP/CNCR), which is attached to the Ministry of Agriculture. The modalities of intervention of these institutions depend on the national contexts and the level of decentralization detailed in this section.

As it is a federal state, **Nigeria** is the most decentralized of the four countries, with the territorial division into states determining the mode of redistribution of the central state's resources. There are 'three tiers' of government, namely the government in Abuja, the 36 federal states and the Local Governments Authorities (LGAs). The federal states receive half of the revenues redistributed by the central government and are headed by a governor elected by an assembly also composed of elected officials who pass their own laws (Magrin and Pérouse de Montclos, 2018). Niger, Cameroon and Chad are more centralized. Niger is divided into regions and departments (administrative districts) and distinguishes two levels of territorial authorities: regions and communes (laws of 2001 and 2008). Since 2004, Cameroon has had regions, departments and arrondissements (administrative districts) under the authority of governors, prefects and sub-prefects, and two levels of territorial authorities (regions and communes). Since 2018, Chad has had provinces (governor), departments (prefect) and communes (the provinces and communes are territorial authorities known as "*collectivités autonomes*")⁸. Unlike Nigeria, where there is significant devolved power in administrative and legislative terms, decentralisation (see below) and the devolution of power are not very advanced in the three francophone countries.

In a highly centralised state like **Cameroon**, land is mainly managed through the administration of state property (Ministry of State Property, Surveys and Land Tenure). The latter may, in accordance with Article 34 of Law No. 96-12 of 5 August 1996, the framework law on environmental management, grant, upon request, an authorisation to occupy public land. The State is also the administrator of national land (land that is not classified as either public or private): it can grant authorisation through a provisional concession that can be transformed into a land title after development, an ordinary lease or a long lease. Finally, it is the owner of private property in accordance with the civil code and registration regimes, which it administers directly. The same applies to Chad and Niger.

On national land, where all dwellings, cropland, pasture and vacant land are located, it is the responsibility of the State of Cameroon to settle conflicts over its use, especially between farmers and herders.

In Cameroon, the Deputy Prefect is the "*chef de terre*" and heads the **consultative commission**, provided for in the law of 1974, which is responsible for managing agro-pastoral conflicts (livestock tracks, agricultural areas). It is made up of the Deputy Prefect and representatives from the agriculture, livestock and state property departments, and it has an arbitration role. The cost of convening the commission has to be paid by the complainants. If the arbitration is not validated, the case is transferred to the prefecture, the governorate and then to the court. However, as the Cameroonian State does not recognise land transactions (loans, donations, rental, sharecropping, sales, etc.), it does not intervene in conflicts over land use, which are the responsibility of the customary authorities. Prefects and Deputy Prefects, who consider these land issues too complex and recurrent, prefer to refer them to the traditional authorities (Gonné and Seignobos, 2006). This situation has not changed since the early 2000s. Moreover, the consultative commission is very rarely activated because of its cost.

In **Niger**, in addition to the CNCR and the SP/CNCR, the bodies involved in land management provided for in the Rural Code are as follows:

SPR (Regional Permanent Secretariat),

⁸ Source: Order n°038/PR/2018 on the creation of Administrative Units and Autonomous Communities. This ordinance abolished sub-prefectures, but the situation is ambiguous: sub-prefects have remained in office and some official texts still refer to sub-prefectures (e.g. Law n°043/PR/2019 of 31 December 2019 on the finance law for 2020: <http://www.droit-afrique.com/uploads/Tchad-LF-2020.pdf>). Many publications, such as those of the IOM for the census of displaced persons, are still published by sub-prefecture.

Cofodep (Departmental Land Commission),
Cofocom (Communal Land Commission),
Cofob (Basic Land Commission)

Without going into detail about the composition of all these bodies, it should be noted that, depending on the level, they take into account: administrative and customary authorities, local authorities, State technical services, civil society and representatives of natural resource users. The SP/CNCR, SPR, Cofodep and Cofocom are coordinated by permanent secretaries appointed administratively. The general assemblies of Cofodep are chaired by Prefects, those of Cofocom by mayors and those of Cofob by village or tribal chiefs. Cofob members include representatives of farmers, herders, including a transhumant herder if necessary, other natural resource users (including loggers, hunters, fishermen, etc.), women and young people.

The missions of the Cofob are to inform and raise awareness by popularizing the texts of the Rural Code, assist village or tribal chiefs in issuing land deeds, securing shared resources and filling out conflict conciliation reports, monitor the development of natural resources, and land publicity.

Finally, it should be noted that **Chad** has had⁹ a Chadian Land Observatory (OFT) since 2001. Under the supervision of the Ministry of Higher Education and Research, it is housed within the National Institute of Human Sciences at the University of N'Djamena. Its general objective is to contribute to improving knowledge and understanding of land issues with a view to promoting the design of relevant land policy and legislation. It is experiencing major operational difficulties and access to its output is significantly restricted.

States and their devolved administrations ultimately have very little involvement in rural land management at the local level, unlike in urban areas. The mechanisms provided for in the law for land appropriation and conflict resolution in rural areas are very little used, either because rural actors do not feel the need for them or because the procedures are too restrictive and expensive. Niger stands out with the existence of land commissions at different territorial levels, but it would be worth evaluating their levels of activity and their impacts in the region.

Decentralized institutions

Land tenure is one of the competences transferred to decentralized local authorities in a number of African countries, such as Senegal since 1996, but this is a minority case, or the competences are not de facto transferred, due to the sensitivity of the issue.

In Cameroon, the 2004 decentralisation law did not provide for the transfer of land tenure to decentralised local authorities,¹⁰ whose prerogatives were limited to land use planning, validated by the Prefecture (decrees of 2009). A new law on the General Code of Territorial Authorities of 24 December 2019 was passed as a matter of urgency following the "*great national dialogue*" organised in November 2019 by the government in the context of a rebellion in the English-speaking area, for which the only way out of the conflict was either the creation of a federal state (for the more moderate rebels) or secession (for the more hard-line rebels). The implementation of this law on decentralization, which had been in the pipeline since the 1996 constitution, is one of the major resolutions: it extends the powers of municipal authorities, in particular, to land management and the management of wildlife, fish and forest resources (article 168/5) and allows for the constitution of land reserves of community interest (article 241/3).

In Chad, although the 1967 legislation provides that local and regional authorities may have both public and private property, these authorities have not benefited from transfers of State property. Moreover, they enjoy only very relative autonomy. Act No. 33/PR/2006 divides competences between the State and the decentralized local authorities. In fact, its provisions have been only very partially applied and need to be reviewed in the light of the new Constitution of 2018. The Constitution of the Fourth Republic of Chad of 4 May

⁹ Decree No. 01-215 creating the Chadian Land Observatory (OFT).

¹⁰ The communes were created in 2004 by following the overall spatial coverage of the boroughs. The most recent mayoral elections were held in February 2020, just before the surveys conducted for this study.

2018 provides for two levels of decentralized local authorities (known as "*autonomous authorities*"), provinces and communes, whose autonomy is guaranteed by the Constitution. However, there are no plans to transfer jurisdiction over land to this level.

In Niger, the recognition of customary rules of land and conflict management in the law began with the Rural Code in 1993 in a context of decentralization (Hihorst, 2008). Increasing the coherence between the Rural Code process and the decentralization reform ("*schéma 2000 de décentralisation*"¹¹) means increasing the autonomy of land commissions in relation to local government bodies (Kandine, 2009). This option was favoured in the draft rural land policy, which confirms the deconcentrated nature of the institutions of the Rural Code. However, it should be noted that the Cofocom are chaired by mayors.

In Nigeria, despite a decentralized territorial organization that specifies (in the Constitution) the modalities for the election of LGA representatives and their management, LGA councils are in fact rarely elected but chosen and appointed by state governors in violation of *Amendment Decree No. 3 of 1991* (Magrin and Perugia de Montclos, 2018). According to these authors, the presidents of the 27 LGAs in Borno State had an average tenure of only 5 years between 1999 and 2015. Since the end of the military dictatorship, Borno has had only two local elections (2003 and 2008), in which the governor's party won the majority of LGAs, with the exception of a few, including Jere's LGA. The local elections announced for 2014 and 2017 could not take place due to insecurity and the Governor appointed *caretaker committees*, which are renewed every six months. Thus, the LGAs are characterized by a very high level of instability, reflecting the democratic problems in the region. In theory, the allocation of land use rights is the responsibility of the governor and local authorities. In practice, traditional chiefs have continued to manage village fallows and the redistribution of undeveloped land in exchange for money.

In 2020, local and regional authorities are still not involved a great deal in land management in the four countries. Plans to reform land laws in Cameroon and Chad could change this situation by giving more power to the local level. Only Niger's legislation provides for a real transfer of land tenure powers to local authorities. However, no responsibility for State property has been transferred to them, and in fact, the communes manage State property in their territorial jurisdictions. However, the examples of Nigeria and Niger, over different time periods, show that decentralized authorities are struggling to play their role fully because they are very involved in political games on the one hand, and poorly equipped with resources and training on the other. In Niger, their land management was strongly criticised by the Prime Minister during the EGFR¹².

Customary authorities

In the four countries and despite different land laws and administrative organisation, land management remains generally in the hands of the traditional authorities, which are mostly Muslim in the region we are interested in. They are recognized differently in the land laws of the four countries.

They play a major role in land regulation in northern **Cameroon**. They are custodians of the customary domain or dependent on the 1st category of State property (Article 15, Ordinance No. 74-1 of 6 July 1974 which

¹¹ Directorate General of Decentralization and Territorial Collectivities, 2015

¹² "*Some municipal authorities are only looking for subdivision zones with the aim of engaging in land speculation*" or "*local authorities display a very high level of corruption, particularly in the handling of land issues*" (Republic of Niger, 2018).

established the land tenure system)¹³. There are three levels of chiefdom¹⁴: the 3rd level concerns heads of villages, hamlets or districts, known as *djawro*; the 2nd level concerns ethnic groups including several villages, known as *boulama*; and the 1st level theoretically concerns the main town of a department, but there are exceptions depending on political arrangements, known as *lamido*. This organization does not take into account the distinction between acephalous chiefdoms (as in the Mandara Mountains) and centralized chiefdoms (such as the Fulani lamidats of northern Cameroon)¹⁵ and has important consequences for land rights management (RocheGude and Planton, 2009). First, second and third level chiefdoms are recognized as auxiliaries to the administration and are remunerated. Their role covers civil status and justice in land and civil matters, including applying to the customary courts. Thus, the customary authorities constitute the first level of conflict management. They can also be included in the consultative commission to bear witness.

The role of chiefdoms is officially recognized in **Niger's** Rural Code. Traditional leaders (sultans, canton chiefs, group leaders, etc.) have official status¹⁶. The village or tribal chiefs preside over the Cofob and sign the acts they issue, which is also the case for other chiefs. The traditional chief has the power to conciliate the parties in customary, civil and land transaction matters (seeking such conciliation is mandatory). He is responsible for establishing customary land ownership and land transactions and for managing community resources. However, the decentralization process has reduced their prerogatives since the early 2000s (Magrin and Pérouse de Montclos, 2018).

In **Chad**, the customary authorities also have legal status¹⁷ and powers of conciliation in civil and customary matters. These include sultans, chiefs of cantons, tribes, or groups (these categories receive allowances), villages and *ferrick/camps* (these categories are remunerated by discounts on the amounts of civic tax and market products collected by them). They are "*collaborators of the administration*" who ensure the protection and conservation of customary heritage. In administrative and police matters, the traditional and customary authorities assist the administration in its task of supervising the population.

In Borno in **Nigeria** as well as in Niger, northern Cameroon and Chad, village chiefs have generally retained control over the allocation of fallow fields to heads of households, their heirs or newcomers. They are systematically involved in securing common land, signing "*small papers*" (see below) and drawing up communal development plans in the context of decentralization. In these four countries, village chiefs and/or chiefs from higher territorial levels (canton chiefs in particular) increasingly intervene directly and self-servingly in land transactions, particularly land sales to actors outside the communities concerned, and this is increasingly contested. However, generalisations should be avoided. In Chad, for example, customary chiefs can be the driving force behind sales, or, on the contrary, they may try to limit them, they may simply '*supervise*' them or they may even be forced to accept them in cases where the balance of power with powerful buyers is unfavourable to them (World Bank, 2020).

In Nigeria and Cameroon, **the strong politicization of** chiefdoms has weakened the customary institution, "*with an increase in the number of honorary titles and a high turnover rate due to interference from local authorities, especially in Nigeria after each municipal election*" (Magrin and Pérouse de Montclos, 2018: 105). The same politicization has been observed in Niger and Chad, where a High Council of Autonomous

¹³ In accordance with article 17 "*customary communities, their members or any other person of Cameroonian nationality who, on the date of entry into force of this Ordinance, peacefully occupy or exploit dependencies of the first category provided for in article 15, shall continue to occupy or exploit them. They may, at their request, obtain title deeds there in accordance with the provisions of the Decree, as provided for in Article 7*". Hunting and gathering rights are also granted to them over the second category of outbuildings provided for in section 15, as long as the State has not given these lands a specific allotment.

¹⁴ Decree 77/245 of 15 July 1977 on the organisation of traditional chiefdoms, amended and supplemented by Decree 82/241 of 24 June 1982.

¹⁵ Moreover, a 3rd degree chieftaincy may depend directly on a 1st degree chieftaincy, which makes a simple reading of their distribution on the territory rather complicated.

¹⁶ Law n°2015-01 of January 13, 2015, on the status of traditional chieftaincy in the Republic of Niger.

¹⁷ Organic Law n°10-013/PR of 25 August 2010 on the status and powers of traditional and customary authorities.

Communities and Traditional Chiefdoms was created by the new Constitution of 2018. This is a consultative assembly that gives a reasoned opinion on decentralization, territorial development, and issues relating to traditional chiefdoms, and participates in the non-jurisdictional settlement of conflicts.

We have seen that in the four countries concerned, the customary authorities have official roles in the conciliation of conflicts. In areas where there is a hierarchical customary territorial organisation, such as those controlled by a sultanate (Niger, Nigeria, Chad) or a lamidat (Cameroon), conflict management follows a bottom-up route and Muslim law often applies.

In this case in Niger, Nigeria and Chad, customary authorities are represented at the local level by **village chiefs** and **tribal chiefs** for transhumant herders. They are answerable to the **canton chiefs**. In Niger, transhumant herders are represented by **group chiefs** who do not depend on a territory. The Chadian territorial administration, on the other hand, includes "*aterritorial*" pastoralist cantons, known as "*nomadic cantons*", which are represented by a canton chief.

At the village level, village or tribal chiefs are competent to conduct conciliation on land conflicts within their constituencies. During conciliation, they are most often assisted by the religious authority. If the conciliation is successful, the village or tribal chief draws up a conciliation report signed by the parties and witnesses: this conciliation is equivalent to a judgement. If the conciliation attempt fails, a non-conciliation report is drawn up and the parties are referred to the higher customary authority: first the *lawan* in the Cameroonian case, then the chief of canton (or lamido) or group.

At the canton (or lamidat¹⁸) **level**, the canton or group chiefs (sultan or lamido in the case of Cameroon) proceed in the same way as the village and tribal chiefs to conduct conciliation. They are assisted, if necessary, by the important members of their respective courts. These authorities are also in a position to draw up minutes. In the event of failure of the conciliation, the parties are referred to the administrative authorities.

In Niger, in the event of a conflict between farmers and herders, the parties can also turn to the **joint commissions**. They are chaired by traditional chiefs and are composed of an equal number of representatives of farmers and herders. In Cameroon, this body does not exist outside the arbitration provided by the Fulani lamidats. In the context of conflict management, Niger's land commissions are essential links in conflict prevention and can intervene in conciliation and resolution procedures by providing technical expertise (damage assessment) and legal expertise (ownership rights of secured property).

In Chad, in addition to conciliation, customary or religious judgements in which one is required to "*take an oath*" or "*swear on the Koran*" are very popular, even in urban areas, because of "*their rapid and often conciliatory or accepted responses*"¹⁹.

In many areas that have historically been conquered and integrated into a sultanate or that have escaped their control, earlier land tenure systems persist and control, among other things, the relationship between the living and the guardian forces of the land. In this case, the **land chief** and **customary rules** are a key figure in understanding land issues and the rules are as diverse as the cultural groups represented. Among the communes targeted by the Resilac project, that of Koza in the Mandara Mountains is populated by Mafa populations who are Christianised but still strongly attached to ancestral rules for land management and land fertility (Hallaire, 1991; Van Santen, 2002).

Also noteworthy is the particular case of the southern shores of Lake Chad that have been cleared by floods since the 1970s, where no previous land tenure system existed and where a multi-use governance system of "*open access with permission*" was *in place* prior to the security crisis (Rangé and Lavigne Delville, 2019). In this system, based on mobility and modes of coordination through mutual adjustment and avoidance, various

¹⁸ The administrative level of the canton has been removed from the Cameroonian territorial organization and this term is not used in Cameroon, which in the far north commonly uses the Fulani language. Depending on the size of the Lamidat (corresponding either to a canton or a department), its history and the power it has retained within the Republic, the capacity for conciliation and conflict resolution by the Lamido will be greater or lesser. The lamido of Rey Bouba, for example, still exercises a great deal of power over its land and retains the capacity to judge and punish through the customary court recognized in Cameroonian law.

¹⁹ "*Cette justice coutumière qui tranche des mystères*", Le Progrès n°5045 of 8 April 2019.

customary and administrative powers intervene in a way that is not very concrete and, above all, not very institutionalized. This mode of governance is strongly constrained by the security crisis due to the disorganization of activities and is difficult to reproduce in the current situation of Lake Chad.

Although variously recognised in national legislation, customary authorities appear to be the main actor in land management at the local level. In most of the territories of the Lake Chad region, the traditional authorities are highly centralized and hierarchical Muslim organizations who are responsible land tenure rules and ensure regulation following a bottom-up process from the base (*boulama*) to the head (*shehu, lamido, sultan*). They are generally recognised and respected, but can be circumvented or contested locally by certain actors in the territory (former conquered peoples, migrants) or from outside (urban investors for example). They have a conciliatory role; in case of failure, cases are referred to the judicial authorities.

Natural or legal persons

The other official stakeholders in land management are private **individuals and companies** who, according to the civil code and registration system, can claim land registered in their name by applying to the state and cadastral services. In Niger, they can have land deeds drawn up by applying to the decentralized institutions of the Rural Code. In the Lake Chad region of Niger covered by this study, only a very small minority of rural stakeholders own a land title or a deed. We will see below that the Rural Code deeds formalizing sales in Chetimari correspond for the most part to purchases made by non-farmers.

The judicial authorities

In Niger, Courts of First Instance are responsible for judging disputes in accordance with the applicable provisions. They interpret laws and customs and are responsible for their application. As far as customary law is concerned, the judges are assisted by customary assessors (who are familiar with the customs of the parties to the dispute, local marabouts). The texts of the Rural Code provide for the establishment of **rural land courts**, but these have never been set up. Similarly, the function of a **rural police force** to combat illegal occupation or exploitation of land and natural resources is still not very operational: this function is governed by various non-harmonized texts; it is entrusted to too many actors (prefects, sub-prefects, heads of administrative posts and mayors) and is therefore not implemented. The measures needed to put an end to occupation or cultivation are rarely taken, even when the occupation has been established by a Land Commission.

The **Court of Cassation** is the judicial division of the Supreme Court to which a party who is not satisfied with the decision rendered on appeal may appeal. The court does not examine the facts but the manner in which the appellate judge applied the law. If it considers that there has been misapplication of the law, it quashes the decision and sends it back for judgment to the same court, but with different representatives.

Finally, in Niger, the **forces of law and order** are not empowered to set fines or conduct conciliation in the event of a land dispute, but they can intervene in two cases: to intervene between the parties, prevent a conflict and ensure the maintenance of public order, or in the event of a criminal offence.

In Chad, conflict management sometimes eludes customary chiefs and becomes an attribute of the brigade commander (CEFOD, 2017; Bureau Morgode, Djerabe, 2018). There may also be local conflict resolution institutions made up of traditional chiefs, notables, representatives of socio-professional groups and religious leaders (BRL, Groupe Fit, 2016; Guibert, Kakiang, 2011). In the case of damage to fields, Chadian State services are responsible for settling the conflict between the two parties. However, local institutions are sometimes set up to deal with them, "*given the observed failures of this procedure and sometimes the lack of transparency in the negotiations between the agents and the two parties concerned*" (Barrière et al., 2019). (Barrière et al., 2019). "*Some agents haggle with the herders and do not demand the damages that should be paid to the farmers, and some herders are abusively fined. This leads to a feeling of great frustration on both sides*". If no amicable settlement can be found, the canton chief and then the prefecture are notified. In the event of injury or death of animals or people, it is the gendarmerie brigade that is in charge of the case (Guibert, Kakiang, 2011). Yonoudjourn (2004) also notes that the fines demanded by traditional and administrative authorities are "*often excessive*".

In Cameroon, the judicial organization²⁰ recognizes traditional law jurisdictions with modern law institutions (supreme court, courts of appeal, special criminal court, lower courts of administrative disputes and those of accounts, military courts, and courts of first instance). The Court of First Instance is established by district, but its jurisdiction may be extended to several districts. The seat and jurisdiction of the customary courts are determined by the law establishing them. They are usually established at the level of traditional communities: tribes, groups, villages or cantons. They cover property-related disputes, in particular claims for the recovery of civil and commercial debts, claims for compensation for material damage and bodily injury and disputes relating to contracts (Decree No. 69-DF-544 of 19 December 1969²¹). The judge is assisted by customary assessors.

The judicial system in Nigeria comprises a variety of judicial systems/hierarchies depending on the states, ranging from the Sharia Courts to the *Magistrate Courts*, the High Court, the Court of Appeal and the Supreme Court.

In all four countries, stakeholders use the judicial authorities to settle land conflicts in serious cases. Judgements are based on national laws and case law. In some territories, where there is a lot of tension over land, there is a growing trend among certain stakeholders of circumventing the local authorities, and thus the possibilities of conciliation, in order to win their case.

Other land management stakeholders

Civil society organizations (CSOs) and professional agricultural organizations (PAOs) are important stakeholders, but are not recognized as such in legislation. However, they are increasingly driving the evolution of rules and laws. **In Niger**, for example, agricultural civil society and professional organizations, such as the Association for the Revitalization of Livestock in Niger²² (AREN), carried out a process of several years leading to the adoption in 2010 of the ordinance on pastoralism (RBM, 2014).

In Cameroon, the civil society actors involved in the land tenure debate at the national level are : ACDIC (Association Camerounaise de Défense des Intérêts Collectifs), CED (Centre pour l'Environnement et le Développement), CIFOR (Center for International Forestry Research), CODAS-CARITAS Garoua, CDD (Comité Diocésain de Développement) Maroua, INADES-FORMATION, PWYP (Publish What You Pay), RELUFA (Réseau de Lutte contre la Faim), Africa-Europe Faith and Justice Network, SNV (Netherlands Development Organisation).

In Nigeria, civil society is made up of NGOs and similar pressure groups, but also religious organisations and large pastoralist associations that have worked hard for the recognition of pastoralists' rights. Pastoralist associations, such as the Miyeti Allah Livestock Farmers' Association, have national and regional mandates from member herders to protect the interests of their members and seek justice when their rights have been violated. They also serve as intermediaries between government authorities (at the local and national levels) and pastoralists for the conclusion of agreements.

Also in Nigeria, religious organisations, including national and transnational religious hierarchies, ecumenical bodies (such as the CAN) and inter-religious bodies, and local religious communities are involved in conflict resolution through inter-faith relations, crisis management, negotiation and mediation in conflict situations. They also act as intermediaries between opposing parties and provide training in peacemaking mechanisms (Reychler, 1997; Sulaiman and Ojo, 2012; Paul, 2015). These organisations are playing an increasingly active and effective role in conflict resolution as educators, intermediaries and advocates of transnational justice, which is a powerful mandate for social tolerance, democratic pluralism and conflict management. Nigeria is also characterized by the existence of religious and community-based organizations, such as the *Gan Allah*

²⁰ Law n°2006/015 of 20 December 2006 on judicial organisation amended and completed by Law 2011/027 of 14 December 2011.

²¹ Decree No. 69-DF-544 of 19 December 1969 to lay down the judicial organization and procedure before the traditional courts of East Cameroon.

²²<https://www.areniger.org/>

Fulani Development Association of Nigeria, who defend the rights of their members at the state and national levels²³.

In Chad, CSOs are much less organized than in the other three countries and have less influence. Their capacities are currently being strengthened by international organisations, led by Oxfam. The main Professional Agricultural Organisation is the *Cadre National de Concertation des Producteurs Ruraux du Tchad (CNCPR)*. It is a national farmers' organisation that brings together more than 40,000 rural producers' organisations in Chad in the 18 regions. Its main objective is to ensure sustainable socio-economic and cultural development for rural producers²⁴. The Pastoral Platform²⁵ is a formal framework for consultation and dialogue. It brings together the various actors in pastoral development: State technical services, professional livestock breeders' organizations, CSOs, technical and financial partners, etc. It is a forum for dialogue and consultation. Its mission is to support and animate reflections and initiatives focused on improving livestock development policies in general and pastoralism in particular.

Two organisations promoting livestock and pastoralism are particularly active on a regional scale. These are the Association for the Promotion of Livestock in the Sahel and Savannah²⁶ (Apess - West and Central Africa) and the Réseau Billital Marroobe²⁷ (RBM - West Africa).

Human rights organisations are also involved in the four countries, notably in terms of monitoring conflict resolution mechanisms and combating "*land grabbing*"²⁸. Also, CSOs specialised in the defence of women's rights are increasingly involved in land issues²⁹.

Local development committees can also play a role in the management of land or natural resources, particularly management committees in the context of security processes (pasture, transhumance tracks) or development (irrigation schemes, pastoral hydraulics). The functioning of these committees is closely related to the issues of resource control and local power games³⁰.

Civil society organisations campaign for land reforms (except in Nigeria), for improved access to natural resources for the socio-professional categories or communities (in Nigeria) they support, and, since the beginning of the security crisis, for human rights. Their activities in support of land resource management in

²³ "Nigeria: Pastoralists determined to block bill against free grazing in Oho State (En): <http://www.hubrural.org/Nigeria-les-eleveurs-decides-a-bloquer-le-projet-de-loi-contre-le-libre.html>

See also: <https://www.facebook.com/pages/category/Non-Governmental-Organization--NGO-/Gan-Allah-Fulani-Development-Association-of-Nigeria-143673576275276/>

²⁴ <https://www.upadi-agri.org/conseil-national-de-concertation-des-producteurs-ruraux-du-tchad-cncpr/>

²⁵ <https://www.plateforme-pastorale-tchad.org/>

²⁶ <https://www.apess.org/>

²⁷ <https://www.maroobe.com/>

²⁸ Examples in Chad: Chadian League for Human Rights (LTDH), Association for the Promotion of Fundamental Freedoms in Chad (APLFT) etc.; In Niger: Alternative Espace Citoyen

²⁹ Chad: Association of Women Lawyers of Chad (AFJT), Liaison and Information Unit of Women's Associations of Chad (CELIAF), International Organization of Women for the Millennium (OIFM), etc.

³⁰ In Cameroon, in the wake of the economic crisis of the 1980s and in the face of the State's disengagement from several regalian sectors (education, health), the associations of nationals considered as "*elite salaried workers and traders*" set up village committees aimed at promoting the development of their homelands. These development committees are financed by membership fees, which elect an executive board elected by direct suffrage in a General Assembly and define a programme. These village development committees have representations in all the towns in Cameroon where the members of the community live. Since the 2000s, there has been a diversification of the income of these associations which take advantage of the address book of their senior members of the administration or living abroad (Europe, America, etc.).

the Lake Chad Basin are not highlighted in the bibliography. Nor is their role locally highlighted in this study (see Chapters 3 and 4).

Acts to secure land tenure

Land deeds common to the 4 countries

The land ownership laws of Nigeria, Cameroon, Niger and Chad all include a description of acts that recognize the existence of formal land rights. Thus, Cameroonian law defines:

- concessions and provisional authorisations to occupy the public domain;
- provisional concessions that can be converted into land titles granted to any person who has a development project to be carried out over a period of five years, on category 2 state land (free of any effective occupation). Provisional concessions last five years and can lead to permanent concessions;
- ordinary leases where the right to use land does not exceed eighteen years;
- emphyteutic leases where the right to use land is attributed for a period of between 18 and 99 years;
- land titles that corresponds to private property.

Emphyteutic leases were designed during the colonial period to allow the long-term exploitation of properties managed by settlers, often in connection with industrial plantations of perennial crops (cocoa, coffee, oil palm in particular). They mainly concern the south of Cameroon and Nigeria. They also exist in Niger³¹. In Chad, they seem to be planned only in the context of the extraction of hydrocarbons³². When they were allocated for development projects during or after the colonial period and subsequently abandoned by the beneficiary (or the project was abandoned), the status of the land remains unclear and the rights of access to resources undefined and subject to numerous claims and conflicts³³. This case is not represented in the municipalities targeted by Resilac.

Obtaining land titles follows different approaches in the 4 countries, but the complexity and very high cost of the procedure excludes most rural producers from gaining access to them. In Chad, for example, the procedure can take several years and the cost can amount to several hundred thousand CFA Francs for a plot of land (Galpin, 2017). These constraints, as well as the disconnection of this official procedure from local and customary contexts (shared use rights on certain resources, the need to preserve resources, ecological issues), do not allow the most modest populations to use registration to secure their activities (livestock farming, crop farming, small trade, etc.). This land title, which is very legally secure (rigidity), places individual interest above collective interest.

In 2006, the Nigerien government proposed a simplified land title "*Sheeda*" ("*témoin*" in French) with lower costs and a shorter procedure. Thus, according to the Directorate of Domains and Land Conservation, 800 Sheeda land titles have been registered per year since the 2006 Finance Act, compared to 200 land titles per year previously. Nevertheless, this new procedure remains inaccessible to the least well-off populations.

In Nigeria, by means of the Land Use Act of 1978, the Governor of the State gives final approval to the Certificate of *Occupancy*. The President of the Local Government only signs the Certificate of *Occupancy* for rural land after the traditional authorities and/or the family that owns the land concerned have given their consent. In practice, these certificates are rarely requested in rural areas, except in crisis situations.

³¹ Law n°2017-27 of April 28, 2017 on emphyteutic lease.

³² Decree 10-796 2010-09-30 PR/PM/MPE setting the terms and conditions for the application of Law n° 006/PR/2007 of 20 April 2007, relating to hydrocarbons, as amended and supplemented by Order n° 001/PR/2010 of 7 January 2010, approving the standard production sharing contract for the exploration and exploitation of liquid or gaseous hydrocarbons.

³³ This is particularly the case in southern Cameroon for the coffee plantations abandoned during the crisis of the 1980s, and in northern Cameroon for the forest plantations (eucalyptus) made by the valley development projects.

No other official land deeds are provided for in the land laws of Nigeria, Cameroon and Chad. Thus, common situations of giving, lending, sharecropping, renting and selling are illegal from the point of view of the law and stakeholders are therefore not given the security that comes from rules that are known and shared by all. Other documents marking these transactions between users ("*small papers*") are described in paragraph 1.6.3 below.

Innovations in Nigerien law

With a view to securing rural producers and preventing land conflicts, the Rural Code has innovated in the number and nature of deeds issued by the land commissions. In particular, they make it possible to recognize customary ownership by local actors and all transactions that are carried out locally (Ministry of Agriculture and Livestock, 2017 and 2018).

The acts recognized in the Rural Code are classified into two main groups: acts of a definitive nature (customary possession, donation, sale) and transactions of a provisional nature (loan, customary pledge and rental). Their validation is subject to a land publicity session during which potential objections are gathered. The advantage of such publicity is that it gives legitimacy to the deed issued. The procedures vary according to the type of land commission concerned. Thus, advertisements carried out in the village last 7 days, while those initiated by the Cofocom or Cofodep last 30 days.

Provisional transaction deeds are written evidence of the various transactions that take place in rural areas. These deeds are unusual in that they are very simple: the procedure is not long and the cost is accessible to poor farmers (between 1500 and 5000 CFA Francs).

The final deeds correspond to property titles (customary ownership, deed of gift or deed of sale). These give farmers security as they involve technical work, in particular the mapping of the area concerned, the description of its physical characteristics (vegetation, soil, state of deterioration, etc.) and the identification of all the rightful claimants. This technical work facilitates compensation in the event of expropriation in the public interest. Property titles (customary ownership, deed of gift or deed of sale) issued by the land commissions cost 12,500 CFA Francs, which is relatively accessible to peasants compared to land titles.

However, these measures provided for in the Rural Code are still not applied a great deal because of numerous difficulties. Land commissions have not yet been established throughout the country (90 per cent for the Cofodep, 96 per cent for the Cofocom and 42 per cent for the Cofob. Source: Republic of Niger, 2019). These commissions, particularly the basic ones, often have insufficient human resources, funding and facilities. It has been estimated that only 2 per cent of rural plots benefit from an administrative act issued by land commissions (Republic of Niger, 2019). Moreover, the low level of state leadership of the process calls into question the sustainability of this policy. The establishment and effective functioning of land commissions is largely dependent on financial contributions from development projects.

Nigerien legislation has also established "*Land Development Schemes*" (SAF), which specify the areas allocated to various rural activities and the rights that can be exercised there. The SAFs, which are set up at the regional level, must contribute to the Land Development Plan with a global vision of the harmonious and equitable development of the country. As a result, the SAF is a document with a multisector objective that not only gives a snapshot of a territory in terms of natural resources (location, extension, state, vocation, etc.), but also a medium- and long-term vision in terms of the development and regulation of rural activities, and which aims to mitigate regional imbalances in terms of infrastructure and facilities.

SAFs are regional and should be the product of a participatory, iterative and consensual approach. The SAF for each region must be adopted by a decree issued by the Council of Ministers after consultation with all stakeholders involved in land management at the regional level. Indeed, once registered in the SAF, the vocation of a site as well as the content of its development can only be modified with the agreement of all these stakeholders and following the same process as for its adoption (Ibid.).

So far, only the FAS of the Dosso region has been adopted (2018). The FAS of³⁴ the Maradi region was officially handed over to the government in 2020³⁵.

The land management methods described in the texts

In Cameroon and Chad, land management of agricultural land and pastureland is governed by separate texts that are not always consistent. Above, we described the actors and acts issued in the field of agriculture.

In **Cameroon**, pasture management is governed by Decree No. 76/420 of 14 September 1976 regulating the breeding, movement and exploitation of livestock. The grazing of animals remains free throughout the Republic except in concessions and private estates. Livestock tracks are defined by orders of the Ministry of Livestock, Fisheries and Animal Industries (MINEPIA) on the basis of proposals from the departmental commissions responsible for the prevention and settlement of agro-pastoral conflicts. These commissions are chaired by prefects and include members from the local state departments for livestock, agriculture, estates, roads, local communities and customary authorities. The movement of animals is subject to the authorisation of the livestock services (livestock sector, sub-sector, and veterinary post). Transhumance at borders may be authorised, particularly in areas where it is customary to allow it (Article 11). No later than one month after the start of the rains, foreign animals must return to their place of origin. International agreements are taken into account, in particular those authorizing the use of the livestock passport and the international transhumance certificate (Decision No. 1/94-CEBEVIRHA-018-ce-29 of 16 March 1994).

As part of the decentralization process and its 2009 implementing decree, the allocation of land devolved between agricultural and pastoral activities is decided by the commune in a consultative commission comprising members of the municipal council, representatives of farmers and herders, representatives of sector-based local departments, and representatives of customary and administrative authorities. Decisions are endorsed by the prefect.

In **Niger**, local land commissions identify, delimit and mark shared resources (corridors, grazing areas, animal resting areas, ponds, etc.).³⁶ Once the resource is marked, an order to secure the resource is issued by the prefect or mayor as president of the Cofodep or Cofocom. This securing is important because any planning or urban development must take this into account in accordance with the provisions of Article 37 of Order 2010-29 of 20 May 2010 relating to pastoralism, which stipulates that "on pain of *nullity*, the planning documents must take into account the paths, transhumance tracks and corridors crossing or bypassing urban agglomerations". Thus, the registration of rights in the Dossier Rural (register of deeds) by land commissions, whether individual or shared, is supposed to be a guarantee of security for farmers and herders, especially those in peri-urban areas.

In **Chad**, as mentioned above, Act No. 04 of 31 October 1959 on nomadism and transhumance has never been applied and no text has been promulgated since to fill this void.

In **Nigeria**, pasture reserves have been established in different parts of the country to provide dry season grazing for pastoralists. However, over the years and due to the increase in human population and animal numbers, these grazing reserves have become insufficient to maintain livestock in both the rainy and dry seasons. The pressure on pastoral resources has been aggravated by the influx of nomadic pastoralists from neighbouring countries, such as Chad, northern Cameroon and Niger. This has led to an unprecedented conflict over resource use, which has resulted in many casualties and loss of property. The ongoing conflicts

³⁴ "Niger: adoption of the Dosso Region Land Development Plan":

<http://www.hubrural.org/Niger-adoption-du-Schema-d-Amenagement-Foncier-de-la-region-de-Dosso.html>

³⁵ "Decentralization: Official handover of the Land Development Plan (SAF) for the Maradi region to the Government:

<http://www.lesahel.org/index.php/2020/02/27/decentralisation-remise-officielle-du-schemas-damenagement-foncier-saf-de-la-region-de-maradi-au-gouvernement/>

³⁶ Article 11 of Order No. 098/MDA/CNCR/SP of 25 November 2005 on the organization, powers and modus operandi of commune, village or tribal land commissions.

between transhumant and sedentary pastoralists, on the one hand, and between transhumant and local Nigerian farmers, on the other, probably led to the introduction of the ECOWAS transhumance protocol, which made it compulsory for all pastoralists to obtain a certificate allowing them to move from one country to another. Several factors have hampered the implementation of this protocol, including the training of officials responsible for ensuring compliance.

Most of the grazing reserves are not officially recognised by a legal text. They have been heavily encroached upon by people who were not identified to benefit from these resource areas. This situation has aggravated conflicts between and within natural resource user groups, including cattle breeders, farmers, fishermen and hunters.

In some communities, local ordinances and rules have been established to oblige farmers to remove their crops from the fields on an agreed date, after which herders are free to move their animals to the harvested crop fields. Any farmer who violates this agreement and whose crops are damaged is not entitled to any form of compensation.

Water and forests are governed by specific texts that often apply in the same territories as those presented above, but we do not have any further information about these. At the time of the Land Law in 1978, land resources were estimated at nearly 925,000 km²: 9 per cent of this land was unused, 35 per cent was devoted to arable crops and permanent crops and 56 per cent to forestry and permanent pastures in addition to cultivated land. Of the 56% classified as forest and permanent pasture, it was estimated that 31% was potential agricultural land, which was neither forest reserves nor permanent pasture (Areola and Ofomata, 1978).

In **Cameroon**, water and forest management is governed by three texts:

the treaty on the conservation and sustainable management of Central African forest ecosystems signed in Brazzaville on 5 February 2005³⁷; the Central African Forest Commission (COMIFAC) is responsible for its implementation;

Law No. 94/01 of 20 January 1994 on forestry, wildlife and fisheries regulations;

Law 1998 n°98-005 of 14 April 1998 on water regulations.

Forests are managed by the Ministry of Water and Forests and rules are applied by forestry agents. Rules for cutting wood for agricultural clearing are specified as well as the fines for infringements. Protected areas and hunting management are also governed by this text. The law recognizes the right customary rights of local populations to exploit all forest, wildlife and fishery products, except protected species, for personal use. Forest products of all kinds found in state-owned forests are managed in a conservatory manner, on a case by case basis, by the forestry and wildlife administrations. Community forest management agreements may be established by the communities concerned under the technical supervision of the administrations in charge of forests and, sometimes, wildlife.

In **Chad**, water and forests are governed by Act No. 14/PR/2008 on regulations governing forest, wildlife and fishery resources. This law introduces many notions of community management of natural resources and provides in particular for the reclassification of certain categories of protected areas (especially those that are not successful) into "*concerted wildlife management zones*", managed by local communities in partnership with State services and the private sector³⁸.

In the same year, two further texts were introduced: (i) Order No. 025 of 6 August 2008 prohibiting the export of wood and charcoal and the use of wood and charcoal in companies throughout the national territory; and (ii) Decree No. 1702/PR/PM/2008 establishing an inter-ministerial committee to combat environmental degradation and poaching. It thus becomes forbidden to cut down any tree located on the national territory as well as to produce and market charcoal, in order to maintain of plant cover. However, wood resources represent the sole source of energy for an overwhelming majority of the population, and offenders are liable to pay fines of up to 500,000 CFA francs. These measures have mainly been applied around large urban areas

³⁷Law No. 2006/002 of 25 April 2006 authorizing the President of the Republic to ratify the Treaty on the Conservation and Sustainable Management of Central African Forest Ecosystems.

³⁸ FAOLEX Database: <http://www.fao.org/faolex/results/details/en/c/LEX-FAOC117920>

and along a few roads and have contributed to deepening inequalities between local elites and the less well-off sections of the population (Mugelé, 2020).

Finally, it is important to recall that Order n°043/PR/2018 of August 31, 2018 on Agro-Sylvo-Pastoral and Halieutic Orientation provides for "*the setting up of participatory, concerted, transparent and efficient management systems for water bodies, forests, national parks and natural reserves*".

In **Niger**, Law No. 98-56 of 29 December 1998 containing the framework law on environmental management and Law No. 2004-040 of 8 June 2004 containing forest regulations are central to forest management. However, these texts contain numerous ambiguities or contradictions relating in particular to the definition of State forests, the classification of State and local government forests, forest concession regulations and the regulations for accessing private forests. Individuals who own forests or wooded land can exercise all the rights resulting from their title of ownership as long as their practices do not pose any threat to the balance of the environment or any danger to the public. They also must comply with the clauses relating to their property rights, in particular the obligation to develop the land. (SP/CNCR, 2018).

Access to classified forests is strictly regulated. All agricultural exploitation is prohibited, but in certain cases authorisations may be granted for cultivation in these forests. In such cases, "*cultivation contracts*" must be signed by the operators and the forestry services. The main objective of these contracts must be the regeneration of the forest concerned (SP/CNCR, 2013). In classified forests, customary rights only include the collection of dead wood, the removal of wood for agricultural tools, the harvesting of exudation products, wild fruits and medicinal and food plants, as well as any forest products that are mentioned in the classification acts. The grazing or passage of animals in classified forests is regulated. In protected forests, customary use rights include cultivation, grazing and the gathering of forest products.

As regards water, the reference texts are Law n° 98-041 of 7 December 1998 modifying Ordinance n° 93-014 of 2 March 1993 relating to water regulations and Law n° 98-042 of 7 December 1998 relating to fishing regulations. Village communities and individuals have the duty to maintain and protect water points and related facilities. Owners of water points and rural communities with priority access to waterworks that are public property have a duty to maintain them and manage them rationally. Watercourses, ponds and wells that are the property of the State or local authorities are also considered to be shared resources and may be secured by the land commissions (see above). Fishing is authorized only on the basis of a fishing permit or a customary right of use. Fishermen wishing to fish in a stocked pond must comply with the fishing rules or any collective agreements put in place by the stocker (State, local authority, concessionary community). The possibility of fishing in a fish pond must always be authorised in advance by a declaration to the administrative authorities (SP/CNCR, 2013).

Ways of accessing land and land security measures

The main land categories used in this study are defined as follows:

- Rental:** temporary transfer of the right to use land in return for a non symbolic and fixed payment whatever the harvest (either in kind, or in money, or both); it can be **seasonal** (only for one growing season and to be renegotiated at the end of each growing season, therefore a priori more precarious than annual rental), **annual** (can be renewed from one year to another more easily) or **pluri-annual**;
- Sharecropping:** the temporary transfer of the right to use land for a non symbolic payment proportional to the harvest or the income from the harvest (either in kind or in money or both) according to different modalities;
- Loan:** temporary transfer of the right to use land free of charge or involving a symbolic payment. Its duration may be limited or unspecified;
- Donation:** definitive transfer of property, free of charge (or for a symbolic cost); old agreements may lack precision on the definitive nature of the donation and become a loan;
- Purchase:** definitive transfer of ownership at a fixed cost; old agreements may lack precision on the finality of the sale and be questioned by new generations;
- Pledging:** borrowing money against the provision of a plot of land until repayment; different modalities ;
- Inheritance:** plot transferred by inheritance in a definitive manner, therefore for life.

Different ways of gaining access to land for rural actors

With a few rare exceptions, rural stakeholders who have a land title in the area under study have gained access to the land in the following ways.

"**Axe rights**", which are the **rights of the** person who clears undeveloped land, is widely recognized, as it is in most sub-Saharan African countries. It is by this means that families have been able to establish ownership of land, which is then transmitted between generations. The interpretation of this law is sometimes contentious, particularly in areas of former fallow land or in relation to the land ownership of customary chiefs. In the Fulani lamidats, however, one accepted rule is that "*if the vegetation returns to the level it had when the plot was previously cleared, it becomes free land again subject to the Lawan's authorization*"³⁹ (Seignobos and Teyssier, 1997).

Inheritance **rights according to which** family land reverts to the descendants. This practice is a major source of conflict between rights holders when there are many of them or when they have had different trajectories in their lives (e.g. influential, urbanised people who have a strong influence over other family members). These succession conflicts are multiplying in all the most densely populated areas of the 4 countries studied. It should be pointed out that under customary systems, women are generally excluded from this way of gaining access to land. But this depends on the customs. In some cases, such as in the Bousso area (Chari Baguirmi region, Chad), "*Mouroum and Ngambaye women have declared that they inherit on the same basis as their brothers*" (Ferrari, Alhascari, 2016). In Muslim families, women generally have the right to inherit, although in reality this right depends much more on the respective weights of local traditions than on Muslim law. The latter seems to be beginning to take hold locally in Chad and Niger. According to UN-Habitat (2018), inheritance is the main route for women to gain access to independent land ownership. Bron-Saïdatou and Yankori (2016) make a similar observation for Niger, where the application of Islamic law on inheritance is even "increasingly common".

In practice, the share received by Muslim women may vary, not only in terms of the percentage they should receive, but also in terms of the concrete assessment of what that percentage represents (World Bank, 2020). Muslim women are entitled under Muslim law to half of the brother's share. But in Baguirmi, the women interviewed by Ferrari and Alhascari (2016) claim to have inherited a quarter of the share received by their brother. It seems common for the wife to be entitled to one-eighth of the inheritance or one-sixth.

Very low-cost loans or rentals, which are difficult to distinguish on the ground, were already rare in Cameroon in the 1990s in a context of strong monetarization of the economy (Seignobos and Teyssier, 1997). They were mainly practised within the framework of Muslim law and were used to encourage Islamization. In the Sahelian zone in Niger and Chad, on the other hand, in 2020, **donations** and **loans** are still a common means of gaining access to land, except in flood-recession zones where productive stakes are high and more generally in areas of high land pressure. There, donations and open-ended loans are giving way to short-term loans for both natives and migrants. For example, in one of the departments of the Guéra province in Chad, renewable 5-year loans have become widespread (World Bank, 2020). This was also a very important access modality in northern Nigeria before the crisis began.

Land **leasing**, on the other hand, had already become common practice in the 1990s in Cameroon (Seignobos and Teyssier, 1997). Rented land has been mentioned in the literature at least since 1978 in Chad (Magnant, 1978). *Karal* or vertisol land is much sought-after for the cultivation of sorghum transplanted in the off-season: a "*race for land*" was observed as early as the 1950s in order to clear it for cotton cultivation during the rainy season. **Land was first sold** in this area in the 1990s, as well as on the banks of Lake Chad (Magrin, 1996).

The monetarisation of these land transactions of varying duration spread to the cotton zones. In the most densely populated sectors of northern Cameroon, a real "*land market*" can be observed in the plains at the beginning of each agricultural season, where cash crops are grown (Seignobos and Teyssier, 1997), and is more recent in the Mandara Mountains, despite the fact that it has been more densely populated for a long time (Hallaire, 1991; PCD, 2011b). In these areas (for the target communes of Resilac, mainly the Komadougou Yobé valley, Lake Chad, the plains around Maiduguri, the Diamaré plain and the Mandara Mountains), plot rental practices are common, as is the sale of land. **Rental** prices vary according to soil type,

³⁹ Cf. infra the section on traditional power.

fertility and cultivation history. Contracts (mainly oral) are established for **one year** and cases of plot recovery after chemical or organic amendment are common. Under pressure from the Société de développement du coton (Sodecoton), which is keen to build up the loyalty of its members, a **two-year** rental contract (tacit agreement between lessor and lessee) has become general practice for the cultivation of a plot of cotton in order to benefit from fertiliser the following year for cereals. Monetised land transactions are also developing in the other three countries, particularly in areas where land pressure is high or where there is significant agricultural potential.

Pledging also exists and most often ends in the "*confiscation*" of land due to the inability to repay the borrowed sum. This practice increases the land holdings of traditional chiefs and traders. In the Cameroonian cotton zone, as well as in the *karal*, **land is purchased** under the control of traditional chiefdoms, even if they officially prohibit it and do not have the legal right to do so. City dwellers and other traders began to show interest in agricultural land which resulted in increased income for village chiefs, who are the main sellers of land (Magrin, 1996; Gonne et al, 2011; Watang Zieba, 2019). Traditional authorities are also involved in land sales in Chad and Niger. In Chad, it has reportedly become a widespread practice for customary chiefs to take 10% of the sale price. This share is even frequently requested from both the buyer and the seller. In many cases, village chiefs, canton chiefs, sultans, where they exist, and sometimes imams or intermediaries receive a share of the sale price (World Bank, 2020).

In northern Nigeria, demographic pressure and climatic deterioration has increased demand for certain productive types of soil, particularly around hydro-agricultural developments, wetlands and peri-urban areas (Bertoncin and Pase, 2012; Lemoalle and Magrin, 2014; Magrin and Pérouse de Montclos, 2018).

Formal land tenure security measures and their impact

In Niger, the impact of formal land tenure security systems is generally very low. We have already mentioned that only 2 per cent of rural plots have been issued an administrative act by the land commissions (Republic of Niger, 2019). With regard to land titles issued by the administration of estates and cadastre, a study (Bron-Saïdatou, Yankori, 2015) estimated that between 2005 and 2015, about 8,000 titles of more than 10 hectares were granted out of a total of about 32,000 since 1906. While there has been an increase in the issuance of these permits in recent years, the total number of permits issued remains very low. In Chad, the situation is similar: only about 7,000 land titles have been issued (World Bank, 2020).

Although Cameroon is less advanced than West African countries in formally securing access to land⁴⁰, more work has been done to secure access to commonly-owned natural resources, particularly in the context of development projects. Measures to secure pastures and livestock tracks have been put in place (Labonne *et al.*, 2003; Raimond *et al.*, 2010; Koussoumna Libaa *et al.*, 2011), however no quantitative assessment has been carried out of these either at the national level or at the level of the northern regions. Nor have we been able to collect data on the security of pastoral resources in Chad and on land tenure security in Nigeria.

In Niger, the inventory carried out for the EGFR (SP/CNCR, 2018) mentions the securing, between 2000 and 2016, of 1,081 corridors totalling 17,454 km, 771 grazing areas, pastoral enclaves and rest areas totalling 305,554 ha and 29 classified and protected forests totalling 13,865 ha. In eastern Niger (Diffa region), mention should also be made of the charters for the use of water points, for which we have no figures.

Semi-formal land tenure security measures

Below is the very clear description produced by Philippe Lavigne Delville of the⁴¹ notion of semi-formal security devices.

⁴⁰ The initiatives undertaken in this direction since the 1990s by the Diocesan Development Committee of Maroua and the Rural Development and Land Management Project in Northern Cameroon to promote "*small papers*" and their formalization led to the reactivation of the Consultative Commission provided for in the law, but not to a revision of the land law and its application (Seignobos and Teyssier, 1997; Seignobos, 2010).

⁴¹ Lavigne Delville *et al.*, 2017, reprinted by Philippe Lavigne Delville :

"Faced with the development of market transfers - and in particular of purchase and sale - and the conflicts they generated, local actors have set up forms of "local formalisation" based on a written contract explaining the transaction, most often co-signed by witnesses, and frequently by village or administrative authorities.

These contracts are not explicitly recognised by land laws, which consider that only plots with a "legal existence" (through registration or other provisions), which therefore have a title deed, can be legally sold. However, they are not illegal and are subject to private contracts, freely drawn up by the parties, who are subsequently bound by them. They play a real role, in the sense that they partly fill the void produced by land policies which, by failing to take account of reality, relegate the vast majority of transactions outside any formal framework.

They go beyond the simple private contract, as long as they also have a signature from a state actor, which is often the case. Faced with the problem posed by this lack of a solution to the issue of transactions involving untitled land, local administrative authorities (territorial administrations, communal administrations) have indeed developed responses. By being part of the contract, by "affirming" it by signing it to make it official, local administrative authorities have integrated the principle of written contracts into their administrative practice, thus giving them a "semi-formal" or "formal-informal" character: the administrative validation of contracts is not part of legally framed arrangements, but involves public authorities, according to fairly standardised procedures".

It should be added that in the countries covered by our study, particularly the three French-speaking countries, the formalization of these contracts very often involves the customary authorities.

In northern Cameroon, the issue of land tenure security was tackled by charitable organisations (Diocesan Development Committee, which intervened mainly in the Mandara Mountains and the areas of population migration in the cotton plains of the Sudanian zone) and Sodecoton (a semi-state company) through a series of development projects undertaken in the 1990s and 2000s (Teyssier et al., 2000; Seignobos, 2010). These projects had two aims: securing common land and regulating farmer-breeder conflicts (described above), which led to the reactivation of the consultative commission, and the securing of land transactions carried out locally and not recognized in the law. Thus, "*small papers*" have become common practice, particularly for land purchases⁴²:

- **the certificate of sale** signed by the traditional chief (*djaoro*, *lawan*) and the seller; the chief takes 10% of the amount of the transaction (amount to be specified in the certificate);
- **the relinquishment of customary rights** has no legal value but serves as a guarantee to the buyer, and it is signed by the sub-prefect.

As in Chad and Niger, land sales are often carried out by the actors who have the largest areas of land (traditional chiefs who distribute the land among users, heads of families, large farmers in pioneer agricultural front areas). They are also carried out by farmers whose production factors (land, capital, labour) are no longer balanced or by people who are in urgent need of money. In the latter case, these sales are referred to as "*distress sales*".

This was an important source of income for traditional chiefs in Cameroon in the 1990s, where there was a strong decapitalisation of land by customary authorities (Seignobos and Teyssier, 1996). In the particular case of conversion of agricultural land in peri-urban areas, the law provides for the subdivision of land by the Land Registry Department and the payment of benefits to the village chiefs when it is sold to individuals. Direct sales by village chiefs are prohibited, but are common practice and can be contested by the population if they were not informed⁴³.

https://anthropo-impliquee.org/2019/03/16/mars-2019-la-question-de-la-securisation-fonciere-rurale-en-afrique-de-louest/#_ftn10

⁴² In the absence of these "*small papers*", the purchase takes place in front of witnesses in exchange for the payment of the money "*for the shoes*", or without witnesses by family heirs who often do not have the right to sell (often in connection with pawning). In both cases, the risk of subsequent contestation is high.

⁴³ See, in particular, the case of direct sales disputes in Katoual.

International agreements and their difficult implementation

The Lake Chad Basin region is marked by the boundary between the Economic Community of West African States (ECOWAS) and the Central African Economic and Monetary Community (CEMAC). Created in 1964, the Lake Chad Basin Commission⁴⁴ (LCBC) is an inter-State consultation institution responsible for promoting shared management of the basin's environmental resources in favour of sustainable development. It has a regional vision and strategic action plan (2010) specifically for the sectors affected by the security crisis (2018). For rural areas, its actions are based on the existing regional legislative frameworks, some of which are relevant to the four countries, especially those concerning transhumance and water management.

The movement of livestock across borders is governed by texts within ECOWAS and CEMAC, the Lake Chad Basin Commission (LCBC) and the Agreement on the Transhumance Corridor between Chad, Niger, Nigeria and Cameroon, respectively. The texts channel transhumance along the most accessible routes, but they are difficult to implement and they are showing their limits in the context of the crisis that has led to the closure of borders and profoundly disrupted the regional system. In 1998 ECOWAS adopted Decision A/DEC.5/10/98 on the regulation of transhumance among its Member States. It determines the conditions for the movement of livestock (International Certificate of Transhumance - CIT) and the reception of transhumant livestock and imposes the obligation to watch over the animals. It stipulates that any conflict between transhumant herders and farmers must be subject to prior conciliation. In the event of non-conciliation, the dispute is settled by the competent courts. In 2003, ECOWAS then adopted Regulation C/REG.3/01/03 on the implementation of transhumance regulations between its Member States. The regulations provide for: i) the elaboration and implementation of sub-regional programmes for the development of pastoral areas or the creation of cross-border infrastructures in favour of transhumance; ii) the implementation of pilot actions of a cross-border nature with a view to developing new methods of concerted management of rangelands and reception areas; iii) the establishment by ECOWAS Member States of an information and communication system, a pastoral management programme and a ministerial committee to monitor transhumance, iv) the creation of a regional observatory on transhumance and a regional strategy for the management of pastoral resources. ECOWAS notes the poor compliance of the legal provisions of its member States with these community texts (Coraf, World Bank, ECOWAS, 2015). The transhumance map produced for this study shows the extent to which the Lake Chad region is marginal in the region, and how little is known about transhumance routes.

In 2011, at the continental level, the African States adopted Decision CL/DEC.618 (XVIII) related to the African Union (AU) Framework Policy on Pastoralism. This policy notably advocates in favour of supporting pastoralism as a way of life and a production system, recognising the importance of livestock mobility, regionalizing approaches and promoting risk prevention to the detriment of emergency responses.

The Water Charter (CBLT, 2012) was adopted in 2012 and started to be implemented just before the beginning of the security crisis. It provides for resource conservation measures through the protection of part of the aquatic domain and the harmonization of regulations on the issuing of permits, fishing periods, authorized techniques and vessels, as well as dialogue prior to any water-related development or water withdrawal by one country that has repercussions on the others. State fishing zoning and concessions are not explicitly advocated but could be established on this basis for better fisheries management (Lemoalle, 2014). Before the insecurity and state of emergency decrees in some parts of the lake caused fishermen to leave and stop fishing, regulations were inadequate due to the unpredictability of hydrology and fishery resources and the lack of means to enforce the rules, the overlapping of national and traditional authorities for access to fishing areas and resources, and the poverty of fishers for whom "*fishing is a last resort for subsistence for those who have lost their livelihoods due to natural (drought) or human (insecurity or war) causes*" (Lemoalle, 2014, p. 385), which makes them neither solvent nor, in many cases, controllable.

The Water Charter covers the whole basin, but does not bind the States, which can decide on developments or policies that affect water resources without having to use the CBLT as a consultative body. While the attention of the CBLT has long been monopolized by the project to transfer water from the Oubangui-Chari River to supply Lake Chad, a long-standing project that has been shelved several times and put back on the agenda in the context of the fight against climate change, the security issue has recently become a primary concern for the regional organization (CBLT, 2018a and b). Thus, the priority pillar "*security and human rights*" aims to consolidate progress in the area of security and the application of national legislation and to support

⁴⁴ <http://cblt.org/fr>

the management of self-defence groups and the relationship between civilians and the military. In the medium term, the question of the regulation of renewable natural resources at the local and regional level (water resources at the basin level) remains to be addressed in order to limit, especially in Lake Chad, a deep socio-economic crisis that is "*transforming what was once a highly polarising oasis into a crisis and emigration zone*" (Magrin and Lemoalle, 2019).

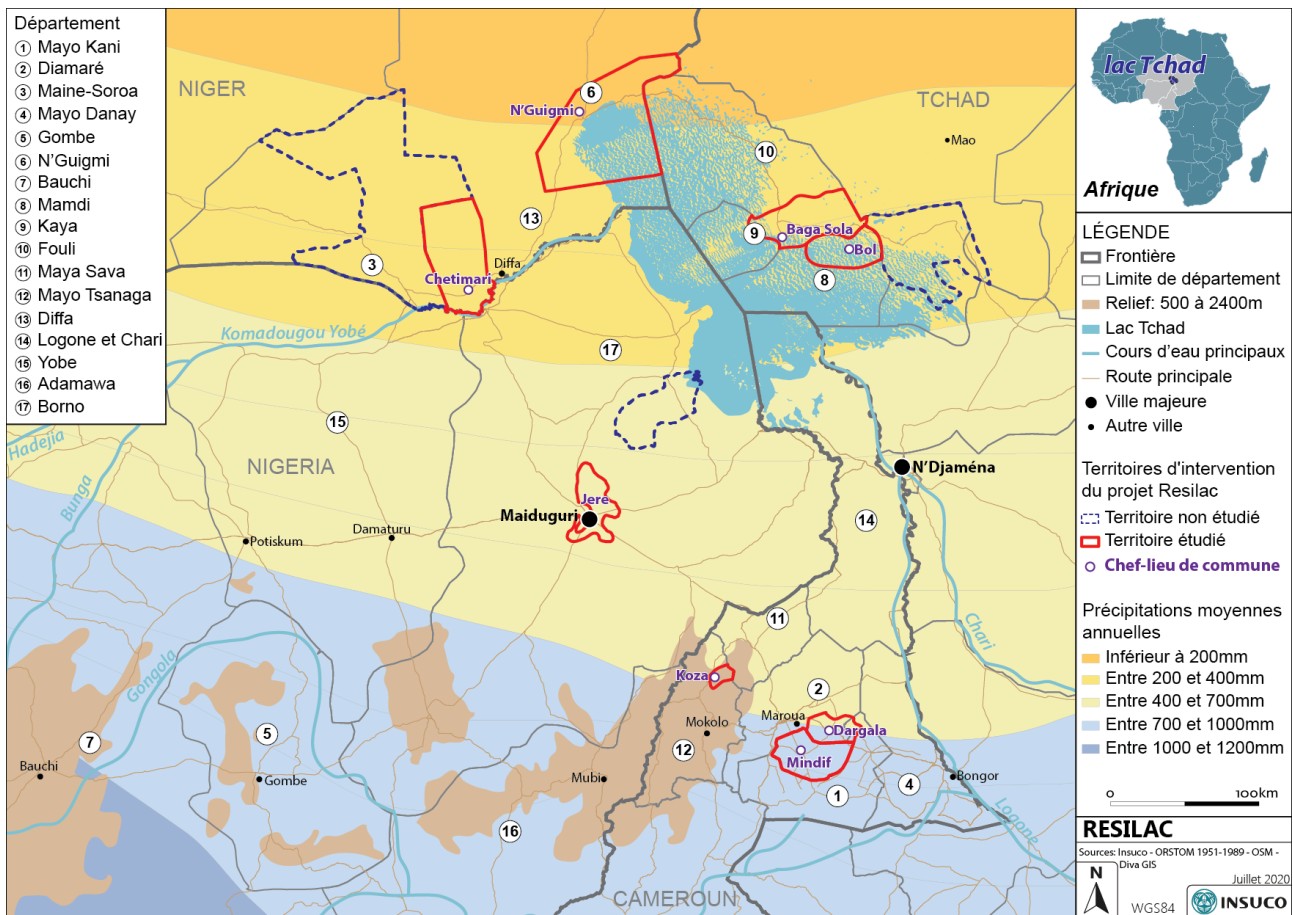
In chapter 1 we show that despite the contrasting territorial systems between the Nigerian federal state, which is essentially decentralised, and the highly centralised French-speaking states where there are varying degrees of decentralisation, land management remains essentially in the hands of local actors at the customary and village levels. Although new legislation has helped different actors in different countries, in practice access to natural resources and the regulation of conflicts are, for the most part, still managed by local customary and administrative authorities. Niger stands out for having established local land management, as early as the 1970s, through the creation of land commissions, and the introduction of innovative measures to secure customary land rights. However, like other West and Central African countries, there have been very poor quantitative results in terms of securing the rights of rural actors in all four countries. To make up for this deficiency, actors sometimes resort to informal or semi-formal mechanisms for securing land transactions: documents are thus drawn up on a sheet of paper or on forms in order to keep track of transactions and, more often than not, they are given a stamp of approval by an authority, most often a customary authority.

The diversity of land issues in the territories targeted by the study

The territories targeted by Resilac are part of a regional system which, before the security crisis, was an exporter of agricultural products and provider of permanent and seasonal jobs. These were focused around Lake Chad and the two large regional metropolises (Maiduguri and N'Djamena), which are centres of consumption and services (Lemoalle and Magrin, 2014). The security crisis provoked by Boko Haram has seriously disrupted this system by excluding the most productive wetlands where there were a lot of jobs (Lake Chad, Komadougou Yobe, transplanted sorghum plains in Nigeria) and by closing the borders, which has blocked food production on the one hand and regional complementarities on the other. The displacement of large numbers of people and the shift to a food aid regime in the most affected areas is profoundly changing livelihood systems and has indirect impacts on areas further away from the crisis epicentre in northern Nigeria (Magrin and Pérouse de Montclos, 2018).

Land issues and inequalities in access to natural resources are seen as important parameters in explaining the foundations of the security crisis. It also has many repercussions that reinforce the land insecurity of refugee, displaced and returning populations, but also of host populations who receive an influx of people with whom the territory's resources must be shared. Among the territories targeted by Resilac, we have chosen 9 which allow us to analyse this situation according to various levels of intensity of the impacts of the crisis, as well as the diversity of the natural resources considered, the local land tenure systems and the national legal frameworks.

From the heart of the crisis in Nigeria to the sectors in the three neighbouring countries, where there is less or no impact, the 9 territories chosen for this study illustrate different land issues. They are located in a climatic gradient (map 2) from the Sudano-Sahelian domain (800 mm of annual rainfall in Koza, Mindif and Dargala) to the Sahelian domain (less than 300 mm in N'Guigmi), and are characterised by contrasting natural resources and land tenure systems (map 3).



Map 2: Location of the territories under study according to the climatic gradient

The commune of **Chetimari** in Niger is situated between the floodplains along the Komadougou Yobé, and the cleared land where most of the villages are located. The former have been used for many generations, are frequented in the dry season by herders and are managed by the Kanouri Manga chieftaincy. The cleared land is cultivated during the rainy season, and seasonal workers travel from there to work in the market gardens in the valley. Insecurity, the arrival of displaced populations and the closure of the border with Nigeria, as well as the ban on all activities in Komadougou Yobe under the state of emergency, have blocked this local system (see Chapter 4).

The commune of **N'Guigmi** in Niger is located, in part, on Lake Chad and is controlled by the Kanouri Manga chieftaincy. It is also a commune directly impacted by the crisis: the strong growth of the multifunctional system, observed in the context of the re-watering of the northern basin since the end of the 1990s and the increase in tidal surfaces throughout the lake, has been wiped out by the presence of armed insurgent groups in Lake Chad since 2015 and by the state of emergency. The populations have been expelled from the lake since 2015 and are concentrated on the roads outside the commune or on the outskirts of the town of N'Guigmi.

The canton of **Nguelea** and the commune of **Bol** in Chad, controlled by the Kanembou chieftaincy, were among the territories indirectly impacted by the security crisis until the last attack by armed groups on 23 March 2020. The latter stopped the timid resumption of activity observed since 2019 and the return of some families to the islands. The departments of Foulï and Kaya, where the commune of Baga Sola is located, have been declared a "war zone" since 26 March 2020 (Cf. Decree 0380). The state of emergency decreed on 27 March expels all the civilian population from the lake. However, the two territories chosen for this study, the canton of Nguelea (in the commune of Baga Sola) and the commune of Bol are located outside the combat zone.

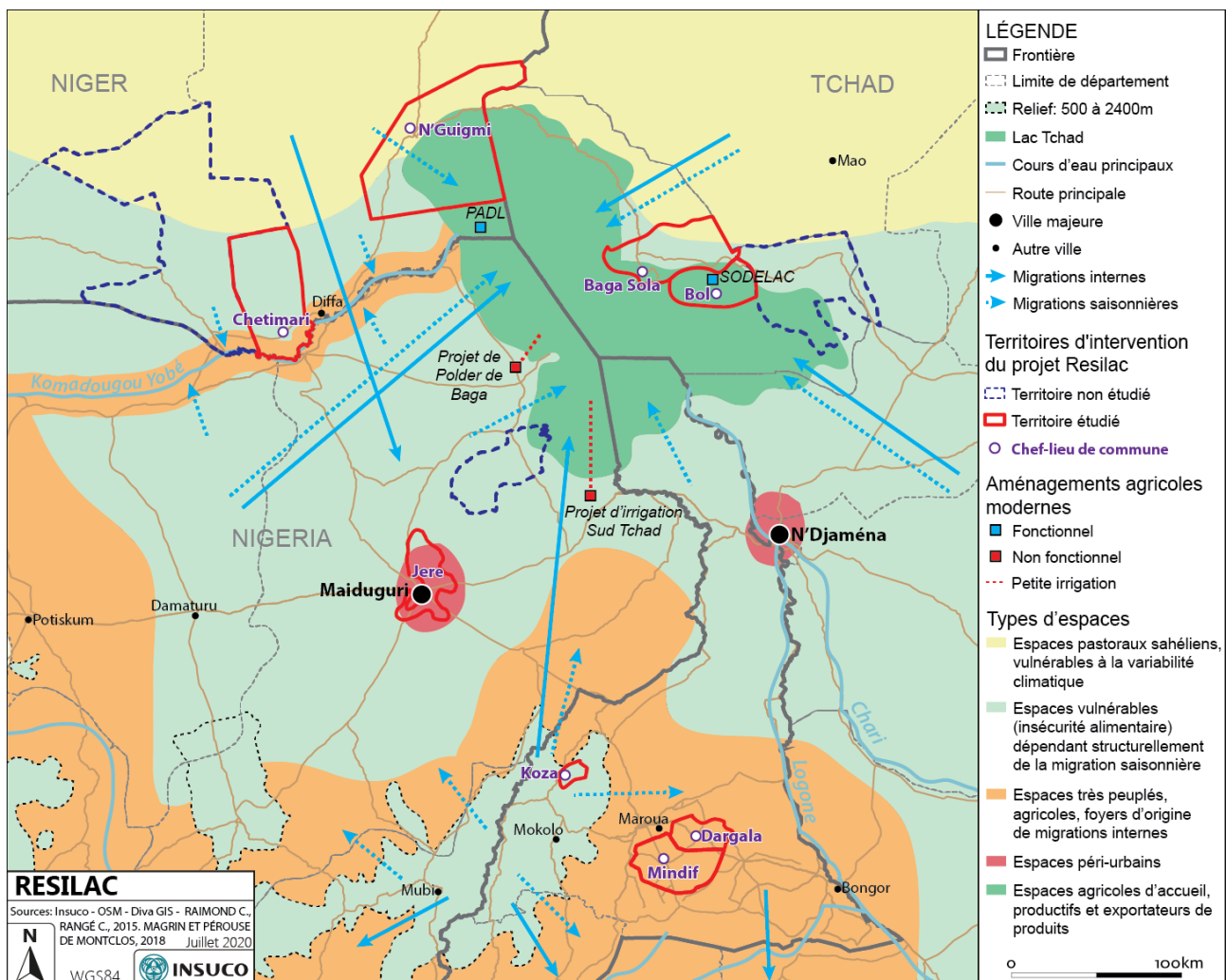
The commune of **Koza** in Cameroon is also part of the territories indirectly impacted by the crisis although the land issue is totally different. Historically, this is a densely populated mountainous area, where natural resource management is a collective survival issue anchored in rules and practices. The Mafa company that occupies this region manages the relationship between people and nature without intermediaries, and the former "*chefs de massif*", who had a moral role, have no administrative role whatsoever. The arrival of people fleeing areas

of high insecurity on already overburdened land not only challenges the local system of governance already undermined by colonial innovations, but also the ecological sustainability of livelihood systems.

The two Cameroonian communes with little or no impact from the security crisis (**Mindif** and **Dargala**) are representative of the floodplain and livestock systems of northern Cameroon. Each is led by a Fulani lamidat who manages the land and the inhabitants. Land issues concern, on the one hand, the flooded lands where the transplanted sorghum is produced and where the herds roam in the dry season, and, on the other hand, the management of rainy season pastures essential to the regional, extensive and mobile livestock farming system. These areas receive few displaced people but could be subject to pastoral pressure from livestock farmer groups who that bypassing insecure areas.

In Nigeria, the territories that were chosen are at the heart of the crisis. The land tenure issues in the periphery of **Maiduguri** are very different from those in the 8 other territories under study, firstly because it has the peri-urban characteristics of a city of more than 2 million inhabitants, but also because of the access to land resources of internally displaced populations living in camps located in the city's suburbs. The LGA of **Jere**, which almost encircles Maiduguri, also has very specific land tenure issues, as it has recently been partially pacified after having been constantly insecure for a long time. It therefore provides an opportunity to study the way in which land tenure systems are being reconstructed as a result of the numerous departures and returns imposed by armed groups on the village populations.

The following presentations are based on existing literature on these territories and therefore do not all include similar sub-sections.



Map 3: Location of the territories studied in the regional pre-crisis security system (2014)

At the heart of the crisis: the outskirts of Maiduguri and the LGA of Jere, Nigeria

For this study, we do not have the detailed reports on population, exploitation systems and land use planning that we have for the other territories in Chad, Niger and Cameroon. This short presentation is based on the summary written by the Nigeria national expert, supplemented by the information collected on the periphery of Maiduguri and Jere in the regional synthesis reports (Lemoalle and Magrin, 2104; Magrin and Pérouse de Montclos, 2018), as well as the Resilac baseline study. For the history of insecurity in this area, the emergence of Boko Haram and how it has evolved, we refer the reader to the abundant bibliography that exists on this subject.

Population

The town of Maiduguri, before the security crisis, was one of the main regional markets in the Lake Chad basin and one of the major religious centres in West Africa, with major Koranic schools. This city is also the historic site of residence of the *Shehu* (prince) of Bornou, heir to the empire of Kanem-Bornou. It has experienced significant growth since the middle of the 20th century and had a population of 900,000 in 2013 (Lemoalle and Magrin, 2014). Its function as the main regional market places the city at the crossroads of communication routes, making it an arrival point for many products and a departure point for exports to the south of the country.

The local government territory of Jere (Map 4), in the state of Borno, covers an area of 169 km² (⁴⁵MLS, 2008). Its total population should have reached almost 300,000 inhabitants in 2019, applying an annual growth rate of 2.8% to the 2006 census figures. However, this figure does not take into account the number of IDPs. The territory shares its borders with the LGA of Mafa in the east, the Metropolitan Council of Maiduguri in the north and the LGA of Konduga in the south. In the peri-urban context of this large African city, the inhabitants' main occupations are crop farming, trade and service activities (many civil servants), while the main ethnic groups are the Kanuri and Shuwa Arabs, with other smaller groups such as the Hausa, Bura and Fulani, as well as many migrants from both within Nigeria and from abroad (BOSADP, 2008).

Since the beginning of the security crisis in 2009, the regional metropolis of Maiduguri has been attracting displaced people arriving from all over the rural area of Borno State. Since the attacks by armed groups on villages in the Lake Chad region in 2014, people have arrived in large numbers to take refuge near the city. Many refugee camps have been set up by the state and managed by large national or international organisations. The internally displaced population was estimated at more than 1,475,600 people in Borno State, largely located in the Maiduguri plains (IOM, 2019). In the town of Maiduguri and its immediate periphery alone, there are more than 130 refugee camps (Ocha, 2018). As soon as one moves away from the safe perimeter of the town and its close periphery (10 to 20 km), the security situation becomes very unstable and activities related to the exploitation of natural resources become uncertain.

This situation has significantly changed the function of the city of Maiduguri, which, since 2015, has become a platform for humanitarian aid, which has become its main resource (Magrin and Perugia de Montclos, 2018).

Environment

Maiduguri and Jere LGA (Map 4) have a dry and hot climate for most of the year, with annual rainfall ranging from 500 to 700 mm and characterised by high variability and intensity (NMA, 2008). The rainy season generally runs from May to October, with low relative humidity and short rainy spells. The topography is a low plain with generally sandy soils, short grasses and thorny shrubs. The main river in the region is the Ngadda, which has its source in the flood waters of the Yedseram and Gombole rivers and flows through the area where overflows occur. This has led to the formation of the Jere Bowl and the Ngadda Channel, which are identified as river channels sandwiched between a series of pond and swamp complexes (Nyanganji, 1994). These environments are generally referred to as *Fadama*, which means a lowland plain, a floodplain or valley bottom plain around a river, suitable for irrigated crop farming and livestock farming. In the clay plain, transplanted sorghum (*masakwa*) crops were also widespread before the crisis.

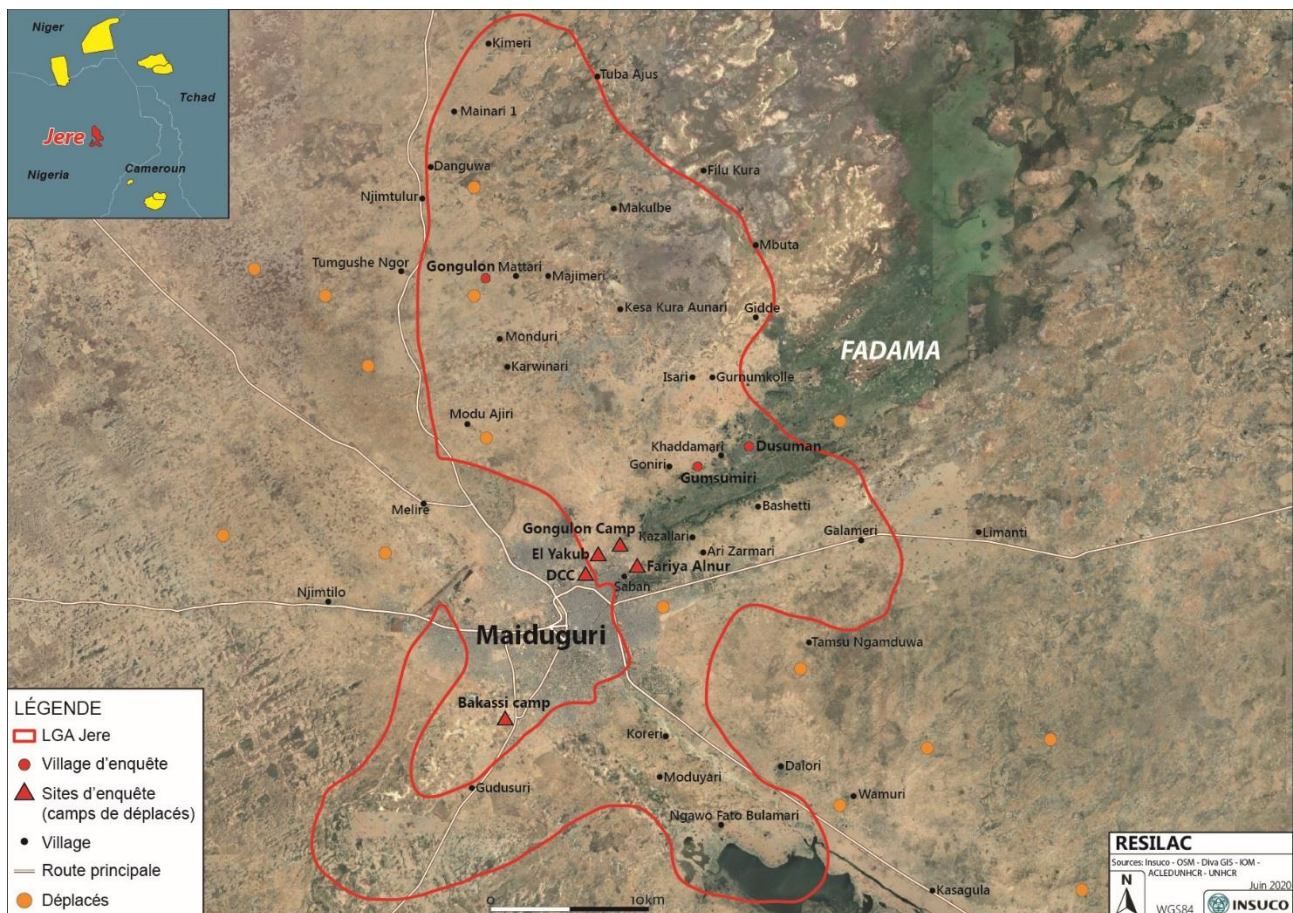
⁴⁵ We have chosen a larger area for calculating population densities in Table 3, which corresponds to the boundaries given for the mapping, bearing in mind that these boundaries are highly variable, as for the other communes, from one source to another.

Activities

We did not collect information on activities before the crisis, because it has been going on for 10 years in the LGA of Jere and the outskirts of Maiduguri and therefore activities have been very much disrupted by insecurity and the arrival of many displaced people. Our information is based on the data collected in the survey, the results of which are presented in Chapter 3. We can simply state here that there has been a very sharp reduction in agricultural activities on the one hand, and a major reshuffling of transhumance routes, which have had to deal with armed insurgent groups for almost 10 years, on the other.

Access to natural resources

The local land tenure system, as in the rest of Borno State, articulates customary and decentralised state power. Customary transactions are recognised by the *Boulama* (village chief) and then validated by the *Lawan*. A certificate of occupation can then in theory be issued by the local government at the LGA level. As has been observed on the shores of Lake Chad, this last step is not put into practice a great deal, and the Bornouan customary authorities retain a great deal of influence (Boureima *et al.*, in Lemoalle and Magrin, 2014). However, we do not have precise studies on Jere's LGA that allow us to outline the pre-crisis situation, as we have done for the francophone territories below.



Map 4: Jere LGA (Nigeria)

Municipalities directly impacted in Niger: N'Guigmi and Chétimari

Two communal development plans (PCD) were drawn up in 2016 and 2018 as part of the Disaster Risk Management and Urban Development Project (PGRC-DU) and set out the development challenges for the communes of N'Guigmi and Chétimari. It should be noted here that these monographs present a very interesting assessment of the impacts of climate change. They are also based on the monograph on the Diffa region (Rep. of Niger, 2008) and the reference report produced as part of the Diffa long-term ecological and environmental monitoring observatory (ROSELT, 2009). A development plan for the Diffa region exists and specifies the major objectives for the coming decade (Diffa Regional Council, 2015).

We will keep humanitarian categories to distinguish displaced populations (refugees, returnees), knowing that locally they are grouped together under a common designation "*in gudun hijira*", literally "*the people of the Hegira*", which refers to the notion of exile, in reference to the flight of Mohammed's companions from Mecca to Medina, but also to exile, separation, and breaking up, particularly of family and social ties (Oumarou et al., 2017).

The commune of Chetimari: influx of displaced populations and closure of the Komadougou Yobe wetland on the border with Nigeria

The Commune of Chetimari, between the communes of Maïne Soroa in the west, N'Gourti and Kabalewa in the north, Gueskerou and Diffa in the east, shares in the south a border of 20 km with the State of Borno in Nigeria. The border is marked by the Komadougou Yobe River, whose seasonal regime provides less than 10% of Lake Chad's water supplies. Before it was deserted due to insecurity and the state of emergency declared in 2015, this border area was the economic centre of the commune: irrigated crops (mainly peppers and rice, and more recently a wide variety of market garden crops) have been developed there for several decades for the major regional consumption centres, particularly in Nigeria. These activities meant that the commune was fully part of trade and labour exchanges at the regional level.

The small town of Chétimari is the capital of the commune and the canton ruled by the traditional Manga chieftaincy (Kanouri). It is located 28 km from the town of Diffa and close to National Road 1 which continues to Niamey more than 1,300 km away. The local departments of the Ministries of Agriculture, Livestock, Environment, Health and Education are located in the town, as well as the National Guard, the Gendarmerie and Customs. As elsewhere in Niger, the municipal council has not been renewed since 2011. In 2016, it had 18 members (including three women). The *chef de canton* and the two Chétimari MPs are ex officio members in an advisory capacity (PCD, 2016a).

Population

The municipality covers an area of 2,566 km² (map 5) with a population estimated before the crisis at nearly 65,500 inhabitants, i.e. a population density of 27.5 people/km², slightly higher than the average density of the department of Diffa at 22.8 people/km² and 4.1 people/km² at the regional level (RGPH, 2012). The banks of the Komadougou Yobé were more populated than the north of the commune. The population was composed of Manga, Kanouri, Fulani, Hausa and Mohamid Arabs. Demographic pressure was particularly high on the banks of the Komagoudou Yobe, where farmers and herders conduct their activities, and where there is a very high level of environmental variability linked to the vagaries of the climate. Before the crisis, the seasonal mobility of agricultural and pastoral populations was very high between the humid valley and the hinterland. Part of the population also found opportunities outside the commune, towards Lake Chad when possible and the large cities in Niger (Diffa, Zinder, Maradi and Niamey) and Nigeria (PCD, 2016a). Finally, the transhumance movements of herders to neighbouring communes in Niger and across borders to Nigeria, Cameroon and Chad in search of pasture and water complete the picture of population mobility before the crisis.

The settlement of displaced populations since 2015 has profoundly changed population distribution in the commune. Refugees from Nigeria arrived first, followed by those displaced from the shores of Lake Chad, who "*followed the tar*" into the most accessible areas and those best secured by the army (Oumarou et al., 2017). In 2015-16, the humanitarian sector set up the camps of Gagamari, N'Gourtouta and Zawaram. In 2020, UNHCR calculated that there are 32,158 refugees, 9,696 IDPs and 5,317 returnees, mainly located along the national road (Map 5). The state of emergency measures from 2016 (see § 2.7.2) have notably banned trade in fish and peppers, but also closed the commune's main market in Gagamari, which is one of the two main markets in the valley.

Vegetation

The very high population growth rate explains the change in land use. Cultivated areas have increased while dry and riparian forests have decreased between the periods before and after 1990 (PCD, 2016a). In the *Kaola* plain, about 15 km north of the road and on clay-loam soils, vegetation is fairly dense. The commune has "*significant potential consisting of three classified forests (Gagamari, Malaminari and Kalgounam) totalling 980 ha and protected forests: doumeraies, natural gommaraies (70,000 ha), riparian formations along the Komadougou River*" and numerous shrub and tree species, some of which are in danger of disappearing, in the absence of natural regeneration, under the effects of climatic hazards and anthropic actions (Ibid.). This observation will certainly need to be reviewed in view of the good rainfall years observed since 2000, which have notably caused several exceptional floods (in 2001, 2010, 2012, 2016, 2019) and the attainment of flood levels not observed for a very long time.

Activities

Rainfed agriculture, outside the Komadougou Yobé valley, consists mainly of millet and cowpea, with low yields that are closely dependent on the rainy season. These crops are neglected (often left to women; Luxereau and Diarra, 2008) in favour of irrigated crops in the valley (pepper, chilli, rice, onion, maize, parsley, sorrel, okra, barley, lettuce etc.; PCD, 2016a). Several irrigated perimeters have been developed and are managed by the National Office for Hydro-Agricultural Development (ONAHA) in the villages of Douro 1, Douro 2, Walada, Wandori and Dabogogon Kayawa; four have been rehabilitated by the International Fund for Agricultural Development (IFAD: Special Country Programme II) and the fifth built by the Diffa Local Development Support Project. In addition to these developments, 105 ha were developed between 2012 and 2016 for small-scale irrigation (PCD, 2016a). Numerous individual and collective schemes exist outside of these schemes financed by the state and donors for irrigated farming.

The development of hydro-agricultural facilities suffers from numerous constraints, as observed in the entire Komadougou Yobé valley (Bertoncin and Pase, 2012). These are related to the degradation of the river regime in connection with the numerous hydro-agricultural developments and the irregularity of rainfall, on the one hand, and the inadequacy of supervision and maintenance, on the other. The organisation of producers into cooperatives and the reuse of the facilities by farmers nevertheless allows production for export to other regions of Niger and Nigeria. Women participate in transplanting and harvesting, for which they are paid in kind. Some women are also full-fledged producers and members of cooperatives.

Extensive livestock farming is the second activity in the commune. The PCD (2016a) estimates the livestock population at 173,188 head of cattle and 57,930 small ruminants, distributed among almost all the inhabitants of the commune. The majority of small ruminants are reared by women throughout the commune. The cattle were located on the pastures in the north of the commune and outside the Komadougou Yobé valley, where the herders only went to water the cattle by using the 117 recorded passageways (only 4 are marked), and to use the dry season pastures from January to May. Despite the density of rainfed and irrigated crops along the valley, the valley was seasonally crossed by pastoralists who stayed part of the dry season in the Nigerian rangelands and returned to rainy season pastures in the Manga or Dillia rivers in Niger (Anderson, 2008). This international mobility explains the number of livestock tracks, the security of which is crucial for transhumant pastoralists given the increase in agricultural activity. In addition, bourgoutières (*Echinochloa stagnina*) were already being marketed by sedentary farmers before the security crisis. They kept them for their own animals or for sale to livestock breeders. Access to the valley and these resources has been banned by the state of emergency since 2015, posing major problems for both mobile and sedentary livestock systems. Due to the intensity of the attacks by armed groups, this ban is respected by all farmers, but it is defied by some herders whose animals are particularly dependent on green pastures during the dry season (see Chapter 4).

In terms of infrastructure, the commune has 10 vaccination parks and corridors, 6 slaughter areas, 2 livestock markets (separating small and large ruminants) and 1 feed shop. The main livestock market is that of N'Guel Kollo, located about 30 km north of the village of Chétimari. This infrastructure was functional in 2016 but needed rehabilitation. As for crop farmers, the difficulties noted by the herders concern the weakness of agricultural support services, particularly the lack of veterinary services and access to credit. Insecurity (theft of livestock, access to pastures, closure of cross-border transhumance routes) is a major problem for livestock farmers in the commune.

The collection of forest products was a fairly important practice in the commune in 2016. Common species were easily available, notably doum, acacia, balanite and tamarind⁴⁶. These resources are located in the valley of the Komadougou Yobé and in the canopy of trees in the north of the commune. In addition, the two *doumeraies* and *gommeraies* which cover 70,000 ha of the commune are exploited (PCD, 2016a).

⁴⁶ The most commonly used species are the doum (*Hyphaene thebaica*), whose dried or floured fruit is used to make sweet millet cakes or milk porridge; the palms are used to make mats, vans, ropes and baskets; stipples for the construction of houses and sheds, acacia as firewood, and *Balanites aegyptiaca* (for the consumption of the pulp and the kernel of its fruit; the use of wood for construction and fuel, and for making handles and other accessories; roots for shoring when drilling traditional wells). The fruit of the *Diospyros mespiliformis* is consumed directly or processed into flour to make porridge; that of the tamarind tree (*Tamarindus indica*) is also consumed (sucked) or the juice is removed to make porridge.

Small game hunting is practised in the traditional way, but it is not very common today. According to CDP (2016a), however, fishing was common practice in Komadougou Yobe before the crisis. Catfish (*Clarias* sp.), carp (*Tilapia* sp.) and *Heterotis niloticus* were caught. The great diversity of fishing equipment mentioned in the CDP (longlines, link nets, traps, casting nets and seines) testifies to the vitality of this artisanal and remunerative activity, which nevertheless depends on the existence and scale of the floods (Luxereau *et al.*, 2011).

The Gagamari market is one of the two major markets of Komadougou Yobe in eastern Niger and an important relay for exports to Nigeria. It was officially closed as part of the state of emergency measures in May 2016.

Access to natural resources

From a land tenure perspective, the pre-crisis situation corresponds to that described for Niger (Chapter 1). Until the 2000s, access to plots was still relatively easy because land was still available and the loan and rental system was relatively accessible for some crops such as irrigated peppers (Luxereau and Diarra, 2002). Pepper farmers were very numerous in all villages, with land acquisition mainly by inheritance, less often by clearing land with the agreement of the village chief. SCI mentions land sales in conjunction with the spread of small-scale private irrigation, but the 2008 study by Diarra and Luxereau did not yet include this. In the valley, at that time, loans (in exchange for 1 to 3 bags to the lender at the time of harvest⁴⁷) were more common than rentals and sharecropping. Sharecropping contracts were diversified (Diarra and Luxereau, 2008): the field owner could provide the inputs (the cost of which was deducted from the profits) and could take part in the work with profit-sharing at half or one third. The field owner could also borrow the inputs from a trader (his 'boss', *mai gida*), who received half of the harvest in return. The field concerned could be exploited by its owner or a sharecropper.

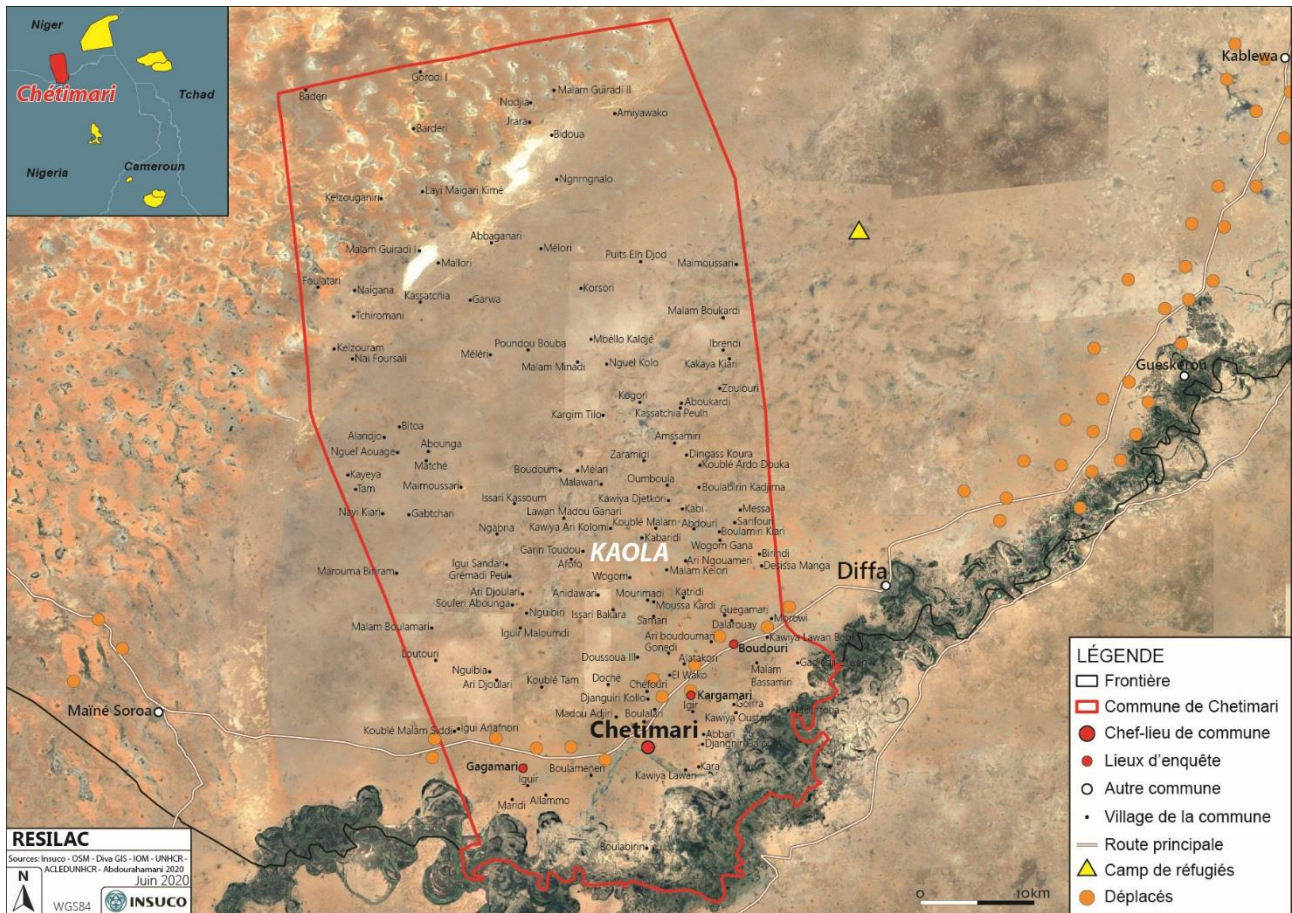
Other modes of access to land were donation, between relatives or allies, and leasing of flooded and irrigated land for a period of 1 to 3 years. Although not rare, these cases of leasing were much less important than the direct tenure mode.

Conflicts between crop and livestock farmers had the same causes as elsewhere in the Sahel: the disappearance of cattle tracks and livestock resting places due to the increased number of agricultural plots, the disruption of transhumance rhythms and paths, and the systematic collection of straw (which has become more pronounced since 2015 in the context of the crisis). No information is given in the CDP (2016a) on the terms and conditions of access to pastures and the crossing of the valley by transhumant herders.

In Chetimari, Cofocom has been present since 2011 but no information is given in the 2016 SCP on its actual activity in the municipality. Cofocom's capacities are currently being strengthened by the Pan-African Network for Peace, Democracy and Development (REPPADD)⁴⁸. In practice, land tenure affairs are managed locally by the boulama, then by the chief of canton in the event of non-conciliation at the local level.

⁴⁷ Due to lack of information, it is not possible to distinguish whether they are loans or cheap rentals.

⁴⁸ <http://www.reppad.org/appui-a-la-gouvernance-locale-des-ressources-naturelles/>



Map 5: Municipality of Chetimari (Niger)

Communal land issues

Among the constraints identified in the Chetimari CDP are, of course, insecurity and its direct consequences in terms of reduced agricultural and pastoral production. In 2020, land issues are still concentrated on the banks of the Komadougou Yobe in anticipation of the official return of activities. Flood recession crops, irrigated crops, livestock farming, trade and fishing are often replaced by cutting wood, fodder and manual labour (Caremel and Sani, 2019). The areas where people have withdrawn to, in the hinterland, which, in the popular imagination were associated with the tasks of precarious populations or with 'cast-related activities', have become places where a 'variety of survival-based activities' are being developed (Caremel and Sani, 2019). Following the effective mobilisation of civil society, mainly orchestrated from Niamey (Tchangari and Diori, 2016), the risk of land grabbing in this area for the installation of the Saudi company Al Horaish has been averted since 2018. However, a project to develop irrigated perimeters outside the insecurity zone on the banks of the Komadougou Yobe was under study to revive local production systems (Magrin and Pérouse de Montclos, 2018). If it is implemented, such a project will require significant arbitration in terms of land redistribution and management and will not solve the problems of watering and grazing for transhumant herders.

The commune of N'Guigmi: hosting a population expelled from an intensive production system in Lake Chad

In the department of N'Guigmi, the urban commune of N'Guigmi borders Chad to the east. It is close to the communes of Bosso in the south, Kabléwa in the west and N'Gourti in the north. In the 1970s, the town of N'Guigmi was located on the edge of the lake, but no longer since the drought years (1970-80), which greatly reduced the flooding of the northern basin for almost two decades. The more regular and seasonal return of water since 1998, although it remains more than 30 km from the town, has favoured the establishment of a multi-active and multifunctional system adapted to the uncertain rhythms of floods (Raimond *et al.*, 2014), supported by a hydro-agricultural development programme in Niger State (Abdourahamani, 2013). The

productive and land tenure related issues are to know what possibilities and conditions exist for the inhabitants to return to the villages on the islands, given that until March 2020 groups from the Iswap faction of Boko Haram still occupied the two basins north and south of Lake Chad.

As in Chetimari, the small town of N'Guigmi is both the capital of the commune and the traditional chiefdom (Kanouri Manga). It is located about 1500 km from Niamey on National Road 1, which has been partly asphalted since 2012. The road, not yet asphalted, then continues towards Chad, bypassing the lake to the north. The municipal council has 11 members, including 3 women and 2 ex officio members. The same team has been in place since the last elections in 2011.

Population

Nearly 48,000 inhabitants live in the municipality (RGPH, 2012) on a total surface area of 39,200 km² (map 6). The population density is therefore very low (1.8 people/km²), even though the annual growth rate is 3.9%⁴⁹ (equivalent to the average rate in Niger). The ethnic groups are, in order of numerical importance, the Kanouri, Boudouma, Fulani, Arab, Toubou and Haoussa.

Before the crisis, the population was spread between the town of N'Guigmi (15,000 inhabitants; RGPH, 2012) and the villages on the former shores of the lake and in the lake. The indigenous Boudouma people have occupied the islands for a very long time and engage in crop and livestock farming (with the Kouri cows that depend on the lake area) and fishing. Two waves of migration have marked the history of this territory: that of fishermen from the 1950s onwards, then that of migrants, more numerous, who came from other regions of Niger to participate in the development of the recession lands following the return of the waters at the end of the 1990s. As on the banks of the Komadougou Yobé before the crisis, there was significant seasonal migration from villages on the former banks of the lake (Magrin and Lemoalle, 2014). There was also considerable movement to the Chadian part of the lake, in the northern basin but also in the southern basin in years of bad flooding. This movement concerned activities, but also exchanges of products and social relations (Magrin and Pérouse de Montclos, 2018).

Since the expulsion of the Niger basin from the lake in 2015, the population has been concentrated in and around the town of N'Guigmi, and along the axis towards Diffa where several camps have been set up by humanitarian organisations. The town has therefore become depopulated, even though it will be home to almost 35,000 internally displaced persons, returnees and refugees in 2020 (UNHCR figures).

Natural environment and vegetation

Almost all of the communal territory is located in the northern basin of the lake, which represents two thirds of the Nigerien part of the lake. The flooding rhythms and levels that determine the availability of natural resources in the northern basin of the lake are now documented (Lemoalle and Magrin, 2014). During the dry period, a dense forest settled at the bottom of the basin with an invasive species, *Prosopis sp.*, which now hinders vehicle or pirogue traffic during the impoundment periods. It covers 140 ha divided between the communes of N'Guigmi and Bosso (PCD, 2018). Other species are concentrated in the southern part of the municipality: *Salvadora persica*, *Acacia raddiana*, *Balanites aegyptiaca*, *Prosopis juliflora*, *Commiphora africana*, *Calotropis procera* and *Acacia senegal*. The herbaceous carpet is mainly composed in the south of *Cenchrus biflorus* and *Eragrotis tremula*, which are well valued for cattle feed, and *Panicum turgicum*. Outside the lake basin on sandy soil, tree, shrub and herbaceous vegetation is rather scarce and is limited to a sparse cover of *Balanites aegyptiaca*, *Acacia raddiana*, *Leptodania pyrotechnica* and *Salvadora persica* (PCD, 2018).

Activities

Crop farming, livestock farming and fishing were the three main activities of the inhabitants of the commune, often associated in the same farms and conducted successively according to the availability of resources. Rainfed agriculture is practised on the sandy soils around the villages and the town of N'Guigmi, mainly with millet and cowpea crops with short cycles (between 40 and 50 days) and an average yield of 300 kg/ha (PCD, 2018). Irrigated crops are grown in the market gardens north of the town, where a total of 100 ha have been developed. Only 6 gardens (55 ha in total) were cultivated in 2018, with the same species as in the Komadougou Yobe valley (pepper, sorrel, okra, lettuce, potato, tomato). The production is intended for local sale. Flood recession crops were grown before 2015 in the lake basin, mainly maize, sorghum, cowpea, some wheat, pepper and various legumes. The Tchungoua polder in the lake basin to the south of the commune

⁴⁹ Magrin and Perugia de Montclos (2018) indicate a growth rate of 4.3% per year for the Diffa region.

(see Map 6), in an area that was disputed with the commune of Bosso, has not been cultivated or maintained since the population exodus in 2015. The end of this production has not only led to the impoverishment of the producers, but also to a reorganisation of the flow of agricultural products on a regional scale (Magrin and Pérouse de Montclos, 2018).

Animal husbandry is practised by all the inhabitants of the commune and extends over the entire territory (PCD, 2018). Pasture is available in abundance all year round, often as a complement to crop by-products. For several decades, it has attracted transhumant herding groups who avoided the swamps in the wetter period before the 1970s (Anderson and Monimart, 2009). In the context of a strong regional increase in livestock numbers and climatic constraints, lake pastures have thus become a strategic off-season resource for some herders. The CDP (2018) does not propose figures for the livestock population, which it considers to be '*very large and composed of cattle, sheep, goats, camels, horses and asses; however, small ruminants clearly dominate the numbers*'. In practice, this quantification is made very difficult by the security situation and the fact that a large number of herders with their herds have fled outside the insecure zone, i.e., outside the commune. Similarly, it is difficult to estimate the livestock trade when N'Guigmi commune was a major exporter to neighbouring countries (Nigeria and Libya; PCD, 2018). During the rainy season, the sale of curdled milk in the markets of Doro, N'Guigmi and neighbouring communes (Kabléwa, Bosso) represents an important source of income for women.

Fishing was a flourishing activity in the Niger part of the lake before the security crisis (Kiari Fougou, 2014). Since the arrival of the first fishermen in the lake in the 1950s, fishing techniques and equipment have changed a lot and have adapted to the flood levels (Kiari Fougou and Lemoalle, 2019). The abundant catches were evidence of high fishing productivity and a growing fishing capacity, with an export trade circuit to Nigeria. The sudden closure of fishing areas and markets led to several years of defensive measures, which has had an impact on the size of catches since fishing resumed in 2019.

The collection and sale of wood and charcoal from *Prosopis* is a relatively old activity. The products are sold in N'Guigmi and then transported to the domestic markets of Zinder and Agadez (Kiari Fougou, 2014). This activity has increased since the arrival of the IDPs, for whom it is their main activity because of the rapid income it generates (Oumarou *et al.*, 2017). The other species also provide wood for fuel, lumber, services and for traditional medicine (PCD, 2018). They are also used as overhead grazing for animals. These species are currently used by all the inhabitants of the territory, transhumant herders, IDPs and host populations. The PCD (2018) mentions the existence of users who are unaware of cutting techniques and degrade the resource.

Commerce is also a widespread activity in the municipality, practised by a multitude of retailers and some wholesalers in the markets of N'Guigmi and Doro. Although marketing channels have changed a lot at the regional level since the security crisis, the market of N'Guigmi is not the one that has suffered the most: a major transit centre for goods between West and Central Africa and the Maghreb (Ngaressem *et al.*, 2014), it benefits on the contrary, for certain products, from the bypassing of Lake Chad on the route from Chad to Nigeria (Chauvin *et al.*, 2018). Local trade, often conducted by women, concerns basic necessities, notably condiments, tea, sugar, cereals, clothing and cosmetics (PCD, 2018). The export of smoked fish, live animals, hides and skins to the markets of Malam Fatori, Maïdougouri and Baga in Nigeria was halted in 2015 by the state of emergency measures (see Chapter 3). Trade has resumed towards the major cities of Niger (Chauvin *et al.*, 2018). Camels continue to be exported to Libya (PCD, 2018).

Access to natural resources

As in Chetimari, land affairs generally remain managed at the level of the canton chief. The particularity of the commune, according to the PCD (2018), is that the Fulani, Arab and Toubou communities living on the communal territory are attached to a tribe outside the commune, or even outside the department, which can complicate conciliation during farmer-livestock conflicts. A Cofocom also exists, but the PCD does not provide details on its functioning in the field.

Unlike the commune of Chetimari, where the occupation of the valley is long-standing and entirely controlled by the chieftaincy, a contemporary interpretation of customary rules can be observed here that is comparable to the southern banks of the southern basin of Lake Chad (Chad and Cameroon in particular), based on a system that is, however, less favorable to non-natives, perhaps because of stronger chieftaincies, but this point needs to be verified. In the northern basin, villages have been created by extending the powers of the Kanouri and Boudouma chieftaincies over land that has only been cleared and occupied by crop farming and livestock farming since the 1970s. This movement has resulted in very precarious access to land for migrants, which

varies according to the period. "(...) access to land is through inheritance, loans and the transfer of usage rights under variable conditions. An indigenous person, Kanouri or Boudouma, retains the right to use the plot of land allocated to him by the *boulama* as long as he cultivates it, and can thus give his plots of land as an inheritance. Conversely, migrants have unfavourable conditions of access to land, whether the right of use has been transferred to them by the *boulama* or by a private farmer. His plot is in fact taken back from him after one or two years, once the heavy work required to recultivate a fallow plot has been carried out. This insecurity of land tenure prevents migrants from settling permanently at the lake. The only settled populations are the indigenous Boudouma and Kanouri populations (Abdourahamani, 2011). (...) According to custom, land cannot be alienated and remains under the direct responsibility of the *canton chief*." (Boureima *et al.*, 2014: 494).

For fishing, national and international rules (Water Charter, CBLT) apply, even though they are not adapted to a system that depends on an uncertain and variable water resource (Kiari Fougou and Lemoalle, 2019). Before the crisis, fishermen were very reluctant to comply with the regulations because they were 'poorly adapted and therefore poorly explained' and therefore 'difficult to apply in practice, which means that they are mainly used to justify 'arrangement' transactions, i.e. to claim unpopular prebends from fishing activities' (Lemoalle, 2014: 378).

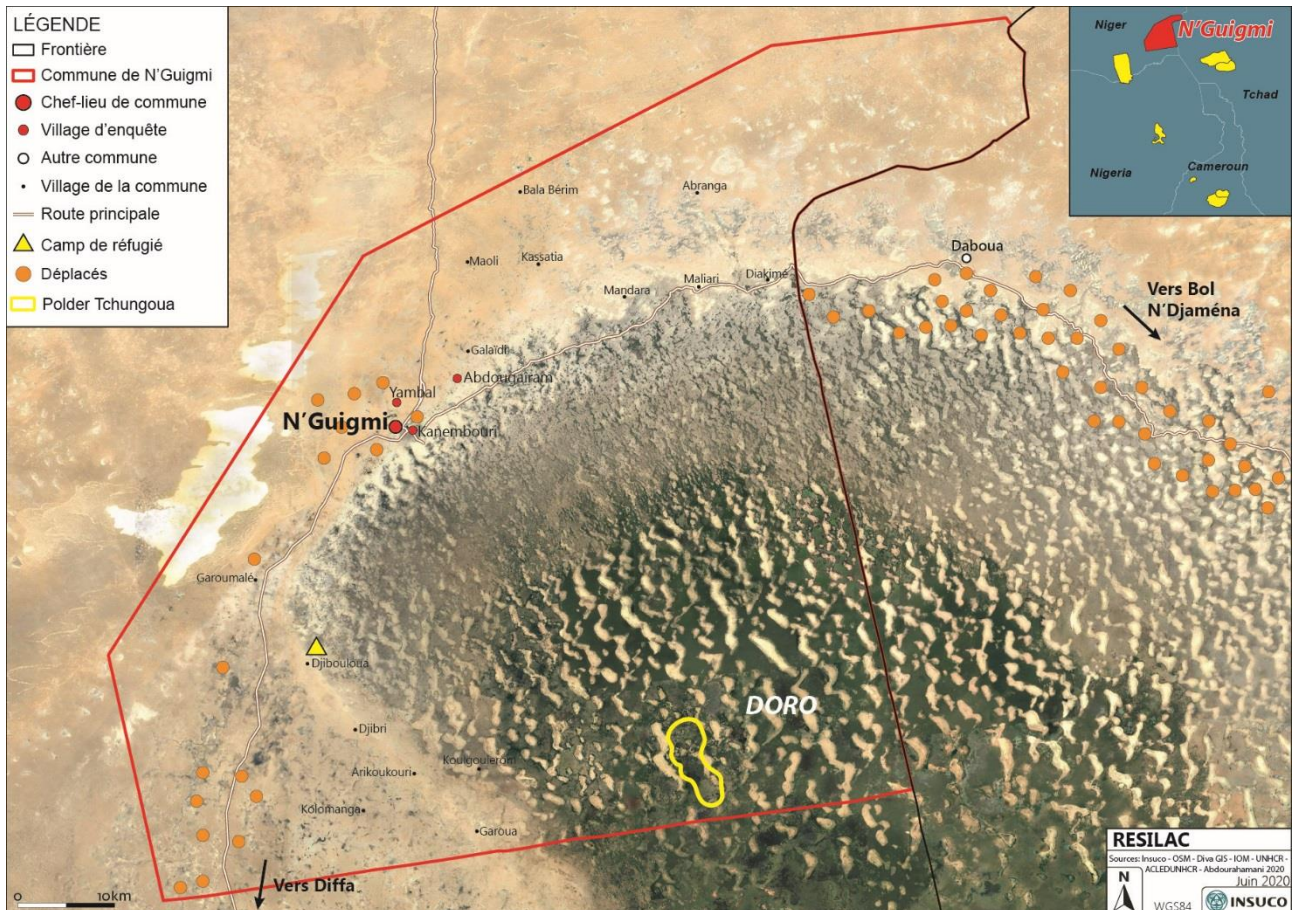
The PCD (2018) refers to conflicts related mainly to disputes over agricultural plots (especially market gardening) and access to pasture (without specifying which ones). It does not, however, mention the state of emergency or the illegality of human activities in the lake, nor the presence of armed groups that threaten the security of the inhabitants (which is always implied by the term "*insecurity*").

Land issues in the municipality

As in the commune of Chetimari, the issues at stake in the commune of N'Guigmi are mainly in the wetland. The population is waiting for the Governor, who decides on state of emergency measures, to authorize a return to Lake Chad, as a sign that security conditions have improved (Omarou *et al.*, 2017). However, the presence of Boko Haram around Lake Chad maintains significant pressure at the local level by controlling access to certain areas of the lake basin, sometimes in return for a fee (Magrin and Pérouse de Montclos, 2018), and at the national and international levels through its violent attacks against armies and civilians, which maintain insecurity and state of emergency laws.

For the town of N'Guigmi and the villages under pressure from the displaced population, the 2018 PCD mentions a lack of plots of land that creates overcrowding with serious consequences on hygiene and health conditions, but also in terms of loss of income from land tenure because it deprives the commune of significant revenue from the sale of plots of land. (CDP, 2018: 29). This also highlights the issue of the sustainability of the population settling away from the lake, along the N'Guigmi/Diffa axis, and the use of the agricultural land.

Finally, the PCD lists the sources of conflict, most of which are linked to access to natural resources and governance (access to water, land, grazing land and transhumance routes), and also to the poor management of local affairs in a context of decentralisation. These points remain to be clarified in the context of the security crisis.



Map 6: N'Guigmi commune (Niger)

Territories indirectly impacted in Chad: the commune of Bol and the canton of Nguelea (commune of Baga Sola)

The two chosen territories in Chad are located in the area of the archipelagos of the southern basin of Lake Chad. This area has long been occupied by the Kanembou on the banks and the Boudouma on the islands, and has long been developed into polders where rainfed crops are grown on the sandy dunes and flood recession crops in the interdune areas. These techniques are now well known (Bouquet, 1990; Pase and Bertocin, 2012; Raimond *et al.*, 2014; Mugelé, 2015) and are promoted by donors in projects that aim to support the transition from aid to development. The Resilac project is one such project, but it has been faced with problems of insecurity: part of the activities in Chad were at a standstill in January 2020. The particularly deadly attack on 23 March 2020, which killed around 100 Chadian military personnel, led to a declaration of war by Chad on Boko Haram and a greater involvement of Chad in regional military engagements. For the people living on the lake, the⁵⁰immediate consequence was their expulsion to the shores to allow military operations to take place. They have thus joined the displaced and refugee populations who have settled in the vicinity of the town of Bol and along the Bol/Baga Sola and Bol/Massakory roads since 2015.

The land issues of the Lake region are to be considered from the polders, access to pastures and fishing waters. The stakes, equivalent in both territories, are analysed after a short presentation of the two study areas.

⁵⁰ It is difficult to specify the population displacements in the two communes of Bol and Baga Sola, as the figures published by the IOM and Ocha are given by department or province. One of the most accurate sources is a density map showing between 20,000 and 30,000 IDPs in Bol and over 40,000 in Baga Sola (IOM, 2019).

The commune of Bol

Bol is one of the ancient cities of Chad. It is at the same time the capital of the Lake region, the department of Mamdi, the sub-prefecture of Bol and the canton of Bol. It had nearly 30,000 inhabitants in 2009 (RGPH, 2009), as well as the main attributes of a small town of these administrative levels in Chad: prefecture and sub-prefecture, town hall, schools and high school, hospital, court, market, offices of the main administrative services (including the buildings of the Société de développement du lac - Sodelac), gendarmerie, police and, for this border town, customs. Since the arrival of the first refugees from Nigeria in 2015, the small town of Bol has grown considerably and is now home to many NGOs and humanitarian aid agencies. The town is still connected to N'Djamena (327 km from Bol) by a very degraded road between Bol and Ngouri, but which is in better condition towards Massakory (185 km) and Massaguet (251 km). To the east, Baga Sola is 70 km away via a track where insecurity had already increased significantly in January 2020, restricting the movement of the population and humanitarian workers who used to move around relatively freely between 2016 and 2019.

The territory of the municipality of Bol was defined from the canton of Bol (map 7) and the Kanembou sultanate of Bol. The difficulties of the Chadian administration in dividing the lake, particularly between the canton of Bol and the neighbouring cantons (Nguéléa, Kangalom, Baderi), explain the lack of mapping of this part of the lake, as well as the lack of clarification of land rights on the passes and islands that are the most productive from the point of view of fishing, grazing and trade (Boureima *et al.*, 2014). Within the lake, the Boudouma Sultanate claims control over the islands and fishing territories. Its geographical proximity to armed insurgent groups explains the offensive territorial claims since the beginning of the security crisis. This territory has been classified as a "*red zone*" under the state of emergency measures and is located south-west of the commune of Bol and the canton of Nguelea.

In the municipality of Bol, the first municipal elections were held in July 2012 to elect the municipal councillors, who elect the mayor and his two deputies every 3 years (Magrin and Pérouse de Montclos, 2018). As elsewhere in Chad, the mayor's office has no role in land management, but has been actively involved in the management of displaced people and refugees settled on the outskirts of the town of Bol and on the territory of the commune.

There are about a hundred villages in the commune. Mapping and estimating the population of this rural commune is difficult since the boundaries of this administrative unit are disputed by neighbouring communes. We provide a non-contractual version of this map from the maps available in the bibliography (map 7).

The commune of Baga Sola

Among the areas of intervention selected by the Resilac project in the Lake Province, we have chosen, for security reasons, the Nguelea 1 canton which is located in the commune of Baga Sola. The canton of Nguelea 2, whose head of canton is related to that of Nguelea 1, and which has separated for power-sharing reasons, is located in a neighbouring commune, in the insecure zone, where it was difficult to go in February 2020 to carry out surveys. Below, we present the commune of Baga Sola, for which we have information about its history, its population and its production system based on the bibliography and a recent evaluation in connection with the municipal development plan drawn up in 2016 (PCD, 2016b).

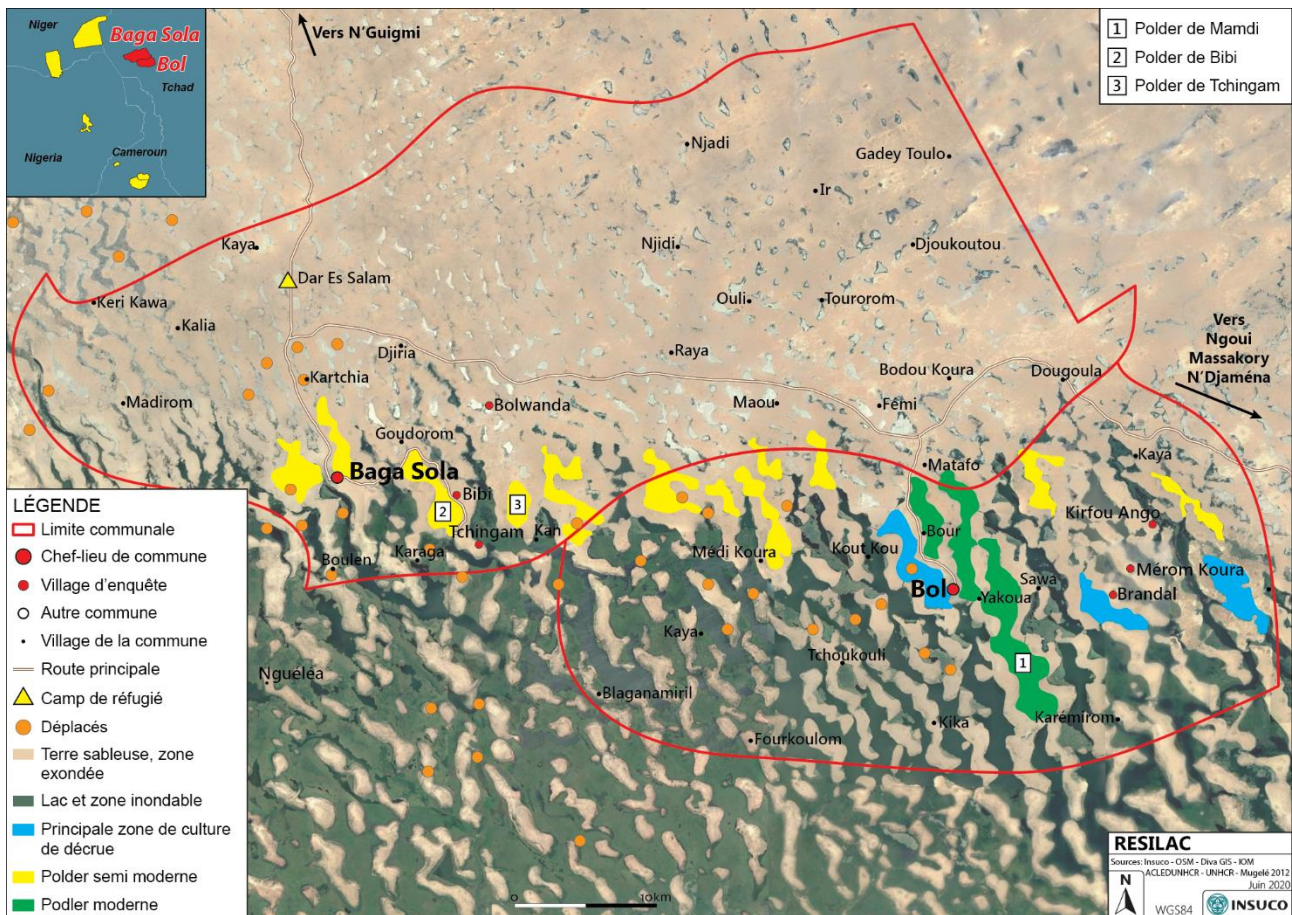
As in the canton of Bol, the demarcation of the commune is difficult. We have reproduced the limits from an IOM map (map 7). It is indirectly affected by the crisis because it hosts displaced, refugee and returnee populations, but does not include "red zones" where armed groups intervene directly, which are located in the south-west of the commune. However, isolated events, such as the attack of 10 October 2015 in Baga Sola, have affected certain localities in the west of the commune, far from the Nguelea 1 canton selected for this study, which is located in the east of the commune.

The town of Baga Sola is the capital of the department of Kaya, the sub-prefecture of Baga Sola and the commune of Baga Sola. It has a population of less than 10,000 inhabitants and, in addition to the town hall and the sub-prefecture, it is the seat of the local livestock, environment, education, agriculture and health departments. Since 2015, due to the insecurity linked to non-state armed groups, several humanitarian organisations have taken action in the area and have local teams, including Coopi, Oxfam, Action Against Hunger (ACF), World Vision, Resilac, Secadev, CRCS, World Food Programme (WFP), Unicef, IRC, and others⁵¹.

As in Bol, the majority of inhabitants are Kanembou. They arrived on the shores of Lake Chad in search of areas suitable for crop farming and livestock farming. The lake was occupied by Kotoko and Boudouma people. In the Kanembou language, *Baga Sola* means *Baga/Bord* and *Sola/Fruit*. The Kanembou therefore settled on the banks of the lake and live off its products (PCD, 2016b).

In addition to the numerically smaller Kanembou, Boudouma and Kotoko populations, other populations have arrived more recently. The commune also includes Arabs, Boulala, Haoussa, Sara, Kanouri, Ouaddai, Hadjarai and settled Fulani, who have arrived at different times, often in connection with droughts. In addition, there are groups of Arab, Fulani, Goran and Kreda herders who seasonally frequent the pastures. The population was estimated to be 38,884 inhabitants in 2009 (RGP2, in PCD, 2016b).

⁵¹ These organisations are also represented in the city of Bol.



Map 7: Communes of Bol and Baga Sola (Chad)

The creation of polders and land management: controlled development

In the archipelago area, the lake's digitations have been built over a long period of time. The traditional polder is a Kanembou technique dating from before the colonial period. It consists of a traditional dyke (wood, reeds and sand) filling in the outlet of an interducting depression to retain the flood water for crops that grow in subsequent stages as the water evaporates (wheat, maize, market garden crops such as onions, tomatoes, vegetables and sweet potatoes). Fruit trees are also cultivated. They vary in size and covered 2,130 ha in 2012 (Mugelé, 2012) out of 120,000 ha of cultivatable land (P-Sidrat, 2012). There were about twenty polder in 2013 (Raimond *et al.*, 2014).

The land is owned by the families who have developed the land, and ownership is transmitted by inheritance and managed by the Kanuri customary authorities. The allocation of plots is under the authority of the Mara-Bla (polder chief), who is charged by the Maï (canton chief) with sharing the land among the villagers, particularly among the families who participated in the construction of the first polder dike, while taking into account the size of the families. Newcomers do not have a priority right to polder land, but a sharecropping contract can be established with the Maï. Levies taken from the crops obtained by all the farmers in the polders, as well as the Maï's control over the workforce (particularly for the reconstruction of the dikes every 10 years), have long limited cultivation in the polders. With the shrinking of the lake since 1970, the old developed areas have been abandoned in favour of modern facilities. New flood-recession areas have been created in the archipelago occupied by the Boudouma, who were already claiming control of it at the beginning of 2010, well before the security crisis.

Sodelac, which was integrated into Chad's *Agence nationale d'appui au développement rural* (Anader) in 2016, intervened in the aftermath of independence (1967) to modernise facilities and production systems with the aim of making this lake region self-sufficient in food and exporting to other regions of Chad. However, the political and military unrest between 1979 and 2008 limited investments to a few polders with total water control

("modern" polders, notably that of Bérin covering 800 ha developed after 1985, then that of Mamdi covering 1800 ha with funding from the African Development Bank) and partial water control ("semi-modern" polders, notably 1000 ha developed in Ngouri and 1650 ha in Doum between 1998 and 2005) (Ngaressesm and Magrin, 2014).

The modern polders, which are few in number but cover large areas, consist of a heavy construction of dikes, dams or canals with dewatering of the ground water, which ensures year-round irrigation for double cropping. With complete water control, they are very similar to irrigated perimeters. Technical support provides agricultural supervision and the supply of inputs. In 2013, three polders were functional on 2,000 ha.

Semi-modern polders require less investment because they operate by submersion, gravity and without a pumping system, with controlled flooding thanks to a sluice gate system in the dam, which allows the polder to be returned to water after evaporation. This technique has been implemented in 13 polders over an area of 6,000 ha by Sodelac. They can be found in Méléa, Klakola, Bibi, Broum Tchouloum¹, and Djouboulboul in particular. Closer to the traditional system, they are also more flexible and less expensive than modern polders.

As a state-managed area, the land in the modern and semi-modern polders becomes the property of Sodelac. It hands over the use of the land to farmers in return for payment and managed the land until 2016, with a lot of inequality between local populations and urban elites (especially civil servants) which led to many conflicts (Mugelé, 2012). The canton chief also collects a fee on polder land within his territory. Since the early 2000s, land pressure has led to land being rented and sold by private individuals despite this being prohibited by the canton chief, and these agreements not being recognized by national law. In 2012 (Mugelé), the sale prices were not known, but the rental price was between 30,000 and 40,000 CFA FRANCS per hectare per agricultural season.

In particular, recurrent land conflicts in modern polders forced farmers to exploit land in other areas, on rainfed and flooded land⁵². These are located in the arms of the lake and are riskier to farm than in the polders, because if there is an early flood, all the crops are exposed to flooding. They are also highly dependent on climatic variations and hazards. They can be found on the eastern shore of the lake (map 7), in Yaola, Talia, Somi, Souda in particular.

Access to pastoral and fishing resources: the Boudouma claim on the open waters and the islands

The Lake Province is also a large livestock area, which is comprised between three main complementary resources: the dry pastures of the Sahelian zone outside the lake, the by-products of agriculture and the wet pastures in the lake. Faced with the large increase in cultivated areas, livestock farmers exploit the uncultivated interstices in the lake in agricultural zones, then move further and further into the lake depending on the intensity of cultivation and the rate of recession, as well as livestock rearing techniques and the health of the herds (Anderson and Monimart, 2009; Rangé *et al.* 2014).

Access rights to these pastures depend not only on seasonality and location, but also on the access rules set up by the Boudouma and Kanembou Sultanates. Of all the lake's populations, the Boudouma are the only indigenous people who are pastoralists. Even before the security crisis, the Boudouma wanted to maintain a monopoly on access to certain islands that they use as pasture, against the use of other herders (Fulani or Arabs). Conflicts were therefore already numerous before the security crisis, but rarely deadly, between the different Boudouma communities and Fulani and Arab pastoralists (Boureima *et al.*, 2014). The pressure from other pastoralists in this area had become all the more important as the herds were more numerous and pastoral resources were becoming scarce in the context of climate change in the Sahel. Moreover, after the extension of the areas usable for crop farming and livestock farming in the 1980s and 1990s, due to the withdrawal of lake water that characterises the Petit-Lac stage, the reduction in the amount of exempted land during the last wetter years (1998-2020) has intensified conflicts (Platte, 2001).

As in the northern basin, the presence of insurgent groups in the lake has caused an unprecedented situation of insecurity and profoundly disrupted activities. Entire sectors have been deserted. The Boudouma have remained within the lake, and have often been suspected of alliances with terrorist groups. Inhabitants have

⁵² These lands are also known locally as "faux-polders".

left due to attacks by armed groups who their fishing, livestock and agricultural products. The lake area of the southern basin was controlled by armed groups from 2013 onwards. They levied taxes for access by the few fishermen and herders who chose to brave the insecurity and prohibitions (Magrin and Pérouse de Montclos, 2018: 179). From 2013-14, populations from Nigeria, Cameroon and the Chadian part of Lake Chad took refuge on the shores of the lake between Bol and Daboua (70 camps and villages; *op. cit.*, p. 172).

Unlike the Nigerien part of Lake Chad and the Komadougou Yobé valley in Niger, Chad has allowed returns: by 2017, almost 40,000 people had decided to return to their villages in the islands south of Bol and Baga Sola, half of them households with dual residence between insecure areas in the lake and safe areas on the shores (*op. cit.*, p. 179). Displaced populations had great difficulty accessing land and seeds, taking refuge in day labour jobs previously held by seasonal migrants. Land and family chiefs feared that they would not be able to recover their plots because they could not specify the duration and status of the right of use. The displaced persons were able to gain access to humanitarian aid and to land with the support of NGOs and no major conflicts were observed (*op. cit.*, 181).

The difficult transition from humanitarian aid to development

Land issues in the communes of Bol and Baga Sola cover all natural resources: access to agricultural, pastoral, fishing and energy resources. The ban on traffic in certain areas classified as "*red zones*" or risk zones in the lake takes resources away from the neighbouring populations, even if they do not reside there permanently.

Magrin and Pérouse de Montclos, (2018: 183) consider that, in Lac Province, the Chadian state's interventions are an opportunity to reinvest a space on the margins and to better control the Boudoumas populations, who they have never been able to control, and whose involvement in Boko Haram is interpreted as a reaction to their abandonment by the state. However, the government's strategy based on empowering displaced people on the shores, creating public services on the islands and allowing returns to the villages, as well as building new hydro-agricultural infrastructure, is faced with a resurgence of armed conflict which has forced the administration to evacuate all the populations from the lake once again.

A commune indirectly impacted in Cameroon: Koza in the Mandara Mountains

The commune of Koza is located in the northern part of the Mandara Mountains, on the track that links Mokolo to Mora and a few dozen kilometres from the Nigerian border (map 8). The commune is divided between mountain and lowland areas. Insecurity linked to armed groups has been rife there since 2014, when the conflict spilled over beyond Nigeria's borders, particularly in the Mandara Mountains where the group has been expanding for a long period. Although the localities in the commune have not been directly impacted by the Boko Haram attacks, many people have either fled for shelter or have arrived from the more impacted red zones. Humanitarian organisations estimate that several thousand people have been displaced and have settled near the rural town of Koza.

From an administrative point of view, the municipality of Koza is located in the department of Mayo-Tsanaga and the Far North region. The commune was created by decree n° 82/455 / of 20 September 1982 and modified by decree n° 93/32/ of 25 November 1993 after the division of the commune of Mayo-Moskota in two. The boundaries correspond to those of the eponymous district, which is headed by a sub-prefect. It extends over an area of 257 km² and covers two former cantons (Gaboua and Koza). It includes two second-degree chiefdoms and 27 third-degree chiefdoms led by *boulama* (village or neighbourhood chiefs) (PCD, 2011b). It is bounded to the north by the arrondissements of Mora and Mayo-Moskota, to the east by those of Meri and Soulédé-Roua, to the south and south-east by those of Mokolo and Soulédé-Roua, and to the west by the arrondissement of Mayo-Moskota.

The commune has a customary court. A local development committee accompanies the commune. Since the arrival of IDPs, a greater diversity of aid actors has become involved.

Natural environment and vegetation

The landscape of Koza commune is characterised by a set of strongly dissected high plateaus to which the abrupt contact with the plain gives a mountainous aspect, with changes in altitude of up to 600 metres. To the north, "*the Mora plain penetrates as far as Koza into a vast recess in the mountain*" (Hallaire, 1991: p.11). There are three main areas:

The mountain area, where there are terrace crops (Djingliya, Gouzda, Moustsakar, Bigide, Haalak, Mavoumaï, Houva, Meldere, Cheré, Gobili, Mbardam, Hirsché, Djengue, Yamedé);

The plain area (Koza, Maltamaya, Gaboua, Gabas) ;

The foothills area (Kilda, Galdala, Djingliya, Mazi, Modoko).

The commune of Koza is watered by two large intermittent water courses: the Mayo Mawa which meanders and waters the western part and the Mayo Kilda (Kondawadi) which waters the eastern part. Few pockets of water remain in the rock after the rainy season. However, in the northern part of Koza (Mawa, Galdala, Ziler), located in the plain, the water table is accessible at less than 5 meters, which makes it possible to engage in gravity-fed irrigation using motor pumps.

The plant formation is made up of a stratum of trees with few forest species. Here, it is mainly *Acacia albida*, *Kaya senegalensis* (caïlcédra), *Azadirachta indica* (neem), with tree heights of up to 20 metres. This vegetation is subject to very strong anthropic pressure, due to a demographic explosion which has increased the demand for firewood, but also poverty, which leads local actors to derive most of their income from the exploitation of natural resources. The lower stratum is made up of a diversity of thorny plants and grasses.

To the north of Koza commune and in the neighbouring district of Mayo Moskota is the Mozogo-Gokoro National Park, created in 1932, recognised as a biosphere reserve. It covers 1400 ha and is the main forest massif in the northern part of the Mandara Mountains.

Population

The Mafa are the indigenous population and are said to have arrived around 1540 from Soulédé in the south of the massif (PCD, 2011b). Although two versions exist as to the origin of the name Koza (Kusa/herbe or kwoza/ mountain stone in Mafa), local stories agree on the remote nature of the region and the need to fight against the wild animals that populated it. Seven generations of the Médjéwé family succeeded one another⁵³ until colonisation. A half-brother of the last chief then proved to be incompetent: his dismissal by the French in 1933 favoured the transfer of power to an envoy of the Wandala de Mora sultan, a Muslim, facilitating at the same time colonial control over the inaccessible and refractory mountain areas. The territorial organisation of the Wandala (or Mandara) was superimposed on that of the Mafa, with the instigation of a canton chief according to the rules of the sultanate.

The colonial territorial organisation then divided the canton in two (Koza and Gaboua). Two Wandala chiefs succeeded each other between 1933 and 1989. The multiparty system then allowed the Mafa to return to power with the appointment of the current chief, who has been in office since 1991.

High population density very quickly posed problems of access to land. During the colonial period, mountain people were settled in the plains, both to resolve the problem of population density and to better manage communities who were resistant to change. Since then, continuous emigration has provided the main contingents of migrants to the almost deserted plains of the Northern Region, where an agricultural pioneer front is progressing, initially organised by Sodecoton with a view to relocating cotton production to more favourable sectors.

In 2011, the population of Koza has become more diverse and represents a mosaic of different ethnicities. In addition to the Mafa, who are partly Christian, there are also Minéo, Mandara, Kanouri and Guemdjecks. They are spread between the 26 villages that make up the commune, in scattered settlements. The population is estimated at around 109,318 inhabitants, including 25,124 men, 31,773 women and 52,421 young people (RGPH, 2005; in PCD, 2011b) and a population density of over 200 inhabitants per square kilometre⁵⁴. The dominant religion is Christianity, but there are also Muslims and traditional animist religions. Due to population

⁵³ Contrary to the version reported by the Koza Communal Development Plan, though these successive generations have been Mafa, they are "*massif chiefs*" with a moral role and not "*canton chiefs*" with political power. This nuance is important, because in the traditional Mafa system there is no chieftaincy in the political sense, as practised at the time by the Muslim sultanates in the plains, who used the densely populated mountains as raiding grounds, the booty being crops and slaves.

⁵⁴ The CDP mentions a density close to 100 inhabitants/km² (in the mountains) and 150 inhabitants/km² (in the plains), but it seems to be largely underestimated with regard to the surface area of the municipality.

densities and the particular land tenure system (see below), houses are scattered in the mountains, and more concentrated in the plains.

Since 2014, the commune of Koza has been receiving IDPs fleeing the exactions of armed insurgent groups. They come from the districts of Mayo Moskota and Kolofata, for the most part, and more precisely from Achigachia, Lawtof, Banki, Vréké, Gousda vréké, Zeleved, Dibrilli, Mouldogoua, Tchébé-Tchébé, Djémené, Kati, Krawa-Mafa. There are even some refugees from Nigeria. According to the IOM, the number of IDPs was estimated at 5,144 in 2015.

Activities

The activities in the commune of Koza are closely tied to the natural resources that are available. Terrace crops are cultivated on the mountain slopes (mainly sorghum, groundnuts and peas) using intensive farming practices that the population understands. The plateau is divided between the plots of the old "*casier de colonisation*" (2,900 ha), dating from 1954 and which aimed to bring the mountain dwellers down to the plateau to supervise them better and promote cotton cultivation. The plots that are not part of the '*casier*' were cleared very soon afterwards because of the great success of this strategy (Hallaire, 1919: p.40). Downstream of the casier there is a small amount of irrigation for off-season crops.

In 2011, the CDP identified the main crops grown:

- food crops (sorghum, sweet potato, groundnut, cowpea, soya, potato, sugar cane);
- cash crops (cotton, onion, sweet potato);
- market gardening and fruit growing in the plain.

Other economic activities include livestock breeding, crafts and small trade. A. Hallaire considered livestock breeding as a secondary activity, the mountain people being mainly farmers, and distinguished sedentary livestock breeding from that of the transhumant Fulani. The CDP (2011b) noted that there were sedentary and transhumant livestock and estimated the livestock population before the security crisis at more than 250,000 donkeys (mainly used for transport), nearly 40,000 small ruminants and 30,000 poultry (Table 1). Cattle are few in number and mainly held by transhumant herders.

Table 1: Livestock in the municipality of Koza (PCD, 2011b)

Animal species	Number
Cattle	4 500
Goats	26 000
Sheep	13 500
Poultry	30 000
Donkeys	250 000
Dogs	520
Cats	75
Pigs	780
Horses	29

Small-scale trade is important and is generally carried out by all sections of the population. It concerns the purchase, storage and sale of agricultural products, the sale of small livestock and basic manufactured goods. Services in the tertiary sector (motorbike taxis, call-boxes, photocopies, etc.) are expanding in the commune.

There is a large market with several warehouses and shops in the main town of the commune. Buyers and sellers come from the district of Koza and the surrounding areas. The market takes place every Sunday. Three other medium-sized markets are located in Gaboua, Kirché and Mawa.

Access to natural resources

The societies of the Mandara Mountains are, if roughly presented, organised by massif: the highest points being inhabited by the local supernatural powers (secondary deities emanating from a single God or the souls of the ancestors (Hallaire, 1991: p. 37)). The '*massif chief*'⁵⁵ fulfils a moral and religious role, which is exercised at the level of the community and not of individuals, and therefore has little authoritarian political power (*op. cit.*: p. 30). He therefore plays no role in the distribution of land and does not '*control*' the land. Thus, the mountain people are characterised by a profound individualism, which, although "*closely bound by custom*", "*tends to reject any dependence on people, except that of one's father*" and "*is perfectly compatible with a land ownership system based on private property*" (*op. cit.*, p. 31).

In 1991 Antoinette Hallaire described land tenure systems for the Mandara Mountains that had not changed much with modern law. The distribution of land between communities and individuals is subject to precise customary rules, depending on each ethnic group, but all based on the private appropriation of land, which she links to the need, in contexts of very high population densities, to grow permanent crops on small areas. The practice of terraces, where farmers "*build*" their fields on the mountainsides, appears both as a reason for the individualism of the mountain dwellers, but also to justify the fact that a fallow land, even a very old one, remains in the possession of the person or his descendant who first cultivated it. Each family chief thus freely disposes of his plots of land, passes them on by inheritance to his sons and can sell them if he so wishes. Two types of transactions exist: "*temporary transfers, concerning the right of use, and definitive transfers, concerning the right of ownership*" (*op.cit.*: p. 29). The restriction that land can only be sold to a member of the community, and under no circumstances to an outsider, limits the powers of the owners. Finally, no superior personality exists who can act as head of the land and arbitrate in the event of conflicts. Only witnesses to the sale attest that custom is respected and can intervene in the event of conflict.

Among the Mafa, the eldest son inherits the land and the youngest power over the sacrifices (grout) and the parents' house. The other sons are *keda/dogs*, or "*landless*", and have to manage to clear land elsewhere. This system of inheritance explains the strong expansion of the Mafa on the massifs, on the one hand, and their strong participation in the migratory movements towards the plains of the Northern Province since the 1980s, on the other. In the original terroirs, on the mountains, the land heritage is preserved without being divided. In the commune of Koza, particularly in the plains, this system has been combined with that of the Muslim sultanates.

⁵⁵ "*The chief of the massif, whose clan is generally in the majority, is a key figure, the symbol of the unity of the group. Assisted by the chiefs of the districts and clans, he decides on sowing and harvesting dates, presides over the celebrations that mark out the year, organises exceptional rites in the event of repeated misfortune, and ensures that customs are respected.*" Hallaire, 1991: p. 57.

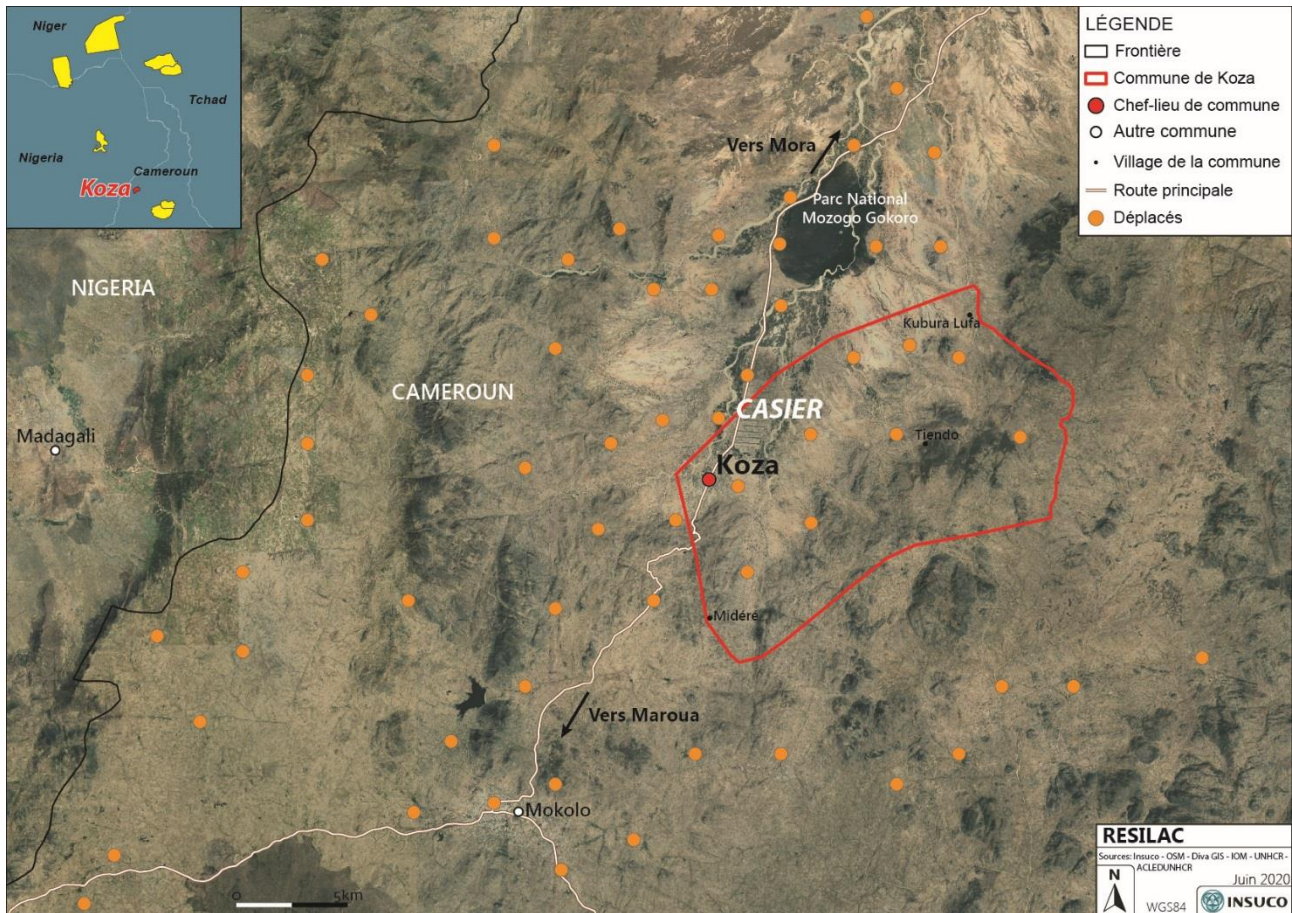
Since colonisation and the introduction of a Mandara canton chief, other customary rules have been superimposed on those of the Mafa, which are recognized to varying degrees. The canton chief, reinforced since independence and the 1976 law officialising his role as an auxiliary to the administration, is responsible for managing agro-pastoral and land conflicts and distributing land when it is available. It also appoints the *boulamas*.

Land issues in the commune

Prior to the security crisis in 2014, the land situation was already problematic in the commune of Koza. With the decline in ancestral beliefs, changes in lifestyles (education, commodification of the economy, changing needs), increasingly difficult emigration, difficulties in increasing production and, for young people, gaining access to land, as well as the multiplication of ways to obtain land and arbitrate conflicts ("*petits papiers*", Muslim rules of the sultanate, modern administration), the situation is at a standstill. The men are forced to leave: it is the women who, more and more, are involved in crop farming in addition to petty trade and rearing goats and sheep. The local economy depends more than ever on work outside the commune, money from family members who have migrated south or to the city, and trade with Nigeria. The isolation of the region and its distance from the decision-making centres in cities do not favour the development of basic services (health, school, roads) though needs are huge, as highlighted in the 2011 CDP. There are also significant problems with drinking water, fodder and wood supply.

The influx of displaced populations is taking place on land that is already insufficient to meet the basic needs of its inhabitants. This is likely to compromise the ecological balance that has been maintained by careful resource management and intensive farming practices on the terraces and through inputs and irrigation on the plains. Above all, the local land tenure systems, whether Mafa or combined with Muslim rules, do not have the means to integrate a large population that arrives suddenly in the terroirs. Small jobs and trade, which are the livelihood activities usually adopted by displaced populations in survival strategies, will compete with the host populations for whom they are equally vital.

In this context, where the entire mountain economy is being called into question, only external intervention can mitigate the local consequences of the security crisis and outline prospects for the future. This is what the Diocesan Development Committee began to do in the 1990s by disseminating the practice of "*small papers*" (§ 1.6.3) to secure farmers when land was sold. Some contracts from this period were found during the investigation in Koza (see Chapter 3).



Map 8: Commune of Koza (Cameroon)

Two non-impacted communes in Cameroon: Mindif and Dargala

The other two municipalities chosen by Resilac are located in the Diamaré plain. They are characterised by endomorphic vertisols flooded annually by the rains (*karal* in foulfouldé) and planted with *mouskwari* sorghum as the water recedes, as in the plains surrounding Maiduguri in Nigeria. The conversion of these plains from pastoral to agricultural land dates back to the 1950s, with the introduction of cotton into village areas, and ended with the droughts of the 1970s and 1980s, which finally convinced the agro-pastoralists of the value of this off-season crop, which makes it possible to escape the vagaries of the weather to some extent and provides a cereal harvest in the middle of the dry season (Seignobos, 2000; Gonné *et al.*, 2011). Livestock farming has been pushed back to the dry pastures associated with dry season transhumance to the wet pastures of Logone and Lake Chad. It benefits from the by-products of the *mouskwari*, which have a higher feed value than other sorghum. In the rainy season, a reverse transhumance is observed, with the arrival of herds coming from all over the Far North to stay in the pastures of Mindif. The American Mindif-Moulvoudaye project from 1980 to 1985⁵⁶, which aimed to restore the dry pastures, protect them from the advancing agricultural front and settle the herders, was a failure, from which lessons have been learnt to enhance pastoral mobility (Requier-Desjardins, 1999). At the end of the 2010's, these pastures were strategically important for pastoralism in the densely populated Far North and were repeatedly damaged due to overgrazing and cultivation (Donfack and Ramalatou, 2018). In addition, there is a great deal of pressure on the vegetation

⁵⁶ The Mindif-Moulvoudaye agropastoral project (1981-85) aimed to restore degraded pastures by tending and sowing fodder plants in three blocks of pasture, i.e. 25,000 ha suitable for the project, with a system of animal rotation within the blocks. The digging of artificial ponds was also intended to settle transhumant herds and encourage fattening. The project was a failure because it ruled out mobile livestock farming, whereas sedentary herders did not maintain the pasture that was becoming muddy. After the end of the project in 1985, the pastoral hydraulic installations deteriorated and all the groups of herders went back to transhumance.

cover on the Diamaré plain and on the *yolde* (sandy land) for wood fuel. The city of Maroua is a major consumer in the absence of alternatives (Seignobos, 2020).

Cotton cultivation remains significant in the Diamaré. Sodecoton provides agricultural advice, inputs and marketing outlets for cotton. Although *mouskwari* is a major food crop at the regional level, cotton continues to represent a significant annual cash contribution, which explains why this crop has been maintained despite the drop in yields due to the loss of soil fertility and climatic deterioration. Sodecoton is a major development player in northern Cameroon.

The communes of Mindif and Dargala (map 9) are located in the Far North region, in the Mayo Kani and Diamaré departments respectively. They both follow the contours of the corresponding Fulani lamidats, where the traditional chieftaincy continues to play a major role in land management and conflict regulation. They have been indirectly impacted by the security crisis, which has affected the Far North region since 2014, due to the economic slowdown and the disruption of marketing channels. On the other hand, very few displaced persons have settled there. Two communal development plans have been drawn up in Mindif and Dargala respectively (CDP, 2011 and CDP, 2012), as well as two studies on the local economy (PDR-EN, 2013a and b), which provide the basis for the presentation below.

The commune of Mindif: a strategic agro-pastoral area for livestock farming within the Far North region

The commune of Mindif is located between the communes of Dargala and Moulvoudaye to the east, Moutourwa to the west, Maroua 1er to the north and Kaélé to the south. The commune had a population of 50,500 inhabitants in 2005, over an area of 2,450 km², i.e. a density of 20 inhabitants/km². The population is estimated to be nearly 110,000 people in 2020 (PDR-EN, 2013a), i.e. nearly 45 inhabitants/km².

The Lamidat of Mindif was founded around 1788 by Foulbé Iloga who took power in the context of the Jihad launched from Sokoto by Ousman Dan Fodio. The conquest was carried out on the former territory of the Giziga family, who, therefore, lay claim to having originated from Mindif ⁵⁷(PDR-EN, 2013a according to the works of Boutrais, Pontié, Marguerat). Before 1890, the lamidat of Mindif extended from Goudoum-Goudoum to Salak, then Salak was ceded to Maroua around 1895 a little before the colonial period. It became a commune in 1975.

Demography

The population is divided between the town of Mindif (8,200 inhabitants in 2005, RGPH figure) and the twenty or so villages in the commune. It is mainly made up of Fulani (Foulbé), Kanouri, Guiziga, Moundang and Toupouri. The Guiziga are more numerous in the villages of the neighbouring commune (Midjivin, Moutourwa, Hoppo, Mizao-Guizak). The Moundang and Toupouri arrived as of the 1940s, from the groups of Kaélé, Dziguilao and Guidiguis in the south, to exploit the *karal* and alluvial soils of the Louga valley (Levrat, 2007).

The territory of Mindif has the particularity of serving as a stopover for many migrants from the neighbouring cantons of Midjivin, Loulou and the Giziga country to the north of Maroua, who will then head for the town of Maroua or more distant destinations towards Mora in the north or Guider in the south. It also attracts other migrants from Toupouri, Massa, Moundang, Sara, Gambaye who come for an agricultural season for the cultivation of rainfed sorghum and/or settle (PDR-EN, 2013a).

Resources

The Commune of Mindif has a significant reserve of land which is used as pasture for the local livestock and animals from transhumance. The local populations exert a great deal of pressure on natural resources, particularly for the supply of timber and firewood, for which there is no local alternative. Aboubakar Moussa (1997), Fotsing and Madi (1997), Bouboua Ahmadou (2001) show that the sale of fuelwood was booming in the 1990s because of the forest reserves that still existed. The CDP in 2011 described the wood cover as "*anthropogenic*" with woody trees both in patches and scattered individually. The degradation of the pasture in Gagadjé, where the Mindif-Moulvoudaye project had been implemented, was studied by Donfack and

⁵⁷ The name Mindif is said to come from *mandaf* / hare in the Giziga language.

Ramalatou (2018), who show the importance of the extension of cultivated areas, but also of the increase in animal overload and the cutting of firewood in this area.

The Mayo Boula, which is the most important river in the commune, has a seasonal course. It contributes to the recharging of the water table in times of flooding, reducing the constraints linked to the lack of water.

Activities

The Ministry of Agriculture and Rural Development (Minader) estimates the area sown at 16,800 ha in the commune of Mindif (CDP, 2011). The two dominant cropping systems are the rotation of cotton/cereal/peanut in the cleared land and *mouskwari* in the floodplain.

Family farming is based on an agro-pastoral system. Rainfed crops (red sorghum, white sorghum, maize, and more marginally millet) are grown on sandy-clay soils. Sorghum and millet, as well as groundnuts, are increasingly being replaced by maize, which is very well valued on the market and increasingly appreciated for food: the area that is cultivated has doubled in the space of 20 years in the commune (1700 ha in 2017, figures from Daminader in Donfack and Ramalatou, 2018). Cowpea cultivation also increased considerably in the commune, where it was grown in large fields (6,500 ha in 2015). The dry season crops are *mouskwari* sorghum, which is the most widely consumed cereal locally, and market gardening. They are grown both for household consumption and to be sold on the markets.

Breeding is the second activity of the commune. Livestock include cattle, sheep, goats and poultry. A small number of pigs have begun to be introduced. The Mayo Kani department is the exuded zone where outside herders come with their herds in the rainy season. However, in the dry season, surface water being scarce, livestock rearing is difficult. Pastoralists move to the *yaéré* (flood plain) of Logone and to areas of Chad where water is present all year round. This mobile system is adopted by all cattle breeders, both transhumant and sedentary, who entrust their animals to herders. Part of the livestock remains in the village, notably ploughing oxen and small ruminants. Crop residues and cotton cake are used to supplement livestock feed during the dry season.

The commune's cattle herd⁵⁸ fell sharply between 2006 (16,000 head) and 2013 (9,000 head), linked to a drop in rainfall (Donfack and Ramalatou, 2018) and an increase in rainfed crops in grazing areas. It then rose sharply in 2014 to 16,000 head, probably linked to the security crisis and the arrival of shepherds with their herds who took refuge in Mindif. In the following two years, the size of the herd stabilised at around 14,000 head, twice as many as just before the crisis (figures DAMINEPIA, 2018 in Donfack and Ramalatou, 2018).

The dry season transhumances from Mindif head towards the *yaéré* plain, up to Lake Chad in the north, and towards the regions of Bongor, Pala and Léré in Chad in the south. The latter route was in decline at the end of the 1990s (Requier-Desjardins, 1999). In 2013, the RDP-EN report still mentioned these two axes, plus three livestock trade routes to Maroua, which then go on to Nigeria. It also states that the transhumance corridors have been encroached upon by fields (PDR-EN, 2013a).

Livestock from Moulvoudaye and Kaélé that are destined for sale travel through Mindif and stay temporarily in the south of the commune, which brings in a substantial amount of income for the commune and the customary authorities.

Access to natural resources

Access to land is based on the typical lamidat system, either by inheritance or after allocation by the village chief (*djaoro*). As in the rest of Diamaré, the loaning and leasing of land has developed in line with human pressure. Since the end of the 2000s, land sales have become commonplace.

According to the PDR-EN report (2013a), the commune's land reserve remains significant, but the ownership of land remains under the control of the customary power. The commune has established several plots of land on the outskirts of the town of Mindif.

⁵⁸ It was estimated at 24,000 head for the Mindif and Moulvoudaye cantons in 1996 by Requier-Desjardins (1999), who also pointed out the difficulty of quantifying the livestock of transhumant pastoralists on the basis of non-exhaustive livestock censuses (drawn in particular from figures from vaccination campaigns).

For migrants, "conditions are not always favourable. In general, migrants [guiziga] are able to settle in neighbourhoods, or even villages that are populated exclusively by Guizigas, and they will not be too out of place, but they will have difficulty obtaining land. (...) If a newcomer succeeds in appropriating some land by clearing it - after giving a substantial gift to the village chief - he will most often have to buy or rent additional land." (PDR-EN, 2013a: 33). The Tupuri arrivals in the areas of Sabongari, Gagadjé, Paris, Djam Houra, Dir, for example, are still significant.

Access to the pastures is based on the rules applied in the sultanates. The *kaydal* (the leader of the shepherds of one or more villages, chosen for his knowledge of the environment and his wisdom) acts as an intermediary between the chiefdoms, the vaccination services and the shepherds. It is he who takes the pass from the livestock department, who guarantees that the animals are vaccinated, and who goes to the lamidats where the camp is to be set up to warn of their presence and to pay the fee. Requier-Desjardins (1999) established the cost of a transhumance from Mindif in relation to veterinary services, communes and chiefdoms. The pass cost between 1,000 and 1,500 CFA FRANCS plus the same amount for the veterinary check at the veterinary centre; the transhumance tax of 3,000 CFA FRANCS was paid to the communes, the livestock tax (*garama nai*) between 2,000 and 25,000 CFA FRANCS per herd and 10,000 to 15,000 CFA FRANCS per camp paid to the commune through the chiefdom; and the grass tax (*garama hu'do*) of 1,000 to 5,000 CFA FRANCS per herd was paid to the chiefdoms. In return, the *Lamido* provides protection and settles possible conflicts with the farmers through the *ardo'en* or *sarkin sanou* who is the representative of the herders at the Lamido court.

In 2013, i.e. before the security crisis, the coexistence between crop farming and livestock farming was 'sometimes precarious' (PDR-EN, 2103a). The recurrence of conflicts in the rainy season forced transhumant herders to monitor their herds more closely to keep them away from crops. The study mentions projects such as the GIZ [which] supported the commune and the various stakeholders in identifying and creating secure grazing areas (p. 35).

Development issues for the commune

The PDR-EN report (2013a) identifies vulnerable groups in the commune among young people who do not have access to agricultural means of production and who do not have any employment prospects, despite the development of service jobs in rural towns; widows and orphans where a head of household has suddenly died; disabled people who benefit less and less from the local self-help system as it disappears with the market economy and, in particular, the wage-earning nature of agricultural labour.

However, the main problem remains the place of extensive and mobile livestock farming in the Far North and particularly in the area of the municipality of Mindif. This problem is all the more acute as the security crisis is profoundly changing the transhumance routes for grazing and for the marketing of livestock. This issue cannot be dealt with solely at the communal level. It requires a regional development plan supported by a strong livestock policy, but they are having difficulty in adopting such a policy in northern Cameroon (Koussoumna Libaa *et al.*, 2011).

The commune of Dargala: an agricultural area

The commune of Dargala (442 km²) is 5.5 times smaller than that of Mindif⁵⁹. It was created by presidential decree n°93/321 of 25/11/1993. It is made up of four cantons headed by traditional chiefs of the 2nd degree. The rural town of Dargala is the main town in the commune. The commune of Dargala is bounded to the north by the commune of Bogo; to the south by that of Mindif; to the east by that of Moulvoudaye and to the west by the commune of Maroua 3.

Demography

The commune of Dargala has an annual population growth of 2.6%, similar to that of Mindif (2.5%). The population increased from nearly 18,000 in 1987 to over 39,000 in 2005 (RGPH, 2005). This increase is linked, in part, to the settlement of migrants to farm the flood plain. The population was estimated to be over 43,000 in 2013 (CDP, 2013). It is unevenly distributed throughout the commune, with areas of high density (Dargala and Yoldéo), and there are a lot of young people (56% of the population is under 16 years of age) (CSI of

⁵⁹ Map 9 does not respect this order of magnitude. As for Chad, but for very different reasons, because here the boundaries of communes are not disputed, it remains difficult to access reliable administrative maps for these administrative divisions.

Dargala, Yoldéo and Kahéo 2010). The rural village of Dargala had 4,000 inhabitants in 2005. The population was composed of 63% Fulani Foulbé, 16% Toupouri, 14% Kéra, the rest shared between Moundang, Guiziga and Massa.

Resources

Population density and the intensity of resource extraction (agricultural clearing, grazing, woodland exploitation) have led to major deterioration of plant cover, and even its scarcity, as well as the modification of ecosystems and a significant loss of biodiversity. Today, the commune of Dargala is made up of a shrubby Sudano-Sahelian savannah and steppes with thorny bushes and grasses. Remaining plants include *Combretum sp*, *Borassus aethiopicum* (rodent), *Zizyphus mauritania*, *Dichrostachys cinerea*, *Balanites aegyptiaca*, *Dalbergia melanoxylon*. In addition to these, there are some resilient gallery forest species along the Mayo-Boula and its tributaries.

Exotic woody species such as *Azadirachta indica*, *Faidherbia albida*, *Acacia nilotica* and other leguminous plants have been planted by the population to meet the need for wood energy. Bush fires degrade the vegetation. Finally, the widespread use of herbicides in the *karal* is causing a change in the herbaceous cover and bringing the risk of uncontrolled pollution.

Activities

Crop farming is the main activity, with a total area sown in 2010 estimated at 1,462 ha.

Dargala Commune is a large *mouskwari* production basin, with 540 ha cultivated in 2010 (CDP, 2013). The largest producing villages are Dargala, Yoldéo, Yolel, Gabagawol and Siti Birli. The exempted land supports maize (450 ha) and white sorghum (200 ha) during the rainy season in rotation with cotton (no information on area) and groundnuts (110 ha). Cowpea (60 ha) is less cultivated, as are sweet potato (63 ha) and cassava (35 ha) grown in gardens (CDP, 2013). Part of the production is sold on the market to buy basic necessities. On the outskirts of the rural town of Dargala, small farming units produce maize, groundnuts, tomatoes and vegetables for consumption by urban civil servants and employees.

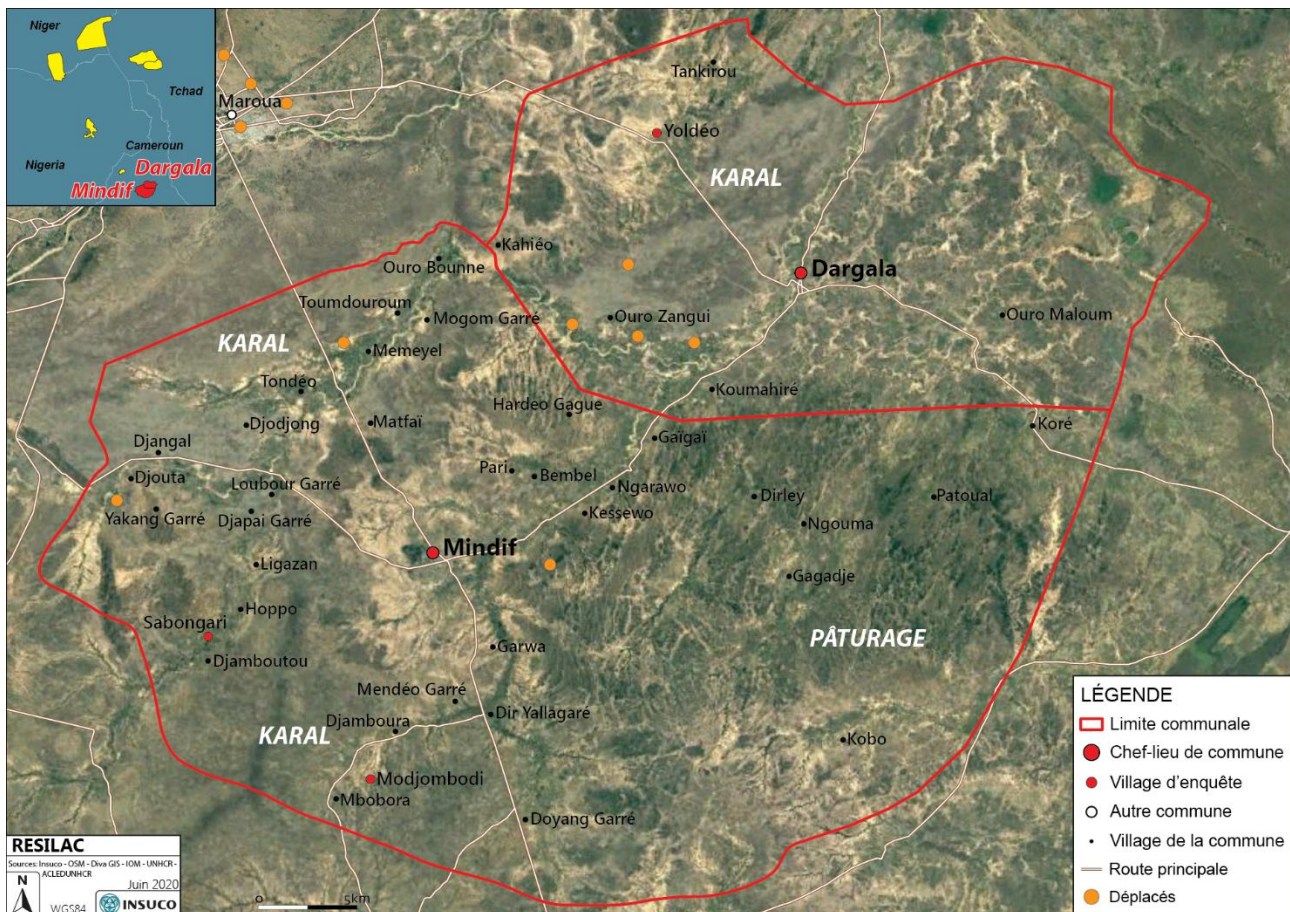
In the commune of Dargala, crop farming provides basic foodstuffs and is carried out on small areas that vary between 1 and 2.75 hectares per family. Production per hectare of maize varies between 1 and 2 tonnes, while millet and groundnuts represent 1 to 1.75 tonnes. Oxen are used for ploughing. Young people are often employed as labour for sowing, weeding and crop collection.

The PDR-EN report (2013b) identifies an under-exploited potential for market gardening along the Mayo Boula, fertile areas not developed for the cultivation of sweet potatoes, maize and peas and, finally, the banks of temporary watercourses favourable for sugar cane and rice crops (irrigated or rainfed).

Livestock farming is also practised by the vast majority of sedentary farmers. According to DAMINPIA data from Dargala 2010/Green safe 2011 cited by PDR-EN (2013b), there are nearly 2,000 cattle, 2,300 small ruminants, 2,000 poultry and 71 pigs (despite the ban due to the prevalence of swine fever), with a greater concentration in the larger villages and the rural town of Dargala. As in Mindif, dry season transhumance is observed, and there are numerous farmer-herder conflicts, which are managed by the customary authorities.

Two health and veterinary control centres ensure the supervision of livestock farmers in the communal territory. A livestock market is located in Dargala and marketing towards Maroua and then Nigeria follows the same tracks as those from Mindif.

Fishing takes place seasonally in Mayo Boula and its tributaries, but the population is mainly supplied with products from Maga, Zina and Yagoua.



Map 9: communes of Mindif and Dargala (Cameroon)

Access to natural resources and development issues for the commune

As elsewhere in the Diamaré plain (Seignobos and Teyssier, 1996; Gonné *et al.*, 2011; Watang Ziéba, 2019), land pressure is significant on *karal* land. Land distribution dates back to the 1950s and 1960s, and today land is acquired by inheritance, purchase, rental, donation and by '*bequest*' (a category used by the PDR-EN without explanation). Return migration is a particular source of conflict due to land saturation. There are conflicts over '*rental, leasing and sharecropping*' contracts (PDR-EN, 2013b, p.21). The sectors where the most conflicts take place between farmers are the Dargala and Yoldeo *karal*.

On the other hand, the report does not mention any significant investment by the urban elite (especially in Maroua) in crop farming, and especially in land in the *karal*, which was nevertheless identified upstream of this study as a development issue for the commune. The survey carried out for this study did not allow us to assess this issue either (see below).

The development issues addressed within the development plan are those linked to demographic pressure (vegetation degradation, fuelwood supply by plantations), the decline in soil fertility and the pressure of livestock farming on crops.

Table summarising the territories studied

The territories included in the study involve a very broad range of land issues and ways of managing them at the local level. However, there is homogeneity among land management methods in areas that have been Islamicised for a long time. These are mainly managed by hierarchical customary authorities who organise conflict management from the village level up to the higher level of the territory controlled by the community chief (canton chief, sultan, *lamido*, *shehu*). In this context, and over and above the specificities linked to resource areas and the activities carried out, the role of decentralised local authorities is relatively limited, with the exception of the Niger communal land commissions set up in the two Nigerien communes since 2011, whose actual role must be analysed among the actors in the territory. The commune of Koza is an exception, both because of the high population density and the land saturation that dates back many decades and

because of the cultural differences of this population. The original mountain population comes from an animist tradition that continues syncretically with the Christian religion, and has mixed with the Muslim population of the plain without fully adopting the model of hierarchical territorial management. Land ownership there is thus of a particular nature and requires the analytical grid to be adjusted.

The table confirms the link between the semi-formal land tenure security systems ("*petits papiers*") and the land saturation observed in the territories: in the 9 territories studied, it is in the territories where land pressure is the greatest and where the stakeholders need to be secured the most, that the presence of "*petits papiers*" is observed.

Finally, this analysis confirms that the interference of armed groups in territorial management is a relevant parameter. They intervene both in terms of physical access to certain areas, particularly wetlands, and by taxing certain activities. It is thus possible to classify the territories under study in relation to the direct or indirect impact of these groups on land management (tabl.2).

Table 2: Main characteristics of the territories under study

	Nigeria		Niger		Chad		Cameroon		
	Jere	Maiduguri	Chétimari	N'Guigmi	Bol	Baga Sola	Koza	Mindif	Dargala
Impact of the security crisis	Direct	Direct	Direct	Direct	Indirect	Indirect	Indirect	Not impacted	Not impacted
Start date of the security crisis	2009	2009	2015	2015	2015	2015	2013	2014	2014
Size (km²)	860		2 566	39 200	1 032	1 811	257	2 450	442
BEFORE the security crisis									
Population (based on 2015 RGPH)	268 000		70 481	51 691	23 095	45 094	139 936	64 644	45 177
Mobility	Internal	Internal	Internal	External and internal	Internal	Internal	Emigration	Internal	Immigration and Internal
Density (inhab/km²)	311,6		27,5	1,3	22,4	24,9	544,5	26,4	102,2
Rain-fed agriculture	++	++	+	+	+	+	+++	++	+
Decreased agriculture	+++	+++	+	+++	++	++		+++	+++
Irrigated agriculture	+	+	+++	+	+++	+++	+	+	+
Sedentary livestock farming	++	++	+	++	++	++	+	++	++
Transhumant livestock farming	+++	+++	+++	+++	+++	+++	++	+++	
Fishing			+	+++	+++	+++			

The Different Impacts of the Security Crisis on Land Tenure in the Lake Chad Region

Wood	++	++	++	+++	++	++	+++	++	+
Resource areas with high land stakes	Karal, irrigated cultivation, pastures		K. Yobe Valley irrigated farming and bourgoutières	Lake Chad pastures, flood recession cultivation, fishing, wood	Lake Chad pastures, flood recession cultivation, fishing, wood; polders	Lake Chad pastures, flood recession cultivation, fishing, wood; polders	Wood, terrace cultivation, irrigated cultivation	Karal, rainy season pastures	Karal
Other important features	Transhumance		International transhumance	Land claims in the lake	Land claims in the lake	Land claims in the lake	Land saturation	Transhumance, overgrazing and reduction of rangelands	Land saturation of the karal

The security crisis in the Lake Chad region

The presentation of the land tenure situation in the different territories of the Lake Chad region confirms two essential points to be taken into account in analysing how they evolve in the context of the security crisis:

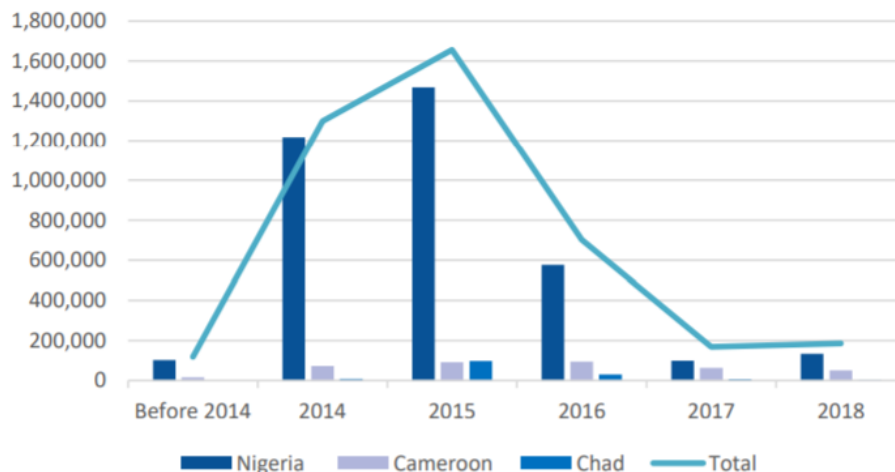
- the links between demographic pressure (population density and production systems) on access to natural resources and close dependence on historical political systems;
- the interdependence between strategic natural resources (dry/rainy season; wetlands) through the mobility of people and animals (work, migration, transhumance) and goods (markets).

The complex and multifactorial crisis, which progressively affected the study territories between 2009 and 2015, calls into question these two structural points: firstly, by profoundly modifying the distribution of the population over the territories, and, secondly, by blocking access to resources in the most productive wetlands and limiting mobility. The analysis of the evolution of local land tenure systems is therefore based firstly on the observation of population displacements in the Lake Chad region and in the territories studied, before presenting (chapter 3) the main results of the survey of 496 people on the land tenure situation in the 9 territories studied.

The crisis and population displacements in the Lake Chad region

After the initial violence in north-eastern Nigeria in 2009, the humanitarian crisis began in early 2014 and then spread to Cameroon, Niger and Chad in 2015. The escalation of violence triggered the creation of a Multinational Mixed Force (MNJTF) between Benin, Cameroon, Niger, Nigeria and Chad to combat NSAGs in the four affected countries and gradually contain them in smaller territories in north-eastern Nigeria and Lake Chad. The deployment of armies on the ground and the state of emergency measures decreed in the four countries also triggered population displacements, such as when the inhabitants of Lake Chad were forced to move (2015 in Niger and Chad). Moreover, the withdrawal of military forces from certain sectors is viewed as a risk factor and also leads to displacement to find safety. Thus, while the largest population displacements were observed at the height of the crisis, between 2014 and 2015, there have continued to be returns and new departures since (fig. 1).

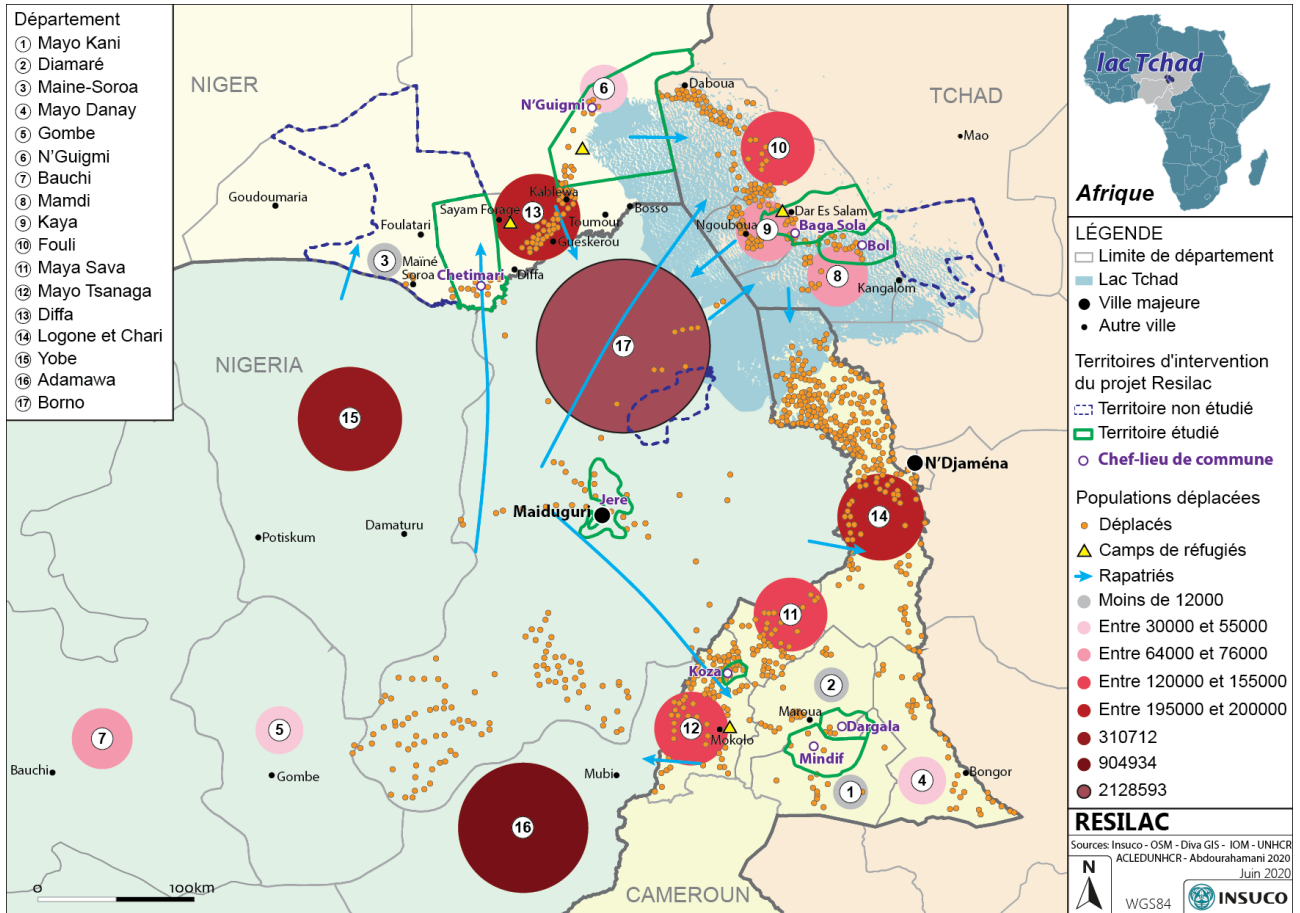
Figure 1: Start of displacement in Nigeria, Cameroon and Chad (source: IOM, 2019)



Since 2015, insurgent groups have been acting locally, are mobile and have demonstrated their "ability to challenge the military in combat in rural and urban areas" (IOM, 2019). In insecure areas, populations live in unstable and unsafe conditions and are, themselves, highly mobile. The IOM identifies other causes of population displacement: "In addition to fighting between security forces, pro-government militias and armed opposition groups, conflicts over natural resources between professional groups such as farmers, pastoralists, fishermen and hunters have been exacerbated by the reduction of arable land, grazing routes, changes in rainfall patterns affecting crop yields and livestock health, military restrictions,

security problems and water scarcity" (IOM, 2019). The report also observes a deterioration in the relationship between IDPs and host populations, particularly with regard to access to natural resources.

In 2018 there was a growing number of returns, particularly to Nigeria, with approximately 1,810,600 people returning home. However, the omnipresent threat of violence impedes the delivery of aid and greatly jeopardizes the potential for transition from an aid regime to a development regime in the directly and indirectly impacted areas in all four countries.



Map 10: Displaced persons at the regional level in 2020

IOM estimated that there were 4,471,459 displaced people in December 2018 (IDPs, refugees and returnees) (IOM, 2019). It also judged the humanitarian emergency to be one of the most serious in the world, with 10.7 million people dependent on humanitarian assistance. Nearly 2.5 million people are internally displaced within their own country's borders, while more than 1.8 million have returned to their areas of origin and about 160,000 people are refugees outside the camps. In 2020, the number of IDPs, refugees and returnees is roughly the same, half of them in Borno, 30% in Yobe and Adamawa States in Nigeria, and 12% in Northern Cameroon (Map 10). To this figure should be added the 20,000 people who fled after 23 March and the attack in Boma in Chad attributed to Boko Haram, which killed 98 soldiers and wounded 47 others. This fighting, the Chadian army's robust response and the tightening of the state of emergency rules once again led to the expulsion of the population from the lake. They joined the 10,000 IDPs in the 11 sites of Diamerom and Toboro, 45 km from Liwa, later to be relocated to Amma to distribute the displaced populations throughout the territory (OCHA Chad, April 2020).

Security measures to combat Boko Haram

The population displacements are the result not only of exactions by armed groups, but also of the state of emergency measures taken in the four countries to reduce the insurgents' revenues, which have had serious consequences on the livelihoods of all socio-professional categories in the region. For example,

the escalation of violence in north-eastern Nigeria led to the declaration of a state of emergency in Yobe, Adamawa and Borno States in 2013. In 2015, Niger (11 February) and Chad (10 November) also declared a state of emergency in nearby localities and in Lake Chad. These arrangements constitute legal regimes authorising the state (locally the governors in Niger, Nigeria and Chad; the prefects in Cameroon) to take measures exceptionally restricting freedoms (notably freedom of movement, limited by curfew measures and the banning of certain means of transport, the prohibition of residence in certain areas suspected of being controlled by insurgent groups ; but also restrictions related to the exercise of economic activities) by breaking with a number of general principles of law (in particular by giving exceptional powers of action to the army and the police, mainly in relation to searches). In Nigeria, Niger and Chad, these state of emergency regimes are still in place, even though they have been relaxed (Table 3), due to pressure from the populations affected by the bans on production systems and the food crisis they have largely caused (ACF, 2020). Cameroon has not declared a state of emergency but has tightened controls and put in place '*administrative police measures*' which are experienced by the population as a '*de facto state of emergency*' (ACF, 2020).

The main motivation for the measures implemented is to reduce the strength of the insurgent groups by drying up their income, which is largely based on the natural resources in the territories they control. Thus, "*the involvement [of these groups] in socio-economic activities in Lake Chad remains one of the key reasons for the nature and scale of the measures adopted by the states in the area of food production*" (AICF, 2019) and their extension over time (see § 2.7.3).

The measures taken to reduce movement in the 4 countries are primarily aimed at the wetlands, which are difficult to control, where the insurgent groups quickly took refuge. In Niger, the populations living in the northern basin of Lake Chad had 48 hours to leave their villages if they did not want to be considered as belonging to the rebel groups. In Chad, "*red zones*" were defined in the lake and evacuated as well. The use of motorbikes, identified as the preferred means of action for rapid attacks, was prohibited in all 4 countries. Curfews have been introduced in Nigeria, Niger and Chad, severely restricting not only the transport of goods, but also the delivery of aid to remote areas (IOM, 2019). Checks are systematic at checkpoints and their number is growing. Some roads, particularly border roads, have been closed, leading to "*de facto*" border closures.

Restrictions on economic activities primarily affect the main resources of the insurgent groups: fishing, peppers and livestock markets. The measures cover all stages, from production (prohibition of access to certain resources, restrictions on the supply of inputs) to marketing (closure of markets, bans on selling certain products). While these restrictions have greatly affected sedentary populations who have had to leave their homes to settle elsewhere, the most mobile populations (transhumant herders and fishermen in particular) have, in some cases, braved the prohibitions to continue their activities.

Table 3: State of emergency measures in the 4 countries and mitigation in 2019 (based on ACF, 2020)

Pays (date état d'urgence)	LOCALITES	mesures sécuritaires/ économiques	Mesures sécuritaires levées en 2019
NIGERIA (2013)	Etats du Borno, Adamawa et Yobe	<p><u>Restrictions de mouvement :</u></p> Fermetures de routes Couvre-feux Interdiction de cultiver à plus de 5 km des villes Interdiction des déplacements en moto	<p><u>Restrictions sur les activités économiques :</u></p> Autorisation de déplacement jusqu'à 2 à 5 km des camps de personnes déplacées Autorisation de se rendre dans des exploitations agricoles Mise en place de corridors avec le Cameroun
	Borno (Maiduguri)	<p><u>Restrictions sur les activités économiques :</u></p> Fermeture des marchés et des marchés aux frontières Interdiction du commerce de produits locaux : bétail et poisson Interdiction des cultures hautes Interdictions sur le charbon et le bois pour le feu Restrictions sur la vente de carburants et d'engrais	
NIGER (2015)	Frontière Nigeria	<p><u>Restrictions de mouvement :</u></p> Couvre-feu limitant les déplacements en véhicule et piétons Fermetures de certaines routes Fermeture de la frontière avec le Nigeria Interdiction des déplacements en moto Restriction/Interdiction d'accès au Lac et aux bordures du lac et sur les bordures de la Komadougou Yobé (frontière naturelle)	<p><u>Restrictions sur les activités économiques :</u></p> Autorisation du commerce du poivron Levée des mesures d'interdiction des activités productives au Lac Tchad Possibilité de pêcher dans certaines parties du Lac Tchad Création d'un marché au poisson à N'guigmi
	Diffa region Frontière Nigeria: Maiduguri-Banki, Fotokol-Gambaru, Gaga Mari, Kindiandi	<p><u>Restrictions sur les activités économiques :</u></p> Fermeture des marchés frontaliers Interdiction du commerce du poivron rouge et du poisson Interdiction de la vente de carburant sans justificatif Interdiction de semer dans 71 villages	
TCHAD (2015)	Frontière Nigeria Lac Tchad Bagasola	<p><u>Restrictions de mouvement :</u></p> Fermetures de routes/Zones interdites le long de la frontière avec la Nigeria Interdiction d'aller sur les zones dans les zones insulaires Fermeture de la frontière avec le Nigeria Couvre-feux (17h-6h sur les axes principaux du Lac) Restriction/ interdiction d'accès au lac et aux bordures du lac Interdiction d'utilisation des voies fluviales vers le Nigeria	<p><u>Restrictions sur les activités économiques :</u></p> Levée du couvre-feu Levée de l'interdiction d'utiliser les motos Assouplissement de l'interdiction du passage des troupeaux Pêche autorisée de 6 h à 17 h
		<p><u>Restrictions sur les activités économiques :</u></p> Interdiction de commercialiser les arachides et le haricot Interdiction de la vente des bêtes sur pieds vers le Nigeria Interdiction de la pêche de nuit Interdiction de l'exportation des bétails et des poissons Interdiction de la pêche à grande échelle Interdiction d'importation et d'utilisation engrais et carburants	
CAMEROUN	Frontière Nigeria Maiduguri-Banki, Fotokol-Gambaru Maiduguri-Mura corridor	<p><u>Restrictions de mouvement:</u></p> Fermetures et contrôles accrus aux frontières Fermetures de routes Interdiction des déplacements en moto Interdiction aux personnes non-identifiables à vue, de circuler sur la voie publique, à pied ou à véhicule	<p><u>Restrictions sur les activités économiques :</u></p> Assouplissement de l'interdiction de circulation des motos Mise en place de corridors de transport avec le Nigeria Ouverture de certains marchés
	Gamborum, Banki-Amaride, Maltam, Molié, Bodo, Kidam, Zimado, Balgaram, Dabarga...	<p><u>Restrictions sur les activités économiques :</u></p> Fermetures des marchés à bétail aux frontières Interdiction du bétail à 50km des frontières nigériennes Interdictions des marchés de nuit Interdiction de l'exportation des céréales vers le Nigeria, le Tchad et la République centrafricaine Interdiction du transport et la commercialisation transfrontalière du mil dans le Logone et Chari	

In February 2020, when the study was being carried out, some measures had been relaxed. Fishing had resumed on the lake in Chad and Niger and a new market had opened in N'Guigmi. Some plots of land in the Komadougou Yobé valley were beginning to be used for pepper cultivation again, and pepper trading was reauthorised in Diffa in March 2019 (ACF, 2020). In Nigeria, restrictions on movement were relaxed, as were curfew rules. However, the resurgence of attacks at the end of 2019 increased the pressure. In Chad, the attack on Boma in March 2020 reversed the trend and led to a further expulsion of civilians from the "red zone".

Financing and territorial control of armed groups

The origins, the configuration and the people involved in the Boko Haram group, as well as the reason why numerous people from the local population have joined it, have been widely debated (Magrin and Perugia, 2018; Seignobos, 2018, Mac Eachern, 2018 etc.). Boko Haram has often been assimilated, wrongly, either to ethnic groups or to populations rooted in certain localities. It appears that its ethnic composition is very heterogeneous and its motivations diverse. The group is also very fragmented: in 2016 "*Boko Haram*" split into two branches, the Jamat Ahl al-Sunna li-I Dawah wal Jihad (JAS) still led by Abubakar Shekau, and the Islamic State West African Province (ISWAP) led by Abu Musab al-Barnawi, and then by Abu Abdullah al-Barnawi from March 2019.

Since 2017, the landscape of Islamist insurgency in the Lake Chad region has changed, with the Islamic State West African Province gradually becoming the main insurgent group and a major and disciplined fighting force (GICS, 2019). According to this report, ISWAP "*is becoming a major part of a global machine, the global Islamic State, which appears to be particularly investing in the co-option of local organisations with deep community ties. ISWAP's main success has been its ability to effectively engage and co-opt local networks gradually and smoothly, while linking a global Caliphate message to local grievances and using it competently to establish legitimacy in the eyes of local communities*". To achieve this goal, the group's strategy has been to avoid unnecessary violence and exploitation against civilian populations, while inflicting severe punishment on civilians who deviate from its objectives. This strategy stands in stark contrast to the Shehu group accused of indiscriminate violence.

Moreover, for the last 5 years the crisis has become entrenched as States have been unable to regain control of vast areas on the margins of their territories. Numerous armed gangs with a long history of cross-border regional insecurity (Saibou Issa, 2010) have contributed to the insecurity. The reduction of trade that is essential to the local economy around the lake region has fuelled resentment among the civilian population against the government, as livelihoods are destroyed and no alternatives are offered.

Parallel local governance has been established in areas controlled by insurgent groups. According to the GICS study, in 2019 ISWAP was capable of self-financing itself monthly to the tune of US\$2-3 million, whereas until 2017 it depended heavily on the funds transferred every four months by the Islamic State. In 2018, taxes levied on various economic activities and trafficking in the territories it controlled contributed 45% of its income, 30% from the fish trade, 11% from the rice trade and 10% from the red pepper trade. Commissions were also collected from fishermen and traders from outside the controlled territories, who negotiated directly or through semi-independent intermediaries. Taxes are also levied on economic activities from high-ranking ISWAP staff, civilians and other persons affiliated to and residing in its territories, as well as from economic actors and commercial transporters in the areas it controls or even those controlled by the government (GICS, 2019).

Thus, in the context of the serious and lasting food crisis caused by the crisis, and the related security measures (ACF, 2020), it is difficult to distinguish among the host, displaced and refugee populations, between those who are with the insurgent groups and those who are not. Their extremely precarious economic situation pushes them to seek alliances with these groups, who provide opportunities for access to certain resources in the most productive areas under their control (see below), thus ensuring local support for their economic activities and their intelligence system.

The arrival of refugee and displaced populations in the territories under study

In the territories under study, displaced populations arrived at various times: they mainly arrived between 2014 and 2015 in the LGA of Jere in Nigeria, where there has been a very high level of instability since

then, and mostly in 2015 in the other territories and following the expulsion measures from the lake areas in Chad.

In the territory that was the least densely populated at the outset (N'Guigmi), the population density does not account for the depopulation observed and the concentration of inhabitants who have fled the lake to settle on the periphery of the insecurity zone, often outside their commune of origin. The Boulama fled with them, leaving behind deserted villages and sometimes even entire herds that were unable to follow the sudden forced eviction that came with the state of emergency.

The population density in the municipalities of Bol and Baga Sola is the same and has doubled between 2015 and 2020, from almost 25 to 50 inhabitants/km². This has numerous consequences for access to natural resources, particularly in the hydro-agricultural developments (modern and semi-modern polders, flood-recession zones) which are limited in size and were already saturated when the displaced populations arrived.

Apart from the Nigerian territories, Chetimari is probably the commune where the changes are the most brutal: it has three times as many refugees as the commune of N'Guigmi, especially refugees from Nigeria, in an already highly fragmented space with natural resources concentrated in a very narrow area of the Komadougou Yobe valley. The population density of 2015, before the crisis, is already misleading in that the population is not evenly distributed in the territory of the commune. The population density has almost doubled in the space of 5 years, while becoming almost zero in the valley (expulsion of the inhabitants). The human concentration is therefore very localised in a very difficult environment for agricultural activities. At the same time, the floods observed in 2012 and 2019, due to the exceptional overflow of the river and the damage caused by animal pests (birds, insects) have caused a large number of victims and increased the need for humanitarian aid in this commune and its neighbours.

The commune of Koza hosts half as many displaced people while its territory is ten times smaller. The already very high population density before the crisis (nearly 545 inhabitants/km²) has certainly increased (636 km²) but to a lesser extent than in the other territories. However, this very high density explains why there are crucial problems of access to natural resources.

The two communes of Dargala and Mindif do not host displaced populations, or do so only marginally. Population density is therefore based on the average growth rate. The immigration described in Mindif and the population estimated in 2020 by the CDP (2011) shows, however, a more rapid evolution of population densities in this commune compared to Dargala.

We were unable to calculate the evolution of population densities in the Jere territory due to the lack of data collected at this level. Before the crisis, the population density was estimated at between 30 and 60 inhabitants/km² in the state of Borno, but was already much higher on the outskirts of the metropolis of Maiduguri. The arrival of IDPs since 2009 has considerably increased this anthropogenic pressure, with people settling on the outskirts of the city without being able, in most cases, to carry out activities related to natural resources (see below).

Unequal access to natural resources in the four countries

This chapter provides an overview of access to natural resources in the different territories studied, based on the results of field surveys. This gives a snapshot of the current situation, which will be put into perspective in chapter 4, where we analyse the changes in land ownership identified in the territories and the changes brought about by the security crisis.

Presentation of the survey and the sample

In order to understand changes in the land tenure situation in these 9 territories (6 communes, 1 canton, 1 LGA and the outskirts of Maiduguri), the survey was carried out by a team of 8 investigators (2 per country) during the week of 17 February (Chad, Cameroon and Niger) and 24 February 2020 (Nigeria). Each was responsible for interviewing around ten people a day for 5 days, using a computerised survey form on a tablet. The use of qualified and experienced staff recommended by ACF (Resilac partner)

compensated for the limited training time. However, it was not possible to sufficiently upgrade the interviewers' knowledge of certain aspects related to land tenure, such as modes of access to agricultural land. It was only possible for the national experts to validate the completed forms *after* the survey had been conducted, which meant that it was not possible to rectify certain shortcomings and inaccuracies (such as the number of plots filled in per informant). The survey results were sent to Insuco, who cleaned the data, homogenised it across the four countries and had it validated by the heads of mission. Bi-variate data processing was carried out for all data by gender, age group, residence status, commune and village. The cross-processing was carried out by C. Raimond and V. Basserie.

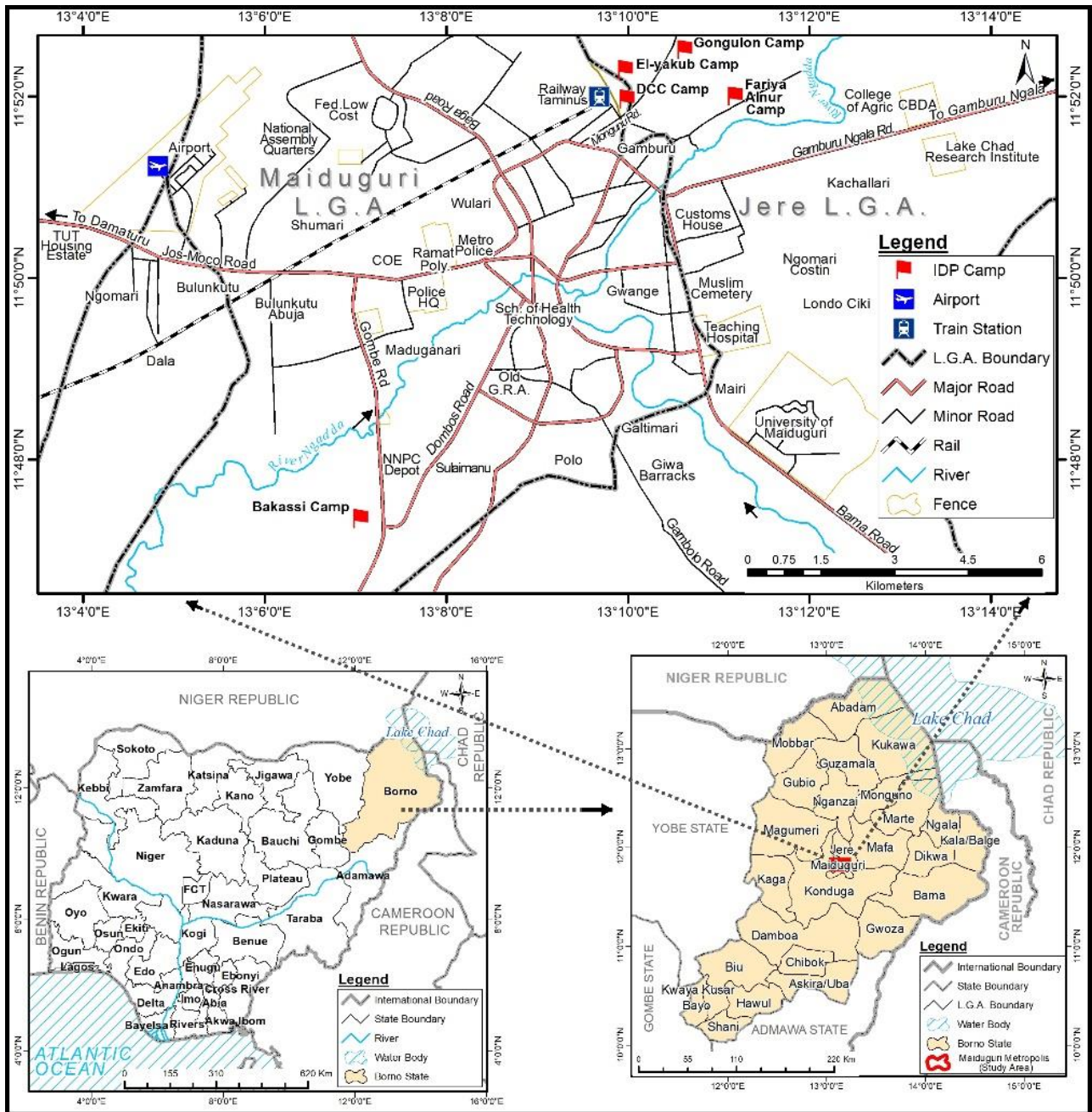
The survey data was supervised by the 4 country experts, who supplemented the information with interviews conducted over 4 days with key actors in land management at the local level. A detailed list by territory is given in Annex 2. In Nigeria, Niger and Chad, the security conditions required these resource persons to travel to towns (Maiduguri, Diffa, Bol) to meet the country expert.

Due to a sampling error, an additional survey was conducted in the LGA of Jere (two villages) by the same two interviewers over four days during the week of 25 May 2020. Indeed, the first phase of the survey had only concerned people living exclusively in IDP camps, therefore with potentially little access to natural resources, and did not allow for an analysis of changes in land management in rural areas. Two accessible villages, located around ten kilometres from the outskirts of the town, were identified and provided a set of data of equivalent quality to the other territories.

Reminder of village selection criteria and confirmation of pre-identified land issues

In Nigeria, Borno State is the region most affected by the security crisis. As mentioned above, since 2009, the **periphery of Maiduguri** and the nearby LGAs have been the most affected by the crisis among the territories surveyed. This is where displaced populations have taken refuge and have been settled in camps run by the state via large international NGOs (map 11). In February 2020, and since June 2019, the army's interventions have secured the plains surrounding the city, so that agricultural and livestock activities have been able to resume in relative security, but there are still very high levels of instability. Part of the rural population of the LGA of Jere have also taken refuge in the safety of the camps and occasionally leave to carry out their activities in their areas where they normally live.

Within the secure area, 145 people were interviewed: they were variously staying in the IDP camps of Bakassi and DCC in the urban territory of **Maiduguri** (39 people), and in the IDP camps of El Yacoub, Fariya Alnur and Gongulon in the LGA of **Jere** (46 people) (map 11). Most of these heads of household had to abandon their agricultural activities when they were displaced, with the exception of the residents of Gongulon camp who are still engaged in activities in their villages. Sixty other heads of household who live in the villages of Dusuman and Gumsumiri, close to the wetlands in the Jere LGA territory, were interviewed in the second survey conducted in late May 2020. These families had moved to safety on the outskirts of the town but had been back in their villages for several months. The high mobility of the rural population reflects the instability of the plains surrounding Maiduguri, where there is great insecurity due to the presence of different armed groups.



Map 11: Location of IDP camps on the outskirts of Maiduguri

In **Niger**, the communes of Chétimari and N'Guigmi are located in the immediate vicinity of conflicts with armed groups and are directly impacted by these. Thus, during the survey, two attacks took place in these communes and the entire department of Diffa was again placed under a state of emergency. In these two communes, the crisis really began in 2015 with the cumulative effects of the first attacks by the armed group Boko Haram on Nigerien soil and the imposition of strict state of emergency measures which have prohibited any activity in the wetlands (Komadougou Yobé valley and the Nigerien part of Lake Chad) and have restricted movement for the past five years. In February 2020, at the time of the survey, travel was banned at night from 8pm for vehicles and 10pm for pedestrians. All direct trade with Nigeria, which was the basis of the economy of the two communes, is either impossible due to the closure of the borders or requires long and risky bypasses.

In the commune of **Chetimari**, the first impact of the crisis was the mass arrival of refugees from Nigeria. The families, who were fleeing the exactions of armed groups in Nigeria, were first settled in the Boudouri

camp, created following the Komadougou Yobe floods in 2009. From 2015, and the first direct attacks in the commune, there was a general displacement of the population from the Komadougou Yobe valley to the north. The State, with the support of humanitarian partners, provided shelter and assistance in camps set up for this purpose along the road, notably in Chetimari, Boudouri, Sayam Forage, Gagamari, N'Gourtoua and Zarwaram. In December 2019, according to the Regional Directorate of Civil Status, Migration and Refugees, the commune of Chetimari had 31,543 refugees and 615 asylum seekers, 5,317 returnees and 9,696 IDPs, some of whom came from Lake Chad. Population density has almost doubled in five years and the over-exploitation of natural resources has accelerated, in a context of significant climatic uncertainty and variability, as shown by the succession of dry years (2014) and years of heavy flooding (in 2001, 2010, 2012, 2016, 2019), which accentuate this pressure.

For this study, the villages were chosen together with the Cofocom leaders based on where the IDPs and returnees were located, the diversity of activities carried out and the recurrence of land conflicts. This last selection criterion partly explains the level of conflict in the commune of Chetimari. The villages of Gagamari, Kargamari and Boudouri are located in the area known locally as kanouri *kaoula* (map 5). Wood resources were not identified as a source of conflict before the crisis. Fishing was not a permanent activity before the security crisis, as it was dependent on whether or not the river flowed and the ponds were flooded. On the other hand, the withdrawal of resources from the valley, made inaccessible by insecurity and state of emergency measures, poses a general problem of food and economic resilience at the commune and household level, both for the localities studied and for refugee and displaced populations, but also for transhumant pastoralists.

The situation in the commune of **N'Guigmi** is contrasted in terms of the evolution of its population, which is difficult to account for based only on the figures for displaced populations. In fact, while the Regional Directorate of Civil Status, Migration and Refugees estimates the number of refugees and returnees in 2019 at 4,227 and 755 respectively, the 29,933 IDPs are essentially inhabitants of the commune who have had to leave their village or camp located in Lake Chad due to insecurity and the expulsion measure taken as part of the state of emergency in February 2015. In 2020, the road from Mainé Soroa to Goudoumaria is occupied by people from N'Guigmi, who are no longer located in their commune. Thus, contrary to all the other territories of the study, there is depopulation of the commune, on the one hand, and, on the other hand, some families who used to live on the lake near the town of N'Guigmi have relocated. In theory, the interior of the Nigerien part of Lake Chad is therefore empty of its inhabitants and occupied by members of insurgent groups.

The choice of the three villages in the study was also made in consultation with Cofocom. All three are located near the town of N'Guigmi. Abdou Ngairam and Yambal are two market gardening sites located 7 km from N'Guigmi. Kanembouri is a peripheral neighbourhood of N'Guigmi. The informant sample in Yambal does not include any IDPs, unlike the other two sites. The selected informants are mainly farmers who have access to inter-domain land for rainfed cultivation and garden land for off-season agriculture. They no longer have access to the resources from Lake Chad's bed.

In **Chad**, the commune of **Bol** and the canton of **Nguelea 1** (in the commune of Baga Sola) are located in the region of the archipelagos, in the southern basin of Lake Chad. Although Baga Sola received the largest contingent of refugees from Nigeria and IDPs from Chad as early as 2015, these settlements were mostly on the western side of the commune and less in the canton of Nguelea 1, which has only IDPs. The commune of Bol is relatively spared from insurgent incursions and has received fewer IDPs than the commune of Baga Sola, which includes the Dar Es Salam refugee camp (map 7). In these two territories (canton Nguelea 1 and Bol commune), the inhabitants who used to go to the "*island zone*" to the west⁶⁰ to fish and graze in the rainy season have been prevented from doing so since 2015 because of insecurity and the "*red zone*" where state of emergency measures are applied (ban on travelling at night, ban on fishing, army controls). The IDPs are arriving in the areas on the periphery of the lake zone, on either side of the polders and the floodplain, where they hope to be able to grow crops and

⁶⁰ This zone is located "*at the limit of the department of Kaya, the department of Foulï towards Ngouboua and the department of Liwa*" (Chad expert), therefore south-west of the commune of Baga Sola and north of the open waters of the southern basin of Lake Chad.

graze their animals temporarily. This concentration of people around hydro-agricultural installations, where it is not possible to increase the cultivated areas without creating new installations, raises the question of access to plots of land for displaced populations in a context where the state of the installations is deteriorating and where there are variations in flooding, which affect the provision of water and the related flood recession crops. In addition, there is the question of herd and pasture management due to the concentration of herds, herders moving out of insecure areas on the lake and those arriving seasonally from elsewhere, and in the absence of recourse to the wetlands during the dry season.

The villages chosen for the surveys are located in this band where host populations and IDPs are concentrated, where activities are being reorganised and conflicts over access to natural resources are being exacerbated (see below). In the commune of Bol, the three villages studied are located around a dyke being built by Resilac, given that the modern Mamdi polder is too far away for the people interviewed to cultivate plots of land there. These are the villages of Brandal (20 km from Bol, where Resilac is involved in the construction of a dike to extend the cultivated areas and secure the water supply for the flood recession crops), Merom (33 km) and Kirfou Ango (27 km). In the canton of Nguelea 1, the villages Bibi barrage (10 km from Bol) and Tchingam (15 km) farm plots in the two semi-modern polders, which were developed by Sodelac in 2006 (400 ha and 240 ha respectively). In Tchingam, Resilac is also involved in the construction of another dike. Bolwanda, 9 km north-west of Baga Sola, is located outside the floodplain and the inhabitants can farm plots in both polders. This village does not host IDPs, unlike the other 5 villages studied in Chad.

In **Cameroon**, the commune of **Koza** is one of Resilac's future intervention sites, for which the project does not yet have a baseline survey. This commune is not considered to be in the "red zone", i.e. it has no territory directly affected by Boko Haram, but since 2015 it has been receiving a significant number of displaced people from the red zones in the Mandara mountains. However, insecurity is increasing in 2020; Watang Zieba (Resilac country expert for this study) mentions that on his arrival on 17 February, a crisis meeting was underway at the sub-prefecture to take stock of the insurgent attacks the day before in Ouzal, 8 km from Koza. Another attack took place in Koza, not far from the Sodecoton site, on the night of 18 February.

In terms of land, the influx of more than 5,000 IDPs in 2015 took place in an already very densely-populated area (more than 400 inhabitants/km², RGPH 2005) and exacerbated a situation where there was long-standing and conflicting land saturation. Several interventions in the years 1990-2000 sought to disseminate "small papers" to protect people's rights. In practice, for the Mafa, land is held by the heads of families who pass it on by inheritance to the eldest son, and the others migrate to find work or land elsewhere; sometimes these heads of families find themselves in very precarious situations and are forced to give up their rights. The settlement of these displaced families, even if it is temporary, can have serious consequences, both in terms of economic systems, as the displaced are very likely to take on "odd jobs" that contribute to the resilience of the host population, and in terms of the local ecological balance due to the undermining of intensive production systems (crop farming, wood collection) by unsuitable practices on the part of totally destitute populations. In order to analyse these changes, 95 surveys were carried out, 2/3 with the host population and 1/3 with displaced persons (see below), living in the mountainous area, on the plateau and on the plain, in the different neighbourhoods/villages that make up the dispersed housing that is characteristic of this region.

The data shows that the area least affected by the security crisis is in the communes of Mindif and Dargala. In the commune of **Mindif**, the villages of Sabongari and Modjombodi were chosen to represent an agro-pastoral situation comprising floodplains cultivated with transplanted sorghum (*moukwari*), the by-products of which are then used in livestock farming, and a grazing area that was the subject of a rehabilitation and security project in the 1980s. Land is saturated in these areas following the last agricultural fronts in the 2010s in the *kara* where *moukwari* is cultivated. There is also increased pressure on pastures due to the arrival of new populations from neighbouring communes. This study hypothesises that livestock farmers who have been diverted from insecure areas may be delaying their movements and changing their calendars.

There is a similar land ownership problem in the neighbouring commune of **Dargala**, although the complete clearing of vertisol (*kara*) took place in the 1950s and 1960s in connection with the introduction of cotton into the cleared land, and there is less livestock farming due to the reduced availability of

pasture. The presence of large producers/traders in the floodplains illustrates the growing heterogeneity of farms and the power relations between small and large producers. To analyse this issue, the survey focused on Dargala-centre, where the largest producers are concentrated.

In the latter two communes, displaced people make up a much smaller percentage of the population.

Composition of the sample

The survey was based on a sample of heads of household, taking into account residence status (see below), activities practiced (size of holdings and production systems), the sex of the heads of household and their age (over and under 30 years old). The sample therefore reflects the diversity of heads of household, but not the diversity of the entire population of the villages studied.

In order to understand the changes in access to natural resources and land tenure rules in the context of the security crisis, the heads of household were chosen on the basis of the time they had been in the territories studied and the resources that they use:

Native populations who stayed and those who left because of the crisis and then **came back**;

Migrants settled in the area and included in the host population, who have negotiated their access rights with the natives;

IDPs and **returnees** as defined by humanitarian aid organisations (see box).

Definition of the population categories targeted by the survey

The following residence statuses are taken into account in the survey:

- **Native:** a person from the territory who has not moved or who has migrated and returned to the territory unrelated to the security crisis ;
- **Migrant:** a person who has arrived to settle in the territory without a direct link to the security crisis;
- **Returned migrant:** a person from the territory who migrated without connection to the security crisis and returned in connection with the security crisis;
- **Displaced person:** person who has arrived in the territory in connection with the security crisis (*category included in the statistics on population movements*);
- **Returnee:** a person from the territory who has migrated in connection with the security crisis and returned (*category included in the statistics on population movements*).

Host populations are made up of natives and migrants. **Internally displaced persons** include displaced persons, returned migrants and returnees. Three other categories of population are not taken into account in this survey, because they are not part of Resilac's target populations (refugees and returnees) or because it is difficult to mobilise them in only 5 days in the field (transhumant herders, only taken into account in the interviews):

- **Refugee:** a foreign person who has left his or her country of origin in connection with the security crisis and is entitled to international protection (*category recorded in displacement statistics*);
- **Returnee:** A former refugee who has returned to his or her country (*category recorded in population displacement statistics*);
- **Transhumant:** mobile livestock farmer who moves between dry and rainy season pastures.

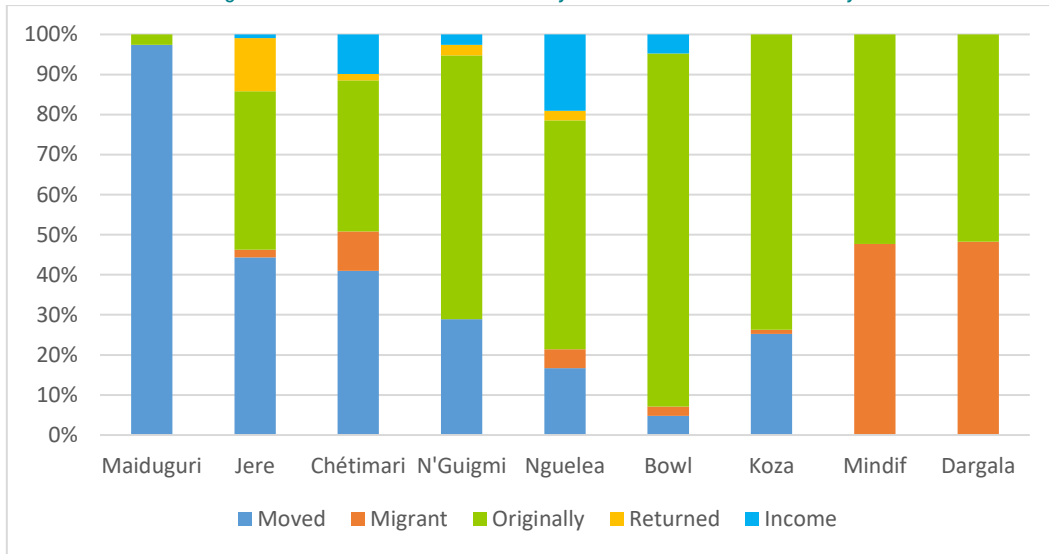
The total sample represents 496 people spread across the 9 territories under study. Between 30 and 60 people were surveyed per commune, with the exception of Jere and Koza where 106 and 95 people were interviewed respectively (table 5). Our sample is therefore unbalanced, but it was agreed to keep all the information, as the case of Koza is different compared to the other two Cameroonian communes and deserves to be treated in its own right. The same applies to Jere, which is representative of the territories most affected by the security crisis. However, it should be borne in mind that we have twice or even three times as much information for these two territories as for the others, which relativises certain comments on the indicators used in the analysis.

Table 4: Sample by territory and residence status

	Originally	Migrant	Moved	Returned	Returned migrant	Total
Nigeria	43	2	85	14	1	145
<i>Maiduguri</i>	1		38			39
<i>Jere</i>	42	2	47	14	1	106
Niger	48	6	36	2	7	99
<i>Chétimari</i>	23	6	25	1	6	61
<i>N'Guigmi</i>	25		11	1	1	38
Chad	61	3	9	1	10	84
<i>Nguelea</i>	24	2	7	1	8	42
<i>Bowl</i>	37	1	2		2	42
Cameroon	108	36	24			168
<i>Koza</i>	70	1	24			95
<i>Mindif</i>	23	21				44
<i>Dargala</i>	15	14				29
Total	260	47	154	17	18	496

However, the sample reflects the number of displaced people in the territories studied (fig. 2). IDPs make up almost all of the respondents on the outskirts of Maiduguri, where they are concentrated having come from the deserted areas of northern Borno. The neighbouring commune of Jere accounts for 40% of natives, 44% of IDPs and 13% of returnees, which illustrates the trend of returns mentioned at the regional level.

Figure 2: Distribution of informants by residence status and territory

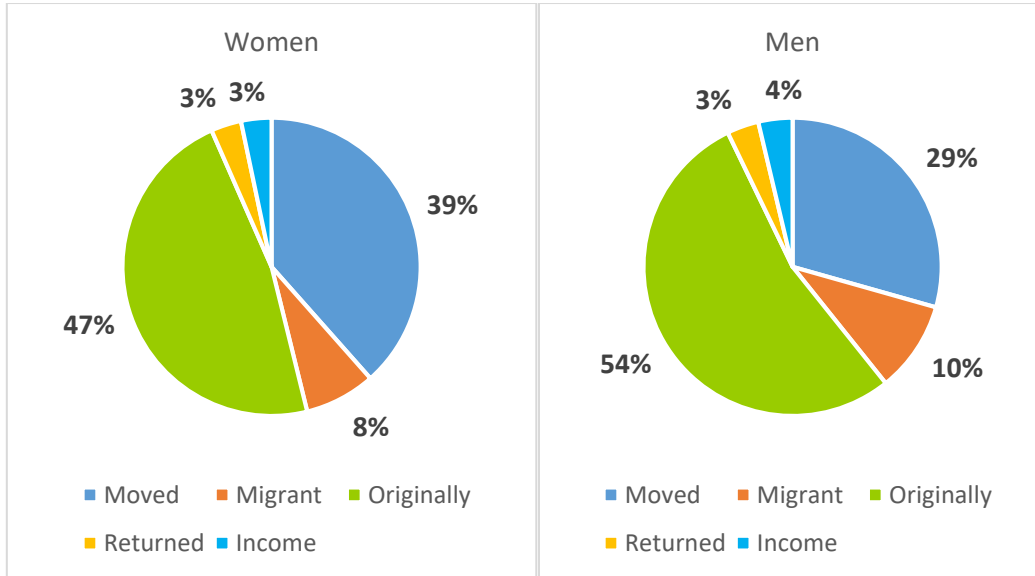


In Niger, of course, it is in the commune of Chetimari that the largest number of IDPs was surveyed (41% of the sample), to which must be added 10% of people who had previously migrated and have now returned to their families in the commune. Cases of this kind were not observed as much in the commune of N'Guigmi, where natives represent 66% of the informants and IDPs almost 30%. In Chad, the villages selected for the survey are further away from insecure areas and areas where a lot of displaced persons have settled, which explains the lower proportion of IDPs and returnees. In the commune of Koza in Cameroon, very close to the insecurity zones in Nigeria, the proportion of IDPs is higher. The absence of returned migrants should be noted. Finally, the samples from Mindif and Dargala are representative of the plains of the Far North of Cameroon, with almost 50% of migrants from the more densely populated neighbouring areas, who have settled to grow crops, particularly flood recession sorghum. No displaced persons were interviewed.

This distribution of different types of residence status is important for interpreting certain results by commune, particularly those relating to the perception of the crisis, the increase in conflicts and the difficulties in accessing natural resources. In total, in the four countries, native people represent 52% of the sample, displaced people 31% and migrants 9% (mainly in Mindif and Dargala in Cameroon). The two categories of returnees and returned migrants together account for less than 10%.

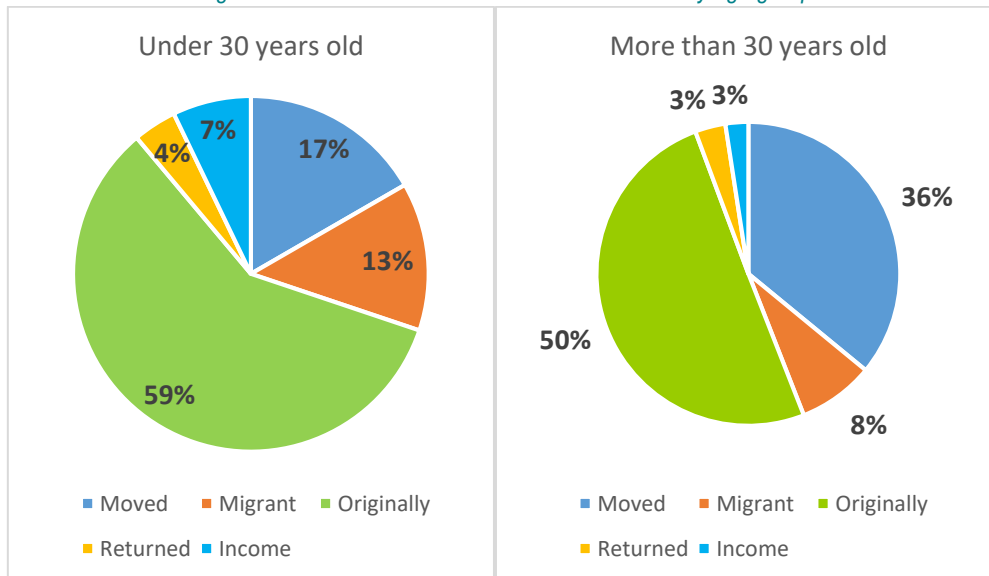
91 female heads of household were interviewed, i.e. 18% of the total sample. 21 women live in Koza, 17 in the territory of Jere, 17 in the commune of Bol and 16 in the municipality of Chetimari. Elsewhere, there are 3 or 7, and none were interviewed in Nguelea. Given the composition of this sample, the residence status of the women is not very different from that of the men (Fig. 3). They are, however, slightly more frequently displaced and less native than men. The marital status of these women heads of family is varied: of the 91 women interviewed, 49 are married (which is surprising for heads of family: however, in the context studied, these could be women whose husbands have migrated or disappeared); 6 are divorced, 2 are separated or single, and 34 are widowed. The high proportion of widows (37%) is also characteristic of the study area.

Figure 3: Residence status of heads of household by gender



The average age of those surveyed is 44.5 in Nigeria, 42.8 in Niger, 34.5 in Chad and 44 in Cameroon. The youngest is 18 (in Cameroon), the oldest 90 (in Nigeria). Heads of household under the age of 30 represent 25.4% of the total sample; this share is higher in Chad (44% of the sample) and Cameroon (23% in Koza, 25% in Mindif and 48% in Dargala) than in Nigeria (18%) and Niger (16%). The analysis of residence status by age group shows more contrasting results than by gender: there was a higher proportion of natives (59%), migrants (13%) and returned migrants (7%) among younger people, compared to older people (fig. 4).

Figure 4: Residence status of heads of household by age group

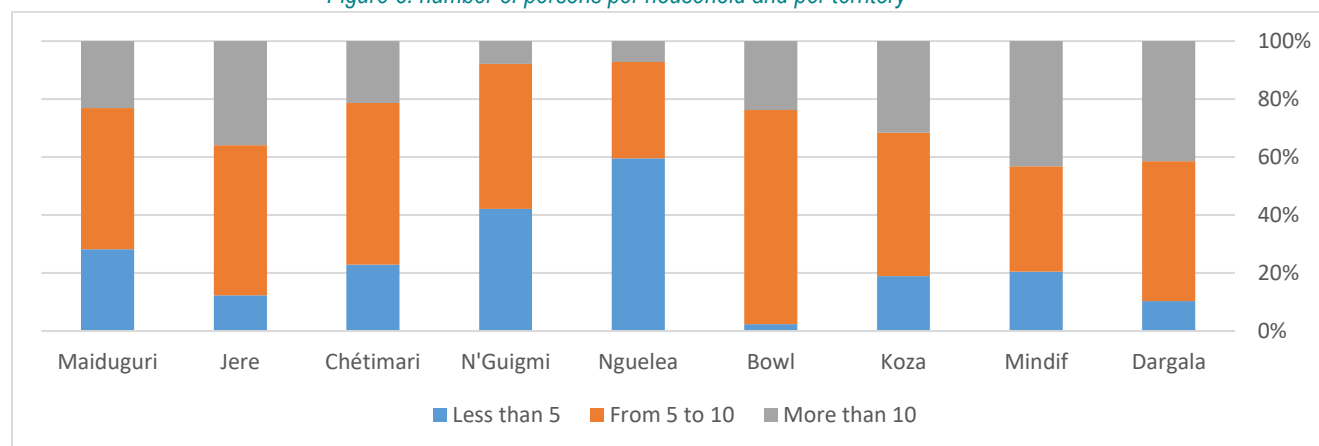


The sample shows a strong correlation between the age of the head of household, the number of wives and the size of the household, but there is some variation (tabl. 6). This means that the older you are, the more wives you have (polygamy is a common practice throughout the region) and the larger the family size. A multivariate analysis of this sample, which was not carried out as part of this study, would allow further analysis of the links between residence status, age and family size, taking into account cultural differences. The breakdown by territory (fig. 5) does not present a very contrasting picture of family composition. The three territories in Cameroon and Jere in Nigeria are similar, with more large families than the other territories: this situation makes it difficult to identify a clear relationship with the impact of the crisis.

Table 5: Description of family composition by country

	Average age of the head of household	Minimum age	Max. age	Number of wives	Average number of persons per household	Correlation between age and household size
Cameroon	44	18	79	1,4	8,5	0,48
Chad	34,5	19	62	1,5	6,4	0,6
Niger	42,8	20	85	1,2	6,7	0,38
Nigeria	44,5	21	90	1,2	8,4	0,3

Figure 5: number of persons per household and per territory



The survey should have detailed information related to the life stories of the heads of families (the date they settled in the village, the reasons for choosing this village and the people who introduced them). Unfortunately, this part of the survey contains too many unanswered questions and does not allow for a relevant comment.

Activities that are dependent on the impacts of the crisis

The 496 respondents to the questionnaire were asked about their activities. The following information⁶¹ was collected for activities related to land and renewable natural resources:

Agricultural activities: number of plots of land cultivated and major conflicts experienced by the head of the family; and by plot⁶², type of crops, mode of access to the plot⁶³, existence or not of land security documents, developments or conflicts over the last 10 years, details of the conflict considered the most important and the extent to which it has been resolved .

Livestock activities: types of animals reared, access or not to pasture in the dry and rainy seasons, purchase or not of fodder, access to water resources and salt marshes, existence or not of conflicts for access to pasture for the past 10 years, details of the conflict considered most important and the extent to which it has been resolved.

Fishing activities: access to fishing areas in the dry and rainy seasons, existence or not of conflicts related to this access over the last 10 years, details of the conflict considered most important and the extent to which it has been resolved, existence or not of a fishing permit and main difficulties encountered.

Timber collection or logging activities: methods of obtaining the wood and types of areas concerned, whether or not authorisation is required, whether or not conflicts exist, details of the conflict considered most important and the extent to which it has been resolved. As all the respondents need firewood, these questions were asked of the entire sample, not just those who earn income from it.

Each respondent described the '*most significant*' conflict they had encountered in the last 10 years concerning crop farming, livestock farming and fishing, and with no time limit for wood collection. This precaution was a safeguard to avoid reporting minor disagreements that could easily be resolved. However, it is not a perfect filter: respondents may have mentioned conflicts that had had an effect on them, without being the most serious, and their memory may have had an impact.

We present the activities of the heads of household surveyed in two stages: firstly by taking into account the entire sample, and secondly by focusing on residence categories. A focus on women and young people is presented in § 3.6.

The diversification of activities depending on proximity to insecure areas

If we add up all the activities of all the people surveyed (fig. 6 on the right), it is not surprising that crop farming is by far the most common activity (52%), ahead of animal husbandry (18%) and trade (16%). Other activities account for 6% or less of the activities undertaken. Thus, nearly 76% of the respondents are involved in agricultural activities, 25% livestock farming and 22% trade. The share of livestock farming is very low, given the pastoral nature of the areas studied: the survey did not include transhumant herders, of whom there are many in the Lake Chad region, but who are difficult to question if the survey is not specifically dedicated to them. The herders interviewed here are either sedentary or IDPs who have managed to keep livestock. In our sample, there is fishing in Bol (13 fishermen), Nguelea (9 fishermen), N'Guigmi (1 fisherman) and on the outskirts of Maiduguri (2 in Maiduguri, 3 in Jere). Given the proximity of these territories to insecure areas (Lake Chad and the Maiduguri plain), these low numbers of fishermen are no doubt linked to the insecurity that characterises water resources (cf. chapter 4).

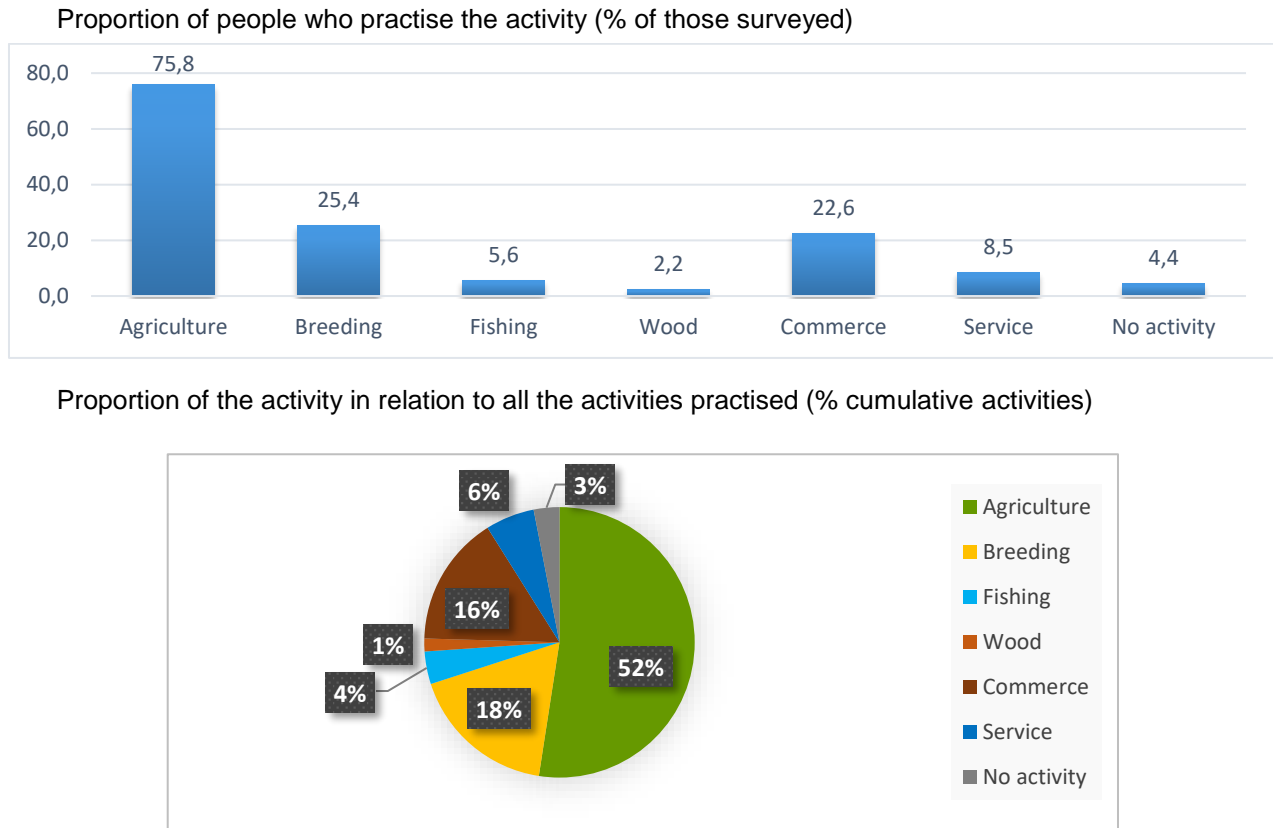
⁶¹ Other questions relating specifically to changes in activities were also raised (see Chapter 4).

⁶² It should be remembered that a bias was introduced in the way the surveys were conducted: detailed questions on the respondents' plots were not systematically asked for each plot.

⁶³ The survey covers both (i) plots owned by the head of household as a result of inheritance, gifts and purchases and (ii) plots operated by the head of household but owned by a third party as a result of loans, rentals, pledges and sharecropping.

Even if activities related to fishing and woodcutting are less common, the sampling made it possible to capture them and to have an interesting proportion of activities related to land resources (75.5%), which was a criterion for selecting the heads of household to be interviewed.

Figure 6: Activities in the 4 countries (496 respondents, multiple answers possible)



The diversity of activities observed per territory is very variable and the **more the place of residence is impacted by the security crisis, the more diverse the activities practised** (fig. 7 and tabl. 7). The territories directly impacted (Maiduguri, Jere, Chetimari, N'Guigmi) have two characteristics that are not found together elsewhere: there is proportionally less crop farming there than in the other territories and all six categories of activities are present, with the exception of Chetimari (4 activities). Thus, the diversification of activities, which is a trend observed in the territories of sub-Saharan Africa where there is differentiation of agriculture, affects this crisis-ridden region in different ways, because the decline in agricultural activities has been forced upon it. This has major consequences on family budgets, which have been affected by a lasting food crisis. We shall see that residence status (§ 3.2.5), gender and age (§ 3.6) also have a major influence on activities.

The commune of Chétimari is characterised by the absence of fishing, despite the presence of the Komadougou Yobé which marks its southern border and the proximity to the river of the 3 villages concerned by the study (distances of 5 to 10 km). It is not included in our sample, as we shall see in chapter 4. On the other hand, the absence of lucrative timber exploitation does not mean that this activity is not practised in the commune: Chetimari has relatively abundant wood resources in its southern part, which are mainly cut by Fulani and displaced people (Niger country report).

Nguelea also has a specific profile of activities, very close to that of the directly impacted territories, whereas this territory is only indirectly impacted: there are 6 types of activities, but crop farming is the most common (95%), which confirms that farmers have access to their plots. However, it should be borne in mind that this area is very close to zones with high levels of insecurity, which also means that there is a more significant perception of conflict in this area (see chapter 4) than in the other indirectly impacted communes.

In the other two impacted territories, Bol and Koza, five and four categories of activities are practised respectively. And only three and two categories are respectively engaged in in the non-impacted communes of Mindif and Dargala.

The "no activity" respondents all reside in areas directly affected. There are 10 in Maiduguri, 6 in Jere, 5 in N'Guigmi and 1 in Chétimari. Even if these figures seem low, they still represent 4.4% of the total sample. Bearing in mind that the respondents are all heads of households, the lack of activity is a clear indicator of a particularly dramatic situation making the survival of the families concerned totally dependent on the existence of external help. In Nigeria, these heads of household without work are located exclusively in IDP camps.

Figure 7: Activities practised by informants by territory (496 respondents, % of respondents)

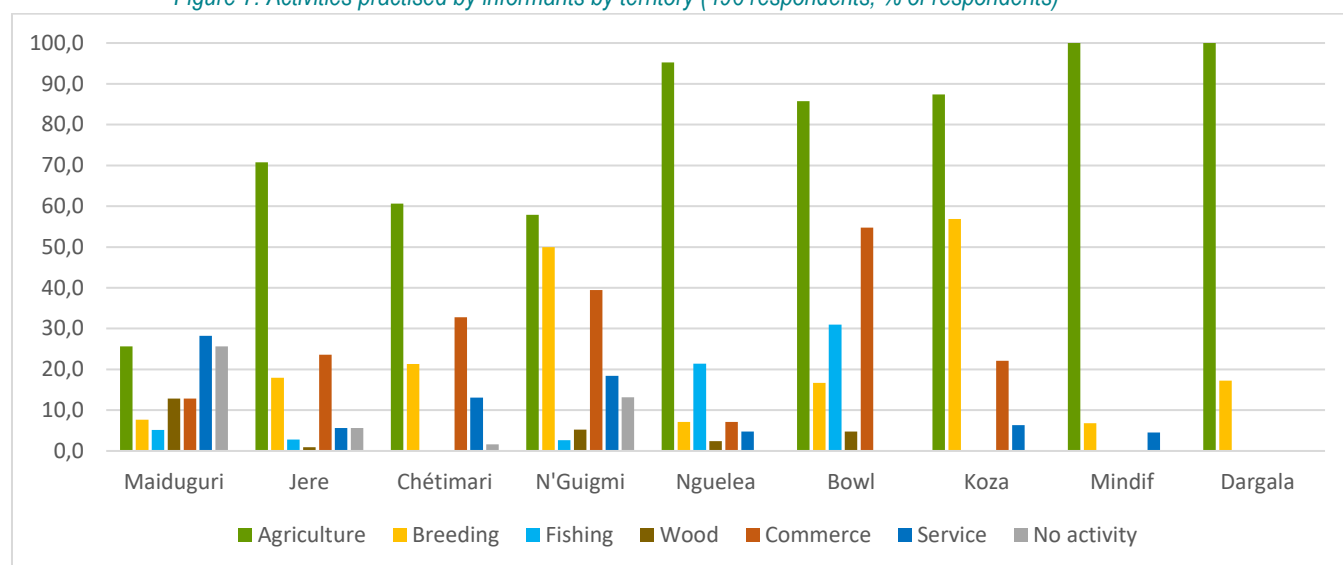


Table 6: Sample by territory and activity (all activities combined) ⁶⁴

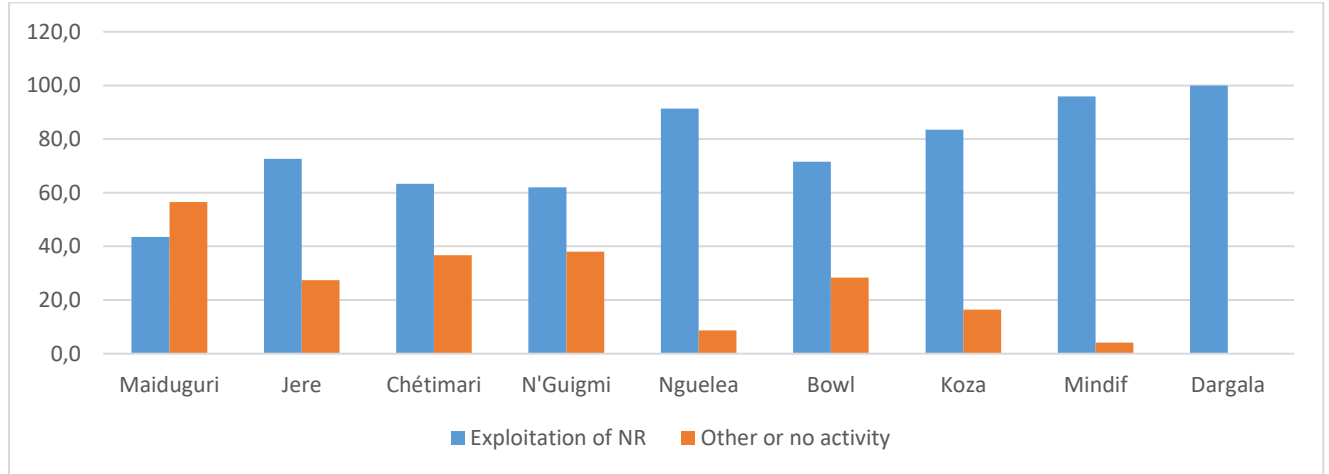
	Crop farming	Livestock farming	Fishing	Wood collection	Trade	Services	No activity	Total
Nigeria	85	22	5	6	30	17	16	181
Maiduguri	10	3	2	5	5	11	10	46
Jere	75	19	3	1	25	6	6	135
Niger	59	32	1	2	35	15	6	150
Chétimari	37	13			20	8	1	79
N'Guigmi	22	19	1	2	15	7	5	71
Chad	76	10	22	3	26	2		139
Nguelea	40	3	9	1	3	2		58
Bowl	36	7	13	2	23			81
Cameroon	156	62			21	8		247
Koza	83	54			21	6		164
Mindif	44	3				2		49
Dargala	29	5						34
Total	376	126	28	11	112	42	22	717

The proportion of activities related to land resources (crop farming, livestock farming, fishing and timber) is much lower where insecurity is high (Fig. 8). In the two non-impacted territories, **98%** of the activities reported are related to land. The percentage is **82%** in the indirectly impacted territories

⁶⁴ This table presents the diversity of activities per territory: taking into account the multi-activity observed, the total number of activities for the 9 territories is 717 for the 496 people surveyed.

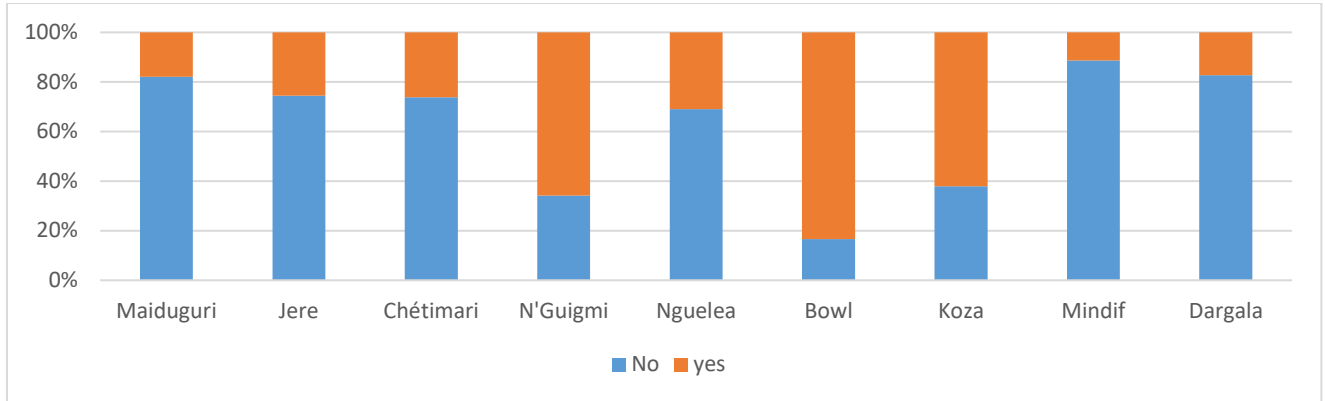
and **64%** for those directly impacted. In Chétimari and N'Guigmi in Niger, activities related to land and renewable natural resources remain in the majority (63%), but other activities account for 37%, which is particularly high for rural areas. In Nigeria, the activities of heads of household residing exclusively in IDP camps (Maiduguri territory) are mostly unrelated to natural resources (43%). Proximity to the city and peri-urbanisation processes also partly explain this proportion. If we also include the populations who have returned to their villages (Jere territory), the proportion is reversed and 73% of activities are based on the exploitation of renewable natural resources. The comparison with the indirectly impacted and non-impacted territories speaks for itself: other activities have half the weight in Koza (17%), four times less in Nguelea (9%), ten times less in Mindif (4%) and none in Dargala. In Bol, there is an even split between these two main categories of activities, with 72% of activities related to natural resources.

Figure 8: Activities related to the exploitation of land resources by territory (496 respondents, % of activities)



The diversity of activities per commune is not related to the multi-activity of farms, which was a feature of the system before the security crisis. On the contrary, multi-activity **is less significant than expected** (fig. 9): only 39% of respondents reported several activities. This varies a great deal from one territory to another and according to the intensity of the security crisis. Indeed, the crisis has had a huge impact on the reduction of activities in the territories directly impacted and in Nguelea, and in the territories indirectly impacted (cf. chapter 4). Multi-activity also varies according to the proximity of the wetlands (communes of Bol and N'Guigmi near Lake Chad) and the presence of displaced populations who are struggling to combine several activities (Maiduguri, Jere and Chétimari). The big surprise is the low rate of multi-activity observed in the communes of Mindif and Dargala, which shows a clear separation between agricultural and livestock activities despite being in multifunctional territories.

Figure 9: Multi-activity observed per household and per territory (496 respondents, % of respondents)



Heterogeneity of land ownership by territory

Crop farming represents the main activity, with strong disparities in land ownership. It is by far the activity most frequently practised by respondents from territories not or indirectly impacted (fig. 7: between 86% and 100% of respondents). It is the activity most frequently practised in the other territories (with the exception of Maiduguri), but in proportions which suggest that this activity will sometimes decline sharply (fig. 7: between 58 and 71% of the activities carried out) (cf. chapter 4).

We do not have information on the total area cultivated per household, which we thought we could deduce from the description of the plots, which was not done systematically, but we do have a record of the number of plots per family. This indicator is useful for observing the size of the farm, the diversity of cropping systems and the fragmentation of the plot. For this analysis based on the number of plots, we have not used the figures obtained from the second wave of surveys in Nigeria because of too much uncertainty about the values of this variable⁶⁵, but the information recorded about the plots has been processed with all the other information (see § 3.3).

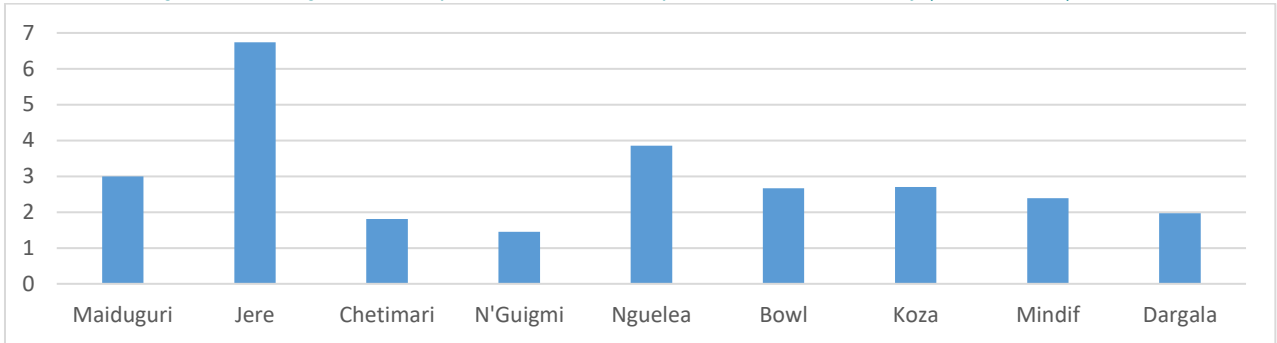
The results show that the average number of plots owned or farmed per farmer varies greatly from one area to another (Fig. 10). It ranges from 1.45 plots per farmer in N'Guigmi to 3.85 in Nguelea.

In the territories studied, the ability to cultivate different plots of land in different agro-ecological environments is important for three reasons: different varieties can be cultivated (optimisation of available resources, food security, price levels, etc.), natural risks can be limited (rainfall, animal pests, flooding, etc.) and security can be increased (inaccessible areas can be very localised). Thus, in Chadian territories, farmers are seeking to use polder, flood-recession and rain-fed plots in a complementary manner. In the Cameroonian lowland areas, the same logic applies to land used to grow flood recession sorghum and rainfed land (Mindif and Dargala). In Koza, the mountainous relief and the population density have fragmented the parcels to such an extent that the exploitation of several plots is often indispensable to obtain sufficient harvests. In Niger, the number of plots of land in the directly impacted zone is on average lower than in the other zones, and this should be seen in relation to the size of the resource areas that have become inaccessible due to the security crisis (see Chapter 4). In Maiduguri, the number of farmers is low (10) and the average obtained is not very representative. In Gongulon, located in the territory of Jere, the average, which is based on 21 responses, is surprisingly high and could be explained by land concentration caused by a series of departures and returns by some of the inhabitants of this locality. Indeed, a study that focused on Nigeria (Adelaja and George, 2019) indicates that an increase in the intensity of terrorist attacks has led to an increase in the amount

⁶⁵ In the analysis of the number of plots owned and/or operated by heads of household, we did not incorporate data from the second phase of the survey in Nigeria. Indeed, these data raise serious doubts about the correct interpretation of the question asked. For example, they include 20 heads of households who reported more than 20 plots, of which 2 reported 50 plots and 1 reported 150 plots. This very high figure raises questions about the definition of plot in these cases.

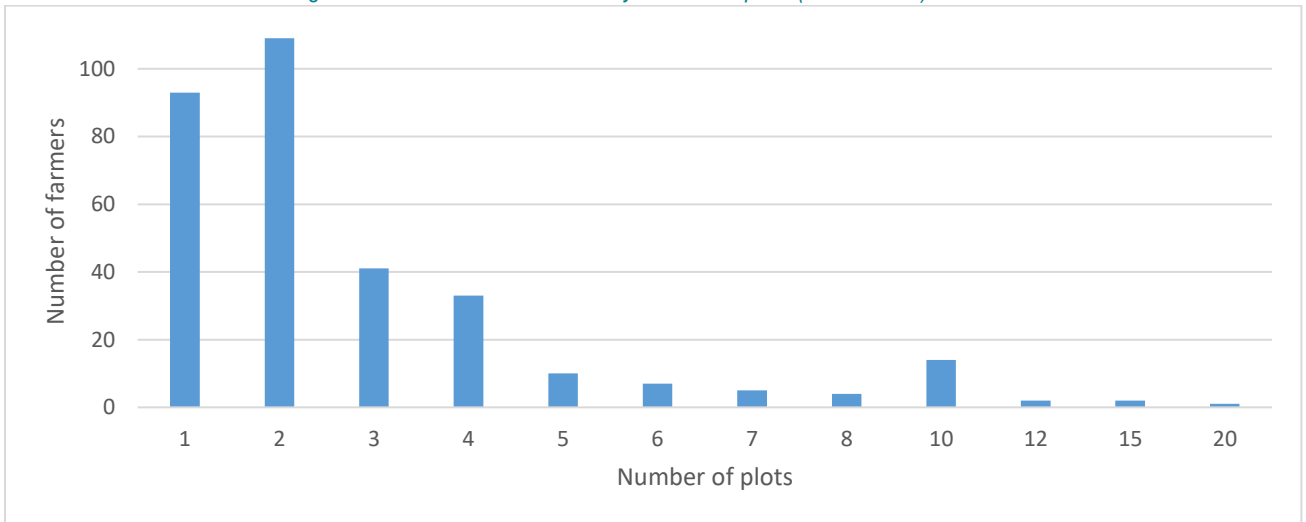
of land owned due to the abandonment of farms by neighbours and family members. However, this is a hypothesis that we cannot confirm on the basis of our data.

Figure 10: Average number of plots owned or farmed per farmer in each territory (321 farmers⁶⁶)



The averages conceal important differences. Across the entire sample (fig. 11), the vast majority of farmers have only 1 plot (93 farmers, 29%) or 2 plots (109, 34%). Only 41 (13%) and 33 (10%) have 3 or 4 plots. Forty-five (14%) have 5 or more plots, including 14 who declared that they had 10 plots, 2 who declared that they had 12 plots, 2 that they had 15 plots and 1 who had 20 plots. Although we do not know how big these plots are, the very high number of heads of households with only one or two plots is a sign that, in some cases, the families concerned do not have enough land to feed themselves, and that the amount of land they have has been reduced during the crisis.

Figure 11: distribution of farmers by number of plots (321 farmers)



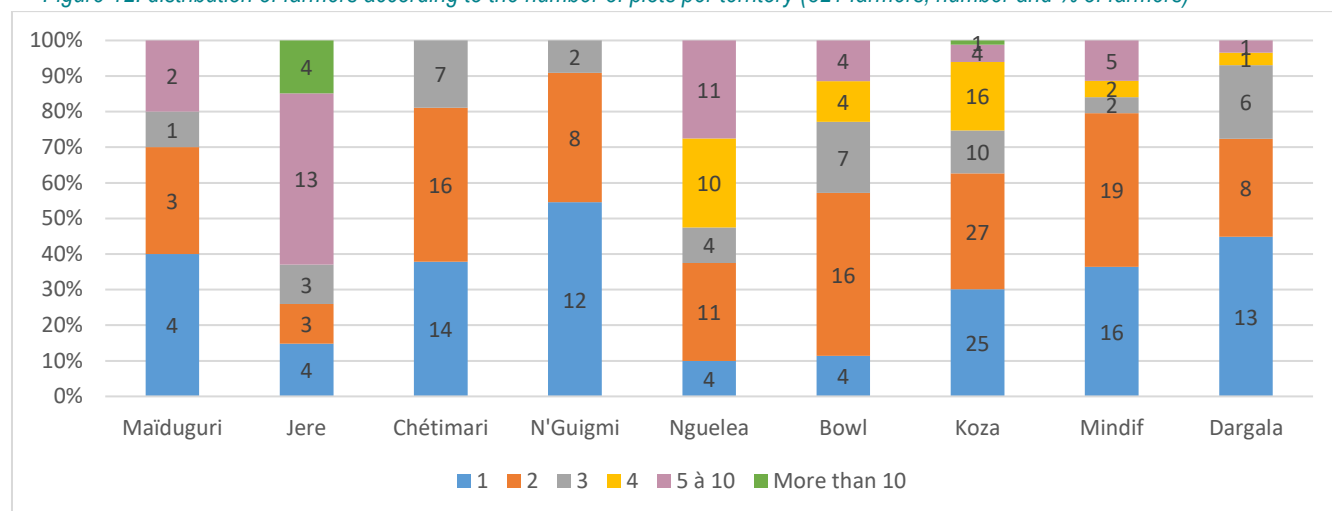
The breakdown of these data by territory (fig. 12) shows us that it is in Nigeria that there are the most families reporting 5 plots or more, as opposed to Nigerien communes where there are no families cultivating more than 3 plots. This difference between directly impacted territories may be due in part to the number of years since the security crisis has affected the territories concerned (11 years in Nigeria, 5 in Niger). There may not have been enough time for the recomposition of tenure systems and the land concentration observed by Adelaja and George in Nigeria (2019) to take place. The fact that in the LGA of Jere, located on the outskirts of the metropolis of Maiduguri and therefore driven by peri-urban dynamics that contrast with the other rural territories studied, the territory was partly *'repacified'* in June 2019 after having been inaccessible for a long time due to insecurity, has certainly accelerated changes in ownership of the plots that had been abandoned. In order to verify these hypotheses, further statistical analyses and interviews with families would be necessary.

Conversely, in Niger, areas where crop farming has become impossible remain *"inaccessible"*, thus paralyzing plot transactions. Nguelea is the indirectly impacted territory where there are the fewest

⁶⁶ Input error, the number of plots for a farmer is incorrect.

families who own or cultivate 1-2 plots (less than 40% compared to around 60% for Bol and Koza) and the most households who own or cultivate more than 5 plots (more than double that of the other two territories). In Mindif and Dargala, the number of farms with 1 or 2 plots of land is surprisingly high for municipalities that are not generally subject to strong land pressure. However, the data gathered shows that the size of the plots is frequently large (30% of the plots are 6 ha or more), which corresponds to plots planted with sorghum with lower densities of plants per hectare in these flood-recession conditions than in rainfed cultivation. This situation is also a sign of recent land clearing.

Figure 12: distribution of farmers according to the number of plots per territory (321 farmers, number and % of farmers)



The non-negligible presence of farms with many plots may be because the sample includes families who are more financially comfortable than others, or '*large families*', or because plots have been abandoned locally in highly insecure areas (Adelaja and George, 2019).

The profiles of 19 heads of household with 10 or more plots (Table 8) indicate that only two of the families concerned are very large (24 and 37 people), the average being 10 people. Of the 3 women who are heads of these farms, 2 are widows and one is married. The heads of these large farms are not all elderly: some are even young (5 are 30 years old or less, one of whom is single) and only 6 are over 50 years old. Their incomes are exclusively from crop farming, with the exception of 3 people: one harvests wood and fishes in Nguelea, while the others are livestock farmers in Koza. Residence status is varied, with 8 natives, as many returnees (all in Gongulon) and 3 displaced persons. The fact that the latter run large farms while having IDP status and small families (4 to 7 people) is quite surprising, especially in the case of the woman who is displaced in a refugee camp and only arrived there in 2017. However, we know that she chose to settle where she did because of the presence of family ties who may have helped her to gain access to land. One of the two other displaced persons is in the same situation. Even though we do not have the necessary data to gain a deeper understanding of the reasons for these situations⁶⁷, their existence is interesting in itself. If the plots are mostly bought, rented or sharecropped, this would be evidence of the vitality of the local land markets. If, on the other hand, most of the plots are used free of charge or with symbolic compensation (loans, donations), this would be evidence of the availability of land and that families or residents had agreed to share their land. However, this second hypothesis is hardly compatible with the number of plots in question.

Table 7: Profiles of heads of household with 10 or more plots of land

Territory	Village	Number of plots	Residence status	Year of return	Sex	Marital status	Age	Family size
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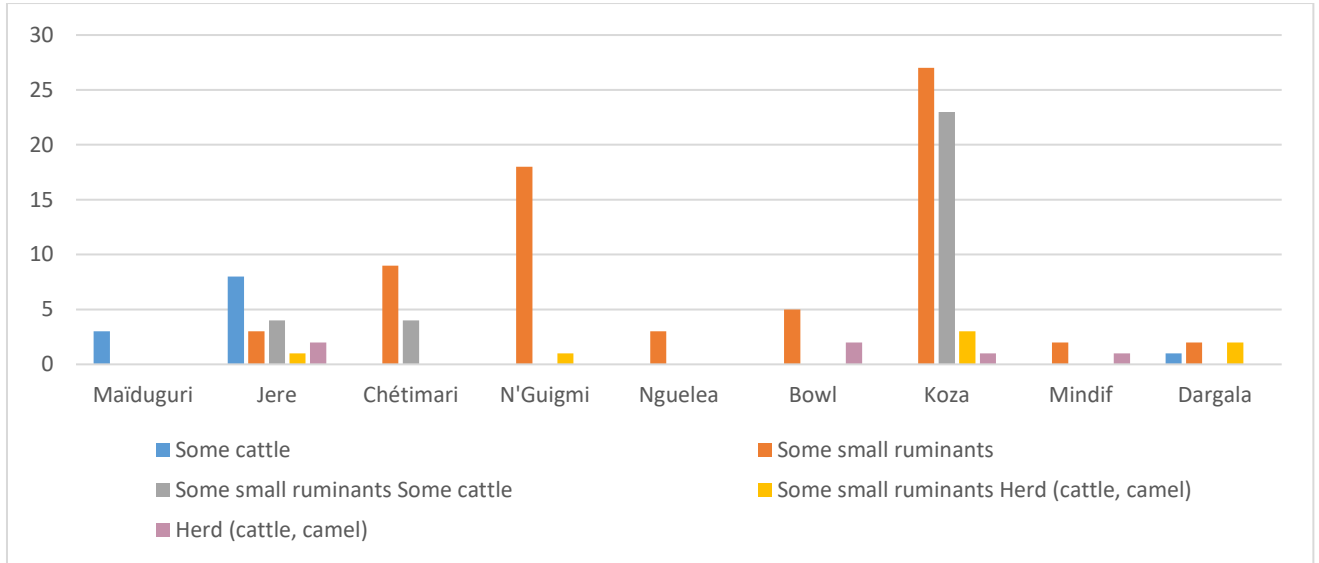
⁶⁷ As a reminder, the details of the modes of acquisition per plot have not been systematically recorded. Only one plot of 2 ha inherited by the displaced woman is included.

				arriva					
				I					
Nguelea	Tchingam	10	Displaced	2014	M	Married	33	5	
Nguelea	Bibi dam	10	Displaced	2015	M	Married	28	6	
Nguelea	Tchingam	10	Native		M	Married	29	5	
Jere	Gongulon	10	Native		M	Married	23	5	
Jere	Gongulon	10	Returnee	2015	M	Married	35	10	
Jere	Gongulon	10	Returnee	2014	F	Married	30	10	
Jere	Gongulon	10	Returnee	2013	M	Married	33	10	
Jere	Gongulon	10	Returnee	2015	M	Married	50	11	
Jere	Gongulon	10	Returnee	2012	M	Married	52	9	
Jere	Gongulon	10	Returnee	2014	M	Married	63	7	
Jere	Gongulon	12	Native		M	Single	28	4	
Jere	Gongulon	12	Returnee	2013	M	Married	45	10	
Jere	Gongulon	15	Returnee		M	Married	48	12	
Jere	Gongulon	15	Native		M	Married	55	10	
Maiduguri	Bakassi camp	10	Displaced	2017	F	Widow	38	8	
Koza	Koza	10	Native		F	Widow	62	9	
Koza	Koza	20	Native		M	Married	58	37	
Mindif	Modjombodi	10	Native		M	Married	43	24	
Mindif	Sabongari	10	Native		M	Married	55	10	

Livestock farming by sedentary families: a small herd of small ruminants

Livestock farming, like crop farming, is present in the samples from all the territories. It should be borne in mind that the surveyors' time in the field did not allow them to include transhumants in the samples. The respondents who are involved in livestock farming are therefore sedentary herders or agro-pastoralists. Within our sample, they are most numerous in Koza (43.2% of the herders surveyed), which is surprising for the densely populated foothills of the Mandara mountains, where families rear a few small ruminants, and in comparison with the other territories under study where sedentary livestock farming is more widespread (Jere, N'Guigmi, Bol, Nguelea, Mindif). **The survey mainly notes the rearing of a few small ruminants and a few cattle** (Fig. 13). Only 13 farmers (10.4% of the farmers surveyed) have a herd of cattle and/or camels, sometimes with a few small ruminants. Seven of them are in Koza, the others being distributed between Jere, N'Guigmi, Bol, Mindif and Dargala.

Figure 13: Livestock population surveyed by territory (125 livestock owners)



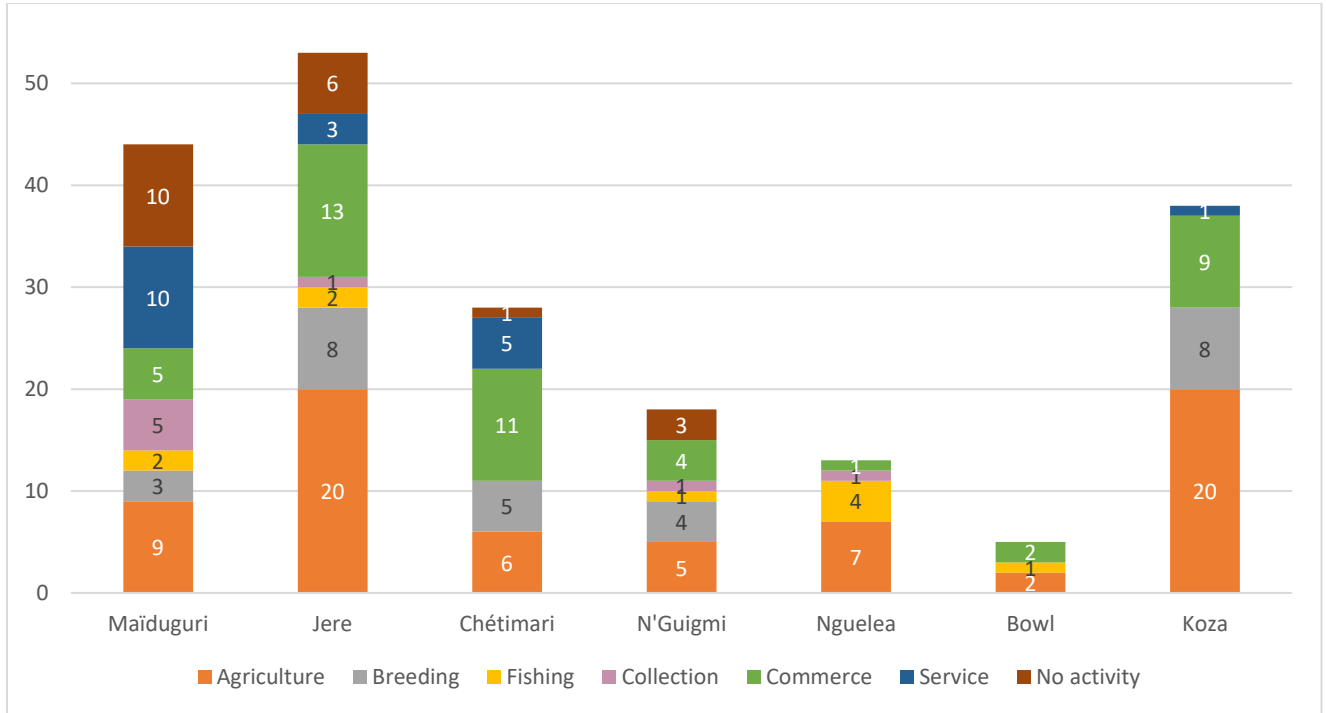
Cutting and selling wood: the activity of last resort

Wood is mainly a "refuge activity" carried out by poor people. This is apparent from the interviews conducted by the national experts. Commercial wood cutting does not appear in the Cameroonian samples, nor in Chetimari (Niger), unlike in the territories in Lake Chad (Bol and Nguelea in Chad, N'Guigmi in Niger) and in the Nigerian territories, where it is very much in the minority. This is the single activity of only two respondents: they are both IDPs (one in N'Guigmi, the other in the Bakassi camp on the outskirts of Maiduguri). Similarly, 8 of the 11 respondents concerned are IDPs (5 in Maiduguri, and 1 each in Jere, N'Guigmi and Nguelea). However, selling wood or charcoal does not always constitute a "refuge activity" as we found that a head of household who does this activity in Nguelea also has 10 plots of land and also fishes.

Differentiation of activity systems by category of residence

Here we verify the link between commercial activities and the history of families who have fled insecure areas. These displaced, returnee and returned migrant families have been forced to abandon all or part of their property (for returnees this will have been for a period of varying length). They then have to negotiate the conditions for settling in their new place of residence. Compared to natives and migrants, for the sample interviewed (154 displaced persons, 17 returnees, 18 returned migrants) we observed a lower proportion of activities related to crop farming (41% compared to 58.4%) and livestock farming (12.7% compared to 20.1%) and a higher proportion of activities related to services and trade (21.3% compared to 12.7%) and unemployed persons (8.2% compared to 0.4%).

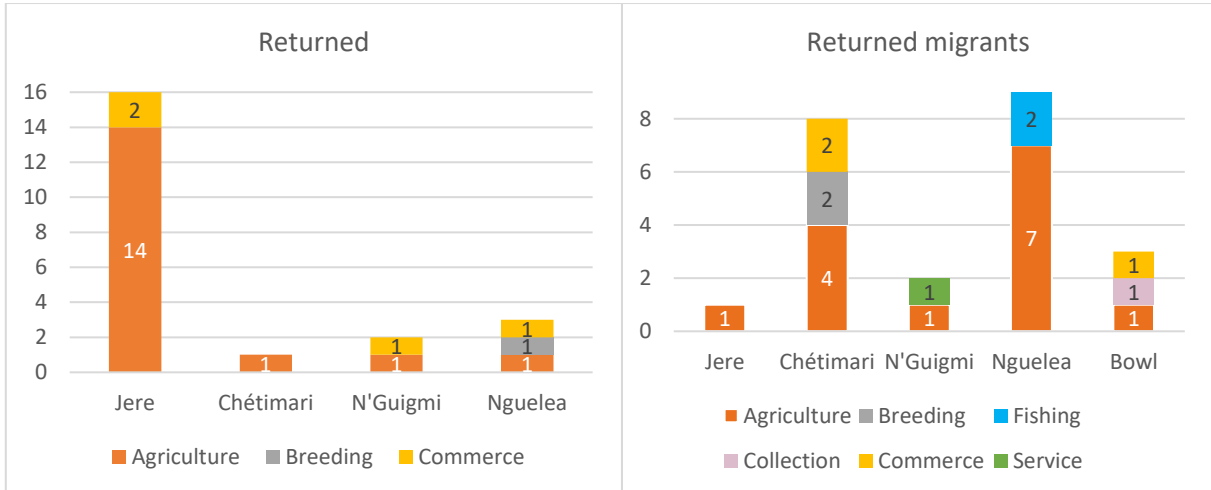
Figure 14: IDP activities by territory (154 respondents, number of IDPs)



Within our overall sample, **20 out of the 22 heads of households without any activity are displaced persons** (fig. 14): 19 men over 30 years old and one widow over 30 years old. The other two are women from N'Guigmi. This shows that this is the most fragile residence category. What is more, for this category, **activities are very diversified in the territories directly affected by the crisis**, particularly those in Nigeria, which have been **affected for the longest period of time** and have the largest number of IDPs. As is the case for the overall sample, crop farming is the most common activity. However, **the proportion of activities related to land resources (58%) is significantly lower than for all other residence categories** (93% for migrants; 81% for natives; 82% for returnees; 83% for returned migrants).

For returnees and returned migrants (Fig. 15), crop farming is also the main activity. Only two other activities are practised, to a lesser extent, by returnees: animal husbandry and trade. The activities are more diversified for returned migrants. **Activities linked to land resources represent 83% of activities** by returnees and returned migrants, which is slightly higher than for natives (81%).

Figure 15: Activities by returnees (17 respondents) and returned migrants (18 respondents) by territory (no. of respondents)



The multi-activity rate (Fig. 16) among displaced persons, returnees and returned migrants (26%) is half that of natives (52%), but higher than that of migrants (19%). This result illustrates the difficulties IDPs have in (re)undertaking several activities, unlike native persons, who have been able to use their assets to invest in more than one activity. The low rate among migrants is influenced by the high proportion of young people, who essentially have a single activity, in this category (36%).

Figure 16: Multi-activity observed by residence category (496 persons, number and %)

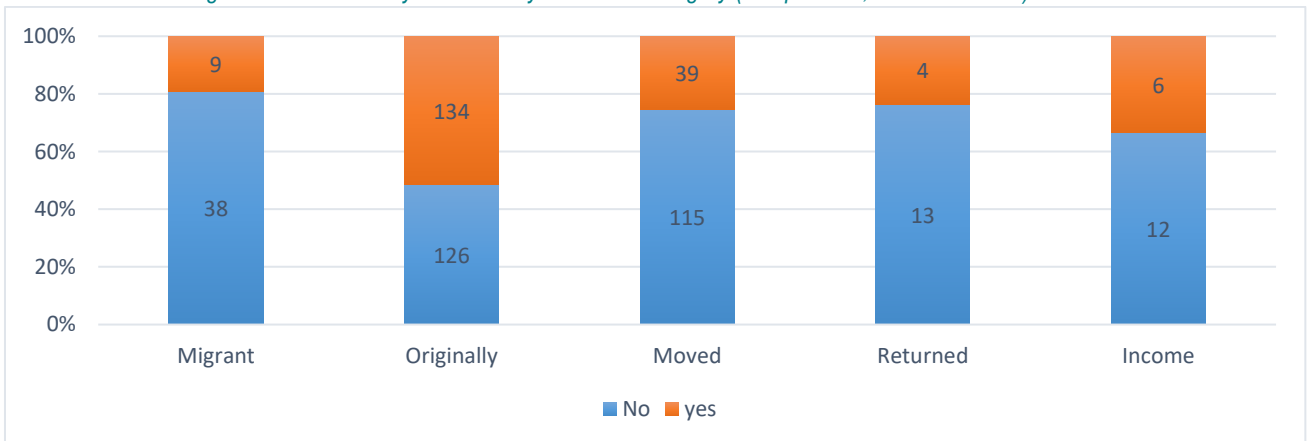


Figure 17: distribution of displaced, returned, returned migrant and migrant farmers by number of plots (144 people, no. of people)⁶⁸



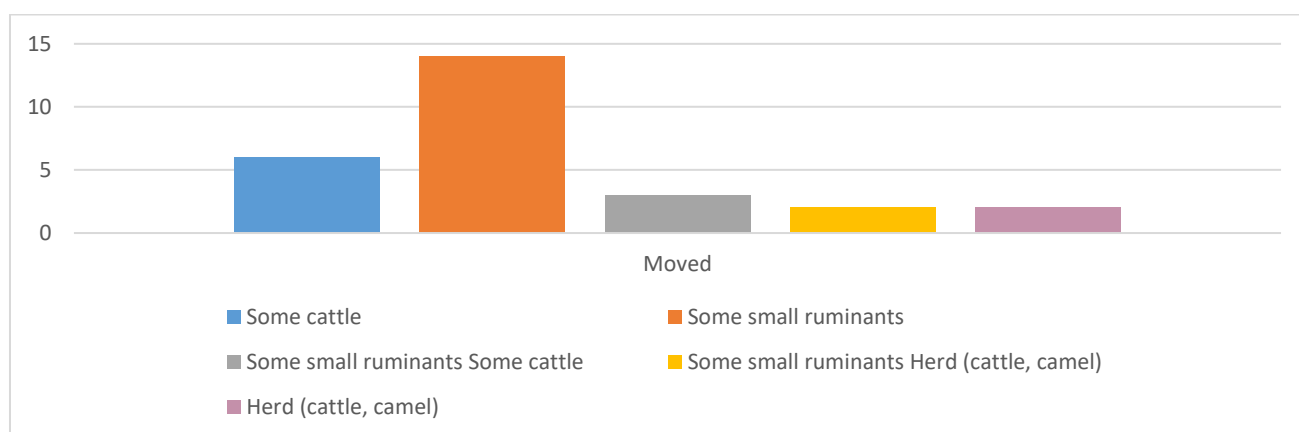
Among those who practice crop farming, migrants and IDPs are most likely to have only one or two plots of land (Fig. 17). Indeed, 74% of them are in this situation, compared with 63% for the sample as a whole and 62% for the native population. These high proportions surely reflect the fact that access to land is more difficult for these two categories of actors. However, this does not prevent some IDPs from having access to a large number of plots. In addition to the three IDPs with 10 plots of land that we have already mentioned (cf. table 8), two IDPs stated that they had seven plots and another that they had eight (only two migrants said that they had more than four plots). They are located in Tchingam (Nguelea), DCC Camp (Maiduguri) and Gongulon (Jere).

On the other hand, these rates are only 13% for returnees and 54% for returned migrants and are therefore lower than the rate of 63% for the entire sample. These figures appear to show that **returnees and returned migrants are not generally in more complex land tenure situations than the others.** However, it should be remembered that we do not know the surface areas, the agro-ecological characteristics of the plots, or their modes of access, and that the sample of people concerned is small (15 returnees and 13 returned migrants). The situations of the returnees are varied: they have between 2 and 15 plots. It should be noted that the 10 returnees with between 6 and 15 plots are all in Gongulon, where land tenure appears to be highly concentrated, with significant disparities (one of the respondents from Gongulon has only one plot). The number of plots among returned migrants is more homogenous, varying from 1 to 5.

With regard to livestock farming, there is the same distribution of livestock among the IDPs as exists in the overall sample, with small herds of small ruminants dominating. Four displaced persons manage a herd of livestock (Fig. 18).

⁶⁸ These data do not include those from the second phase of the survey in Jere, for reasons already mentioned above.

Figure 18: Types of livestock farming by displaced respondents (27 herders, no. of herders)



Access to agricultural land: inequality and conflict

The surveys of heads of households were supposed to provide us with data on all the plots they own and/or cultivate. This was not the case: out of the 1887 plots declared by the 496 heads of household, information was provided for 332 (Table 9). This section is therefore based on data from these 332 plots, all of which are cultivated: 270 in rainfed cultivation, 39 in market gardening and 19 in transplanted sorghum (we do not have information for 4 plots).

Table 8: Distribution of the plots of land filled in by territory and by residence category

	Native	Migrant	IDP	Returnee	Returned migrant	Total
Maiduguri			5			5
Jere	38	2	17	14	2	73
Chétimari	21	5	6	1	4	37
N'Guigmi	6		11		2	19
Nguelea	3		2			5
Bowl	27		1			28
Koza	61		20			81
Mindif	28	23				51
Dargala	15	18				33
Total	199	48	62	15	8	332

Confirmation that significant inequalities exist in terms of land tenure

Regardless of the type of farming, plot sizes vary greatly (Fig. 19). While plots are generally small (36% measure one ha or less), there are some very large plots (over 20 ha) in Nguelea (three plots, one of which is 64 ha), in Jere (3 plots, the largest measuring 25 ha) and in the three Cameroonian communes: one plot of 24 ha in Koza, five plots, one of which is 50 ha, in Mindif, and one plot of 30 ha in Dargala. Plots larger than 10 ha are much more frequently found in territories not affected by the security crisis (22%) than in other territories (8%). However, this situation probably predates the security crisis: plots transplanted with sorghum are on average larger than those under rainfed cultivation because of lower transplanting densities and lower rainfed land availability in the Diamaré floodplains in Cameroon (Teyssier and Seignobos, 1997; and see below). Land inequalities in the Chadian polders were already observed before the crisis (Bertoncin and Pase, 2012). In the commune of Koza, the constitution of large land holdings seems to be a well-established phenomenon (a 24 ha plot was obtained by inheritance by

a divorced woman of 65 years old, the head of a family of 10), but it is marginal. Of the 81 plots of land reported for this commune, only three others measure between 4 and 6 ha.

In order to obtain comparable data by territory and to avoid multiplying the categories of crop types, the survey planned to distinguish between rainfed crops, market gardening and flood recession crops (transplanted sorghum); those that are irrigated and those that are not; and those located in developed land. The lack of time did not allow us to refine this typology upstream of the survey, nor to validate the results, forcing us to work on this basis when we lacked information on the number of harvests per plot and could have provided a drop-down list for the types of development (individual market garden, collective market garden, ouadi, semi-modern polder, modern polder, etc.).

Small **rainfed** plots (1 ha or less⁶⁹) clearly predominate (37%). However, 11% of the plots are larger than 10 ha. They are located in Jere, Chetimari, Nguelea, Koza, Mindif and Dargala. Only in Maiduguri and N'Guigmi are there no plots larger than 3 ha in our sample.

Smaller **market gardening** plots (half a hectare or less) do not appear in our sample. Those of one hectare are in the vast majority (62%). A plot of 40 ha, which is very large for market gardening, was noted in Nguelea.

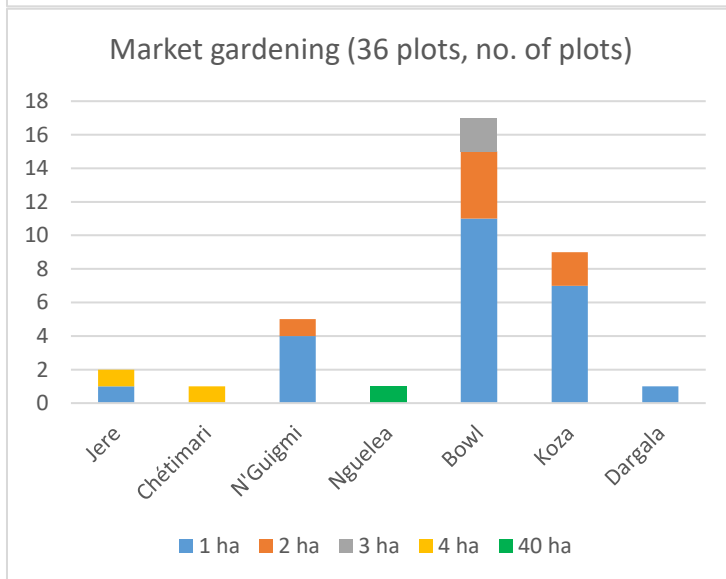
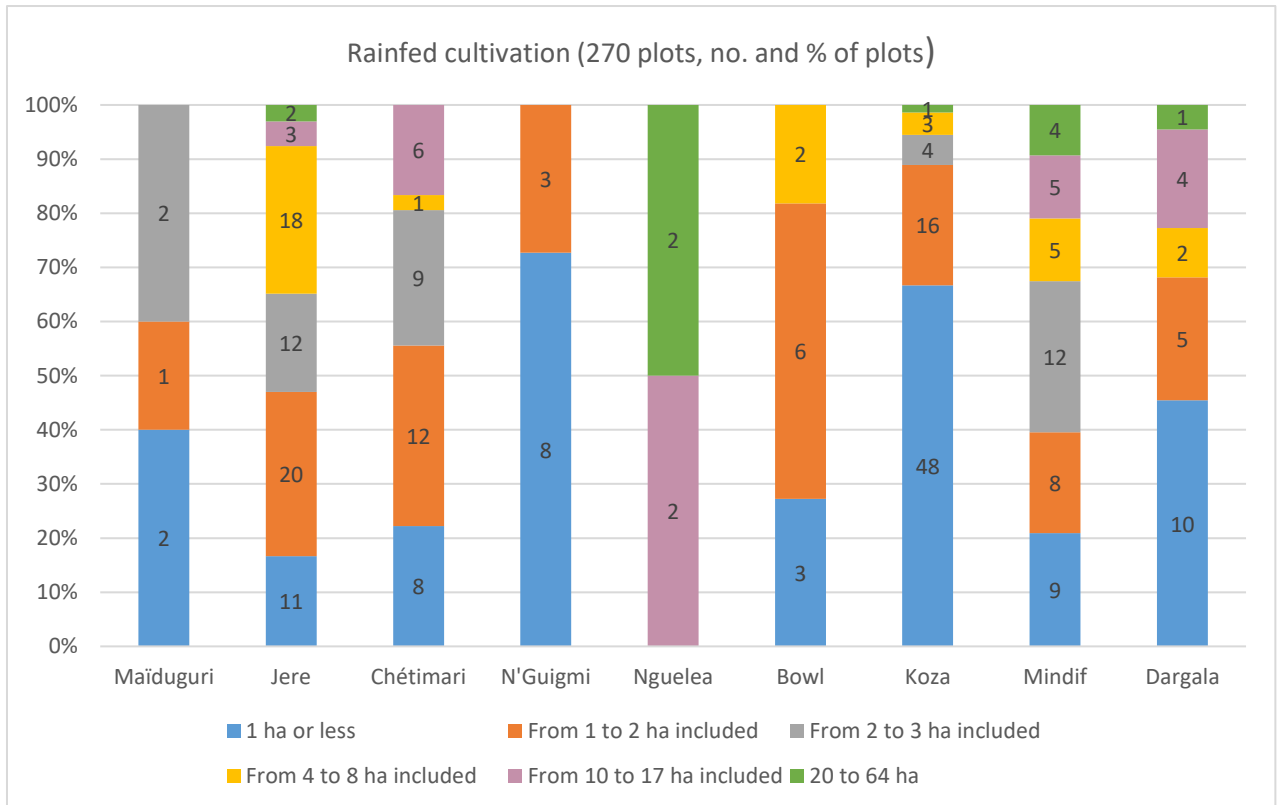
In Nguelea, the 5 documented plots are located in a development and are irrigated: they are therefore probably all in polders where double cropping is possible in rainfed cultivation (4 plots) then in market gardening (1 plot).

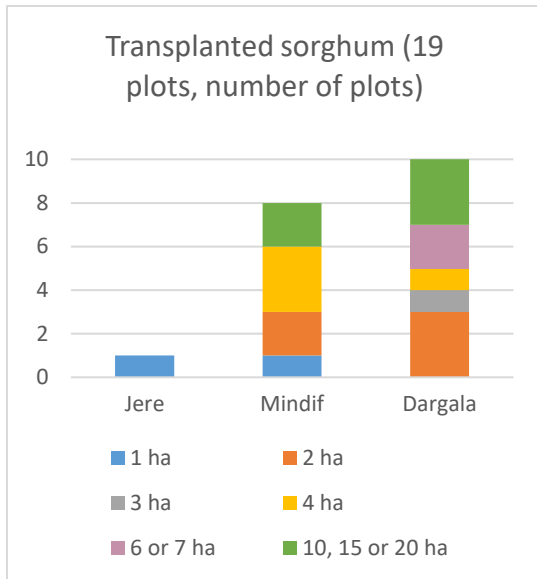
The distribution of the areas cultivated with **transplanted sorghum**, present in Jere, Mindif and Dargala, is different from the previous ones because it is the large plots that dominate: 7 plots out of 18 are between 6 and 20 ha while two plots are only one hectare in size.

⁶⁹ The sample includes 2 plots of 0.5 ha, 1 plot of 0.25 ha and 1 plot of 0.15 ha.

*Figure 19: Size of plots by type of farming and by territory*⁷⁰

⁷⁰ Four parcels do not appear, due to errors in entering their area.





There were significant differences between the land tenure situations in the different territories (except in Maiduguri, where the situations of the 5 farmers with a plot of land are very similar): Table 10 below illustrates this situation on the basis of the information available to us.

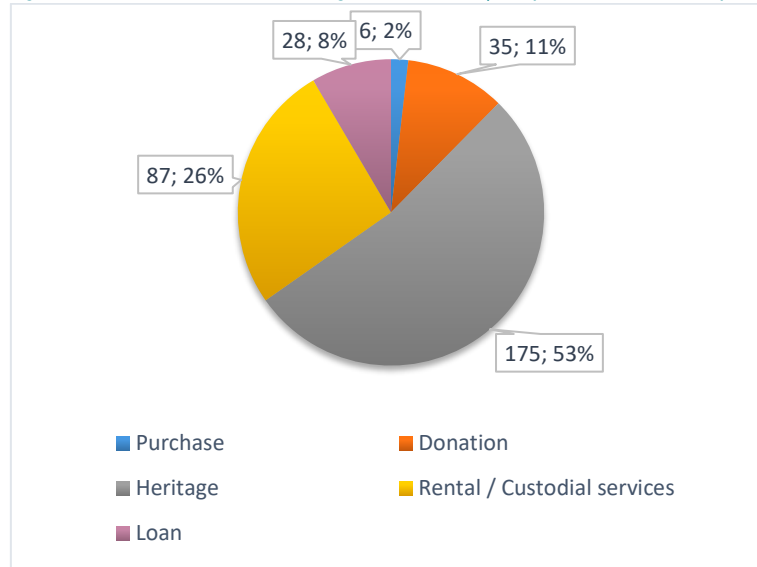
Table 9: the contrasting land 10 situations of farmers by territory

Jere	
<u>Land situation n°1</u> : 1 inherited plot of 3 ha in rainfed cultivation + 14 other plots of <u>land</u>	<u>Land situation n°2</u> : 1 rented or sharecropped plot of <u>land of 0.15 ha</u> in rainfed farming.
<u>Other activities</u> : no	<u>Other activities</u> : no
Chétimari	
<u>Land situation n°1</u> : 1 inherited parcel of 4 ha in market gardening + 2 other plots ;	<u>Land situation n°2</u> : 1 plot of <u>land of 1 ha</u> on loan for rainfed cultivation.
<u>Other activities</u> : some small ruminants and some cattle	<u>Other activities</u> : no
N'Guigmi (reduced sample)	
<u>Land situation n°1</u> : 1 inherited parcel of 2 ha in market gardening + 1 other parcel	<u>Land situation n°2</u> : 2 sharecropping plots of 1 ha in rainfed farming + 1 other sharecropping plot.
<u>Other activities</u> : services	<u>Other activities</u> : some small ruminants and trade
Nguelea (reduced sample)	
<u>Land situation n°1</u> : 1 inherited parcel of 40 ha in market gardening + 4 other plots of <u>land</u> .	<u>Land situation n°2</u> : 1 inherited plot of <u>land of 10 ha</u> in rainfed cultivation
<u>Other activities</u> : no	<u>Other activities</u> : some small ruminants
Bowl (reduced sample)	
<u>Land situation n°1</u> : 2 inherited plots of 5 ha in rainfed cultivation + 3 other plots	<u>Land situation n°2</u> : 1 plot inherited from 1 ha in rainfed cultivation + 1 other plot
<u>Other activities</u> : fishing and small ruminants	<u>Other activities</u> : no
Koza	
<u>Land situation n°1</u> : 1 inherited plot of 24 ha in rainfed cultivation + 19 other plots of <u>land</u>	<u>Land situation n°2</u> : 1 rented plot of <u>land of 1 ha</u> in rainfed cultivation
<u>Other activities</u> : no	<u>Other activities</u> : no
Mindif	
<u>Land situation n°1</u> : 2 inherited plots of 20 ha of transplanted sorghum + 3 other plots of <u>land</u> .	<u>Land situation n°2</u> : 1 inherited plot of <u>land of 1 ha</u> in rainfed cultivation
<u>Other activities</u> : no	<u>Other activities</u> : no
Dargala	
<u>Land situation n°1</u> : 1 bought plot of <u>land of 10 ha</u> of transplanted sorghum + 3 other plots of <u>land</u>	<u>Land situation n°2</u> : 1 rented plot of <u>land of 1 ha</u> in rainfed cultivation
<u>Other activities</u> : herd	<u>Other activities</u> : no

Despite poorly controlled sampling, since we do not know how the investigators chose the plots of land from among all those owned and/or cultivated, this sample of plots illustrates both the contrasting land situations between the territories under study, as we had expected (see chapter 2), and the heterogeneity of land tenure within the territories. In the absence of a reference study for a precise diachronic analysis of these contrasting situations, the influences of the security crisis are analysed in terms of modes of access to plots (§3.3.2), conflict related to plots (§3.3.4) in the 9 territories differently impacted by the crisis and residence categories (§3.3. 3.).

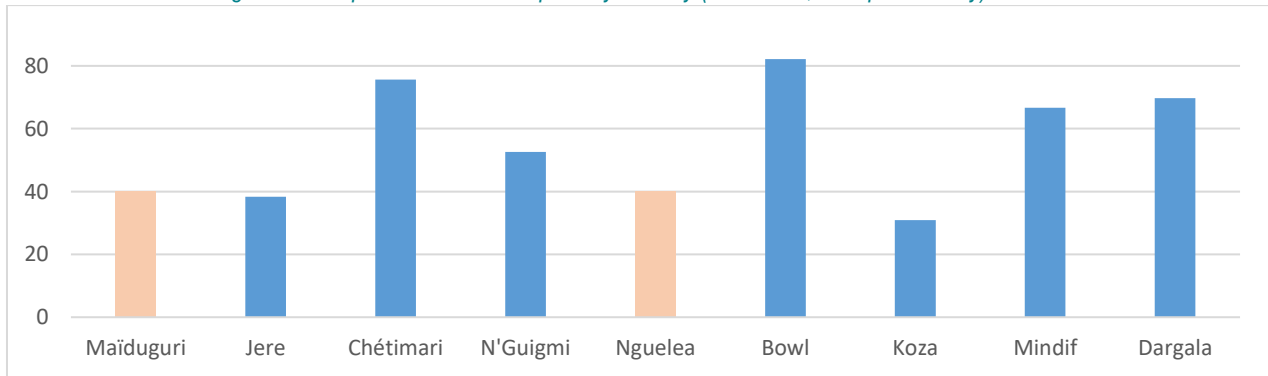
The increased commercialization of access to agricultural land

Figure 20: methods of access to agricultural land (332 plots, no. and % of plots)



As in most rural areas in West and Central Africa, **inheritance** is the most common way of gaining access to agricultural land (53 per cent of the sample, fig. 20). This category of inheritance includes cases of donation (free transmission to an heir of a plot of land during the donor's lifetime). While in most territories sons, and increasingly daughters (see section 3.6), of heads of household inherit plots, only the eldest son inherits land among the Mafa in Koza, where population density is extremely high and a land market has developed more than in other territories (see below). This explains why the proportion of inherited plots (fig. 21) is particularly low (31%). It is also low in Jere (38%), certainly due to the large number of displaced persons. However, this is not the case in Maiduguri, but the sample is very small there (5 heads of household) as it is in Nguelea (also 5 people).

Figure 21: Proportion of inherited plots by territory (172 cases, in % per territory) ⁷¹



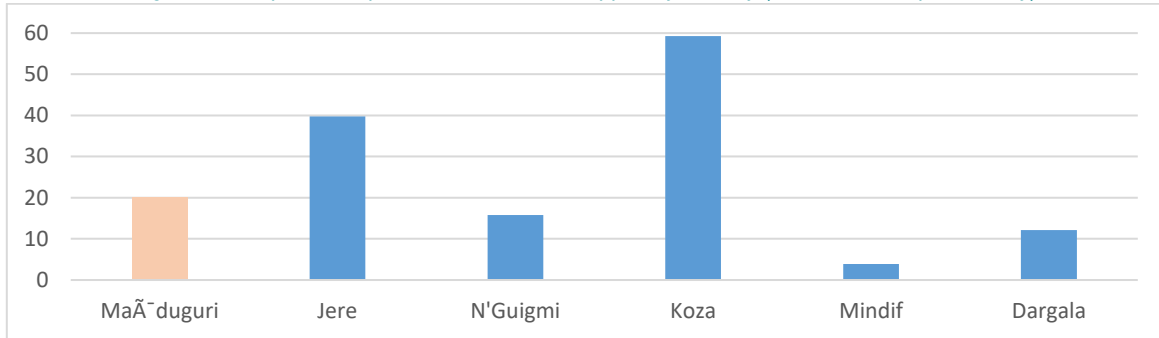
Rental and sharecropping come in second place for the whole sample (Fig. 20), with more than a quarter of the modalities. We were forced to group these two modes of access together because of biases identified in the survey results. We had taken the precaution of not designating a mode of access through a single question: additional questions were asked about payments, the duration of the agreements, etc. (fig. 20). (see the survey form). Many respondents stated that the consideration given in exchange for access to the land was proportional to the harvest (which should only apply to sharecropping), whereas they indicated that they rented the plots (but also in a few cases of purchase). Thus, the amount of rent depended on the agronomic qualities of the plots and therefore on the expected harvest. In other cases, considerations were reported as non-proportional to the harvest for transactions

⁷¹ Wherever possible, we use the colour salmon in graphs and tables to indicate a particularly small sample, which we have set at 5 units or less.

designated as sharecropping. The total number of uncertain cases was so large that we have chosen to combine these two modalities. It should be noted, however, that we are certain that cases of sharecropping have been identified in N'Guigmi, and that the proportion of rentals within the grouping is much higher than that of sharecropping, particularly in Cameroon, where rentals are more or less systematic. However, the existence of sharecropping was also noted during the interviews in Koza.

No rentals and/or sharecropping were recorded either in Chetimari or in the Chadian territories, which does not mean that these modes of access to plots of land are absent. On the other hand, agreements of this kind are predominant in Koza (59%, Fig. 22), mainly in the form of rentals, and in Jere (40%). They are also present in significant proportions in Maiduguri, N'Gguigmi and Dargala (12-20% of transactions).

Figure 22: Proportion of plots rented or sharecropped by territory (87 cases, in % per territory)



The plots are mostly rented or sharecropped from an acquaintance (31 cases; 36%) and from customary authorities (24 cases, including 21 in Jere; 28%), and to a lesser extent from family members (5 cases) or from the head of a family (4 cases). Koza has the specificity of having 'régies', which is the local name for public institutions who manage land, some of whom have land in the private domain of the state (Sodecoton, CFJA, CEAC; see Chapter 4) and lease plots (21 cases). Though the level of rents is certainly not fixed as in a market, as the sample is large (48 rentals in all), it is safe to say that the rental market is dynamic in this commune. Conversely, in the communes of Mindif and Dargala located in the cotton zone and in the area around the city of Maroua, the low proportion of rentals is quite unexpected and is probably explained by the existence of land reserves (see Chapter 2).

The duration of rental and sharecropping contracts is very short: 63 agreements (72%) are for 1 season, 11 for 1 year (13%) and only 15% for 2 years or more⁷². The questionnaire was not designed to understand the reasons for this. The literature on this subject (Lavigne Delville *et al.*, 2017) shows that such limited durations generally do not encourage farmers to invest in the plots, particularly for fear that the holders will no longer renew the agreement.

On the basis of the survey data, we compared the payments (CFA Francs) related to these agreements by aligning them to an area of one hectare (tab. 11).

⁷² On three occasions, the duration indicated is "indefinite".

Table 11: variations in payments for rentals and/or sharecropping per plot reduced to 1 ha (68 transactions)

Territory	Type of plot	Lowest payment	Highest payment	Average
Maiduguri (1 case)	Rainfed cultivation		30 000	
Jere	Rainfed cultivation	1 200	47 000	13 000
	Market gardening (1 case)		3 750	
Koza	Rainfed cultivation	3 750	50 000	16 000
	Régie Plot of rain-fed land	750	35 000	11 000
	Market gardening	5 000	120 000	37 000
Mindif (2 cases)	Rainfed cultivation		10 000	
Dargala	Rainfed cultivation	10 000	40 000	28 000
	Transplanted sorghum (1 case)		17 500	

The levels of payments vary greatly, even for plots of the same type. These variations are observed between territories, but also within territories where there were more than 2 cases (Jere, Koza and Dargala). We did not find any correlation either with the existence of plot development, nor with the possibility of irrigation. The differences in the cost of access to plots of the same type could be explained by differences in the quality of the plots (soil, location, etc.), but also by the fact that the value of the land is not perceived in the same way by different actors, between whom power relations may also exist. This is not a surprising situation insofar as we are dealing with markets which are not regulated and which develop without price references. It is the very large price differentials that are surprising. The links between the stakeholders influence the amounts. Without taking into account the cases located in Jere and those of the régies in Koza, all 12 transactions with very low fees (10,000 CFA FRANCS or less for rainfed cultivation and less than 40,000 CFA FRANCS for market gardening) were concluded between acquaintances (11 cases) or between members of the same family (1 case). In Jere, the situation is very different, as it is mainly customary authorities who rent or share plots (66% of these transactions), even for small fees.

We also note a great variability in the prices set by the Cameroonian 'régies', whose practices deserve to be further analysed. However, the prices that they set are, on average, lower than those practiced between actors in Koza (11,000 CFA francs compared to 16,000 CFA francs in rainfed crop farming). The fees in Jere are lower on average than in the other territories. Access to market gardening land in Koza, where onions in particular are grown, is logically more expensive on average than for rainfed plots, which is not the case for the only transplanted sorghum plot in Dargala, nor for the market gardening plot in Jere.

Six plots have been **bought**: three in Koza, one in Mindif, Dargala and Jere. Only the Cameroonian and Nigerian territories are therefore concerned here, which does not mean that land is not sold in the other territories. The plots were either bought from heads of household in the respondent's village (2 cases), from acquaintances (3 cases) or from a customary authority. In Koza, one of these transactions was the result of a **pledge of** a plot of land, the holder of which was unable to repay his loan⁷³. Although they do not appear in our sample, pledges are relatively widespread in Koza and are linked to the economic precariousness of households according to the interviews conducted. Finally, it is worth noting the existence of the 'lease-purchase' of a one-hectare plot of rain-fed land in Koza. The plot is rented 15,000 CFA FRANCS per season to an acquaintance of the tenant and its possession should be transferred to him after a certain number of seasons.

⁷³ This type of situation has already been observed in Chad (Sougnabé *et al.*, 2010).

Table 12: price, area, actors and type of crop of the 6 plots purchased

Territory	Cost (CFA FRANCS)	Surface area (ha)	Buyer / Seller	Type of plot
Koza	80 000	1	Native / Acquaintance	Rainfed cultivation
Koza	110 000	1		Rainfed cultivation
Koza	300 000	1		Rainfed cultivation
Mindif	100 000	50	Migrant / Head of family in village	Rainfed cultivation
Dargala	300 000	10		Transplanted sorghum
Jere	100 000	20	Native / Customary authority	Other

As in the case of rentals and sharecropping, Table 12 shows very large differences between the selling prices of plots in Koza. As each plot was developed before purchase, these differences could also be explained by strong differences in the quality of the plots (only the transplanted sorghum plot is irrigated, which is curious for this type of crop) or, more likely, by the fact that "the price of the land" is not known by farmers in an informal land market context⁷⁴. In the first two cases (80,000 and 110,000 CFA FRANCS), it is possible that these are old sales or distress sales when comparing these prices with rents. The same hypotheses (variable perception of the market value of the land, and old or distress sales) can be made about the plot purchased from Dargala. In Mindif and Jere, the large surface areas exclude the hypothesis of distress sales.

Table 13: Proportions of grants and loans reported by territory (38 and 28 cases, in % per territory)

	Directly impacted				Indirectly impacted			Not impacted	
	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bowl	Koza	Mindif	Dargala
Donation	20	7	3	0	60	14	4	25	15
Loan	20	14	22	32	0	4	1	2	0

The proportion of **donations** in the overall sample (11%, Fig. 20) is not surprising. Apart from Maiduguri and Nguelea, where the number of respondents is very low, it is in Mindif that they are the most numerous, representing a quarter of the transactions, ahead of Dargala (15%) and Bol (14%). They account for no more than 7% of the deals elsewhere. It would have been interesting to have the dates of these transactions in order to understand the dynamic that they were part of. Donations were obtained either from members of the respondent's family (15 cases), or from family heads in the respondent's village (15 cases), from customary authorities (6 cases, including 3 in Jere) or from a church (2 cases in Koza and Nguelea).

Loans only represent 8% of all methods of access to land in the overall sample (fig. 20). With the exception of Koza, we expected a higher proportion as this is usually a relatively common mode of land access in areas with low land pressure. The results by territory are striking: while they represent 14-32% of the agreements concluded where the security crisis is most felt, elsewhere they do not exceed 4%. This is obviously linked to the influx of displaced persons in Nigeria and Niger, and illustrates how they have been welcomed by the resident populations (cf. chapter 4). The actors who lend land are either

⁷⁴ Knowing the dates of the sales could have allowed further analysis.

customary authorities (10 cases, including 6 in Jere), heads of household from the village (8 cases), acquaintances (7 cases) and family members (3 cases).

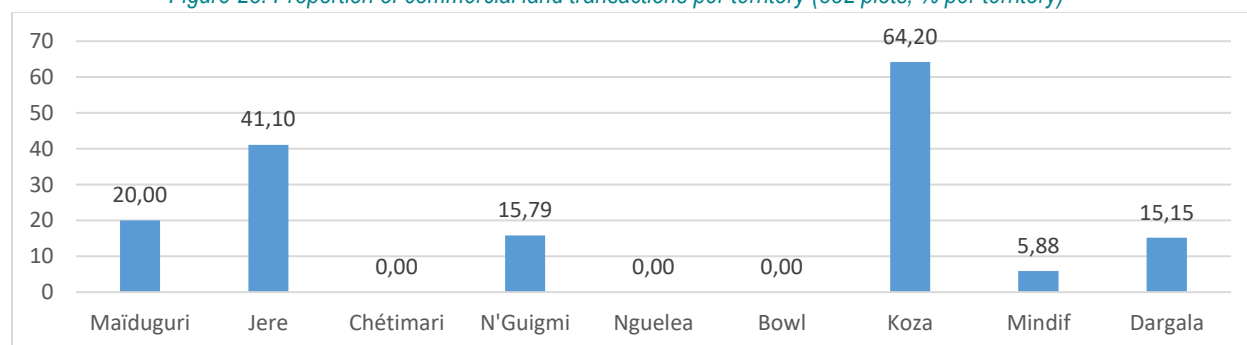
Arrangements for access to land are rarely **formalised in writing** (5% of plots) and only in Cameroonian communes (Table 14). The existence of two documents formalising an inheritance in Mindif and a donation in Dargala is worth noting, as the need for formalisation is generally felt for commercial land transactions. The documents that are drawn up, outside the 'régies', are most often signed by the village chief, without the need to pay a fee.

Table 14: Types and number of documents for formalising agreements by territory and mode of access

Types of documents	Koza	Mindif	Dargala
Purchase			
Abandonment of customary rights (signed by the village chief)			1
Certificate of sale (signed by the village chief)	1		
Certificate of occupation (1 signed by the village chief)	2		
Donation			
Abandonment of customary rights (signed by the village chief)			1
Heritage			
Abandonment of customary rights		1	
Rental / Sharecropping			
Application to the Koza Departmental Delegate for Agriculture	1		
Ticket (signed by the director of the CFJA)	3		
Rental ticket (signed by the director of the CFJA)	1		
Private contract	2		
Total	10	1	2

In total, **commercial land transactions** (purchases, rentals and sharecropping) constitute **28%** of all the modes of access to land. While the Koza and Jere samples largely explain this high proportion (fig. 24), it should be stressed that these transactions were identified through our surveys in 6 of the 9 territories and that their existence was noted during the interviews in the other 3 territories. The data from the Cofocom in Chetimari confirm that land sales do indeed take place there in significant numbers. In both Chadian territories, the development of the land market (sales, rentals and sharecropping) is fuelled by the presence of displaced persons, returnees and those who have returned in search of land. However, some returned migrants also sell land. They recover the plots to which they were entitled, and then some of the ones who still plan to leave sell certain plots to meet their immediate needs. The rentals are for rain-fed plots of land or plots of land that have receded during the rainy season. They do not concern market gardening activities. Once a method of gaining access to land has become accepted practice, it tends to become more frequent; but the development of land markets is not always irreversible: in some cases they may regress (Lavigne Delville *et al.*, 2017).

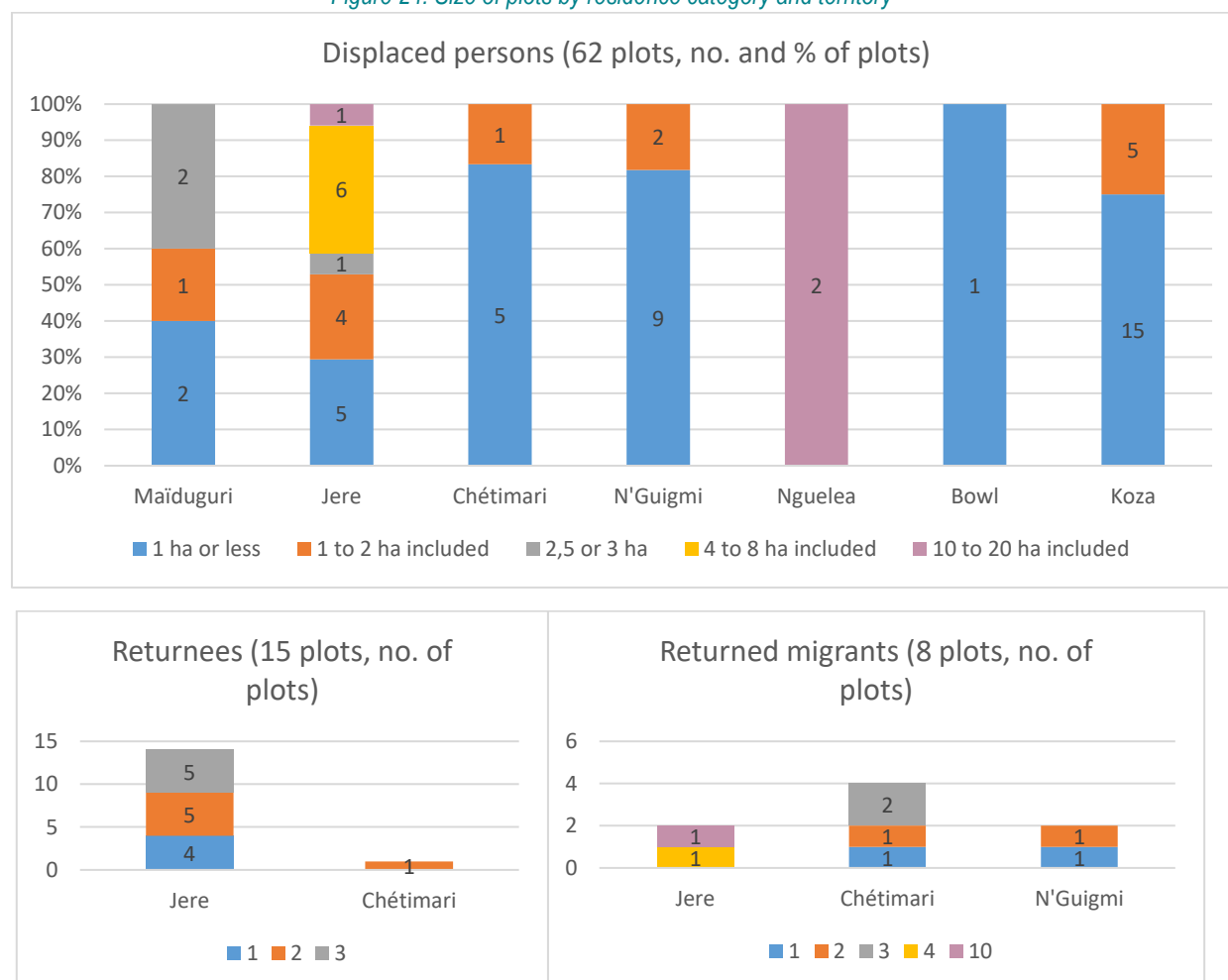
Figure 23: Proportion of commercial land transactions per territory (332 plots, % per territory)



Small plots of land as indirect tenure for IDPs

The plot sizes of IDPs, returnees and returned migrants are on average significantly smaller than those of the overall sample (Fig. 24): 87% of these respondents farm plots of 3 ha or less. Only 9 IDPs report plots of between 4 and 20 ha in Jere and N'Guigmi, and 2 returnees have plots of 4 and 10 ha in Jere. We also note that 60% of IDPs work on plots of 1 ha or less, compared to 39% for the whole sample.

Figure 24: Size of plots by residence category and territory



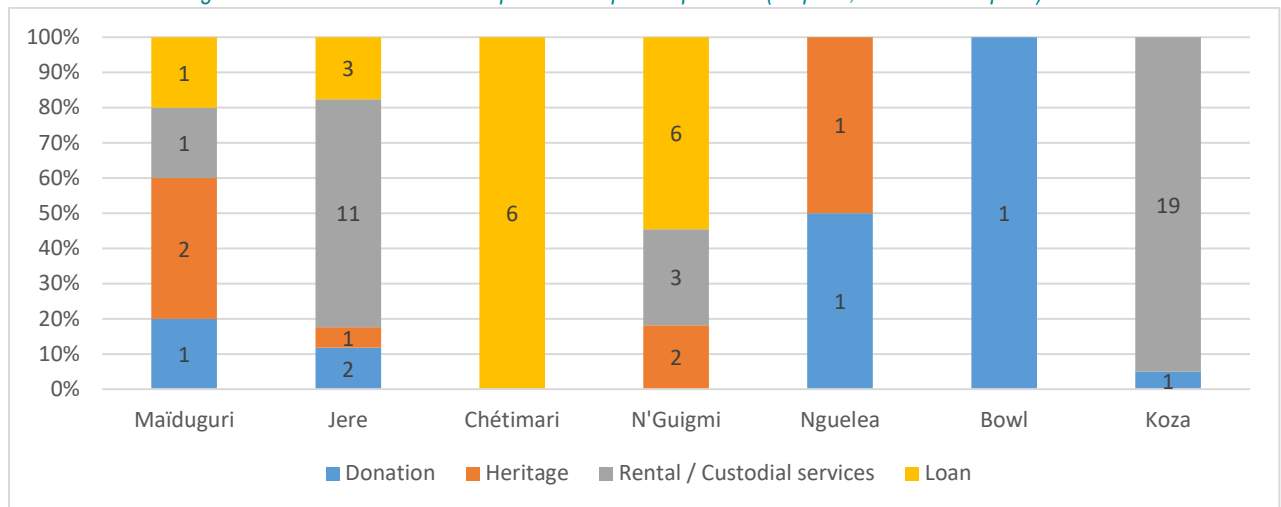
The modes of access to the plots of displaced persons are relatively varied (Fig. 25), even if renting and sharecropping are largely dominant (55%), due to the weight of Koza in the sample, and also due to their preponderance in Jere. For rainfed crops in the territories impacted by the crisis (19 plots), the average cost (15,500 CFA FRANCS) of these transactions for the displaced is not significantly lower than that of the overall sample (16,000 CFA FRANCS). Of the 12 transactions with very small fees concluded between people who know each other (see previous section), 5 benefited IDPs, whose precarious situation was probably taken into account. As with the entire sample, the duration of the agreements is very short (one season in 27 out of 34 cases). Three IDPs were able to rent land from the CFJA (Centre de Formation des Jeunes Agriculteurs managed by a 'régie') and received a rental voucher.

Loans (16 cases), which are the second most common method of gaining access to land, are only identified in territories directly impacted by the crisis. This is a particularly useful way of accessing land for the poor. There are also 3 cases of donations in the territories indirectly impacted. Examples of inheritance in Maiduguri, Jere, N'Guigmi and Nguelea show that some IDPs are still able to use the plots

they or their families owned before the crisis. This is also the case for IDPs in Koza according to the interviews conducted.

The rate of indirect gain⁷⁵ among IDPs (who have neither returnees nor returned migrants, and therefore do not originate from the territory of residence) **is significantly high, which** was expected. It concerns **81% of** the plots they work, whereas it is only **26% among the natives**. Using a plot of land as an indirect holding does not systematically mean that one is in a situation of land insecurity. This is not a problem when the agreements are clear, with specified durations - as far as possible in writing - and clear conditions for challenging the agreement. However, this is not the case for the majority of transactions in the zones studied. This very high proportion thus reflects land tenure precariousness, insofar as the duration of access to land depends on the goodwill of the plot holder, who may decide not to renew the rental or sharecropping contract or to terminate the loan.

Figure 25: Methods of access to plots for displaced persons (62 plots, no. and % of plots)



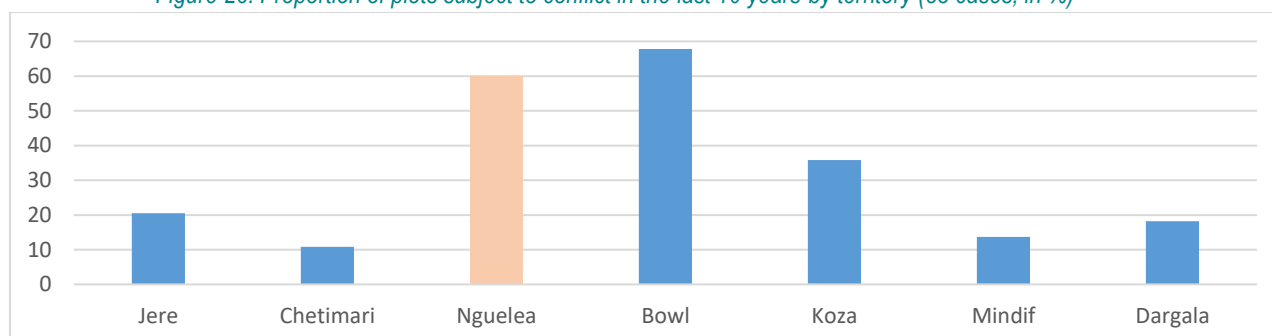
The **returnees** whose activity is crop farming are mainly located in Jere (14 out of 15). Eight of them use inherited land, 5 use loaned land and 2 use donated plots. Of the **8 returned migrants**, 6 cultivate inherited land in the communes of Niger and 2 use rented or sharecropped land in Jere. We therefore **mainly observe non-market modes of access to land** for these two categories of residence, who essentially benefit from their family networks to access land.

A high and increasing level of conflict over plots of land.

Of the 332 plots surveyed, 83 had experienced at least one conflict in the 10 years preceding the survey, i.e. a **high conflict rate of 25%**. No conflicts were recorded in Maiduguri and N'Guigmi (which does not mean that there are none). Conflict rates vary greatly in the other territories (fig. 26). They are particularly high in the Chadian territories (60% in Nguelea, 68% in Bol). Koza is also above average for the sample, with 36% conflict, whereas this rate is between 11 and 21% in the other territories.

⁷⁵ Indirectly owned plots of land are exploited by people who are not the owners or holders.

Figure 26: Proportion of plots subject to conflict in the last 10 years by territory (83 cases, in %)



These conflicts fall into three categories: damage to crops caused by other people's animals (54%), problems with plot boundaries (30%) and disagreements over land rights (16%). Crop damage is particularly high in Koza (83% of the conflicts in the commune), while it was not identified in Chetimari and Mindif.

The conflicts that were identified involve a variety of actors (Table 15). Crop damage only affected transhumant livestock owners on 10 occasions, so two-thirds of this type of conflict involved sedentary livestock owners. While no returnees were involved (small sample of 8), all other residence categories experienced disputes. Natives are proportionally more involved in the conflicts than other categories (53%), while IDPs are least affected (23%). This greater involvement of natives is undoubtedly linked to the fact that IDPs arrived less than 10 years ago in all the French-speaking territories.

Table 15: Number of disputes over plots in relation to the parties involved and the proportion of⁷⁶ residence categories involved

Parties involved	Nb of cases	% of residence categories
Between natives	35	53% of the 199 natives 46% of the 48 migrants 33% of the 15 returnees 23% of the 62 IDPs 0% of the 8 returned migrants
Natives / transhumant herders	10	
Natives / migrants	13	
IDPs / natives	6	
Natives / people from outside the community	4	
Returnees / migrants	4	
Natives / other	2	
Between IDPs	1	
IDPs / returnees	1	
IDPs / migrants	3	
IDPs / people from outside the community	1	
IDPs / customary chiefs	1	
People from outside the community / migrants	2	

The results of the surveys on when conflicts emerged (Table 16) show a **clear increase in cases over the last two years, with** almost as many conflicts (39) as in the previous 8 years, from 2010 to 2017 (44 cases). This trend seems to be general, except in Jere. We do not observe any significant difference according to the level of impact of the crisis on the territories. However, this may be due to the low number of cases studied. This recent increase in the number of conflicts reported may be due to the way that memory works, but also, to a greater or lesser extent depending on the territories concerned, due to a higher level of pressure on resources, successive changes in production conditions (changes

⁷⁶ Proportion calculated in relation to the number of people in each category cultivating a documented plot.

in the routes taken by transhumant herds, reduced animal mobility, the arrival of displaced groups, states of emergency, the mobility of armed groups, etc.) and the pressure on actors in such uncertain environments (cf. chapter 4). It should also be borne in mind that this increase, however sudden, only concerns two years and that it should be possible to check whether it is confirmed in the future.

Table 16: Distribution of conflicts on plots, according to their date, by territory (no. of conflicts)

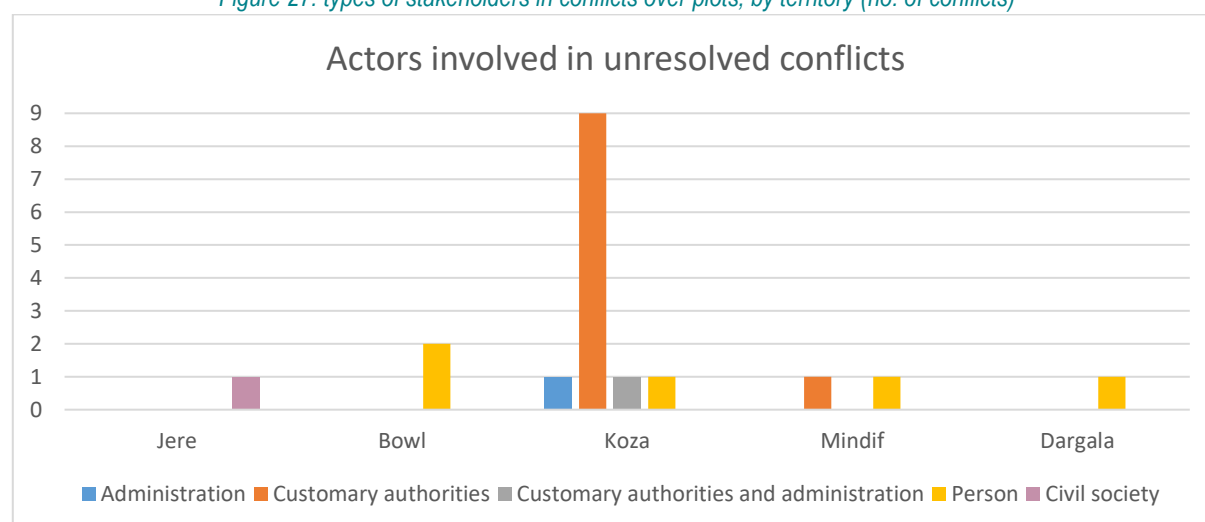
Dates of conflicts	Jere	Chétimari	Nguelea	Bowl	Koza	Mindif	Dargala	Total
2010 to 2017	11	2	1	11	14	3	2	44
2018 to Feb. 2020	4	2	2	8	15	4	4	39

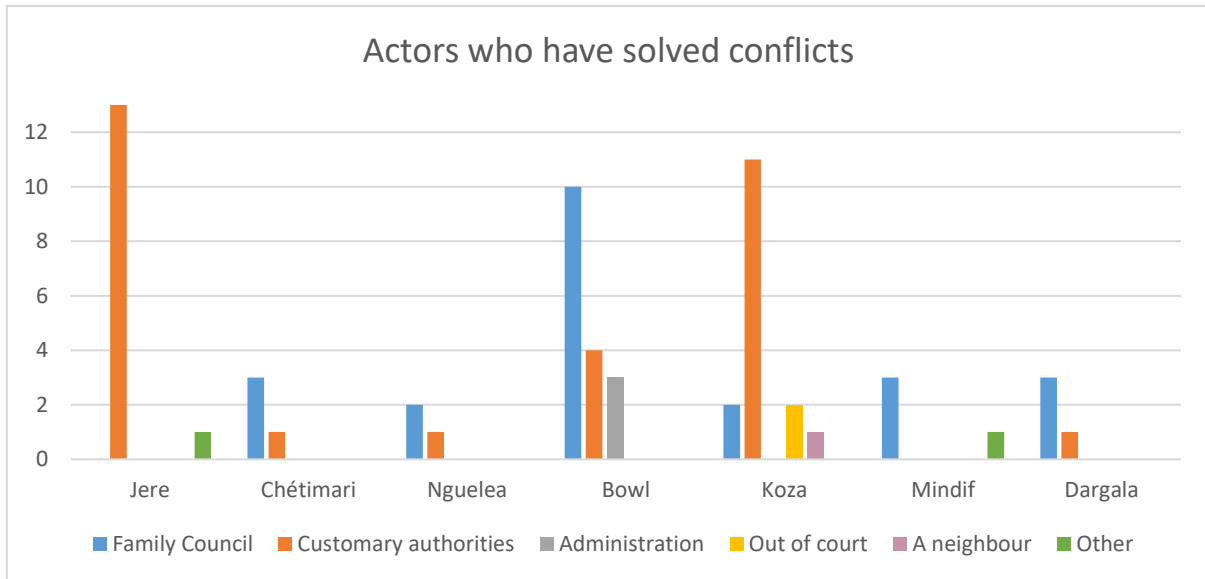
The proportion of **unresolved conflicts at the time of the survey was 22%, which** is far from negligible. While the majority of these unresolved disputes are recent (11 out of 18 arose in 2018 and 2019), these results show that, in general, delays in dispute resolution procedures are sometimes measured not in weeks or months, but in years. The remaining 7 unresolved disputes are dated between 2011 and 2017 and illustrate that land disputes can remain unresolved for long periods of time. It would be interesting to look at other quantitative studies of this kind in order to assess the extent of this level of conflict.

In the 3 territories where the sample of conflicts is not too small (15 cases in Jere, 19 cases in Bowl and 29 cases in Koza), there is a very big difference in the conflict resolution rate: it is 93% in Jere, 89% in Bowl and only 59% in Koza, where this poor performance is due to major failures in governance systems for land and natural resources within the commune (see Chapter 4).

Figure 27 shows the types of actors involved in trying to resolve conflicts. We note that the main actors are the family councils and the customary authorities and that 100% of the 23 conflicts managed by the family councils were resolved, compared to 74% for those managed by the customary authorities. **State administrations are involved much less frequently than we might have thought in a security crisis context** (5 cases).

Figure 27: types of stakeholders in conflicts over plots, by territory (no. of conflicts)





70% of those involved are "*completely satisfied*" with the resolution of the conflict. These conflicts are mainly managed by customary authorities (21 conflicts out of 44) and family councils (17 conflicts out of 44). 29% are moderately satisfied: in 10 out of 18 cases, the conflicts are managed by customary authorities and in 6 cases by family councils. Only one respondent expressed dissatisfaction with the decision by the administration in Bol.

To conclude this analysis of the sample of plots of land, we note particularly strong land inequalities in the region, both between and within territories, with a trend towards the commodification of land. The fees paid within these land markets, which are not regulated, vary widely. The means of gaining access to agricultural land vary, and IDPs tend to end up with plots of land of 1 ha or less as indirect tenure. The level of conflict on the plots has clearly increased over the last two years and the proportion of unresolved conflicts is surprisingly high. Conflict resolution seems to have remained in the hands of family councils and customary authorities. Very few conflicts are resolved by the administration and none have been brought to court.

Often free but insufficient access to pastoral resources

Here we present the results of the part of the questionnaire devoted to access to pastoral resources by the 125 sedentary pastoralists in our sample. Our analyses are limited by the fact that the samples per territory are very small, with the exception of Jere, the communes in Niger and Koza in Cameroon.

Pastures that do not allow for the feeding of small herds.

Despite the preponderance of farmers with small herds of small ruminants, 87% of the farmers in our sample need access to pasture to feed their animals. Conditions of access to pasture in the rainy and dry seasons are similar, with a very high prevalence of unauthorised access (Table 17), including for herd owners. However, three Nigerian herders cannot access pasture in the rainy season, including two living in Dusuman, where insecurity is particularly acute (see Chapter 4).

Table 17: Conditions of access to pasture in the rainy season (109 herders, % of herders) and in the dry season (108⁷⁷ herders, % of herders)

	Free access	Free authorisation	Authorisation for a fee	No access
Dry season	88	8	4	
Rainy season	82	11	4	3

Authorisations are issued by a relatively wide range of actors (Table 18). The customary authorities are the main actors who grant this type of permission (10 cases), followed by private individuals (9 cases). The situation of livestock farmers in Jere differs from that of the others: they have to apply for more permits, and half of the permits that are paid for (4 out of 8) are issued there.

Table 18: Actors issuing authorisations for access to grazing land by territory (number of people)

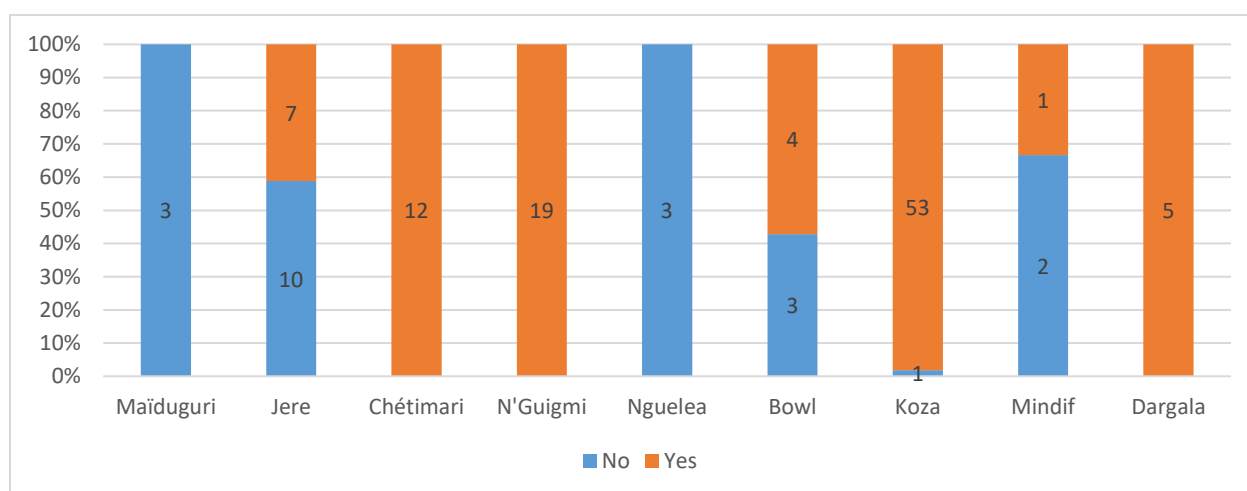
Dry season	Maiduguri	Jere	N'Guigmi	Bol	Koza	Mindif	Dargala	Total
Customary authority	1	3			1			5
Pastoral authority							1	1
Village chief		1			1	1		3
Private	1	2		1				4
Total	2	6	0	1	2	1	1	13
Rainy season	Maiduguri	Jere	N'Guigmi	Bol	Koza	Mindif	Dargala	Total
Customary authority	2	2			1			5
Pastoral authority		2						2
Other (not specified)							1	1
Village chief		1				1		2
Private		1	1	2		1		5
Total	2	6	1	2	1	2	1	15

The issue that stands out about pastures is that there are not enough to feed the herds: **82% of livestock farmers are forced to buy fodder during the year**. Figure 28, which shows this percentage by territory, is misleading because the samples are small in many territories. In contrast, in 3 of the 4 territories where the samples are larger (the two communes in Niger and Koza in Cameroon), the proportion is 98-100%. In Jere, the rate is much lower (41%, i.e. 7 out of 17). Bran, oilcake and hay are, respectively, the three most purchased foodstuffs. 18% of livestock farmers also buy agricultural by-products, but this is the case for 6 out of 7 farmers who buy fodder in Jere. There is a clear link with the security crisis in N'Guigmi, where 14 out of 19 (74%) herders have started to buy fodder since the beginning of the crisis (between 2015 and 2020)⁷⁸. The same observation is made in Koza, but to a lesser extent: 42% of livestock farmers started to buy fodder during the crisis period, between 2013 and 2020. On the other hand, in Chetimari, farmers were already buying fodder before 2015.

Figure 28: Proportion of livestock owners purchasing fodder by territory (123 livestock owners, no. and % of livestock owners)

⁷⁷ For livestock, the number of respondents varies, often slightly, according to the questions, due to the existence of "empty" answers.

⁷⁸ This proportion may include situations where the livestock farming activity is recent, data which we do not have. Above all, this result indicates a need for more in-depth analysis of fodder purchases by livestock farmers, which are not a new phenomenon in the Sahel but seem to be increasing with the security crisis.



The identification of fodder sellers (Table 19) is particularly interesting in the two communes of Niger, where the situation is quite similar: the survey only identifies two categories of sellers - technical services and traders - and all herders who buy fodder have to go to traders for supplies. The sale of fodder is therefore a trade that is certainly fruitful and boosted by the security crisis. Although traders are also solicited in Koza and Jere (36% of responses in both cases), the majority of purchases are made from private individuals. We also note the presence, among the vendors, of 10 IDPs who have been able to engage in this activity, which does not necessarily require privileged access to land.

Table 19: Fodder vendors by territory (multiple responses)

	Jere	Chétimari	N'Guigmi	Bol	Koza	Mindif	Dargala
Natives	2			3	50	1	4
IDPs				1	9		
Returnees				2			
Migrants	1						
People from outside the community	3			1			
Customary chief	1			1			
Transhumant herder							1
State (technical services)		2	3		15		1
Trader	4	12	19		43		1
Other (farmers)					4		

Access to water for animals is often free but difficult

Table 20 shows the main source of water cited by pastoralists in both the dry and rainy seasons. In the dry season, boreholes are the main source in the villages studied in Koza and Chetimari, while herders mainly use village wells elsewhere, except Bol. In Koza, 7 herders buy water directly from the Cameroonian water company or from private individuals. There are also 4 cases of herders who purchase water in Jere. In the rainy season, surface water is obviously the most used, but boreholes are also cited in the Nigerien communes and in Koza, as well as village wells in N'Guigmi and Dargala.

Table 20: Main source of watering in the dry and rainy seasons by territory (125 herders, no. of herders)

Dry season	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bol	Koza	Mindif	Dargala	Total
Surface water		1			1	2	2	1		6

Drilling		1	11	4		2	31			48
Pastoral well		1				2	3			5
Village well	3	11	1	15	2	1	11	1	5	42
Purchase		4					7			7
At a neighbour's land			1							1
Other								1		1
Rainy season	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bol	Koza	Mindif	Dargala	Total
Surface water	1	12	2	6	1	7	47	2		68
Drilling			9	3			6			18
Pastoral well	1	2								2
Village well	1	4	1	10	2		1	1	5	21
Other			1	0						1

66% of access to watering sources in the dry season is free (Table 21). Apart from the 7 cases where water is purchased, 21 herders have to pay to obtain authorisation to access water, including 11 out of the 12 who use boreholes in Chetimari, where free access to water therefore seems to be very rare in the dry season. Eight of these boreholes are managed by private individuals, the other three by a customary authority, a village chief and a users' association. The only herd owner out of the 13 in our sample who pays for access to water in the dry season does so with a private individual who manages a pastoral well in Bol. The 8 cases of payment in Koza also concern boreholes and are made to management committees, "managers" or "*water vendors*". In total, about a quarter of the herders do not have free access to water during the dry season.

Table 21: Conditions of access to watering sources in the dry season by territory (118 herders, no. of herders)

	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bol	Koza	Mindif	Dargala	Total
Free access		7	1	19	3	3	38	2	5	78
Free authorisation	3	5				3	1			12
Authorisation for a fee		1	11			1	8			21
Purchase							7			7
Total	3	13	12	19	3	7	54	2	5	118

In the rainy season (Table 22), 15% of livestock farmers pay for access to water. Chetimari stands out again due to the fact that 9 out of 12 herders are in this situation, all of whom get water from boreholes. Six of these boreholes are managed by private individuals, the other three by a customary authority, a village chief and a users' association. Seven herders pay for borehole water in Koza and one herder in Jere also buys water. Of the total sample, twelve herders have free access to water. The thirteenth - a displaced person – has permission from a customary authority in Jere to use surface water free of charge.

Table 22: Conditions of access to watering sources in the rainy season by territory (115 herders, no. of herders)

	Maidugu ri	Jere	Chétima ri	N'Guig mi	Nguele a	Bol	Koz a	Mindi f	Dargal a	Tota l
Free access		5	3	18	3	7	47	3	5	91
Free authorisation	2	5								7
Authorisation for a fee			9				7			16
Purchase		1								1
Total	2	11	12	18	3	7	54	3	5	115

Livestock farmers were asked about the main problems they encountered in feeding their animals. Of the 118 who responded, 42 (36%) said they had no problems. The latter are located in Chetimari (83% of the herders in this commune), N'Guigmi (100% of the herders in this commune), Koza (20% of the herders in this commune) and Jere (11% of the herders in this territory). Those among them who pay for access to water have therefore integrated it into their farming practices, without claiming free water.

However, the majority of herders (56%) mention problems related to water scarcity: "lack of water", "few water points", "low water levels during the dry season", "too much distance to travel" or "waiting too long". With the exception of N'Guigmi, these difficulties are noted in all the territories under study. In Koza, two herders mention "increased pressure due to the arrival of refugees". This reality was often mentioned in interviews with land management stakeholders.

Very rare access to the salt marshes

Only 11% of the farmers in our sample have access to salt marshes in Jere, N'Guigmi, Bol and Dargala. None have access to them in the other territories. Of the 13 farmers concerned (Table 23), 7 have to pay for access in Jere, N'Guigmi, Bol and Dargala. Authorisations for Bol are paid for and issued by private individuals in all three cases. In Dargala, it is a pastoral authority (as in Jere) and an unidentified actor (no answer given).

Table 23: Access to salt marshes by territory (11 livestock farmers)

	Jere	N'Guigmi	Bol	Dargala	Total
Free access	1	1	1		3
Free authorisation	1		2		3
Authorisation for a fee	1		3	2	6
Total	3	2	6	2	12

Above all, these figures show that this practice is quite rare in the territories studied and for sedentary livestock farmers. Without any basis for comparison, it is difficult to conclude whether or not there is any link with the crisis context. No conflicts were noted on this subject in the survey either.

Similar access to pastoral resources for different residence categories

In this section we highlight the differences, or rather the absence of differences, observed between livestock farmers based on their residence category. As a reminder, 27 IDPs are involved in livestock farming, and there are only 2 returned migrant herders and 1 returnee herder. They are located in all the affected areas except Bol.

The displaced, returnee and returned migrant herders all need access to pasture, with the notable exception of Chetimari where none of the 5 displaced persons or the 2 returned migrants need access to pasture. In Jere, one herder pays for authorisation from a private individual in the dry season and from a pastoral authority in the rainy season, as well as one case of water that is purchased and one case of unauthorised access. Elsewhere, pastoralists who gain access to pasture do so without paying, mostly freely and sometimes with free authorisation (4 cases in the dry season, 3 in the rainy season)

given by a customary authority (except in one case where it is a landholder). Two IDPs have access to a salt marsh in Jere, one for free, and the other by paying a pastoral authority for authorisation.

The purchase of fodder reveals two categories of territories where the results are diametrically opposed: all the displaced, returned and returned migrant herders in Chetimari (7 cases), N'Guigmi (4 cases) and Koza (8 cases) buy fodder, while none do so in Maiduguri and Nguelea (4 cases) and only one in 6 in Jere. For this category of livestock farmer, 100% of herders in the Nigerien communes purchase fodder from traders, while the proportion in Koza is 50%.

Access to drinking water also varies from one area to another. In the dry season, 3 out of 4 IDPs⁷⁹ and 2 returned migrants pay for access to boreholes in Chetimari. The same applies to 3 out of 8 IDPs in Koza. Elsewhere, access is free, except for a herder in Jere who buys water in the dry season. In the rainy season, the same herders pay for access to water in Chetimari, while access is free elsewhere.

A higher proportion of displaced livestock farmers do not report any problems with watering their animals (48% compared with 39% of the sample as a whole). However, problems related to water scarcity are mentioned by 39% of them.

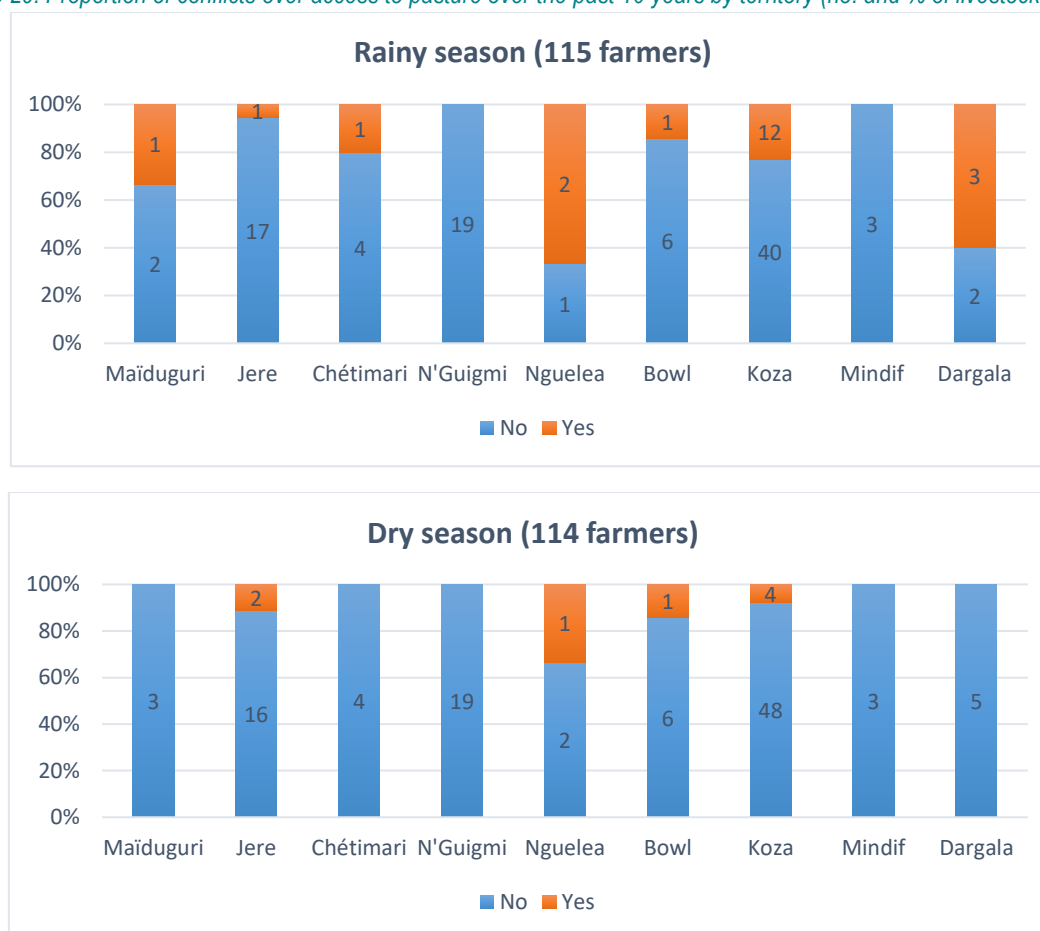
On the basis of these results from a sample of 23 displaced, returnee and returned migrant herders, we cannot identify any particular consequences for their access to pastoral resources compared to the sample as a whole. Differences in access are more related to locally available resources than to inequalities in access compared to natives, as has been shown for the distribution of agricultural plots. This result should be compared with the reality that is perceived by transhumant herders.

Access to grazing land is principally a source of conflict with crop farmers

Conflicts related to access to grazing land are more numerous in the rainy season than in the dry season, which was expected due to the importance of rainfed crops in the study areas (fig. 29). 18% of herders report having experienced conflict at least once in the past 10 years in the rainy season, compared with 7% in the dry season. **The overall rate of conflict is high (25%)** and is similar to the level of conflict over agricultural plots. Of the territories where the sample is not too small, the frequency of conflict is significantly higher in Koza than in N'Guigmi and Jere (38% versus 5% and 17%). These differences are undoubtedly linked to the very high population density and the fact that livestock farmers are unable to send their animals to the plains, as they usually do, because of the insecurity there (see Chapter 4).

⁷⁹ The only one who does not pay in Chetimari freely uses water from a village well.

Figure 29: Proportion of conflicts over access to pasture over the past 10 years by territory (no. and % of livestock owners)



There are two reasons for the conflicts identified (Table 24). In the majority of cases, they are related to crop damage, and, as expected, these are most common in the rainy season. The remaining conflicts are related to access to pastureland. The conflicts mentioned by the herders show that crop damage is significantly high in Koza, which was also evident in the conflicts relating to plots (see section 3.3.4). As with the plots, no conflicts were mentioned by livestock owners in Chetimari and Mindif. They do appear in Jere, however, where there was one case.

Table 24: Types of conflicts related to access to grazing land by territory (no. of conflicts)

Rainy season	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bol	Koza	Dargala	Total
Crop damage	1	1			2		11	3	18
Dispute over access rights			1			1	1		3
Dry season	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bol	Koza	Dargala	Total
Crop damage					1		4		5
Dispute over access rights						1			1
No information		2							
Total	1	3	1	0	3	2	16	3	29

The dates of these conflicts do not reveal a particularly high incidence in the last two years, as was the case for conflicts related to plots of land. On the other hand, we can see that they mainly occurred after

the beginning of the crisis in the different territories⁸⁰. Though this was obvious in Nigeria where the crisis started 11 years ago, it was not evident in the other territories that were affected 5 or 6 years ago. Yet 19 out of 21 rainy season conflicts and 5 out of 8 dry season conflicts occurred during the security crisis.

The proportion of unresolved conflicts here is only 14%, while this proportion was 22% for the conflicts experienced by crop farmers. The 4 unresolved conflicts are in Koza (3) and Jere (1). They date from 2015, 2018 and 2019. The customary authorities have tried to resolve two of these conflicts, in vain, in Koza. A civil society organization failed to resolve the conflict in Jere.

Table 25 shows which actors resolved the conflicts. It is clear that customary authorities were the most involved. The state administration resolved 2 conflicts in Bol, the only commune where it was involved, and where it also resolved 3 other conflicts mentioned by crop farmers (see section 3.3.4).

Table 25: Actors who resolved conflicts related to access to grazing land by territory

	Maidugu ri	Jer e	Chétima ri	N'Guig mi	Nguele a	Bo l	Koza	Dargal a	Tota l
Administratio n						2			2
Customary authority	1	2	1		2		13		19
Other								1	1
Family Council					1			1	2
Person								1	1
Total	1	2	1		3	2	13	3	25

There is moderate satisfaction with the way conflicts have been resolved. While no one indicated that they were dissatisfied with the outcome of the conflict, only 40% said they were completely satisfied, and 60% were moderately satisfied.

This analysis of access to pastoral resources highlights that the vast majority (85%) of pastures are open access, though there are cases of paid authorisation and, above all, that 82% of herders have to buy fodder during the year. Access to watering sources is also mainly free, but a quarter of herders cannot water their animals free of charge in the dry season, as is the case for 15% during the rainy season. The scarcity of existing and accessible pastoral resources has therefore led to the development of commercial modalities of access to water and fodder and the existence of numerous conflicts related to access to pasture, particularly in Koza. There is considerable room for improvement in their management.

⁸⁰ As a reminder: 2009 in Nigeria, 2013 in Koza, 2014 in Mindif and Dargala, 2015 in the impacted communes of Niger and Chad.

Fishing areas and timber: unequally distributed resources managed differently in different territories

This section examines access to fishing areas and to timber (whether a commercial activity or not) based on the results of the survey of heads of household.

Fishing areas controlled by various actors

It should be recalled that there are few fishermen in our sample: they are 28 in number and mainly located in Chad (9 in Nguelea and 13 in Bol). We have therefore mainly documented the archipelagos zone of Lake Chad in Chad, where access to fishing resources was already conflictual before the security crisis (Magrin and Pérouse de Montclos, 2018). In this sector, access to the 'island zone' has become impossible because they delineate the 'red zone' (see Chapter 4). Fishing is therefore mainly carried out in seasonally flooded areas, close to the villages. The other fishermen surveyed are in Nigerian territories where they fish in the Ngadda River and the flood plain (2 fishermen in Maiduguri, 3 in Jere) and in N'Guigmi in Niger (1 fisherman). This last example suggests that some inhabitants, in this case a native, have an agreement with one or more armed group(s) who control access to the waters of the northern basin of Lake Chad in order to practice this activity⁸¹ (cf. chapter 4). Within this sample, IDPs are numerous: 10 IDPs and 2 returned migrants practice this activity, the other 16 being natives.

Half of the fishermen have fishing licences (Table 26). There are no licences in N'Guigmi, where the administration is struggling to issue permits to fish in the lake, which it no longer controls. The presence of NGOs in the responses undoubtedly indicates that they have played an intermediary role in obtaining permits from administrations, with both reported cases involving IDPs. The proportion of IDPs who hold a permit (75%) is much higher than that of natives (31%).

Table 26: Holding of fishing permits and actors in their delivery by territory (26 fishermen, no. of fishermen)

	Maiduguri	Jere	N'Guigmi	Nguelea	Bol	Total
No			1	3	10	14
Yes	2	3		6	3	14
Local Administrative Authority	1	3				
NGO	1			1		
Environment Department				5	3	

As has been shown in other studies (Kiari Fougou and Lemoalle, 2019), there is another level of control over access to certain fishing areas. While access to fishing zones in the dry and rainy seasons does not generally require an authorisation (Table 27), 7 fishermen (5 natives and 2 IDPs) nevertheless have to obtain one, free of charge, in the rainy season, as well as 2 original fishermen in the dry season. Of these, 3 fishermen also hold licences. Conversely, some manage to fish without a permit or authorisation: there are 10 in the dry season and 8 in the rainy season (all in Chad, 1 in Jere).

There are various actors who authorise access to fishing areas: a users' association and pastoral authority in Maiduguri, customary authorities (2 cases), village chiefs (2 cases) and private individuals (3 cases) in Bol. The two authorisations that are subject to payment in the dry and rainy seasons in Bol concern the same fisherman: he is a displaced person without a permit, who obtains authorisation from a village chief to fish in the territory he controls. In Jere, one fisherman, a native, has to obtain authorisations from a users' association for which a fee is charged in the dry and rainy seasons.

Table 27: access arrangements to fishing areas by territory (26 fishermen, no. of fishermen)

⁸¹ This agreement is not reflected in his answers to the questionnaire, which is quite understandable.

Dry season	Maiduguri	Jere	N'Guigmi	Nguelea	Bol	Total
Without permission	2	2	1	9	10	24
Free authorisation					2	2
Authorisation for a fee		1			1	2
Rainy season	Maiduguri	Jere	N'Guigmi	Nguelea	Bol	Total
Without permission		2	1	9	7	19
Free authorisation	2				5	7
Authorisation for a fee		1			1	2

Over the past 10 years, only 4 respondents have experienced a conflict situation related to their fishing activity, a fairly low conflict rate of 14%. These conflicts are not very recent, as they occurred between 2011 and 2016. They all took place in Chad: 3 in Nguelea and 1 in Bol.

Two concerned the destruction of fishing nets in Nguelea (tabl. 28) and appear to be the result of competition for access to water, one of which was between a fisherman and a livestock farmer. The other two conflicts are related to the question of whether certain individuals (certainly from the Boudouma community, see Chapter 4) had the right to access a fishing zone, and did not involve the administration or armed groups.

Table 28: Nature of fisheries-related conflicts and actors involved by territory (4 conflicts, no. of conflicts)

	Nguelea	Bol
Destruction of fishing nets	2	
Displaced - Transhumant herder	1	
Displaced person - Native	1	
Fishing prohibited	1	1
Native – Person from outside the community		1
Displaced person - Migrant	1	

Three of the four conflicts were resolved by customary authorities, and the conflict between the displaced person and the native was resolved by a family council. The four fishermen were very satisfied with the outcome of these conflicts.

Two fishermen believe that they have no difficulty in fishing, which is understandable as they a native and a returned migrant in Nguelea, who therefore fish in their own territory. The only problem mentioned by all the other French-speaking fishermen, and a fisherman from Jere, was the lack of equipment. Three Nigerian fishermen indicated that it was difficult to fish in the rainy season, as the fish then frequent the deepest waters, and one fisherman from Jere mentioned the problems of access to water resources.

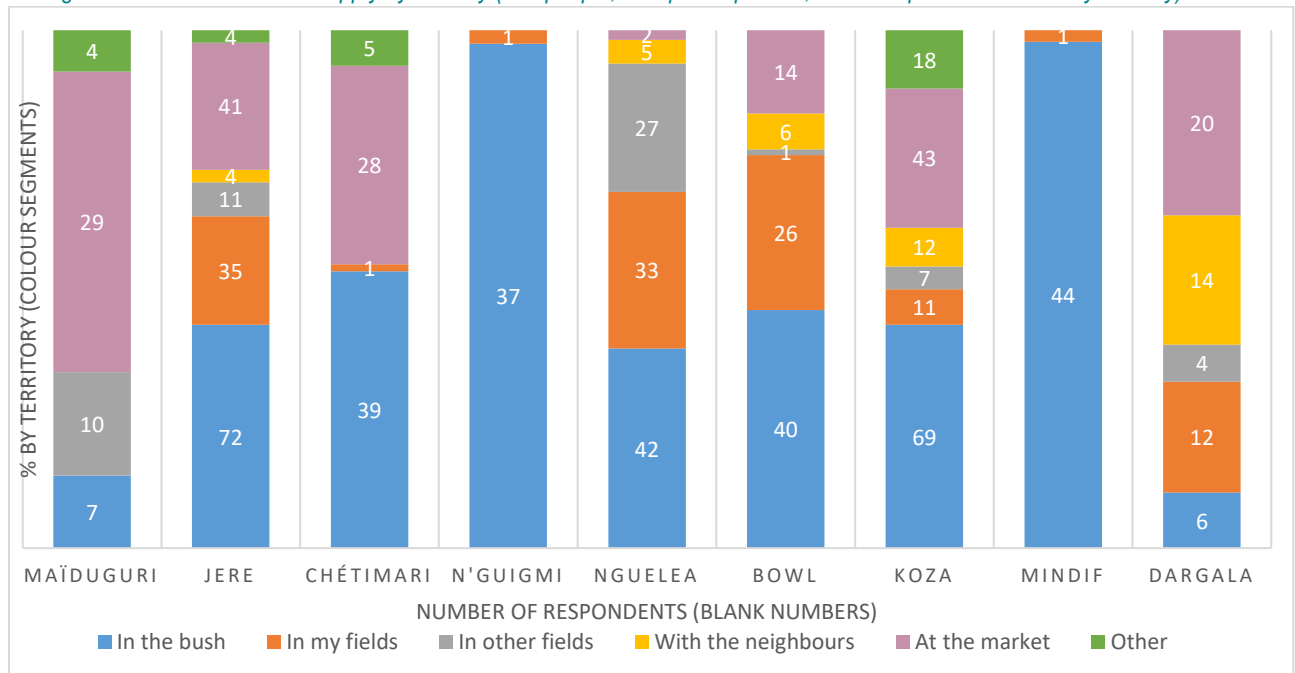
Thus, we note that IDPs are relatively well represented in our small sample of 26 fishermen and that they are proportionately more likely to hold licences than natives. The acquisition of an official licence does not exclude, in some cases, the need to request authorisation, sometimes at a cost, to access the resource. The actors who control fishing areas are therefore very varied: (i) administrations via permits; (ii) user associations, local authorities and private individuals via authorisations; (iii) and lastly, exclusive control by one or more armed group(s) in N'Guigmi via agreements, which was mentioned in the interviews, but does not appear in the quantitative survey (see Chapter 4).

Access to timber: very different situations from one territory to another

The entire sample was questioned on how wood is obtained and the types of areas when the wood is not purchased. It emerged (fig. 31) that wood is mainly collected in the bush (46%). However, the second most common method of obtaining wood within the entire sample is to buy it on the market (23%), which may indicate strong pressure on this resource or problems in accessing it. 16% of the respondents

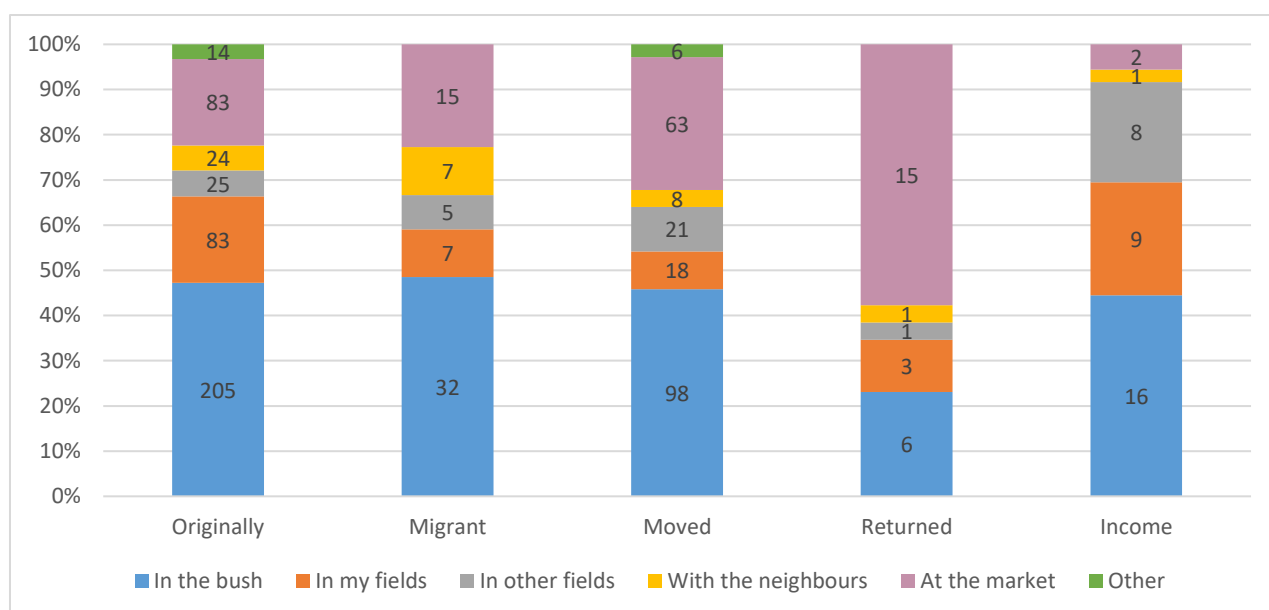
cannot obtain it elsewhere. They are mainly located (as a proportion of the respondents from the territory) in Maiduguri (54%), Jere (50%), Chetimari (33%), Dargala (14%) and Koza (13%). Not surprisingly, respondents in the refugee camps on the outskirts of Maiduguri are the most likely to have to resort to the market. Many inhabitants of Jere are also in this situation, due to the constraints on movement that persist in this territory, which is still disrupted by the unpredictable movements of insurgent groups, despite its partial repacification. In Chetimari, the 3 villages studied are close to wooded areas (Kaola area), but access to these resources is very strongly disrupted by the activities of insurgent groups. In the event of an attack, several days can go by without the inhabitants daring to venture out, out of fear of the combatants but also of the presence of the army. In Dargala and Koza, the population densities projected for 2020 (116 and 636 inhabitants/km²) no doubt explain why this method of obtaining wood is so common. In Bol, as we have already seen, the ban on movement in certain areas classified as "red zones" or at-risk zones is no doubt an explanatory factor.

Figure 30: Sources of wood supply by territory (496 people, multiple responses, no. of respondents and % by territory)



While there is a similarity in the sources of wood supply for natives and migrants (Fig. 31), the proportion of returnees (58%), and to a lesser extent displaced persons (29%), who obtain wood from the market is much higher than for other population groups (23% on average). About half of the IDPs concerned live in camps in Nigeria and 14 of the 15 returnees concerned live in Jere. Strangely, this proportion is only 6% for returned migrant respondents.

Figure 31: Sources of wood supply by residence category (496 respondents, no. of respondents and % by category)



Of the 496 people in the total sample, 84% cut or collect wood. Of these, 27% have to apply for permission (Table 29). The regional situation is highly contrasted, between the commune of Koza where wood supply is most constrained due to population density, which explains the very high demand for authorisation (76%), and the communes of N'Guigmi and Dargala, where none of the heads of household have an authorisation, even though their population densities are also contrasted (less than 5 inhab/km² in N'Guigmi, more than 100 in Dargala).

Table 29: Distribution by territory of respondents with and without permission to cut wood (419 persons, no. of persons, %)

	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bowl	Koza	Mindif	Dargala	Total
Without	21	90	2	38	33	28	23	43	27	305
With	4	11	4		9	14	71	1		114
Total	25	101	6	38	42	42	94	44	27	419
Without (%)	84	89	33	100	79	67	24	98	100	73
With (%)	16	11	67	0	21	33	76	2	0	27
Total	100	100	100	100	100	100	100	100	100	100

Unlike agricultural land and grazing lands managed mainly by customary and village chiefs and family councils, access to some timber resources is under the control of the administration, as are fishing areas. Authorisations are, in fact, mainly issued by administrative services in Koza, Chétimari and Maiduguri. Noone reported that they had an administrative authorisation in N'Guigmi, Mindif and Dargala. In all the territories under study, it is also sometimes necessary to contact village chiefs or customary authorities, particularly in Jere (10 out of 17 responses), Nguelea (10 out of 20) and Bol (9 out of 17).

Those who issue authorizations obviously rely on these resource areas, and 38% of people with authorizations have more than one. They therefore do not have sufficient supplies from a single resource area⁸². People with several authorisations are particularly present in Nguelea (8 people out of 9) and Koza (24 people out of 71), but also in the 5 other territories (though there are none in N'Guigmi and Dargala). The need to diversify sources of supply is sometimes so great that heads of household can hold up to 4 authorisations. In the three cases identified, authorisations were from a customary authority, an administrative authority, a village chief and a farmer (2 respondents in Koza, 1 respondent in Nguelea).

⁸² However, it is possible that some resource areas may be subject to multiple authorisations.

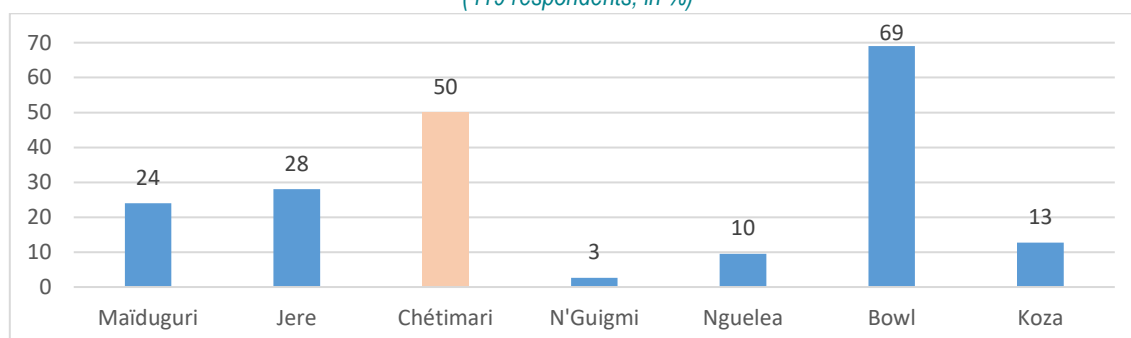
Of the 11 people for whom timber constitutes an economic activity, only 4 have obtained permits from the administration (2 cases in Bol); from the administration and a customary authority in Jere (1 case); and from the administration, a customary authority and a village chief in Maiduguri (1 case).

Table 30: Actors having issued authorisations to cut wood by territory (multiple choice, 114 respondents, no. of persons)

	Maidugu ri	Jere	Chétima ri	Nguele a	Bol	Koza	Mindif	Total
Village chief	2	5	1	7	9	5	1	30
Farmer		3		4	1	6	1	15
Customary authority	2	5		3		19		29
Administration	3	4	4	6	7	67		91
Town Hall						3		3
Other	1							1

The rate of conflict⁸³ relating to timber is 20% (83 out of 419 people), but it varies greatly between different territories (Fig. 32). In the two Cameroonian communes not affected by the crisis, the respondents did not mention any conflict⁸⁴. In Koza, Nguelea and N'Guigmi, the rates range from 3 to 13%, and are lower than in the Nigerian territories (24% in Maiduguri, 28% in Jere). The commune of Bol, on the other hand, stands out from the rest, because 69% of the 42 respondents who collect or cut wood said they had experienced at least one conflict.

Figure 32: Proportion of respondents collecting or cutting timber who have experienced at least one conflict by territory (419 respondents, in %)



Among the 83 people who reported having experienced conflict, the proportions of natives and displaced persons are in line with their weight in the overall study sample. Migrants are, on the other hand, less concerned, while returned migrants and returnees are more so. Four of the 11 timber sellers in our sample are also involved, as well as 23 authorisation holders, but we do not know whether these people were already sellers or authorisation holders when the conflicts occurred, or whether the conflicts affected the resource areas affected by the authorisations.

Cases of conflict with technical services are relatively high (17% of conflicts; 14 out of 84 cases, including 8 out of 12 in Koza) and three conflicts involve transhumant pastoralists in Chad (4% of conflicts). In Maiduguri, one conflict pitted a timber seller against a member of the *Civilian Joint Task Force*,⁸⁵ and one returnee was directly opposed to a member of an armed group ('Boko Haram') in Jere.

⁸³ The 10-year timeframe applied to the identification of conflicts related to other activities is not appropriate here. Respondents described the most important conflict they had experienced.

⁸⁴ However, the samples were not reduced: 44 respondents in Mindif, 27 in Dargala.

⁸⁵ Nigerian self-defence militia formed in 2013 to counter the Boko Haram insurgency.

We have the dates of when 64 of the 83 conflicts recorded began. As in the case of crop and livestock farming, we see a probable link with the security situation. Indeed, **78% of the 64 conflicts occurred in times of crisis in the various territories and half of the conflicts have occurred since 2017**⁸⁶. Even if these figures are influenced in our sample by IDPs, who were not present before the crisis began, these rates remain high for natives and migrants: 63% of the conflicts they have experienced have occurred since the crisis and 42% in the last three years.

The proportion of unresolved conflicts is 14% (12 conflicts). In 8 cases out of these 12 conflicts, no one intervened to resolve it. The administration (1 case), customary authorities (2 cases) and a family council (1 case) tried to resolve the other 4 conflicts, without success.

The main actors that have resolved conflicts (tabl. 31) are mainly customary authorities (42 cases; 61% of conflicts resolved) and the administration (14 cases; 20% of conflicts resolved). We note here, for the first time, a case of conflict resolved by a civil society organisation in Maiduguri. The level of satisfaction of the respondents after the conflict is relatively high, with 78% completely satisfied and 19% moderately satisfied. In two cases in Bol, one managed by the administration and the other by a customary authority, respondents expressed dissatisfaction with the resolution of the conflict.

Table 31: Actors who have resolved timber-related conflicts by territory

	Maiduguri	Jere	Chétimari	N'Guigmi	Nguelea	Bol	Koza	Total
Administration			1		2	5	6	14
Customary authority	3	22	1	1	1	13	1	42
Other			1				1	2
Family Council	1	1			1	3		6
Person		1				2		3
Civil society	1	1						2

To conclude, 84% of our sample collect or cut wood and 27% of them have to ask for permission to do so. Many respondents are unable to obtain sufficient supplies from a single resource area and are therefore forced to apply for several authorisations. There are major variations between territories, both in terms of the need to obtain authorisation and the levels of conflicting access to timber resources. In Mindif and Dargala, for example, authorisations are virtually absent, as are conflicts, while in Koza three-quarters of respondents have at least one authorisation and in Bol two-thirds of respondents reported at least one conflict. These differences can be explained not only by population densities, but also by the multifaceted nature of the intervention methods used by Water and Forestry agents at the local level, which is often an additional factor of insecurity for rural populations (Mugelé, 2020).

⁸⁶ The oldest conflict dates back to 2008.

Women and young people: what are the new challenges in terms of access to natural resources in times of crisis?

We decided to address the situations of women and youth separately, as these two population groups do not have a great deal of weight in the overall sample and are likely to be particularly problematic in terms of access to natural resources during a security crisis, due to unfavourable customary land tenure or lack of local perspectives, and as targets for potential recruitment by insurgent groups.

Gender analysis: confirmation of significant inequality with regard to access to land resources

As a reminder, women represent 18.3% of the overall sample (91 women). They are not represented in Nguelea, and are weakly represented in the two Cameroonian communes not affected by the security crisis. They are more present in Chetimari, Bol and Koza (Table 32). They are all IDPs in Maiduguri. Displaced women make up half of the sample in Chetimari and represent 47% of the women surveyed in Jere and 43% in Koza.

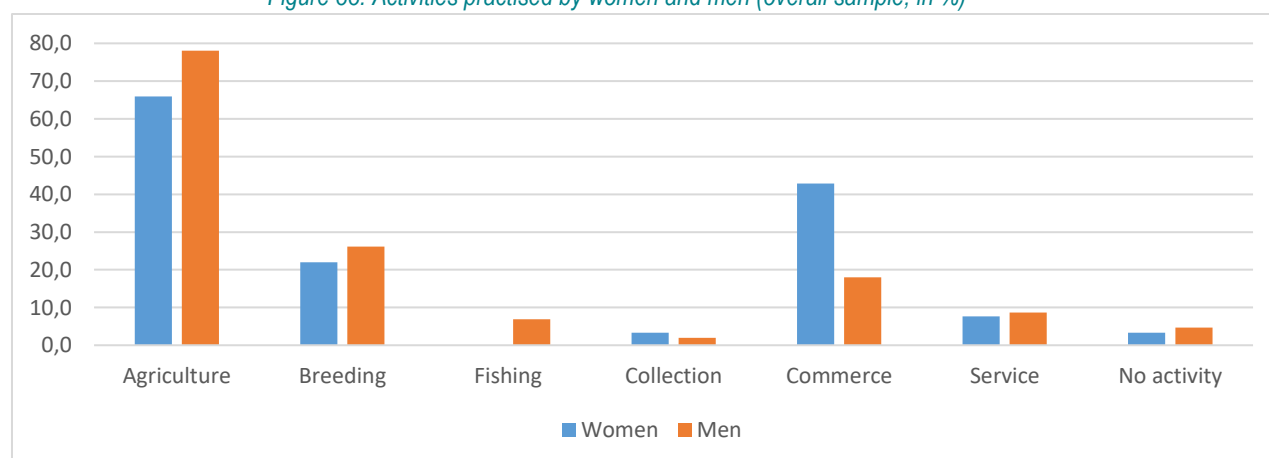
Table 32: Number of women surveyed by community of residence and by territory and share of the sample by territory

	Maiduguri	Jere	Chétimari	N'Guigmi	Bol	Koza	Mindif	Dargala	Total
IDP	7	8	8	2	1	9			35
Returnee		3							3
Returned migrant			2		1				3
Native		6	4	5	14	12		2	43
Migrant			2		1		3	1	7
Total	7	17	16	7	17	21	3	3	91
%	17,9	16,0	26,2	18,4	40,5	22,1	6,8	10,3	18,3

Activity system

The two main activities carried out by women are crop farming (60 women; 66%) and trade (39 women; 43%). Compared to men (figure 33), women are proportionally less likely to be engaged in crop farming (60 per cent compared to 78 per cent for men), about 2.5 times more likely to be engaged in a commercial activity (43 per cent compared to 18 per cent) and twice as likely to sell wood (4 per cent compared to 2 per cent). The proportions are similar for other activities, except for fishing, which they do not engage in.

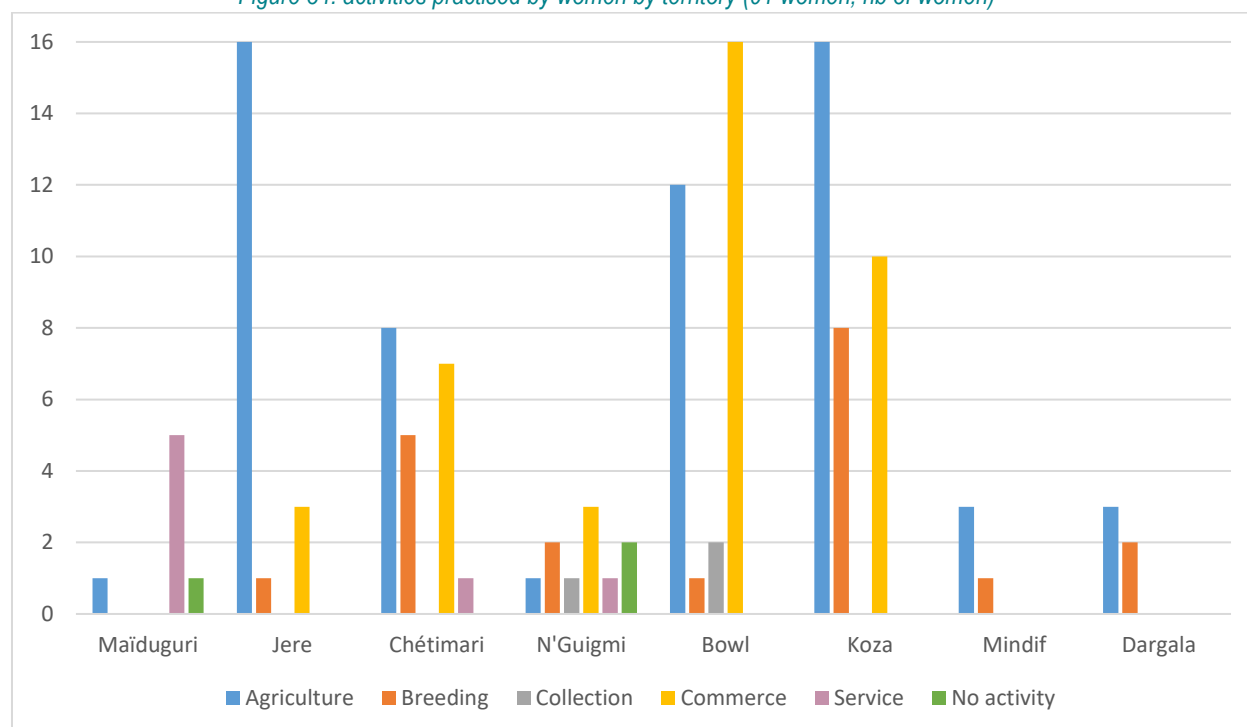
Figure 33: Activities practised by women and men (overall sample, in %)



By territory (fig. 34), we note that 16 out of 17 women trade in Bol, 16 out of 21 women cultivate in Koza and 5 out of 7 women are in the service sector in Maiduguri. In N'Guigmi, but also in Chetimari and Bol,

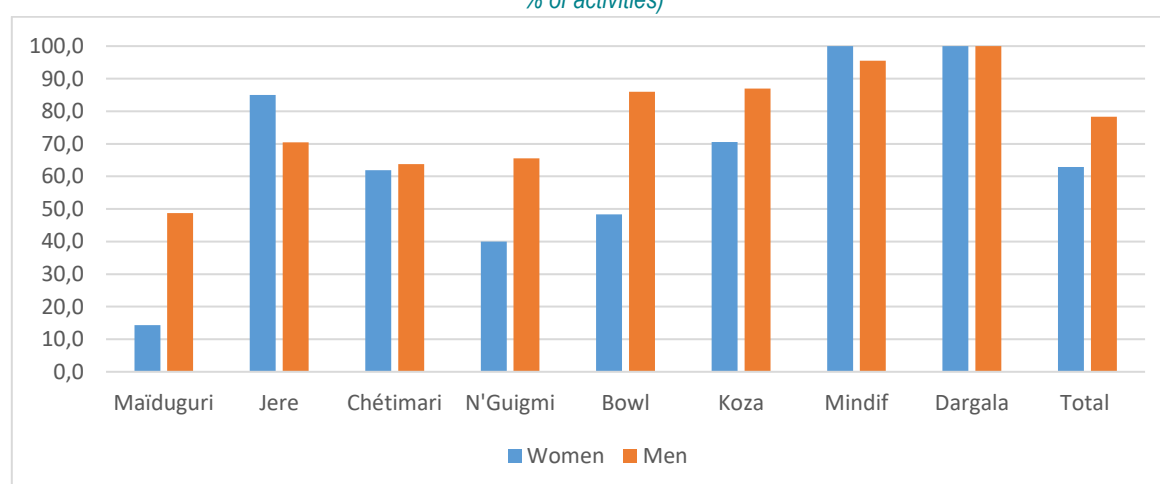
their activities are more diversified than elsewhere. Jere is characterised by a strong predominance of agricultural activity (16 women out of 17, 80% of the activities reported).

Figure 34: activities practised by women by territory (91 women, nb of women)



The proportion of women's activities related to land resources is significantly lower in territories affected by the security crisis (fig. 35). It is 60% in the territories directly and indirectly impacted and 100% in Mindif and Dargala (where the number of women surveyed is very low). Overall, the proportion of women's activities related to land resources (63%) is much lower than that of men (78%). As they are heads of households, this difference confirms **a strong inequality of access to these resources between men and women**. In Jere, where almost all the heads of household surveyed cultivate, this rate is higher for women (85%) than for men (70%).

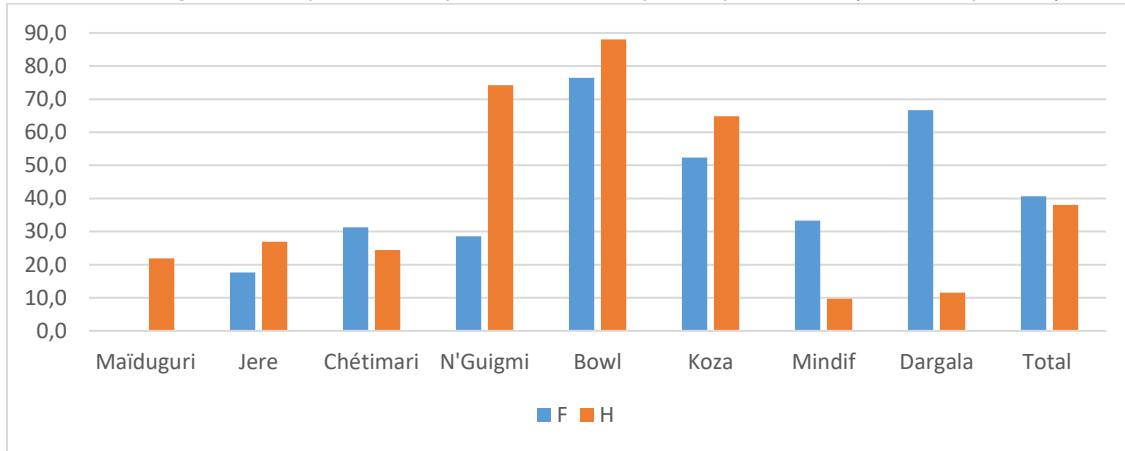
Figure 35: Activities of women and men related to the exploitation of land resources by territory and in total (overall sample, % of activities)



A slightly higher proportion of women than men said that they had multiple activities (41% versus 38%). Women's multi-activity rate is particularly low in the territories directly impacted (Table 36), illustrating

the difficulty of undertaking several activities in complex and unstable environments, where economic opportunities are low.

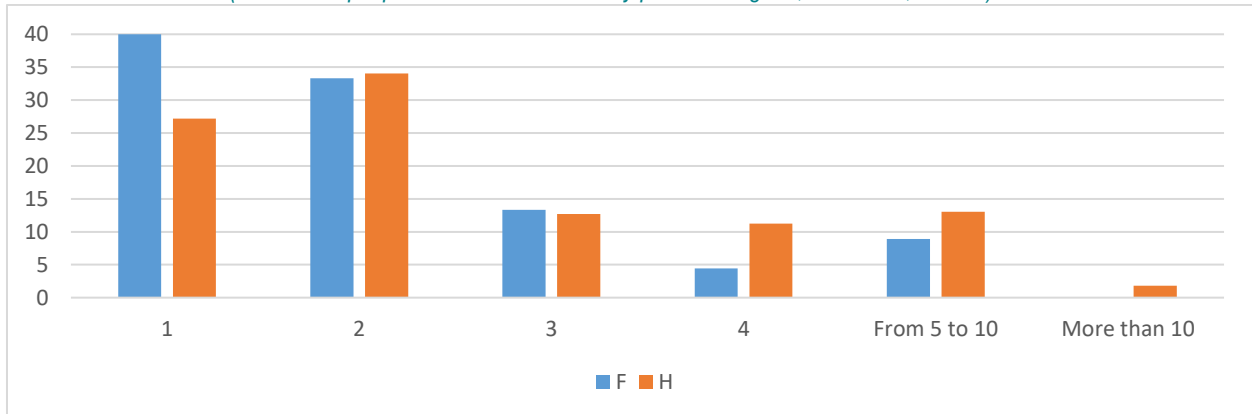
Figure 36: Multiple activities by women and men by territory and in total (overall sample, in %)



Access to agricultural land

Women's⁸⁷ land holdings are much more restricted than men's (figure 37): 40% of women, compared to 27% of men, own or cultivate only one plot of land, and 73% of women report one or two plots of land, compared to 61% of men. Women are half as likely as men to report four or more plots of land. **Disparities in land tenure also exist between women:** while 18 women have to make do with just one plot, 3 have 10 plots in Maiduguri, Jere and Koza (fig. 37). However, women who have numerous plots are in a very small minority.

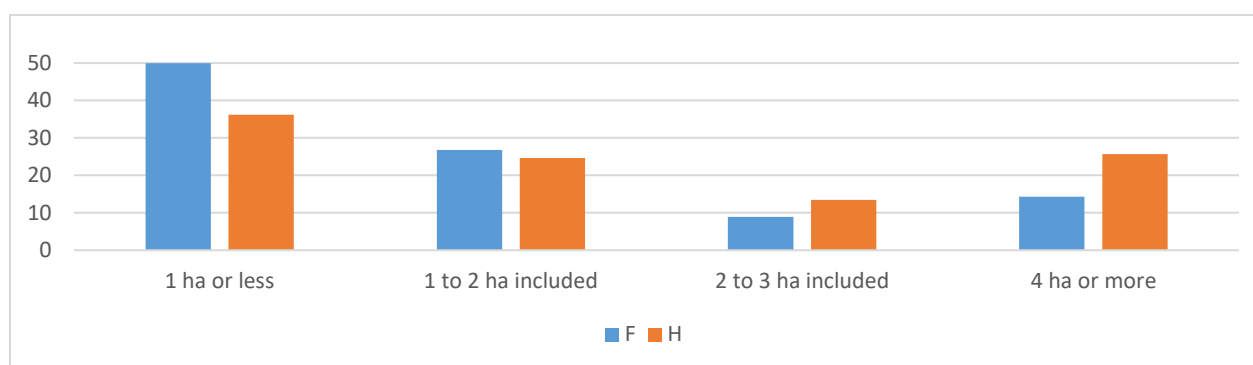
Figure 37: Number of plots reported by women and men (overall sample prior to the second survey phase in Nigeria, % women, % men)



The female heads of household have a total of fifty-six plots (none in N'Guigmi). Their areas are clearly different from those of the men (Fig. 38): **50% of the women's plots are 1 ha or less**, compared with 36% of the men's plots, and, proportionally, the men have far more plots that are larger than 2 ha than the women (39% of the men's plots compared with 23% of the women's plots).

Figure 38: Surface areas of plots for men and women (332 plots, in %)

⁸⁷ As far as the number of plots is concerned, we have not taken into account the data from the second wave of the Nigerian survey. See footnote 65.



All of the women's plots are rainfed, except for 5 market gardening plots of 1 ha in Bol, a 10 ha plot of transplanted sorghum in Dargala, a plot of 1 ha of transplanted sorghum and 1 market gardening plot of 1 ha in Jere (Table 33). In addition to the above-mentioned large sorghum plot, a plot of 30 ha under rainfed cultivation has also been identified in Dargala, which shows that there are disparities between women, but also that the number of large plots cultivated by women is very low.

Table 33: Size of women's plots by speculation and by territory (42 plots)

	Maidugur i	Jere	Chétimar i	Bol	Koza	Mindif	Dargal a	Total
1 ha		4	3	7	13		1	28
Rainfed cultivation		2	3	2	13		1	21
Market gardening		1		5				6
Transplanted sorghum		1						1
2 ha	1	5	3	1	4	1		15
Rainfed cultivation	1	5	3	1	4	1		15
3 ha		2	2			1		5
Rainfed cultivation		2	2			1		5
4 to 6 ha		5				1		6
Rainfed cultivation		5				1		6
10 ha							1	1
Transplanted sorghum							1	1
30 ha							1	1
Rainfed cultivation							1	1
Total	1	16	8	8	17	3	3	56

With regard to means of access to agricultural land (fig. 39), we note that **38 per cent of plots have been inherited**, while women are generally not allowed to inherit land under customary land tenure systems in the three francophone countries⁸⁸. This high percentage can be explained, on the one hand, by the strong presence of the Muslim religion in the region. Indeed, Islam allows women to inherit, albeit in smaller proportions than men and in a highly variable manner depending on the region. Although Islamic rules on land tenure are applied much less than customary rules, they increasingly tend to take precedence in terms of inheritance (Bron-Saidatou and Yankori, 2016; World Bank, 2020).

⁸⁸ We do not have sufficient information about Nigeria.

The second means of access to plots for women is renting or sharecropping (29%), which only concerns Cameroonian communes (mainly Koza and Dargala) and Jere. This is a higher proportion than for men (26%). Women benefit proportionally from about **twice as many gifts as men** (18% for both natives and IDPs, compared with 10% for men) but also receive far more gifts than young people (see next section). It is therefore the category of the population that benefits most from this type of support. They also get twice as many plots of land on loan as men (14% compared to 7% for IDPs only). Only one plot was bought by a woman: the 10-ha plot of transplanted sorghum in Dargala. Koza is the only area where no women have benefited from donations or loans: in this saturated land context, they benefit less from these means of access and, if they have not inherited, they are forced to either rent or accept a sharecropping contract, or to buy a plot of land.

Like for the IDPs in the four countries, the rate of indirect land tenure among women is high: 43% compared to 33% among men. If we compare means of access with surface areas, we observe that **37.5% of the plots of land used by women are plots of 2 ha or less (27% of 1 ha) that do not belong to them**. Furthermore, **57% of the agreements for these small plots are for one season** and the holders of the plots may not renew them.

Figure 39: Women's modes of access to agricultural plots by territory and globally (56 women, no. of women)

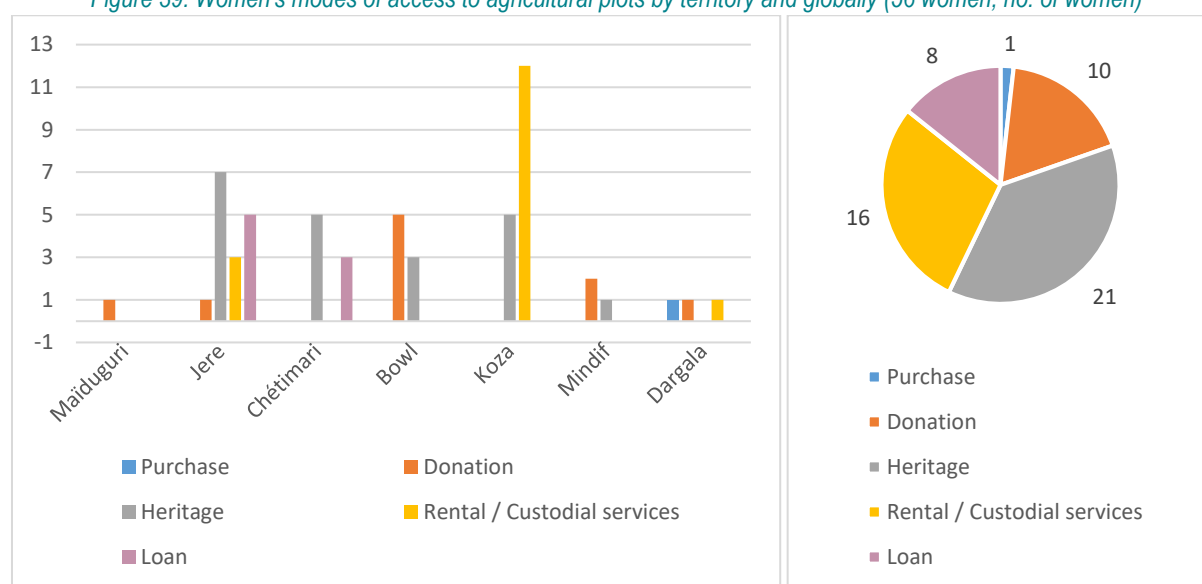


Table 34: Women's means of access to plots, by territory and type of transferor (42 plots)

	Maiduguri	Jere	Chétimari	Bowl	Koza	Mindif	Dargala	Total
Purchase							1	1
Head of a family in village							1	1
Donation	1	1		5		2	1	10
Customary authority		1		1				2
Head of a family in village	1			4			1	6
Member of their family						2		2
Heritage		7	5	3	5	1		21
Member of their family		7	5	3	5	1		21
Rental / Sharecropping		3			12		1	16
Customary authority		3						3
Other					7			7
Acquaintance					5			5

	Maiduguri	Jere	Chétimari	Bowl	Koza	Mindif	Dargala	Total
Member of their family							1	1
Loan		5	3					8
Customary authority		4	1					5
Head of a family in village			1					1
Acquaintance		1	1					2
Total	1	16	8	8	17	3	3	56

In addition to inheritance, women obtain plots of land from family members through donations (2 cases in Mindif), renting or sharecropping (1 case in Dargala). **Thus, only 43% of the plots are obtained by women from their families.** Of the 9 donations, 6 were made by heads of families, who sometimes also lend plots (1 case) or sell them (1 case). Women also obtain plots from acquaintances (5 leased/sharecropped in Koza, 1 loan in Chetimari and in Jere) and more rarely from customary authorities (1 donation in Bol and 2 loans in Chetimari and Jere), with the exception of Jere, which stands out due to the strong presence of customary authorities among the transferors (8 out of 9 transactions excluding inheritance). Finally, 7 of the 12 leased/sharecropped plots in Koza are the work of the 'régies' (see § 3.3.2).

Thus, the rate of **commercial means of access to land is 30.4% for women, compared to 27.9% for men.** It should be remembered that these high percentages are influenced in particular by the weight of Koza in the sample and that, unlike men, there are only 4 other commercial land transactions for women in the other territories.

All the plots that are rented or sharecropped are rainfed (except 1 case of market gardening in Jere) and, as in the whole sample, the **cost per hectare varies a great deal**, ranging from 750 to 35,000 CFA FRANCS in Koza. Still in this commune, which is the only one for which comparisons can be made, we note that **the average cost of renting 1 ha by a woman is lower than the average cost for a man**: 8,500 CFA FRANCS compared to 12,000 CFA FRANCS for the 'régie' plots, 12,000 CFA FRANCS compared to 18,000 CFA FRANCS for plots owned by private individuals. In the latter case, this is not particularly surprising, as we have seen that women tend to mobilise their network of acquaintances to gain access to land.

Of the 13 documents formalising land transactions that we identified within the entire sample (Table 14), 6 are held by **women, who are therefore proportionally much more inclined to formalise their contracts**, which may mean that they feel less secure.

Of the 56 plots of land surveyed, 16 have experienced at least one conflict in the last 10 years. **The rate of conflict is therefore higher than for men's plots** (29% versus 24%). They involve the three categories of conflict already identified: crop damage, boundary problems and disputes over land rights (including an inheritance dispute with a brother-in-law). Curiously, women do not seem to be involved in conflicts with other herders.

Access to pastoral resources

Our sample of women involved in animal husbandry (tabl. 35) concerns the 2 Niger communes, Bol, Jere and the 3 communes in Cameroon. Although they mainly raise only a few small ruminants (16 cases out of 20), 2 women also have a few cattle in Koza and 2 others have a herd of cattle and/or camels in Mindif and Dargala.

Table 35: Livestock of female livestock farmers by territory (19 women)

	Jere	Chétimari	N'Guigmi	Bol	Koza	Mindif	Dargala	Total
--	------	-----------	----------	-----	------	--------	---------	-------

Some small ruminants	1	5	2	1	6		1	16
Some small ruminants Some cattle					2			2
Some small ruminants Herds (cattle, camels)							1	1
Herds (cattle, camels)						1		1
Total	1	5	2	1	8	1	2	20

Seven women with small ruminants, including 5 in Chétimari, do not need access to pasture. Three women have to apply for authorisations to use grazing land: the two female livestock farmers with herds (one who pays a fee for authorisation in the dry season from a pastoral authority in Dargala; and the other who has authorization for free in the dry and rainy seasons from a village chief in Mindif) and one female livestock farmer with small ruminants in Koza (free authorisation in the dry and rainy seasons from a customary authority). One woman has free access to a salt marsh in Bol.

17 women have to buy fodder (85% compared to 82% of the male sample) and 13 of them buy it from traders, 6 of them exclusively (5 in Chetimari, 1 in N'Guigmi). Five and four of them respectively have to pay to water their animals in the dry and rainy seasons. Finally, 8 out of 19 women expressed that they had no problem watering their animals, and 12 mentioned difficulties related to the lack of water.

Although the sample is small, we note **that only one woman mentioned a conflict over access to pasture in the last 10 years, while 40% of the men involved in livestock farming have experienced one**. The woman is from Dargala and has animals, including a herd, which caused damage to a field.

Access to wood

Women are as likely as men to obtain wood from traders (32 women, 35%). Fourteen obtain wood in this way exclusively, including eight in Niger. Seventy-two women (79%, compared to 86% of men) collect or cut wood and 20 have to ask for authorisation (28% of the women concerned, slightly more than men). Three women sell wood in Bol (2 cases) and N'Guigmi (1 case). Proportionally, **women reported twice as many conflicts as men** (33% versus 17%).

This gender analysis confirms the existence of **significant inequality of access to land resources between men and women**, a situation that is reinforced in territories directly affected by the security crisis, where the number of women involved in multiple activities is particularly low. Land tenure among female farmers is significantly weaker than among men, but disparities also exist between women and between territories. Women who have many plots or large plots are clearly in the minority. Inheritance is the main means of access to land for women, despite this being contrary to certain customs, but they only get 43% of their plots from their families. Women receive twice as many gifts as men and proportionately more loans than men. However, it is especially noteworthy that 40% of the plots of land used by women are plots of 2 ha or less that do not belong to them, based on renewable agreements of very short duration. Women are much more inclined than men to formalise their contracts. Proportionally, while women's plots are more conflictual than men's plots, women are far less likely than men to be involved in a conflict in the context of livestock farming and twice as likely as men to be involved in a conflict over wood collection or cutting.

Young people: are the significant disparities that exist in terms of land tenure linked to the security crisis?

We have defined ‘young people’ as being those who are 30 years old or younger. Young heads of household, 126 in number⁸⁹ (tabl. 36), are poorly represented in our samples in Maiduguri and N'Guigmi (1 and 6 young people respectively), with the other territories having between 10 and 25. The majority of young IDPs are in Jere and Nguelea, but there are some in the other territories affected by the crisis.

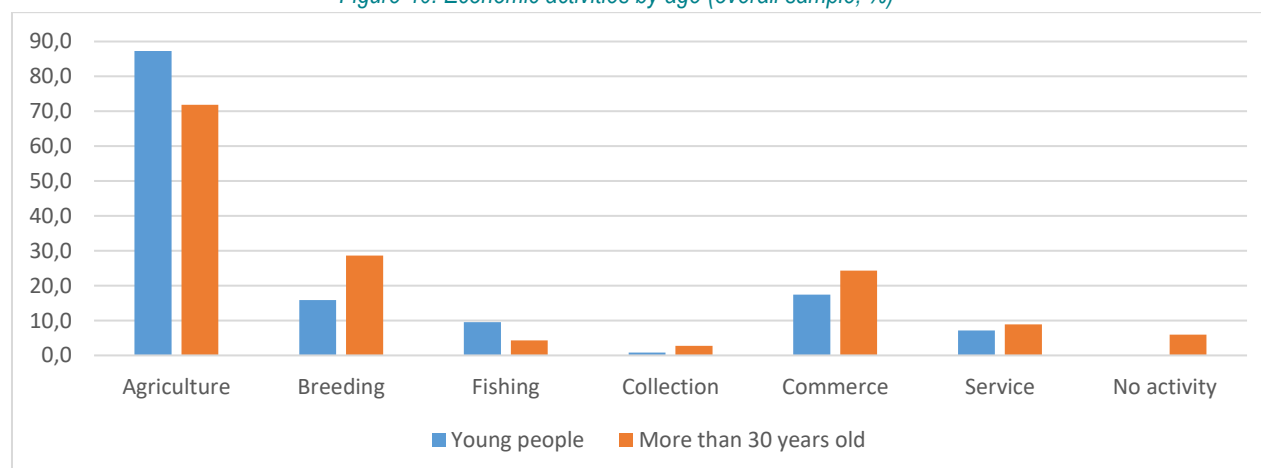
Table 36: Number of young people surveyed by community of residence and territory

	Maiduguri	Jere	Chétimari	N'Guigmi	Nguele	Bol	Koza	Mindif	Dargala	Total
IDPs	1	6	4		4		6			21
Returnees		4		1						5
Returned Migrants		1			7	1				9
Natives		13	5	5	13	11	15	7	5	74
Migrants		1	1		1		1	4	9	17
Total	1	25	10	6	25	12	22	11	14	126

Economic activities

Crop farming, which is carried out by 110 out of the 126 young people, is the most common economic activity among young heads of household (Fig. 40). This activity concerns 87% of young people, compared to 72% of older heads of household. It is far more common than the other most common activities, such as trade and animal husbandry (22 and 20 young people). These activities require resources to get started, which young people may not have. There is therefore little livestock farming among young people, with only 16% involved in it, i.e. about half as many as older people. We also note that young people are about twice as likely to fish as their elders (12 fishermen compared to 16) and that all the young people have an economic activity.

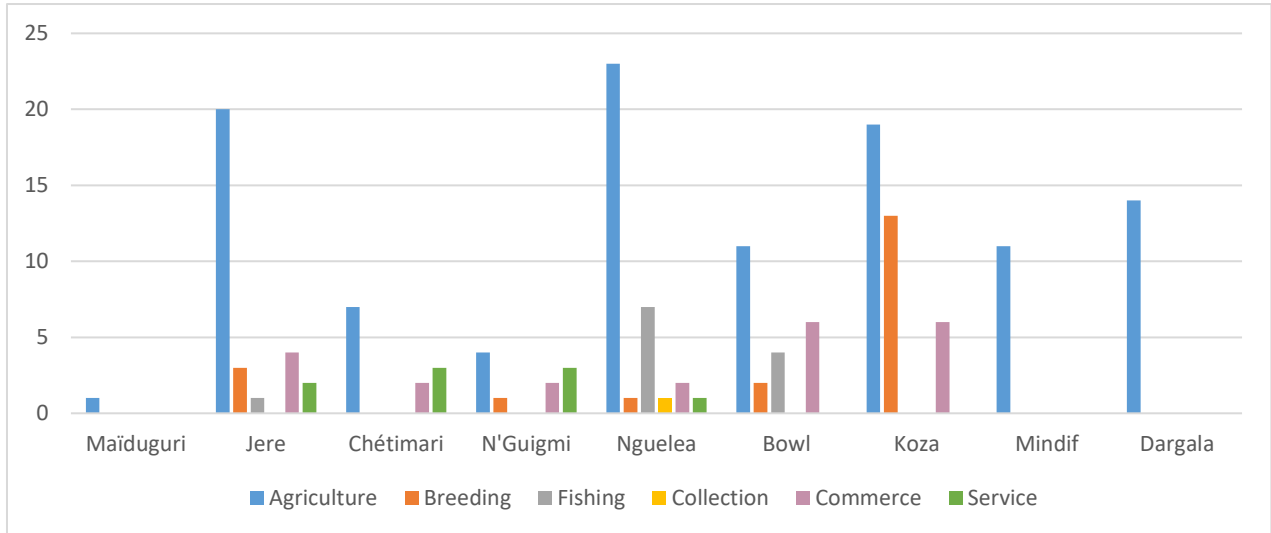
Figure 40: Economic activities by age (overall sample, %)



Youth activities are more diversified in Nguelea, and to a lesser extent in Jere, than in the other territories (Fig. 41). Crop farming dominates everywhere. In our sample, there are no young people involved in livestock farming in Chetimari, Mindif or Dargala. Young people who fish are found in Nguelea (7 cases), Bol (4 cases) and Jere (1 case).

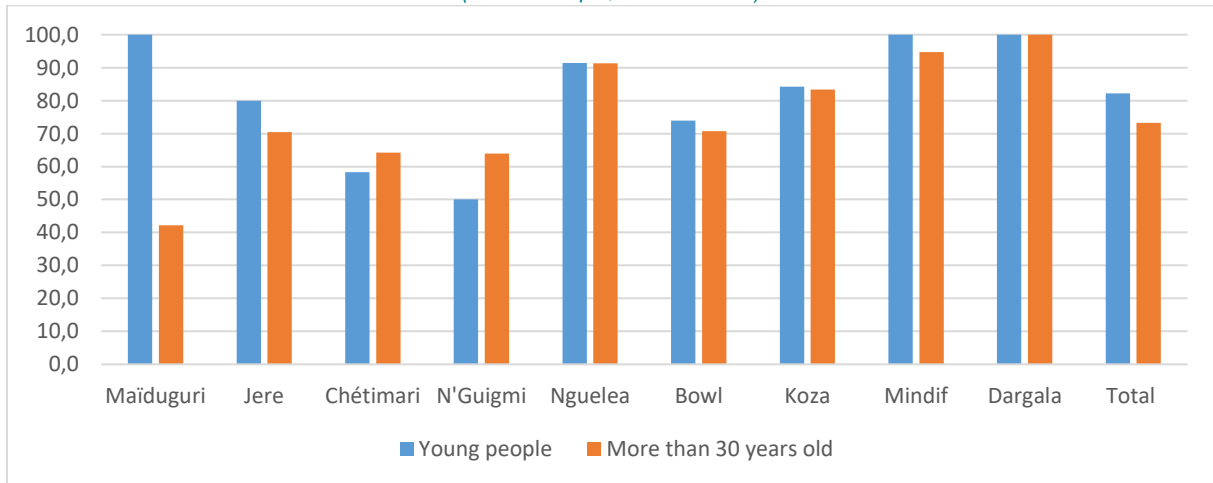
Figure 41: Activities by young people by territory (112 young people, no. of young people)

⁸⁹ Of which 109 men and 17 women.



With the exception of Maiduguri, where there is only one young person, the percentages of activities related to land resources for young people and those over 30 years old do not reveal any significant differences in the different territories. 14% fewer young people are involved in crop farming in N'Guigmi (58% of all respondents), where young people's activities are more diversified. In total, **young people, who overwhelmingly rely on crop farming for their autonomy, logically have a higher proportion of activities linked to land than those over 30 years old** (82% compared with 73%). This also partly explains why the rate of multipole activities among young people is low: 34% compared with 42% for those over 30. The need for financial resources to initiate new activities also contributes to this low percentage.

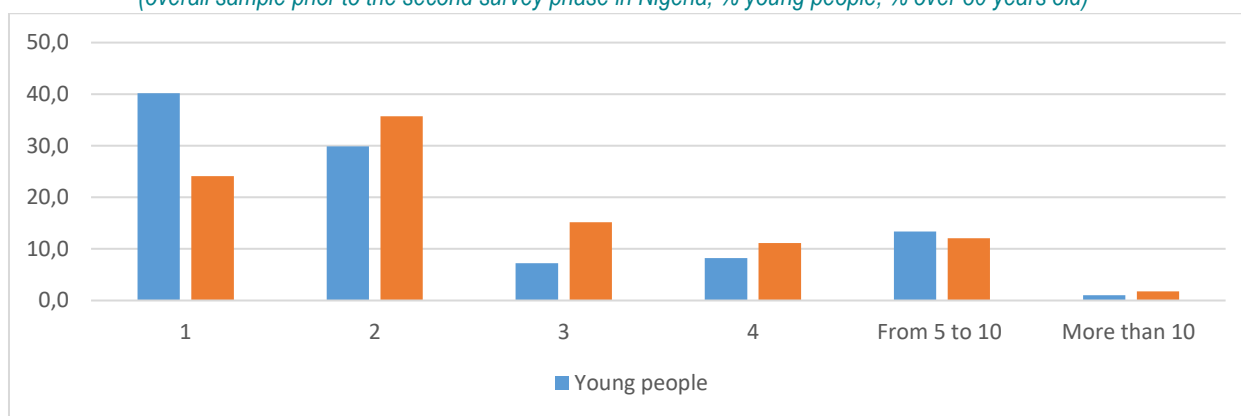
Figure 42: Land resource development activities by age, by area and in total (overall sample, % of activities)



Access to agricultural land

As regards land ownership⁹⁰, **there are significant disparities between young people and those over 30**: 40% of young people have to make do with a single plot of land compared with 24% of their elders, and 70% of young people have one or two plots of land compared with 60% of those over 30. However, **disparities between young people are also significant**, with 22 out of 97 young people (23%) with four or more plots, compared with 25% for those over 30. The gap is therefore very small, unlike women, who are half as likely as men to have 4 plots or more. Therefore, there is a significant proportion of young people in the sample who have much more land than the majority. This finding could be explained by the fact that **young people might have benefited from plots belonging to their families at an early stage because of the security crisis**. In fact, 20 young people out of the 22 concerned (91%) are located in areas directly or indirectly affected by the crisis. However, we lack data on the history of the families concerned (death or departure of the father...) to ascertain this.

Figure 43: Number of plots reported by young people and their elders
(overall sample prior to the second survey phase in Nigeria, % young people, % over 30 years old)



There are ⁹¹83 plots of land used by young people in the survey. Rainfed crops are grown on 66 plots, 14 are market gardening plots and 2 are used to grow transplanted sorghum⁹². Analysis of the surface area of rainfed plots shows **the same findings**: on the one hand, a significant difference with older people in the proportion of plots that do not exceed 1 ha (52% for young people compared to 32% for those over 30 years old) and, on the other hand, strong disparities between young people which are not due to a few isolated cases, with 10% of their plots measuring 10 ha or more⁹³.

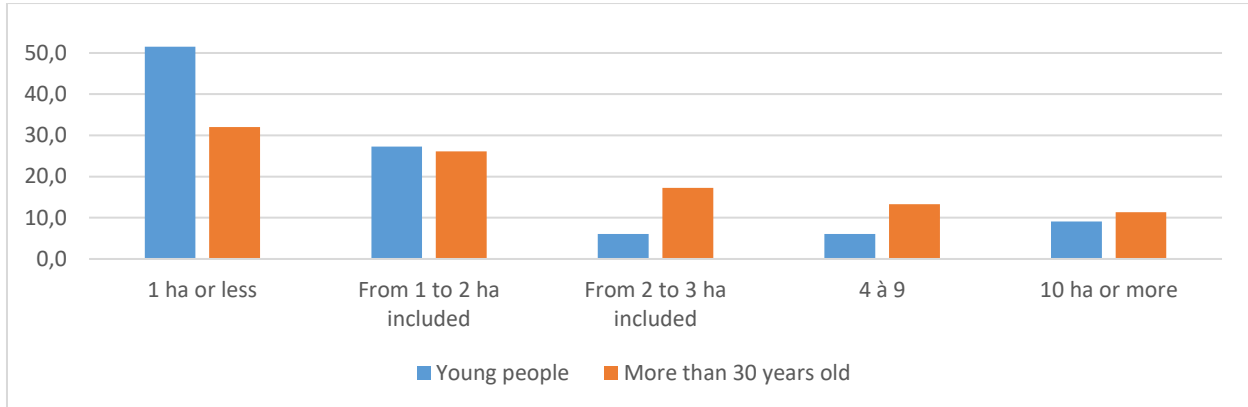
⁹⁰ We remind you that as far as the number of plots is concerned, we do not take into account the data from the second wave of the Nigerian survey.

⁹¹ None are located in Maiduguri or N'Guigmi.

⁹² No answer for one plot.

⁹³ By way of comparison, only 2 women farm plots larger than 10 ha.

Figure 44: Surface area of rainfed plots for young people and over 30-year-olds (269 plots, in %)



The majority of young people have access to agricultural land (Fig. 45) through inheritance (52% of the plots surveyed), as do people over 30 years of age. This is the main means of access by young people to plots in 4 out of 7 territories: Bol, Chétimari and the two non-impacted Cameroonian communes. Young people also obtain land from their family members in other ways (donations, rentals / sharecropping), so that 63% of the plots exploited by young people come from their families, compared to 57% for older heads of household.

The case of Koza⁹⁴ is characteristic of a territory where land tenure is saturated. The Mafa land tenure system has adapted to this by passing on the inheritance of the plots to the eldest son: the other children who continue to farm there have to find land by other means: inheritance therefore only concerns a minority of cases. Those who remain become tenants or sharecroppers (13 cases out of 16). Renting or sharecropping appears to be the second most common means of access to land for young people, as it is also the most common in Jere, where it concerns 10 out of 19 young people. Young people make slightly more use of this mode of access than people over 30 years of age (30% and 25% respectively). The duration of agreements concluded by young people is only one season in 16 out of 25 cases, and one year in 4 cases.

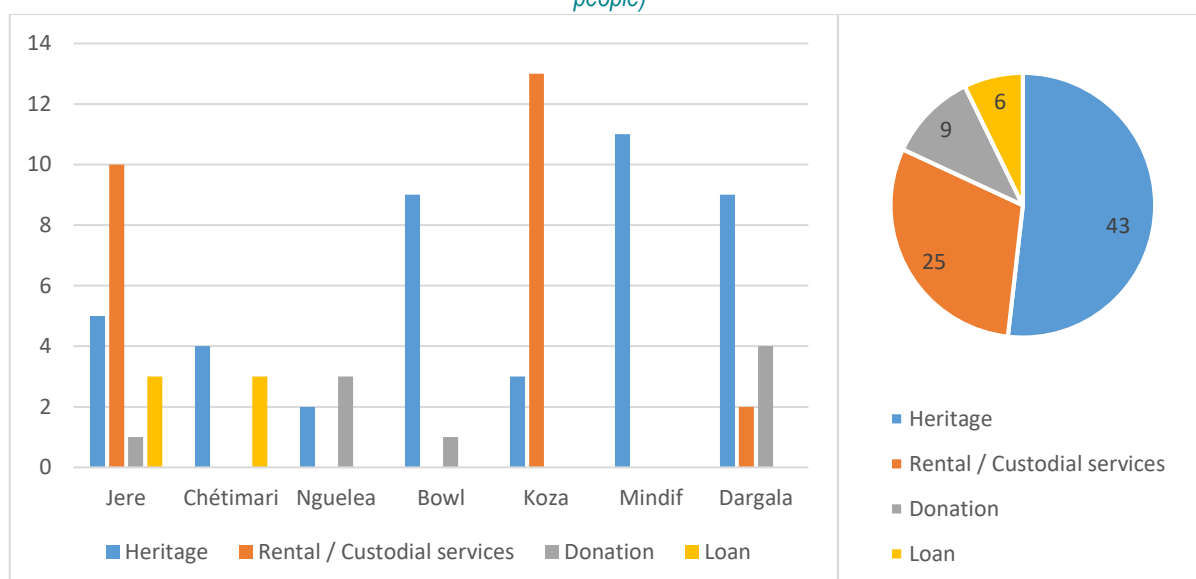
As with inheritances and renting/sharecropping, there is no significant difference in the proportions of plots given and loaned to young people (11% and 7%) and their elders (12% and 9%). The land lent to young people is all located in areas directly impacted by the crisis (Jere and Chetimari). No young people have had the opportunity or the means to buy a plot of land.

Because of comparable land access arrangements, **the rate of indirect land ownership among young people is similar to that of older people** (37% and 34%) and the use of market land transactions is also equivalent (30% for young people, 28% for those over 30). However, we note that 84% of the plots used by young people as indirect tenants do not exceed 2 ha. Thus, **31% of the plots operated by young people are plots of 2 ha or less that do not belong to them**, i.e. 7% more than older people. The gap is identical if only plots of 1 ha or less are taken into account: **24% among young people compared with 17% among those over 30**.

Finally, it should be noted **that no young people have any documents formalising the agreements** that give them access to their plots and that the rate of conflict on the plots they farm is identical to that of people over 30 years old (25%).

⁹⁴ In contrast to Nguelea, where 5 young people farm crops, and Jere and Chétimari, where 7 young people farm crops.

Figure 45: ways that young people gain access to agricultural plots by territory and overall (83 young people, no. of young people)



Access to pastoral resources

As with the total sample, young people mainly have a few small ruminants. However, 3 of them own a few cattle and 1 has a herd. Most of the young people involved in this activity are located in Koza, the others around Lake Chad (Table 37).

Table 37: Livestock herds of young people involved in animal husbandry by territory (20 young people)

	Jere	N'Guigmi	Nguelea	Bol	Koza	Total
Some small ruminants	1	1	1	1	10	14
Some small ruminants Some cattle	1	0	0	0	3	4
Some cattle	1	0	0	0	0	1
Herds (cattle, camels)	0	0	0	1	0	1
Total	3	1	1	2	13	20

Only 1 young person from Koza and 2 from Jere do not need access to pastures. The remaining 17 have free access to pastures, except for one small ruminant farmer in Koza who needs to obtain a permit for which a fee is charged during the rainy season. The 2 young people located in Bol are the only ones to have access to a salt marsh, one of them with a free permit, the other for a fee.

As with the over-30s, 80% of the young people have to buy fodder, with only 2 young people in Chad and 2 young people in Jere not buying any (compared with 83% of the over-30s). Of these 16 young people, 11 buy fodder from traders, and only 2 exclusively. Access to water for the animals is almost always free: 4 young people have to pay for this access in the dry season (including the person with the herd) and 2 in the rainy season. Finally, 5 young people said that they have no problem watering their animals, and 12 mentioned difficulties related to the lack of water.

Young people have not experienced conflict more than the over-30s. 3 young people have been in conflict over access to rainy season pastures for the past 10 years: 2 cases of damage to crops in Koza, 1 case where the right of access was contested in Bol. In the dry season, there was one case of the same type of conflict in Koza and another in Bol.

Access to fishing and timber collection areas

Of the 12 young fishermen in our sample, 11 have free access to fishing areas in the dry season and 1 young person from Jere pays a users' association for a licence. In the rainy season, the same young respondent also needs to pay for authorisation and 2 young people have free authorisation in Bol. Six young people are in possession of a fishing permit. Only 1 case of conflict was mentioned by a young person from Nguelea, whose net was torn by herders.

The proportion of young people purchasing wood from traders is equivalent to that of their elders (34% compared to 36%). Almost all young people collect or cut wood (90%, compared with 82% for those over 30) and 27 young people have to apply for at least one authorisation (24%, compared with 29% for those over 30). Only 1 young person, living in Nguelea, sells wood. The proportion of conflicts declared by young people is equivalent to that of older people (18% compared to 20%).

To conclude this section, we note that the young heads of household category is characterised by a high level of crop farming and a low level of animal husbandry. As crop farming is the activity through which they become autonomous, **young people are more dependent than other categories of actors on access to land resources and they are less likely to have multiple activities.** Access to land among young people is very different compared to over-30s: proportionally more young people have to make do with a single plot of land, as well as those who farm plots of 1 ha or less. However, there are significant disparities between young people: the proportion of young people who have 4 plots is close to that of older heads of household, and 10% of young people's plots measure 10 ha or more. Our sample therefore includes a non-negligible proportion of young people who have much more land than the majority, which is perhaps explained by the fact that they may have benefited from their parents' plots at an early stage because of the security crisis. Our study shows that means of access to land do not differ between the two age groups. However, **young people are more dependent on their families who transfer land to them other than by inheritance, and proportionally more of them cultivate small plots as indirect tenants.**

Changes in land tenure in the territories under study

Studies on the security crisis in the Lake Chad region show the establishment of parallel local governance in areas controlled by insurgent groups (Magrin and Pérouse de Montclos, 2018; GICS, 2019). How do these groups use access to natural resources to control territories? How is this reflected in the territories studied and what changes are being made in land management and modes of access to natural resources for the populations that exploit them?

In order to analyse these developments, we first present the quantitative results from the survey, on how the impacts of the crisis are perceived depending on the proximity of the territories studied to the areas controlled by the insurgent groups. Changes in local governance are then presented by resource territory and according to the direct and indirect impacts of the armed groups. It should be noted that we do not tackle economic impacts, which affect actors and territories much more widely, but only access to natural resources (land, pasture, water and wood).

Quantitative overview of the impact of the security crisis on the territories under study

The literature review (Chapter 2) and the summaries of the surveys and interviews made it possible to revise our initial perception of the territories more or less impacted by the security crisis. Thus, the Cameroonian communes of Mindif and Dargala, which we thought had been indirectly impacted by a transfer of animals from grazing areas that had become inaccessible, finally turned out to be not impacted: this is reflected in particular by the perception that there has been no increase in conflict since 2014 (the date of the start of the security crisis in the far north of Cameroon), as shown in Table 38. In the two Chadian territories, the situation we document is not that of directly impacted territories: the

canton of Nguelea 1 and the commune of Bol do not include 'red zones' (locally also known as the 'island zone') where insurgent groups and state of emergency measures are concentrated, but they do receive displaced, refugee and returnee populations who are fleeing them. This is also the case for the commune of Koza in Cameroon, where populations from the fighting zones in the Mandara Mountains on the border with Nigeria are taking refuge.

We have thus classified the territories affected by the security crisis (all except Mindif and Dargala) according to the direct impacts (Maiduguri, Jere, Chétimari, N'Guigmi) and indirect impacts (Bol, Nguelea, Koza). The rates calculated for the main indicators regarding the perception of conflicts, the modification of economic activities and people's perspectives vary a great deal depending on the categories of territories (table 38).

One of the main findings of this study is the significant contrast between the changes observed in impacted and non-impacted areas. Indeed, when asked about these changes "due to the security crisis" (2009 in Nigeria, 2013 in Koza, 2014 in the rest of the Far North of Cameroon, 2015 in the impacted territories of Niger and Chad), almost 50% of respondents believe that conflicts have increased, that they have been forced to modify their activities (90% concerning fishing) and/or have had to abandon some of them. These rates are systematically higher if we do not include the respondents from the non-impacted territories, where there have not been any specific changes due to the security crisis. This finding shows that, although certain territories close to the crisis may suffer wider economic impacts, particularly in terms of the marketing of agricultural products, their productive systems remain unaffected (Mindif and Dargala are located around 100 km from the Nigerian border).

Table 38: Indicators of the main changes observed according to the proximity of territories to insecure areas

	Total (9 territories)	Not impacted (Mindif and Dargala)	Impacted (All except Mindif and Dargala)	Indirect (Bol, Nguelea, Koza)	Direct (Maiduguri, Jere, Chétimari, N'Guigmi)
Sample					
Number of respondents	496	73	423	179	244
Number of crop farmers	376	73	303	159	144
Number of livestock farmers	126	8	118	64	54
Number of fishermen	28	0	28	22	6
Perception of conflict					
% who feel that there are more conflicts (all)	46,8	0,0	54,8	69,3	44,3
Modification of activities					
% change crop farming activities (crop farmers)	58,5	0,0	72,6	56,0	91,0
% settlement of newcomers (crop farmers)	4,0	0,0	4,6	3,1	6,3
% land occupied by force (crop farmers)	2,4	0,0	3,0	1,3	4,9
% sale of land (crop farmers)	0,8	0,0	1,0	1,9	0,0
% change in livestock farming activities (livestock farmers)	53,2	0,0	56,8	32,8	85,2
% change in fishing activities (fishermen)	89,3	0,0	89,3	77,3	100,0
% change in wood activities (all)	57,5	0,0	67,4	59,2	73,4
% discontinued activities (all)	56,0	0,0	65,7	39,1	85,2
Perspectives					
% leaving (all)	15,1	0,0	17,7	6,7	25,8
% unsure (all)	6,5	2,7	7,6	10,6	5,3
Help activities (all)					
% improved security	60,9	5,5	71,4	62,0	76,6

% improved land tenure rules	22,4	4,1	26,2	32,4	21,7
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Within the **impacted area**, the perception of conflicts related to natural resources is very strong, with nearly **55% of stakeholders believing that they have increased**. Surprisingly, this perception is much stronger in the indirectly impacted territories (70%) than in those that are directly impacted (44%). Feedback from the field, particularly from Nigeria, shows that the populations who are directly confronted with insecurity and the activities of armed groups (crop and livestock thefts, attacks) have retreated to their villages, without the possibility of going out into the surrounding countryside to carry out their activities. Thus, conflicts between residents are not so numerous, whether between crop farmers and herders, between crop farmers or with institutions. In the territories indirectly impacted, conflicts of all kinds have increased due to the arrival of IDPs in territories where there is a sudden increase in population.

There is a very specific situation in the commune of N'Guigmi due to the low population density on the one hand, and the depopulation of the commune on the other. All the productive stakes are concentrated in the Lake Chad basin, where it is officially forbidden to go but where arrangements with the insurgent groups make it possible to develop some activities. As a result, conflicts over access to natural resources are ultimately less numerous, or at least differently expressed. On the other hand, in the commune of Chetimari, where population density has doubled within five years, 90% of the informants perceive an increase in conflicts related to natural resources, particularly in the fields and related to wood collection.

It is in the canton of Nguelea that the increase in conflicts is the most keenly felt, as all the interviewees, whether they were natives of the study villages or had been displaced there due to the crisis, mentioned at least one issue of dispute related to natural resources (fields, fishing areas, wood collection, agro-pastoral conflicts). An almost equally conflictual situation is observed in the neighbouring commune of Bol, where 74% of respondents cited the same reasons, and the challenging of the authority of chiefs in the context of the state of emergency measures.

The impacts on economic activities therefore vary a great deal, and increase the closer one gets to areas of insecurity. The quantitative results are edifying: among the people interviewed in the directly impacted areas, more than 85% had to abandon at least one activity, and 85% of herders, 91% of farmers and 100% of fishermen had to change their activity. Fuelwood supply practices have also changed profoundly, particularly in areas where human pressure on resources was already strong before the crisis (the outskirts of Maiduguri, Jere, Koza) or has changed the most (Chetimari) with the arrival of displaced, refugee and returnee populations. Moreover, wooded areas are often primarily controlled by armed groups and are therefore difficult to access.

The final questions of the survey, which focus on the respondents' short-term prospects (within the next 5 years), shed light both on their state of mind, and on their perception of the permanence of the current situation. While studies conducted at the beginning of the crisis (2015-16) showed that IDPs generally aspired to return to their villages of origin (Oumarou *et al.* , 2017), our results are much more mixed. **Only 15% of the people we interviewed wanted to leave the village where they live in 2020**. Those who want to leave are mainly IDPs: of the 189 people interviewed in the four countries (IDPs, returnees, and returned migrants), 60 want to leave, i.e. 31.7%. These are all IDPs, currently settled in the most difficult territories, in Maiduguri, Jere and Koza. It is also among IDPs that there is the most indecision: 16 people do not know what they are going to do (7 in Jere and 5 in Maiduguri).

Among the natives (260 people in all), a number of people want to leave in the two most densely populated territories where there are usually problems of access to natural resources: 7 in Jere and 6 in Koza, including 2 young people and 2 women. 2 people in Koza and 14 people in Bol (including 4 young women and 6 old women, and 2 young men) do not know if they are going to stay.

No returnees (Nguelea, Bol, Chétimari, Jere, N'Guigmi) or returned migrants (Nguelea, Bol, Chétimari, N'Guigmi), 35 people in all, nor any migrants (45 people) stated that they wanted to move, except one returned migrant in Jere who wished to leave. On the other hand, young people under the age of 30 are

neither the most undecided (6% do not know what they are going to do), nor the most ready to leave (10% of the plans to leave).

Thus, fewer people than expected want to return due to the intensity of the crisis in the areas that they have left. Those who do want to return represent **25.8% of respondents in the directly impacted areas**, where most of the IDPs surveyed are located, and only **6.7% in the indirectly impacted areas**, where more than 10.6% are unsure.

Finally, as expected, among the different answers given⁹⁵ for ways to develop economic activities, **improving security conditions** was among the most common requests for assistance, but nevertheless came after the need for financial support (cited by more than 80% of people in each territory, except curiously in Bol and Nguelea) and the need for technical support (67% of responses). The need to improve security conditions was cited by **60.9% of respondents in the four countries and 76.6% of people in directly affected areas**. Almost a quarter of the informants mentioned improving rules related to land and natural resources: even though this problem only appears in the penultimate position (after attractive options such as land development or micro-credit), and more often in the indirectly impacted areas (32.4%) than in those directly impacted (21.7%), the high proportion of people citing it reveals a strong feeling for this issue. The details of the responses by commune are presented in Appendix 3: these show that the informants who cited the question of natural resources are mainly located in Chetimari (in 3rd position of the requests for assistance for this commune, after the need for security and financial support) and in Nguelea (1st position). It is indeed in these two territories that questions of access to natural resources are most acute, as we will analyse in this chapter.

Territories in the process of being reconstructed

The four territories where access to natural resources has changed the most as a result of the security crisis are Chetimari and N'Guigmi in Niger and Bol and Nguelea in Chad. As it is impossible to gain access to the wetlands respectively in Komadougou Yobé and the northern and southern basins of Lake Chad (with exceptions as we will see below), production systems have been significantly impacted with the abandonment of certain activities, the reduction of mobility and the localised concentration of human populations and domestic animals. The changes observed in land management obviously depend on the previous situation and the differential between host and displaced populations.

Blockages and concentrations in the Kaola plain in the commune of Chetimari

Among the territories directly impacted by the security crisis, Chetimari is different in that the host population has not been displaced and all administrative and traditional authorities have remained in place. The conflict observed in relation to access to resources is mainly due to the cumulative increase in anthropic pressure along National Road No. 1, which crosses the commune from east to west in its southern part, and also due to the impossibility of gaining access to floodplain and woodland resources in unsecured areas. The commune of Chetimari also has the highest rates of conflict and abandonment of activities (Table 39), which were mentioned by both the displaced population and the native inhabitants.

Before describing in detail the changes that have taken place in terms of access to natural resources, it is worth mentioning the high number of people who have abandoned trade or service activities (52.5%). This situation has profound repercussions on the diversification of activities which was underway in the villages observed along the roadside and which was linked to the economic activity of the rural town of Chetimari and its market in Gagamari, which is of regional importance and is a relay before products are exported to Nigeria. The loss of income of the families concerned has serious consequences on family budgets and on the increased pressure on natural resources, in addition to humanitarian aid.

⁹⁵ Development / technical supervision / improving security / professional development / micro-credit / improving road infrastructure / improving rules related to land and natural resources / other.

Table 39: Perception of the evolution of conflicts and changes in activities in the commune of Chetimari
(% of the number of respondents)

% who feel there are more conflicts (all)	90,2	% discontinued activity (all)	78,7
Agricultural plots	83,6	Crop farming	13,1
Fishing areas	4,9	Livestock farming	14,8
Wood collection	45,9	Trade, service	52,5
% change of agricultural activities (agris)	83,8	% change in livestock farming activities (herders)	100,0
Difficulty of access to the fields	18,9	Difficulty of physical access to pastures	30,8
Changing crop types	32,4	Competition due to the arrival of new herders	23,1
Climate change	51,4	Decline in pasture quality	30,8
Animal pests	59,5	Fodder availability	30,8
High demand for agricultural land by IDPs	0,0	High fodder prices	84,6
Lack of financial resources	10,8	Insecurity (armed groups)	15,4
% change of wood activities (all)	82,0	Lack of financial resources	61,5
		Others	23,1

As there were no villages in the now inaccessible area of Komadougou Yobé, the insecurity that has prevailed there since 2015 has not led to internal displacement within the commune. However, the proportion of actors who have abandoned an activity is very high (79%), and the proportion of people forced to change their activities is among the highest in comparison with other territories. For crop farming, the reasons are not only due to the physical difficulty of accessing fields, but also to other hazards. Due to increased rainfall in recent years, the flooding of the Komadougou Yobé (in 2010, 2012, 2016 and 2019) has forced the inhabitants of flooded neighbourhoods in some of the valley's outlying villages to relocate. In 2016 and 2019 this added disaster victims to the number of refugees and IDPs in the area. In 2019, the water rose along the oxbow lakes of the Komadougou Yobé river to a level that had not been seen for almost 100 years (according to interviews with the mayor). 2019 was also marked by an upsurge in damage caused by locusts. These two events explain why "climate change" and "animal pests" were cited so much in this commune and nowhere else.

Contrary to our hypothesis, the high demand for agricultural land by displaced populations is not cited by any of the respondents as a source of conflict, as is the case in all nine territories. However, it has caused some of the recent changes in land ownership.

Hosting displaced persons and refugees at the heart of the crisis

The Commune of Chétimari, which falls within Niger's agro-pastoral zone, has three types of cultivable land: the land of the Komadougou (in the south), the land of Kaola, north of the national road (clay-silt soils in the centre), and the inter-dune land (in the north). In relation to the Komadougou, the riverbed

of up to 25 m officially belongs to the State. Traditionally these lands are the property of the first occupants (the natives). Each family has its own area within the valley. The Kaola lands are under the control of the traditional authority (the village chief). Any form of land cultivation is subject to his authorisation, by means of a loan. The inter-dune fields belong to the natives and come from the "*first blow of the axe*" (clearing). Land clearance automatically confers the right of ownership and development.

A market for the purchase/sale of agricultural plots has existed in the municipality since well before 2010 (see sections 3.3 and 4.2.1.5). The deeds issued by Cofocom show a peak in the formalisation of transactions in 2017 and 2018, which is difficult to explain. The peak itself may be the result of awareness-raising work carried out by Cofocom in previous years. According to Cofocom's permanent secretary, the decline since then is due to the obligation imposed from 2018 onwards to provide the minutes of a family council in order to authorise these sales, which has significantly slowed down this trend. However, these minutes do not appear in the documents referred to in the deeds since 2018, even though reference documents are systematically mentioned, particularly certificates of customary possession issued at village level. This may be linked to the crisis: the peak could be explained in part by an increase in the number of plots for sale belonging to a section of the population that had decided to leave the area. The prolongation of the crisis over time and the uncertainties that it engendered may have contributed to slowing down the purchasing decisions of the mainly urban stakeholders.

In general, as in the whole of eastern Niger, there was a great deal of solidarity between host populations and IDPs at the time of their arrival (Oumarou *et al.*, 2017), including the provision of plots of *land* ("*... although I am not from the village, I have been granted land that I am cultivating with my family. The other resources are accessible to all*"; refugee in Chétimari, Résilac Baseline Report). Returned migrants and returnees try to regain the plots they have inherited (respectively 4 cases out of 4, and 1 case out of 1). Lending and sharecropping (the latter was not observed in the survey) are the preferred agreements between the natives with plots and the displaced. The fees are negotiated at the beginning of the season and are always in proportion to the harvest; this type of transaction is little subject to conflict.

These transactions take place exclusively on land cultivated in the inter-dune areas and in the basins, as crop farming is no longer possible in the Komadougou Yobe valley since 2015. Unlike the irrigated areas around Diffa, some of which were secured by the army at certain times, and where pepper cultivation has resumed since 2019 thanks to the relaxation of state of emergency measures (§ 2.7.2), in the commune of Chétimari insecurity in the valley is such that "*even the army does not go there*" (national expert Niger) and farmers do not try to return. All crops have therefore been moved outside the valley, mainly to produce rainfed crops (cereals, cowpeas and groundnuts). The production of irrigated market gardening crops is still possible on a smaller scale on basin land by the host populations (Kanouri), or by means of sharecropping by IDPs and refugees. Of the 37 plots observed, only one of the irrigated market gardening plots is cultivated by a native. Five basins are listed in the national directory of communes for Chetimari (N'Guel Kollo, N'Guel Mamadou, N'Guel Guissaou, N'Guel Bounai and N'Guel Saa).

The availability of rainfed farmland is not a cause for concern for the customary and administrative authorities because the commune, which is entirely located in the agro-pastoral zone, has a lot of this kind of land (interviews with the mayor and the canton chief). However, the risks of environmental degradation due to land clearing and continuous cultivation are not taken into account. What is more, potential production is very limited and yields are very low: food security for all, both host populations and displaced people, is highly compromised. The food crisis is a worrying reality in the commune, and as a result, the inhabitants (of all residence status) seek assistance from the many humanitarian organisations present, but also take risks in order to carry out certain activities in the valley. The stealing of crops is also more frequent.

The interviews reveal an increase in conflicts between natives and displaced and refugee populations over plots of land, particularly when farmers do not want to return plots that have been loaned to them, or sharecropped plots. Conflicts over inheritance are also numerous. These situations are not revealed by the survey, which notes 4 cases of conflict (Table 40) involving natives, except for a conflict in the

village of Boudouri between a migrant and someone from outside the community, which required the intervention of the customary authorities.

Table 40: Conflicts on the plots observed in the commune of Chetimari

Types of conflict	People involved	Number
Resolution body		
Regarding rights	Migrant / Person from outside the community	1
Customary authorities		
Regarding limits	Native / Person from outside the community	1
Family Council	Native / Native	2

The risks of timber harvesting

In a context where the inhabitants have become very impoverished, the harvesting and sale of wood are commonly observed as back-up activities. These are essential activities for the displaced to earn some money. They have increased significantly in the commune of Chetimari, but they are carried out in a context of very high insecurity which makes them very risky. For example, 82% of the people interviewed consider that wood collection has been seriously disrupted because of the crisis and 46% believe that conflicts over this resource have increased (Table 41).

Timber harvesting mainly takes place in the *Kaola*⁹⁶ area, which is the sandy-clay plain covering a large part of the commune north of the national road (Map 7), and, for the most daring, in the Komadougou Yobé valley. Based on the interviews, the activity is currently not subject to any rules: neither by the competent Nigerien administrative authorities, who have not intervened in the area since the insecurity began, nor by the traditional authorities, who have never done so. However, for the respondents who harvest timber professionally, 3 natives said that they had an administrative authorisation (from the forestry service) and 1 migrant said that they had an authorisation from the village chief. Out of the 3 conflicts identified concerning wood, 2 involved the technical services, which shows that they are still present in secure areas, and probably at the points of sale.

Armed groups do not seek to control this activity, which is carried out by the poor and whose trade is not as lucrative as that of fish or peppers. On the other hand, the forests are areas where these groups retreat and any attack makes it impossible to collect wood for several days, out of fear of the combatants but also of the presence of the army in action. Thus, the insecurity that is felt in relation to this activity in this tense area is due to difficulties in accessing the resource, caused by the incursions of armed groups into the territory.

The interviews did not reveal any shortage of resources, nor any risk of accelerated deforestation or damage to the three protected forests. However, these points need to be verified.

Transhumance stopped and livestock farmers blocked in the commune.

It is by trying to understand the movements and pressure of livestock farmers in the commune that the issues of the *Kaola* plain take on their full meaning. 100% of the sedentary herders interviewed (natives, displaced and returnees) believe that this activity has been modified, particularly because of the

⁹⁶ The *Kaola* Plain is oriented West-East from Mainé Soroa to Lake Chad. Its width varies from 15 to 50 km in places (see map 5).

difficulties in accessing pasture (31%), the availability of fodder and the decline in pasture quality (31%) and, above all, the high price of fodder (85%, see Table 41). This extremely difficult situation can be explained not only by the difficulties of access to the valley pastures, but also by the reduced mobility and the much higher concentration of animals in the commune.

It is also interesting to recall the particular difficulties in relation to water for sedentary livestock (we did not conduct a survey for transhumant herders). Of the 13 people who have animals, spread across the 3 survey villages, 9 use a borehole with a paying licence in both the rainy and dry seasons, while 2 others have a licence for the dry season alone. Of the 9, 6 are natives and 2 returned migrants. 1 displaced woman arrived with a few ruminants that she waters from her neighbour's pump.

Armed groups have had a major impact on livestock farming since the 2010s in north-eastern Nigeria and have significantly affected pastoralist groups who are involved in transhumance between these pastures and those of eastern Niger. Since the attacks on Nigerien soil in 2015 and the "de facto" closure of the border between Nigeria and Niger by the ban on movement decreed by the state of emergency in these two countries, transhumance has been stopped.

In the commune of Chétimari, in addition to the livestock and small ruminants held by sedentary people, groups of transhumant Fulani herders have found themselves blocked by the closure of the border in 2015. These are mainly Bokolodji Fulani, who raise cattle that are highly dependent on green pastures in the dry season (unlike other herds that are more tolerant of dry pastures) and Ouda sheep (Abdourahamani, 2020). Before the crisis, they stayed in the *Kaola* and *Kadzel* zone (an extension of the plain east of Diffa) only during the rainy season, and left again at the beginning of the dry season to return to green pastures in the plains of Nigeria. They therefore crossed the valley twice, on the way to and from transhumance, often quite quickly because of the irrigated crops and the many conflicts with farmers whose fields encroached on the corridors.

Since 2015 and the "de facto" closure of the border, they have been trapped north of the Yobe river. North-south transhumance is replaced, to a lesser extent, by east-west transhumance. Herders stay in the *Kaola* plain away from insecure areas, especially at night, and take their herds to the edge of the Yobe river during the day. Because of the rapidly depleting pasture in the *Kaola* plain, many are forced to take risks to take their animals to the green (bourgoutières) pastures in the valley, despite the insecurity.

Access to pasture in the *Kaola* plain is not subject to specific authorisations, either from the traditional or administrative authorities, and this has not changed with the crisis. However, the number of animals is such that damage to rainfed and market gardening crops has increased significantly: this is not apparent from the survey results, but interviews with land management stakeholders highlight that this is the most common cause of conflict, before disputes over field boundaries and, to a lesser extent, disputes over water points for livestock watering and crop theft. Demand for agricultural by-products has also increased significantly: the survey did not include a question on this issue, but it is likely that agreements are being made between crop farmers and herders to negotiate access to these products.

On the other hand, **access to the valley's pastures is negotiated with the insurgent groups**. Before the crisis, access to these pastures was also free, even though it had been greatly reduced due to their cultivation. In 2020, armed groups have imposed a tax whereby one cow has to be paid for every 30 head of cattle in exchange for a permit to access the pasture for one year. If this is not respected, the animals are confiscated and the herders are murdered. This situation reduces the use of these pastures, but does not exclude it. It shows that there is a power struggle and that armed groups want to establish local alliances.

Unchanged land regulations in the Kaola Plain and the hinterland

Outside the valley, in the *Kaola* plain and throughout the hinterland, conflict regulation methods have not changed because of the crisis and are the responsibility of the customary, administrative and judicial authorities.

There are four conflict resolution bodies in the municipality of Chetimari. They are, in order of intervention: the village chief, the canton chief, the gendarmerie and the judiciary. The customary

authorities, as moral authorities, are vested with the powers of conciliation between conflicting parties in rural areas (Ordinance No. 93-014 amended and supplemented by Law No. 2008-22, Article 15). The frequency with which this customary authority is used can be explained in terms of geographical and cultural accessibility. In the event of damage, conciliation procedures are recommended. This consists of having the damage assessed by a committee who are representative of all the socio-professional strata of the village. When there is a claim to ownership of a field (inheritance problem), the plaintiffs are listened to directly in the presence of witnesses and the elders who work with the village chief.

A complainant who is dissatisfied with a decision by his village chief can appeal to the canton chief. The latter is supposed to have more authority to decide and put an end to the conflict. When a final decision is made and accepted by both parties, all the participants are notified for its immediate implementation. Normally, a record of conciliation or non-conciliation, signed by both parties, should be drawn up, but this is not always the case.

Failed customary judgements are referred to the courts by plaintiffs. At this level, after consulting the non-conciliation report drawn up by the customary chief, the judge decides by issuing a judicial decision that is binding on all parties. Most of the conflicts that reach the gendarmerie (judicial officer) are those that have ended in a confrontation between the two parties and have then been referred to the courts. In this case, the customary authority stage is systematically ruled out.

The Communal Development Plan (CDP, 2016a) noted that traditional judgments were being called into question more frequently before judges, "*often due to the non-existence of minutes*". Interviews with the mayor, the canton chief and Cofocom underlined that there was a very high level of poverty among IDPs and refugees, which explains why we did not observe any monetarised transactions for access to plots in the survey results (cf. section 3.3. 3) and why disputes of this type are limited between host and displaced populations.

Competition for control of the valley

Due to the presence of the army, armed groups are not advancing on Nigerien soil beyond the Komadougou Yobé valley. However, in February 2020, there were recurrent attacks and daily gunfire. It was difficult to understand who had control over which resources in the valley.

The Kanouri chieftaincies traditionally hold the land in the valley. Already before the security crisis, due to the purchase of plots of land by urban dwellers with the extension of the town of Diffa around 2010, customary chiefs and local elected officials had warned farmers about the risk of losing control over arable land. It was at this point that a tacit rule prohibiting land sales to people outside the community was adopted. Thus, in descending order of importance, kinship, ethnicity and seniority in the territory are the criteria to be met for a buyer of land in the valley and they seem to be known to all. The analysis of the deeds of sale drawn up by Cofocom confirms this: 20 deeds were studied from this angle and all the buyers are from the region. The two personalities already mentioned above (cf. section 3.3.2) are also well-known: the former minister was born in N'Guigmi and the MP in Diffa. Since the crisis began and the surge in land transactions (15 sales formalised by Cofocom between 2014 and 2019), families have further tightened their control over land sales.

The absence of agricultural activity, which is an important land marker in normal times, is to the disadvantage of the Kanouri families, who can no longer assert their presence on the land. Contrary to the outskirts of the town of Diffa, where certain irrigated perimeters for the cultivation of peppers have been secured since 2015, cultivation has not resumed in the valley, or only in a very marginal way, because access to plots is non-negotiable in the valley. The Kanouri families try to retain control over their plots, particularly the fodder resources (bourgou) which are collected and sold to the herders (Abdourahamani, 2020). Demand has exploded (see chapter 3) and constitutes an important source of income for the natives. However, the activities carried out in the valley are predominantly carried out by people who take the risk of carrying out their activities and returning, often at night (Caremél *et al.*, 2020).

Fishing in the Komadougou Yobe is controlled by insurgent groups, who prevent fishermen from accessing the river: only fishermen who work for them are allowed to fish and they take all the proceeds from the sale of the fish.

By imposing their rules on access to grazing and fishing areas, by tolerating wood collectors who earn a minimum subsistence income from this activity, and by excluding any agreement with crop farmers dependent on chieftaincies that hold traditional power over the valley, the **insurgent groups gain the sympathy of those on the fringes of local traditional power, as well as income and information, in addition to the protection provided by the marshlands.**

In this power struggle over the valley, the Bokolodji and Ouda Fulani herders are key actors: though they have to negotiate with armed groups to gain access to the valley's pastures, those who cannot go there are forced to buy fodder, or they find the bourgoutières already cut down when they arrive (Abdourahamani, 2020). But more generally, the economic opportunities offered by the valley provide the insurgent groups with relays within the local populations with whom they can have relations of varying closeness. It is thus known to everyone, including the traditional and administrative authorities, that the populations of the south of the commune are in contact with the insurgent groups and that the market of Gagamari, like that of Kinzayde (in the commune of Gueskéroù to the east of the town of Diffa), has not officially reopened but has continued to function informally. It is an information and funding hub for insurgent groups. It is difficult, on the basis of this study, to assess the exact links between local traditional authorities and the insurgent groups.

Depopulation of the lake and resettlement on the former shores, north of the northern cultivation limit

In the commune of N'Guigmi, the expulsion from the lake and the departure of the traditional authorities (Boulama) from the villages they controlled has meant that insurgent groups have been able to move into this territory, which the Niger army and the multinational forces have been unable to control since 2015. The resettlement of these displaced populations takes place mainly outside the commune, or around the small town of N'Guigmi on the former shores that mark the extension of the Grand Lac (visible before the 1970s). The lake is now more than 30 km away and IDPs are settled north of the crop line, which should theoretically limit its extension. There have therefore been major changes in land ownership: firstly, by profoundly modifying economic activities and the way populations are distributed throughout the territory, and secondly, by reconfiguring the power relationships within the basin.

Due to the sharp reduction in anthropogenic pressure on the environment (apart from the pressure on wood, which has increased significantly), the increase in conflicts related to access to natural resources as a result of the crisis is much lower in this commune than in the others: only 21% of those interviewed believe that there are more conflicts (table 41). 50% of those interviewed have given up crop farming, and among those who still practise it, 82% have difficulties accessing their fields and 41% have been forced to change crops. Only 10% have given up livestock farming, and among those who still have livestock 29% have difficulties accessing pasture and 68% have problems with fodder availability. High fodder prices are not mentioned a great deal, probably because fodder is not available. The 3 fishermen interviewed have all changed their activity. Finally, 11 heads of household said that they did not have any activity.

As the market in N'Guigmi is not as large as that of Chetimari (Gagamari), the crisis has had less impact on commercial and service activities. However, the disorganisation of activities in the commune has led to a sharp drop in agricultural and fishing production and has caused a serious food crisis.

Table 41: Perception of the way conflicts have evolved and changes in activities in the commune of N'Guigmi
(% of the number of respondents)

% who feel that there are more conflicts (all)	21,1	% discontinued activity (all)	84,2
Agricultural plots	15,8	Crop farming	50,0
Fishing areas	13,2	Livestock farming	10,5
Wood collection	5,3	Trade, services	36,8
% change of wood activities (all)	15,8	Fishing	15,8
% change in crop farming activities (crop farmers)	86,4	% change in livestock farming activities (livestock farmers)	84,2
Difficulty of access to the fields	81,8	Difficulty of physical access to pastures	78,9
Change of crop types	40,9	Competition due to arrival of new livestock farmers	5,3
Animal pests	4,5	Decline in pasture quality	26,3
% change in fishing activities (fishermen)	100,0	Fodder availability	68,4
Difficulty of physical access to fishing areas	66,7	High fodder prices	5,3
It does not concern fishing areas	33,3		

The settlement of displaced persons

Apart from the land in the bed of Lake Chad (*Doro* in Kanouri), the main cultivated land is in the basins around the town of N'Guigmi and the dune lands. These lands are allocated to Kanouri indigenous families under the "*first blow of the axe*" (clearing) right.

Displaced persons and refugees were settled in these areas, and the same solidarity was observed from the host populations as in the commune of Chetimari. **Of the 19 plots documented in N'Guigmi, half are irrigated for market gardening** (by 1 native, 2 returned migrants and 1 IDP) **as is the case for rainfed crops** (by 4 natives and 1 IDP). All the others have rainfed crops on dune land, with inevitably very low yields in this region where it rains 250 mm per year. There has also been a food crisis for several years, and the IDPs are looking to diversify their activities in order to earn an income, in addition to the aid provided by humanitarian organizations. It should also be noted that there was no development on the plots observed by the survey.

As in Chetimari, plot lending and sharecropping⁹⁷ are the two principle modes of access to farmland for the displaced, while the natives and returned migrants own land through inheritance (table 42). While IDPs are forced to use different means and contacts in order to access land, returned migrants go to

⁹⁷ In the table below, the provision of three plots by a customary authority for 1/10th of the harvest has been classified as "*sharecropping*".

their families to resume farming activities. This makes sense when we know that the settlement of the lake basin was partly carried out by the inhabitants who lived around it. The evicted families therefore chose, when they could, to return to their families in their home village. Among the displaced families who have been settled by the state or by NGOs, some are related to the original inhabitants and may be able to inherit a plot of land⁹⁸.

Table 42: Mode of access to plots in the commune of N'Guigmi

Applicants and assignors	Means of access to land			
	Inheritance	Sharecropping	Loan	Total
IDP	2	3	6	11
Customary authority		2		2
Head of a family in the village		1	5	6
Acquaintance			1	1
Member of own family	2			2
Native	6			6
Member of own family	6			6
Returned migrant	2			2
Member of own family	2			2
Total	10	3	6	19

The interviews show the same changes in the reasons for conflicts over plots: disputes over loans are increasing, but the level of conflict between natives and IDPs is not very high. Thus, the **surveys did not find any cases of conflict on the 19 plots observed**. The same conflict regulation methods are observed as in Chetimari, with the same possible disputes over inheritance and pledges. In interviews with the mayor and the canton chief, when specifically asked about increased crop damage, they explain that this is due to a higher concentration of livestock on the former riverbanks (see next §), but this is not a theme that emerges from the survey: the interviewees do not mention crop damage as a reason for changing their agricultural activities.

The Cofocom is also present, but did not give the Niger expert access to its data. We are therefore unable to specify how the number and type of transactions has evolved in this commune since its implementation in 2011.

Livestock farmers on the shores of the lake: expulsion and exacerbation of intercommunity conflicts

In the commune of N'Guigmi, all the pastures usually used in the dry season have become inaccessible due to the administrative measures of the state of emergency. The best grazing area is the lake bed, where there is green pasture all year round (see map 6): since their expulsion from the lake in 2015, the

⁹⁸ In Table 42, the two inherited plots are cultivated by the same displaced head of household, who is settled in the village of Kanembouri by the state or NGOs. He was not born in this village but seems to have relatives who gave him access to an inherited plot.

herders have been forced to leave with their herds and have settled on the former shores to the west and north of the town of N'Guigmi, both within and outside the communal territory.

The question of access to pasture and fodder is therefore a major issue, as is that of access to drinking water, which herders are forced to draw even during the rainy season (table 43). However, no notable changes in access rules have been noted: outside the lake, no application for access authorisation is required for access to pastures and water, whatever the resource chosen. Only access to borehole water requires in principle the payment of a fee for maintenance, but this was not noted in the survey (3 herders⁹⁹ in the village of Kanembouri). The concentration of animals around water points can lead to conflicts over the distribution of water towers (not recorded in the survey for this commune), particularly with transhumant herders who have larger herds. In particular, conflicts between Fulani and Arab herders are frequent around water points because they have large herds.

Table 43: Access to drinking water in the dry and rainy seasons in the commune of N'Guigmi (no. of responses)

Access in the dry season	Access to water in the rainy season			Total
	Borehole	Village well	Surface water	
Borehole	3		1	4
Village well		10	5	15
Total	3	10	6	19

Of the 19 farmers interviewed, all buy fodder: all buy bran and oil cake, 4 add agricultural by-products. These supplies come mainly from private traders (for 16 herders), more marginally from technical services (3 herders). Usually, this increase in livestock feed costs, in addition to the cost of family food, leads to the sale of animals and therefore to significant decapitalisation among livestock farmers.

As in the commune of Chetimari, the situation of livestock farmers is different for those who keep animals that are adapted only to green pastures and those, such as sedentary people, who have small ruminants that are able to use dry, aerial pastures.

For the Boudouma herders who have been expelled from the lake, the situation outside the lake is untenable: if they are not confined in a corral, the Kouri cows return to the lake pastures on their own (Abdourahamani, 2020b). For the Mbororo Fulani herders and the Mohamid Arabs, the issue of seasonal access to the lake's pastures is also vital for their herds. The ban on dry season transhumance to the lake's pastures calls into question the mobility and agreements between the groups that frequent the lake.

On the lake, in addition to the administrative ban, there is a great deal of insecurity caused by armed insurgent groups. Taxes are imposed on transhumant pastoralists in the form of hostage-taking for ransom and the theft of animals, as well as the imposition of a tax on herds which consists, as in the Komadougou Yobé valley, of handing over a share of the livestock in return for an annual grazing permit (Abdourahamani, 2020b). Interviews with the mayor and the heads of herders' groups (see appendix 2) reveal that taxes vary between 50,000 and 100,000 CFA Francs for a herd¹⁰⁰ (around 100 head of cattle), in addition to the Zakat levied by the armed groups, or 1/10th of the herd (one head of cattle for every 10). If the herder refuses, the animals are confiscated and the herder is killed.

⁹⁹ There are 3 displaced persons who own a few ruminants, one of them with a herd (cattle, camel).

¹⁰⁰ Abdou Issoufou O. and Katchalla Mandara I's Bachelor's thesis. (2018) gives equivalent amounts in Naira for cattle, and specifies a lower amount for a herd of 100 small ruminants (16,500 Naira or 27,500 CFA francs). The tax can also be calculated per head of cattle: 400 Naira (650 CFA Francs) for a cattle, 150 Naira (250 CFA Francs) for a small ruminant.

In spite of these very high levies, and the violence of past losses, the need to return to green pastures for the herders most dependent on this resource forces some to negotiate with the armed groups, at the risk of being spotted by the administrative authorities and accused of connivance with the insurgent groups. *"Faced with an extremely difficult reality, individuals have to find ways to deal with the situation. The solutions they find can range from risk avoidance to dependence on external aid, by way of continuous appropriation of resources despite the risks involved (sometimes accepting dangerous agreements with dubious actors), or more opportunistic liaisons and even direct involvement in the violence"* (Abdourahamani, 2020b). The dual role of pastoralist communities, who are both actors and victims of armed insurgent groups, is as relevant in Lake Chad as in other crises in the Sahel (Guichaoua and Pellerin, 2017).

In the lake basin, pastoralists who have remained or returned have broken the law, and it is therefore difficult to make contact with them, and they are often suspected of alliances with armed insurgent groups. Insecurity also exacerbates intercommunal conflicts, notably between the Boudouma and Fulani pastoralists (Abdourahamani and Waziri Mato, 2019) in the Nigerien part of the lake, and between Fulani pastoralists and Mohamid Arabs (Abdourahamani, 2020b). These serious conflicts, which have involved kidnappings and killings, directly raise the question of the control of the lake's pastures, particularly by the Boudouma Sultanate, who was forced to evacuate the lake and whose pastures were occupied by Fulani pastoralists who had defied the prohibitions. Abdourahamani and Waziri Mato (2019) mention taxes and a procedure for applying for access to the pastures that the Boudouma did not grant the Fulani. This suggests that it is not only the Boko Haram group that collects taxes from the lake. Herders too are armed, such as the Mohamid Arabs who *'use force against the Boudouma as they associate them with Boko Haram'* (ibid.). All herder groups have therefore mobilised based on ethnic allegiances in order to defend their interests and facilitate their access to natural resources.

Military interference and retreat of customary authorities in the lake

Since the administrative order expelling people from the lake, the traditional authorities no longer have control over the territories within the lake.

Before the crisis, the *boulama* (village chiefs) under the Kanouri canton chief managed the agricultural land within the territory he controlled. They granted a right of use on *Doro* plots in exchange for a symbolic sum of 10,000 Naira, which could be passed on to the heirs. If the plot was no longer cultivated, it automatically came back to the *boulama*, who could allocate it to another family. As no plots of land were officially cultivated any more, they theoretically came back under the control of the *boulama* and the chief of canton, who had intended in 2016 to try to take advantage of this situation to regain control of plots where migrants had settled since the 2000s: Magrin and Pérouse de Montclos mentioned an alliance between the *boulama* of the deserted villages of Lake Chad *"to agree on the conditions for the return of former residents, and to only allow new migrants access to land through short-term loans or rentals"*. This did not come up in the interviews conducted for the study. It no longer seems to be relevant, as the prospect of returning to these lands has become very uncertain. Moreover, as the resources of the lake are much more abundant and the pressure less great than in the Komadougou Yobé valley, there are fewer problems related to hay cutting. Even if the Fulani are identified as the actors who collect the most hay, to the detriment of other groups of herders, control of this resource is not a major issue for the Kanouri. **Crop farming is not negotiable with the insurgent groups**¹⁰¹, which prevents the indigenous people from accessing their plots of land. In 2020, they are therefore completely excluded from gaining access to the lake's resources.

The indigenous Boudouma are more active in defending their territory. Some of them have returned to the islands, where they are trying to assert their control over the islands and the pastures in a more forceful manner. Their physical proximity to the insurgent groups means that they are suspected of being in allegiance with them, but they claim not to be like the Chadian Boudouma groups who are much more involved in the insurgent groups.

¹⁰¹ The only plots of land cultivated with peppers are owned by families who did not obey the order to leave the lake and who work for the insurgent groups.

State of emergency measures also remove power from the administrative services. While the sale of wood and charcoal, mainly taken from the *Prosopis* forests within the lake, constitutes one of the main sources of income for the people of the commune, this practice is not in keeping with current regulations. The Forestry Service does not issue any authorisations¹⁰² and therefore cannot control the extent of the clearings or tax them. **Nor is this activity controlled by armed groups**, who are no more interested in it than in the commune of Chetimari. In contrast to fishing, which has resumed since 2019, with fish being sold at the fish market in N'Guigmi: not only does the fishing service not issue permits, but it is the **armed insurgent groups that control the fishing zones** in a similar way to the way it is controlled in Chetimari.

In the commune of N'Guigmi, a parallel economy has replaced the one that existed in the pre-crisis period, with much lower production volumes. Access to resources (pasture, fish) is controlled by various groups and is the subject of conflicts between users. The **products of the insurgent groups (fish, peppers, livestock) are sold through the markets they control in the lake and exported by traders who supply them with basic products**. These small markets (Haboula and Mari) also enable the Fulani, the Mohamid Arabs, and probably also the Boudouma to obtain supplies (Kiari Fougou, 2020).

As in the commune of Chetimari, the people questioned about their medium-term prospects did not mention leaving their current place of residence: either they feel that the insecurity is too great to return to their home area, or they are also, as in Chetimari, in contact with the insurgent groups who offer economic alternatives.

The challenges of the Bol and Nguelea polder area

The two territories chosen in Chad for this study, the canton of Nguelea and the commune of Bol, are located outside the "red zones" where the insurgent groups are located, and are controlled by the Chadian army. This does not mean, however, that the native and migrant populations, who settled in these territories before the beginning of the security crisis, have not seen their economic activities change. Indeed, natural resources are very mobile throughout the archipelago zone due to the fluctuations of the lake, and therefore of activities. The production system is thus characterised by a very high degree of complementarity between the different facets of the landscape (drained land, floodplains, polders) and crop farming, livestock farming and fishing. Some of these activities were commonly carried out outside these two territories, in the "**island zone**" (expression used locally and by the mayors of Bol and Baga Sola), which corresponds to the marshy sectors and open waters in the centre of the southern basin of Lake Chad. It is this zone to the south-west of the two territories studied, straddling the departments of Kaya, Fouli (towards Ngouboua) and Liwa, made up of marshlands and open waters, where there are **the most conflicts**. Insecurity has been high there since the Boko Haram group took refuge there. This whole area also corresponds to the territory claimed by the Boudouma. The inhabitants and chiefs of the villages attacked (notably those of Kaiga, Kindjiria, Madji; Tchaglia, Yelia on the border between Chad and Nigeria) fled as early as 2015 to take refuge in the vicinity of Dederom (which has a market), about 45km north-west of Baga Sola, where they settled in camps and other sites for returnees and displaced persons. "*In the localities of Ngouboua, Tchoukou Talia, Tchoukou Ndoubou, Dandala, Foga, concessions, fields, cattle, cereals and more were abandoned and left to Boko Haram. People think about their physical safety before anything else*" (interview with the mayor of Baga Sola).

IDPs suddenly began to arrive in the two territories studied, the canton of Nguelea and the commune of Bol, from 2015¹⁰³ onwards. They settled on the periphery of the lake, increasing the pressure on natural resources. These families arrived in a saturated land tenure context, particularly in the flood recession cultivated wadis and the polders, which function more or less effectively depending on how they have been developed, where land is already unevenly distributed (see Chapter 2), and where there is great

¹⁰² Of the 37 respondents, only one administrative permit was issued. This activity has very little conflict since only one case of conflict between a native and a member of the community was noted.

¹⁰³ The first refugees from Nigeria arrived in 2014 and were settled in 2015 in the Dar es Sala camp, located in the western commune of Baga Sola. They are therefore far from the canton of Nguelea.

potential for new development. It is therefore in these areas that the conditions are best for receiving displaced families on a long-term basis. However, very few people see this as an opportunity, either among the host populations (natives and migrants), or among the displaced (IDPs, returnees, and returned migrants).

The canton of Nguelea: a strong feeling of the crisis

It is in Nguelea canton that the level of perception of an increase in the number of conflicts is highest compared to the other study areas (tabl. 44): 100% of those surveyed said that conflicts are increasing over crop farming (93%), fishing areas (71%) and wood collection (55%). 40.5% of those surveyed declared that they had abandoned an agricultural activity and 76% that they had stopped fishing. If the "access to pasture" option had been retained in the questionnaire¹⁰⁴, it is very likely that it would have been mentioned on a large scale here, because out of the three heads of household rearing small ruminants who were interviewed, all of them cited numerous changes in access to pasture, fodder, water and salt marshes. The under-representation of livestock farming, which also does not appear among the activities abandoned in the sample of people interviewed in this commune, remains an issue.

Table 44: Perception of the evolution of conflicts and changes in activities in the canton of Nguelea (% of the number of respondents)

% who estimate that there are more conflicts (all)	100,0	% abandoned activity (all)	81,0
Agricultural plots	92,9	Crop farming	40,5
Fishing areas	71,4	Fishing	76,2
Wood collection	54,8		
% change crop farming activities (crop farmers)	95,0	% change in livestock farming activities (livestock farming)	100,0
Difficulty of access to fields	92,5	Difficulty of physical access to pastures	100,0
Changing crop types	95,0	Competition due to the arrival of new breeders	33,3
% change fishing activities (fishermen)	88,9	Decline in pasture quality	100,0
Difficulty of physical access to fishing areas	88,9	Difficulty of physical access to water points	100,0
Competition with the arrival of new fishermen	44,4	Access to salt marshes	66,7
Evolution of access agreements (authorisation/abusive taxes)	11,1	Fodder availability	100,0
Decrease in catches	77,8		

¹⁰⁴ It had been planned but was not entered in the digital survey form.

As the 3 villages chosen for the survey are further away from a village or town than in the other territories studied, service and commercial activities are more limited.

For those involved in crop farming (40 respondents) and despite the absence of a "red zone" on the territory, almost all of the respondents mention difficulties of access to fields and changes in crops. They mention the case of plots of land in the polders closest to the insecurity zone to which they no longer have access and which has forced them to switch to rainfed crops.

Fishing is still carried out by the inhabitants of Nguelea (9 people surveyed), to complement other activities: conflicts linked to this activity principally concern physical access to fishing areas (89%), but also include cases of competition between fishermen, who are more numerous in the secure areas inside the canton (arms of the lake and flooded inter-dune depressions). It is this seasonal and localised production that has contributed to supplying N'Djamena with fish since 2015, even though catches are smaller (7 fishermen mention a drop in catches) than in the more productive usual fishing areas located in the "red zones".

Changes in access to natural resources

In the canton of Nguelea, as is the case in the two communes of Baga Sola and Bol, the displaced and returnee populations have been settled in a dedicated site. From there, some have developed ways of integrating into village communities. They have contacted the village chief who has entrusted them with plots of land for their activities. Others have acquired plots directly through their acquaintances or relations. Returnees who have kept a link with their families during their absence try to reach them directly.

It is difficult to give results regarding modes of access to land in this territory on the basis of the survey, as only 5 plots of land were recorded: 4 in Bibi Barrage and 1 in Bolwanda, with a surface area of between 10 and 64 ha and cultivated by 3 natives and 2 IDPs, obtained either by inheritance (2 natives, 1 IDP) or as a donation (1 native, 1 IDP). Such a sample is not representative of land tenure dynamics in this territory.

However, the interviews with the mayor and the ANADER sector agent mention a higher proportion of loans, rentals and sharecropping contracts with the displaced, returnees and returned migrants. All of these agreements are oral, and are generally made in front of witnesses. The interviews also point to many conflicts between farmers, particularly over the delimitation of fields in polder areas and wadis where flood recession crops are grown.

Returnees who have been away from their home region for a long time try to settle on land near their parents. Some find it difficult to find their plots or those of their parents (interview with the ANADER sector manager, sub-prefecture of Bol). Thus, the integration of returnees in their native land raises the question of the recognition of their rights and has led to new types of conflict. The interviews also noted an increase in land sales, but this point could not be clarified either by the surveys or by the details of the interviews; in fact, it would appear that these are returnees who have succeeded in asserting their rights to their plots and have sold them to survive the time of the crisis, as a complement to humanitarian aid, and while waiting to be able to return to the villages where they previously resided. However, no concrete cases were reported.

With regard to livestock farming, as is the case in the communes of Chetimari and N'Guigmi, there is a high concentration of herds on the mainland. Herders expelled from the lake and transhumant pastoralists are stuck on drained land, where they concentrate in conditions that are unfavourable for livestock (Sutter, 2017). In Nguelea, and as in the communes of Chetimari and the neighbouring commune of Bol, where there is a lot of crop farming, conflicts between crop farmers and herders are perceived to be increasing (interview with the mayor of Baga Sola).

In the commune of Baga Sola, access to pastures is free for the livestock held by the residents, but since the beginning of the security crisis, transhumant herders have had to pay a fee: they have to ask the village chief for access authorisation and have to pay a calf or a sum of between 25,000 and 50,000 CFA Francs for a herd (interview with the mayor of Baga Sola). The administrative authorities condemn this practice (interview with the prefect of Mamdi), which has been illegal since the abolition of grazing rights by the colonial regulations of 1947. The traditional authorities also deny this practice, but the

pressure from transhumant herders who can no longer access pasture in the interior of the lake is such that monetarised negotiations persist. Demand for fodder, particularly hay, has increased significantly (Sutter, 2017) and the livestock services are calling for support from partners to facilitate the supply of fodder in the Lake province (interview with the head of the livestock sector in Baga Sola).

Access to fishing has also become more difficult for outside fishermen: they also have to go to the village chief to ask for his agreement and pay him a fee, which is more modest than for livestock farmers. The issue of fishing permits does not seem to be a topical one in the territory, as it was not mentioned in any of the interviews carried out. The interviews also showed that there were conflicts between fishermen, which were also highlighted in the survey (competition with new fishermen, Table 45).

The commune of Bol

In the commune of Bol, the impact of the crisis is less acute than in the canton of Baga Sola, probably due to the greater distance from the insecurity zone of the three villages studied on the one hand, and on the other hand to the higher proportion of herders and fishermen interviewed. With almost 74% of the people interviewed believing that there are more conflicts linked to natural resources (Table 45), this area nevertheless ranks third in terms of the most conflictual situations after Chetimari and Nguelea.

Table 45: Perception of how conflicts have evolved and changes in activities in the commune of Bol (% of the number of respondents)

% who feel that there are more conflicts (all)	73,8	% abandoned activities (all)	45,2
Agricultural plots	45,2	Trade, services	40,5
Fishing areas	71,4		
% who have changed crop farming activities (crop farmers)	47,2	% who have changed livestock farming activities (livestock farmers)	42,9
Difficulty of access to fields	47,2	Difficulty of physical access to pastures	42,9
% who have changed fishing activities (fisherman)	69,2	Decline in pasture quality	42,9
Difficulty of physical access to fishing areas	69,2		

While the number of discontinued activities is smaller and mainly concerns trade, which has fallen sharply due to the combined effects of the fall in production and the state of emergency measures to limit the circulation and marketing of the most lucrative products, the other three activities are impacted due to difficulties in accessing resources. Indeed, for the residents of the commune, the main fishing areas and dry season pastures are located in the insecure areas of the lake. Activities therefore have moved to villages and polders, where the concentration of people and livestock have increased the number of conflicts. The presence of areas developed for crop farming brings an additional constraint because they exclude the possibility livestock farming due to the risk that the animals will damage the facilities¹⁰⁵.

¹⁰⁵ The survey and interviews did not identify conflicts related to the diversion of irrigation canals by pastoralists to water their herds, which are mentioned in the study by Adoum Forteye and Kiari Fougou (2019) as one of the major causes of farmer-pastoralists conflicts in the Lac province.

The reception of displaced populations (IDPs, returnees and returned migrants) takes place in the same way as in the canton of Nguelea. New arrivals mainly approach resident families who give them an area of land in the plots they own through loans, renting or sharecropping. In the wadis and polders, rental is generally annual and the price is negotiated before the rainy season, so that there is no need to pay again for off-season market gardening. The ANADER¹⁰⁶ only intervenes in the distribution of land in new developments, such as those carried out by the Resilac project, where a management committee has been set up and acts in coordination with the customary authorities. For the Kanembou returnees, it seems that they are able to regain access to the land to which they were entitled from their parents (national expert report). Land sales are being carried out by both natives and returnees in circumstances that could not be clarified by the investigation. It is likely that the same decapitalisation through land sales observed in Chetimari is happening here for farmers seeking safety by moving to the city.

The means of access to fishing and pastoral resources are similar to those of Nguelea canton. There is no right of access to fishing areas; fishermen from elsewhere simply report to the village chief to inform him and leave him a small symbolic amount of money (500 to 1000 CFA FRANCS). Sedentary herders graze their livestock freely, but outside herders group together to ask the village chief for access authorisation and pay a calf or a lump sum.

Before the security crisis, sedentary farmers' livestock were located near villages in the rainy season and in the island area in the dry season, always staying close to the water, because both the Boudouma and the Kanembou raise *kouri* cows that cannot move away from the green pastures. As in the communes studied in Niger, access to lake pastures is a vital issue. In areas controlled by the Boudouma, access has to be negotiated with them. Further into the red zone, for those who are willing to take the risk, access must be negotiated with the insurgent groups in the same way as described for the northern basin in Niger.

Reduced influence of the Kanembou authorities in the archipelago area

The interviews conducted with land management actors revealed an increase in three types of conflict in the rural communes of Baga Sola (including the canton of Nguelea) and Bol :

Between farmers over the sharing of plots (polders, wadis and drained land) ;

Between villages and between cantons over the delimitation of their territories (see below);

Between crop farmers and livestock farmers over damage to crops due to the concentration of livestock in the peripheral territories of the lake, particularly in developed land.

As in the other territories under study, land conflicts are in principle first managed at the local level, where conciliation is sought between the protagonists, and then brought to the village chief who is advised by the Djema, whose role, among the Kanembou, is to share plots in the polders and wadis and to participate in the management of land conflicts. If the problem has not been resolved at the village chief's level, it is referred to the canton chief. In general, this traditional authority succeeds in solving land tenure problems. The problem is referred to the judicial level when no agreement is reached.

The commune does not intervene in conflicts in rural areas, but in the sharing of land in urban areas. However, as a native of the locality, the mayor is also involved in the resolution of land conflicts in rural areas, particularly conflicts over boundaries between communes.

Since the beginning of the security crisis and the arrival of numerous populations from outside the territory, the legitimacy of customary authorities in managing conflicts has been called into question. This change is expressed by the interim canton chief of Bol: "In the *past*, *the mara* [village chiefs] were

¹⁰⁶ Based on SODELAC's longstanding practice, the criteria for the allocation of plots by the ANADER are: having formerly cultivated the land before the polder is developed, having lived in the area for at least two years, being a member of a village group, committing to participate in development, maintenance and management work on the perimeter, paying fees regularly, not being allocated a plot on another polder and applying guidelines in terms of itineraries and technical innovations. Displaced and returned populations are therefore not eligible upon arrival.

highly respected, but this is no longer the case today. People no longer obey the mara in relation to access to natural resources. The returnees, the adventurers who have come back to their homeland, put new ideas into the heads of their fellow citizens; people's behaviour has changed and some politicians have also contributed to weakening the role of the mara in our locality. The selling of land, which was very rare in the past, has now become a daily reality". This situation has several causes.

The President of Bol Court reports that there has been an increase in claims over cultivated land by the Boudouma, who claim the right to use it based on the right of the first occupant. The lands concerned are those that were developed after the withdrawal of the lake's waters in the 1980s on dry land that the Boudouma had left to advance into the lake. According to the President of the Court, in this case positive law applies, according to which the right of use over land that has been occupied for 30 years reverts *ipso facto* to the person who cultivates it; however, we have no confirmation of the legal existence of this means of acquisition. This situation has been the source of many conflicts since the return of Boudouma families fleeing insecurity in the '*island zone*' and claiming their land in the areas they had abandoned in the previous dry period. The major increases in water levels observed in recent years, which have caused exceptional flooding, are probably favourable to these resettlements, but there are also constraints in terms of cultivated areas and work schedules. However, we have no precise information on this subject.

In the current period, we also observe the same instrumentalisation of the courts by the elites with regard to the management of land conflicts as before the security crisis: in the event of a conflict over a plot of land, these urban investors systematically bypass customary powers to refer the matter directly to the courts, and systematically appeal decisions that are not favourable to them. This lengthens the time taken for the procedure without the plaintiff farmer being able to cultivate his plot (interviews with the interim canton chief of Bol and the village chiefs of Mérom, Brandal and Kirfou Dolé). Relatives who belong to powerful circles in N'Djamena or who have held positions of responsibility, are often accused of these practices, which create tension between people at the local level. The President of the Bol Tribunal assesses the situation very negatively, as citizens are generally dissatisfied with the resolution of land disputes by the judiciary. This level of dissatisfaction is also highlighted by the survey (see Chapter 3).

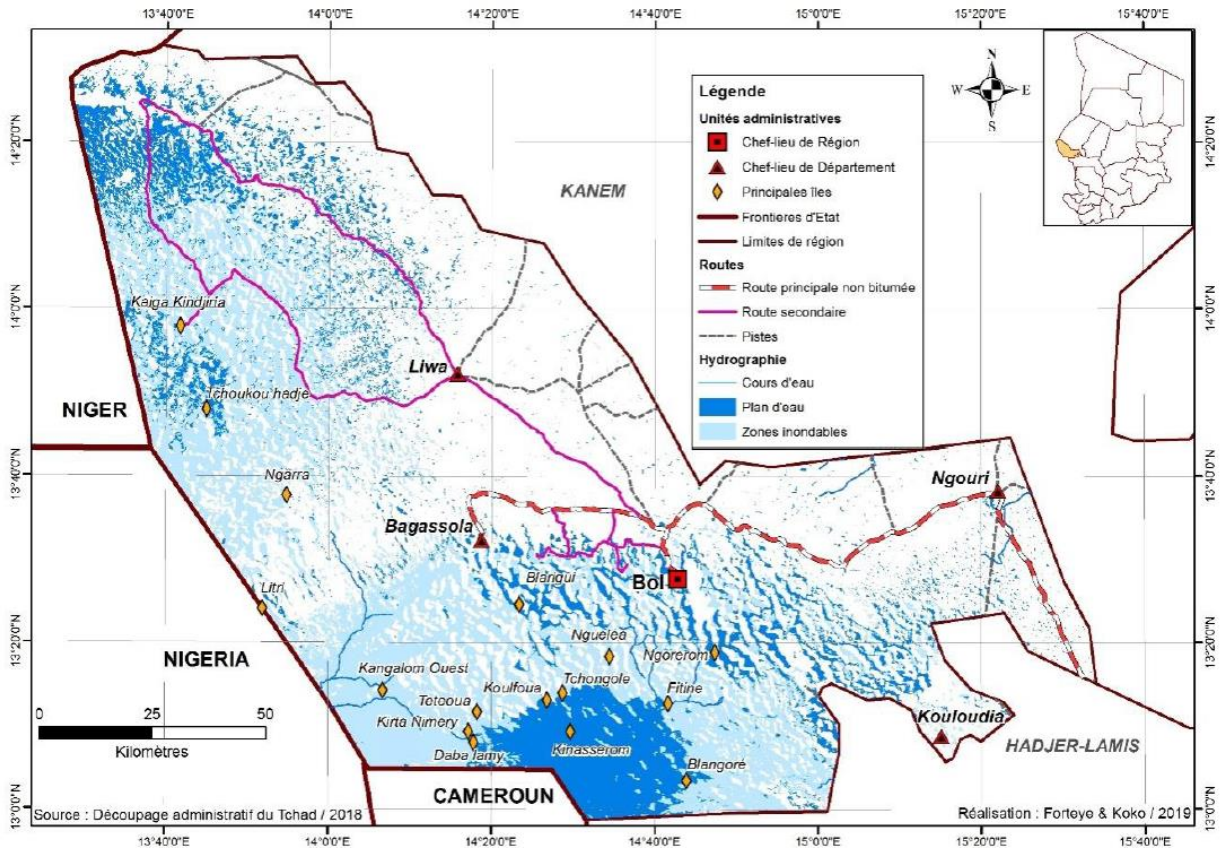
In the two territories before the security crisis, the traditional authorities already had a less important role than in the other study territories in terms of the distribution of agricultural plots in developed areas (role of the management committees established by SODELAC and ANADER) and in the resolution of conflicts that were increasingly brought before the courts. The reduced importance of the customary authorities has meant that there is a strong sense of insecurity for users, which has been reinforced by the security crisis and the restriction of access to other resources by the administrative authorities (state of emergency measures), by the army (abusive controls) and by armed groups (red zone). Added to this are the Boudouma claims to territory they have lost since the agricultural developments undertaken in the post-drought years and also the competition between traditional authorities, which Chadian and international law cannot resolve because it is not adapted to the recognition of the multifunctional and productive system of the lake area (Kiari Fougou and Lemoalle, 2019; Adoum Forteye and Kiari Fougou, 2019).

Since the security crisis, security forces have been present throughout the Lac province, particularly in the departments of Foulï and Kaya, but not in the department of Mamdi. Their interventions, for intelligence and to protect the population and their property, also involves protecting, and therefore controlling, resource areas. This is seen, in the field, as evidence that the State is showing more interest in this region, which is particularly neglected in terms of infrastructure and services.

The island area: disputes over access claimed by the Boudouma

One of the major consequences of the security crisis in terms of land tenure is the increased control over land by the Boudouma in all the sectors they controlled before the Petit Lac phase in 1970. This concerns in particular the traditional polders developed and controlled by the Kanembou from the 1990s (Boureïma *et al.*, 2014), but also the whole '*island zone*' where the main fishing areas and

flood recession pastures are located (map 12). In this zone, herders and fishermen are obliged to pay a large number of taxes and fees to gain right of way, which are a source of violent conflict, and were already emerging long before the security crisis (Adoum Forteye and Kiari Fougou, 2019).



Map 12: Main islands in Lake Province in Chad, a territory claimed by the Boudouma people (from Adoum Forteye and Kiari Fougou, 2019)

Concretely, the Boudouma have regained control over access to the resources of the island area by excluding members of other groups, such as the Kanembou for crop farming, and by charging a fee to external herders and fishermen for access. Adoum Forteye and Kiari Fougou (2019) even mentioned fences to exclude non-Boudouma livestock farmers and to charge for entry.

According to the head of Kaya's livestock sector, there is a significant increase in access fees being charged for grazing areas within the lake: "The fee to gain access to grazing areas varies according to the size of the herd. It ranges from 250,000 to 300,000 CFA Francs to access an area on an island for a period defined by the two actors involved (the 'owner' of the island and the Fulani or Arab transhumant herder). While the dry land belonging to the Kanembou, access is free for Boudouma cattle, the reverse is unfortunately not true" (interview of 19 February 2020). Similar fees are noted by Adoum Forteye and Kiari Fougou (2019): for a herd of 100 animals, the fee to gain access to one island is one 3-year-old ox or 100,000 CFA Francs, which implies a considerable budget per herd for the journey across several islands. These authors also describe practices regarding taxes on fishing zones, which are different according to the status of the fishermen: free for the indigenous Boudouma, 750,000 CFA Francs for a Chadian non-native and 1,500,000 for a foreign fisherman (surveys of June 2019).

This situation of confrontation between the traditional Kanouri and Boudouma authorities is found in both Bol and Baga Sola. At this level, it involves conflicts over the canton boundaries, and therefore the boundaries of communes, which are defined on the basis of this territorial division. Inter-community conflicts also take place between groups of transhumant herders. Thus, for the whole of the Lac province, Adoum Forteye and Kiari Fougou (2019) mention 25 conflicts linked to land tenure, which have

resulted in 38 deaths, as well as injuries and an estimated loss in livestock of 50 million CFA francs. As all this territory is located in the lake, Chadian law considers it to be in the public domain, and does not recognise the rights of the communities occupying it. No specific details are given about the islands. This legal vacuum has also been identified in Niger's land policy. The administrative and judicial authorities, including the security forces, intervene *a posteriori* by imposing exorbitant fines on the parties. In this sector, conflict management seems to be more often carried out by the customary authorities, but 'the *administrative authorities (prefect and sub-prefect) and those in charge of the defence and security forces (brigade or company commanders) are known for their interference in land disputes, even questioning judgments already handed down. This confusion of roles increases the resurgence of these conflicts*' (Adoum Forteye and Kiari Fougou, 2019: 43).

It was not possible, on the basis of the interviews conducted in the territories of Nguélea and the commune of Bol, to establish the level of taxes imposed by the insurgent groups for access to resources. From the perspective of the Kanembou cantons, it is above all the demands and levies imposed by the Boudouma that are mentioned in addition to the insecurity of the "red zone", where access is restricted. In the red zone, the Boudouma customary authorities have fled the insecurity. They have been replaced by armed groups in areas that are not controlled by the army and, as in the commune of N'Guigmi, by the security forces. The state of emergency measures prohibit the use of canoes. Motorbike travel is also prohibited, which also limits the possibilities for exporting fish from the fishing zones. These measures were still in force in February 2020. An economy similar to the one observed in the northern basin of Niger has been established, with obvious connections to the Boudouma who have not fled or have returned to keep control of their territory in the lake.

A blocked territory: land saturation and failure of governance in the Mandara Mountains

The commune of Koza in Cameroon presents a twofold challenge: that of long-standing land saturation due to population density and growth, and that of hosting displaced populations due to the security crisis. In this territory, the diversification of activities has been taking place for a long time, including small businesses, often involving women, and service activities. Young people often have to move to other, less densely populated regions where they can clear new plots of land and settle with their families. For the others, the strategy is to diversify the means of access to plots. Thus, the proportion of inherited plots is lower in this commune than in the other territories, and there is a greater number of plots obtained through rental/sharecropping, and more rarely through purchase, loan or donation. Plots are negotiated with family members, acquaintances or other heads of household (see Chapter 3). The high level of rental/sharecropping is explained by the high demand for land, but also by market gardening with high added value (onions, potatoes), which allows high rents.

The arrival of displaced people in the territory has increased land conflicts, but they are mentioned by fewer people than in the territories studied in Niger and Chad (Table 46): one person in two believes that there are more conflicts, particularly over crop farming (45%) but also over wood collection (almost 37%). Abandoned activities do not include natural resource-related activities, but rather trade and services, and in a much lower proportion than in the other affected territories, mainly by IDPs. The changes in activities mainly concern access to fields (41% of respondents) and to a lesser extent livestock farming (almost 28%), even though the causes of changes are more varied and, as in the areas directly affected by the security crisis, linked to difficulties of access and the decline in the quality of pastures, as well as to the low availability of fodder and its very high price.

Some respondents mentioned tensions between host populations and IDPs, particularly around water access points, access to wood and other resources. However, little information is available about this issue.

Table 46: Perception of the evolution of conflicts and changes in activities in the commune of Koza (% of the number of respondents)

% who feel that there are more conflicts (all)	53,7	% discontinued operations (all)	17,9
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Agricultural plots	45,3	Trade, services	14,7
Wood collection	36,8		
% change in livestock farming activities (livestock farmers)	27,8	% change in crop farming activities (crop farmers)	41,0
Difficulty of physical access to pastures	24,1	Difficulty of gaining access to the fields	41,0
Decline in pasture quality	27,8		
Fodder availability	24,1	% Change in wood collection activity (all)	75,8
High fodder prices	20,4		

Land saturation, new players and tensions in the land market

In the commune of Koza, the arrival of massive numbers of IDPs fleeing the abuses of armed groups has increased the demand for land. In the absence of available land, like the natives, IDPs are trying to diversify their means of access to land and are turning to the same stakeholders: acquaintances and heads of household (Table 47). In contrast to the other territories impacted by the security crisis, tenancy/sharecropping was already a common practice in the area and this is the mode of access to land that is offered to IDPs, who have no other choice (fig. 46).

Figure 46: modes of access to plots by residence status in the municipality of Koza (81 plots)

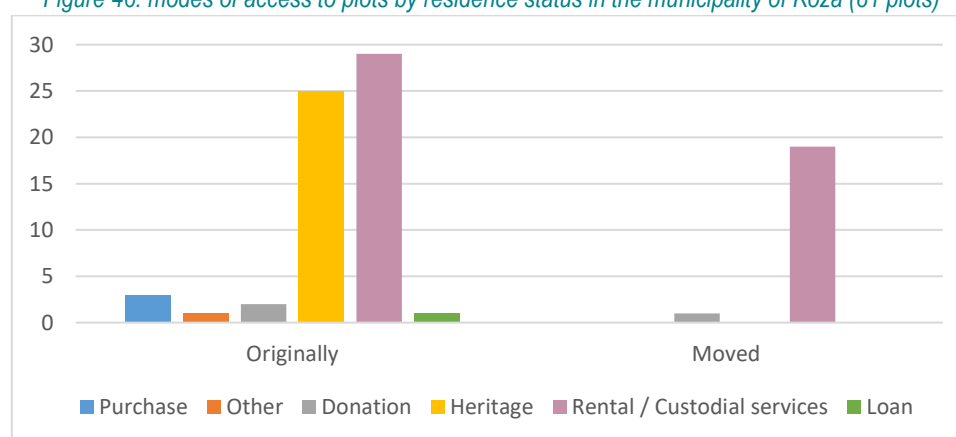


Table 47: Actors providing plots of land in the commune of Koza (82 responses out of 95 respondents)

	Native	Displaced	Total
Member of own family	25	8	33
Acquaintance	19	7	26
Village head of household	3	1	4
State bodies	14	5	19
Total	61	21	82

In spite of the attacks in February and March 2020, the commune of Koza is considered safe by the population. The reinforcement of the Rapid Intervention Battalion base located 5 kilometres from Koza reassures the population. The native population have therefore remained in the area and there is very little land decapitalisation.

Of all the respondents, the proportion of families with access to land through family networks barely reaches 39%. 'Acquaintances' from informal relationships allow 31% of households to gain access to land, while 23% depend on state structures.

A major innovation in this territory is the intervention of the "régies", who manage land belonging to the State and who have made it available to crop farmers who have requested it. The latter pay an annual rent (officially 5,000 CFA Francs for ¼ per hectare, but the amounts vary greatly in practice, see section 3.3.2) in return for a ticket to justify their payment. This land includes the agricultural farm of the *Délégation d'arrondissement de l'agriculture et du développement rural*, the SODECOTON experimental station (*Société de Développement du Coton*), the *Centre d'éducation et d'action communautaire* (CEAC) and the *Centre de Formation des Jeunes Agriculteurs* (CFJA). It was not possible to establish precisely what the régies provided (total areas concerned in the territory) or the criteria for choosing the beneficiaries (first-come-first-serve, the most needy, with a waiting list system, etc.?), but it appears from the interviews and survey data that this opportunity represents an interesting solution for the residents of the commune (both native and displaced). These bodies have experienced a sharp increase in demand over the last 5 years.

In addition to these institutional actors, there are also the "landlord-donors", who have built up considerable land assets through their family connections or by buying land from vulnerable smallholders, when they migrate, after getting into debt or when they are unable to repay land that they have mortgaged. These large landowners rent out their land to the highest bidders. The village of Mawa, where land is in great demand for market gardening, is an example of this.

Another major consequence of the significant increase in demand for agricultural land is the duration and price of lease/sharecropping contracts. All contracts have become seasonal, so that a contract that used to last for three years before the arrival of the IDPs, now only lasts one rainy season and has to be renegotiated in the dry season for market gardening. Prices have also increased: to give an idea, the selling price of a plot in the 2000s corresponds to the seasonal rental price in 2020. Finally, the very tense land market in the commune makes it necessary to look for a land owner (régies, owner-landlords) earlier and earlier in order to reserve a plot of land.

Mechanisms for securing land transactions still exist, although the survey found only one after 2000¹⁰⁷ (see Chapter 3). However, these "petits papiers" do not concern lease/sharecropping contracts and do not protect tenants/sharecroppers.

According to the interviews and survey results, the causes of conflict are threefold. They include :

- boundaries with neighbouring communes:
- plot boundaries ;
- crop damage.

Disputes over the territorial limits of chiefdoms are not new. The village of Mawa, for example, which is the large market gardening village mentioned above (where onions, sugar cane, tomatoes, garlic etc. are grown) is disputed between Koza and Mozogo. A commission including the authorities of the two sub-prefectures, to which these chiefdoms belong, has been unsuccessful on several occasions. The case of the village of Houva, between Koza and Mokolo, is similar.

¹⁰⁷ The dates of the 'petits papiers' were not included in the questionnaire, but we have photographs of 6 of them.

Agropastoral conflicts are far more frequent than other types of conflict (see Chapter 3), which can easily be explained by land saturation and the scarcity of grazing land for livestock in the district of Koza. Cohabitation between agro-pastoralists, pastoralists and farmers is proving difficult, but this is nothing new, since the increase in agro-pastoral conflicts since the security crisis is cited by only 4.8% of respondents. Land pressure also explains why there are conflicts over land boundaries, which account for 10 per cent of the conflicts identified by the survey, but are not cited among those that have increased in connection with the security crisis.

Finally, it is not uncommon for rights to plots of land to be contested, with several cases presented during the interviews. These were conflicts related to:

- the pledging of a plot of land and disagreements related to the non-respect or interpretation of the agreement;
- the sale of the same plot of land to several people;
- the confiscation of a vulnerable creditor's plot of land by a debtor abusing his influence (traditional chief, rich trader);
- the non-payment by a purchaser of the full amount requested;
- land claims by returning migrants.

Conflicts of this kind already existed before the security crisis. The respondents did not mention an increase in conflicts over land rights, but the tension that exists on the rental market is evidence of a very high level of insecurity for the most vulnerable farmers and of the significance of this issue in the territory.

Despite the effects of the security crisis (the arrival of IDPs, the inability to use agricultural land or harvest wood in insecure areas), land conflicts are primarily managed by family councils, and the most serious cases are referred to the traditional chiefdoms (*boulama* and canton chief), or even to the state administration. NGOs concerned about the well-being of IDPs are more involved in awareness-raising and conflict prevention.

Increased pressure from livestock farming on the territory

In this saturated commune where crop farming dominates, livestock farmers are forced to send their animals to the pastures in the plain, in the district of Mayo Moskota. However, since 2014, this territory has been subject to repeated attacks by armed groups. It has become impossible for livestock farmers to go there for fear of theft and kidnappings. Of the 54 herders interviewed in the commune, 14 have lost animals to the insurgents in out of control areas (11 of whom are natives). Decapitalisation through the sale of livestock, on the other hand, affects 81% of the livestock farmers interviewed and all population categories (Table 48), in order to meet basic household needs.

Table 48: Livestock decapitalisation in Koza commune (54 herders interviewed)

	Gender		Age		Residence status		Total
	F	M	Under 30 years old	Over 30 years old	Displaced	Native	
Loss of animals	5	9	1	13	3	11	14
Sale	8	38	11	33	6	38	44

27.8% of livestock farmers have noted changes in livestock management, and this proportion is even higher among women (37.5%). The retreat of livestock farmers from the foothills to the district of Koza is putting additional pressure on the territory, where there is real competition for available resources: fodder (post-harvest products, such as groundnut and bean leaves, and sorghum stalks) and the food supplement provided by SODECOTON (cotton cake). This pressure is combined with a decrease in pasture quality due to the increase in livestock confined between the mountains and the foothills, in a climatic context characterised by very irregular rainfall. As a result, the demand for fodder has risen sharply and livestock farmers complain about its scarcity (13 livestock farmers out of 54) and the increase in prices (11 livestock farmers out of 54).

The agreements that exist between traditional authorities and mobile pastoralist groups have basically not changed with the crisis. Their presence is, however, subject to increased vigilance by the traditional authorities and local vigilance committees, who are obliged to pass on all information to the sub-prefecture and the gendarmerie in order to guarantee their security.

The main changes noted by livestock farmers are the difficulty of physical access to water points (nearly 70% of respondents) and the evolution of access agreements (30%). The difficulty of physical access to water points is linked to the insecurity that exists throughout the Koza plain, which makes it difficult for herders seeking pasture and surface water to move away from the urban centre. The way access agreements have evolved is a consequence of this difficulty, as the boreholes in Koza were primarily intended for everyday domestic consumption. The fact that livestock farmers have moved to these water points has led to saturation and an increase in livestock farming costs, as livestock owners are obliged to join the water point management committees and pay their fees, or else to buy water from vendors.

Some local and international NGOs (CARE, Premières Urgences Internationales) also intervene to improve the living conditions of host and displaced populations, and are particularly involved in increasing the supply of water resources for the populations (and not specifically for livestock). They participate in the maintenance of water points and train users in their sustainable management.

According to the respondents, new measures have been taken by traditional authorities and pastoralists to strengthen livestock security and avoid conflicts with farmers:

- Livestock farmers take their animals to villages in the mountains to prevent armed groups from taking them away;
- They buy feed (fodder, supplements) for livestock and build shelters for the animals;
- Traditional authorities do not allow animals to graze near agricultural plots, which has not prevented an increase in agro-pastoral conflicts.

Timber supply: where the administrative authorities have taken over from the traditional authorities

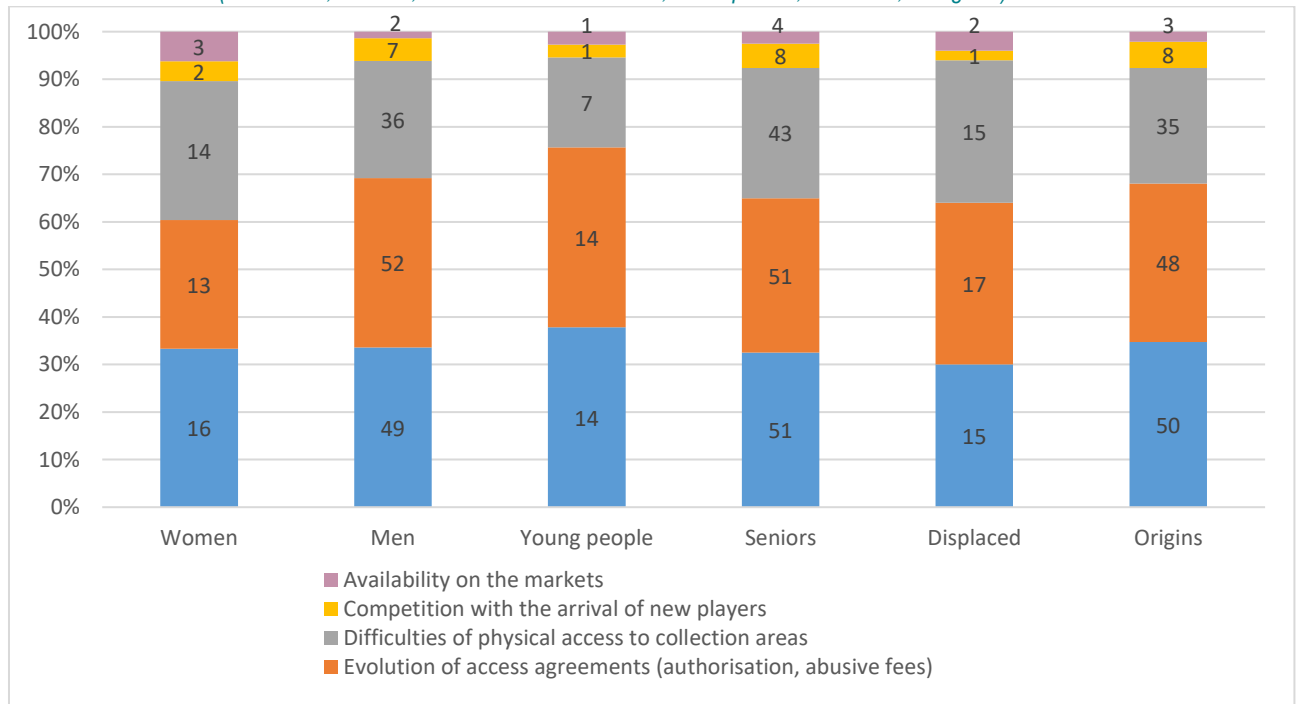
After the increase in conflicts over agricultural plots, respondents most often cite conflicts over wood collection (almost 37% of respondents, fig. 47) and 76% of respondents have observed changes in practices in the commune of Koza. Women are the category that is most concerned (81% report changes in this activity).

68% observe a decrease in available resources (wooded areas) and a change in access agreements, 53% state that there are difficulties in physical access to collection areas and almost 10% say that there is competition due to the arrival of new players and availability on the markets. The importance of these difficulties is generally perceived in the same order according to gender, age and residence status (fig. 47), although variations can be observed. Women and displaced persons are more affected by the reduction in wooded areas, as well as difficulties in accessing wooded areas (cited by 66.7% of women and 62.5% of displaced persons; compared with 48.0% for men and 49.3% for natives); but this seems to be less perceived by young people (31.8% compared with 49.3% for the elderly). Competition due to the arrival of new actors is obviously felt more by those over 30 years of age. More women than men feel the need to use the market (cited by 14.3% of women compared to 2.7% of men). Thus, the opening of a wood market is a solution and an opportunity given the scarcity of the resource, but it also constitutes an additional financial burden.

Women seem to be the first to be affected by these changes because they cite them on average more than men (2.3 compared to 1.9). Young people appear to be less affected (1.7 changes cited compared with 2.2 for those over 30). Natives or displaced persons mentioned them equally often (2 responses).

Figure 47: Differences in perception of changes in wood collection in Koza commune (95 respondents, multiple responses possible, % of responses)

(21 women, 75 men; 22 under and 73 over 30; 24 displaced, 71 native, 1 migrant)



Changes in access agreements (authorisations/ abusive fees) are seen as the second most important constraint linked to the security crisis by all households, regardless of gender, age or residence status. Indeed, in response to the pressure on resources, the technical services in charge of forest protection have increased monitoring of timber resources. Even the felling of trees on farms is subject to the regulations in force (prior authorisation is required from the relevant services). Moreover, for the displaced, it is difficult to gain access to the resources that are on private farms.

Faced with the increased pressure on trees, the risk of illegal clearing in the Mozogo Natural Park was identified very early on by the technical services, notably the park warden and the head of the Koza forestry post, who reinforced measures to preserve wood resources in Koza by making the following compulsory:

- Applying to Koza district forestry services for any timber exploitation;
- Applying to the park warden for access to the wood in the park;
- Applying to district chiefs to collect wood;

Banning the felling of trees, including those on farms, without prior authorisation.

These authorisations are compulsory for users and are accompanied by fines which increase the charges levied on households.

As in the peripheral territories of Maiduguri, energy is a major problem in the commune of Koza. This issue is increasingly outside the reach of traditional authorities, and the old rules, linked to agro-forestry practices rooted in agricultural plots, are no longer able to manage it. Alternative solutions exist (gas and solar energy), but this subject does not seem to be discussed locally.

A bleak outlook

The land pressure already felt before the security crisis has increased with the arrival of more than 5,000 IDPs in the commune of Koza. The absence of land reserves favours an increase in the demand for agricultural land, which results in an increase in leases from private individuals and a strengthening of the power of large landlords who impose higher rents and a shortening of the duration of the contracts, which in 2020 are mainly seasonal whereas before the security crisis they were established for 3 years. The State intervenes in favour of the most vulnerable families through its "*régies*", which grant plots for rent, according to a procedure whose legality should be verified, and according to distribution methods that should also be clarified. Land tenure insecurity has existed for a long time, as is shown by the existence since the 1990s of "*petits papiers*", but it is growing. Access to rented and sharecropped land has become increasingly unstable. The law does not recognise these means of access and therefore does not provide security. This system maintains a very unequal situation, where the richest actors (traders, civil servants, private sector employees, chieftaincy personnel) hold the most fertile plots, and only rent/share out the less fertile ones to poor farmers and IDPs.

In this context, conflicts are mainly managed by family councils, even when they concern displaced persons, and only the most complex ones are referred to the chieftaindom. As the latter is an institution created during the colonial period, and does not have strong traditional legitimacy, it does not own land and therefore has little influence over land tenure, apart from its role as a witness during transactions. It carries little weight in the face of powerful actors, large landowners and urban elites who come to their home villages to seek political legitimacy, which is the source of many tensions¹⁰⁸.

The question of the future of the land assets of people who have left and not yet returned to the crisis zones is the subject of ongoing debate between the actors involved in the reconciliation and stabilisation process (National Committee for Disarmament, Demobilisation and Reintegration, UNDP, local NGOs, etc.). Although certain plots of land are occupied by populations who have remained in the area with or without the authorisation of those who left, the fact remains that when they return, there will be a variety of claims. This is why a UNDP report (2018) on the provisions necessary for the reintegration of former hostages from Boko Haram into the communities of origin in Mayo-Moskota (a district connected to Koza), states that the return of former hostages and other displaced persons will exacerbate land conflicts over the boundaries and rights of long abandoned farms. This is the view of the mayor of the commune, who believes that there could be problems related to access to land. Generally speaking, the management of local resources (water, land, pasture, wood) is already proving difficult in February 2020, and is not expected to improve with the return of former hostages and other displaced persons. According to the traditional chiefs, it is essential to prevent these conflicts in order to avoid an escalation of violence in the territory.

¹⁰⁸ The municipal elections of February 2020 confirmed the mayor in office and the complex power relations between a majority population in the opposition and an urban elite more generally involved in the majority. For example, the prefect of Mayo Tsanaga who became governor sought election in Koza but was only able to obtain a 3rd degree chieftaincy, which is being challenged by a lawsuit brought against his election.

Occupied territories: Jere and the outskirts of Maiduguri

On the outskirts of the town of Maiduguri and in the LGA of Jere, armed groups are present everywhere and have a heavy impact on security conditions and access to natural resources, particularly on the dry season pastures that are essential for transhumant pastoralists' herds. Due to the arrival of IDPs from all over Borno State, and more massively from Lake Chad and the LGAs of Dikwa and Mafa, the town has grown considerably. Urban expansion was visible before the crisis, but this has been accentuated with the installation of IDP camps. In the camps, the findings on economic activities show that a large part of the population no longer has access to natural resources and is turning to other activities. For the populations residing in the LGA of Jere, the insecurity is such that some families prefer to stay in the safety of the camps, even though the outskirts of Maiduguri have been sufficiently secure since June 2019 to allow them to resume certain activities in the villages where they normally live (case of the people interviewed in the Gongulon camp). In the two villages visited by the investigators, Dusuman and Gumsumiri, people have reduced their activities drastically: they only cultivate small plots of land close to the villages and do not stray far from them to graze their herds. As a result, agricultural production has collapsed and the inhabitants who have remained live in fear and anxiety. These villages also host displaced people, who share the same precarious living conditions.

In these conditions, where the crisis began 11 years ago, the main concern of rural populations is that there might be a major conflict between armed groups: their perception of other types of conflict is low. Thus, all the conflicts that they previously experienced, between farmers, between farmers and herders, between wood collectors and other users, are now being pushed into the background, or are irrelevant since these activities have fallen sharply. This situation probably explains **the low rate of people who feel that conflicts have increased since the beginning of the crisis**. In the LGA of Jere (Table 49), this rate is only 32% and in the camps on the outskirts of Maiduguri (Table 50) 28%, while it is between 54% and 100% in all the other territories directly or indirectly impacted, with the exception of Nguelea (21%). These figures are in line with those presented in Resilac's Baseline Study, which estimates that only 33% of respondents believe that the conflict has worsened during 2019 (Resilac, 2019d).

Table 49: Perception of the evolution of conflicts and changes of activities in the Jere territory (in % of the number of respondents)

% who feel that there are more conflicts (all)	32,1	% change in livestock farming activities (livestock farmers)	84,2
Agricultural plots	26,4	Difficulty of physical access to pastures	63,2
% change in crop farming activities (crop farmers)	97,3	Decline in pasture quality	36,8
Difficulty of access to fields	93,3	Difficulty of physical access to water points	42,1
Change of crop types	24,0	Access to salt marshes	36,8
% change in wood-related activities (all)	83,0	Fodder availability	52,6
% discontinued activities (all)	86,8	High fodder prices	73,7
Crop farming	41,4	Loss of animals	78,9
Livestock farming	15,5		
Trade, services	37,9		

Table 50: Perception of how conflicts have evolved and changes in activities on the outskirts of Maiduguri (in % of the number of respondents)

% who feel that there are more conflicts (all)	28,2	% discontinued activities (all)	92,3
Agricultural plots	20,5	Crop farming	67,7
Wood collection	15,4	Livestock farming	12,9
% change in crop farming activities (crop farmers)	80,0	Others	9,7
Difficulty of gaining access to fields	80,0		

On the other hand, more respondents here **have abandoned their activities compared to the other affected territories: nearly 87% in Jere and 92% in Maiduguri**. For the populations residing in the camps (Table 50), the changes in activity only concern those who have continued to engage in crop farming (80%), but **in the Jere territory almost all activities have been modified**, whether for crop farming (97%), livestock farming (84%) or wood collection (83%). For both crop farmers and livestock farmers, the most important difficulties concern physical access to resources: 93% of crop farmers cite difficulties in accessing fields, 63% of livestock farmers cite difficulties in accessing pastures, 42% cite difficulties in accessing water points and 37% cite difficulties in accessing salt marshes. The decline in the quality of pasture has probably been caused by the concentration of livestock near villages, despite the fact that their numbers have fallen significantly. Half of the livestock farmers complain about the limited availability of fodder, while 73% complain about its very high price.

Reduced crop farming in a climate of constant insecurity

A quarter of the crop farmers surveyed in Jere territory say they have been forced to change crop types since the security crisis began. Whereas they used to grow a wide variety of products, some of which were sold in town (beans, maize, millet, yams, market gardening crops, etc.), on large areas in the plain, vertisols (transplanted sorghum) and the *Fadama* wetland (market gardening), crops in 2020 have been reduced to basic products mainly for family consumption. Thus, market gardening is limited to very small plots of land close to the village, which explains why we have only counted 2 plots of land, whereas we had chosen two villages close to the wetland. Because of insecurity, agricultural support has disappeared and farmers have enormous difficulties in obtaining inputs and no longer have access to agricultural subsidies or credit (*focus group* farmers, Maiduguri Metropolitan Council).

The displaced, who arrived in greater numbers in 2013-14, mainly settled in camps organised by the state, but also in areas around villages where the occupants are afraid to go too far because it is unsafe. The only details we have on the conditions in which IDPs settled outside the camps in the territory of Jere come from the survey results: unlike in the communes of Niger, where the main mode of access to plots of land for IDPs is through loans (fig. 25), justified by the poverty of the people arriving, in the territory of Jere and as in the very dense commune of Koza, the main mode of access is rental/sharecropping (11 out of 17 displaced farmers). There are also two donations of plots of land, as in the indirectly impacted territories, but not in Chetimari and N'Guigmi. Cases of plots occupied by IDPs were also observed in Jere (3 cases), as well as in N'Guigmi (3 cases), Chetimari (1 case) and Bol (2 cases), but not in Koza. Two plots of land are occupied in the village of Gumsumiri: this has been the case since 2016 and the owners think they can retrieve them. The third case is in Dusuman and the owner does not know if he will be able to recover his plot because he cannot access it for the moment. This situation reflects all the land that has been abandoned by its owners because it has become inaccessible and the future of which is very uncertain.

The instability of the security situation also causes a lot of coming and going by the native population, who according to our sample (15 returnees in Jere) mostly manage to retrieve their plots (8), or to regain them through loans (5) or donations (2).

The major characteristic that emerges, and which was described in Chapter 3, is land concentration: farmers own and/or operate many plots and/or large plots of land, which is not observed in other territories, whether or not they are affected by the security crisis. A large number of farmers can only cultivate small plots of land, while displaced people living in camps have had to give up this activity. The results of the surveys show **a predominant role of customary authorities in the management of agricultural plots**. Apart from inheritance, they are the main source of plots in Jere: 30 transactions out of 45 have been carried out with a customary authority. They are also solicited most often in the event of conflicts: 13 out of 15 conflicts have been managed by a customary authority. All 13 have been settled, and in 12 cases the stakeholders are "*completely satisfied*". It is interesting to note in this case a lesser role for family councils, which everywhere else in the territories studied, have a major role in managing land assets. This development is also mentioned in the farmers' focus group report organised in connection with this study, which states that village or parish chiefs can act as negotiators between one village or parish and another when a farmer is looking for land to farm.

This focus group with farmers from the outskirts of Maiduguri also highlights the fact that women farmers need the help of governmental organisations and NGOs to access land: though some have inherited their husbands' land, as provided for in Muslim law, their in-laws very often come to take it away from them. As a result, women turn to actors from outside the territory to defend their rights.

A local organisation that secures rural people's access to natural resources

Faced with the extension of the armed conflict into rural areas from 2013 and its continuation over time, rural communities have organised themselves to secure access to the resources surrounding rural towns and villages. To do this, in the outskirts of Maiduguri and in the LGA of Jere, they rely on the Civilian Joint Task Force (CJTF) set up from 2013 to dislodge elements of Boko Haram from the town¹⁰⁹ (Higazi, 2015), possibly with the army and vigilante groups that already existed before the arrival of the jihadists.

The Civilian Joint Task Force is also locally called *Yan Banga* or *Yan kato da gora* / haussa / strong men with big sticks. These anti-Boko Haram vigilante groups are grassroots but have been supported since 2013 by the Borno state government and the army (Higazi, 2015) and have subsequently expanded into rural areas. Many groups exist today, who are active and controlled to varying degrees. It is on the basis of these local militias who have changed their activity to protecting people, that a local organisation has been set up to secure access to certain resources for rural people who have remained in their villages: they are called upon to secure access to plots, pastures and wood collection areas. The *Yan banga*, a former organisation of traditional hunters, are often recruited from among these groups, whose modes of action and legality are questionable (Ya'u, 2000; Casey 2010). However, they have the support of the people interviewed in the survey villages, who they help to make feel safe. These *Yan banga* '*security agents*' organise themselves in the villages and are in contact with neighbouring villages, with whom they exchange relatively reliable information on the movements of the armed groups.

We have no details about the operational and management methods of these militias. They seem to intervene more frequently to protect herders and wood collectors.

In the villages studied, both livestock and crop farming have been considerably reduced due to the theft and slaughter of livestock by insurgent groups, but also to limit the need for pasture. The livestock seen on the outskirts of the town are therefore those of sedentary rural people, but also those of urban owners who usually have their animals herded by pastoralists. The future of these large herds is difficult to assess on the basis of the discussions that took place within the *focus group* organised with representatives of the large livestock farming associations. The surveys do not reveal any major conflicts

¹⁰⁹ Because of their numbers and local knowledge, they managed to get Boko Haram out of the city very quickly, something the armed forces had not succeeded in two and a half years.

over access to pastoral resources. Access to drinking water does not seem to pose a major problem for sedentary livestock farmers, who continue to have free access to it during the dry and rainy seasons. The crop farmers' focus group points to a conflict between water sellers/*maïruwa*/Hausa and livestock farmers who have to buy water because of its use for irrigation: this privatisation of water resources does not emerge strongly from the surveys, but deserves to be clarified in a more detailed analysis.

Concerning wood collection, security measures are taken at the village level and concern very localised resources. To resolve the issue of cooking fuel in refugee camps, humanitarian aid agencies logically propose alternative solutions: agricultural and animal waste, fossil fuels such as paraffin, liquefied petroleum gas (LPG) or non-organic waste (e.g. plastic). The *focus groups* with rural dwellers highlighted conflicts over wood between collectors and land *caretakers*, who are appointed by the landowners to guard the plots, but not necessarily to develop them. This caretaker system, which already existed before the security crisis, may have developed with the displacement of farmers who entrust their plots to those who remain, or by actors from outside the territory who invest in the plots in anticipation of being able to cultivate them, but this point needs to be verified.

Fishing activities, which used to be important in the LGA of Jere and especially in the Fadama wetland, have been significantly reduced due to the difficulty of gaining access to fishing areas. It does take place in the rainy season in the rivers and ponds, without the need for authorisation.

Displacement from and to territories controlled by armed groups

In Borno State, the administration of the territory is based on four hierarchical levels, namely *shehu*, *aja*, *lawan* and *boulama*. The *shehu*, former supreme ruler of Borno Emirate, chairs an Emirate council which is responsible for appointing the '*chiefs*' of the lower hierarchy. Traditional administrative activities are carried out by district chiefs (*aja*), village chiefs (*lawan*) and neighbourhood chiefs (*boulama*). Although the roles and powers of this traditional system are not defined in the Nigerian constitution, they are very important for community mobilization, conflict resolution, tax collection, the approval of land sales, the identification of bona fide citizens, security and the dissemination of information. They are also heavily involved in the implementation of public policies and state and local government programmes.

This system of territorial and land tenure management has not changed, and the role of customary authorities has even been strengthened for land management in the LGA of Jere. Faced with an extremely unstable and dangerous situation, the activities of aid programmes and projects rarely extend beyond the immediate periphery of the city. Beyond a distance of about ten kilometres, it is very difficult to understand what is happening locally, to adjust and provide aid to the population: all these rural areas are particularly destitute. For example, the village chiefs of Dusuman and Gumsumiri, who were asked to take part in this survey, had not been visited by any administration or aid organisation since the beginning of the crisis, even though they are less than 20 km from the city limits. Given this isolation and lack of support, the answers to the questionnaire were obtained very easily. They have very high hopes that a project will be implemented on their territory. It is very difficult for the major families to continue to be responsible for redistribution (through loans and leases/ sharecropping) as they were before the crisis. This role now falls to the Boulama who organise themselves as best they can on the small territory where the population that has stayed and those who have arrived from elsewhere reside.

Outside these small territories occupied by sedentary rural populations, where activities related to natural resources are restricted, there are major unknowns. Discussions in the livestock farmers' focus group suggest that transhumant pastoralists who used to frequent the off-season pastures near Maiduguri, where there is an international livestock market, now come only very rarely and briefly.

Adam Higazi's work on pastoralism in the context of insurgency in north-eastern Nigeria (Higazi, 2020) shows that all groups of pastoralists and agro-pastoralists (Shuwa Arabs, Fulani, Boudouma (Yedina), and the two Kanuri sub-groups (Koyam and Badawi)) in Borno and in the regions bordering Yobe and Adamawa, have been affected by the conflict and attacks by jihadists grouped under the local name of Boko Haram. Pastoralist organisations have reported several thousand deaths among pastoralists, as many refugee families (especially women and children) and hundreds of thousands of livestock thefts throughout the Lake Chad region. Raids on villages to seize crops have also affected pastoralists since many also cultivate and/or depend on exchange relations with crop farmers.

In terms of transhumant pastoralists' relations to natural resources, A. Higazi distinguishes two contrasting situations related to the two major branches of Boko Haram: on the one hand, the Shekau group, based in and around the Sambisa forest, which is a predatory force that attacks civilians, including pastoralists and their livestock, and on the other hand, ISWAP, which, as we have seen in the other territories under study, does not attack civilians indiscriminately. According to A. Higazi, the Fulani, Shuwa and others are in combat with the Shekau faction, but they graze their animals in ISWAP areas relatively unhindered, except sometimes by the military. As in the territories it controls in Lake Chad and the Komadougou Yobe valley, ISWAP levies annual per capita taxes on livestock, and it appears that by March 2020¹¹⁰, the number of Fulani and other pastoralists who have taken up arms to fight for ISWAP is relatively small. Thus, in this extremely confused and conflict-ridden context of Borno State, which is subject to the exactions of jihadist groups, some resource territories that are essential for pastoralists seem more attractive than others because they can enter into agreements for access to resources. According to Adam Higazi, the attractiveness of these areas controlled by ISWAP does not have to do with the ideology it promotes, but the pastoral resources the areas contain, which they can access by following the rules and restrictions defined by ISWAP, but which is not possible with the other branch of Boko Haram.

This observation leads us to qualify the strengthening of the role of customary authorities in land management and questions the relations that these authorities could develop in the future with ISWAP. The same question arises more broadly between ISWAP and the administrative authorities, as in other Sahelian countries where the same type of jihadist insurrection is taking place (Pérouse de Montclos, 2020).

Close to the crisis zone, little impact on access to natural resources

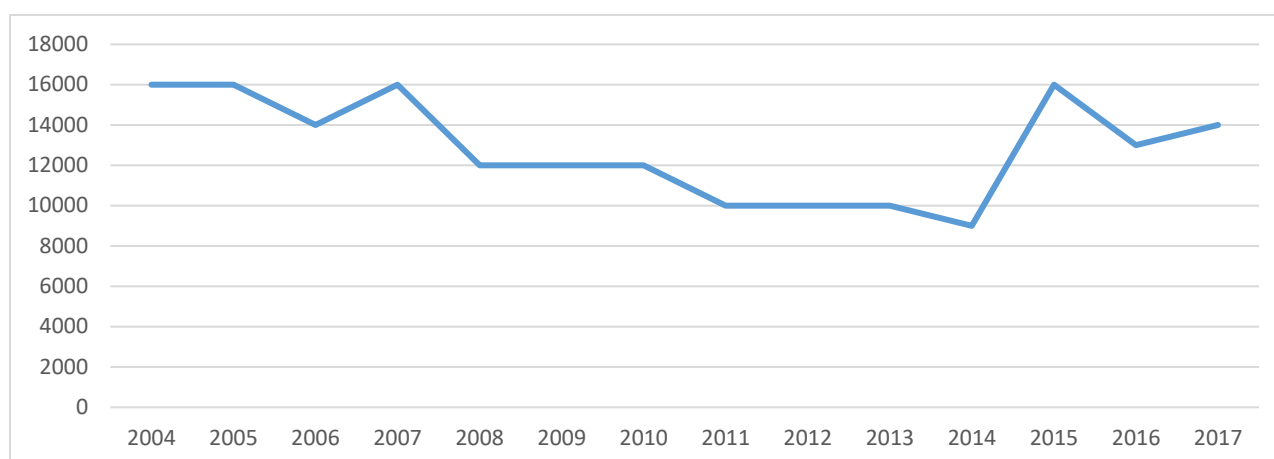
In the communes of Mindif and Dargala, the respondents did not note any developments related to the security crisis. **This result shows that some areas close to the crisis** (Mindif and Dargala are located 100 and 110 km from the Cameroon-Nigeria border) **have not experienced any major impact on access to agricultural land and natural resources.** The consequences of the crisis on access to agricultural land and natural resources are therefore mainly confined to the territories in which armed groups operate and the territories hosting internally displaced people and refugees.

The hypothesis according to which these peripheral territories would be indirectly impacted due to the transfer of animals from the impacted sectors to the external pastoral land is not confirmed in these two communes, which does not mean that it is not true in other territories equally distant from the epicentre of the crisis. Indeed, none of the interviews with land management actors noted an increase in agro-pastoral conflicts on the farms observed (see Annex 2), nor did they record any increase in the number of animals or changes in the calendar since 2014, which marks the beginning of the security crisis in Cameroon's Far North region. The increase in livestock numbers observed in livestock sector statistics¹¹¹ (Fig. 48) is thus misleading and should be linked to the difficulty of collecting reliable statistical data, or to a change that was hardly noticeable on the ground - which seems unlikely.

*Figure 48: Cattle population in the commune of Mindif between 2004 and 2017
(Source: Daminepia, 2018 in Donfack and Alatou, 2018)*

¹¹⁰ Adam Higazi, 2020. Pastoralists and insurgency in Borno. Note in the process of being published.

¹¹¹ The Daminepia data are based on vaccination data and do not accurately reflect the livestock of transhumant herders.



The land management system has therefore not changed, nor have conflicts evolved significantly in the two territories studied. In these territories that are attractive from the point of view of agricultural land, the same inequalities of access to land between men and women are observed as in all the territories studied, while young people have the same access as their elders (tbl. 51). Migrants, depending on when they settled in the area, hold less land by inheritance than natives and obtain more by donation on arrival.

Table 51: Modalities of access to plots in the communes of Mindif and Dargala (84 respondents)

	F	M	Under 30 years old	Over 30 years old	Natives	Migrants
Purchase	1	1		2		2
Donation	3	15	4	14	4	14
Inheritance	1	56	20	37	35	22
Loan		1		1		1
Rental / Sharecropping	1	5	2	4	4	2
Total	6	78	26	58	43	41

In both Dargala and Mindif, families provide their different members with access to land (Table 52), and they are also the ones who intervene in the event of conflict through heads of families (Fig. 27).

Table 52: Actors providing plots of land in the communes of Mindif and Dargala

	Dargala		Mindif		Total
	Migrant	Native	Migrant	Native	
Head of a family	1	3	10	4	18
Acquaintance	1	1	1	1	4
Member of own family	16	11	12	23	62
Total	18	15	23	28	84

The actors responsible for managing land conflicts are the family councils, the customary authorities (*djaoro*, *lawan* and *lamido*), the administrative authorities (*Sous-Préfet, Délégués d'arrondissement de l'Agriculture et du développement rural, de l'Élevage, des Pêches et des Industries Animales*) which make up the Commission for the settlement of agropastoral disputes and the management of the national estate in the three communes studied. Agreements concerning the transfer of plots from one person to another are verbal and are made in the presence of witnesses. In general, the security of land tenure is guaranteed by the traditional authority and the various native families.

Arbitration is most often carried out by the *djaoro* (3rd degree chief), then the *lawan* (2nd degree chief), and the *lamido* (1st degree chief or canton chief). It can continue at the gendarmerie, at the sub-prefecture (the Commission for the settlement of agropastoral disputes and management of the national estate is then mobilised). Conflicts over property rights sometimes end up in court when they have not been settled at the level of the customary authorities and the gendarmerie.

Access to grazing land is regulated by customary authorities, notably the traditional chiefs of third (*djaoro*), second (*lawan*) and first degree (*lamido*). They are the ones who most often intervene in conflict situations. Agropastoralists' access to grazing land is not subject to prior authorisation and their location is known to all villagers. The transhumant herders who come seasonally have already established links with the populations of the host villages and return each year. For some, they obtain an authorisation signed by the administrative authority, for others they have the verbal agreement of the traditional chief. All of them must have the vaccination certificate for their livestock before arriving in the commune.

Agropastoral conflicts are frequently cited in interviews with those involved in land management, but they do not emerge much in the quantitative surveys conducted in the two territories: they are not mentioned in Mindif and cited by 3 people in Dargala (tabl. 24). Interviews with resource persons (district delegates for agriculture and rural development, fisheries and animal industries) revealed that the Commission for the settlement of agro-pastoral disputes and management of the national domain, chaired by the sub-prefect and of which the customary authorities are members, is consulted each year to arbitrate conflicts between pastoralists and crop farmers. However, this body is not systematically called upon because of the financial costs related to its operation which are charged to the complainant¹¹². In the villages of Dargala, Modjombodi and Sabongari in the two communes concerned by this study, the number of conflicts linked to the destruction of crops is very limited and can be attributed to the measures taken upstream by the village communities and the communes to demarcate cultivation areas, ensure respect for livestock tracks and regulate the conduct of animals by herders.

This approach is framed by the support programme for the security and integrated management of agropastoral resources (PASGIRAP¹¹³), which has set up, in the Mindif district, a communal consultation framework to prevent and resolve conflicts between farmers and herders. This consultation framework is based on the experience of many previous livestock projects in the North and Far North regions, and brings together at the local level the various agro-pastoral actors in the villages concerned by the project (Matfai, Doyang, Dir, Mendeo, Yakang, Djapai, Loubour, Gagadjé, Laryé, Bembel). This programme has also established two charters:

the **charter for the management of pastures and livestock tracks** (Table 51) to preserve livestock **grazing** areas and avoid agro-pastoral conflicts: this charter was designed on the basis of proposals from rural stakeholders (crop farmers and livestock farmers) through village consultations and a communal consultation;

the **agricultural land charter**, which aims to preserve the soil and combat the destruction of crops by animals.

¹¹² This is contrary to the regulation that stipulates that the funds are housed at MINEPAT (Ministry of Economy, Planning and Territorial Development).

¹¹³ The Support Program for the Securing and Integrated Management of Agropastoral Resources (ASGIRAP) which is jointly managed by MINADER and MINEPIA is financed by the 2nd C2D in the framework of the CCM 1272 01 K agreement signed on 17 February 2014 between AFD and the Cameroonian government.

These local agreements modify the way agro-pastoral conflicts are managed, by means of commissions, before they become serious and are brought before the courts.

Table 53: Charter for the consensual management of livestock tracks in Doyang village (Mindif commune)

Offences	Fines in CFA Francs	Comments
The occupation of cattle tracks by fields	5 000 CFA F	
The introduction of sick animals into the village	50 000 CFA F	
Livestock wandering (moving animals off the tracks during the rainy season)	250 CFA /head	
The destruction of markers	1,500 CFA/Borne	
Moving the marker(s)	5,000 CFA/Borne	
The production of charcoal from trees on the livestock track	10 000 CFA F	
The lighting of bush fires	15 000 CFA F	Subject to the penalties provided for by law
The felling of trees of all species	15 000 CFA F	
For crop compensation	Refer to decree 2003/418/PM of 25 February 2003 setting the crop compensation rates.	

This type of intervention, observed in territories where securing goods and people is not a priority, is part of the decentralisation process that has been underway in Cameroon since 2009, notably through the National Participatory Development Programme (PNDP). It should be supported by the ongoing land tenure reform and the transfer of land tenure competences to the communes (see chapter 2).

Conclusion

The security crisis has had various different impacts on land tenure situations in the territories of the Lake Chad region. Either directly or indirectly, the presence of armed groups in the different sites studied:

- leads to the re-organisation of the authorities that control access to resources as the armed groups take control of the resources that are of strategic importance for them;
- leads to the re-organisation of economic activities, so that some become impossible, while others are encouraged;
- leads sometimes to the mass influx of people into certain areas - whether concentrated or not - raising questions about the capacity of these displaced persons to secure their livelihoods, about the share of agricultural activities (in the broadest sense) in their livelihoods, and about how they are to gain access to the resources in question;
- leads to the reorganisation of settlements on a regional scale, through induced mobility;
- and therefore modifies, directly or indirectly, as a result of these population movements, economic activities, pressure on resources, and modes of access to resources, both in the areas that people leave and in the areas where they settle.

The methodology adopted for this study, based on a qualitative approach using interviews supported by a systematic survey of 496 heads of household in 9 territories and 4 countries, provides localised, precise and contextualised information that enabled quantitative analyses to be drawn from it. The results have the limitations of a survey carried out in only 6 days of field work with a small team (12 people) spread across four countries. However, they have the advantage of quantifying the changes observed and identifying the levels of conflict between territories. Thus, the results show an overall **increase in inequalities in access to land and natural resources**, and a high level of conflict at the local level. It also showed that the crisis is having a significant impact on people. The survey made it possible to quantify these changes and to qualify them according to local situations.

We tested the initial hypothesis about the **localised nature of the crisis** and the importance of geographical proximity in assessing the impacts of armed groups on access to land and natural resources. These impacts are measured in terms of the extent of population displacement, activities that have been changed or abandoned, constraints on access to natural resources and the multiplication of conflicts. The territories closest to the epicentre of the crisis, that have been affected by insecurity for the longest time, appear to be the most affected by the extent of restrictions on access to resources and the resulting restructuring of economic activities. Conversely, the most remote territories appear to be less affected and their land governance is not affected. However, the more detailed results by territory (Table 54) call for caution with regard to the criterion of distance: the canton of Nguelea (municipality of Baga Sola), although classified as an 'indirectly impacted territory', appears to be as affected by the restructuring of activities as the other directly impacted territories. Conversely, the communes of Mindif and Dargala, where the Resilac project is carrying out its activities, are not representative of all the dynamics at work on the fringes of the insecurity zone: if we had chosen territories where transhumant herders have withdrawn to, in the Maga plain (Far North Region, Cameroon) for example, would have shown different results for a territory that is just as far from the epicentre of the crisis.

The Different Impacts of the Security Crisis on Land Tenure in the Lake Chad Region

Table 54: Summary of results by territory

	Nigeria		Niger		Chad		Cameroon		
	Jere	Maiduguri	Chétimari	N'Guigmi	Bol	Baga Sola	Koza	Mindif	Dargala
Impact of the security crisis	Direct	Direct	Direct	Direct	indirect	indirect	indirect	not impacted	not impacted
Density (inhab/km²) in 2020			49	2	50	50	636	45	116
Resource areas with high land tenure stakes	Karal, irrigated cultivation, pastures		K. Yobe Valley irrigated cultivation and bourgoutières; Kaola Plain	Lake Chad pastures, flood recession cultivation, fishing, woods	Lake Chad pastures, flood recession cultivation, fishing, wood; polders	Lake Chad pastures, flood recession cultivation, fishing, wood; polders	Wood, terrace cultivation, irrigated cultivation	Karal, rainy season pastures	Karal
Situation in 2020	Urbanisation, strong reduction of rural activities	Urbanisation	Reduction of local and international mobility; territorial recomposition	Territorial recomposition; exclusion of agriculture in the lake; resumption of fishing	Territorial recomposition; land claims in the lake; high level of conflict	Territorial recomposition; land claims in the lake; high level of conflict	Land saturation, blockage of agricultural land	Transhumance, overgrazing and reduction of rangelands	Land saturation the kara
Land governance	Securitisation by militias; isolation of customary and administrative authorities in rural areas		Competition between customary authorities and armed groups in the KY valley; Cofo	Competition between customary authorities and armed groups in the lake; Cofo	Competition customary/administrative authorities; inaccessibility of islands	Competition customary/administrative authorities; inaccessibility of islands	High land tenure insecurity, intervention by the authorities	Major role of family councils; local agreement on access to pastures	Major role family coun
% who feel that there are conflicts	32,1	28,2	90,2	21,1	73,8	100,0	53,7	0,0	0,0
Agricultural	26,4	20,5	83,6	15,8	45,2	92,9	45,3		
Fishing areas	4,7	5,1	4,9	13,2	71,4	71,4	-		
% change of crop farming activities (crop farmers)	97,3	80,0	83,8	86,4	47,2	95,0	41,0	0,0	0,0
Difficulty of access to fields	93,3	80,0	18,9	81,8	47,2	92,5	41,0		
% change in livestock farming activities (livestock farmers)	84,2	33,3	100,0	84,2	42,9	100,0	27,8	0,0	0,0

The Different Impacts of the Security Crisis on Land Tenure in the Lake Chad Region

Difficulty of physical access to pastures	63,2		30,8	78,9	42,9	100,0	24,1		
High fodder prices	73,7		84,6	5,3			20,4		
Loss of animals	78,9	33,3	84,6	78,9	57,1	66,7	25,9	33,3	80,0
% change in wood collection activities (all)	83,0	89,7	82,0	15,8	9,5	71,4	75,8	0,0	0,0
% discontinued activities (all)	86,8	92,3	78,7	84,2	45,2	81,0	17,9	0,0	0,0
Crop farming	41,4	67,7	13,1	50,0	2,4	40,5	1,1		
Livestock farming	15,5	12,9	14,8	10,5		11,9	2,1		
Trade, services	37,9	1,7	52,5	36,8	40,5	2,4	14,7		
Prospects									
% leaving (all)	37,7	59,0	0,0	0,0	0,0	0,0	12,6	0,0	0,0
% unsure (all)	6,6	12,8	1,6	0,0	38,1	0,0	3,2	4,5	0,0

The results confirm that there has been an **increase in land inequalities for disadvantaged population groups** (Table 55). Displaced persons carry out, on average, for the 9 combined territories, fewer activities related to land resources than people from their new village of residence; they also use less land, more often by means of indirect tenure and on small areas, usually on the basis of short-term agreements (one season or one year). Analysis by territory, however, shows that conditions vary, with free loans in Niger, where land is not limited in the drained zones, while they are more constrained in more densely populated territories such as in the commune of Koza or in the peri-urban situation in Jere. In all cases, although the settlement of displaced persons in villages or camps often depends on the administrative authorities, the negotiation of access to plots is mainly done with individuals, family relations or acquaintances. The settlement of returnees (who had left because of the crisis, mainly located in Jere) and returned migrants (who left before the crisis and returned because of the crisis) was observed. They are in a privileged situation compared to displaced persons because they have easier access to land, using non-market modes of access. However, in Chadian communes and in developed areas, the interviews show that the conditions of return of displaced persons are not clear, with some able to sell their inherited land and others who find new farmers on their land. The issue of abandoned land in insecure areas and the conditions of return of people who have been absent from the land for a long time and who are claiming their old plots or their inheritance deserves further investigation.

Table 55: Summary of results for IDPs, women and young people

	Displaced	Women	Young people
Activities related to land resources	58% (other >80%)	63 % (M 78 %)	82 % (A 73 %)
Cultivates plots of land through indirect ownership	81 % (N 26 %)	43 % (M 33 %)	
Cultivates 1 single plot		40 % (M 27 %)	40 % (A 24 %)
Cultivates plots of less than 1 ha.	60 % (N 37 %)	50 % (M 36 %)	52 % (A 32 %)
Other	2 x wood / market		10% >10ha

N: native; M: men; A: over 30 years old

Female heads of household also appear to be disadvantaged in terms of access to land (Table 55). The small sample, scattered over 9 territories, does not allow an analysis of regional disparities, nor a detailed comparison between residence statuses. Also, the study does not show the full diversity of women's stories: gender inequalities would probably be more marked if we included married women, in mono or polygamous households, of different age groups and in various cultural contexts. However, this study highlights a trend in the evolution of inheritance rules related to Muslim law, which allows women to inherit and seems to impose itself locally in the face of customary systems, which has already been mentioned in other studies (World Bank, 2020) and should be better documented.

The situation of young family heads appears to be little different from that of heads of household over the age of 30, which is contrary to the hypothesis that young people's lack of access to land is a factor in the crisis. This result is probably linked to the choice of interviewing only heads of household, i.e., for young people, those who have already been able to gain independence and access to land. However, the study shows a greater disparity in the land holdings of these young heads of household, with 52% of them cultivating plots of less than 1 ha and 10% cultivating plots of more than 10 ha. If the low level of labour and investment easily explains the small plots, the large plots could be explained by a concentration of plots entrusted by parents who have left. However, we do not have enough information to confirm this hypothesis.

The security crisis is also proving to be **fertile ground for land conflicts**. We thus observe a high rate of conflicts over plots: 25% of the plots documented in this study have been the subject of at least 1 conflict in the last 10 years, and of these 47% have begun since 2018; 22% of the conflicts have not been resolved. A surprising result of the study is the low use of the state administration to resolve conflicts, which are mainly managed by family councils. Another surprising result is that displaced persons do not perceive demand for agricultural land as a cause of conflict.

Conflicts related to access to pasture are as numerous as those related to plots, with 25% of herders having experienced at least one conflict over access to pasture in the past 10 years, 83% of which began during the security crisis. These conflicts are mainly brought before the customary authorities, and 14% of the conflicts

are still unresolved. Conflicts related to access to wood have more varied sources due to the diversity of authorities that authorise access. Thus, administrative authorities are more often called upon. 20% of the respondents have experienced at least one conflict over access to wood, 78% of which began during the crisis period.

Conflicts over resources are more frequent in territories where land conflicts were already significant before the beginning of the security crisis. This is the case in Chadian territories as well as in the commune of Koza in Cameroon, where dysfunctions in land governance were already observed before the crisis, with the circumvention of customary authorities and local land management rules by powerful actors located outside the territory. This specific situation, where the effects of the crisis are very strongly felt in territories indirectly impacted by armed groups, could, in turn, fuel the crisis. It is essential to monitor conflicts and how they are resolved in order to take action on land governance at the local level and ensure that this action is part of an inclusive approach to IDPs in the territories.

The contrasts between resource areas also influence how conflicts are perceived: while land governance is not very different between the two communes in Niger, the people of Chetimari feel that there are more conflicts than those of N'Guigmi (Table 54). This is because the doubling of the population, which is concentrated in the Sahelian agro-pastoral zone, without access to the Komadougou Yobé valley where the most productive land is located, and without the possibility of moving to other more favourable areas for work, increases the pressure on scarce and seasonal resources, and thus favours land conflicts.

Strangely, the level of conflict appears to be lower in the territories where the security crisis has been present the longest and the most intensely, and where the situation is getting bogged down without a definitive solution to provide people with security (Jere and the outskirts of Maiduguri). In these territories, the survey notes a very low level of intervention by the administrative authorities and civil society in conflict resolution. No conflict has been brought to justice. The weaker perception of conflict than in the territories mentioned above (30% of respondents in Nigeria, compared with more than 75% in Koza, Chetimari and Chad, estimate that there have been more conflicts since the beginning of the crisis; table 52) can be explained in terms of the reduction of agricultural activities, which effectively limits conflicts over land, but also in terms of the huge stress caused by the presence of armed groups on the territory, which minimises disputes between users.

As in most crisis situations, the security crisis in the Lake Chad region is **accelerating changes that were already underway**. The sudden doubling of anthropogenic pressure, which has taken place locally in less than a year whereas this would have taken 20 years with the natural population growth rate, brings challenges both for the organisation and development of the territories, and for actors to adapt. The sudden increase in anthropogenic pressure is accelerating resource extraction (deforestation, straw collection, water distribution) and the power games to control access to them. The study shows that the crisis is **accelerating the commercialisation of access to natural resources**. In the agricultural sector, 28% of modes of access to plots of land are commercial and the survey reveals a very wide variability in the fees involved. While livestock feed in the Sahelian zone is mainly provided by pasture and 'vain grazing', the survey reveals that 82% of herders are forced to buy fodder during the year and 56% of herders mention problems related to water scarcity. The rate of 23% of respondents who buy wood at the market also seems very high for residents in rural areas. These figures reflect changes that have been observed in the Sahel in recent decades that are not related to the security crisis. These raise questions about energy supplies and the availability of resources for a rapidly growing population whose interests are all focused on the same resources.

The security crisis is causing other unexpected developments, linked to the rearrangement of territories and local land governance. The presence of armed insurgent groups in the wetlands, who control access by imposing taxes and excluding certain stakeholders, profoundly changes the vocation of multifunctional spaces. Thus, **a new specialisation is emerging for wetlands** with the partial conversion of the Komadougou Yobé valley, which had become a crop farming area for several decades thanks to developments and market gardening, into a pastoral area. In the northern basin of Lake Chad, the departure of sedentary populations has put an end to crop farming and greatly reduced anthropic pressure: this effective "no go area" has led to environmental regeneration, which has been favoured all the more by several successive years of high water levels, and low levels of wood collection, fishing and livestock farming. In the southern basin of the lake, the situation is less clear-cut. Because crop farming was marginal there, the principle activities in the island area remain fishing and livestock farming, even though land is now predominantly controlled by armed groups. In the Bol and Baga Sola archipelago, the situation is less clear, with the developed areas where the host and displaced populations are concentrated – crop farmers and livestock farmers, and to a lesser extent fishermen

- and the areas bordering the island zone where there is less crop farming because of the Boudouma's claim to the land. Outside Lake Chad in Niger, the concentration of displaced populations excluded from the resources of the lake has brought the risk of cultivation within the legally defined pastoral zone. The sustainability of these specialisations is difficult to assess: it depends on whether armed groups will continue to be present, and, if so, whether they will want to include new actors in the territories they control.

The major development observed in the context of the security crisis is **a recomposition of power relations at the local level**. Through their presence and their control of resources, armed groups exercise power that competes, at the local level, with the long-standing power acquired by customary authorities. By allowing some stakeholders rather than others to exploit resources, armed groups gain sympathies and allies among the population, which enables them to consolidate their funding, but also their presence in the territories. They also take advantage of inter-community conflicts, between groups of livestock farmers (Arabs / Fulani), between livestock farmers and crop farmers, or between indigenous groups (Boudouma / Kanembou) to gain revenue from allowing access to land resources and consolidate their position.

In all the territories studied, whether directly or indirectly impacted by the security crisis, we observe the **need to improve land governance**. The high number of land conflicts related to agricultural plots and access to grazing land on the one hand, and the proportion of unresolved conflicts on the other hand, despite the fact that some have lasted several years, suggests that there is considerable room for improvement in their management. Commercial land transactions have emerged in all the territories studied, but are not regulated either at the local or national level, as they are not allowed by current laws (except in Niger). This lack of regulation means that stakeholders are faced with significant uncertainties, both with regard to the fees to be paid and the risk that rights granted might subsequently be contested. It is in such contexts that power relations can have the greatest influence on contract negotiations, and that the duration of access to plots of land is reduced. In wetlands (lakes and floodplains), the mainly state-owned status of water resources is not accompanied by legal measures to organise their use between groups of stakeholders with interests which, although they can be managed in a complementary way, are in fact opposed. Some of these resources are the subject of community claims, which states cannot therefore manage on a legal basis. Taking into account the multifunctionality of land resources and the seasonality of their exploitation remains a challenge, particularly for pastoralism, both legally and locally. In Lake Chad, this challenge is made even more difficult by the rhythms of floods and droughts to which activities, and therefore the rules of access, must adapt. These are complex contexts, where the decentralisation of land management at the level of local authorities is incomplete. As such, the improvement of land tenure governance should be considered in terms of its articulation with territorial governance. The territorial imbroglio is particularly acute in the Lake Chad area, but similar situations can be found throughout West and Central Africa, where the limits of territorial authorities are not defined on the ground and relations with the customary authorities and their territorial jurisdiction are not clarified.

This study has made it possible to specify the factors that account for the winners and losers of the security crisis. Most of the rural actors in the territories controlled by armed groups have become considerably poorer, some have been forced to abandon everything, while others have remained in an uncertain and constrained situation in terms of their activities. Outside these areas, it appears that the most mobile and dependent users of the wetlands, currently controlled by armed groups, are the big losers in the current situation. These are, on the one hand, the transhumant herders whose livestock only consume green pastures and who have not been able to take refuge in wetlands not controlled by armed groups (the case of the Maga plain in Cameroon): they find themselves stuck in unfavourable areas and are forced to negotiate illegal access to the bourgoutières to save their livestock. On the other hand, migrant farmers who arrived in the post-drought years to develop the wetlands (Lake Chad and the Komadougou Yobé valley) appear to be among the most affected populations: without any legal possibility of consolidating their rights before leaving and forced to abandon everything because of insecurity, their conditions of return are the most precarious, as they cumulate the risks of occupation by new occupants and recovery of their land by the original inhabitants. IDPs are targeted for recruitment by armed groups, and therefore the way that they are treated on arrival in a territory will be a factor in whether or not the crisis continues. On the other hand, as is common in times of crisis, certain powerful actors have become more powerful, such as traders who have set themselves up in certain lucrative markets (such as those for food aid, fodder) or agricultural investors (in urban or rural areas, urban elites, civil servants, large farmers) who have taken advantage of the abandonment or sale of plots of land to acquire large areas. The rearrangement of land ownership can also benefit *ordinary* farmers, who have not fled their villages or who have returned to them first, by allowing them to cultivate abandoned plots. The future departures and

returns of IDPs will in turn reshuffle the cards of these rearrangements: today's winners may not be tomorrow's winners. The rules governing the future of the abandoned plots will prove crucial. In the meantime, growing land tenure inequalities are making many households more precarious and are also fuelling the crisis.

Recommendations

In terms of **knowledge production**, the team recommends that in-depth studies should be conducted on 4 main themes that could not be developed in this study:

- **Women's access to land and natural resources**

The gender analysis presented in this study is very partial due both to the small size of the sample, which does not make it possible to illustrate the diversity of situations by territory, and to the decision to consider only heads of household. In order to improve understanding of women's land tenure situation and its evolution in the context of the security crisis, it would be necessary to increase the sample size and select different situations in relation to marital status and background, as well as in relation to local cultural, economic and political contexts.

- **Young people's access to agricultural land**

The sample of young heads of household, slightly larger than for women, revealed a much greater heterogeneity of land tenure than expected. Additional interviews about modes of access and life paths are essential to support these observations. In addition, analysis of access to land by "social cadets" (young people who work for their families, sometimes for a long time, because they cannot become self-employed and cannot access land) is necessary to better understand the hypothesis of intergenerational conflict as a factor in the crisis in the region, and to improve the targeting of interventions with this category of stakeholders.

- **Changes in land tenure by socio-economic category**

It was not possible to take into account in this study all the socio-economic diversity represented at the local level, nor to take into account actors from outside the territory. This analysis remains to be done by targeting territories where land tenure issues have been well identified. This will allow situations of land dispossession in areas of insecurity and land grabbing to be better understood in order to anticipate responses from an operational point of view.

- **Changes in land tenure in relation to pastoralism**

The results on how access to pastoral resources and water has changed show major changes in the pastoral sector, and in particular a trend towards commercialisation, which needs to be better studied, particularly by including transhumant herders. A regional analysis is all the more necessary given that regional mobility has been seriously disrupted by armed groups and the way the crisis has been managed, and that livestock farming systems are being profoundly questioned: desperate livestock farmers are both victims and actors in the crisis, and a specific intervention at their level is essential.

The study reveals very heterogeneous land tenure situations per territory, which require further study according to specific problems (including the peri-urban situation in Maiduguri). Among these, we recommend the following:

- **Analysis of the land tenure situation in the polders of Chad**

The results on the rate of conflict and the impact of the crisis are particularly revealing of a degradation of local territorial governance. This predates the security crisis and could also partly explain the conflicts. Specific research on this situation needs to be conducted on the basis of interviews and analysis of concrete cases of conflict in order to analyse the causes, the protagonists and the mechanisms for resolving (or not resolving) conflicts.

Finally, several lines of research have been identified and could be taken up as part of a partnership with regional universities which would allow more targeted studies over less limited periods of time (Master's and Doctorate subjects):

- **Land tenure implications of the increasing use of pesticides:** the growing use of pesticides for clearing and weeding has major implications for labour, and thus potentially for young people's jobs,

but also for the increase in cultivated areas and pressure on land, especially in wetlands (karal and recession).

- **The implications of rising water levels for land tenure:** in the flood zones and the lake, land tenure systems were set up in a context of water retreat linked to the climatic deterioration between the 1970s and 2000s. How will the return to a more abundant rainfall regime, with a recurrence of catastrophic episodes such as floods, affect economic activities and land distribution and governance?
- **A specific study on fishing:** in the pre-crisis period, conflicts in Lake Chad concerned the nasse dams (Dumba) that block some of the arms of the lake and were the focus of opposition between indigenous people (notably Boudouma) and Hausa traders. The resumption of fishing since 2019 in many sectors still controlled by the armed groups requires a specific study to understand the terms and conditions of access as well as the balance of power between the actors involved.
- **The role of militias: this study does not show their role** in aggravating the crisis, as analysed in Mali in particular, but rather their role in providing local security in Nigeria. This result is very partial and requires further study.
- **The future of abandoned land:** this subject is particularly sensitive in view of the return of displaced persons to their villages and in order to anticipate future crises. What methodology can be used to explore this subject further in areas that are still inaccessible?
- **Contracts and terms and conditions of land transactions: this study provides an overview of land transactions** (rental duration and sharecropping; price differences in transactions) which should be looked at in greater detail in each territory and monitored over time. This information is indispensable in order to improve operational interventions.

At the **operational level**, the results of this study could be used for different projects to do with land tenure. The drafting of a **series of booklets** per territory for field agents could help to explain the land issues at the local level.

The presence of armed groups in the Lake Chad region is causing a major reshuffling of access to land and other natural resources through the concentration of people in certain areas and the loss of control of certain resources by states and customary authorities. This situation is putting increased pressure on resources and is increasing inequalities. These developments mean that reflection is required in terms of the governance of land tenure given the need to manage different authorities and interests in this context where there is a wide variety of actors, including armed groups. As tensions increase, there is growing interest from certain powerful groups, and less access to land for other actors, who are often the most vulnerable groups. In order to better manage the integration of displaced persons in the host areas and to better prepare their return to their home villages, several activities could be implemented in the short term and within the timeframe of the Resilac project.

- **Promoting multi-stakeholder debates at local level on the rules of access to** natural resources in the different areas: the rapid and uncontrolled adjustments made to the terms of land transactions following the sudden arrival of displaced persons mean that there is a need to rediscuss the conditions of their stay (length of stay, right of access to land and other resources) in the presence of all the stakeholders in the area, who should be clearly identified (different professional representatives, customary authorities, administrative authorities, representatives of technical services and the army, and possibly armed groups if it is possible to invite them). This democratic debate should make it possible to decide collectively on territorial organisation, to manage the increasing pressure on resources and the inclusion of new actors in the territory, to manage the most sensitive cases before they degenerate into conflict and to think about collaboration in terms of coordination rather than competition between authorities. Three main issues could be explored:
 - **The conditions in which displaced persons are received in the different areas:** location, terms and conditions for gaining access to resources, collective conditions for increasing productivity (land development, intensification).
 - **Establishing a hierarchy of conflict regulation bodies:** for example, in order to prevent conflicts from escalating, the territorial administration and the justice system might not accept cases if local conciliation procedures have not been respected.

- **Defining local rules for land transactions:** due to the limited use of the written word and the risks of manipulation for largely illiterate populations, it is essential that local norms and rules for access to land are explained in order to avoid abuses and inequalities of access, in particular with regard to rental and sharecropping fees and duration, the price and terms of land sales, and access to grazing land.

These debates should be able to lead to the signing of **local agreements**; approaches of this type, underway in the North of Cameroon through various projects within the framework of the decentralisation process, could provide examples in terms of methodology.

- **Monitoring the level of conflicts in the territories:** the results of this study on land conflicts can be added to those produced by pillar 1 of the Resilac project (CAS baseline indicator) to establish a good indicator of how the crisis is evolving in the territories, to be monitored annually. However, it is necessary to define the conflicts well (object, protagonists, method of resolution and level of seriousness) in order to have a solid basis for comparison.
- **Preparing for the return of displaced persons:** while access to the areas they left remains impossible, work on legitimacy is essential, based for example on the experiences of the Great Lakes.
- **Developing an advocacy strategy in favour of access to land for the most vulnerable people,** to be adjusted according to local realities and aimed at local authorities.

Bibliography

- Aboubakar Moussa, 1997. Evolution récente (1994-1997) du couvert végétal ligneux dans un terroir sahélo-soudanien. Le cas du village Guiziga de Gazad (Extrême-nord Cameroun), Master's dissertation, Univ Ngaoundéré.
- Abdourahamani M., 2013. Foncier et agrobiodiversité sur les rives nigériennes du lac Tchad, M2 Geography dissertation, Univ. Paris 1 Panthéon Sorbonne.
- Abdourahamani M., Waziri Mato M., 2019. « De l'insécurité de Boko Haram au conflit intercommunautaire dans le lac Tchad. Le conflit Peul/Boudouma au Niger ». In C. Raimond et al., *Le Tchad des Lacs. Les zones humides sahéliennes au défi du changement global*, IRD Editions, pp. 225-238.
- Abdourahamani M., 2020. *Les éleveurs de la rive nigérienne du lac Tchad face à Boko Haram : entre mobilités forcées et revendications identitaires*. *Canadian Journal of African Studies*, 17 p.
- Abdourahamani M., (to be defended). *Réorganisation de l'espace et de la mobilité des éleveurs au Niger oriental dans un contexte d'insécurité transfrontalière inédite*. Geography Phd, université Abdou Moumouni, Niamey, to be defended in September 2020.
- Abdou Issoufou O., Katchalla Mandara I., 2018. *Le pastoralisme dans la commune de Diffa : organisations, contraintes et impacts sur l'environnement*. Degree dissertation, Geography, Université de Diffa, 43 p.
- ACF, 2020. *Les impacts des mesures sécuritaires sur les populations civiles dans le bassin du Lac Tchad*, Study Report, ACF Paris, 65 p.
- Adelaja A., George J., 2019. Terrorism and land use in agriculture: the case of Boko Haram in Nigeria. *Land Use Policy*, 88, 104116.
- Ade - Ajayi, J. F. (1962). *Milestones in Nigerian History*. Ibadan: Ibadan University Press.
- Anene, J.C. (1966). *Essays in African History*. Ibadan: Onibonoje Publishers.
- Adoum Forteye A., Kiari Fougou H., 2019. *Analyse des modes d'accès et de contrôle des ressources naturelles de la partie tchadienne du lac Tchad par les communautés rurales*. *Rigager*, vol. 5, pp. 31-46.
- ALADOUA Saadou et al., 2013. *Étude de bilan de la mise en œuvre de la politique foncière rurale au Niger*, SPCR du Niger, 114 pages.
- Anderson S., 2008. *La contribution pastorale. Les apports économiques de l'élevage mobile en milieu principalement agricole. Étude de trois communes dans le sud Diffa*. ZFD, 68 p.
- Anderson S., Monimart M., 2009. *Recherche sur les stratégies d'adaptation des groupes pasteurs de la région de Diffa, Niger oriental*, IIED, London.
- Baffa Aliyu Umar, 2008. Urban Gangs "Yan Daba" and Security in Kano State : A Review of Trends And Challenges. In Abdalla Uba Adamu (ed) *Chieftaincy and security in Nigeria. Past, Present and Future*, 326- 338.
- Banque mondiale, 2020. *Droits fonciers, investissements et productivité agricoles au Tchad. Faits marquants du LSMS-ISA 2018 au Tchad*. P167721. Volumes I et II.
- Barrière O., Saleh O. M., Togueyam I., 2019, *Mission d'Appui méthodologique pour la sécurisation du foncier pastoral en lien avec les activités d'aménagement de l'espace agro-pastoral dans le Moyen Chari et le Mandoul (Tchad)*, Final Report, République de Tchad, AFD, UE, IRD, PASTOR.
- Basserie V., 2019, *Analyse de l'avant-projet de Code domanial et foncier (version amendée par le Comité de Relecture du 4 septembre 2019)*, Rapport provisoire n°2, LAND-at-scale, 24 pages.
- Bertoncin M., Pase A., 2012. *Autour du lac Tchad – Enjeux et conflits pour le contrôle de l'eau*, L'Harmattan, Paris.
- Boubaoua A., 2001. *État de la réserve forestière de Laf dans l'Extrême nord Cameroun*. Mémoire de fin d'étude d'ingénieur Forestier de la Faculté d'agronomie et des sciences agricoles, Université de Dschang, 63 p.
- Bouquet C., 1990. *Insulaires et riverains du lac Tchad*. Orstom, 2 vol.
- BRL, Groupe Fit, 2017. *Projet d'aménagement hydro-agricole du Bahr Linia. Services de consultance pour la réalisation d'actions d'appui aux acteurs du projet d'aménagement du Bahr Linia, concernant la gestion du périmètre d'irrigation et du foncier et l'assistance technique. Rapport de fin de prestation*. Ministère de l'aménagement du territoire, de l'urbanisme et de l'habitat, AFD.

- Bron-Saïdatou F., Yankori S., 2016, L'accès des femmes et des jeunes au foncier. Note de débat. Réseau National des Chambres d'Agriculture du Niger.
- Bron-Saïdatou F., Yankori S., 2015, Les titres fonciers de plus de 10 ha. Note d'information. Réseau National des Chambres d'Agriculture du Niger.
- Bureau Morgode E., Djerabe A., 2018, Rapport d'étude sur les textes officiels et mécanismes communautaires de gestion de conflits et couloirs de transhumance dans le département de la Nya-Pende. CARE International.
- Caremel J.F., Kiari Fogou H., Oumarou H., 2020. Stratégies de sécurisation alimentaire dans la région de Diffa. Reconfiguration et permanence de la multifonctionnalité des terres et de la multi-activité des hommes dans les interstices de l'État d'urgence et du BH. XVIIIe colloque Méga-Tchad, 29 au 30 janvier 2020, N'Djamena. Communication orale.
- CEFEP, 2013, Étude de bilan de la mise en œuvre de la politique foncière rurale au Niger. Document 1 : rapport général, Secrétariat Permanent du Comité National du Code rural, 114 pages
- Caremel J.F., 2018. Dynamique de l'aide à Diffa. Une entrée par les « besoins et proposition de décentrement de grilles analytique et opératoires. Rapport de synthèse. Observatoire de l'action humanitaire, 14 p.
- Caremel J.F., Sani M., 2019. Sécurisation alimentaire « par le bas » et nexus humanitaire-développement à Diffa. Rapport de synthèse. Lasdel, 13 p.
- Casey C., 2010. "Hypocrisy, spatial (in)justice and youthful « policing » in Northern Nigeria". In Bret B., Gervais-Lambony P., Hancock C., Landy F. *Justice et injustices spatiales*. Presses universitaires de Paris Ouest, pp. 201-218.
- CEFOD, 2017, Recueil de textes sur le droit foncier au Tchad.
- Chauveau, J-P., Le Pape M., Olivier de Sardan J.P., 2001, La pluralité des normes et leurs dynamiques en Afrique : Implications pour les politiques publiques. In Winter G., (coordonnateur) J-P. Chauveau., G. Courade., J. Coussy, M. Le Pape et M. Lévy (éditeurs scientifiques), *Inégalités et politiques publiques en Afrique : pluralités des normes et jeux d'acteurs* », Karthala-IRD, Paris, pp. 145-162.
- Chauvin E., Langlois O., Seignobos C., Baroin C., 2020. *Les insécurités dans le bassin du lac Tchad. Sociétés, violences et conflits*. XVIIe colloque Méga-Tchad, Nice, 14-16 juin 2017, Editions IRD.
- Commission du Bassin du Lac Tchad, 2011. Création et vulgarisation d'une charte de l'eau du Lac Tchad, BRL et AWF, 17 pages.
- Conseil régional de Diffa, 2015. Plan de développement régional de Diffa (2016- 2020), Niger.
- Coraf, Banque mondiale, CEDEAO, 2015. Un cadre juridique adapté et harmonisé pour une transhumance transfrontalière durable dans l'espace CEDEAO. Note aux décideurs.
- Diarra M., Luxereau A., 2008. Le poivron à Diffa (*Capsicum annum* L.). Atelier Mécanismes de valorisation des productions agricoles au Niger, 25 p.
- Dike K.O., 1960. Hundred Years of British Rule in Nigeria. Lagos: Federal Ministry of Information.
- Direction Générale de la Décentralisation et des Collectivités Territoriales, 2015, Brochure d'information sur la décentralisation au Niger, PNUD, UNCDF, 106 pages https://www.decentralisation-niger.org/images/publications/decentralisation/brochure_information_decentralisation.pdf
- Donfack, Ramalatou, 2018. Dynamique des Pâturages dans la plaine de Mindif (Extrême-Nord Cameroun), Mémoire de DIPES II en Géographie, ENS, Université de Maroua, 137 p.
- Elias T. O., 1971. Nigerian Land Law. London: Sweet and Maxwell. Federal Republic of Nigeria (1978). The Land Use Decree No. 6, Cap 202. Laws of the Federation of Nigeria. 1990 Edition.
- Famoriyo S., 1979. *Land tenure and agricultural development in Nigeria. Technical and Engineering*. Nigeria Institute of Social and Economic Research, 146 pp. ISBN 9781810022
- Ferrari F., Alhascari S., 2016. Gestion des ressources naturelles et gestion des conflits sur les ressources naturelles : quelles améliorations possibles ? Étude réalisée dans les régions du Mayo Kebbi Ouest, Mayo Kebbi Est et Chari Baguirmi en République du Tchad. Avocats sans frontière, GIZ.
- Fotsing E., Madi A., 1997. Evaluation et suivi de la dynamique de la biomasse ligneuse par images satellites. Rapport de Recherche n° 13, Yaoundé University and United Nations University, 38 p.

Galpin C., 2017. Mobilisation d'une expertise pour une étude sur la réforme des procédures d'octroi des titres fonciers, Rapport final de mission, Assistance technique en appui au Programme d'Appui à la bonne Gouvernance (PAG), programme du Fond Européen de Développement (FED) pour la République du Tchad.

Gefu J.O., 1996. *Conflict in common property resource use in Nigeria: Experience from an irrigation project Paper presented at the IUAES/IGU Congress on Livelihoods from resource flow*. Institute of tema Research, Environment Policy and Society (EPOS). Linkoping University, Sweden, August 19-22.

GICS, 2019. Survival And Expansion, The Islamic State's West African Province, Report, Avril 2019, 41 p.

Gonné B., Seignobos C., 2006. Nord Cameroun : les tensions foncières s'exacerbent. *Grain de Sel*, 36, pp. 16-24.

Gonné B., Ngana F., Sougnabé P., 2011. *Dynamique des transactions foncières dans les savanes d'Afrique centrale. Le cas du Cameroun, de la Centrafrique et du Tchad*. Comité technique « Foncier et développement », AFD/GRET, 68p.

Guérin H., Réounodji F., Rangé C., 2014. « De la compréhension des systèmes et dynamiques de l'élevage à la définition de mesures d'accompagnement ; les dynamiques de l'élevage ». In J. Lemoalle, G. Magrin (dir) *Le développement du lac Tchad ; situation actuelles et futurs possibles*, IRD Editions, pp. 312-369.

Guibert B., Kakiang L., 2011. Pré - identification d'interventions dans le secteur rural du Tchad central, oriental et méridional (Guéra, Wadi Fira, Ouaddaï, Dar Sila, Salamat, Moyen Chari et Mandoul), République du Tchad, AFD, IRAM.

Guichaoua Y., Pellerin M., 2017. Faire la paix et construire l'État. Les relations entre pouvoir central et périphéries sahéleennes au Niger et au Mali. *Études de l'IRSEM*, 51, 122 p.

Habibou Ibrahim, Mormont M., Stassart P.M., Boubacar Yamba, 2018. Pastoralisme et politiques développementalistes : états de lieux sur les systèmes de tenure foncière pastorale en Afrique Subsaharienne, *Vertigo - la revue électronique en sciences de l'environnement* [En ligne], Débats et Perspectives, mis en ligne le 25 mai 2018, consulté le 30 mars 2020. URL : <http://journals.openedition.org/vertigo/20165> ; DOI : <https://doi.org/10.4000/vertigo.20165>

Hallaire A., 1991. *Paysans montagnards du Nord-Cameroun. Les monts Mandara*. IRD Editions, 253 p.

Higazi A., 2015. "Mobilisation into and against Boko Haram in North-East Nigeria". In K. Tall, M. Pommerolle, M. Cahen (ed.) *Collective mobilisations in Africa*, Brill: Leiden, pp. 305-358.

Higazi A., 2020, Pastoralism and insecurity in the Lake Chad Basin: ethnography, ecology, and history. XVIIIe colloque international Méga-Tchad, le 29 janvier 2020. Communication orale.

Higazi A., Yousuf Z., 2017. From cooperation to contention: political unsettlement and farmer-pastoralist conflicts in Nigeria. London, PSRP, Conciliation resources, 20 p.

Iyébi-Mandjek O., Karpe P., Akoa S., 2015. Observatoire de l'acquisition des terres à grande échelle au Cameroun par le Fondation Paul Ango Ela. Rapport final. FPAE, 63 p.

Kandine A., 2009. *Gestion décentralisée ou locale du foncier ? Le cas du Niger*. AFD, Fiches pédagogiques, Comité technique « Foncier et développement », 4 p.

Kiari Fougou H., 2014. Impacts des variations du niveau du lac Tchad sur les activités socio-économiques des pêcheurs de la partie nigérienne. Thèse de Doctorat soutenue à l'Université Abdou Moumouni, Niamey.

Kiari Fougou H., 2020. Boko Haram, migrants forcés et conséquences économiques dans l'est du Niger. In E. Chauvin et al., *Les insécurités dans le bassin du lac Tchad. Sociétés, violences et conflits*, IRD Editions, pp. 161-172.

Kiari Fougou H., Lemoalle J., 2019. Évolution technologique et gestion d'un espace halieutique dans la cuvette nord du lac Tchad. In C. Raimond et al., *Le Tchad des Lacs. Les zones humides sahéleennes au défi du changement global*, IRD Editions, pp. 209-223

Kossoumna Liba'a N, Dugué P., Torquebiau E., 2011. Éleveurs et agriculteurs du nord du Cameroun face à la violence et aux insécurités. Entre adaptation et impuissance. *Cahiers de géographie du Québec*, vol. 55, num. 155, p. 175-195

Labonne M., Magrong P., Oustalet P., 2003. « Le secteur de l'élevage au Cameroun et dans les provinces du grand Nord : situation actuelle, contraintes, enjeux et défis ». In Jamin J.-Y., Seiny Boukar L., Floret C. (éd.) *Savanes africaines : des espaces en mutation, des acteurs face à de nouveaux défis*. Actes du colloque, mai 2002. PRASAC, N'Djaména. CIRAD, Montpellier. Cd-rom.

Lavigne Delville Ph, Saiah C., 2015. Politiques foncières et mobilisations sociales au Bénin. Des organisations de la société civile face au code domaniale et foncier. *Les cahiers du Pôle Foncier*, n°14, 64 p.

- Lavigne Delville P., Colin J.-P., Ka I., *et al*, 2017. Étude régionale sur les marchés fonciers ruraux en Afrique de l'ouest et les outils de leur régulation. Volume I, Ouagadougou, UEMOA/IPAR, 198 p
- Lemoalle J., Magrin G., 2014. *Le développement du lac Tchad : situation actuelle et futurs possibles*, IRD, 638 pages
- Lemoalle J., 2014. "La pêche : à la recherche d'une gestion intégrée", In Lemoalle J., Magrin G. (dir.) : *Le développement du lac Tchad : situation actuelle et futurs possibles*, Marseille, IRD Editions, coll. Expertise collégiale, 370-394 (clé USB).
- Levrat R., 2007. La culture cotonnière en Afrique soudanienne de la zone Franc depuis les débuts de la colonisation : l'exemple du Cameroun. Doctorat de géographie, Université Bordeaux 3.
- Lund, C., 2001. Les réformes foncières dans un contexte de pluralisme juridique et institutionnel : Burkina Faso et Niger. In Winter G., (coordonnateur) J-P. Chauveau., G. Courade., J. Coussy., M. Le Pape et M. Lévy, *Inégalités et politiques publiques en Afrique. Pluralités des normes et jeux d'acteurs*, Karthala-IRD, Paris, pp. 195-207.
- Luxereau A., Diarra M., 2002. Changement social et valorisation des produits localisés au Niger. Colloque « localiser les produits ». http://localiserlesproduits.mnhn.fr/23_Paper_LUXEREAU_A.pdf
- MacEachern S., 2018. *Searching for Boko Haram: A History of Violence in Central Africa*. New York : OUP USA. 248 p.
- Magnant J. P., 1978, Quelques grands types de systèmes fonciers traditionnels au Tchad. *Cahiers d'outre-mer*, N° 122 - 31e année, pp. 171-201.
- MAGRIN G., 1996. Crise climatique et mutation de l'agriculture. L'émergence d'un grenier céréalier entre Tchad et Chari. *Annales de géographie* 592 : 620-644.
- Magrin G., Pérouse de Montclos M.A., 2018. *Crise et développement La région du lac Tchad à l'épreuve de Boko Haram*, AFD, 292 p.
- Melchisedek Chétima, 2020. Comprendre Boko Haram à partir d'une perspective historique, locale et régionale. *Canadian Journal of African Studies / Revue canadienne des études africaines*, 14 p.
- Ministère de l'Agriculture et de l'Elevage, 2017. Cadre Juridique et Institutionnel de gestion du Foncier Rural au Niger : État des Lieux. Niger, SPCR, 117 p.
- Ministère de l'Agriculture et de l'Elevage, 2018. États généraux sur le foncier rural. Niger, SPCR, 74 p.
- Mugélé R., 2012 – Bol et ses polders : les dynamiques agricoles sur la rive nord du lac Tchad, mémoire de master 1, département de géographie, université Paris1-Panthéon-Sorbonne, 99 p.
- Mugélé R., 2013. Enjeux et conséquences de la réglementation sur le bois-énergie au Tchad. *EchoGéo* [En ligne], 26 | 2013, URL : <http://journals.openedition.org/echogeo/13620> ; DOI : 10.4000/echogeo.13620
- Mugélé R., 2015. « Les polders de la Sodelac » in Magrin G., Pourtier R., Lemoalle J., 2015. *Atlas du lac Tchad*, Paris, Passages, République du Tchad, AFD, IRD.
- Mugélé R., 2020. « Les eaux et Forêts, fauteurs d'insécurité dans les espaces ruraux au Tchad ? » In Chauvin E., Baroin C., Seignobos C., *Les insécurité dans le bassin du lac Tchad*, Actes du XVIIe colloque Méga-Tchad, Nice les 14,15, 16 juin 2017.
- Namnso U, Adegá G, Victor, O.O., 2014. Land ownership in Nigeria: Historical development Current Issues and Future Expectations. *J. of Environment and Earth Science*. Vol 4(2) : 182-188.
- OIM, 2019. Regional displacement and human mobility analysis. Displacement tracking matrix, 43 p.
- Olayoku P., A., 2014. Trends and patterns of cattle grazing and rural violence in Bigeria (2006-2014). IFRA-Nigeria epapers series, n° 34.
- Omuojine, E.O., 1999. The Land Use Act and the English Doctrine of Estate. *Journal of the Nigerian Institution of Estate Surveyors and Valuers*. 22(3): 54-56.
- Onwubiko K. B.C., 1976. *History of West Africa: 1800-Present Day (Book Two)*. Aba: Africana Educational Publishers Company.
- Ouédraogo H. 2011. Mythes, impasses de l'immatriculation foncière et nécessité d'approches alternatives, Fiche pédagogique, CTFD, AFD, MAE
- Oumarou H., Caremel J.-F., Kiari Fougou H., 2017. « En Gudun hijira » : Fuites, accueils, solidarités et reconfigurations économiques en contexte d'insécurité et d'aide humanitaire dans la région de Diffa, LASDEL,

- Oyebola A., Oyelami A., 1967. *A Textbook of Government for West Africa*. Ibadan: Educational Research Institute.
- Pérouse de Montclos M.A., 2020. Faut-il négocier avec les djihadistes au Sahel ? *Politique étrangère*, pp. 175-187.
- PCD, 2011. Plan communal de développement de Mindif, Cameroun.
- PCD, 2011b. Plan communal de développement de Koza, Cameroun.
- PCD, 2012. Plan communal de développement de Dargala, Cameroun.
- PCD, 2016a. Plan de développement communal, Commune Rurale de Chetimari, Niger, 139 p.
- PCD, 2016b. Plan communal de développement de Baga Sola, Tchad.
- PCD, 2018. Plan de développement communal replanifié, Commune Urbaine de N'guimi, Niger, 154 p.
- PDR-EN, 2013a. Rapport Étude de l'économie locale de la commune de Mindif (lot 1), programme de développement rural de la région de l'extrême-nord (PDR-EN), Cameroun.
- PDR-EN, 2013b. Rapport Étude de l'économie locale de la commune de Dargala (lot 6), programme de développement rural de la région de l'extrême-nord (PDR-EN), Cameroun.
- Raimond C., Breton C., Abouya A., Moussa A., 2010. Planification territoriale et accès aux ressources naturelles. Retour sur la démarche participative des opérations de sécurisation foncière dans le Nord-Cameroun, *Annales de géographie*, 6 (676) : pp. 639-656.
- Raimond C., Rangé C., 2015. "Les systèmes d'activités". In Magrin G., Pourtier R., Lemoalle J., *Atlas du lac Tchad*, Paris, N'Djamena, Passages, Rép. du Tchad, AFD, IRD, pp. 120-122.
- Raimond C, Rangé C., Guérin H., 2014. « La multi-activité et la multifonctionnalité, principes d'un développement pour le Lac ? ». In Lemoalle J., Magrin G. (dir.), *Le développement du lac Tchad : situation actuelle et futurs possibles*. CBLT, N'Djamena, Marseille, Expertise collégiale IRD, AFD-FFEM, Rapport de synthèse, 66 p. + Contributions intégrales des experts (CD), pp. 423-474.
- Rangé C., Lavigne Delville P., 2019. « Gestion en commun » ou accès ouvert autorisé ?, *Études rurales*, 203, URL : <http://journals.openedition.org/etudesrurales/15995>
- Rangé C., 2020. « Boko Haram, révélateur des insécurités foncières au lac Tchad (Cameroun) ? » In Chauvin E., Langlois O., Seignobos C. Baroin C., (dir), *Les insécurités dans le bassin du lac Tchad*. XVIIe colloque Méga-Tchad, IRD Editions.
- Requier-Desjardins Mélanie, 1999, « L'accès aux pâturages, une approche économique de la mobilité ». In Baroin C., Boutrais J. (eds) *L'homme et l'animal dans le bassin du Lac Tchad*, Actes de Colloque, IRD.
- RBM, 2014, L'implication de la société civile pastorale dans l'élaboration de la loi pastorale au Niger. Quels enseignements
- République du Niger, 2008. Monographie de la région de Diffa, région de Diffa, direction régionale de l'Aménagement du Territoire et du Développement communautaire.
- République du Niger, 2018. États Généraux sur le Foncier Rural, Rapport général, 74 p.
- République du Niger, 2019, Politique foncière rurale du Niger, avant-projet, version du 08 décembre 2019, 52 pages
- RESILAC, 2019a. Rapport détaillé des résultats de l'enquête initiale de données (Baseline) dans la région de Diffa au Niger, 23 p.
- RESILAC, 2019b. Rapport détaillé des résultats de l'enquête initiale de données (Baseline) dans la province du Lac au Tchad, 24 p.
- RESILAC, 2019c, Rapport détaillé des résultats de l'enquête initiale de données (Baseline) à Mindif et Dargala, dans la région de l'Extrême Nord, 2019.
- RESILAC, 2019d. Detailed report of the results of the initial data survey (Baseline) in Local Government Area –LGA) of Jere, Nigeria, 19 p.
- Rochegude A., Plançon C. (dir), 2009. Décentralisation, foncier et acteurs locaux - Fiche pays Cameroun. AFD, Comité technique Foncier et développement. <http://www.foncier-developpement.fr/publication/cadre-legislatif-et-institutionnel-du-cameroun/>
- ROSELT, 2009. État de référence des observatoires de Diffa, Zinder, azaAad et Torodi-Tondikandia, OSS, 131 pages.

- Saïbou I., 2010. *Les coupeurs de route. Histoire du banditisme rural et transfrontalier dans le bassin du lac Tchad*, Karthala, Paris.
- Seignobos C., 2000. « Sorghos et civilisations agraires ». In Seignobos C. et O. Iyébi-Mandjek (dir.), *Atlas de la Province Extrême-Nord Cameroun*, IRD, Paris.
- Seignobos C., 2010. Une négociation foncière introuvable ? L'exemple du Mayo-Rey dans le nord du Cameroun. *Annales de géographie*, 6 : 679, pp. 657-677.
- Seignobos C., 2018. Chronique d'un siège (2). Boko Haram dans ses sanctuaires des monts Mandara et du lac Tchad. *Afrique contemporaine*, 265 : 99-115.
- Seignobos C., 2020. *La région de Maroua. Chronique d'une déforestation annoncée*, XVIIIe colloque international Méga-Tchad, le 29 janvier 2020. Communication orale.
- Seignobos C., Teyssier A., 1997. Enjeux fonciers dans la zone cotonnière du Cameroun. Observatoire du foncier n°1. *Projet de développement paysannal et gestion de terroirs*, 51 p.
- SP/CNCR, 2013, *Questions-réponses pour mieux comprendre le Code Rural*. Edition 2013.
- SP/CNCR, 2018, *État des lieux de la gouvernance foncière au Niger soumis par le comité technique en charge de la préparation des états généraux du foncier rural*, 96 p.
- Sonkoué M et Kossoumna Liba'a N., 2020, *Rapport d'étude sur les tenures foncières coutumières au Cameroun : terres communautaires et terres coutumières*, Plateforme SNE Cameroun (Stratégie Nationale d'Engagement sur la gouvernance foncière au Cameroun), 55 p.
- Tchangari M., Diouri I., 2016. *Convoitises foncières dans le bassin du lac Tchad au Niger*, Alternative Espace Citoyen, décembre 2016, 45 p.
- Teyssier A., Hamadou O., Seignobos C., 2000. *Expériences de médiation foncière dans le Nord-Cameroun*. <http://www.fao.org/3/y8999t/y8999t0l.htm>
- Thébaud B., 2002. *Foncier pastoral et gestion de l'espace au Sahel : Peuls du Niger oriental et du Yagha burkinabé*. Karthala.
- UN-Habitat, 2018, *Women and land in the muslim world: Pathways to increase access to land for the realization of development, peace and human rights*.
- Van Santen J., 2002. « Règles d'accès au domaine foncier et occupation du sol dans un contexte de migration : le cas de Mafa Kilda ». In Jamin J.Y., Seyni B., Floret (eds.) *Savanes africaines : des espaces en mutation, des acteurs face à de nouveaux défis*. Actes du colloque, mai 2002, Garoua, Cameroun. Prasac, N'Djamena, Tchad – Cirad, Montpellier, France.
- Watang Ziéba Félix, 2019. « Périurbanisation, enjeux de la préservation des terres agricoles et réponses paysannes autour de Maroua, Cameroun ». In Tchékoté Hervé, Yémmafouo Aristide et Mopou Moïse (sous la direction), 2019. *Complexification des nouveaux enjeux fonciers en Afrique subsaharienne. Quelques expériences de l'Afrique du Centre et de l'Ouest*. Editions CLE, Yaoundé, pp. 109-120.
- Ya'u Y. Z., 2000. "The Youth, Economic Crisis and Identity Transformation. The Case of 'Yan daba in Kano". In Jega, A. (ed) *Identity Transformation and Identity Politics under Structural Adjustment in Nigeria*, Nordiska Africa institute, Uppsala, Sweden/The Centre for Research and Documentation, Kano, p.161.

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Appendix 1: List of land tenure texts by country

Nigeria

Treaty of Cession (1861)
Land Proclamation Ordinance (1900)
Land and Native Rights Act (1916),
Niger Lands Transfer Act (1916),
Public lands Acquisition Act (1917),
Native lands Acquisition Act (1917),
State Lands Act (1918)
Town and Country planning Act (1947)
Land Tenure Law (1962)
The Land Use Act (1978)

Niger

- Constitution of 25 November 2010 ;
- rural and pastoral codes 2010
- Civil Code 114

Legal texts

- Law n° 60-28 of 25 May 1960 fixing the modalities for the development and management of agricultural developments carried out by the public authorities;
- Law n° 60-029 prohibiting tithing and Ashoura ;
- Law n° 61-30 of 19 July 1961, confirming and expropriating customary land rights in the Republic of Niger;
- Law n° 61-05 of 27 May 1961 setting a northern limit for crops, amended and completed by Law n° 2008-37 of 10 July 2008;
- Law n° 61-06 of 27 May 1961 establishing as a pastoral modernisation zone, the Sahelian Livestock Breeding zone located north of the legal limit of crops;
- Law No. 62-007 of 12 March 1962 abolishing privileges acquired on chieftaincy land ;
- Law no. 61-37 of 24 November 1961, regulating expropriation in the public interest and occupation, amended and supplemented by Law no. 2008-37 of 10 July 2008;
- Law n° 64-16 of 16 July 1964 incorporating into the private domain of the State the land and buildings registered as undeveloped or abandoned;
- Law n° 98-07 of 29 April 1998, fixing the hunting and wildlife protection regime;
- Law n° 98-56 of 29 December 1998 on the framework law on environmental management, in particular articles 88 and 93;

114 Nigerian version in force. It lists in particular the land in the public domain, also specifies the different conditions for acquiring ownership of land;

- Law n° 2000-15 of 21 August 2000 creating the Regional Chambers of Agriculture of Niger ;
- Law No. 2001-023 of 10 August 2001 on the creation of administrative districts and local authorities;
- Law n° 2001-032 of 31 December 2001 on the orientation of the regional planning policy, in particular articles 31, 36, 51 to 60;
- Law No. 2004-040 of 8 June 2004 on the forestry regime;
- Law n° 2004-050 of 22 July 2004 fixing the organisation and jurisdiction of the courts in the Republic of Niger, in particular articles 55 to 57, 88 and 92 to 94;
- Law n° 2004-048 of 30 June 2004 on the framework law on livestock farming;
- Law No. 2005-26 of 15 November 2005, on the finance law for the 2006 financial year¹¹⁵;
- Law n° 2006-26 of 9 August 2006, amending Ordinance n°93-16 of 2 March 1993 on the Mining Law, supplemented by Ordinance n°99-48 of 5 November 1999;
- Law 2007-01 of 31 January 2007 on the Oil Code ;
- Law No. 2015-01 of 13 January 2015, on the status of traditional chieftaincy in the Republic of Niger Ordinance No. 97-05 of 17 January 1997 instituting documents for provisional and operational urban planning as well as tools for urban land use, in particular Articles 2 and 3;
- Law n° 2017-20 of 12 April 2017, setting the fundamental principles of town planning and urban development, repealing Law n° 2013-28 of 12 June 2013, setting the fundamental principles of town planning and urban development;

Ordinances

- Order No. 59-113/PCN of 11 July 1959, regulating land in the private domain of the State¹¹⁶;
- Order n° 84-06 of 1st March 1984 on the regime of associations, amended by law n° 91-006 of 20th May 1991 and order n° 96-019 of 19th May 1996;
- Order n° 92-030 of 8 July 1992 adopting the document entitled "Guiding Principles of a Rural Development Policy for Niger";
- **Order 93-015 of 2 March 1993 laying down the guiding principles of the Rural Code**
- Ordinance n° 2010-09 of 1st April 2010 on the Water Code in Niger ;
- Order n°2010-54, of 17 September 2010, bearing the General Code of Territorial Communities of the Republic of Niger and the subsequent amending texts¹¹⁷;
- Order n° 2010-029 of 20 May 2010, relating to Pastoralism ;

Decrees

- Decree of 29 September 1928, regulating the public domain and public utility easements in French West Africa;
- Decree of 26 July 1932, on land reorganisation in French West Africa. It institutes in particular the legal regime of land registration;

¹¹⁵ In particular, it institutes "*a simplified formality for the attribution of land titles*". The simplification results in particular from the removal of the prior development clause which formed the basis for the granting of land titles under the terms of Order No. 59-113/PCN of 11 July 1959 relating to the private domain of the State.

¹¹⁶ In particular, it decides on the modalities of land management in the private domain, notably through the granting of urban, rural and industrial concessions.

¹¹⁷ The Code Général des Collectivités Territoriales repeals and replaces Act No. 2002-012 of 11 June 2002, determining the fundamental principles of the free administration of the regions, departments and municipalities and its subsequent amending texts, Act No. 2002-013 of 11 June 2002, transferring powers to the regions, departments and municipalities and Act No. 2002-017 of 11 June 2002, determining the financial regime of the regions, departments and municipalities (Article 333, Code Général des Coll. Terr.).

- Decree n°71-33/MF/ASN of 16 February 1971, on the transfer and cession of real estate to the public and private domain of the districts and towns and communes of the Republic of Niger. It operates a first measure of land decentralization for the benefit of local authorities.
- Decree n° 61-159/MER of 25 July 1961, establishing the pastoral modernisation sectors of Tahoua;
- Decree No. 61-160/MER of 25 July 1961, establishing the pastoral modernisation sectors of Agadez ;
- Decree No. 97-006/PRN/MAG/E of 10 January 1997 regulating the development of rural natural resources;
- Decree No. 97-007/PRN/MAG/E of 10 January 1997 laying down the status of the terroirs where pastoralists are based;
- Decree No 97-008/PRN/MAG/EL of 10 January 1997 on the organisation, powers and functioning of the institutions responsible for applying the guiding principles of the Rural Code;
- Decree No. 97-367/PRN/MAG/EL of 2 October 1997 determining the - Decree No. 2000-369/PRN/ME/LCD of 12 October 2000 on the Responsibilities, Organisation and Operation of the Environmental Evaluation and Impact Assessment Office;
- Decree No. 2000-397/PRN/ME/LCD of 20 October 2000 on the administrative procedure for assessing and examining environmental impacts;
- Decree No. 2000-398/PRN/ME/LCD of 20 October 2000 determining the list of activities, works and planning documents subject to environmental impact studies;
- Decree No. 2016-623/PRN of 14 November 2016, on the organisation of the Government and the powers of the Ministers of State, Ministers and Ministers-Delegate;
- Decree n° 2016-624/PM of 14 November 2016, specifying the attributions of the members of the Government ;
- Decree n°2013-28/PRN/MEL of 23 January 2013 determining the practical details of the national inventory of pastoral areas and pastoral resources;

Orders

- Order N° 013 /MDA/CNCR/SP of 19 April 2006 on the organisation, attributions and operating methods of the Regional Permanent Secretariats of the Rural Code;
- Order N° 098 /MDA/CNCR/SP of 25 November 2005 on the organisation, attributions and functioning modalities of the land commissions of communes, villages or tribes.

Chad

Codes

Civil Code of 1958

General Tax Code version 2006

Legal texts

Law N°003/PR/2005 of 7 January 2005, on the general State budget for 2005

Law N°001/PR/2001 on the General State Budget for 2001

Law N°23/PR/67 of 22 July 1967, on the status of State property

Law N°24/PR/67 of 22 July 1967, establishing land ownership and customary rights.

Law N°25/PR/67 of 22 July 1967 on the limitation of land rights

Ordinances

Order N°32/PR/PM/86 of 31 December 1986 on the general State budget

Decrees

Decree of 20 July 1900 and decree of 24 July 1906 creating the system of land registration and the introduction of land registers as part of a policy to organise land ownership;

Decree of 8 October 1925 consolidating customary rights allowing holders to have it recorded by the issue of a customary land tenure booklet;

Decree of 20 March 1955 on the reorganisation of state land ownership, which gives the customary land register the value of a genuine title;

Decree N°186/PR/67 of 1 August 1967, implementing Law 24

Decree N°187/PR/67 of 1 August 1967, implementing Law 25

Decree N°188/PR/67 of 1 August 1967, implementing Law N°23

Decree No. 630/PR/MJ/96 of 22 November 1996 on the status of notaries

Decree N°737/PR/MFM/DG/SCA/85 on compulsory insurance of risks relating to the construction industry.

Decree N°211/PR/MFM/86 on the distribution of revenues from registration, transcription, recording and cancellation of mortgages

Decree N°236/PR/MATUH/04 of 31 May 2004 on the creation, attributions and functioning of the local town planning commission

Decree N°1310/PR/PM/MATUH/2008 of 23 October 2008 on the creation, attribution and functioning of the National Commission for Urban Planning.

Decree N°1312/PR/PM/MATUH/04 of 23 October 2008 on the creation, attributions and functioning of the Commission for the allocation of land in urban areas.

Decree N°1313/PR/PM/MATUH/08 of 23rd October 2008 on the creation, attribution and functioning of the urban planning commission for the city of N'Djaména

Decree N°514/PR/PM/MATUH/2006, establishing the organisation chart of the Ministry of Regional Planning, Town Planning and Housing

Cameroon

Legal texts

Law of 25 June 1902 relating to the emphyteutic lease;

Law N°19 of 26 November 1983 amending the provisions of Article 5 of Ordinance N°74-1 of 6 July 1974 fixing the land tenure system;

Ordinances

Order N°74-1 of 06 July 1974 fixing the land tenure system and which determines the framework for land allocation;

Ordinance N°74-2 of 06 July 1974 fixing the state property regime;

Decrees

Decree N°74/412 of 24 April 1974 delimiting the national agro-pastoral development perimeters and defining the status of the said land;

Decree N°76/165 of April 27, 1976 fixing the conditions for obtaining a land title;

Decree N°76/166 of April 27th 1976 fixing the management modalities of the national domain;

Decree N°84/311 of 22 May 1984 on the modalities of application of law n°80/22 of 14 July 1980 on the repression of land property offences.

Decree No. 2005/481 of 16 December 2005 amending and supplementing certain provisions of Decree No. 76/165 of 27 April 1976 laying down the conditions for obtaining land title.

Decree no. 2014/3210/PM of 29 September 2014 setting the conditions for granting leases and the terms of payment of the state fee in economic zones.

Annex 2: List of interviews conducted during the week of 17 February (Chad, Cameroon and Niger) and 24 February 2020 (Nigeria) with land management stakeholders in the nine territories

List of land management stakeholders met by the country experts during the week of 17 February (Chad, Cameroon and Niger) and 24 February 2020 (in Nigeria).

Niger

Interviews organised in Diffa

Commune of Chetimari :

- The Mayor ;
- Representative of COFOCOM ;
- 3 elected councillors from the 3 sample villages ;
- 2 representatives per economic activity: crop farmers, livestock farmers and fishermen ;
- 2 representatives of the traditional chieftaincy.

Commune of N'Guigmi :

- The Mayor ;
- Representative of COFOCOM ;
- 3 elected councillors from the 3 sample villages ;
- 2 representatives per economic activity: crop farmers, livestock farmers and fishermen ;
- 2 representatives of the traditional chieftaincy.

Nigeria

Seven group discussions were held with around 40 participants at Maiduguri Metropolis from 25 to 28 February 2020. They were organised separately for crop farmers, fishermen and livestock farmers to obtain information on the specific needs of each category.

- a group of 7 livestock farmers;
- two groups of 6 livestock farmers;
- a group of 7 fishermen;
- a group of 6 fishermen;
- a group of 6 female crop farmers;
- a group of 6 male crop farmers.

Chad

Interviews organised in Bol and Baga Sola.

Commune of Bol :

- The interim canton chief of Bol (the incumbent and his secretary being absent during our stay in the field) ;
- The prefect of Mamdi department ;
- The technical director of ANADER (EX-SODELAC) ;
- The head of the ANADER rural development department ;
- The president of the court of Bol ;
- The 2nd deputy mayor of the city of Bol ;
- The inspector of water and forests of Mamdi department ;
- Mérom village chief;

- Agricultural representative from Mérom ;
- Brandal village chief;
- Kirfou Dolé village chief;
- President and deputy president of the Al-Chafak group (aid to the suffering)

Canton Nguelea 1 :

- Mayor of Baga Sola ;
- Head of the environmental sector of Kaya department ;
- Head of the Kaya livestock sector ;
- Prefect of Kaya ;
- Sub-prefect from Baga Sola ;
- Village chief from Bibi dam ;
- Village chief from Tchingam ;
- Village chief from Boulanda
- Justice of the Peace from Baga sola ;
- Head of the Kaya Anader sector
- Head of the ANADER sector in the Fouli department (passing through Baga Sola for work with his colleague from Kaya) ;
- Head of the nautical brigade section.

Cameroon

Municipality of Koza :

- The Deputy Prefect of the district of Koza
- An elite working at the Sous-Prefecture and recommended to us by the Deputy Prefect
- The Head of the Canton
- The ACDES (Agent Communal de développement économique et social de la Commune)
- The managers in charge of the Regies exploiting the private domains of the State (ECSC (CFJA, SODECOTON, MINADER)
- Nuns living in Koza
- Teachers from the Catholic Private College of Koza

In the communes of Mindif and Dargala :

- The District Delegate for Agriculture and Rural Development, Rapporteur of the commission for the settlement of land disputes and the management of the national estate, chaired by the Sub-Prefect
- The District Delegate for Livestock, Fisheries and Animal Industries
- The Chief Forester
- ACDES (Agent Communal de développement économique et social de la Commune) and RESILAC focal point in Mindif
- The traditional chiefs of Modjombodi and Sabongari
- An onion producer in Matfaï
- The ASGIRAP Programme Facilitator
- The village chief of Yoldéo
- The Chief of Dargala centre
- ACDES and RESILAC focal point in Dargala

Annex 3: Assistance requested per commune

Responses by % of respondents per municipality

	Micro-credit	Support	Security	Land development	Roads	NR**	Professionalization	Other
Maiduguri	79,5	94,9	71,8	30,8	17,9	5,1	25,6	0,0
Jere	89,6	85,8	63,2	50,0	21,7	2,8	35,8	0,9
Chetimari*	98,4	60,7	100,0	55,7	62,3	78,7	37,7	21,3*
N'guimi	81,6	50,0	81,6	18,4	2,6	0,0	5,3	2,6
Nguelea	45,2	83,3	71,4	92,9	64,3	100,0	2,4	0,0
Bowl	64,3	90,5	61,9	26,2	35,7	0,0	59,5	0,0
Koza	100,0	50,5	58,9	18,9	18,9	16,8	7,4	0,0
Mindif	81,8	54,5	0,0	27,3	13,6	6,8	4,5	11,4
Dargala	89,7	72,4	13,8	48,3	0,0	0,0	0,0	10,3
Grand total	84,7	70,6	60,9	40,3	27,2	23,0	21,8	4,6

* : for the commune of Chetimari, the category "Other" includes only health needs (dispensary, maternity, other).

** : improving rules related to land and natural resources

