# How have decentralised natural resource management institutions evolved over 20 years?

## Summary of findings from Mali, Niger, Sudan and Ethiopia

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## Partner organisations

This research has been carried out with Sahel-Eco, Mali; Kou Tayani/CRAC-GRN Niger; SOS Sahel Sudan; and SOS Sahel, Ethiopia. The approach of these organisations has been to support vulnerable communities in high risk, low rainfall regions, to strengthen rights over land and forests, and find long-term, sustainable and peaceful solutions to the poverty and marginalisation they experience. The "parent body" SOS-Sahel UK was a UK-based Non-Governmental Organisation, established in 1983, working with local African organisations to support herders and farmers in Africa's drylands. A pioneer of the localisation agenda, their country programmes in Mali, Niger, Sudan and Ethiopia have since 2005 been transformed into independent national NGOs, named above. SOS-Sahel UK then shut its activities in 2019.

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- Building capacity to act on the implications of changing ecology and economics for equitable and climate resilient development in the drylands.

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Two decades ago, legal provisions gave local institutions rights to manage natural resources in four dryland African countries: Mali, Niger, Sudan and Ethiopia. This report examines how resilient such decentralised institutions have been, under rapidly changing circumstances, and notes common lessons learned. Local management rights remain largely unsupported by government. The state has further complicated land management challenges by allocating large holdings to investors. Changing politics, insecurity, demographic shifts and climate have exacerbated stresses, many of which have distant root causes. Neighbouring conflicts have driven migration by people and animals. Increasing wealth inequalities and shifting livelihood strategies have eroded farming and herding communities' common interests.

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# Summary

The research described in this paper explores changes within natural resource institutions in Mali, Niger, Sudan and Ethiopia as they have responded to shifting politics, climate, security, demography and economy over 20 years. It revisits the project sites of a UK-based non-governmental organisation, SOS-Sahel UK, which had established field operations in four countries in the 1980s and 90s. Researchers returned in 2019 to collect data and describe local and wider forces affecting land and natural resource management. This research forms the second phase of an AFD-IIED partnership examining conflict over land, water and grazing in dryland Africa. The first phase explored and challenged the simplistic analysis lying behind much recent comment about conflict in Africa: neither recent history nor surveys of armed violence support 'farmer-herder conflict' as a root cause of current violence.

The research field-sites examined here experience low and variable rainfall of 250–700mm per year, which is typical of the semi-arid Sahelian zone. Over the past two decades, rainfall has increased slightly in Mali and Niger, but fallen slightly in Sudan and Ethiopia. Variability has increased markedly at all sites, with rain falling in larger, more intense storms, heightening run-off and soil erosion risks. Where temperature data are available, they show a rising trend. At each project site, SOS-Sahel UK worked alongside state and community organisations with a shared commitment to decentralised community-based natural resource management. In every case, legislation had opened up new opportunities for promoting local land and resource management. Once SOS-Sahel UK's initial involvement ended, project activity continued to varying extents.

While conflicts and their causes vary across the region, common factors are fuelling tensions, with increasingly deadly results:

- The state has often complicated the management challenges faced by local institutions, by making large-scale land allocations to investors, and supporting partisan local politics.
- Woodland and grazing areas are particularly vulnerable to people seizing land for farming and revenue generation.
- Falling complementarity between livestock and cropping systems means common interests and cooperation between farmers and herders have eroded.
- Policies have ignored pastoral herders and their need for mobility and access to pasture, forests and croplands after harvest.
- Many rural people (both pastoralists and farmers) are caught up in larger struggles, with ethno-politics and jihadist groups exploiting the vacuum created by state failure.
- Increasing wealth inequalities within pastoral groups, and concentration of animal wealth in fewer households, are eroding common interests in maintaining collective range and water resources, as production strategies and objectives diverge.

The research shows that there are severe limits to what can be achieved within a project framework of 5–10 years. The projects SOS-Sahel established created a valuable platform for people to meet and discuss management of their shared woodland and grazing resources. But these institutions' power, authority and effectiveness relied in part on the technical and financial support external funding provided. Such decentralised institutions need formal recognition from state authorities for carrying out their responsibilities, and continued funds for investment and ongoing operations if they are to fulfil their promise. In each locality, the withdrawal of project support has had adverse impacts on local institutions' ability to take forward their activities. It is also clear that the interests, history and political economy of each locality are complex, deep and rarely understood well by any project intervention. Consequently, there are limits to what project investments can achieve. More thought is required to work within a 20 to 25-year time horizon and understand what the past can teach in terms of future pathways.

# 1 Introduction

This working paper documents the strength and resilience of decentralised natural resource management institutions in dryland Africa over time, and their capacity to address conflict between different users in rapidly changing circumstances. It forms Phase 2 of IIED's work for the Agence Française de Développement (AFD) on farmer-herder conflict in sub-Saharan Africa.

This paper builds on a broad overview document, which formed Phase 1 of the research study (Krätli and Toulmin 2020). Responding to heightened concern over rising levels of conflict and antagonism between predominantly herding groups and more settled farming peoples across a wide band of dryland Africa, Phase 1 aimed better to understand the root causes of such conflicts, which are widespread in many of the countries where AFD works. It also aimed to identify examples of constructive engagement in their resolution, to map out pathways to more peaceful outcomes across the region.[1]

In Phase 1, we outlined trends in conflict levels, how conflicts unfold, the forms they take, the actors involved and their consequences in terms of loss of life, property and transformed livelihoods. In its analysis of the underlying forces at work, the report shows how conflicts contribute to, and are impacted by, wider national and international processes of insecurity, religious extremism and uneven economic development.

Phase 1 also identified several locations where initiatives had been undertaken to reduce tensions and clashes between groups, such as participatory forest management projects in Mali, Niger, Sudan and Ethiopia. These projects were originally set up in the late 1980s/early 1990s by SOS-Sahel UK, a UK charity promoting bottom-up management of land and forests in the Sahel that has since decentralised its operations to autonomous organisations in the four countries, as described on page 2. During the course of its project activities, it soon became clear that pastoral groups had not been properly integrated into participatory forest, woodland and grazing planning and management.

So, in 1999–2001, IIED, SOS-Sahel UK and the Near East Foundation carried out supplementary work to assess the potential for shared management of common property resources (SMCPR) in the four countries, by finding mechanisms to bring pastoral herders into the process. At this time, all four countries illustrated promising approaches to establishing and strengthening shared decentralised management systems for common property resources and easing conflict between user groups.[2]

[1] AFD has supported major programmes to address pastoral development in West Africa, such as : Projet Elevages et Pastoralisme intégrés et sécurisés en Afrique de l'Ouest (PEPISAO) and support to the Programme Régional d'Appui au Pastoralisme au Sahel (PRAPS), Pastoralism and Stability in the Sahel and Horn of Africa (PASSHA), Programme Régional de Dialogue et d'Investissement pour le Pastoralisme et la Transhumance au Sahel et dans les pays côtiers d'Afrique de l'Ouest (PREDIP), and Programme d'investissement en faveur de l'élevage dans les pays côtiers (PRIDEC).

The main objectives of the SMCPR project were to:

- Document and disseminate the experiences of institutional mechanisms attempting to regulate competing claims and practices relating to the use of common resources in the Sahel, and
- Promote learning and exchange among those who are interested in the practices and policies affecting resource management in dryland Africa (see Box 1).

For Phase 2 of the research study, AFD asked IIED to document the evolution of natural resource agreements and institutions in the four case study sites – the original SOS-Sahel UK locations. The aim was to compare how institutions have coped with political, demographic, environmental, climate, security and economic changes over the 20 years since the SMCPR work began, paying attention to what – if any role – women and youth have played in conflict management. The study findings would allow broader conclusions to be drawn to inform AFD's work.

To carry out this work, IIED commissioned in-country research collaborators to collect data from the field sites on the multiple changes in climate, politics, security, demography and legislation that have taken place over the last 20 years and to describe local and wider impacts on land and natural resource management. Insecurity was a major challenge to this work, limiting the time available for research in the field and making it difficult for the research teams to contact pastoral communities for discussion, particularly in Mali.

Research teams in the four countries carried out and presented in each country report:

- Documentary research and inventory of materials, especially project documents and unpublished research
- Analysis of political, legal and institutional changes, such as new legislation affecting land and forest rights, decentralisation, political shifts and broader conflicts
- Demographic information for human and livestock numbers where they exist, and
- Perceptions from the field as regards the viability of local institutions, shifts in rainfall and land productivity, and effectiveness of mechanisms for resolving disputes, through a range of interviews and visits to forest areas.

This synthesis report draws from the four country reports, and presents a comparison of changes from each case study site (Abduba, Y. 2019; Khatir and Haroun, 2019; Diakité, Gana, and Dembélé 2019; Lawan Sani and Vogt 2019).

## BOX 1. MANAGING THE COMMONS

"What are the commons, how should they be managed, and by whom? These critical questions arise in the current wave of decentralisation and tenure reform sweeping many Sahelian states. Governments are passing new legislation to devolve the responsibility for managing natural resources to local communities, but despite growing awareness of the vital role of the commons in local livelihood systems, there is still some resistance to transferring full management of their use to the communities that depend upon them. Some policy makers are doubtful as to whether these areas can be properly managed by community-based organisations, and it is still believed in some quarters that privatisation or state control are the only means of preventing the degradation of resources that are customarily held in common. The alternatives, which range from full local control to joint management by the community and the state, are relatively new and untested.

"There are no simple solutions or blanket remedies that can serve as models for managing common property resources, whose very nature, particularly in highly diverse and dynamic environments such as the Sahel, require processes that can be tailored to suit specific circumstances. However, as local organisations and projects attempt to identify institutional mechanisms to regulate competing claims and practices relating to the use of common resources, it is essential that their experiences are documented and disseminated in order to develop more effective systems for managing resources in the Sahel.

"This regional action-research programme on the shared management of common property resources in the Sahel (SMCPR) aims to promote learning and exchange among those who are interested in the practices and policies affecting resource management in dryland Africa."

Source: Hesse and Trench, 2000

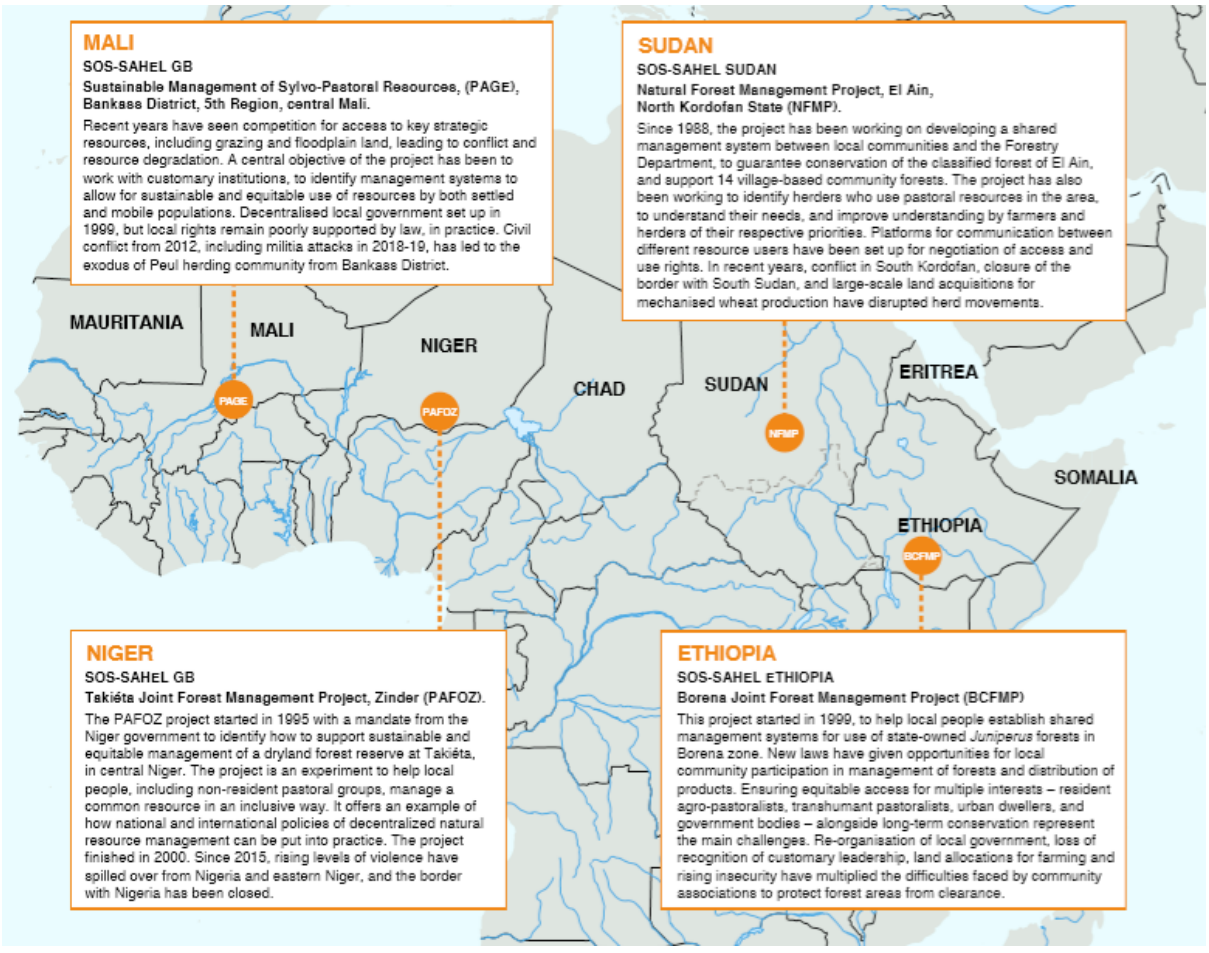
[2] For a summary of the sites, see Hesse and Trench (2000).

# 2

# The study sites

This section provides an overview of the four case study sites in Mali, Niger, Sudan and Ethiopia. Each case study covers one of the four participatory forest management projects set up by SOS-Sahel UK: the Takiéta Joint Forest Management Project in Niger, the Natural Forest Project in Sudan and Borena Joint Forest Management Project in Ethiopia – both of which cover several community forest sites – and the Sustainable Management of Sylvo-Pastoral Resources Project in Mali, which supports a set of customary associations in one district (see Figure 1).

Figure 1. The four study sites



From its foundation in the mid-1980s, SOS-Sahel UK had a strong commitment to supporting decentralised community-based natural resource management in all four case study areas, working alongside state and community organisations. In each study area, SOS-Sahel UK set up some kind of management organisation – with various levels of formalisation – to represent community interests in land and forest management. These ranged from structures based on traditional bodies to more formal ones that hold regular elections, meetings and an annual assembly. In all the countries, changes to legislation created new opportunities for promoting local control and management of land and natural resources. Support for the activities beyond the project end and the consequent withdrawal of SOS-Sahel UK and its in-country partners from the case study areas has also varied, as we explore in Section 4.

## 2.1 Ethiopia

**Borena Joint Forest Management Project, Oromia State**

**Area:** 69,000 hectares across ten forests in three districts – Arero, Negelle, and Yabello.

**Rainfall:** 450–800mm. Highly variable, with slight increase in volume over 20 years.

**Population:** 2.5% average growth since 1999, rising urbanisation and influx of people from elsewhere.

**Status of forest areas:** SOS-Sahel UK and Oromia State Forest Department agreed a joint forest management approach in 1999. Today, the forests fall under the Oromia Forests and Water Enterprise, an autonomous organisation under government authority, which has only one staff member in the Borena area.

**Political events:** The federal government was established after victory by the Ethiopian People's Revolutionary Democratic Front over the Derg in 1991, with a new Constitution agreed in 1995 and new states established based on ethnic identity. Subsequently, local government has been reorganised, and new units and boundaries established. Several thousand refugees fleeing from conflict further south have resettled in the Borena Zone over the last decade.

The Borena Community Forest Management Project established by SOS-Sahel UK (now SOS Sahel Ethiopia) aimed to support forest areas in three districts to conserve the remaining areas of juniper forest. Activities included strengthening local natural resource management organisations, securing common property rights for local users and collaborating closely with the national forest agency to promote participatory forest management.

Before the forest project was established, illegal forest settlers stripped some areas of trees to create farmland and supply fuel wood to urban centres. The forests' proximity to towns, army barracks and growing settlements put further pressure on the remaining resources for poles, construction timber, firewood and charcoal. Each of the three sites continues to lose forest cover to tree felling and land clearing for farming.

When the project was established in 1999, the traditional Borena authority still retained significant power. The project worked through the traditional Borena *gada* institution, a generation-based management structure. But the country's regionalisation along ethnic lines has eroded the traditional powers of local institutions, while local and state-level government's lack of support for traditional institutions to manage land and forests means there is no recognised land manager in the Borena Zone.

The establishment of new state structures transferred land claimed by Borena elders to the neighbouring Somali state, which confirmed the Borena belief that government officials have shown unfair favouritism towards adjacent Somali clans. Increasing conflict and the presence of armed groups further aggravate the problems. Borena traditional leaders also complain that federal and state administrations and the younger generations have increasingly refused to recognise the power of the *gada*, which has adverse consequences for their ability to exert their authority and sanction infractions.

## 2.2 Mali

**Sustainable Management of Sylvo-Pastoral Resources Project, Bankass Cercle, 5th Region**

**Area:** *Cercle* (district): 9,054km$^2$

**Local organisations:** Four local traditional Dogon (settled farmers) associations and two natural resource management coordination platforms.

**Rainfall:** 400–700mm, but highly variable.

**Population:** Near doubled from 184,000 in 1999 to 354,000 in 2018, but there has since been an exodus of the pastoral herding population.

**Status of forest areas:** The 2004 Law recognised the creation of associations, giving them legal status. But local conventions for natural resource management remain poorly supported by law.

**Political events:** Decentralised elected local government was established in 1999, giving greater political space for local initiatives. The Pastoral Code was agreed in 2003, providing greater legal protection for pastoral groups to access grazing resources. There has been civil conflict since 2012, including attacks between rival settled farmer and herder militia groups, especially in Bankass *Cercle*.

SOS-Sahel UK (later Sahel-Eco in Mali) supported four local structures based on traditional institutions for managing land and natural resources, among the Dogon, who are settled farmers. Sahel-Eco also established a *cercle*-level platform to bring together the different associations dealing with natural resource management and pastoral herding, local government structures and government technical services to learn from each other, and encourage a coordinated approach across the district.

Bankass District is a densely populated area of central Mali, which has seen significant population growth over the last 20 years, amongst the settled Dogon farming population. The outbreak of civil and jihadist conflict from 2012 has increasingly spread into the district and led to setting up of rival militia groups, responsible for the massacre of Peul herders in the village of Ogossagou in 2019, and 2020, and subsequent reprisals.

## 2.3 Niger

**Takiéta Joint Forest Management Project, Takiéta Forest Reserve, Zinder Region**

**Area:** 6,720 hectares

**Rainfall:** Average 250–400 mm, but highly variable.

**Population:** More than doubled from 1.9 million in 1998 to 4.4 million in 2018.

**Status of forest areas:** The colonial administration established the Takiéta Forest Reserve in the 1950s on hard-packed, high-runoff clay soils that were less suited to agriculture than surrounding sands. From 1995, the government handed management of the forest reserve to the local Kou Tayani Association.

**Political events:** Elected local government established in 2002, with three communes covering the Takiéta area, set up after Kou Tayani established. Since 2015, there have been rising levels of conflict spilling over from Nigeria and eastern Niger.

SOS-Sahel UK became involved in the mid-1990s with the aim of strengthening the local management association, re-named Kou Tayani Forest Management Association in 1998 and officially recognised by government in 2000. This association had the aim of preserving the classified forest and generating enough income from woodland activities to support community-based forest management. Between 1995–2000, SOS-Sahel UK held a series of consultations and workshops to ensure a common understanding among those elected to the local management structure. The project set up three rural woodfuel markets in 1998, managed by the Kou Tayani Association, to control commercial offtake from the forest, and earn income. The Kou Tayani Association was established as a formal organisation, with an annual assembly and regular election of village representatives, with formal responsibility for managing the Takiéta forest.

# 2.4 Sudan

**Natural Forest Management Project, El Ain, North Kordofan**

**Area:** 2,462 hectares (5,859.8 *feddan*) covering 14 villages

**Rainfall:** Annual average 350mm, but high variability between 120–635mm. No clear trend in average rainfall since 2000 in this semi-arid area.

**Population:** No up-to-date population data available for the area but it is likely that there has been a yearly natural increase of 2.5%, plus incoming herders and internally displaced people (IDPs) from further south.

**Status of forest areas:** 14 community forests were registered under the 1986 Forest Act, with ownership and management rights transferred to local people.

**Political events:** The new national boundary for South Sudan established in 2011, consequent shifts in herd movement, and large-scale land allocations made to commercial farmers and put under mechanical cultivation, have all disrupted long-standing migratory north-south routes for livestock herds. Conflict in South Kordofan and in South Sudan have also led to large-scale inflows of people (including IDPs) and animals.

In the early 1990s, SOS-Sahel UK (later SOS-Sahel Sudan) agreed a joint approach with the National Forest Corporation (FNC) to put participatory forest management into practice in the El Ain Forest Reserve, North Kordofan. From 1991–1999, the project attempted to rehabilitate degraded areas and the hard clay soils, giving local people subsidies and incentives (such as food for work) to use micro-catchment techniques for re-establishing trees and shrubs.

Communities interested in registering their natural resources put themselves forward under a gazetting procedure whereby SOS-Sahel UK covered the costs of land registration, which at the time was a time-consuming, four-year process of surveys for registering and getting a formal certificate for community forest land. A quicker, more decentralised procedure has subsequently been put in place, which is cheaper and more efficient. The project enabled 14 villages to register and gazette their community forests and then establish a management plan.

# 3

# Changes observed in the study areas

## 3.1 Climate and rainfall

All the field sites are in areas of low rainfall with high variability. On average, they get 250–700mms per year, which is typical of the semi-arid Sahelian zone. Over the last 20 years, rainfall totals have increased slightly in Mali and Niger; while in Sudan and Ethiopia, they have shown a slight decrease. At the same time, variability has increased, with rain falling in larger, more intensive storms, bringing heightened risks to soils from erosion and run-off. Temperature data are only available for Sudan, which shows a significant rising trend over the last 20 years.

## 3.2 Politics and insecurity

All four case study countries have seen major political change, which has had consequences for effective local management systems.

In Ethiopia, the federal government established a set of regional, ethnically based states following the constitutional reforms of 1995. The establishment of the Oromia and Somali states led to major conflicts in the 1990s in Liben and Arero Districts, both within the SOS-Sahel UK Borena project zone. Conflict over land and resources has led people to abandon some areas for fear of clashes. New districts have been created, leading to shifts in local government boundaries and responsibilities, so people say they no longer know who is in charge.

In Sudan, when the project was established in the late 1980s, Kordofan region was divided into North and South Kordofan States, with El-Obeid and Kadugly as their respective headquarters. When the government signed a peace agreement with the Sudan People's Liberation Movement in 2005, the region was divided into three states: North, South and West Kordofan. When the project was established in North Kordofan, the state consisted of four localities. But in 2005, it was further divided into eight localities, reallocating administrative powers, issuing new legislation, abolishing old orders and establishing new boundaries. All of this has had adverse effects on land and forest rights, and conflict resolution.

Widening conflict and insecurity in Mali have spread from the north into the centre of the country, where there are long-standing contested claims over land and water. The state's failure to provide fair adjudication of such conflicts has offered fertile ground for the country's many competing armed militias (Benjaminsen and Ba 2018). The presence of members of the pastoral Peul community in certain jihadist groups has further enflamed tensions between Dogon and Bambara settled people and the Peul, rekindling historic rivalries and mutual accusations.

Takiéta has not been on the frontline of fighting between groups in Niger. However, there has been some spillover from conflicts further east and south, with the arrival of displaced people. The recent closure of the Niger-Nigeria border nearby has also generated considerable difficulties for the movement of people, livestock and goods.

## 3.3 Conflict and conflict management

In all four project areas, local forestry staff and community representatives established and agreed regulations and management rules, including ways to handle infractions and conflict between users of the resources in question. Local disputes can arise for several reasons, including cutting green/live wood, harvesting woodland produce without authorisation, clearing land for cultivation, and grazing in restricted areas. Local associations and traditional structures are relatively effective in dealing with infractions committed by members of their local community, but have weaker authority over people from elsewhere.

In **Niger**, everyone in the villages neighbouring the Takiéta Forest is considered a guardian of the forest and has a duty to report infractions, such as clearing land, cutting green timber and collecting non-timber forest produce without authorisation. When the project started in 2000, there were also 16 paid guards, on a monthly salary of 10,000 FCFA (equivalent to 15 Euros). Today, there are only two guards and they are unpaid, though members of the Kou Tayani Association say mobile phones have made it easier to track and report wrongdoing. Fines depend on the type and severity of the infraction. The government's Environment Service levies fines of 10–30,000FCFA (15–45 Euros), while the Kou Tayani Association levies smaller fines.

In **Ethiopia**, people upheld and respected the customary rules for managing the forests for some years after the SOS-Sahel UK project ceased operations, but in the last decade, these have been largely ignored, with people settling in forest areas and illegally exploiting the resources there. NGOs get no government support to back up the rules, and there have been so many institutional changes that local people no longer know where to report problems. Since the project ended in 2004, the *gada* leaders have been unable to maintain their authority over woodland protection, due to a combination of weak support from government administration and lack of recognition by younger generations who have lost respect for the elders' rules and regulations.

In **Mali**, the local associations have kept records of conflicts, the parties involved and their resolution. Half of the 213 disputes noted in period 2000–18 concerned disputes between local people and incomers seeking to cut wood or pasture their herds without authority. A quarter of conflicts were between government technical services and people without an authorisation permit. Only 6% of conflicts were between herders and farmers, 8% between two farmers and 5% between two herders. Disputes between herders and farmers were often about fields encroaching on livestock corridors and their boundaries not being respected, which makes it hard to move animals without damaging crops. However, relations between local people and the justice system are poor – especially the district judiciary – and certain forestry officials mistrust local institutions' ability to manage resources effectively. The legal provisions associated with local agreements for natural resource management (*Conventions Locales)* are not always respected, despite being enshrined in the new Land Law (*Loi Foncier Agricole*) of 2017, and associated legislation putting the law into effect (*Décrets d'Application* ).

In **Sudan**, three members of each community forest have a card issued by the FNC, recognising their legal rights to manage access and sanction those breaking the rules around cutting and harvesting forest resources. But many valuable tree species have disappeared through field clearance, felling for fuelwood, and cutting for forage. Regeneration of bushes and trees is rare.

Disputes are often handled at a local level, with fines levied in the case of crop damage by herds. Conflict mediation is done by local leaders. However, not everyone respects the traditional administration and conflict resolution systems, and the root causes of conflict often lie outside the immediate locality and are the result of broader pressures and decisions made by higher-level institutions. Large-scale land allocations to domestic elites and foreign investors have removed significant areas of grazing land, and in many cases have blocked transhumance routes. In North Kordofan, for example, the state government leased approximately 10,000 hectares of land to a Malaysian company for gum arabic, excluding all pastoralists from the area and leading to increased grazing pressures elsewhere. When disputes cannot be resolved by the local village leader (*sheikh*), parties take their dispute to the local court system, which is more time consuming and expensive. Infractions and related penalties imposed are recorded by several community forest associations.

Disputes between settled farmers and livestock keepers are rising, as pastoralists are excluded from management decisions on forest reserves and land allocations. Conflict and pressures on grazing land elsewhere are driving increasing numbers of herding groups into the region, many of whom now have automatic weapons. Urban traders and state officials have also increased their livestock holdings, which puts further pressure on grazing. The SOS-Sahel UK project attempted to negotiate the marking out of transhumance corridors, access to water, wet season grazing areas and resting places. But villagers are not always happy with such negotiations, which they think give too much recognition to the rights of pastoral groups.

## 3.4 Relations with local government

In all four countries, changes to local government have challenged the legal status and powers of the associations and groups seeking to manage the woodlands in the project areas.

In Niger, the Kou Tayani Association was already established when the three commune-level local government structures – Garagoumsa, Kantché and Termini – were installed in the Zinder Region. As a result, there was no provision for commune representation in Kou Tayani's council of administration. At Kou Tayani's next annual assembly in 2020, it plans to find ways to include commune-level representation in the formal management committee. The communes' main interest appears to be in the potential revenue and resources to be derived from the Takiéta forest. Kou Tayani currently pays the small amount of revenue it has earned – estimated at FCFA 300,000 (around 450 Euros) for 2018 – into the regional government account, and the communes can draw their respective shares from this.

Relations between the federal Sudanese state, local governments and local communities in El Ain are complex and ambiguous, especially given the growing market value of land there. Most land is unregistered and recognised as state property, although tribal leaders assert control over land allocations at village level. The native administration system recognises the powers of *sheikhs*, who operate alongside or are partially integrated with the official system, and he is trusted to be responsible for allocating land to adults from the village and newcomers who wish to settle there. However, land is a valuable asset which officials at all levels of government seek to control, and large-scale land allocations offer federal, state and local governments an opportunity to acquire financial resources in return. As such, federal and state-level decisions often override the *sheikh's* role in the native administration. The Forest National Corporation (FNC) is an autonomous organisation that needs to generate its own income to ensure it covers its costs and often relies on extracting revenue from people and land in order to operate. The same is true Oromia's Forest and Wildlife Enterprise agency in Ethiopia.

Changes to local and state government have had major consequences for traditional land and natural resource management systems in Ethiopia, and many consider that the state plays a central but partisan role in local power politics. Most difficulties between forest associations and local government revolve around power and authority over revenues from forest produce and attributing land and wood-cutting rights. The re-working of the boundary between the Oromia and Somali Regional States has also created problems, as noted earlier. Although the Borena Zone lies within Oromia State, certain areas traditionally claimed by the Borena elders – and two of the most reliable all-season Borena wells – were attributed to the Somali State. Borena elders claim that the government does not respond to their complaints about conflicts and territorial disputes with neighbouring groups. The elders' councils and tribunals are also being replaced with government-appointed agencies and officials, undermining the legitimacy and authority of customary laws and practice.

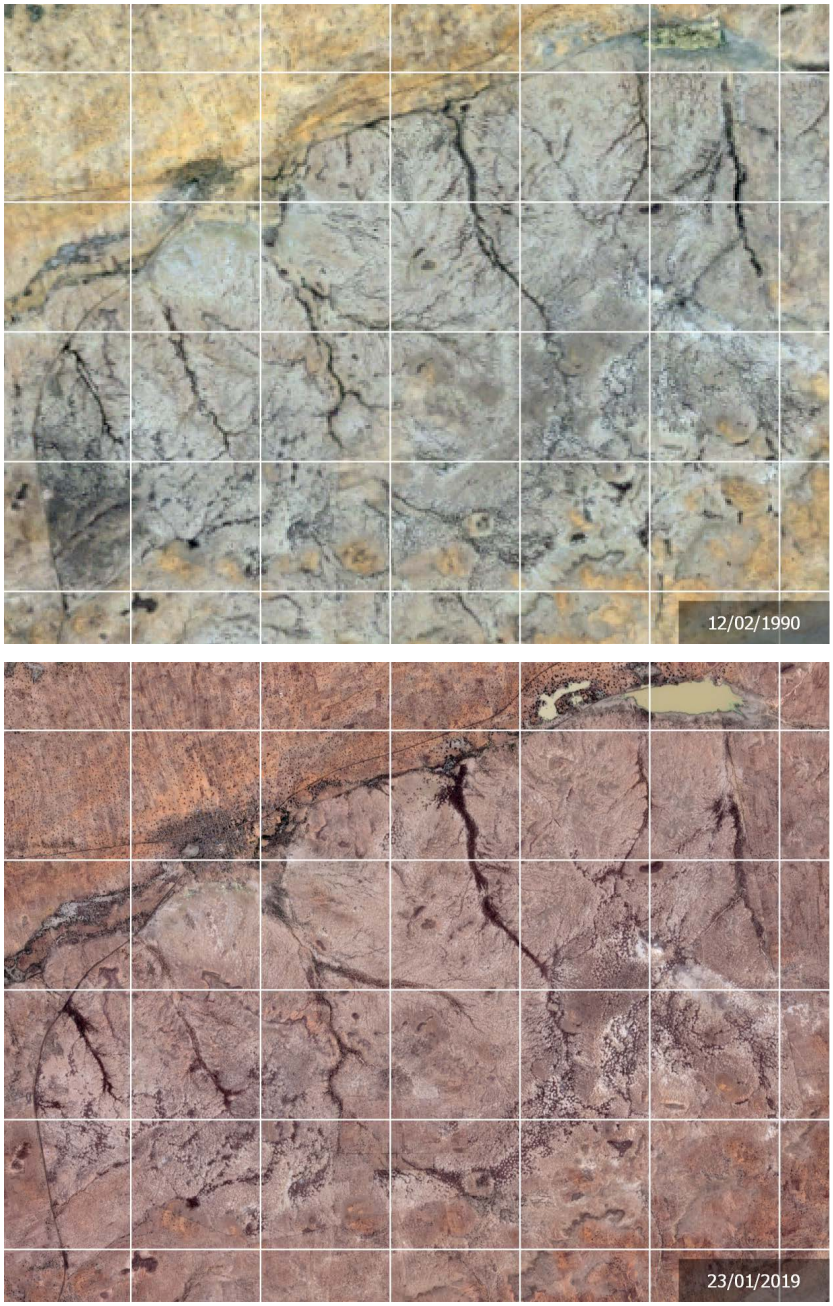
In Mali, decentralised elected local government was established in 1999, just as the Bankass project was also getting established. Responding to the need for coordination between commune and *cercle*-level structures, the project in Mali created *cercle*-level platforms to coordinate different associations and create space for dialogue with pastoral groups. Natural resource management questions have been firmly embedded in commune local plans, demonstrating the close working relations between the different structures.

## 3.5 Government land allocations

In the absence of other resources, Sudan's federal, state and local governments see large-scale land allocations to domestic elites and foreign investors as a means to acquire funds. Several instances were documented for the north Kordofan case-study; in one case, noted in Section 3.3, 10,000 hectares were leased to a foreign company for gum arabic production. In another, a pastoral leader was illegally allocated a large area of the community forestland. Political elites have also been allocated large areas for mechanised wheat farming across the state, removing land from grazing use.

In Niger, the local administrator is said by the villagers to have attributed small plots near a large pond within the Forest Reserve for market-gardening. However, in general, the Forest Reserve boundaries have been preserved, as can be seen by comparing satellite images over the 1990–2018 period, as shown below.

Figure 2. Satellite Images Takiéta Forest Reserve 1990–2019




In Ethiopia's Borena lowlands, land enclosures and the privatisation of key grazing areas (especially wetter, more fertile valley bottom land) have led to inter- and intra-clan killings. The 1995 Constitution recognises pastoralists' rights to "free land for grazing and cultivation" and to not be displaced from their own lands. The wording is ambiguous, however, and "free" can be interpreted either as accessible at no cost, or free from other uses. The constitution also allows government to make land available to private investors, and the lack of clear land tenure rights in pastoral areas allows government structures at the lowest administrative units to transfer land to urban elites or so-called "investors". Since pastoral lands have not been used for cropping before, they tend to provide a good harvest in the first few years, so much of this pastoral land has now been converted for farming. The most important crop farmed on this land is wheat, followed by teff and haricot beans. Wheat has become a significant cash crop for those who privatise land in this way.

There have been no large-scale land allocations in Mali's Bankass *cercle*, since the land was already heavily occupied by Dogon farmers. Land has been developed for irrigated crop production along the *cercle's* southeast edge in the Sourou Valley, especially after dam construction and irrigation development in neighbouring Burkina Faso.

## 3.6 Demography and population movements

All four case study areas have seen a significant increase in human populations in and around their forested areas, due to a combination of demographic growth and inflow of people from elsewhere.

The population of Mali's Bankass *cercle* has almost doubled over the 20-year period, and all available land is now under cultivation, leaving little space for grazing. This change in land use is visible in the sequence of satellite images from the 1980s onwards, as can be seen in Figure 3 below. Alongside the spread of conflict and attacks by rival militias, this absence of grazing land has led to the exodus of Peul communities from the district.

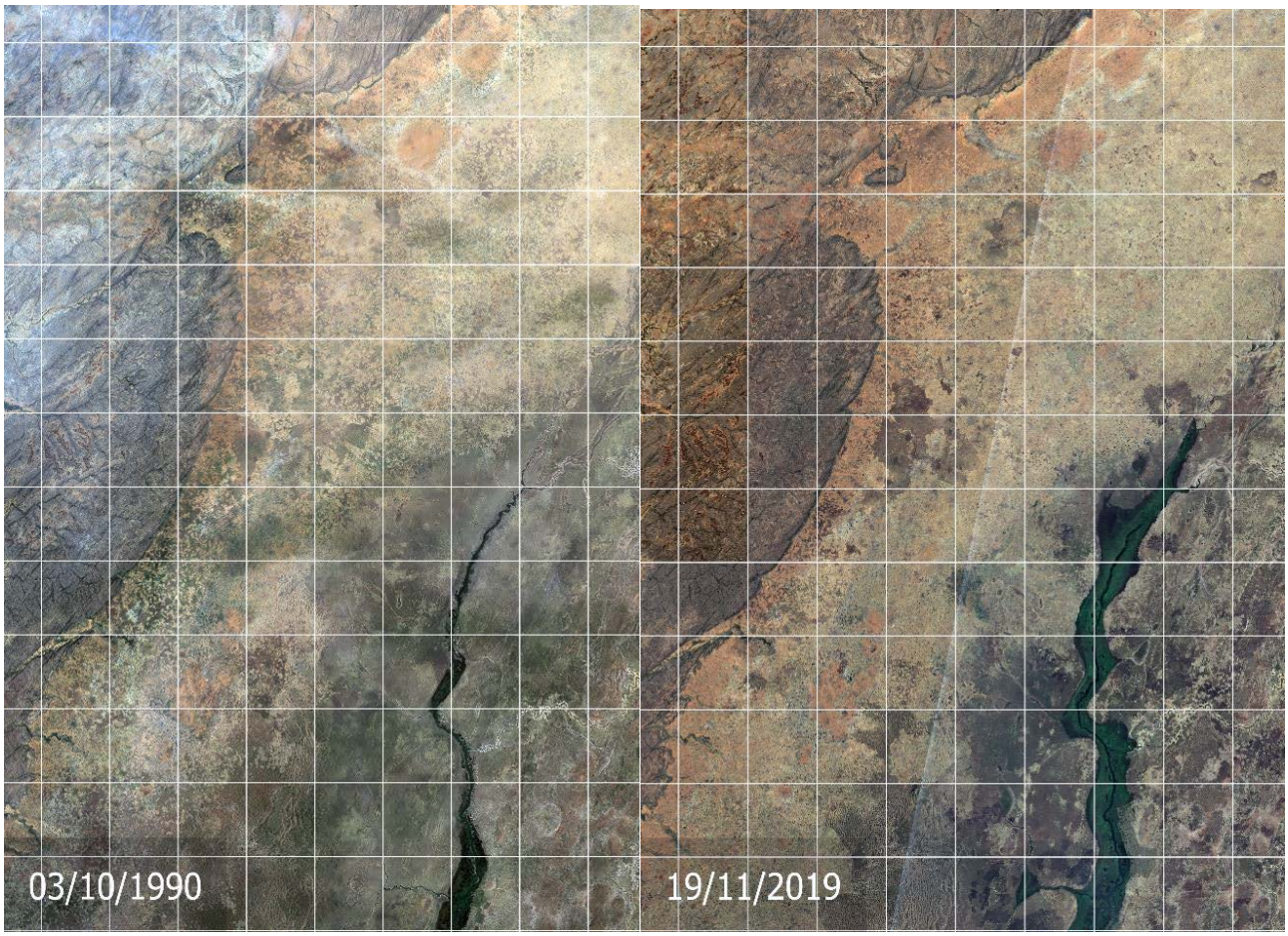
In Niger, demographic data for Zinder Region show the human population has grown by a factor of 2.3 over 20 years, from 1.9 million in 1998 to 4.4 million in 2018. In the 17 villages surrounding the Takiéta Forest, numbers have increased from 10,318 in 2012 to 13,589 people in 2018. This is equivalent to an annual growth rate of more than 4%.

Detailed population data for the three districts of Oromia are not available, but demographic data for southern Ethiopia show average growth rates over recent years of 2.5%. Applying this rate to the three districts over a 20-year period would imply a 64% increase in population.

Demographic data were not available for Sudan for the whole period, but the annual growth rate for 2000–12 was 2.5%, slightly below rates in Mali and Niger.

In southern Ethiopia and Sudan, demographic growth has been compounded by significant inflows of people seeking refuge from conflict in neighbouring regions and countries. For example, a significant number of Gabbra and Garre pastoralists from Kenya and Somalia resettled in Oromia State making use of kin ties with Oromo groups, and many Somali refugees resettled on land in territory claimed by the Borena. The establishment of South Sudan as an independent country in 2011 closed off transhumance possibilities

Figure 3. Satellite Images Bankass District 1990–2019



for many pastoral livestock-keeping groups in North Kordofan, forcing them to stay longer in and around the study site. Many have also migrated from South Kordofan state fleeing war, crisis and insecurity. North Kordofan is seen as a relatively peaceful area with easy access to water, education and health services. So many of those arriving from the south plan to settle here, seeking land to cultivate and inter-marrying with local families.

There is little mention of conflict and civil disturbance in Niger's Takiéta District, but there has been an inevitable spillover from conflicts to the east and south, in Niger's Diffa Region, Nigeria's Borno and Jigawa States, northern Cameroon and the Central African Republic. The partial closure of the Niger-Nigeria border in 2019 has also created major problems for the movement of people, livestock and goods.

As mentioned in Section 3.3, Mali's Bankass *cercle* has been at the heart of much conflict between Peul and Dogon communities. Rival militias have attacked each other's villages, killing people and destroying their homes, as exemplified by the massacre of Peul villagers in Ogossagou in early 2019. This has led to the outflow of Peul herding groups, seeking safer ground elsewhere. There has also been a significant inflow of people from Mali's north and centre, seeking land to settle and farm, especially along the Sourou Valley, in the eastern part of Bankass *Cercle*.

## 3.7 Livestock numbers and patterns of movement

There are few detailed data for how livestock numbers have changed in any of the areas studied. For the Sahel as a whole, the Food and Agriculture Organization estimates that livestock numbers have increased two and a half times between 1961–2009 and 50–80% from 1990 to 2010, but they recognise these statistics need improvement[1]. There are limited statistics for Kordofan, but local villagers report that there has been a large inflow of herders such as the wealthy Shanabla nomads from further south, seeking more secure areas to graze and settle and land to cultivate. There has been widespread settlement of formerly mobile herding groups seeking land for cultivation across the West African Sahel. At the same time, many farmers have invested in cattle as a means to store their cash and surplus grain, and provide traction, dung, milk and meat. This homogenisation of livelihood strategies between herding and farming groups has caused a loss of complementarity, and instead of welcoming visiting herd-owners, farmers want to reserve stubble and village grazing lands for their own animals. Both groups have also cut fields in former grazing areas, fragmenting the zone and disrupting livestock movements.

There are also growing disparities in who holds livestock wealth. Investment in livestock has become particularly important to city-dwelling traders and government officials, and these herds have added pressure on grazing resources close to towns. Although poorly documented, such trends are common to pastoral societies in many parts of the Sahel, where there has said to have been a big shift in livestock holdings towards a few large herd-owners. Urban professionals, government officials, military men and traders also see the advantage of investing their money in livestock herds, which they can graze on common pasture lands. Many are putting these increased animal numbers into the hands of a single, heavily-armed hired herder, following shorter-distance grazing patterns, and bringing increased tensions with local farmers, as the herder cannot keep close control of the animals and frequently does not know the social landscape well.

## 3.8 Trends in natural resource degradation: satellite imagery and local perceptions

Focus group discussions in Mali's Bankass *cercle* agreed that the level of degradation had slowed down since the project started more than 20 years ago, and in some places was achieving an equilibrium, if somewhat precarious. Local people noted successes in bush fire prevention, natural regeneration of trees and shrubs, soil and water conservation, improved methods of clearing land for farming, and intensification of livestock keeping. However, they also noted that the doubling of the population means there is no longer forest or fallow land left in the *cercle*.

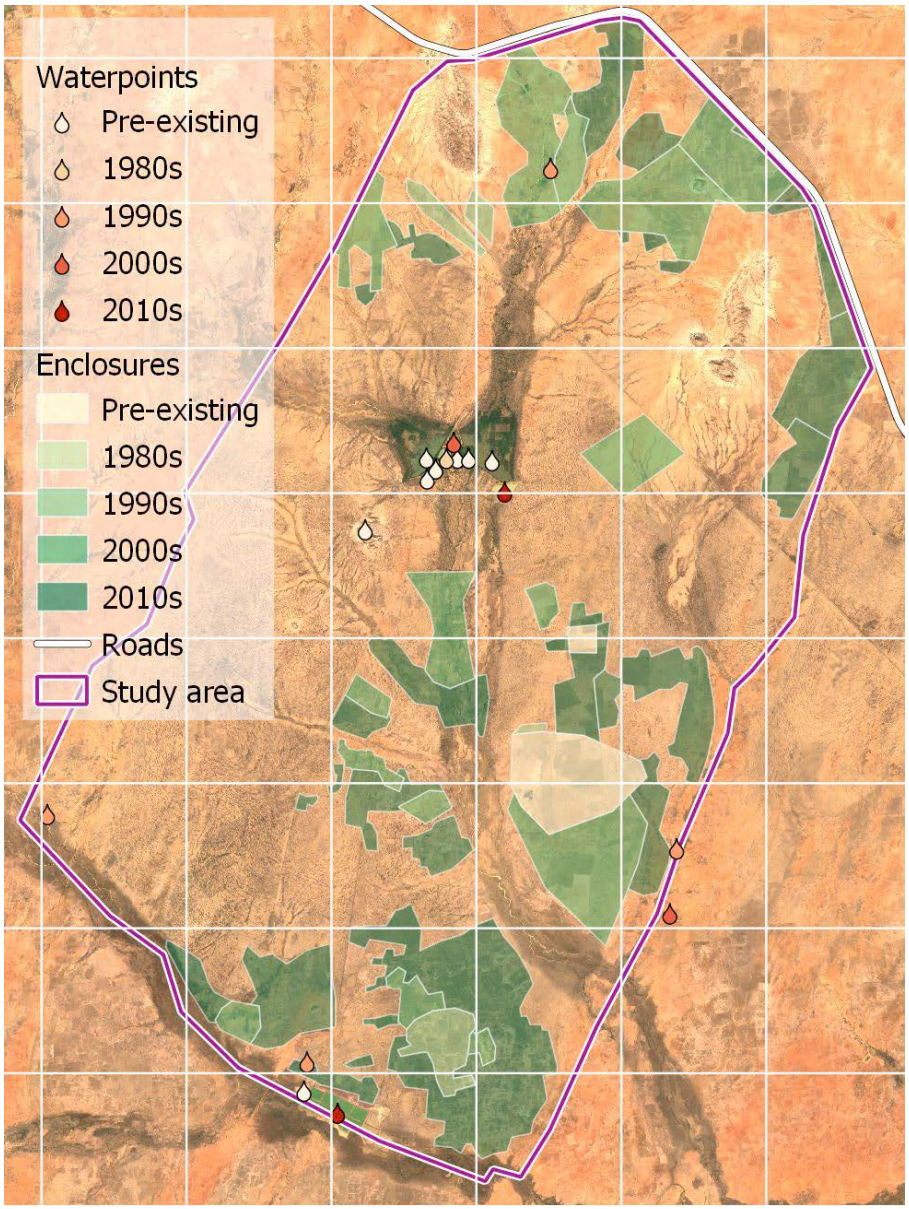
Members of the Kou Tayani Association are proud that the boundaries of Niger's Takiéta Forest Reserve have remained largely intact over the last 20 years, with a few small exceptions. The limited erosion of this boundary is partly due to the hard, clay soils in the reserve, which are far less valuable for agriculture than the surrounding sandy plains. With growing pressure of people and livestock, the association recognised that the limited financial support for Kou Tayani activities will make it increasingly difficult to keep people out.

In Sudan, vegetation has been under heavy pressure from livestock grazing and land clearance for agriculture. Despite higher levels of rainfall in the last 15 years, harvesting of timber for fuelwood, field clearance and forage cutting means there has been little or no regeneration of trees and shrubs. Many of the more valuable local species have disappeared, leaving only more resilient, lower-value shrubs. A comparison of satellite images for 2000–2012 shows that over this

period, land used for agriculture, grazing and urban settlement had more than doubled, bare land had greatly expanded; forest cover had decreased by more than half and shrubland by more than 20% (FAO 2012).

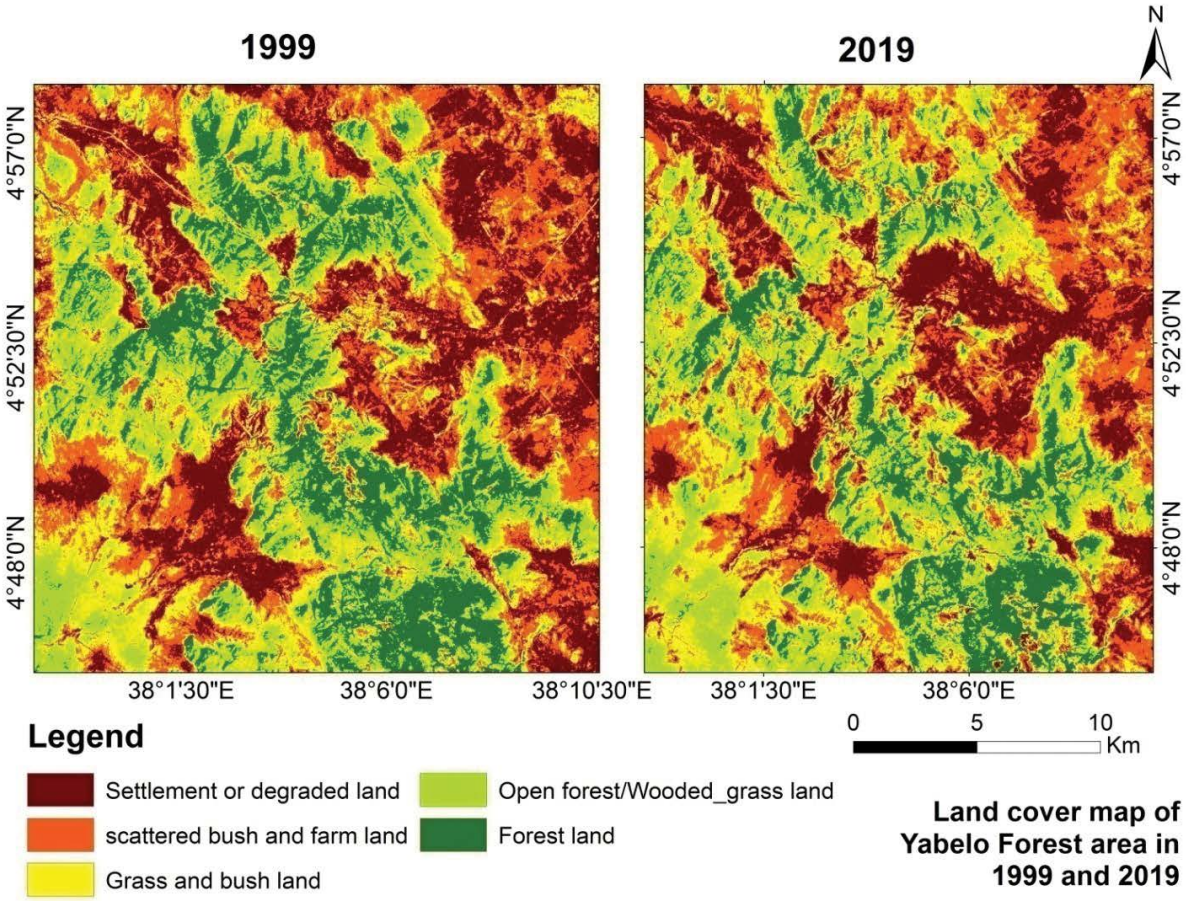
An examination of satellite images of the El Ain Forest Reserve for 1984–2019 shows significant settlement and field clearance within the protected area, as can be seen from Figure 4 below.

Figure 4. Analysis of land use change from satellite images, El Ain Forest Reserve 1980s–2010s.



In Ethiopia, satellite images of Arero, Negele and Yabello Districts for 1999–2019 show that forest cover has fallen by 6.5%, 14.1% and 22.4% respectively (Abduba, 2019). Much of this land has been converted into wooded grassland, use for grazing, and scattered bush and farmland, with settlement or degraded land increasingly sharply in Yabello and Negele, as can be seen from Figure 5 below.

Figure 5. Satellite Images of Yabello Forest Area 1999–2019. (Abduba, 2019).



# 4

# How have the natural resource management institutions fared?

As we saw in Section 2, the projects established some form of management organisation to represent community interests in land and forest management in each of the four case study sites. Their level of formalisation varied. In Ethiopia and Mali, they were based on traditional bodies while in Niger and Sudan, they were more formal associations and committees, holding regular elections and meetings. Support for their activities beyond the project end and the consequent withdrawal of SOS-Sahel UK from the case study areas has also varied.

## 4.1 Niger

The Kou Tayani Association, a formal organisation with an annual assembly and regular election of village representatives, had several years after the SOS-Sahel project ended without any changeover of representatives. But, since 2016, the election process has been reinvigorated, and today there is significant representation of women on the association's council, at 37%. Getting youth representation has been more difficult, as most young men are away on migration. The reason given for holding irregular elections was the cost implied, since preparations for elections involve multiple visits to each village and the paid presence of higher-level chiefs at the annual assembly. Paper records have not been well kept and have suffered termite damage.

However, the Kou Tayani Association continues to function, with village representatives meeting on a regular basis.

## 4.2 Ethiopia

The project in Ethiopia worked through traditional Borena management structures, using the long-standing *gada* institution, a generation-based system for mobilising labour for collective activities, such as digging wells. This nested socio-political hierarchy comprises structures at neighbourhood, block, district and zonal levels. When the project was established in the late 1980s, traditional authority still retained significant power.

But local and state-level government does not support traditional institutions to manage land and forests, and all activities stopped once the project came to an end. Borena traditional leaders complain that, for the last ten years, their recognition by federal and state administrations has steadily decreased. They also say that the younger generation no longer respects them, which has adverse consequences for their ability to exert their authority and sanction infractions. Increasing conflict and the presence of armed groups further aggravate these problems.

## 4.3 Mali

In Mali, a set of parallel initiatives took on some of the former SOS-Sahel UK activities as the area has continued to receive several government and NGO-supported projects addressing land management, pastoral development and setting up boundary markers for livestock corridors. But growing insecurity since 2012 has meant that for the last few years there has been little effective government presence on the ground. The *cercle-level* platform and its activities continue to be represented in commune-level local development plans but, the breakdown of relations between herders and settled people has become so acute that there are few, if any, opportunities for communities to meet and discuss their common problems.

The structures based on traditional Dogon community organisations continue to operate in Bankass *Cercle* and the activities of the *cercle*-level platform were still represented in communes' local development plans until 2017. After this, however, the broader civil conflict spilling over between Peul and Dogon communities and the breakdown of relations between herders and settled people have become so acute that there are few, if any, opportunities for different communities to meet and discuss their common problems. Following a series of massacres attributed to the Dogon-led militia, almost all Peul herders left the *cercle* over the last two years and the *cercle*-level coordination with pastoral organisations no longer takes place.

Although a regional land use plan was agreed in 2010, growing insecurity since 2012 has meant that there is little effective government presence on the ground. As such, the land use plan exists only on paper. Despite changes to the law – such as the re-reading of the Forest Code (*re-lecture du Code Forestière)* and the establishment of decentralised local government – higher level officials have often blocked the effective transfer of power and resources to local structures, since they wish to maintain control over and income from them.

A range of new laws have also come into force, such as the Agricultural Land Law (*Loi Foncier Agricole)* of 2017, which formally recognises both local land rights and systems for managing common property resources once they are formally registered. However, the slowness of the accompanying legislation needed to put new laws into practice, ordinary people's limited knowledge of these laws, and inertia among officials mean the daily practice of administration remains wedded to former legislation.

## 4.4 Sudan

The end of the incentives the project provided to local people in El Ain and the phasing out of the project in 2005 have meant its success has not endured. However, each village involved in the project does now have its own forest management committee, with several women members, who meet occasionally to make decisions.

Given the high levels of illiteracy, few of the community forests have a management plan. But local people have a clear idea of what they need to do to manage their forest resources without the benefit of formal plans, and say that written plans were mainly for FNC purposes. The existence of certificates assigning ownership rights over land and forest resources to local people has brought some benefit, although many FNC and court officials do not recognise communities' ownership rights and land management powers. Despite this, their existence seems to provide some protection, as the areas of forest land that have not been registered have all but disappeared.

# 5

# The role of women and young people

Neither women nor young people play a major role in managing land and natural resources, nor resolving conflict. Young men are largely absent from all four case study sites, on short and long-distance migration for much of the year, often to town to earn money. In Borena, those young men who are still present are described by their elders as no longer willing to accept the authority of their elders, as established in the *gada* structure. Women play no management role in Borena, where men represent the whole household's interests.

In Niger, women make up more than one-third of the Kou Tayani association members, and fill roles such as president and secretary of the eastern committee, and treasurer. They play an active role in guarding the forest, and report that this has been facilitated by widespread of mobile phone ownership. It has been much less easy to get youth well-represented, as so many young men migrate.

In Sudan, women rarely own land and responsibilities are divided along gender lines. Women take in charge the household's day-to-day needs and caring for the children and the family. Getting wood for cooking has become increasingly difficult, and women rely on access to the community forest. A few better-off women in villages close to the road buy and use bottled gas in place of traditional, wood-fired stoves. Women also collect a number of non-timber products from the forest, such as medicines, fruits, nuts and edible leaves. Each forest committee is meant to have at least three women members, but the presence and participation of women in forest management vary considerably (Kerkhof 2015).

In Bankass *cercle*, there are a few women representatives on the forest management committee, but they play a less active role to men, being reluctant to speak in meetings due to the weight of custom and tradition, which grants men a more formal public role.

# 6

# Lessons learnt: common insights from the case studies

The four case study reports highlight six common insights, which confirm and illustrate the findings of the Phase 1 report (Kratli and Toulmin, 2020). While the SMCPR project documented the context and measures put in place in each location (Hesse and Trench, 2000), in many cases, the decentralised institutions were new and untested, or based on traditional structures to which government gave scant recognition.

Much has happened in the subsequent 20 years, both at a local and at broader regional level, which have affected the strength and viability of the models set up by SOS-Sahel UK in the 1990s. These changes have impacted many aspects of life in this region – environmental, demographic, political, economic and social – and have had significant impacts on local people's rights and abilities to control and manage their land, soils and vegetation effectively.

1. **Legal rights are not always respected:** Woodland and grazing areas are very vulnerable to seizure by people seeking income-earning opportunities and land to clear for farming. Legal initiatives and project interventions have been only partially successful in retaining the boundaries and conservation of land and vegetation. Despite legal changes recognising decentralised management of land and natural resources, the state administration has often been slow to recognise and affirm the transfer of powers in practice. New laws may support local rights and associations, but such changes in the law have not been translated into changes in behaviour among the officials, judges and technical service providers responsible for the administering rights and justice. So, the law remains inaccessible in practice for most of the population.
2. **An effective shared platform is needed but difficult:** Creating a platform for people to meet and discuss how to manage the land and common resources they share is one of the most important aspects of a natural resource management project. But despite SOS-Sahel UK's objective to get better pastoral representation, these groups' involvement has been very limited in practice. The project made attempts in Sudan to include pastoral representatives in forest management and negotiation of livestock passage routes, but such negotiations faced accusations from settled farmers of favouring pastoralists too greatly. In Mali, the project established a district-level coordination mechanism to enable planning and negotiation between herders and settled groups in Bankass *cercle*. After working well for some years, it has

broken down following recent conflict between Dogon and Peul groups. In Ethiopia, the Borena are pastoralists with a partial reliance on agriculture. Their principal competitors are other pastoral groups, such as the Gabbra and Somali, and people seeking wood and land to farm. But there is no local platform or mechanism to resolve disputes between them.

3. **There are conflicts of interest between the state's need for income and its duty to enforce the land law:** The state has played a complex role in all four country case-studies. When the projects started 25–30 years ago, promising legal changes had laid the foundations for SOS-Sahel UK to support local people and forest departments in establishing participatory management systems. At the same time, the state has posed a threat to local management, making large-scale land allocations to investors or others seeking land, often without local consultation. Such land grants have unbalanced the operation of the wider livelihood system – for example, by taking higher-value wetland out of circulation. The state is also often seen as biased towards a particular group or set of interests, leaving it unable to play a neutral role in encouraging different actors and interests to find common ground around shared resource use. The limited financial resources available also mean that the state administration at all levels – including forest departments – seeks revenue to fund their activities. Land is the main resource available to provide this income, leading to major conflicts of interest between the state's search for income and their role in facilitating local land, forest and grazing management.
4. **Increased populations are putting pressure on traditional production systems:** In all four case study areas, human populations have increased significantly – doubling in many places – due to a combination of demographic growth, urbanisation, and significant inflows of IDPs and other groups displaced by conflict elsewhere. Livestock numbers have also grown and patterns of movement have been disrupted, as a result of conflict and border closures on the one hand, and changes in ownership patterns on the other hand, which have led to shifts in herding routes and practices. Overall, the long-standing complementarity of settled farmers' and mobile livestock-keepers' production systems has broken down.
5. **Local organisations need recognition by the state and sources of income:** After withdrawal of SOS-Sahel UK project support, the institutions set up to manage natural resources have continued to function in some form, albeit meeting less regularly. All institutions need continued funds for investment, operations and maintenance, and the power, authority and effectiveness of these local institutions has partly depended on the technical and financial support they got from external funding. None of the organisations was able to develop the sources of revenue they needed for a continuous replenishment of funds.

   For example, the Kou Tayani Association's income was initially derived from regular issue of licences for fishing and quarrying, and sales of honey, and wood for building and fuel. But after the first five years, this income subsequently diminished greatly. None of the other case studies appear to have a financially viable model.

   The institutions continue to operate, resolving conflicts and imposing fines. But such activities are more successful when they involve local parties who recognise and accept the authority of this institution. Young people, IDPs, refugees and herders fleeing conflict coming into the area, who were not involved in building these institutions 20 years ago, are less willing to obey the rules. Guarding continues in Niger and some of the village forests in Sudan, but powerful groups can usually override the protest of local guards and appeal to the state-based system of justice, which is costly and inefficient. These decentralised institutions for managing natural resources need support and recognition from higher-level state authorities if they are to carry out their responsibilities effectively.
6. **There are severe limits to what can be achieved within a project framework of 5–10 years:** In each locality, the withdrawal of project support has had adverse impacts on local institutions' ability to take forward their activities. It is also clear that the interests, history and political economy of each locality are complex, deep and rarely understood well by any project intervention. Consequently, there are limits to what project investments can achieve. More thought is required to work within a 20 to 25-year time horizon and understand what the past can teach in terms of future pathways.

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# Acronyms

| | |
|---|---|
| AFD | Agence Française de Développement |
| FNC | National Forest Corporation (Sudan) |
| IDP | internally displaced people |
| NGO | nongovernmental organisation |
| SMCPR | shared management of common property resources |

# Related reading

Abduba, Y (2019) Follow-up Case Study on Shared Management of Common Property Resources: Cases at Negelle, Yabello and Arero Forest Sites, Borena lowlands, Oromiya Region, Southern Ethiopia. Research Report for IIED/AFD. SOS Sahel Ethiopia.

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Two decades ago, legal provisions gave local institutions rights to manage natural resources in four dryland African countries: Mali, Niger, Sudan and Ethiopia. This report examines how resilient such decentralised institutions have been, under rapidly changing circumstances, and notes common lessons learned. Local management rights remain largely unsupported by government. The state has further complicated land management challenges by allocating large holdings to investors. Changing politics, insecurity, demographic shifts and climate have exacerbated stresses, many of which have distant root causes. Neighbouring conflicts have driven migration by people and animals. Increasing wealth inequalities and shifting livelihood strategies have eroded farming and herding communities' common interests.

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