

Pastoralism Development in the Sahel: A Road to Stability?

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List of Acronyms

AFD	French Development Agency
AQIM	Al Qaeda in the Islamic Maghreb
AU	African Union
CBPP	Contagious bovine pleuropneumonia
CCSD	Global Center on Conflict, Security and Development
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
DDR	Disarmament, demobilization, and reintegration
DFID	Department for International Development
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization
FEG	Food Economy Group
GPS	Global positioning system
GSPC	Groupe Salafiste pour la Prédication et le Combat
IBRD	International Bank for Reconstruction and Development
IIED	International Institute for Environment and Development
IOM	International Organization for Migration
MUJWA	Movement for Unity and Jihad in West Africa
NGO	Nongovernmental organization
ODI	Overseas Development Institute
OECD	Organisation of Economic Co-operation and Development
PIDRK	Programme Intégré de Développement Rural de la Région de Kidal
SDS Sahel-Niger	Stratégie pour le Développement et la Sécurité des Zones Saharo-Sahéliennes du Niger
SSA	Sub-Saharan Africa

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EXECUTIVE SUMMARY¹

Introduction: Setting the Scene

Pastoralism is one of the dominant economies of the Sahel and is by far the main economy on the fringes of the Sahara, a zone of which recently some areas have become unstable. It is estimated that about 50 million people rely on pastoralism for their livelihoods in the Sahel and the Saharan fringes, and most of them are poor. However, the Northern parts of the Sahel and the Sahara have seen a rapid recrudescence of trafficking and other illegal activities. Some areas are now home to extremist groups, several of which are involved in terrorist activities. Although the recent violence has led to relatively few casualties compared to the large conflicts Africa experienced in the 20th century, it has exacted a huge human and economic cost. It has also caused a major loss of revenues and significantly impacted economic development, in particular tourism and social infrastructure. The insecurity and instability in these areas leads directly to increasing poverty for already poor pastoralists, and has a ripple effect on the economic wellbeing of the entire population of the Sahelian countries. While only a very small part of the population is thought to be directly and actively involved in these criminal activities, it is critical to understand whether that large part of dry land peoples that is not directly involved, is vulnerable to these kinds of activities. In most countries, pastoral populations are a minority, and are located in the periphery zones and areas that are difficult to access, often leading to disenfranchisement and poor integration in to the rest of the country. Furthermore, pastoral groups on the Sahel-Sahara region have had since the colonial period a tense history with the state apparatus due to the imposition of new forms of governance that clashed with traditional structures and identities. Most pastoralists are peaceful people trying to ascertain their livelihoods in one of the harshest environments known to humanity. Also, it is clear that because pastoralists are the major socio-economic group living in the fringes of the Sahara and the Sahel areas, that are prone to instability and insecurity, they could and should play a central role in the efforts to promote peace in the region.

The World Bank's Global Center on Conflict, Security and Development (CCSD) commissioned this note to enhance understanding of the connection between pastoralism and the recent increase in instability and violence in the Sahel, as well as the conditions under which the development of the pastoralist economy can actually enhance regional stability. The note seeks to offer guidance to international, national, and local decision makers on the drivers of conflict and instability that are most related to pastoral communities, as well as possible measures to reduce violence and enhance stability in the Sahel. Governments and international development agencies have either neglected pastoral populations or sought to support them with poorly designed interventions. Another compelling reason to look more closely at appropriate entry points for enhancing pastoral livelihoods, is that the World Bank's significant investments in pastoralism have had mixed results. High levels of poverty and increased instability warrants further attention from governments and development agencies.

This note is based on existing literature and knowledge; it is not based on any new empirical work. It attempts to raise some important questions for further investigation and identifies knowledge

¹ This note was commissioned by The World Bank's Global Center on Conflict, Security and Development (CCSD) in the framework of its mission to strengthen the Bank's work on fragile and conflict-affected situations by providing technical support to country teams on strategy, programming design, and operations that are sensitive to fragility, conflict, and violence.

gaps for further studies. This paper is not meant to answer all questions on pastoralism and instability in the Sahel, but is rather meant to bring up issues and questions that need to be considered in designing development interventions and areas that would require further investigation. This paper attempts to bring together two dimensions related to development: pastoral livelihoods and conflict analysis. The goal of this paper is to explore whether improvement of the pastoral economy may reduce conflicts, criminality, trafficking, and if so, under what conditions, in other words what type of development of the pastoral economy is conducive to strengthen peace and stability in the region.

The main finding of this note is that the development of pastoral economies and livelihoods is indeed an important contributing element to stabilization in the Sahel, and in particular to acquire the cooperation of the pastoral population in the control of illicit and extremist activities. However, the note also tries to demonstrate that poorly designed pastoral development interventions that do not fully take the drivers of conflict and violence into account can actually create more instability and exacerbate conflicts. Not all forms of development of pastoralism will induce stability, and developing pastoralism does not guarantee regional stability. However, if the objectives of stabilization and conflict prevention are well integrated into the support of the pastoralist economy, significant evidence already shows that this can contribute to lower levels of insecurity and help foster peace.

The note is based on a review of the literature on pastoral development and stability and the experience of the authors in these fields. It focuses in the Sahel, but where relevant to the Sahelian situation includes data and experiences from other countries. It begins with a background section on both the current state of pastoralism and the state of insecurity in the Sahel. The following three sections, introduced by a brief literature review on ways to analyze conflict drivers, focus on the factors that can drive pastoralists into conflict and violence. The final sections of the paper review past pastoral development experiences. Based on this review, we formulate development objectives to guide pastoral development and stabilization efforts in the Sahel. Finally, the report provides recommendations to national and international policy makers for follow-up actions related to pastoralism and stabilization in the Sahel.

Section I. Background and Context of Insecurity and Pastoralism in the Sahel

A. Historical Roots and Typology of Conflict in the Sahel

This section focuses on the nature of instability and insecurity in the Sahel. Four main types of instability are at play in the Saharo-Sahelian regions: (1) localized conflict between crop farmers and pastoralists over crop damage from livestock, access to water, and dry season grazing; (2) rebellion and irredentism (that is, pan-nationalism based on ethnicity, such as in the case of the Tuareg and Toubou); (3) criminal activities (drugs, smuggling, kidnapping, and money laundering); and (4) religious extremism, such as Al Qaeda in the Islamic Maghreb (AQIM). While they might have different drivers (see table 3) one type (in particular, local conflicts) can escalate into others. Only a relatively limited part of the huge pastoral Saharo-Sahelian area is insecurity prone, i.e., the stretch of land at the southern fringes of the mountain range covering Mali, Niger and Chad. This stretch is characterised by aridity, lack of water, under-population, state absence, lack of communication infrastructures and basic social services, and largely uncontrolled spaces and borders, and have become sanctuaries to criminals, armed groups, and terrorists.

Several different groups and actors contribute to instability. While traders or wealthy urbanites might well be the main powers behind criminal behaviour, some actors from within the pastoralist society also play a role, although they likely have a secondary role in perpetrating insecurity. Pastoralists constitute a critical part of the security chain and have a strategic value to the region's stabilization or its destabilization. With their superior knowledge of the terrain, they can help government forces control illicit activities but can also help criminal groups navigate these challenging areas. Being the only food-producing group in these vast regions, they can sustain or constrain terrorists or other criminal groups. Any long-term development effort aimed at stabilizing the region would be doomed without the pastoral population's involvement.

B. Pastoralism and Conflict in the Sahel

Pastoralists have been classified in the past according to their production system, in line with their patterns of mobility and involvement of crop farming, but the boundaries between these groups have become vague, as former pure pastoralists are taking up farming and crop farmers take up livestock production. What binds these groups together is keeping livestock as an economic and social cultural activity. In addition for all these groups, mobility is essential to benefit from the random spatially distributed rainfall. The mobile lifestyle has made it possible for them to avoid the centralization of cultural and social life following colonization, and maintain their own cultural identity. It has led also to a strong hierarchical structure marked by very specific cultural identities and reluctance to deal with the overwhelming powers of the state authority.

Section II. Factors Driving Pastoralist Society into Conflict and Violence

Economic, demographic, social, and political drivers can cause pastoral people to abandon raising livestock in favor of violent and/or criminal behavior.

A. Economic Dynamics and Conflict

The lure of criminal activities or extremist behavior depends on how attractive and secure pastoral livelihoods are at present and in the future. On the positive side, by overtaking human population growth, the livestock sector has shown to be a better engine of economic growth than expected. The price of meat is expected to remain high, and there are indications, although disputed, that further growth of production is possible. However, on the negative side, livestock ownership is increasingly consolidated in the hands of wealthy people who are mostly outsiders, is only a mediocre employment generator, and shows large inter-annual variation (that is, it amounts to a "boom and bust economy"). In addition, pastoralists are also attractive recruits for their knowledge and control of roads that enable illegal trade. Thus, if pastoralism is to be attractive, the current inequity and vulnerability of poor and young pastoralists needs to be addressed, to provide attractive sources of alternative income to compete with the illicit sources ones. There are indications that armed groups emerge from the poorer pastoralists groups; however, the rich may also support illegal gangs because they are disappointed with the central government and their broken promises.

B. Resource Access Dynamics and Conflict

The traditional natural resource access rules are rapidly changing. These were based on a symbiotic relationship between the crop farmers, who benefited from organic fertilizer and traction animals, and the pastoralists, who profited from the crop residues feed and barter of their

products for grains. However, crop farmers increasingly invest in livestock, whereas pastoralists are taking up cropping because their herd size falls below the minimum to sustain their households. The symbiotic relationship between crop farmers and pastoral therefore disappears. Both groups lose land to expanding agri-business and real estate development.

As a result, increasing competition for access to water and dry season grazing is marked by occasional outbursts of violence. While there is dispute over how related these local conflicts are to the broader instability in the Sahel, some local resource conflicts have scaled up to larger conflicts and even contributed to already existing rebellions. Similarly, droughts and insecurity have led to highly volatile emigration streams and massive cross-border dislocations, with subsequent resource access conflicts and even war. Regarding the future, the effect of climate change on Sahelian agriculture and livestock is unclear, but population growth in crop-farming ethnicities is faster than in the pastoral ethnicities and expansion of agri-business and urban development is expected to continue, pushing crop-farmers into pastoral areas, where livestock is an essential complement to crop-farming, reducing the mobility of pastoral herds and limiting the availability of land for grazing. This increases the likelihood of resource access-related conflicts and coupled with other security threats could lead to further local conflicts mutating or merging with other types of conflict and violence.

C. Social and Political Dynamics and Conflict

A number of social and political drivers lead young pastoralists in particular to join illicit or extremist groups, although inclusive schemes and programs to prevent pastoralists' vulnerability to violent and criminal activities may be part of the answer.

On the positive side, a greater awareness for the plight of the pastoralists has emerged of late. For instance, the N'Djamena Declaration (May 29, 2013)² on the contribution of pastoral livestock to the security and development of the Saharo-Sahelian region recognizes the critical role pastoralists play in maintaining stability, as does the Nouakchott Declaration (October 29, 2013)³. Most Sahelian countries have adopted so-called pastoral codes that guarantee mobility and access rights to resources. There is also an increasing move toward decentralization which if done in a way sensitive to the pastoral population's needs could work positively, but it is often poorly implemented, lacks adequate funding, and is implemented by ill-equipped non-pastoral administrators.

On the negative side, pastoral ethnicities are a minority in most Sahelian countries (except Chad and Mauritania) and suffer from political marginalization. Political power remains in the hands of the elites, since rulers seek to stay in power at any cost. Increasing lack of clarity in the geographical and administrative mandates of formal and traditional governance systems leads to overlapping and competing conflict-resolution outcomes and exacerbates this sense of marginalization. Corruption and sometimes public official's participation in illicit activities widens the gap even more. In addition, the historically strong social cohesion and hierarchical structure within certain communities is eroding from greater exposure to the outside world, especially among the youth. The archaic lineage model is impaired—the younger generation feels much less morally and socially indebted to the older ones. Because they are often deprived of education, or have only access to schooling systems that are ill-adapted to their needs, the young join traffickers

² N'Djamena Declaration, 2013.

³ Nouakchott Declaration, 2013.

and/or religious radicals who promise unprecedented opportunities for them. The continuation of current trends will further politically marginalize pastoralists and form a fertile recruitment basis for illicit activities.

Section III. Development Experiences to Enhance Stability

A. Development Experiences

Over the last several decades, the World Bank's activities to develop this region have included Bank-funded projects supporting pastoralists in Mauritania, Senegal, Mali, Niger, and Chad. The Bank intends to continue these efforts via the Regional Sahel Pastoralism Support Project in preparation stages and the Regional Pastoral Livelihood Resilience Project for the Horn of Africa. Other donors and NGO's have also accumulated considerable experience on pastoralism development projects, which are summarized in this note. However, there has been very limited experience on how pastoral development initiatives can contribute to stability directly, and on how to better provide security to these populations and cooperate with them on security initiatives to combat terrorism, criminality, and other violent activities.

This section summarizes the effect of the main pastoral development activities, and particularly their effect on stabilization. A first condition is that there needs to be greater resource access and mobility, which would reduce conflicts and caps their escalation. The recent (since the late 1990s) introduction of pastoral codes has been a positive development, but they are technocratic and poorly or incompletely implemented.

Institutions of collective action (pastoral associations) can play a useful role in amplifying pastoralists' voices and increasing their inclusion in the national policy debates, and hence reducing the temptation to participate in illegal activities. Regional or national pastoral associations have had some success to this end, although domination by the elites often reduces their effectiveness. These associations can also provide a successful framework for much-needed enhanced service delivery, such as veterinary and pastoral water services.

The establishment of more appropriate services, if done in an inclusive and conflict-sensitive manner, can also directly enhance stability. Of these, education must be a critical component. A combination of mobile, radio, and boarding school models should be tested to overcome the constraints of mobility, child labor, parental illiteracy, and religious opposition. Innovative solutions must also be found to deliver adequate animal and human health services to these highly dispersed populations.

The establishment of mechanisms and incentives, to adapt livestock numbers to the "bust and boom" pastoral economy is described in more detail in the main report, and has been important to avoid pastoralists getting food aid dependent. Some local market development might be needed, but generally, the traditional sector is quite efficient; it is preferable to avoid strong public sector involvement.

Another indirect influence on stability is food aid. If incorrectly designed or implemented, food aid can suppress local production and distort livestock prices and food markets. If poorly delivered—for example, if the aid ends up on the black market or benefits the wealthy—it can cause

discontent and contribute to rebellion. However, acute and severe food insecurity can also diminish the resources available to armed groups.

B. Stabilization and Improving Security

The lessons that emerge from these experiences is that in order to be successful in an unstable environment like the Sahel, development experiences should be both stabilization oriented (providing better access to physical and livelihoods security for populations) and conflict sensitive. State-supported projects that combine development and improved security measures for the population's benefit, if designed and implemented in a participatory fashion can improve pastoralists' perception of the state as repressive, especially if these projects truly improve the access to security and justice, among other services by populations, as well as their living conditions and offer sustainable income opportunities that are more secure than trafficking. Furthermore, and more importantly for the long-run, ensuring true participation and inclusion of pastoralists in local political governance mechanisms and in deciding what kind of development interventions are needed in their areas is key to building trust with the state. Initiatives should take into account some of the good principles of pastoral development described in this report, so that they are adapted to the local context and sensitive to the needs of the population, including but not limited to enhancing mobility, preserving cultural heritage and traditional institutions that are recognized as useful by the majority of pastoralist, strengthening education, healthcare, access to justice/conflict resolution mechanisms, among other services.

Section IV. The Way Forward

It is generally assumed that economic development, employment generation, and political inclusion would reduce pastoral peoples' involvement in illicit activities. However, **pastoral development alone** will not halt the process of deteriorating stability. It can encourage populations to rely on services, which foments dependence on public institutions and encourages trust in government. Pastoral development must be an **integrated package** that focuses on generating employment, increasing productivity, and reducing pastoralists' vulnerability. It must also respect pastoralists' rights, including mobility, and strengthen education, animal and human health services with methodologies appropriate to their conditions, and infrastructure development in underused areas. In addition, it must be promoted in real partnership with target populations. To these ends, foreign partners will need to engage in long-term commitments.

Pastoral development must be accompanied by **enhanced security and conflict resolution provision to the pastoral and other populations of the Sahel and Sahara and enhanced cooperation with those populations**. However, a clear distinction should be made between security operators and development operators, lest the population reject the latter. It is essential that trust exist between the population and state entities, and specifically with security forces. Because conventionally policing immense and remote pastoral areas is costly and impractical, security must be achieved in other ways; for example, by creating a link of trust between security forces and "positive influencers" (such as locally elected and traditional leaders); training security forces with a strong local component; and rewarding local knowledge and skills against criminal activities.

As a first step, such an integrated package could be introduced in **pilot areas** where institutional prospects are favourable and the population is receptive to combating illicit activities. **A proposal**

for pilot development areas could be specifically promoted in Ménaka, a new regional entity in Mali that borders on Niger. Ménaka is a major livestock area and a rebellion springboard. It has a multi-ethnic population and a positive traditional leadership. It could also be used as a leverage point for sub-regional stabilization.

A **policy framework** will be needed to create an enabling environment for the pastoral sector, including (1) providing a “level playing field” for pastoralists, in particular by conducting dialogue with them on an equal basis and by designing development interventions according to their needs, rather than to the needs of governments; (2) clarifying the roles and mandates of traditional and formal governance to ensure unbiased conflict resolution; (3) eliminating the arbitrary taxation of transhumance routes and livestock trade; (4) strengthening further pastoral codes and their implementation; and (5) inducing the Economic Community of West African States (ECOWAS) to see that its decision/regulation on transhumance certificates becomes implemented in a more effective and expedient manner.

All involved parties should participate in the implementation of these measures. On a basis of mutual respect, governments must open a dialogue with pastoralist groups, in particular with women and youth; international organizations should support such dialogues with funding and know-how, and support the region’s many nongovernmental organizations (NGOs) in implementing the policy and investment actions.

Introduction: Setting the Scene

Pastoralism is one of the dominant economies of the Sahel and is by far the main economy on the fringes of the Sahara, a zone that has recently become very unstable. The northern parts of the Sahel and the Sahara have seen a rapid recrudescence of all kinds of trafficking and illegal activities, from kidnapping to theft of cattle and goods. Some areas are now home to extremist groups, many of which are involved in terrorist activities. Although the recent violence in the Sahel, which culminated with the war in northern Mali in 2012, has had relatively few casualties compared to the large conflicts Africa experienced in the 20th century, it has exacted a huge human and economic cost. Since 2008 total ransom payments have been estimated between US\$40 and US\$65 million, and the French military intervention in Mali was expected to surpass €400 million in 2013.⁴ The insecurity has led to 1 million refugees and internally displaced persons in the Sahel.⁵ It has also caused a major loss of revenues and significantly impacted economic development, in particular tourism and social infrastructure. The illicit flows of drugs, human beings, oil, cigarettes, counterfeit medicine, firearms, and toxic waste were estimated by the UNODC⁶ to be US\$3.8 billion annually.

It is estimated that about 50 million people rely on pastoralism for their only or a main part of their livelihoods in sub-Saharan Africa; about half of them are located in the Sahel and the Saharan fringes, and of these about 70 percent are poor.⁷ The insecurity and instability in these areas directly leads to increased poverty of already poor pastoralists, as it interferes with their mobility⁸. Instability also indirectly affects the economic well-being of the entire population of the Sahelian countries due to its ripple effect on other sectors. The population living off pastoral activities has also been growing (although populations focused on farming activities have shown higher demographic growth levels in comparison) and the pastoral economy struggles to provide decent livelihoods to increasing numbers of youths. Although it is unclear what climate change's direct effects are on the pastoralist population, desertification, scarcity of resources, and other environmental issues affect the relationship between farmers and pastoralists. Inaccessible, underfunded or poorly designed social services have also been a major impediment to the development of the pastoralist economy. Despite their vital role in global food security and their capacity of production on land otherwise unsuitable to agriculture, pastoral communities around the world are in a persistent state of crisis. Competition over natural resources, especially land, has become an issue of major concern and cause of conflict between the Sahel's pastoral and farming populations. In many countries, pastoral communities are among the most politically and socially marginalized, and the increasing circulation of firearms has helped make traditional raids and cattle rustling more deadly. All of these factors leave pastoralist communities increasingly exposed to radicalization and recruitment by insurgent groups and traffickers, as the case of Mali reminded us.

⁴ Cabirol, 2013.

⁵ UNCHOA, 2013.

⁶ UNODC, 2013.

⁷ De Haan et al., 2014.

⁸ Mobility for pastoralist populations in arid and semi-arid areas is characterized by usage of spatially highly variable vegetation.

Over the last several decades, the World Bank's activities to develop this region have included improving the livelihoods of pastoralists. World Bank-funded projects have sought to support pastoralists in Mauritania, Senegal, Mali, Niger, and Chad. The World Bank intends to continue these efforts via the Regional Pastoral Livelihood Resilience Project, which initially covers Ethiopia, Kenya, and Uganda and will potentially be replicated in the Sahel, with a new project, the Regional Sahel Pastoralism Support Project (PRAPS).

The World Bank's Global Center on Conflict, Security and Development (CCSD) was launched in 2011 to strengthen the Bank and other partner's work on fragile and conflict-affected situations by providing technical support to country teams on strategy, programming design, and operations that are sensitive to fragility, conflict, and violence. This note was commissioned by the CCSD to enhance understanding of the connection between pastoralism and the recent increase in instability and violence in the Sahel, as well as the conditions under which the development of the pastoralist economy can actually provide regional stability. While investing in pastoralism has had mixed results and offers a compelling reason to look more closely at appropriate entry points for enhancing pastoral livelihoods, increased instability warrants revisiting the classical approaches to pastoral development even further.

This note seeks to offer guidance to international, national, and local decision makers on the drivers of conflict and instability that are most related to pastoral communities, as well as possible measures to reduce violence and enhance stability in the Sahel. Governments and international development agencies have either neglected pastoral populations or sought to support them with poorly designed interventions. This marginalization is due to a combination of factors, including pastoralists' lack of empowerment, which stems from their minority status;⁹ their poor integration into the rest of the society; the vastness of the pastoral areas in question; and the perceived limited development potential of livestock under the prevailing pastoral conditions.¹⁰

This note attempts to bring together two dimensions related to development: pastoral livelihoods resilience and conflict analysis. Our goal is to determine whether improvement of the pastoral economy and livelihoods may reduce criminality, trafficking, and recruitment into rebel groups in the Sahel, and if so, under what conditions. We also explore whether there is any correlation between localized, improved stability among pastoral communities and risk mitigation for higher national/political conflicts in Sahelian countries.

This note attempts to articulate important questions on the relations between pastoral development and stability and identify and knowledge gaps for further exploration. This note is based on existing literature and knowledge and not on any new empirical work. . The harsh environment of the Sahelo-saharien environment, its vastness, porosity, and underdevelopment, and the lack of integration of the populations in these regions within the national entities makes the Sahel-Sahara expanse a favorable setting for armed rebellions and criminal enterprises, including terrorism, to take hold. These areas a sparsely populated by pastoralist population and therefore, pastoralists play an important role in populating these porous spaces and could and should play an important role as a stabilizing these space

This note is based on (a) an extensive review of the recent literature on pastoral development and stability; and (b) the authors experience in pastoral development in Sub-Saharan Africa and in security issues. It focuses on the Sahelo-Saharan expanses going from Mauritania to Chad, but

⁹ With the exception of Chad and Mauritania, pastoral peoples are a minority group in the Sahel countries.

¹⁰ Véron, 2013.

where relevant the study also includes data and experiences from other countries more to the east or to the South. Some findings from this study are probably valid for other areas such as Sudan and Somalia, but the extrapolation will be limited by certain context specific aspects including specific socioeconomic characteristics of pastoralist society, and the climate (mono-modal rainfall in the Sahel, vs. for example bi-modal rainfall in the Horn of Africa, which defines movement patterns), proximity to export markets and the specific dynamics of conflict in the Horn of Africa, etc.

The note begins with a background section on both the current state of pastoralism and the state of insecurity in the Sahel. The following three sections focus on the factors that can drive pastoralists into conflict and violence or alternatively can bring them to play the role of agent of stability. The final sections of the paper review past pastoral development experiences. Based on this review, we formulate development objectives to guide pastoral development and stabilization efforts in the Sahel. Finally, the report provides recommendations to national and international policy makers for follow-up actions related to pastoralism and stabilization in the Sahel.

Section I. Background and Context of Insecurity and Pastoralism in the Sahel

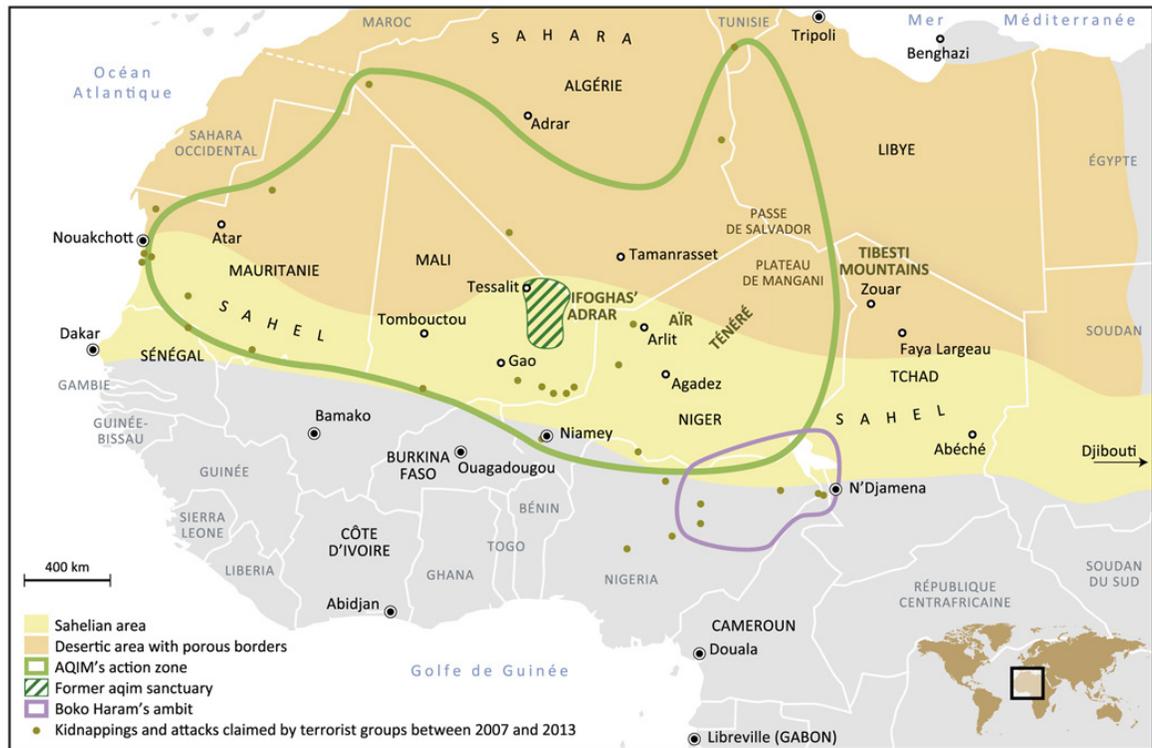
A. Historical Roots and Typology of Conflict in the Sahel

The Sahel's current violence and insecurity are historic in nature but also feature more recent drivers that exacerbate already existing tensions. Two main historic factors form the basis of the region's different forms of violence today. The first is a governance crisis, which is characterized by a feeble state presence, whereby states do not effectively provide necessary mechanisms and services to their populations, particularly in low-density population areas. This results in an inability to control borders, weak capacity by public servants, lack of a monopoly over the use of force, and a failure to protect people and their goods, including a lack of access to justice and police services, among others. This context fosters the free development of all sorts of illegal (and criminal) activities, including a black market in contraband, drug and human trafficking, recruitment to rebel groups, the arming of rebels, and the establishment of terrorist groups. The second historical factor is a legacy of rebellion against the postcolonial state authority by certain populations in the region, such as the Tuareg and the Toubou. This has been expressed via frustration with an over-centralized state authority, often exemplified by the use of security forces to maintain and control the regime's power or by the lack of decentralization policies; or by the absence or neglect of the state in its essential functions, including lack of social and economic development initiatives. However, there is a large heterogeneity among and in pastoral groups by the strength of their internal social cohesion and discipline, equity and relationships with local and formal administrations.

The region's different types of violence and criminal behaviors can be classified according to their origin and whether they are linked to: (1) localized conflicts between crop farmers and pastoralists over crop damage from livestock, access to water, and dry season grazing; (2) rebellion and irredentism (that is, pan-nationalism based on ethnicity, such as in the case of the Tuareg and Toubou); (3) criminal activities (drugs, smuggling, kidnapping, and money laundering); and (4) religious extremism, such as Al Qaeda in the Islamic Maghreb (AQIM). While they might have different drivers (see table 3) one type (in particular, local conflicts) can escalate into another.

Only a relatively limited part of the huge pastoral Saharo-Sahelian area faces serious insecurity. This highly insecure area is situated in the stretch of land between and on the southern fringes of the following groups of mountains: the Adrar des Ifoghas in Mali; the Aïr, Ténéré, and Kavar in Niger; and the Tibesti in Chad. These Sahelian territories, bordered by three Arab Maghreb states (Mauritania, Algeria, and Libya), share the conditions of aridity, lack of water, under-population, state absence, lack of communication infrastructures and basic social services, and largely uncontrolled spaces and borders. Moreover, these mountains offer sanctuaries to criminals, armed groups, and terrorists. These elements are permanent and have triggered a succession of crises over the last century, and especially in the last few years (see Map 1).

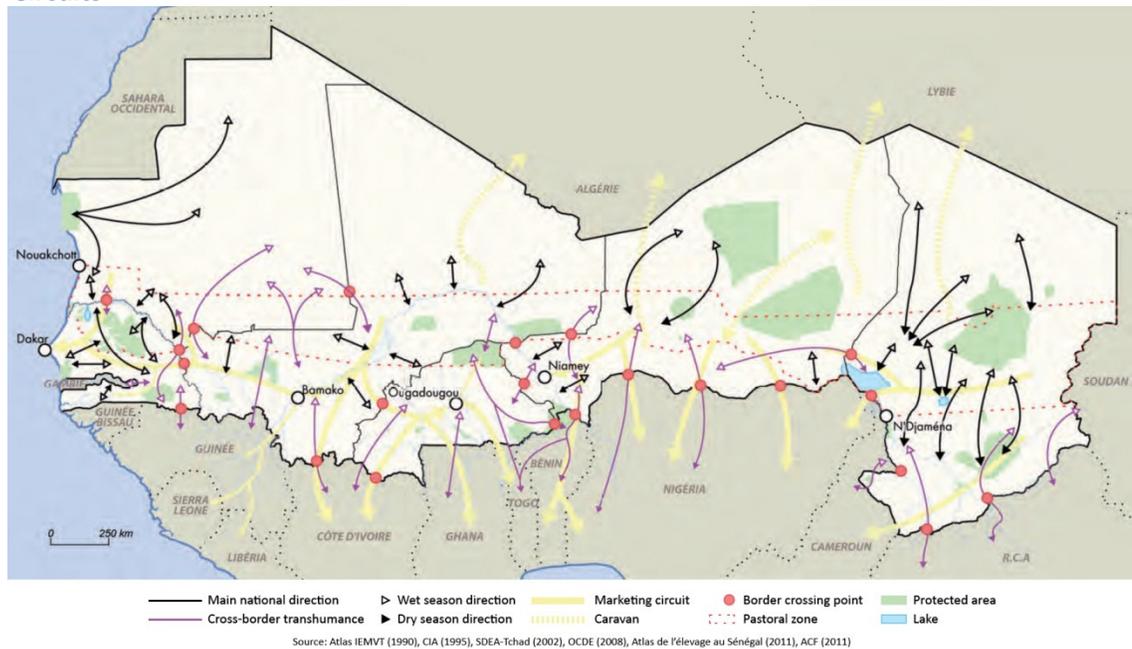
Map 1. Areas Affected by Violence



Source: This map has been drafted from that in Guibert, 2014. Another interesting map can be consulted in Retaillé and Walther, 2011, p. 54.

Several different groups and actors contribute to instability. While traders or wealthy urbanites might well be the main powers behind criminal behaviour, this report focuses on the part played by pastoralists, although they likely have a secondary role in perpetrating insecurity. It is only a small group; figures are not available, but the authors' estimate based on their previous fieldwork and experience comes to about 10,000 in the Sahel. The rationale for focusing on pastoralists is they constitute a critical part of the security chain and can contribute to the region's stabilization or its destabilization, particularly in the longer term. With their superior knowledge of the terrain, they can become key allies that can help government to monitor and control illicit activities, but that if not included in the different political and social processes can also help criminal groups navigate these challenging areas. Being the only food-producing group in these vast regions, they can sustain or constrain terrorists or other criminal groups. Finally, they are a relatively well-defined target group for development initiatives. Any long-term development effort aimed at stabilizing the region would be doomed without the pastoral population's involvement.

Map 2. Synthesis of Recent National and Cross-border Movements and of Cattle Trade Circuits



Source: CIRAD and FAO, 2012.

B. Pastoralism and Conflict in the Sahel

Pastoralism is a way of life that has ecological, political, economic, cultural, and social dimensions. It is a finely honed symbiotic relationship between local ecology, domesticated livestock, and people in highly variable regions who often live at the threshold of human survival. It represents a complex form of natural resource management that involves the direct interaction between three systems in which pastoral people operate: the natural resource system, the resource users system, and the larger geopolitical system.¹¹

Pastoralism can be divided according to the production system¹², although more recently the distinctions between the different groups have faded, as nowadays, almost all depend on some crop farming, and all depend on being able to take advantage of the environmental instability. In effect within the same family, some members can depend purely on livestock, whereas others depend exclusively on cropping. All also depend on communal land management and non-exclusive entitlements to water resources. Also, for all these systems, livestock serves multiple purposes, including social and cultural ones. This is also reflected in the definition adopted by the ministry of northern Kenya in the 2012 ASAL development policy (which builds on the AU Policy Framework on Pastoralism): “The term refers to both an economic activity and a cultural identity,

¹¹ Pratt et al., 1997.

¹² Nomadic herders who are opportunistically mobile, i.e., make their movements depending on the rainfall and vegetation distribution for that particular period, transhumant who move seasonally between the arid/semiarid regions in the rainy season and with higher, more secure grazing resources in the dry season and settled agro-pastoralists. In general pastoralists are defined with at least 90 percent of their feed (sere and Steinfeld, 1996) comes from the natural vegetation or at least 50 of their agricultural income (including household consumption, Swift, 1988) from livestock, whereas agro-pastoralists have a greater share than 250 percent from agricultural activities. The nomadic and transhumant systems together make up about 18 percent of the livestock population (Ly et al 2010) and about 25 percent of the livestock-keeping population (IIED and SOS Sahel International UK, 2011). The remainder is kept by agro-pastoralists, who have a more sedentary production system.

but the latter does not necessarily imply the former. As an economic activity, pastoralism is an animal production system, which takes advantage of the characteristic instability of rangeland environments, where key resources such as nutrients and water for livestock become available in short-lived and largely unpredictable concentrations. Crucial aspects of pastoralist specialization are: (a) The interaction of people, animals and the environment, particularly strategic mobility of livestock and selective feeding; and (b) the development of flexible resource management systems, particularly communal land management institutions and non-exclusive entitlements to water resources".¹³

Pastoralism prospers and survives with mobility. Erratic rainfall patterns, often randomly and sparsely distributed over large areas, make the ability to move herds over large distances essential. The capacity to make use of the differences in feed quality, with the northern fringes a vegetation of high feeding value but low quantity, and the more southern parts with a higher volume of biomass (Breman and de Wit, 1983), but of much lower quality, makes pastoralism superior in yields to sedentary forms of livestock keeping in these drylands. The mobile lifestyle has historically led to relative isolation of the public administrations, and a rather endogenous social and cultural development but also to a strong hierarchical structure marked by very specific cultural identities and reluctance to deal with state authority.

The numbers of mobile livestock keepers vary significantly from country to country (they make up more than 50 percent of the population in Mauritania, for example). Their ethno-linguistic affiliation constitutes their *prima facie* characteristic (Arab, Maure, Peul, Tuareg, Toubou, and Zaghawa constitute the main groups). Unlike in other Sahelian and Saharan societies, they are much more influenced by their own societal traditions than the traditions of Islam.¹⁴

Pastoralists are proud of, and often ready to defend, their social and economic traditions. They boast of their warring abilities (for example, the jihad of Usman dan Fodio at the turn of the 19th century, or *razzia*¹⁵ drives, repressed by colonizers but still occurring today), although the Wodaabe, being the most dedicated 'pastoralist' groups amongst the Fulani of the time of Usman dan Fodio, actually kept their distance from the jihad and most of them converted to Islam only at the end of the 20th century (i.e. almost a century later)¹⁶. In pastoralist societies women have a status (illustrated, among other things, by monogamy among the Tuareg) that corresponds to the enhanced responsibilities conferred to them by the realities of transhumance or (semi) nomadic life, although most pastoralists groups are polygamous. Women often have the exclusive right on the milk and on specific lines of stock.

Pastoralists' share in gross agricultural product is often higher than their proportion of the overall population (32 percent in Chad, 32 percent in Mali, 83 percent in Mauritania, 36 percent in Niger¹⁷). Yet they endure prejudice from the rest of the population, which accuses them of being useless and inefficient; a common charge is that their herds consist of many old, unproductive

¹³ Vision 2030: Development Strategy for Northern Kenya and other Arid Lands. March 2012.

¹⁴ The Islamic brotherhoods—*Tariqat* in Arabic—have pervaded the Sahel over the last five centuries and encouraged the expansion of Malekite Muslim law and Sufi beliefs and practices. Although the brotherhoods now exist as a mostly urban phenomenon, their basic structure, *zawiya* (a religious school, monastery, or inn), was the main diffusion vector of Sufism in the rural zones of the Sahel. As for hierarchy among nomads, the group of religious scholars belongs to the nobility, which immediately follows the warriors.

¹⁵ *Razzia*, an Arabic word, has become a generic term for hostile raids conducted to conquer, plunder, steal cattle or livestock, and capture slaves.

¹⁶ Bonfiglioli A.M. 1982.

¹⁷ FAOSTAT Database.

animals, which would have been sold much earlier under other production systems.¹⁸ This prejudice is often caused by their perceived lack of discipline and unchecked competition with sedentary livestock keepers and farmers, and it is reflected in the many disparaging names for pastoralists that exist in nearly all local languages. It is also a perspective that can be learned in primary school textbooks¹⁹. This humiliating experience has led many pastoralists to further underestimate and marginalize themselves.²⁰

Absentee pastoralists deserve a mention. Living in urban centers, these well-off traders and possibly traffickers often originate from the Arab community. They become involved in pastoralism by buying important herds, in part because of their lack of trust into the inefficient banking systems. Doing so may offer some an opportunity to launder money and find easy recruits for armed groups who will protect their criminal activities. This trend was initiated as a consequence of the droughts that plagued the Sahel in the 1970s and is now illustrated in nearly all urban centers in Mauritania, northern Mali, and northern Niger, as well as in the northern states of Nigeria and Chad. The negative impacts of absentee pastoralists' criminal activity far surpass the damages caused by traditional *razzia* by nomadic Tuareg or Toubou. This increases the competition for resources.

Key Messages and Further Research Needs

- The pastoral population of the Saharan-Saharan zone is highly varied in term of income, assets, and socio-economic and cultural background.
- Only a very small part of this population is involved in criminal or violent activities, the large majority make their living in a peaceful fashion, although under extremely harsh environments.
- More research needs to be done on the number, socio-economic and cultural background and organizational structure of those involved in the each of the respective destabilizing activities.

Section II. Factors Driving Pastoralist Society into Conflict and Violence

The specific drivers for pastoralists will be discussed in this section. Also to note is that in some cases the decision to participate in rebellion or other illegal activities might also be imposed, as pastoralists are being forced out, because their assets are below the level needed to sustain them.

It is generally assumed that increased economic development, employment generation, and political inclusion would reduce pastoral people's involvement in illicit activities. For example, the *World Development Report 201: Conflict, Security, and Development* found in a global survey that unemployment and idleness—sustained lack of livelihood or income-generating opportunities—were the most common motivations for participating in rebel movements and joining street gangs.²¹ These and other drivers, coupled with a lack of solid, transparent and participatory

¹⁸ It should be noted, however, that their systems, with common (free) pasture and little additional labor for any additional animal, are fully rational from an economic and risk-management viewpoint.

¹⁹ Kratli and Dyer, 2010

²⁰ . Toutain et al., 2012

²¹ World Bank, 2011, p. 80.

institutions that can provide a political and conflict resolution space, lead to repeated cycles of violence and fragility.

The WDR 2011 gives an insight into the theory of conflict drivers; Table 1, which illustrates security, economic, and political stresses, is particularly relevant to the present study.

Table 1. Security, Economic, and Political Stresses		
Stresses	Internal	External
Security	<ul style="list-style-type: none"> • Legacies of violence and trauma 	<ul style="list-style-type: none"> • Invasion, occupation • External support for domestic rebels • Cross-border conflict spillovers • Transnational terrorism • International criminal networks
Economic	<ul style="list-style-type: none"> • Low income levels, low opportunity cost of rebellion • Youth unemployment • Natural resource wealth • Severe corruption • Rapid urbanization 	<ul style="list-style-type: none"> • Price shocks • Climate change
Justice	<ul style="list-style-type: none"> • Ethnic, religious, or regional competition • Real or perceived discrimination • Human rights abuses 	<ul style="list-style-type: none"> • Perceived global inequity and injustice in the treatment of ethnic or religious groups
Source: World Bank, 2011.		

The Organization of Economic Co-operation and Development (OECD) has developed a similarly useful grid, one that is more specifically applied to pastoralism in the Sahel region. It enumerates the cultural, social, economic, and political factors that can either curb or accelerate violent conflict (see Table 2).

Table 2. Factors That Restrain or Accelerate Violent Conflicts		
Factors	Restraining transformation of conflicts into violence	Accelerating transformation of conflicts into violence
Cultural	Fatalism; pacifist attitude; common language (Hausa); traditional chief authority	Despair; avenging historical injustices
Social	Community life in the village—space sharing, cooperation, women’s dialogue, and intercommunity exchanges.	Increasing presence of firearms; contradictory and arbitrary conflict-resolution structures, either traditional or governmental
Economic	Convergence and complementarity of production strategies (agricultural, pastoral)	Demographic growth; declining agricultural and pastoral productivity

Political	Democracy; emergence of political representatives, associations, and NGOs that defend the interests of pastoralists	Examples set by rebellions that gained political power through violence (Tuareg, Toubou); tyranny by the sedentary majority without protection for minorities; faulty decentralization of political power, when it outpowers the leaders of breeders' associations; radicalization risk of political representatives, associations, and NGOs that defend the interests of pastoralists
Source: OECD, 2002.		

Likewise, the International Institute for Sustainable Development experts has identified a series of threats to natural capital, human capital, financial capital, physical capital, and social capital.²²

Three categories of conflict drivers will be reviewed in this section: economic drivers; drivers related to resource access; and cultural, social, and political drivers. These categories are not impervious to each other, since they can combine to transform cycles of violence into explosive situations. A society's resilience factors may act as mitigating forces to conflict; therefore, these deserve just as much attention in the definition and implementation of development policies for pastoralists.

Deciding whether to abandon livestock herding in favor of illicit activities may depend on a process of trade-offs between economic (that is, which activity pays better), social (that is, which activity fits best in the social fabric of my group), and geopolitical and security considerations (that is, which activity yields appropriate livelihood and social status at the lowest security risk). However, motivations will fluctuate according to the type of group joined: for example, the motivations behind participating in illicit activities such as smuggling and trafficking could be motivated by economic rational considerations, whereas identity (whether ethnic, religious, or other) could be the key factor in mobilizing certain types of armed rebellions, like those led by the Tuareg in Mali and Niger. Dr. Yvan Guichaoua, explains how in the case of the Mouvement des Nigériens pour la Justice (MNJ) Tuareg rebellion "circumstantial alliances and percolation of grievances provoked by local micro-political dynamic and long-standing disenfranchisement of some sections of the Tuareg youth permitted the movement to take off as a credible rebel group" and further notes that "rebellions can actually resemble a gradual and fragile 'bricolage' whose changes can be influenced by external forces - notably state repression - and disturbed by internal struggle over power."²³ Further evidence from the researcher's interviews suggests that personal rivalries, family ties, and the individual psychological processes that frame these concepts can also contribute to individuals choosing to participate in violent or criminal activities.²⁴ Also, more specifically to the Sahelo-Saharan geopolitical context is the logic of clan and social alliances, which also drives people into conflict.²⁵ As Professor Frances Stewart explains in her seminal work on horizontal inequalities, "The root causes of most violent conflicts lie in economic and political factors, often horizontal inequalities of various types. Yet people are organised, united and mobilised by identities, in

²² See Nori, Crawford, and Switzer, 2005.

²³ Guichaoua, 2009.

²⁴ Guichaoua Lecture, Sahel Politics and the Rise of Al-Qaeda in the Sahara, April 3, 2014, London, UK, http://prezi.com/bi2oyod5jvjk/?utm_campaign=share&utm_medium=copy.

²⁵ Ibid.

particular ethnic or religious ones.”²⁶ Following this logic it can explain easily that grievances expressed by some members of the group and sense of marginalization can mobilize large part of a group.

To set the scene, table 3 summarizes the main types of conflicts, their key defining factors, causes/drivers and consequences. They are detailed in the following sections.

Table 3: Typology of conflicts, their defining factors, causes and consequences.			
Type of conflict	Key defining factors	Causes/Drivers	Consequences
Localized conflicts over resource access	Demography, climate (drought)	Limited access to dry season grazing and water for livestock, crop damage by livestock	Can scale up to larger conflicts
Criminal activities	Level of risk and, attractiveness of payments, social status.	Poverty and inferior perspective of other sectors	Destabilizes social cohesion in pastoral societies, upsets management
Rebellion and irredentism	Strength of social cohesion in group, hierarchical structure	Neglect and/or repression by central authorities, combination of localized alliances and grievances.	Disruption of central services (for example animal disease control), interruption of migratory husbandry practices by other groups
Religious extremism	Weakness of social cohesion, degree of infiltration of other extremist groups	Lack of livelihood perspective for future	Destruction of social services, accelerated trends in criminal activities
Source: Authors			

A. Economic Dynamics and Conflict

This subsection describes the key characteristics of the pastoralist economy. It analyzes the benefits that raising livestock offers to pastoralist households now and in the future and briefly reviews the returns from alternative sources of employment. Economic drivers of violence, which might cause pastoral people to abandon livestock raising in favor of violent and/or criminal behavior, is also discussed in parallel with existing or potential resilience factors.

The key question is **whether pastoralism can ensure a reasonable livelihood that will dissuade pastoral community members from undertaking illicit or illegal ventures.** No answer can be proposed without first reviewing the main traits of the pastoral economy.

Livestock make numerous contributions to Sahelian pastoral households. They are (a) livelihood benefits (milk, meat and sales), (b) agricultural benefits (animal traction; manure for fertilizer); and (c) social benefits (status, solidarity, social investment), among others.

Pastoral production has been appropriately described as a **“boom and bust” economy**: a bust

²⁶Stewart, 2009.

when a drought occurs and a boom when the rains return. The inter-annual variation in *production* and income is therefore extremely large. An example of this inter-annual variation was presented at a recent World Bank and Food and Agriculture Organization (FAO) seminar, Frédéric Ham showed that for the Ménaka region of northern Mali, the available feed was adequate for 3,645 TLU²⁷ in 2007 and only 1,235 TLU in 2009, i.e., it was reduced by a factor of almost 3. Such a difference in the amount of available feed, if widespread and not accompanied by the capacity to move, will cause milk yields to drop and young stock mortality to rise sharply. In addition, rebuilding a herd in boom times takes several years. The inter-annual variation in income depends on the asset level, and the access to other sources of income of the household. **If the herd/flock size is well above the minimum of about 2.5 TLU per capita (Sandford, 2011) the household can cushion with extra sales.** However, with the majority of the households below that level, the variability of the environment is a major shock factor (World Bank in press).

For the pastoral sector, **a clear distinction needs to be made between wealth in assets versus income.** A pastoralist might be well off in assets, but the income generated by these assets can be lower than that of a crop farmer. The oft-heard perception that pastoralists are wealthy should therefore be tempered.

Also, although milk is still an important part of the diet, **cereals make up a significant part of the Sahelian pastoralist diet.** Some pastoral households barter or sell their milk or livestock for cereal.²⁸ The reliance on cereals is particularly felt during a drought, when the meat/cereal price ratio drops sharply, and significantly less cereal can be purchased for the price of one kilogram of beef or mutton.²⁹ This adds to pastoral households' high level of vulnerability.

In addition, **pastoral production is only moderately labor intensive.** It is mostly provided by family labor for the small pastoral families, and by hired labor for the large herd owners. Data on herd size distribution are scarce, as any person in any culture would be reticent to reveal his/her total assets; a recent paper (Manoli et al, 2014) from the Ferlo in Senegal, shows that about one third of the herds are large (more than 50 cattle or 100 small ruminants), which would be about the limit where hired labor would be required. Transhumant herds are often divided into a milk herd, which is kept near the family compound, and the larger herds of young and dry animals that make the large cyclical movements.

Specific data on pure pastoralist household economies are scarce. A household economic survey³⁰ (but one that did not include purely pastoral households) carried out in sample areas in Burkina Faso, Mali, Niger, and Senegal paints the following picture of the household economy of the Sahelian rural population: The wealthier half of households own practically all the cattle and about three-quarters of the small ruminant population; the handful of small ruminants that the poor own are often sold or exchanged for food in the lean season. Rarely can they be raised to leave the poverty trap; the poor consume practically no animal products and have to buy most of their cereal food. Outside employment is a major source of income for the poor, whereas for the wealthier households, income is derived from sale of cereal, livestock, and livestock products. As the authors of the survey put it, "Wealthier households live by their production but poorer households live by their work."³¹

²⁷ Ham, 2013. TLU is tropical livestock unit and equals 250 kg live weight.

²⁸ See, for example, Wane et al., 2010.

²⁹ Ickowicz et al., 2012; SWAC/OECD-ECOWAS. 2008.

³⁰ FEG, 2011.

³¹ FEG, 2011.

Similarly, **remittances are an important source of income for inhabitants of the Sahelian dry lands, including the pastoralists.** For example, it was estimated³² that 82 percent of households in four Nigerien departments³³ received remittances; 45 percent to 87 percent of these revenues are used for food purchase. The drop in remittances due to the war in Libya ranges from 51 percent to 75 percent.

Driven by a regional (Nigeria) and global market, **there is a long-term upward trend in beef and mutton prices.** For example, in constant values, the price of livestock reportedly rose by an estimated 78 percent between 1997 and 2002.

The potential growth in the pastoral sector deserves critical attention. A Sahelian pastoral sector with significant economic potential could absorb the population growth, whereas lackluster potential would lead to abandoning the sector in favor of other sources of income, including criminal activities, including terrorism, trafficking, and kidnapping. The expansion potential will depend critically on the amount of available palatable feed, and the capacity of the herds and flocks to access it, which in turn depends on the capacity of the herds to move and the availability of drinking water.³⁴ In projecting future growth, it should first be noted that Sahelian pastures are already very efficiently used. The classical work of Breman and de Wit³⁵ shows that in production of animal protein per hectare, the Sahelian systems are superior to Western ranches under similar rainfall (about 500 millimeters per year). Thus, in U.S. and Australian ranches, the average production is from 0.3 to 0.5 kilograms per hectare, whereas the production in transhumant and nomadic systems is 0.6 to 3.2 kilograms and 0.4 kilograms, respectively.

So, what are the prospects for the future? More information will be available shortly from the World Bank African Region Flagship report “The economics of resilience in the Drylands of Sub-Saharan Africa”, but the picture that emerges is of **some, but limited prospects for growth of production and productivity.** In the literature one finds the pessimistic view, represented by the distinguished pastoral development expert Stephen Sandford, is that there are “too few animals for too many people.”³⁶ Although he mainly focuses on the dry lands of the Horn of Africa, his argument is that with a population increase of 2.5 percent and an assumed minimum number of five to six cattle (or the equivalent in other species) needed to support a pastoralist (and about half that number to sustain an agro-pastoralist), there is simply not enough feed to sustain the herd even at very low levels of welfare.

More optimistic views come from similarly reputed pastoral specialists, who refute this argument based on the reliability of Sandford’s data³⁷ or technologies for dry season conservation of rangeland pastures,³⁸ as well as the importance of non-pastoral income.³⁹ Although performance data from the last two decades are no guarantee for the future, they also support a more positive view. **Over the past 20 years, the pastoral economy has shown a rather healthy growth.** For example, in Chad, Mali, and Niger, the growth rate of the livestock population seems to be higher

³² Inter-Réseaux Développement Rural and SOS Faim Belgium, 2012.

³³ Loga, Tahoua, Tanout, and Gouré.

³⁴ The amount of usable (that is, palatable) and accessible (within walking distance of a water point) feed per livestock unit.

³⁵ Breman et al., 1983.

³⁶ Sandford, 2011.

³⁷ Catley, n.d.

³⁸ Swift, n.d.

³⁹ Little, n.d.

than the pastoral population. According to data from the Statistical Division of the FAO (FAOSTAT), the number of cattle, sheep, and goats grew by 3.7, 3.1, and 4.4 percent respectively over the period 1990 to 2011. Production of beef and small ruminant meat grew over that same period by 3.2 and 4.4 percent respectively. While FAOSTAT data are often criticized for their lack of reliability, the overall trend seems clear: The Sahelian herds and flocks have increased at a moderate rate. It should be noted, however, that the increase in production has almost exclusively been driven by increase in numbers, and not in productivity per head. The picture of past performance becomes even more positive if the annual growth of the livestock population (between 3.1 and 4.4 percent) is compared to the annual population growth of the main pastoral ethnicities, which is estimated between 1 and 2.5 percent. This means that on average, the number of animals per household and per pastoralist has gone up.

Finally, the capacity to increase production is demonstrated by a number of projects, such as the pastoral water-development project in Chad,⁴⁰ which is supported by the French Development Agency (AFD). This project reports an increase in production and income over a 15-year period due to improved access to pastures from an integrated pastoral water-development project that included not only physical infrastructure development but also institutional capacity building for maintenance and conflict resolution.

The attraction of illegal activities (drugs, trafficking, kidnapping) can be discussed at this juncture. Smuggling has long been part and parcel of nomadic life and livelihood (mainly among Tuaregs and Arabs) and probably now as much as—if not more than—ever, it boosts economic activity in the Sahara region. **However, since 2003 the comparative advantage of illegal activities has reached unprecedented levels and induced a shift in behaviors.** Indeed, in some Sahelian areas—mainly northern Mali and northern Niger—drugs have become *the* profitable product to transport. Pastoralists in this region (though most likely still in small numbers) have thus gradually entered into criminal networks controlled by Arab traders who have economic connections throughout northern Africa and the Middle East and are often linked to jihadism⁴¹ and participate in kidnapping and other illicit activities. Petty transporters, guides, or logisticians who often belong to pastoral communities receive mere crumbs of the very profitable trafficking industry, yet it nonetheless has become a profitable endeavor for them. The association of drugs and jihadism creates a robust vicious circle: The pastoralists who fall into it acquire more income, and might invest at least part of that income in livestock and gain more influence, and an upgraded status in their community; should they want out, however, they are unable to leave, because it is highly risky and difficult to escape AQIM's network.

There are no data available on current and expected **unemployment** in pastoral societies. However, with moderate population growth, few employment opportunities, and livestock

⁴⁰ AFD, n.d.

⁴¹ *Jihadism* refers here to the armed version of Islamic fundamentalism in the Maghreb, Sahara, and Sahel, where it boasts a long tradition (for example, Usman dan Fodio's jihad at the turn of the 19th century). The expansion of jihadism has been driven for the past 30 years by the Salafi movement in Algeria (GSPC: Groupe Salafiste pour la Prédication et le Combat), which transformed itself in 2007 into AQIM. Other jihadist structures loosely affiliated with AQIM have also recently emerged in Sahelian states. These include the Movement for Unity and Jihad in West Africa (MUJWA) and Ansar Dine (which means "defenders of religion"; members are mostly from the Tuareg community in northern Mali). Jihadists have opened simultaneous fronts: against governments with the goal of establishing sharia rule; against Sufi brotherhoods and heterodox forms of Islam; and against "infidels" or the representatives of "infidel states"—a stance that allows lucrative criminal activities such as kidnappings.

holdings for many households below the levels required to provide a decent livelihood, illicit and criminal activities might become more attractive.

In conclusion, **several factors of the pastoral economy can drive pastoralists into conflicts and illicit activities, once they have perceived the comparative advantage of shifting into illegality.** These factors are both internal and external.

Among internal factors:

- First, **the limited potential of pastoralism in arid and semiarid areas**, since the feed available for animals may fall below what is needed to support pastoralists at a minimum welfare level; the consequence is that crowded-out pastoralists must find an alternative livelihood.
- Second, **livestock is becoming increasingly unevenly distributed** between the well-off and the poor; this weakens group solidarity and promotes a sense of injustice.
- Third, whereas the wealthier households can live by their production, **the poor must earn most of their income hiring themselves out to others**; this adds to estrangement between community members.

Among external factors:

- **Essential support from foreign remittances may suddenly dwindle**, as was the case with the war in Libya. Pastoralists may resort to illicit activities to fend for their household.
- **The very lucrative nature of criminal activities** that can entice particularly younger generations to earn a living through these activities.

However, other factors tend to mitigate the conflict drivers mentioned above:

- **Livestock raising has been and will likely continue to be financially attractive.** Productivity gains are further possible in the areas of animal health, breeding, and for some regions, water development.
- **Population growth within pastoral communities** is lower than among the sedentary population, and flock size per household and per pastoralist is going up.
- **Integrated development projects can show the way forward**, provided they tackle both infrastructural equipment and institutional capacity building for maintenance and conflict resolution (see Sections II.B, “Resource Access Dynamics and Conflict” and III.A, “Development Experiences”).

Key Messages and Further Research Needs

- Pastoral livestock keeping is risky and provides highly variable livelihood support, but on average it is financially attractive. There is some room for expansion and absorption of population growth.
- However, livestock ownership is consolidating in the hands of the wealthy; poor and small herder households, which are already highly vulnerable, are increasingly being crowded out.
- On the other hand, illegal activities are highly lucrative for the main traders and are also attractive to the recruited labor from pastoral backgrounds.

- Whether young or poor pastoralists will choose pastoralism over crime will depend on how successful governments and development agencies are in enhancing the attractiveness of pastoralism, but also on emphasizing social cohesion within communities that can help prevent particularly the younger generations from taking part in these activities.
- More work is needed on the current and future attractiveness of livestock production for different wealth categories of pastoralist households.
- Although likely, more evidence is required on whether successful pastoral development leads to a reduction in destabilizing activities.

B. Resource Access Dynamics and Conflict

This subsection reviews the major elements of resource access: changes in the demography, production system, and land use are described, along with issues related to communication infrastructure and territorial control. The main drivers of conflict related to resource access are then identified, together with relevant resilience factors.

Production system, land use changes, and conflict resolution. In the past, pastoralists and crop farmers in the Sahel enjoyed peaceful interactions and a strong symbiotic relationship, although as early as the 14th century, the historian Ibn Khaldun wrote of conflicts between nomadic populations in North Africa and the peoples within emerging states.⁴² In general, however, pastoralists benefited from the grazing of crop residues such as millet straw, and crop farmers benefited from the manure droppings, which helped maintain the fertility of their cropland. These interchanges were based on pure commercial principles; pastoralists paid for the grazing of crop residues in areas with a high livestock but low crop farmer density, and crop farmers paid for pastoralists to night corral their animals in areas with a low livestock but high cropping density.⁴³ Further interaction included a lively barter of milk for grain, and as crop farmers began keeping livestock, they gave their stock to pastoralists for herding (*gardiennage*, or caretaking), and pastoralists provided the crop farmers with animals for traction.

However, **these symbiotic relationships have radically changed over the past two decades.** Crop farmers increasingly invest in livestock, whereas pastoralists are forced to take up cropping because their herd size falls below the minimum to sustain their household. The reciprocal incentives for cooperation are therefore disappearing, and the relationship is turning competitive as parties vie for access to dry season grazing and water, and crops are damaged along transhumant routes.

In most cases the **conflicts are resolved** at the local level. For example, one study⁴⁴ covering conflicts on four sites in the southwestern part of Niger over a three-year period found that 75 percent of the farmer/herder conflicts were resolved at the local level. However, these localized conflicts around resource access can be at least one of several drivers for escalation to a more violent and regional conflict, as is evidenced by a recent Organisation for Economic Co-operation and Development/Sahel and West Africa Club report⁴⁵ for the Tuareg rebellions in Niger (1990–1995); Mali and the Ganda Koy self-defense movement (1990–1996); the food crises in Niger (2004–2006); the Darfur war (2003–2006); and earlier conflicts between the Maure and the Fulani

⁴² Blench, 2001.

⁴³ McCown et al., 1979.

⁴⁴ Turner et al., 2012.

⁴⁵ OECD and SWAC, 2010a.

in the Senegal River.

It has been argued that the frequency and severity of resource access conflicts might worsen because of **climate change**. However, the direction (drying or greening) of climate change for the Sahel illustrated by different models is unclear.⁴⁶ The analysis of security events in the Sahel in this study highlights the absence of climate change's general and direct impact on security. The higher inter-annual rainfall variability that is generally expected might have an indirect effect (via food security), however.

Population growth, migration, and resource conflicts. Competition for resources has and will continue to be exacerbated by **population growth and forced displacement**. The common theory is that the nomadic pastoralist populations have lower natural population growth rates than sedentary farming populations. For example, in a study of two villages in Niger, Swift⁴⁷ reports that the nomadic Fulani and Tuareg had an annual growth rate of 11 per 1,000 people, whereas the semi- and fully sedentary groups, and all rural peoples together, had an annual growth of 23 to 25 per 1,000. While some of these data are challenged,⁴⁸ in part because of their limited sample size, there is a general agreement that this is not the case for the Tuareg, because of their general adherence to monogamy. **Forced displacement** is a serious issue in the region. There are an estimated 1.1 million people forcibly displaced as a result of conflicts in the Sahel (particularly the western area); of these, two-thirds are refugees and one-third are internally displaced persons. Only estimates exist on this point, but it seems that **at least 50 percent of these displaced are pastoralists**. Though solidarity and community-based hosting of the displaced has been an important feature of displacement across the region, it has also created tensions between groups and created major strains on both pastoralist and farming communities. Protracted displacement adds to grievances and trauma and can easily fuel conflicts.

Another resource access-related conflict issue driven by the security situation concerns **migration**, such as what has developed in Mali over the past two years. It is estimated that because of this crisis, about 220,000 people have fled the country, mostly to Mauritania and Niger.⁴⁹ Such a massive influx of refugees to border areas can cause serious conflicts.

Axes of communication, territorial control and telecommunications. The realm of pastoralists consists of expansive distances, with very few transport infrastructures and available vehicles. Asphalted roads are an exception; sand or mud tracks are the rule. Excessive rain makes crossing the Niger River and its tributaries very challenging. Mobile telephone service only exists in town areas. Border checkpoints are too few, improperly manned and equipped, and not linked to each other or to regional or central authorities. Of particular relevance for the future of pastoralism is the conservation of transhumance routes,⁵⁰ which are infringed upon by ever-extending cropland areas. These routes also suffer from political strife, as was recently exemplified in the 2012–2013 Malian crisis.

The main link between pastoralists and illegal trade is their detailed knowledge of the terrain and of alternative communication methods. Pastoralists know exactly where international boundaries lie and how to transgress them with minimal loss. They excel in moving from one hideout to

⁴⁶ OECD and SWAC, 2010b.

⁴⁷ Swift, 1977.

⁴⁸ Randall, 2012.

⁴⁹ IOM, 2013.

⁵⁰ See McPeak and Turner, 2012; Cissé, n.d.

another and in adapting travel arrangements and routes to unfolding situations. Their traditional skills combined with new technologies (four-wheel drive trucks, mobile and satellite phones, GPS) can be used for both legal and legitimate activities or for illegal (although not always illegitimate) ones.

In conclusion, **several resource accessibility factors constitute a high conflict risk**. These factors are mainly **internal**:

- First, the **growing competition between sedentary people and pastoralists** for access to water, grazing, transhumance routes, transport infrastructure, and markets poses a security risk. This risk is aggravated by pastoralists' increasing inability to complement their diminishing income from livestock-keeping activities. The pressure on resource access will increase with rapid population growth and without concerted action to ensure adequate access to dry season grazing and water.
- Second, **localized conflicts around resource access may escalate** to violence and degenerate at the regional level.
- Third, the **growing population and lack of employment opportunities within or around the pastoralist system make illicit activities more attractive**.
- Fourth, pastoralists can easily contribute to illicit activities using their **unchallenged knowledge of uncontrolled, unpatrolled terrain**.

Among external factors:

- The arrival into an area of **refugees that have been displaced due to conflict or humanitarian crisis** can lead to heightened tension and competition over access to resources.

On the other hand, certain factors tend to curb the escalation of violence in conflicts related to resource access:

- **Conflict-resolution systems often operate efficiently at the local level**; ways to improve these mechanisms will be discussed in Section III.A, "Development Experiences."
- Given the fast-growing economies in the countries south of the Sahel, **other sectors could absorb the surplus unemployed youth**.
- **Pastoralists' knowledge of the terrain could be used positively against criminal activities**, provided government authorities show them respect and decently reward their services.

Key Messages and Further Research Needs

- Relationships between crop farmers and pastoralists have shifted from symbiosis to competition and conflict over access to grazing, crop residues, and water.
- Local resource access conflicts have the potential to scale up to the regional level.
- A more inclusive and profitable pastoralism could dramatically improve the relationship between pastoralists and public authorities, enabling them to monitor roads, tracks, and space. In such a context, improved communication infrastructure would serve populations and security forces more than criminals.

C. Social and Political Dynamics and Conflict

This subsection presents the main features of pastoral societies in their sociocultural and political dimensions. Despite an apparently stronger awareness of the pastoralists' predicament, recent evolutions have conspicuously launched social drivers. Some resilience factors are still potentially available, but these need careful treatment to be utilized.

The sociocultural dimension. Historically, pastoralist societies were built on traditional hierarchical structure with strong social group cohesion and a specific cultural pattern. This strong social cohesion, and the trans-boundary nature of pastoralism (many herds move from the northern Sahel to the northern parts of the coastal areas in search of grazing and water) explain the lesser sense of nationality and belonging and allegiance to a particular state than the rest of the population. However, more recently, several important forces have weakened that social glue and altered cultural identity priorities:

- **Modern methods of communication and outmigration**—in particular by youth unable to find employment in the pastoral sector—expose these societies to other structures and ideas. Contact with urban life and sometimes with foreign countries, and mobile telephones easily transform the rather peaceful fatalism of traditional pastoralists into an aggressive willingness to correct injustices, the magnitude of which they discover suddenly. In addition, pastoralists are usually religiously radicalized via contact with Sahelian and Saharan cities.
- **Increased consolidation of livestock ownership by wealthy absentee owners** dramatically changes interclan power and prestige relationships and enhances overall inequality.
- **Women**, already important in pastoral societies, are developing into social, economic, and political actors who have both positive and negative contributions to conflict situations.⁵¹
- **Traditional authorities** have lost a significant amount of prestige and authority among community members, either because they have been implicated in faulty governmental policies or because they have been associated more or less forcibly with criminal groups.
- **The archaic lineage model is impaired**—the younger generation feels much less morally and socially indebted to the older one, and therefore youth no longer automatically respect their elders. Because they are often deprived of education that would upgrade their prospects, the young make allegiance to traffickers and/or to religious radicals who open unprecedented opportunities for them.⁵²
- Finally, it is unclear what role the **continued existence of slavery**⁵³ plays in illicit activities.

The political dimension. Pastoralists view government and administrative structures with a lot of suspicion. **Their main grudges concern arbitrary limitations of their freedom of movement, unjustified taxation, lack of protection, and government failure to keep their promises (see Box 1 below).** They feel excluded from national life, hardly enjoy any concrete benefits from the state, and do not trust their political representatives. On the other hand, governments and other national and international agencies have invested in pastoral development, and have made a major impact, among others with water development and animal disease control. In particular, the

⁵¹ Nori, Switzer, and Crawford, 2005; Ibrahim, 2013; Possémé-Rageau, 2006.

⁵² See synthesis of the debates of the conference held in Paris on June 24, 2013, by the World Bank and the French Ministry of Defense, "Responding to the Challenges of Fragility and Security in West Africa."

⁵³ Brynn, 2008.

eradication of the Rinderpest has removed one of the main disease risks to pastoral herds.

Box 1: Failed promises in Mali

Commitments to pastoralists by state or regional authorities have often remained unfilled. For instance, in Mali's Kidal region, it is interesting to compare what has been requested and promised with what has been accomplished. Take for example the time period from February 2007 (the publication of a report by the director of the Programme Intégré de Développement Rural de la Région de Kidal, or PIDRK)⁵⁴ to January 2012 (the beginning of the armed rebellion in the Kidal region and the attack on Ménaka). The PIDRK director had suggested a set of actions to improve breeding/pastoralism in the Kidal region that included (1) water and feed for livestock, drilling water wells, and regenerating pastoral grazing areas; (2) sanitary cover of livestock (only 1 vaccination park existed in the region in 2007, whereas it needs about 15 for camels and 6 for bovines); (3) trading (construction of well-equipped livestock markets and a refrigerated slaughterhouse in Kidal, close to the airport, to export meat to the Maghreb and the Middle East); (4) professionalization of the sector's actors (opening a vocational school dedicated to agriculture and pastoralism to train pastoralists' sons to become technicians in community development). None of these actions were carried out, and the 2012–2013 war destroyed the few pre-existing achievements.

Rent seeking further weakens the respect and social status afforded by formal and traditional leadership. With 2012 Corruption Perceptions Index rankings of 105, 113, 123, and 165 for Mali, Niger, Mauritania, and Chad respectively, the main Sahelian countries all fall in the lower part of the global rankings. Reports exist of rent seeking by security and customs authorities and of state complicity in crime⁵⁵.

Coexisting, overlapping, and competing traditional and formal governance structures greatly constrain transparency in decision making. This leads to so-called "forum shopping", where litigants seek the institution they assume to be most receptive to their complaints. Pastoralists, who are less integrated, have fewer opportunities for such forum shopping. However, a recent trend that is mildly encouraged by foreign donors favors some return of traditional authorities in the governance of local issues such as water management,⁵⁶ but not in pastoral land control, which has become a prerogative of mostly crop farming dominated communal authorities.

Decentralization of power could, in principle, lead to better inclusion of pastoralists in the governance structure and herald significant benefits in a very diverse ecological and cultural area.⁵⁷ Under the decentralization laws, locally elected government bodies (rural councils) are legally responsible for delivering social and economic services (health, water, education, marketing, and so on) and for drawing up local land use plans for agricultural, forestry, pastoral, and other uses. However, it is often also a partial abdication by the central government, and power is devolved without adequate budget allocation. Moreover, many local councilors have no experience conducting participatory planning processes. As a result, they fail to address the specific needs of certain groups such as pastoralists, as well as women and other marginal communities.

⁵⁴. Maiga, 2010.

⁵⁵. Lacher, 2012.

⁵⁶. Mamoudi and Sougnabé. n.d.

⁵⁷. Mohamed, n.d.

Finally, **growing insecurity has caused Western governments to ban their nationals from visiting the Saharo-Sahelian areas**, reducing to naught the benefits of a promising tourism sector, which was bringing employment opportunities, additional income, and self-esteem to the local population. International organizations and NGOs have also drastically reduced their presence in these regions. **Pastoralists have therefore lost one of their only advocacy channels** at a time when their dialogue with state authorities has become more problematic than ever. A consequence of these two factors is that **the gap between the periphery and center of modern states is getting much wider**.

In conclusion, there are **many social and political drivers of conflict** that push pastoralists, in particular young ones, to join illicit or extremist groups:

- First, **feelings of exclusion, injustice, and/or utter neglect** prompt pastoralists, especially young ones, to become outlaws.
- Second, **the breakdown of collective cohesion** is exemplified at two different levels: the community level, which is marked by estrangement between elders and youth; and the national level, between the (semi)nomadic pastoralists and sedentary people. At both of these levels, **religious radicalization adds fuel to the fire**.
- Third, the **waning of traditional governance structures drives conflict. No satisfactory substitute for the so-called decentralized institutions exists**.
- Fourth, **the absence of state presence in pastoral areas creates a vacuum that invites insecurity**. Examples include the circulation of small firearms and ethnic rebellions by people who have accessed political power through violence.

Fortunately though, some social and political factors curb the escalation of violent conflict:

- There have recently been some **positive attempts to include pastoralists in decision making at the local and national level**. For example, pastoral associations are now active in Niger, Senegal, and Mauritania. Pastoral codes, although poorly implemented, support the rights of the pastoralists (see Section III.A, “Development Experiences”).
- **Integrated schemes or programs for pastoralists have been tested, with promising results**. They have even more chance of succeeding when they focus on youth and women, since these two groups are crucial to the social dynamics of pastoral societies.
- **There seems to be increasing political awareness of the plight of pastoralists**. For instance, the N'Djamena (May 29, 2013) and Nouakchott declarations (October 29, 2013) on the contribution of pastoral livestock to the security and development of the Saharo-Sahelian region has recognized pastoralists’ critical role in maintaining stability.⁵⁸ However, it remains to be seen whether this new intergovernmental initiatives will be fully implemented.

⁵⁸. Elevage Pastoral, 2013.

Key Messages and Further Research Needs

- Multiple sociopolitical trends contribute to the region's declining stability.
- These include the declining authority of traditional pastoralist rulers due to increased rebellion of youth and the emancipation of women; unclear and overlapping geographic and administrative functions and increasing rent seeking; exclusion of pastoralists because of centralization or decentralization without budget; and the emergence of a new, better-educated, armed class from formerly poorer and lower parts of the pastoral hierarchy.
- In addition, a new, better-educated class emerging from formerly poorer and lower parts of the pastoral hierarchy is reportedly increasingly involved in violent and extremist behavior. As noted above, more work is needed on the background, motivation and dynamics of the groups behind the destabilizing activities in the region.
- An aggravating factor is pastoralists' weak political representation and their limited access to state funding.

Section III. Pastoralism Development Experiences to Enhance Stability

A. Development Experiences

This section summarizes the effect, particularly on security, of the main pastoral development activities being implemented by governments and the development community. Over the last several decades, the World Bank's activities to develop this region have included Bank-funded projects supporting pastoralists in Mauritania, Senegal, Mali, Niger, and Chad, and in East Africa in Ethiopia and Kenya. The Bank intends to continue these efforts via the Regional Pastoral Livelihood Resilience Project, which initially covers Ethiopia, Kenya and Uganda and a new regional project in the Sahel, to cover all Sahelian Countries, which is planned for appraisal in July 2014. Lessons can be learned also from World Bank projects on community development, such as the Community Actions Program (CAP) in Niger, now in its third and last phase, which started by empowering small village organizations, then village clusters, then Communes (assisting democratically elected people). A number of Communes covered by the Project are considered "pastoral" – because of their population, and the rather promising launching of the **Stratégie pour le Développement et la Sécurité des Zones Saharo-Sahéliennes du Niger** (SDS Sahel-Niger), with actions programmed according to the prevailing situation in each commune. However, as with pastoral development projects in the past, the post-project sustainability of these activities still has to be proven.

The section below is not a comprehensive review on pastoral development. There is no comprehensive recent detailed review on World Bank experiences available, and this falls outside the framework of this note. The description below is based on extensive literature from experts, technical organizations and think tanks. World Bank focused reviews included those by Fratkin and Mearns, 2003, Gilles and de Haan 1994; Pratt, LeGall, and de Haan 1997; OED/English 1999 de Haan et al. 2001, World Bank 2009⁵⁹.

The consensus on good practices that emerges from these pastoralism development experiences includes the following points: (1) enhance resource access and mobility, (2) promote conflict-resolution mechanisms, (3) support pastoral associations, (4) support livestock marketing, (5)

⁵⁹ World Bank, 2009.

support food aid and food security, (6) support technological interventions to improve productivity, and (7) support education services. However, development interventions also have negative impacts, particularly if they are designed and implemented in ways that are insensitive to the social, economic, and political realities of pastoralist societies. Experts, technical organizations, and think tanks have reached consensus on the points discussed below.

Enhancing resource access and mobility will reduce conflicts, and in particular their escalation to a wider level. Several Sahelian countries have passed various **pastoral laws or codes** that define the rights of the pastoralists, including Mauritania (2000), Mali (2001), Burkina Faso (2003), and Niger (2010).⁶⁰ Thébaud and Hesse offer a balanced review of these codes' contribution to pastoralism, saying they are:

“...a key feature of pastoral systems in the Sahel...There are provisions for giving herders' rights over the common use of rangelands, priority—albeit not exclusive—rights over resources in their 'home areas' as well as rights to compensation in the event of losing their lands to public interest needs... Greater recognition of customary tenure arrangements, including the principle of decentralised natural resource management, the multiple and sequential use of resources by different actors at different times of the year (e.g. herders' access to harvested fields) and the need to manage conflict at the local level, are other innovative features of significance...**With the exception of the pastoral code in Mauritania, all of the laws adopt a very technocratic and development-oriented approach** in support of pastoralism. This is particularly apparent in Burkina Faso's pastoral code. Provisions exist, for example, for the establishment of special grazing reserves (*zones pastorales aménagées*)... It seeks to replace customary systems of resource access, driven by what is perceived by outsiders to be rather 'messy' processes of social and political bargaining between actors, with a more orderly and technical system. This, it is believed, will make pastoral production in the Sahel more secure...In these contexts **water rights are crucial** to manage grazing lands sustainably, and endow pastoral communities with assets that can be negotiated to access distant resources in times of crisis... **The water code does not establish a functional link between access to water and access to grazing**, as if these resources were independent of each other. The role of management committees is limited to surveillance of the water infrastructure, excluding the use of grazing resources or control over the number of livestock using the well”.⁶¹

Niger's pastoral code is more recent (2010) and probably the most advanced, because it very explicitly recognizes that “mobility is a fundamental right of herders and transhumant pastoralists.”⁶² Implementation is still incipient in part due to lack of funds, but conflicts have practically disappeared in the regions where transhumance corridors have been marked.

Facilitating mobility has been a hot topic over the last decade, as governments view mobile pastoralism as backward and difficult to control and prefer to support ranching. A good overview of the superiority of mobility is provided by the International Institute for Environment and

⁶⁰. See selected examples, Toutain et al., 2012, p. 47.

⁶¹. Thébaud and Hesse, 2008.

⁶². Quoted in Learning Initiative: Making Rangelands Secure, 2012.

Development (IIED) and SOS Sahel International UK.⁶³ This study provides convincing comparative data on different levels of mobility. For example, pastoralism produced 155 and 158 percent more protein per hectare than commercial ranches in Kenya and Botswana respectively and generated 150 percent more profits (in U.S. dollars) in Zimbabwe. Similar data were reported in Mali. Data from Niger also confirm the superiority of the nomadic system. However, the promotion of nomadic mobility has not yet received genuine support from Sahelian governments, who, until recently only paid lip service to this cause, but as mentioned above, is now formally endorsed in the Nouakchott and N'djamena declarations.⁶⁴

There is a good experience with **conflict-resolution** mechanisms, which were discussed in Section II.B, “Resource Access Dynamics and Conflict,” about disputes between pastoralists and crop farmers. Literature⁶⁵ highlights the benefits of local and informal mediation. It is reported that while 75 percent of these conflicts find peaceful settlement, 25 percent may escalate to a more violent and regional scale.⁶⁶ It can reasonably be argued that preventive measures could restrain such escalation. But prevention demands long-term efforts that go beyond local capacity: They must involve the population, NGOs, local and central government, and development agencies. In addition, prevention is not only about providing services (health, water, sanitation, education, veterinarian services, energy, and transport infrastructures); it also involves the provision of civic and political benefits, especially effective electoral representation and judicial services.

Decentralization, which was discussed in Section II.C, “Social and Political Dynamics and Conflict,” could be in some cases another way to support the political and economic inclusion of pastoralists. Although it has been successful in, for example, World Bank projects in East Africa; it often remains hampered by the local administrators’ lack of participatory skills. A 2013 World Bank/CCSD–commissioned study by the Overseas Development Institute (ODI) titled “Innovations in Service Delivery: International Experience in Low-Density Countries” raises the issue of decentralization and challenges the assumptions behind the rationale of decentralization in itself as a peace-building measure. “Evidence suggests that it is the extent and form of decentralization, and the nature of its implementation, as well as the broader governance environment, that are key determinants of how services are provided.”⁶⁷ The study concludes that not only must the decentralization model fit the context (Anglophone or Francophone, conflict affected, low-density population areas, ethnically diverse, and so forth), but it must be driven by a local and national-level dialogue around what kind of state and process is desired. The report makes the case that this is of increased importance when dealing with nomadic or seminomadic populations such as pastoralists, as well as in conflict-affected environments where processes of reconciliation and access to justice need to be an integral part of service delivery.

Improving local governance and institution building to benefit local governments does not rank high enough among the priorities of the Sahel’s development programs,⁶⁸ and the linkage with pastoral communities is still too weak,⁶⁹ although experts have identified possible

⁶³ IIED and SOS Sahel International UK, 2011.

⁶⁴ Yet the international community maintains its pressure; see the subregional forum held in Nouakchott on October 29, 2013, by CCSD and CILSS, the final declaration of which unambiguously supports mobility (in French: “*mobilisons ensemble un effort ambitieux pour un pastoralisme sans frontières*”).

⁶⁵ Swift, n.d.

⁶⁶ Little, n.d.

⁶⁷ ODI, 2013.

⁶⁸ Dufourcq, 2013.

⁶⁹ See Bossuyt and Gould, 2000; IIED, 2003.

improvements.⁷⁰ In the 2013 ODI study mentioned above, a section on hybrid approaches to governance and service delivery stresses the fact that it is difficult to balance strengthening local governments that are essentially state structures with allowing and including customary institutions in local governance systems. Although hybrid structures composed of both customary and state elements have sometimes worked, as in the case of community policing programs in Afghanistan, they also have negative effects. Consider the case of Yemen, where traditional chiefs were included in the state's sheikh system. In the long run their authority was undermined because they became viewed as being co-opted by political interests, which allowed the state to push forward its agenda in rural areas without paying much attention to state-building efforts. The ODI report thus concludes that the need to adapt institution building and service delivery is particularly relevant in the Sahel; populations there are highly diverse and animosity often exists toward the state, as is the case in certain pastoralist populations. Differentiation of formal and informal entities is also important where these may work against each other, particularly when dealing with the resolution of disputes.

Supporting institutions of collective action (pastoral associations) can help amplify pastoralists' voice, increase their inclusion in the national policy debates and in principle, reduce the temptation to participate in illegal activities. Regional or national pastoral associations have had some success to this end, although their impact is often mitigated when the elite capture the decision making. These associations can also provide a successful framework for much-needed service delivery, such as veterinary services, which can eventually be combined with human health services. A good example of an integrated service has been the combination of contagious bovine pleuropneumonia (CBPP) and child vaccination campaigns in Chad, which increased vaccination coverage of young pastoralists and reduced costs.⁷¹ Pastoral associations have been less successful in supporting the introduction of improved range management and sustainable operation of water infrastructure. In any case, regarding the latter, care must be taken to create the appropriate institutional framework to (1) avoid conflicts, (2) ensure sustainable operation and maintenance, and (3) avoid range degradation.

Marketing can play a useful role in reducing the vulnerability of poor pastoralists. Some local market development might be needed, but generally, the traditional sector is quite efficient; it is preferable to avoid heavy public sector involvement. The public sector (including the regional centers) should play a bigger role to support stratification⁷² of livestock production with higher potential zones, as well as to establish mechanisms and incentives for early destocking and restocking⁷³.

⁷⁰ See IIED, 2006, p. 58; Bonnet and Hérault, 2011.

⁷¹ Weibel et al., n.d.

⁷² Stratification concerns the livestock production system, whereby the males (the feeder animals) are raised in the Sahel to a relatively young age (2.5-4 years), and then sold to out-grower farmers in the higher potential areas (the better endowed savannas), where they will be fed ("finished") on good feed. The better feeding at the end of the lifecycle increases the quality of the meat, and hence its grade. With an increasing per capita income in SSA and more discerning consumers, it is argued that this system, which has had a mixed performance in the past, now has a chance to succeed.

⁷³ Early destocking concerns a set of incentives (transport and slaughter subsidies) to make it attractive for traders to purchase weakened stock from remote herders at the onset of a drought. When a drought sets in, prices drop sharply, and remote herders have difficulty selling their stock. Offering transport incentives to traders can result in better access, and also encourage the more remote herders to sell their weakened animals. An example of a successful pilot comes from Ethiopia. See Abebe et al., 2008, which gives a good cost-benefit ratio.

Food aid often neglects the pastoralists. If poorly delivered—for example, if the aid ends up on the black market or benefits the wealthy—it can cause discontent and contribute to rebellion. Reasons for the lack of a timely and effective response in affected pastoral zones include lack of available information; refusal to declare an emergency; greater complexity of intervention in pastoral areas; security constraints for international staff; and lower priority given to the pastoral zones by donors and governments.⁷⁴ If not designed and implemented correctly, food aid can suppress local production and distort livestock prices and food markets.

It should also be noted that from a purely military standpoint, Hendrix and Brinkman⁷⁵ argue that while increases in food insecurity can be a source of grievances that fuel rebellion, acute and severe food insecurity also has a dampening effect on conflict behavior, as unpopulated areas and food insecurity diminish the resources available to militants. Rebel movements typically do not grow their own food and instead depend on voluntary or coerced contributions from the population. Drought depresses rural incomes via reduced agricultural and livestock production and the scarcity makes it more difficult to find locals who are willing to aid rebels and also makes the population less likely to join rebel movements. Whatever the case, food aid policies must, from the moment food is delivered, help recipients regain their capacity to maintain their livestock and grow their own crops, and they should not crowd out local production.

Technological interventions (animal health, water development, range management) always get high priority in discussions with pastoralists. The vast and sparsely populated areas make it practically impossible for the public veterinary facilities to provide regular services beyond the annual vaccination campaigns. Basic animal health-care systems use para-veterinarians and community animal health workers and have generally provided good results,⁷⁶ if they are supported by the public sector and not seen to be in competition with it.

Education services⁷⁷ are also essential to promoting stability. Pastoralists tend to lack the education and skills required by the modern world, and girls are especially vulnerable to falling behind. The significant education-related challenges on the provider side include high costs and difficulties in recruiting staff, and on the student side include scattered and mobile populations, child labor, illiteracy, and parents who resist education, in particular for girls. No good model exists yet for the Sahel, but successful examples are found in Mongolia (with boarding schools), in Iran (with mobile schools), and in Australia (with radio schools). A combination of these methods will be necessary for the Sahel.

Taking into account the specific needs of forcibly displaced populations due to drought or conflict. Forced displacement as a result of conflict affects approximately 1.1 million people in the Sahel, a large portion of them pastoralists.⁷⁸ Forcibly displaced pastoralists in the Sahel usually fall into the category of refugees, although also internally displaced in some cases, which means that they have lost access to their habitual pastoral living space characterized by their mobility.⁷⁹ Loss of mobility and placement into camps creates heightened vulnerability and poverty of pastoralists since livelihood opportunities are limited and the ability of pastoralists to retain their livestock is

⁷⁴ Sahel Working Group, 2011.

⁷⁵ Hendrix and Brinkman, 2013.

⁷⁶ See, for example, Niang, 2004.

⁷⁷ This section is largely based on the *Pastoralism Information Note 6* (see DFID, n.d.). In addition, an ODI study on low-density population governance has highlighted a mobile vocational and educational training program in Nigeria.

⁷⁸ Vinck et al, 2013.

⁷⁹ Schrepfer and Caterina, 2014.

particularly daunting. Special efforts are needed to support the return of pastoralists to their original settlements or if this is not possible to help them to maintain their pastoral life and economy, which might mean interventions that help them to reconstitute their herds.

Key Messages and Further Research Needs

- The overriding principle for supporting pastoralists is that the public sector needs to adapt its structure and modalities of service deliveries.
- Pastoralists should not be fit into the model the state has defined for urban and sedentary populations; rather, the state should adapt its structure specifically to meet pastoralists' needs.
- Another important principle is to take into account the needs of vulnerable populations such as the disabled, elderly, extremely poor, youths, and the forcibly displaced.
- More work is needed on the lessons learned from pastoral development, not only from a portfolio review of World Bank projects, but also including the large number of activities from national governments, other donors and NGOs.

B. Stabilization and Improving Security

The above development experiences have already shown promising results. However, their common limitation lies in the fact that they have not systematically integrated a stabilization component. This is in line with the conclusions of the recent conference *Responding to the Challenges of Security and Fragility in West Africa*⁸⁰ was that “development actors may no longer shun security problems in West Africa”. As from now, they should accompany African societies in their transition and help them to weather through their mutation without violence, rather than only serve them again the technocratic discourse on *capacity building*.” This assertion is fully valid in the case of pastoralism.

The lessons, that emerge from these experiences is that in order to be successful in an unstable environment like the Sahelo-Saherian areas , development of pastoral society needs to integrate close attention to the way the development efforts can affect stability.

Therefore, stabilization policies must comprise at least three main elements: (1) trust and confidence building, (2) protection measures that are adapted to physical constraints and to the population's needs, and (3) regional cooperation.

It will be critical to establish trust between the pastoralist population and the state, including security forces. The goal is to foster a relationship in which pastoralists and the surrounding communities cooperate with government authorities on mutually developed security initiatives, and develop a community system of alert for security threats thereby depriving criminals of local intelligence and logistical support. However, to this end, at least two prerequisites should be met:

- Investments must be made in service delivery, crucially on security and justice/conflict resolution mechanisms initially, and basic services and infrastructure to upgrade the

⁸⁰ World Bank and French Ministry of Defense 2013.

population's living conditions; pastoralists should be confident that they have not been abandoned by authorities.

- Better governance and a political settlement that addresses grievances will foster a more confident relationship between security forces and “positive influencers” (elected and customary leaders, for example).⁸¹

The cost of conventional policing in remote and immense pastoralist areas cannot be sustained—the total length of Maghreb-Sahel states' borders is about 40,000 kilometers; 7,466 kilometers for Mali and 6,200 kilometers for Algeria. On the other hand, a flourishing pastoral economy in the Saharan borderlands is essential to the political stability and security of these areas.⁸² Therefore, specific means must be envisaged that are adapted to the terrain.

The following challenges currently exist:

- Pastoralists continue to view the army as a repressive institution that fails to carry out their main mission, i.e. ensure stability. Moreover, efforts to improve the army are often contradicted by a heedless implementation of disarmament, demobilization, and reintegration (DDR), whereby negative elements from armed rebel groups get promoted into the regular army.
- The gendarmerie in some places has a better image, but its on-the-ground presence is too limited and its chain of command inadequate—a defect shared by other security forces.
- The police are concentrated in capital cities and major urban centers. The public also holds them in low esteem.
- Customs is among the most corrupt institutions. Unless tariffs with Maghreb countries get harmonized, customs will continue to be part of the problem rather than the solution.
- Intelligence services are also part of the problem, because of their association with criminal groups.
- Self-defense “civil” guards are also part of the problem. For instance, the Movement for Unity and Jihad in West Africa (MUJWA) originates from militias created in the 1990s by Arab, Fulani, and Songhaï groups to fight against Tuareg rebels.
- “Camel Corps,” inspired by colonial experience, may help improve security in remote areas. Such is the case in Chad, with the National and Nomadic Guard (La Garde Nationale et Nomade du Tchad).⁸³ This option is worth considering because it ensures a state presence in wild, semi-desert areas and is adapted to the pastoralist lifestyle, though camels can hardly compete with four-wheel drives.

⁸¹ For instance, technology can be used as a tool in real time to improve a community's security. Cellphones where reception is available, and satellite phones in some cases can be provided to communities to report incidents and send messages of peace. An example of this has worked in Kenya under the Sisi Ni Amani NGO platform. Communities can have an SMS system that sends them peaceful messages or that they can send alerts to. Another widely used technology is radio programs that transmit peaceful messages to youth and that can be used also as alert systems as in the United States Institute of Peace Radio Program in South Sudan. A current World Bank project in CAR is using mobile technology to map livestock corridors to prevent conflict between communities and this has also been done in the Darfur Peace and Development Project in Sudan by the World Bank.

⁸² This section is inspired from views that economist Jeremy Swift, an expert on nomadic pastoralism, expressed to the authors.

⁸³ Khamis and Pratt, n.d.

Sub-regional development and stabilization cooperation is essential. The focus countries should be Mauritania, Mali, Niger, Chad, and possibly North Sudan, given the violence in Darfur related to pastoral routes and resource access. The Maghreb countries, in particular Algeria and Libya, should also be involved. In light of its supposed connections with regional stability, pastoralist development, which has long been somewhat neglected in national, regional, and international policy agendas, has recently gathered significant political momentum. For instance, the N'Djamena Declaration (May 29, 2013) on the contribution of pastoral livestock to the security and development of the Saharo-Saharan region recognizes the critical role pastoralists can play in maintaining stability. The Nouakchott Declaration on Pastoralism⁸⁴, adopted by six Sahel countries in October 2013, demands that pastoralism be placed at the center of strategies and policies promoting development and stabilization. In the Horn of Africa, a Regional Drought Disaster Resilience and Sustainability Platform launched by the Intergovernmental Authority on Development (IGAD) in November 2011 benefits pastoralist economies by engaging all relevant stakeholders in the region to share knowledge and coordinate their interventions.⁸⁵ Furthermore, the Committee for Drought Control in the Sahel (CILSS) is an important technical partner, and South-South cooperation should be strengthened between CILSS and IGAD initiatives. Several security initiatives have already been launched, but these have been minimally executed at the continental and regional levels (AU, ECOWAS, CEMOC, UFL).

A subregional database could also be a significant asset to **support judiciary cooperation** and actions. Strong and sustainable support of national judiciary systems would help prosecute the subregion's main criminals, whose connections with local security forces and governments has offered them impunity up to this point. Such initiatives would enhance governance, improve the population's sense of justice, and make fighting organized crime more efficient.

Key Messages and Further Research Needs

- Although there is consensus around key principles for pastoral development; the key constraint is the judicious integration of the different interventions into a comprehensive approach that combines stabilization and development measures at the national and subregional levels.
- Security and justice as basic services are at the heart of a successful development and stabilization approach because they gain the trust and confidence of the population in the government, and they must be integrated into project design from the start.
- Regional cooperation and collaboration around a consensus-built framework on pastoral development and stabilization needs to be strengthened and the World Bank could provide support to regional institutions.
- More work is needed on the “economics of stability”, i.e., comparing the broader economic returns (including its ripple effect on the regional economy) of increased stability resulting from effective pastoral development investments.

⁸⁴ Nouakchott Declaration, 2013.

⁸⁵ Other relevant policy and institutional frameworks include The African Union Policy Framework for Pastoralism in Africa (2001); the Comprehensive Africa Agriculture Development Programme (CAADP/NEPAD - 2003); the Global Alliance for Resilience – AGIR Sahel and West Africa (2012); and the United Nations Regional Strategy for the Sahel (2013).

Section IV. The Way Forward

We find that pastoral development and stabilization in the Sahel should focus on the following principles: (1) developing and strengthening a positive, participatory state presence in underdeveloped and pastoral areas, which are usually characterized by low population density and low levels of governance and high border porosity, with the goal of enhancing the state's ability to provide security, justice and other basic services and improving infrastructure; (2) maintaining mobility and resource access for pastoral populations; (3) strengthening health and education services, adapted to local livelihood conditions; (4) opening livelihood prospects for youth; (5) enhancing the social, economic, and political inclusion of pastoralists into local and national decision-making processes; (6) facilitating outmigration of surplus labor to other occupations and/or higher potential or urban regions; and (7) maintaining pastoralists' cultural identity. Therefore, the approach must feature comprehensive support of pastoralist society and be focused on addressing problems of inequality, local governance, and improved relationships with states. It should fulfill the population's basic social, cultural, and economic needs and build trust in state authority.

As discussed, **pastoral development** alone will not solve the problem of deteriorating stability.⁸⁶ Nevertheless, it will encourage populations to rely on social services; this reliance foments dependence on public institutions and encourages trust in government.

Pastoral development must become an **integrated package** to be promoted in real partnership with target populations. It should focus on employment generation, increasing productivity, and reducing pastoralists' vulnerability. It must also strengthen education, animal and human health services, infrastructure development in underused areas, and recognize pastoralists' rights, including mobility.

Pastoral development must be accompanied by **measures to enhance stabilization**. Necessary prerequisites should be met in terms of security and justice provision, infrastructural efforts and governance.⁸⁷ These measures must encompass training security forces with a strong local component (although the World Bank cannot be involved in providing direct support in this regard, partnerships should be established with relevant authorities on the ground); rewarding the use of local knowledge and skills against criminal activities; and providing access to security and justice to the local population as a trust-building mechanism.. Foreign partners will also need to engage in long-term commitments.

Given the guiding principles outlined above, the following specific policy recommendations emerge from this note:

1. Provide a "level playing field" for pastoralists, in particular by conducting dialogue with them on an equal basis and by designing development interventions according to their needs, rather than to the needs of governments.
2. Eliminate the arbitrary (and often informal) taxation of transhumance routes and livestock trade.
3. Clarify the roles and mandates of traditional and formal governance to ensure unbiased conflict resolution.

⁸⁶ As increasingly also acknowledged by governments; see, for example, International Seminar on Security and Development in the Sahel-Sahara, 2013.

4. Strengthen pastoral codes and their implementation, with the aim of reducing limitations on movement and improving secured access to water and dry season grazing, while at the same mitigating conflict resulting from emerging land grabbing.
5. Stop competition from dumped powder milk and imported meat, which stalls investments in local breeding activities.
6. Induce ECOWAS to strengthen its lead on regional integration issues, and specifically to see that its decision/regulation on transhumance becomes implemented in a more effective and expedient manner.

As a first step, such an integrated package could be tested in **pilot areas** where the population is receptive to combating illicit activities and institutional prospects are favorable. Lessons for an integrated approach could be taken from the launching of the **Stratégie pour le Développement et la Sécurité des Zones Saharo-Sahéliennes du Niger** (SDS Sahel-Niger).⁸⁸ Communes are to be the entry point for actions envisaged by SDS, with actions programmed according to the prevailing situation in each commune; local responsibility, internalization of implementation, and ownership by populations will be encouraged. However, financial pledges in support of SDS Sahel-Niger need to be confirmed. The main foreign partner is the European Union, while Niger is to supply as much as 50 percent of the financing.

A proposal for pilot development areas could be specifically promoted in Ménaka, a new regional entity in Mali that borders on Niger, and in Tessalit, a municipality of the Kidal region on the border with Algeria.

Proposal for Pilot Development Areas in Mali: Ménaka and Tessalit

Ménaka and Taoudeni received regional status in December 2011. Ménaka is a major livestock area, and Taoudeni is an important transhumance sector. Pilot projects could be promoted in these two new regions. Focusing on the Ménaka region would be particularly relevant, for the following reasons.

- It is a symbol: Every rebellion starts in Ménaka, with militants from Kidal (1990/2012).
- It offers a favorable context for pastoralism and breeding (geography, pasture, tradition, population; it is thus a good place to improve/develop/professionalize pastoralism).
- It has a multiethnic population with a tradition of peaceful relationship/cohabitation (Tuareg, Songhaï, Peul).
- It can be used as leverage on subregional stabilization: at the border with Niger; close to Niamey; on the Kidal/Tahoua-Tassara axis (strategic in terms of both trafficking and pastoralism).
- It is the right time in terms of governance (it is a new region; has positive, authoritative, and legitimate influencers, such as the Amenokal of the Ioulimiden).

Tessalit municipality (including the border town In-Khalil), in the north of the Kidal region, could also be a pilot area, because of:

- its localization (border with Algeria);
- significant infrastructures (airport, well at In-Khalil—a drilling belonging to the municipality, which provided revenues until 2012);

⁸⁸. Mohamed, n.d.

- a multi-ethnic population (with a long tradition of contacts with Westerners, until recently);
and
- The strategic importance of the In-Khalil axis, in terms of both trade and security.

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