

CLIMATE CHANGE, LAND AND RESOURCE GOVERNANCE, AND VIOLENT EXTREMISM: SPOTLIGHT ON THE AFRICAN SAHEL

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ABSTRACT

Focusing on the African Sahel, this issue brief examines the ways in which weak land and resource governance—especially when coupled with environmental triggers, resource scarcity, and other factors—can in some cases fuel the drivers of violent extremism. The complex relationships among the drivers and consequences of weak land governance, climate change dynamics, and violent extremism are highlighted using a schematic framework, and supporting literature. Examples from across the African Sahel and a more detailed case review of northern Nigeria are presented to illustrate how these complex relationships, in conjunction with other factors such as violent conflict, youth marginalization, and corruption, have contributed to the emergence and spread of violent extremism. We conclude by arguing that, in addition to interventions aimed at building peace, promoting democratic governance, and addressing political economy issues, local solutions for strengthening land governance systems and securing tenure rights for vulnerable peoples can prove effective in resolving deep-seated conflicts, reestablishing trust among contending parties, and creating positive entry points for addressing violent extremism. This brief recommends that land governance-focused interventions should include measures that involve (1) adopting multifaceted, coordinated approaches; (2) recognizing and strengthening customary tenure systems; (3) promoting flexibility within land administration institutions; (4) bolstering dispute resolution mechanisms to address land and resource related conflicts; (5) critically reviewing and reforming land and resource laws and policies; and (6) exploring new issues related to violent extremism. From our experience in the field, we believe local solutions for improving land governance can promote greater stability, resiliency, and prosperity across the Sahel and other volatile regions. More broadly, our framework suggests ways in which the United States Agency for International Development (USAID) and other donors may design and implement integrated multi-sectorial programs to fulfill broader democratic, economic, environmental, and peacebuilding objectives—that incorporate land governance measures. Sequencing interventions in a manner that effectively addresses the various dimensions of nested conflicts is critical for programmatic success and sustainability.

BACKGROUND

Across the vast arid and semi-arid Sahelian landscape bordering the Sahara Desert, complex interactions between environmental triggers, societal vulnerabilities, and demographic growth—all worsened by the broader context of climate change—have contributed to growing resource scarcity and shifting land use dynamics. These factors aggravate existing tensions over land and natural resources, especially around access to surface and sub-surface resources, and thereby create

¹ The views represented here are those of the authors and are not necessarily shared by Tetra Tech or its clients.

conditions for land and resource conflict and, in some situations, the emergence of violent extremism. While there is little doubt that the Sahel has long been plagued by chronic environmental and economic shocks contributing to food shortages, unemployment, and ensuing political instability, what is less well known is how weak governance of land and natural resources has, along with other factors, sparked violent extremism.

The international press and civil society report with increasing alarm how long-standing tensions between pastoralist herders and farmers have escalated as a result of desertification, population growth, resource pressures, and other factors (Amnesty International, 2018; Moritz, 2010; Nigeria Watch, 2017). Weak states, endemic corruption, and elite predations often fuel local resentment, and as a result, Sahelian countries have become hotspots for violence among state and non-state actors, significantly undermining regional security. The deterioration of livelihoods, coupled with growing frustration and animosity toward corrupt government officials, contribute in many situations to the radicalization of youth (Onuoha, 2014). Extremist groups, such as Boko Haram, al-Qaeda in the Islamic Maghreb (AQIM), Islamic State (ISIS) - West Africa, Al-Shabaab, and other affiliates have recruited disaffected youth across Africa with promises of cash, sex, drugs, and religious martyrdom from soldiering and illegal trading (Onuoha, 2014; Mercy Corps 2016, 2017; The Economist, 2016).

The United States foreign policy apparatus is increasingly concerned about security issues unfolding in the Sahel. Militant and terrorist groups are carrying out waves of attacks against African governments, often touching on the interests of the US and its allies (see [Esri's Map of Terrorist Attacks 2018](#)). US armed forces were killed in an ambush in Niger in February 2018 (Callimachi et al., 2018). American soldiers have also been [attacked in Somalia](#) (Gibbons-Neff and Cooper 2018). United Nations (UN) peacekeepers remain a prime target of terrorist attacks in Mali and the Central African Republic (UN, 2018). Al-Qaeda affiliates threaten the operations of Western mining and petroleum companies across North, East, and West Africa (Reuters, 2018). In response, the Trump Administration's new Africa Strategy aims to address comprehensively the serious threat of ISIS, al-Qaeda, and their affiliates (National Security Council, 2018). Publicly available documents of the US State Department and the US military note that militant groups are often based in remote and largely inaccessible places across the fringes of the Sahara Desert (US Department

BOX I: DEFINITION OF KEY TERMS

Violent Extremism

Advocating, engaging in, preparing, or otherwise supporting ideologically motivated or justified violence to further social, economic, and political objectives (USAID, 2011a)

Land and Resource Conflict

A conflict that relates to competing claims to land and resources and is of a breadth and depth not easily resolved within existing law and by existing institutions (Bruce and Boudreaux, 2013).

Land and Resource Governance

The system of rules, processes, and structures through which decisions are made about access to land and its use (Palmer, Fricksa, Wehrmann, 2009). Land and other natural resources are often governed by both statutory or customary systems.

Land Tenure Security

The perception by people that rights to land will be recognized by others and protected in the event of specific challenges. It is manifest by a full set of use and transfer rights of sufficient duration to recoup labor and capital invested, the ability to enforce those rights against the claims of others, and the assurance that the benefits derived from those rights and related investments will be attained (USAID, 2013a).

of State, 2017). According to the US Department of Defense, “global climate change will have wide-ranging implications for US national security interests over the foreseeable future because it will aggravate existing problems—such as poverty, social tensions, environmental degradation, ineffectual leadership, and weak political institutions—that threaten domestic stability in a number of countries” (US DOD, 2015, p. 3). In combination with other factors, such as land and resource governance challenges, climate change may aggravate the conditions that give rise to violent extremism.

Recent studies by Sahelian specialists note that weak land and resource governance sometimes fuel the fires of violent extremism (Benjaminsen and Ba, 2018; Magrin and Montclos, 2018; Nett and Rüttinger, 2016). For example, struggles for the control of land, pastures, water, and other natural resources create opportunities for violent extremists to gain footholds in vulnerable communities. The case study presented in this issue brief shows how with government complicity, criminal actors like drug lords and well-organized bandits are capturing and indeed governing access to and use of land and other natural resources (Muñoz-Mora, Tobón, d’Anjou, 2017; Lacher, 2012; Raineri, 2018). Such actors often aim to fill political vacuums where illicit activities can go unnoticed and unpunished. In some places across the Sahel, the state’s capacity to fight against drug lords, bandits, and politically or religiously driven extremists may be inhibited by the presence of deeply rooted land and resource conflicts. Moreover, as the literature suggests, the drivers of violent extremism may be exacerbated, and in some cases, triggered by a combination of factors that include climate change and weak national and local land governance. This array of factors can escalate or de-escalate security risks, though unfortunately, in largely unpredictable ways.

When conceptualizing the triggers of violent land and resource conflict, it is useful to structure the complex realities of conflict in the Sahel with a political economy model that sequences and nests causal factors within local, regional and global interactions. Diagram 1, modified from Wakhungu, Nyukuri, and Huggins (2008), illustrates schematically how violent land and resource conflicts are often linked to systemic disputes and tensions with local to global interfaces. As the model suggests, local conflicts may consist of multiple causes and evolve over time. Local land disputes might be “nested” within larger conflicts or tensions of regional or international dimensions. Local resource conflicts may explode further because of predatory and corrupt behavior by national elites and the misuse of political power by patronage networks.

To complicate further this causal explanation, environmental factors, triggered by increasingly pervasive climate change factors, coupled with rapid demographic growth, can further aggravate “nested” land disputes.

With Diagram 1 in mind, this brief presents (1) a schematic framework for understanding how land and resource governance is linked to various drivers of violent extremism, and (2) a synopsis of the relevant literature supporting this framework. By way of illustration, the paper presents a case study of northern Nigeria to show how weak land and resource governance is

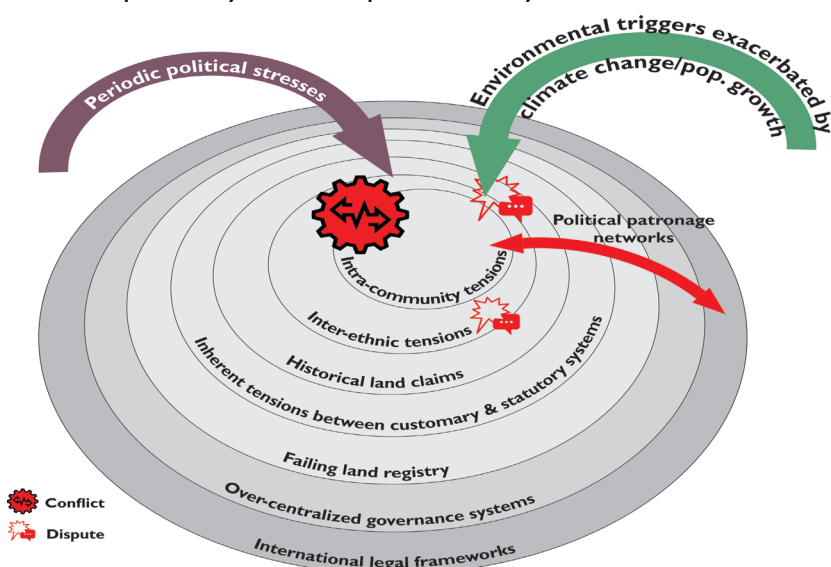


Diagram 1: “Nested” Nature of Land Disputes (modified slightly from Wakhungu, Nyukuri, and Huggins [2008])

associated with an array of societal vulnerabilities and environmental dynamics to produce a toxic breeding ground for violent extremism groups to emerge and flourish. Despite the complexity of these types of situations, the authors suggest that local solutions focused on redefining land and resource tenure agreements in both the customary and statutory tenurial regimes can provide entry points for rural communities and policymakers to address some of the underlying drivers of violent extremism. Based on lessons from experience, the authors recommend programmatic ways to address the land and resource governance issues currently adding fuel to the fires of violent extremism in the Sahel.

THE INTERPLAY OF LAND AND RESOURCE GOVERNANCE, THE ENVIRONMENT AND DRIVERS OF VIOLENT EXTREMISM

The popular press, government reports, and scholarly reviews, as well as the authors’ observations from years of field experience, suggests that poor land and resource governance often functions like kindling for a fire. It can spark negative responses that, especially when combined with environmental and societal triggers, might fuel violent extremism, and out of this, terrorist attacks threatening life and property (see Diagram 2).

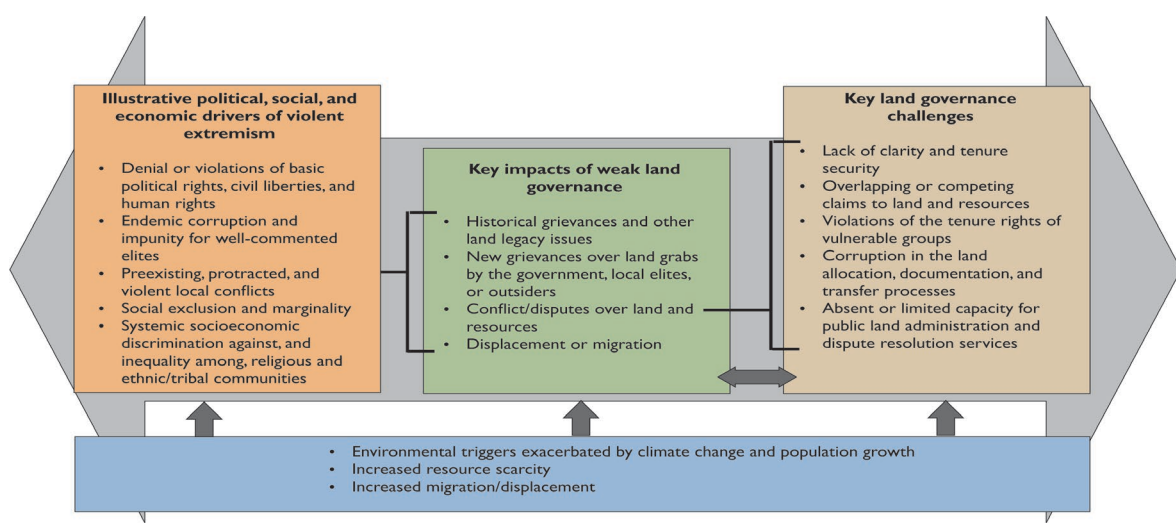


Diagram 2: Illustrative Linkages between Land Governance Challenges and Violent Extremism Drivers

Diagram 2 presents a more nuanced and complex explanatory model that illustrates how weak land governance, especially when coupled with environmental triggers² and other vulnerabilities (e.g., resource scarcity, population growth, and migration), can drive violent extremism in arid and semi-arid parts of the Sahel, and in other regions of the world. The far-left box of Diagram 2 lists some of the political, social, and economic factors that sometimes spark violent extremism. Policy documents spell out these drivers, like the USAID 2011 *Development Response to Violent Extremism* and the USAID *Guide to the Drivers of Violent Extremism* (USAID, 2009, 2011a). The far-right box shows key land governance challenges that often plague the Sahel. The middle box of Diagram 2 shows relevant impacts of weak land and resource governance. The arrow behind the three boxes points in both directions, illustrating (1) how the impacts of weak resource governance aggravate or trigger drivers of violent extremism, and at the same time, (2) how the drivers of violent extremism can perpetuate

² For purposes of Diagram 2, “environmental triggers” are interpreted to include the impacts of climate change and desertification (e.g., rising temperatures and droughts, land and resource degradation; and changes in seasonal patterns).

or worsen the impacts of weak land and resource governance and ultimately trigger additional land and resource governance challenges. The box at the bottom of Diagram 2 illustrates how environmental triggers exacerbated by climate change and population growth (and consequent increases in resource scarcity and migration or displacement) serve as contributing factors affecting land governance challenges, impacts of weak land governance, and violent extremism drivers.

The impacts of weak land and resource governance on violent extremism

Protracted, violent local conflict can sometimes generate violent extremism (USAID, 2009, p. 42). The drivers of local violent conflict, particularly around disputes over land and other natural resources, are often causally associated with food insecurity, poverty, income inequality, migration, and internal displacement of vulnerable peoples (USAID, 2016a, Wily, 2008; RRI, 2015; RRI and TMP Systems, 2017a, 2017b; Oxfam, International Land Coalition, RRI, 2016; Dell' Angelo, D'Odorico, Rulli, Marchand, 2017; Cotula, Vermeulen, Leonard, Keeley, 2009; Bruce and Boudreaux, 2013). An additional factor, often ignored in the literature, is weak land and resource governance. Whether intentional or not, land administration departments housed within governments, and customary authorities who govern the use, access, and transfer of rights to natural resources often contribute to competing and overlapping claims to land and other natural resources. In an ever-escalating manner, frustrations may break out into overt conflicts of various dimensions because of non-transparent, corrupt, and inequitable governance of land and other natural resources (Bruce and Boudreaux, 2013; Transparency International, 2011). If not managed, these land and resource disputes and conflicts may intensify, potentially triggering violent outbreaks (Bruce and Boudreaux, 2013). Latent tensions, often of long-standing historical origins, can erupt into violent confrontations especially in cases where traditional dispute resolution mechanisms have broken down (Bruce and Boudreaux, 2013). Violent conflicts can in some cases become fertile grounds for violent extremism. At the same time, such situations are buffeted by macro-level (e.g., government corruption, elitism, and political economy issues) as well as the micro-level factors (e.g., income inequality, marginalization, and deprivation of political/civil rights). Failing to address land governance challenges along with these macro- and micro-level factors may make it more difficult to mitigate the risk of violent extremism outbreaks.

While the evidence is still somewhat scant regarding the role that socioeconomic factors play in driving violent extremism, the literature suggests that income inequality, poverty, and similar socioeconomic conditions can also, at least indirectly, drive violent extremism (USAID, 2009, p. iv, 21; Allan et al., 2015; Nett and Rüttinger, 2016). For example, a report by the United Nations Development Program (UNDP) and other studies found that economic factors can block upward social mobility, especially for youth, and as a result, generate sentiments of deep alienation, which in turn can further radicalize vulnerable young people (UNDP, 2017, p. 5; Allan et al., 2015). Another study found that while terrorists tend to be better off than the average citizen in the societies to which they belong, impoverished countries tend to generate more terrorist actors than wealthier countries (Keefer and Loayza, 2008). The literature indicates that income inequality, especially when coupled with ethno-religious divides and horizontal inequalities, can contribute to violent extremism (Chen, 2003; Kreuger and Malec̃kova, 2003, Li and Schaub, 2004; UNDP, 2016). For this reason, increasing per capita income among low-income countries may diminish the risk of terrorism (USAID, 2009, p. v).

USAID's Land Tenure and Property Rights Framework and other relevant literature highlights how economic growth is sometimes hindered by weak land governance (USAID, 2013a). A global study of 108 countries found stronger property rights to be associated with an increased average annual growth of per capita income by 6 to 14% (Keefer and Knack, 2002). A study of 33 countries found that stronger property rights were associated with a 5% increase in GDP growth (Fort, 2007).

Seminal World Bank research links land tenure inequality to income inequality (Deininger and Squire, 1998).

Strong land governance and tenure security are also linked with the protection of civil liberties, political rights, and human rights (e.g., the right to self-determination) (Huff, 2005; Lino, 2010; Alcorn, 2013). Weak, corrupt land governance, on the other hand, contributes to marginalization and violations of human rights (Transparency International, 2011; Keefer and Knack, 2002; Deininger and Squire, 1998; Springer, 2016; Alcorn, 2013). The violation of human rights and liberties has often been cited as both a potential driver and consequence of violent extremism (USAID, 2009; Allan et al., 2015).

Environmental triggers aggravate the conditions that give rise to conflict and violent extremism

While a direct causal relationship between climate change and conflict (and climate change and violent extremism) has not yet been found, various published studies suggest that climate change is an aggravator of violent conflict, which in turn can contribute to the emergence and spread of violent extremism in some contexts (Hsiang, Burke, Miguel, 2013; Fjelde and Uexkull, 2012; Reuveny, 2007; Nordas and Gleditsch, 2007; Homer-Dixon, 1991; SIDA, 2018; Nett and Rüttinger, 2016). Rüttinger et al. (2015), for example, concluded that climate change functions as a “threat multiplier,” meaning that it exacerbates already-fragile situations, contributing to social upheaval and in some cases violent conflict (p. vii). Van Baalen and Mobjörk (2016) identified several explanations for how climate-related changes may lead to violent conflict, including deteriorating livelihoods, increased migration, changes in pastoralist mobility patterns, and elite capture of local disaffection. In East Africa, studies suggest that societies that already have a history of conflict run a high risk of worsened conflict due to escalating climate-related stress (Mobjörk et al., 2016; Van Baalen and Mobjörk, 2016; Buhaug et al., 2012). A study of the relationship between climate change and armed groups in the Lake Chad region, Syria, Afghanistan, and Guatemala found that, while there is no direct causal relationship between climate change and conflict, climate change variables nevertheless contributed to rising insecurity in environments that were already unstable (Nett and Rüttinger, 2016). This study went on to conclude that food insecurity and livelihood loss made it easier for armed groups to recruit new members, and that armed groups used their control of natural resources to finance their actions (Nett and Rüttinger, 2016).

While many may argue that causal links between climate change and violent extremism is spurious, case studies suggest that erratic weather may destabilize existing land and resource governance institutions and expose underlying weaknesses in tenure systems (Quan and Dyer, 2008; Jhaveri, 2017; Freudenberger and Miller, 2010; Chagutah, 2013). Natural disasters, drought, and desertification have often led to displacement and migration, putting additional pressures on dwindling resources and shifting the dynamics by which land and resources are accessed and used (Jhaveri, 2017; Quan and Dyer, 2008). The effects of climate change, such as rising temperatures, rainfall patterns, and water availability, have triggered additional competition for access rights, land and resource degradation, and alterations in asset values (Freudenberger and Miller, 2010; Chagutah, 2013, p. 2; Garibay et al., 2010). While climate change can disrupt tenure systems and cause adaptation challenges, securitization of tenure can function as an effective climate change mitigation strategy by preventing deforestation and other environmental problems (Hatcher, 2009; Stevens et al., 2014; Robinson, Holland, Naughton-Treves, 2013; FAO, 2017a).

In the Sahel, the effects of climate change and associated shifts in rainfall and seasonal weather patterns across geographical regions have exacerbated conflicts between pastoralists and farmers (Basset, 1994; Breusers, Nederlof, van Rheenen, 1998; Turner, 2004; Benjaminsen and Ba, 2009; Brottem, 2014, 2016). Farmer-herder conflicts have erupted across the Sahel as well as in Kenya and

other countries (King, 2017, Mercy Corps, 2017; Freudenberger and Mogba, 2018, Bromwich, 2015; Mutiga, 2017; Brottem, 2014, 2016; Burke et al., 2009). Research by Brottem found that “although [livestock] corridors are increasingly necessary to sustain mobility-based livestock production in dryland West Africa, they represent controversial endeavors of boundary formation that disrupt local power relations between herders and farmers” (Brottem, 2014, p. 639). Conflicts are often connected with pastoralists changing their migration patterns in the search for water and pasture as well as the expansion of agriculture into pastoralist corridors (Brottem, 2016; Freudenberger and Mogba, 2018). Climate adaptation investments often cause pastoralists to lose grazing areas and traditional transhumance routes, exacerbating existing tensions (Eriksen and Marin, 2015).

SITUATIONAL ANALYSIS: A FOCUS ON NORTHERN NIGERIA

The previous section shows how the literature supports the view that weak land governance, environmental triggers, and various drivers of violent extremism are interlinked in complex ways across the African Sahel and other regions. In this section, a closer look into the case of northern Nigeria reinforces this finding and provides a more detailed illustration of the dynamics at play.³ The case of central Mali⁴ was also examined by the authors and provides a compelling illustration too; however, the crisis unfolding in northern Nigeria reverberates throughout the Sahel with numerous spillover effects. In both contexts, some of the same trends are present, such as shifting land use patterns, increased tensions over resource access, displacement and migration, worsening marginalization and disenfranchisement of some groups, widespread corruption, and escalating violence. Beyond this high level of generality, each case is unique and clear differences distinguish the conflict dynamics that unfolded in northern Nigeria and in central Mali. The literature on both places supports the view that land governance challenges and the associated impacts, such as violent land and resource conflicts, cannot be ignored when considering the various factors that drive violent extremism.

While this case study discusses the ways in which weak land governance in combination with other factors contributed to some extent to the rise and spread of Boko Haram, it does not measure the relative strength of the various factors at play. For instance, depending on the strength of political and other drivers (e.g., ideological factors, political corruption, and abuse of power), land governance may have played a relatively smaller role and thus land-focused interventions may not necessarily provide a sufficient pathway to peace in the region. If, on the other hand, additional research concludes that Boko Haram’s rise was primarily due to highly concentrated land ownership, landlessness, and government land grabbing, then the connection between land governance interventions and violent extremism becomes stronger. Further research on these issues is needed.

Societal vulnerabilities and environmental triggers in northern Nigeria

In northern Nigeria, a broad range of societal vulnerabilities and environmental factors contributed to an escalation of violent conflicts and the rise of Boko Haram (Magrin and Montclos, 2018; King

³ Follow-on research is needed to understand the various triggers of violent extremism and the possible role that land governance plays in fueling violent extremism triggers in other areas and contexts. While violent extremism dynamics exist in both countries, including outside the regions of focus, and more broadly across the Sahel, including in urban and peri-urban areas, the exploration for this brief was limited to the rise of violent extremism among rural populations, including pastoralists and disaffected rural youth.

⁴ The reader is encouraged to consider the literature reviewed for this brief to also look at the Mali case. References consulted include: Chauzal and Damme, 2015; Mercy Corp, 2017, 2013; Benjaminsen, 2018; Benjaminsen, Alinon, Buhag, Buseth, 2012; Benjaminsen and Ba, 2009; Benjaminsen, 2008; Brottem, 2014; Brottem, Turner, Bilal, 2014; USAID, 2010a; USAID, 2010b; Lacher, 2012; Cotula and Cissé, 2007; Reeve, 2018; CFR, 2018; Coulibaly, 2017; and LANDac, 2016.

and Spangler, 2017; Seignobos, 2015). In the Lake Chad region, for example, the combination of weak land governance, climate change, population growth, weak statehood, corruption, rising temperatures, food insecurity, and resource conflicts led to a highly complex and devastating humanitarian crisis (US Department of State, 2017; Taub, 2017; King and Spangler, 2017; Magrin and Montclos, 2018). Competition over resources drives conflicts at many levels of Nigerian society, including conflicts over land, water, energy, and other resources, with political and military elites often competing for and corruptly accumulating access to and control over these resources (USAID, 2014). In recent years, Lake Chad has shrunk by over 90% due to rising temperatures and droughts that in turn triggered widespread food insecurity, desertification, and loss of livelihoods for local populations largely dependent on agriculture and pastoralism (FAO, 2017a; Taub, 2017). FAO estimated that, as of 2017, 6.9 million people in the Lake Chad region were food insecure and 2.4 million people were displaced by this humanitarian crisis. The Nigerian government has largely failed to develop effective resource management and allocation strategies to address climate change impacts and the lake shrinkage (Magrin and Montclos, 2018; King and Spangler, 2017; Taub, 2017). Access to arable land and safe drinking water in northern Nigeria is severely limited (King and Spangler, 2017). The combination of vulnerabilities, environmental triggers, and conflict has triggered widespread displacement as hundreds of villages have become abandoned (King and Spangler, 2017; Magrin and Montclos, 2018). These problems might continue or even grow given the region's population growth, which is expected to double in size in the next 20 years, the likely irreversible depletion of Lake Chad, and the limited governmental response to date (Taub, 2017).

Land governance challenges relevant to the dynamics of violent extremism

Weak land governance and tenure insecurity trigger land conflicts and instability in northern Nigeria, contributing to the emergence of violent extremism (Magrin and Montclos, 2018; Seignobos, 2015). A country-led assessment, completed using the World Bank's Land Governance Assessment Framework (LGAF), concluded that land governance challenges are prevalent throughout the country, land conflicts related to ownership and use rights are relatively frequent, and the inability to address conflicts in a timely and transparent manner has resulted in long-lasting disputes (Adeniyi, 2011, p. 10). Most relevant to this issue brief are the findings about the inadequacies of the Land Use Act (LUA) of 1990 and weak and corrupt land governance institutions.

The LUA grants the state broad discretion to revoke tenure rights and acquire land and resources from citizens and only a limited obligation to recognize and compensate customary tenure rights (Government of Nigeria, 1990, Sections 5-6, 28). By nationalizing arable lands, assigning their management to state and local authorities, and depriving many traditional chiefs and communities of their land rights, the LUA replaced customary systems of land governance and made land less accessible to most people (USAID, 2016b, p. 4; Magrin and Montclos, 2008, p. 95). The Act makes land allocation procedures highly discretionary, opening doors for state corruption and abuse (USAID, 2016b, p. 4). Formalization of land and resource access can provide local populations with a greater sense of tenure security, but this has occurred in only a few places and is practically non-existent near Lake Chad and other regions (Seignobos, 2015; Adeniyi, 2011; USAID, 2016b).

The referenced assessment and other research indicate that high levels of corruption exist within Nigeria's land governance and other public sectors (Adeniyi, 2011, p. 56; Transparency International, 2017; Suleiman and Karim, 2015; USAID, 2016b). More broadly, lack of basic infrastructure and institutional capacity, coupled with the country's high dependence on crude oil revenue, centralizes the wealth of the northern states in the hands of ruling elites and feeds widespread corruption (Suleiman and Karim, 2015, p. 8).

Pervasive and dynamic land and resource conflicts in northern Nigeria

Conflicts over land and resources pervade the Lake Chad region and other parts of northern Nigeria, with various rural communities, violent groups, urban elites, government actors, and private investors demanding control over the area. Government authorities are largely unable to effectively regulate this increasingly acute competition for land and resources in the Lake Chad region (Seignobos, 2015, p. 100). Alongside clashes between the military and Boko Haram, political manipulation of land issues by urban elites increases the intricacies of conflicts between fishermen, farmers, and pastoralists (Seignobos, 2015). Population growth continues to strain traditional tenure systems in the Lake Chad region significantly (Rangé and Boureïma, 2015).

Violent farmer-herder conflicts pervade in many parts of northern Nigeria, putting land tenure and livelihoods in jeopardy (Magrin and Montclos, 2018; King and Spangler, 2017; Obi, 2010; Amnesty International, 2018; Tenuche and Ifatimehin, 2009). These conflicts have escalated in recent years due to increased pressure on land and water in rural areas, combined with inappropriate, weak, or non-existent state interventions to mediate and resolve growing tensions (Higazi and Yousuf, 2017, p. 9). Climate change, displacement due to Boko Haram violence in the north, and encroachment on nomadic herders' corridors and grazing reserves decrease the land available to both pastoralists and farmers (USAID, 2014, p. 2). In Nigeria's Middle Belt, traditional migration routes are shifting as a result of Muslim Hausa-Fulani herders taking livestock from northern Nigeria and neighboring countries to urban markets in the south. These livestock corridors are hotspots for ongoing conflict between largely Fulani herders and non-Fulani farmers in Benue, Kaduna, and Taraba states, resulting in large displacements of people and razing of homes and villages (USAID, 2018, p. 13).

Transhumant livestock herders encroach on the land and resources of sedentary crop farmers in the higher rainfall areas while searching for water and grazing lands (Magrin and Montclos, 2018; Amnesty International, 2018). At the same time, farmers continue to expand their operations into areas traditionally used by herders, triggering additional conflicts (Magrin and Montclos, 2018). When pastoralists' livestock damage crops, farmers sometimes retaliate by poisoning water or grass, or by attacking the herders (King and Spangler, 2017). In recent years, farmer-herder conflicts have caused thousands of deaths (Amnesty International, 2018; Nigeria Watch, 2017). The UN High Commissioner for Refugees stated, in 2016, that more people were killed as a result of farmer-herder conflicts than by Boko Haram, and that violence surged as result of droughts, desertification, and overgrazing (Egbejule, 2016). Land conflicts were found to be more common in years that are unusually wet or dry, indicating that both tenure issues and environmental triggers likely played a role in triggering conflict (King and Spangler, 2017). With its capacity stretched thin by the battle

BOX 2: BRIEF BACKGROUND ON BOKO HARAM

Aiming to establish an Islamic Caliphate in West Africa, Boko Haram has killed thousands and displaced millions of people. Since 2009, Boko Haram has been responsible for numerous terrorist attacks involving suicide bombs and other deadly weapons. The group has also been responsible for the abduction, rape, and imprisonment of young girls (The Economist, 2017). It has forced young girls to marry soldiers and/or to become suicide bombers (Searcey, 2017). Boko Haram's kidnapping of 276 young girls became viral international news in April 2014. In 2015, Nigeria's newly elected president coordinated the formation of a Multinational Joint Task Force (MJTF) with Niger, Chad, and Cameroon. The MJTF proved effective in thwarting Boko Haram's efforts, resulting in an 80% reduction in the number of people killed by Boko Haram in Nigeria between 2015 and 2016, according to the 2017 Global Terrorism Index (Institute for Economics and Peace, 2017; Ewi and Salifu, 2017).

against Boko Haram, the Nigerian government is unable to effectively respond to the farmer-herder violence stemming from these climate-related grievances (USAID, 2018).

Research also suggests the vested interests of urban elites and other wealthy livestock owners also play a role in triggering conflicts and the emergence of extremism, such as when they protect cattle rustlers, bandits, or herdsmen that disrespect local communities (Higazi and Yousuf, 2017, p. 9). In some cases, wealthy political elites and businessmen from urban areas purchase cattle and hire pastoralists to look after livestock (Higazi and Yousuf, 2017, p. 9). Hired herdsmen sometimes trespass onto farms and act aggressively, triggering conflicts with local farmers (Higazi and Yousuf, 2017). Herds that are owned by urban elites and well-placed government officials are often able to gain access to favorable grasslands, aggravating existing tensions among the various groups fighting for access to land and resources, not only in northern Nigeria but in other countries (Freudenberger and Mogba, 2018; International Crisis Group, 2014; Turner and Hiernaux, 2008; Brottem, 2014; Bassett, 1994; Bassett and Turner, 2007).

The emergence of Boko Haram

Although Muslim and Christians have throughout history co-existed peacefully in the north and other parts of Nigeria, groups of Muslims in northern Nigeria sometimes feel marginalized compared to Christians in the south (Onuoha, 2014; Ludwig, 2008). These feelings fuel ethno-religious divisions that align with income inequality in the region and, at least to some extent, contribute to the emergence of violent extremism and violent farmer-herder conflicts (e.g., conflicts between Muslim Hausa-Fulani herders and the Christian Yorubas) (USAID, 2018; Meagher, 2014; Ndzovu, 2017; Onuoha, 2014).

Lack of access to productive land and economic opportunities cause marginalized youth and vulnerable populations in the Lake Chad region to develop distrust and resentment toward the government (Onuoha, 2014; Mercy Corp, 2016; Ewi and Salifu, 2017). As discussed in more detail below, lack of land access, tenure security, economic opportunity, and other factors enable Boko Haram to take advantage of social economic deprivations and marshal large-scale youth support (Iyekekpolo, 2016; Suleiman and Karim, 2015; Onuoha, 2014).

Boko Haram rose to power with much of its support stemming from widespread public frustration over the lack of water and other basic needs as well as corruption, unemployment, and other factors (Magrin and Montclos, 2018; King and Spangler, 2017; Nett and Rüttinger, 2016; Seignobos, 2015; Pisa and Hume, 2015). As drought, resource conflicts, hunger, and livelihood losses trigger antigovernment sentiments, the

Nigerian government is often perceived as illegitimate among local populations (King and Spangler, 2017; Nett and Rüttinger, 2016; Onuoha, 2014). Against the backdrop of violence, humanitarian crisis, and inadequate government intervention, some communities support Boko Haram hoping that doing so will lead to changes in government (Nett and Rüttinger, 2016, p. 16; International Crisis Group, 2016). Since 2009 when Nigeria's security forces implemented emergency rule in Borno, Yobe, and Adamawa states, there have been reports of massacres, extrajudicial killings, and arrests without trials (Montclos, 2014, p. 15). Some civilians sought the protection of Boko Haram, even if they did not initially support or sympathize with the group (Montclos, 2014, p. 15).

The radicalization of marginalized Nigerian youth

Political marginalization, lack of economic opportunities, and access to productive land led marginalized youth and vulnerable populations in Nigeria to become increasingly frustrated and resentful of national and local government authorities (Nett and Rüttinger, 2016; Onuoha, 2014; King and Spangler, 2017; Mercy Corps, 2016). The Nigerian government's high rate of corruption and neglect of citizen welfare feeds an extremist narrative that appeals to impoverished, alienated, and jobless northern Muslim youth (Onuoha, 2014; Mercy Corps, 2016). Boko Haram is able to exploit the situation, recruit followers, and otherwise manipulate the state weaknesses to further its own ideological agenda (Nett and Rüttinger, 2016, p. 16; Mercy Corp, 2016). Widespread poverty, unemployment, difficult upbringings, and illiteracy are cited as contributing factors explaining why many youth joined Boko Haram (UNDP, 2017; Iyekekpolo, 2016; Onuoha, 2014).

In many cases, youth are forced to join Boko Haram or they are attracted by the food, clothing, and money offered by this extremist group (Mercy Corp, 2016; The Economist, 2016). For some marginalized youth in Nigeria, Boko Haram is seen as a source of access to power (Topo, 2017). Financial incentives as well as prospects of social status from marriage or income offered by Boko Haram are appealing to many young males in Nigeria (Tull, 2015; Nett and Rüttinger, 2016). The group often influences young men to join by offering them with an identity as well as access to money, drugs, and women (many abducted young girls are raped, forced to marry male soldiers, and/or forced to be suicide bombers) (Searcey, 2017; Mercy Corp, 2016; Tull, 2015). Youth also play a key role in the expansion of drug trafficking and illegal trade networks (e.g., cigarettes, alcohol, gold, diamonds) supported by Boko Haram and other criminal groups (UNODC, 2017; Zenn, 2014). Roadblocks and illegal means of taxation often finance such groups (Lacher, 2012).

Boko Haram triggering mass displacement and other land governance challenges

The presence of Boko Haram profoundly disrupts the relationship between resources and populations in the Lake Chad region, causing the displacement of millions while increasing strains on local agricultural and land tenure systems (Magrin and Montclos, 2018, p. 151; Nett and Rüttinger, 2016). Along the shores of Lake Chad in Niger and Chad, refugee camps are expanding to accommodate the influx of people fleeing the violence associated with Boko Haram, adding to the tens of thousands already displaced by resource-related violence (ACTED, 2015; Doyle, 2015; Nett and Rüttinger, 2016, p. 12). Violence and counter-insurgency measures lead to the abandonment of formerly productive rural areas; mass migration places additional pressures on dwindling land and natural resources; lack of enforcement in protected areas contributes to an expansion of illegal hunting (Magrin and Montclos, 2018, p. 151). This undermines the complex array of traditional and statutory mechanisms for governing the use of croplands, pastures, livestock, and fishing areas.

In summary, societal vulnerabilities, environmental triggers, land and resource conflict, and the rise of violent extremism swirl together in northern Nigeria on a palate of broader governance weaknesses. Land governance challenges are clearly an important part of the mix. In northern Nigeria and across other parts of the Sahel, the capture of the commons translates into the

imposition of new rules of access that are often shaped by the militarized power of transhumant pastoralists who herd livestock owned by the urban elites (Basset, 1994; International Crisis Group, 2014: 15-16). In both rural and urban areas of northern Nigeria, violent conflicts and land acquisitions by the government, local elites, and outsiders trigger disputes and grievances as well as displacement and marginalization (Nwapi, 2016; CEED, 2015; Global Land Tool Network, 2007; Tagliarino et al., 2018). With limited government capacity to respond, these land tenure-related factors, coupled with environmental triggers and other issues such as widespread corruption and unemployment, fuel the drivers of violent extremism.

LOCAL SOLUTIONS FOR ADDRESSING LAND CONFLICT AND VIOLENT EXTREMISM

Local grievances against the government as a result of state predation, corruption, and abandonment are overarching factors in the Nigeria case illustration. While grievances and herder-farmer tensions will likely persist for a long time to come in the Sahel, these will be worsened with the presence of extremists who often aggravate local hostilities actively and manipulate ethnic and religious differences to serve their own ideological agendas and recruit followers (Fulton and Nickels, 2017). The overwhelming complexity of issues facing the northern regions of Nigeria and Central Mali begs the question of what measures should be taken to address these challenges.

No simple solution exists to address the complex and historically rooted interface between climate change, tenure, and violent extremism. While the rich academic literature and policy prescriptions (see Box 3) reinforce this central conclusion, the investment by Sahelian governments, civil society, development projects, and local peoples themselves in trying to manage and resolve these deep-seated ills provides valuable lessons. The way forward must be built upon local responses, devised by local actors, but strongly supported by governments and the international community. One entry point for addressing the root drivers of the crises may be through establishing, or reestablishing in some cases, strong local land governance and designing land and resource policies that ensure responsible and effective governance while protecting the tenure rights of local populations. Innovations will undoubtedly need to be tailored to particular countries and contexts. If these innovations are formulated using participatory methods that involve local populations and are responsive to local needs, they can be appropriately designed to ensure greater transparency and accountability on the part of governments. Confidence in government helps close down the spaces in which violence and extremism emerge and spread.

For illustration, the USAID Property Rights and Artisanal Diamond Development II (PRADD II) project in the Central African Republic (CAR) successfully advanced the concept of

BOX 3: RELEVANT USAID TOOLS AND GUIDANCE DOCUMENTS

- [USAID's Policy: The Development Response to Violent Extremism and Insurgency](#)
- [USAID's Guide on the Drivers of Violent Extremism](#)
- [USAID's Conflict Assessment Framework](#)
- [USAID's People-To-People Peacebuilding: A Program Guide](#)
- [USAID's Climate Resilient Development Framework \(2014\) and its Climate Change and Conflict Annex \(2015\)](#).
- [USAID Land and Conflict Toolkit](#)

Local Pacts (i.e., negotiated conventions advocated by the [Bangui Peace Forum](#)) as a means of resolving deep-seated conflicts over resources while contributing to peacebuilding and social cohesion (Freudenberger, 2017; Freudenberger and Mogba, 2018). The process put in place by the CAR government in five communes in the Berberati region in the southwest of the country and supported by the PRADD II project is an unfolding experiment. In effect, the government with the support of the project created a safe space for local communities, devastated by the recent civil strife, to negotiate a roadmap for improving inter-ethnic cooperation and mutually beneficial synergies. With the support of UN peacekeeping forces, the Ministry of Humanitarian Action and National Reconciliation forged negotiated conventions, called Local Pacts, which spell out clearly a range of pragmatic responses to what local stakeholders view as the triggers of violent conflict in their localities. The signed conventions also note in writing what all members of the community view as the ways to bring about redistributive justice and reconciliation. The many days of intense discussions around each of the five Local Pacts are helping to rebuild trust and confidence in local government (Freudenberger and Mogba, 2018).

While not enough time has passed to evaluate whether the Local Pacts will hold, several key lessons have emerged. The basic security of local communities needs to be assured before negotiations can commence around the conditionalities associated with the Local Pacts. Sometimes the presence of military forces, prepared to maintain neutrality, is needed to create the safety required for social dialogue. State actors can, and must, play a role in maintaining security while also supporting public and transparent negotiations. Negotiations led by and for local communities can take unusual turns. In the experiment with Local Pacts in the CAR, local communities wanted to negotiate new transhumance routes and rules of access to water points and neighboring pastures. The communities also called for the stamping out of corruption by local officials, increased schooling for children, and citizen identity cards needed to facilitate access to public services. Most importantly, the communities called for the authority to devise mechanisms to address compensation for ills caused by displacement during the war. Certainly, state actors might also support land use planning and various peacebuilding initiatives that bring together stakeholders in safe places to negotiate arrangements and determine sanctions for non-compliance based on culturally appropriate norms. This strategy is premised on the presence of a strong, honest, and well-equipped state.

Unfortunately, in situations where the state is weakened by years of conflict and predatory behavior, and stripped of financial resources, champions for peace and justice within the state may be able to do little more than communicate national policies encouraging resolution of local conflicts by local peoples, through resolutions based on traditional African concepts of justice, fairness, and flexibility. Ultimately, this rather hands-off approach requires national and international policymakers to step back and respect the decisions of local communities emerging out of conflict and crisis. Faith in the capacity of local communities, divided and weakened as they are by conflict, to devise creative responses to the long-standing crises reported in this issue brief, must be accorded. Otherwise, all the weak state and financially strapped donors can do is assure safe spaces and legally recognized frameworks for local communities, admittedly divided by internal tensions and the consequences of violent extremism, to negotiate new rules of access to resources, and culturally appropriated sanctions for deviant behavior.

SECURING LAND TENURE: A KEY PIECE TO THE PUZZLE

The conceptual framework presented in this brief and the examples, in particular the case illustration from Nigeria, describe how land tenure and property rights matter within the complex factors giving rise to violent extremism. Before implementing programmatic interventions in the

Sahel and other conflict-affected regions around the world, international donors like USAID and its various implementing partners should seek to understand how land governance, aggravated by environmental triggers, contributes to the emergence of extremist movements. Donor interventions should be nuanced and sequenced to address long-standing local disputes nested within complex conflict dynamics occurring at the local, regional, and national levels (see Diagram 1 and Wakhungu, Nyukuri, and Huggins, 2008) to address the drivers of violent extremism. Sequencing is important since certain interventions must take place before others can effectively take hold. Land governance interventions can rarely singlehandedly create political stability, but can be an important tool in the toolkit for promoting it. Preventing the rise of violent extremism may be difficult without a broader and more carefully sequenced set of interventions that are mutually reinforcing. USAID's [Land Tenure and Property Rights Overlay \(2013b\)](#) presents illustrative examples of how to sequence land tenure interventions. For example, see the sequenced set of interventions for dealing with resource conflict and displacement on pp. 5-9, weak governance on pp. 10-19, insecure tenure and property rights on pp. 19-26, and inequitable access to land and natural resources on pp. 27-35.

As a key piece of the puzzle, added measures to improve local land governance and secure tenure may contribute to greater stability, resiliency, and prosperity to the Sahel and other volatile regions. By looking at the role weak land governance plays as a contributing factor to violent extremism, USAID and other donors can play their part in reducing deep-seated resource conflicts.

Interventions should include but not be limited to:

1. **Adopting multifaceted, coordinated approaches:** Addressing security risks and development challenges across the vast Sahel requires a multifaceted and tightly coordinated approach among actors working at different scales from the local to the international. For this reason, the package of responses to current security crises unfolding in the Sahel will be shaped by the unique complexities unfolding within a country and down to the very local level. However, as highlighted in this brief, restoring sound land governance—locally—should likely be part of the mix. By clarifying and securing tenure rights for vulnerable peoples, resolving disputes and reestablishing trust among contending parties, policymakers, and supportive donor organizations may create the entry points for resolving the expanding array of factors contributing to violent extremism.
2. **Recognizing and strengthening customary tenure systems while not subjecting people to abuse from inequitable power relations and unaccountable, unresponsive governance institutions:** Effective resource management demands checks and balances at multiple scales because unfettered power over land use decisions at any one level, national or local, often invites abuse by corrupt actors (Freudenberger, 2013). People need secure tenure—the assurance that rules governing the use and inter-generational transfer of rights to land and other natural resources are known and respected. Farmers and pastoralists in the Sahel need assurance that they have rights of access, to manage resources responsibly. Security of tenure means that rights are not arbitrarily contested, even if they are not formally registered through land use plans, titles, and deeds. In the future, pastoralists in the Sahel—long comfortable with strong secondary rights—might need to acquire primary land rights so they can effectively control and manage land resources. In countries like Ethiopia, this new approach is being tested thanks to a new land policy that respects the historical rights of pastoralist groups.
3. **Promoting flexibility within land administration institutions:** National and local land administration institutions need to devise new ways to adjust rapidly the norms, rules, and administrative practices that shape any resource governance regime—be it in the sphere of customary, or national land administrative systems, because of perturbations caused by climate change and other environmental triggers (Van der Molen and Mitchell, 2016). Ways

to build flexibility into tenurial regimes are suggested in such policy reviews as FAO's [Governing Tenure Rights to Commons](#), [USAID's Future of Customary Land Tenure brief](#), and [Namati's Community Land Protection Facilitators Guide](#) (FAO, 2016; Freudenberger, 2013; Namati, 2016).

4. **Bolstering dispute resolution mechanisms to address land- and resource-related conflicts:** Local communities need to be empowered to address conflicts and grievances following time-tested traditional norms and practices. Conflict resolution practices based upon African precepts of justice can go a long way to addressing deep-seated grievances. Yet, these practices are not without flaws. Sahelian governments and donor partners need to bring in a wider range of stakeholders to the negotiation table, often those living far from the conflicts themselves. Leaders of extremist movements, rebel leaders, urban elites, and wealthy landowners must be part of the negotiation process. If properly trained, mediators can promote tools to resolve conflicts. Key resources include [USAID Land and Conflict Toolkit](#), [UN Toolkit for Managing Land and Resource Conflict](#), [GIZ Land and Conflict Guide and Toolbox](#) (USAID, 2005; UN, 2012; GIZ, 2017).
5. **Critically reviewing and reforming land and resource laws and policies:** The policies, laws, and administrative practices of Sahelian countries need to be assessed considering the pressures exerted by climate change and described in this brief. Multi-stakeholder engagement and broad public consultation from the local to national should inform the policymaking processes to ensure that land laws and policies become more responsive to the needs of local communities buffeted by the many environmental and societal factors noted in this issue brief. Key resources include the [World Bank LGAF](#), the [Voluntary Guidelines on the Responsible Governance of Tenure](#), and the [African Union Framework and Guidelines on Land Policy in Africa](#) (Deininger, Selod, Burns, 2012; FAO, 2012; African Union, African Development Bank, Economic Commission for Africa, 2010).
6. **Exploring new issues:** The conceptual framework and situational discussion presented in this brief suggest the need for further diagnostics to inform programming to address violent extremism. Policy-oriented empirical research should explore whether urban tenure and property rights issues play a role in radicalizing marginalized youth in cities. Evaluations are needed to determine whether Local Pacts and other negotiated conventions, like those unfolding in conflict countries like the CAR, are serving as effective tools in the way described in this brief. Evidence is needed about whether land and resource tenure reforms presently unfolding in some Sahelian countries are helping to protect civil and political rights, the denial of which are commonly cited as drivers of violent extremism. Applied research is needed to determine whether measures to increase transparency in land governance at the national to local levels can indeed reduce corruption, one of the drivers of violent extremism.

CONCLUSIONS

Stretching across the African continent from west to east, the Sahel is increasingly plagued by the emergence of violent extremism. The causes are many, but the literature focused on this vast region suggests that extremism is to some extent linked to resource scarcity, climate change impacts, and tenure insecurity. Recent news stories indicate that some violent conflicts, like those between farmers and herders, are not necessarily linked to violent extremist groups, but rather result from resource competition over land, water, and pastures (BBC News, 2019). However, this issue brief suggests that weak land governance plays a role on a case-by-case basis in sparking both violent resource conflicts and the emergence and expansion of violent extremism. The current realities in

such places as northern Nigeria provide a backdrop for considering ways to improve land governance to address violent extremism.

Identifying ways to combat violent extremism is no easy task. But, international donors can test new approaches, which from our experience, relies upon ways to encourage local solutions to complex land governance problematics. In conflict-riddled localities in the Sahel, violent extremism can only be addressed through comprehensive programming that strengthens resource governance institutions. But to figure out ways to advance, accurate diagnostics of local realities are essential because situational contexts vary greatly from place to place. International donor agencies have developed robust inter-sectorial analytical tools, presented in this brief. Through this focus on accurate understanding of place-based drivers of violent extremism, the foundations for strong program design can be put in place to restore peace and security, promote sustainable economic development, and encourage climate change mitigation and adaptation. Since youth are a vulnerable population segment susceptible to capture by radical extremist groups, an unequivocal focus on improving the livelihoods of youth should be a key focus.

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