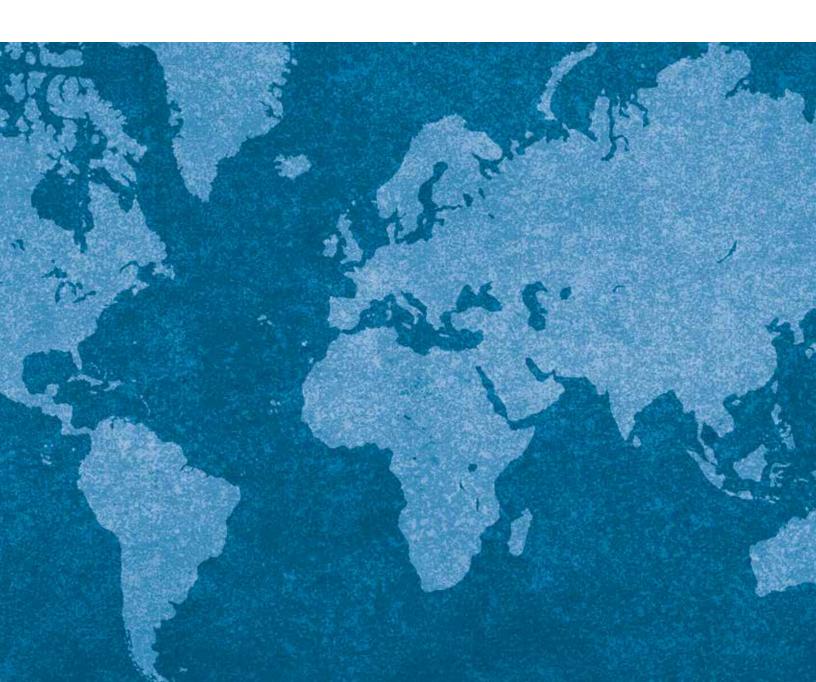




THE IMPACT OF CONFLICT AND POLITICAL INSTABILITY ON AGRICULTURAL INVESTMENTS IN MALI AND NIGERIA

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I. INTRODUCTION

ali and Nigeria are two countries in West Africa with great potential to increase their agricultural production. However, they have also recently experienced severe episodes of internal conflict, which have negatively influenced agricultural productivity and investment. Conflict can adversely affect agriculture in several ways. For example, conflict can disrupt the supply and distribution of inputs and outputs, create price shocks and cause massive displacement of labor. These compounding challenges make agricultural investments difficult to maintain in politically volatile environments.

Several studies have analyzed the impact of conflict on the broader economy, at both the macro and micro levels. Macro-level studies emphasize the impact of conflict on growth. For example, Gyimah-Brempong and Corley (2005) demonstrate that civil wars have a significant negative impact on the growth rate of per capita income. Sector-level studies examine how agriculture, specifically, is affected by conflict. For instance, Messer, Cohen and D'Acosta (1998) estimate that during periods of conflict, agricultural production drops an average of 12.3 percent each year. Other

studies have narrowed the focus to specific crops. For example, Ksoll, Macchiavello and Morjaria (2010) show how post-election violence negatively affected the export volumes of the cut flower industry in Kenya.

The reverse causal relationship between growth and conflict has also been examined. Mounting evidence suggests that shocks to growth due to extreme climate events (such as deviations in normal precipitation and temperature) may increase the risk of insecurity. For example, in a global study of human conflict from 10,000 BCE to the present day, Hsiang, Burke and Miguel (2013) find that for each standard deviation change in average precipitation and temperatures, the frequency of interpersonal violence increases by 4 percent and intergroup conflict by 14 percent. 1 In sub-Saharan Africa specifically, a proportional change in rainfall (from the previous year) of 5 percent increases the likelihood of a civil war the following year by 50 percent (Miguel, Satyanath and Sergenti 2004). While climate shocks alone are not a necessary or sufficient cause of conflict, the above research findings are useful in understanding the relationship between growth in the agricultural sector and conflict, especially considering the projected effects of climate change on global rainfall and temperature over the next century.

Despite the fact that many African countries have been affected by civil conflict and also depend on agriculture for the livelihood of the majority of their citizens, few peer-reviewed studies have examined the effects of conflict on different actors across the agricultural value chain.² This paper aims to address this gap by combining the guidelines for conflict-sensitive analysis (Gündüz and Klein 2008) with an assessment of the components of risk faced by various actors in the value chain—that is, the likelihood and the severity of conflict. This knowledge can assist donors and policymakers alike in supporting resilient value chains where conflict is a risk and determining how to maintain investments during periods of instability.

In particular, this paper analyzes the cases of ongoing violence in Mali and Nigeria that continue to undermine agricultural productivity and investment. At the outset, it needs to be noted that these two conflicts—despite sharing similar jihadist elements—are very different from one another. Each conflict involves a unique set of actors and circumstances that have affected the countries differently and produced distinct possibilities for the trajectory of future conflict.

This paper addresses five key questions:

- 1. What are the characteristics of the conflict in Mali and Nigeria, and what are the likely scenarios for the future?
- 2. How does the conflict affect the various actors and agricultural investments along agricultural value chains in each country?
- 3. Which value chains are more resilient, and why?
- 4. What actions are different actors taking to reduce the impact of conflict? Or how do they adapt?
- 5. Where can donors maintain investments during times of conflict in Mali and Nigeria?

After the introduction, the paper proceeds in five sections. Section II briefly explains the methods followed in this study; sections III and IV provide findings on the characteristics and trajectories of the conflicts and analyze the impact of instability on agricultural investment in Mali and Nigeria, respectively; and section V discusses the implications of these findings for donors and policymakers currently engaged in agricultural investment in the two countries, and highlights specific strategies for promoting resilience. Finally, section VI provides concluding remarks.

II. METHODS

■his study was led by a team from the Brookings Institution's Africa Growth Initiative (AGI) and a group of interdisciplinary researchers in Nigeria and Mali. The AGI research team relied on extensive deskbased research to review the literature and develop the conceptual framework for analyzing the impact of conflict and political instability on agricultural investments (the empirical model is located in Annex IV). Two political scientists performed a conflict impact mapping exercise for Mali and Nigeria, respectively, to determine the characteristics, causes, effects and possible future trajectories of political instability: Moussa Djiré, vice chancellor of the Bamako University of Law and Politics, in Mali, and Jideofor Adibe, senior lecturer in political science at Nasarawa State University, Keffi, Nigeria, and adjunct associate professor in the Department of International Relations and Diplomacy, Baze University, Abuja. In addition, two agricultural economists examined the effects of these conflicts on agricultural investments: Alpha Kergna, researcher at the Institut d'Economie Rurale, Bamako, in Mali, and Abigail Jirgi, senior lecturer in the Department of Agricultural Economics and Extension Technology at the Federal University of Technology, Minna, in Nigeria. These reviews were compiled and presented for feedback at a workshop convened in Abuja in December 2013.

The workshop also served as a forum whereby the researchers used a detailed questionnaire to conduct purposeful focus groups with 10 key informants and major stakeholders in agricultural value chains regarding the impact of instability on agriculture. After the focus group discussions, the research team decided that there was a need to add two questions to the questionnaire to better capture the methods of adaptation used by various actors in the value chain and to determine

the levels of resilience across the sector. The modified survey tool was used to conduct further interviews in Mali and Nigeria (the questionnaires are located in Annex I).

The interviews were conducted under difficult circumstances in the conflict-affected zones of Mali and Nigeria. In some areas, access to respondents was severely restricted due to risk of attacks. Some respondents were inaccessible by phone because of recurrent interruptions in mobile network connectivity. Others respondents declined to give out their phone numbers for fear it would compromise their security. In the study areas, the local populations were suspicious of the AGI researchers because of a rumor circulating that several U.S. organizations were affiliated with the CIA and instigating chaos in Nigeria. This obstacle further diminished respondents' willingness to participate in the study. Additionally, due to the timing of the study, researchers were unable to collect baseline data on the agriculture sector before the conflict and instead had to rely on respondents' recollections, which may have introduced some recall bias into the study.

Despite these challenging conditions, a total of five semi-structured interviews and four focus groups were conducted with 17 value chain stakeholders in Mali (in the regions of Timbuktu and Gao) and 17 semi-structured interviews with 24 value chain stakeholders were conducted in Nigeria (in Borno state) in February and March 2014 (see Annex II for more information on the value chain stakeholders surveyed). This study was finalized in early June 2014. Although events in Mali and Nigeria are constantly evolving, this report focuses on the context, history and long-term dynamics of the ongoing conflicts rather than the rapid evolution of day-to-day events.

III. FINDINGS FOR MALI (A SUMMARY OF REPORTS SUBMITTED BY ALPHA KERGNA AND MOUSSA DJIRÉ)

Context of the Conflict

The Republic of Mali has long been seen as a democratic role model among low-income African countries. However, tensions between the Malian state and the Tuareg independence movements have spurred multiple rebellions over the past half century. This case study concerns the recent conflict in Mali, which escalated dramatically in 2012. It can be characterized as a two-sided crisis, involving both an occupation by nationalist and jihadist forces and a military coup.

Figure 1. Conflict Map of Mali



Source: The Guardian, January 16, 2013.

During the past several decades, Tuaregs have periodically demanded greater autonomy from the Malian state. Tuareg independence movements have been founded on their perceived exclusion from state benefits due to their ethnicity, geographic remoteness

and nomadic, pastoral way of life. Tuaregs are generally light-skinned and considered to be related to the Berbers of North Africa, unlike other ethnic groups in Mali. They make up between 5 and 10 percent of the national population and primarily reside in the northern region of the country, located in the Sahara Desert.

Most of Mali's internal armed conflicts have been concentrated in the three northern regions of the country: Gao, Timbuktu and Kidal. These regions make up nearly 60 percent of the country's land mass although only 10 percent of the population lives there. The most recent conflict precipitated from attacks in January 2012 by the National Movement for the Liberation of Azawad (MNLA) on the military camps of Menaka in Gao and Aguelhok in Kidal. The MNLA, a Tuareg separatist movement based on various national and foreign jihadist groups, sought to take control and proclaim independence of the north.

Background on the Actors in the Conflict and Their Interactions

The National Movement for the Liberation of Azawad (Mouvement National de Libération de l'Azawad, MNLA), led by Mahmoud Ag Ghali, was founded in November 2010 and is composed predominantly of Tuaregs, with some nationals of other ethnic groups in the north. It first existed as cultural association before publicly claiming support for regional independence on October 16, 2011. The MNLA asserts self-determination over the northern region of "Azawad" comprising Timbuktu, Gao and Kidal as well as parts of Segou and Mopti.

Bolstered by fighters linked to al-Qaida (known as al-Qaida in the Islamic Maghreb, AQIM), the Movement for Uniqueness and Jihad in West Africa (MUJAO), and soldiers and mercenaries returning from Libya,

the January 2012 offensive led by the MNLA quickly overran Malian troops. As a result, the Malian army abandoned several of its strongholds. These losses exposed key weaknesses of the poorly equipped and unorganized Malian army, including corruption and mismanagement along the military hierarchy.

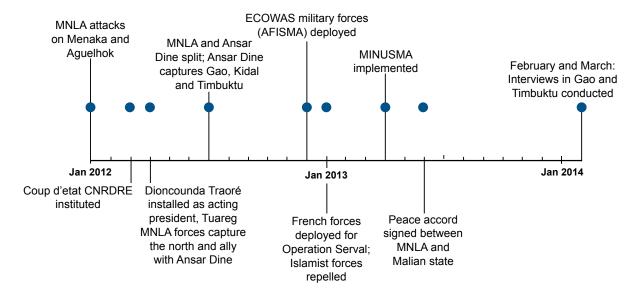
The Malian troops' strong sense of frustration over the difficult combat conditions led to a mutiny of soldiers and officers in the camp of Kati near Bamako. Their mutiny transformed into a coup d'état when, on March 22, 2012, the military rebels overthrew President Amadou Tournani Touré and instituted the National Committee for the Restoration of Democracy and the Restoration of the State.

The National Committee for the Restoration of Democracy and the Restoration of the State (Comité National pour le Redressement de la Démocratie et la Restauration de l'État, CNRDRE) announced the

suspension of the constitution and the dissolution of the government and the National Assembly. The Economic Community of West African States (ECOWAS) took up the matter of the crisis in Mali on March 28, 2012. After several rounds of negotiations, it secured the withdrawal of the junta in favor of restoring constitutional order. The CNRDRE was promised participation in the formation of the new government and amnesty for acts committed during the coup. Under the terms of this agreement, President Touré formally tendered his resignation. The Constitutional Court, in turn, installed the president of the National Assembly, Dioncounda Traoré, as acting president on April 12, 2012.

In April 2012, the Tuareg MNLA and jihadist armed groups took advantage of the political vacuum caused by the coup and captured the north of the country. The following month the MNLA combined forces with the radical Islamist group Ansar Dine.

Figure 2. Timeline of the Mali Conflict, January 2012 - January 2014



Ansar Dine literally means "Defenders of Islam" in Arabic; it is a movement that advocates for radical Islam. Founded in November 2011 by Iyad Ag Ghaly, one of the main leaders of a Tuareg rebellion of 1990, Ansar Dine has set the goal of imposing Shariah throughout the country and turning Mali into a theocracy. With the MNLA, Ansar Dine and other Islamist forces occupied northern Mali, declaring the territory to be an Islamic state. Ansar Dine then implemented Shariah in Timbuktu. By July, however, the rebel alliance split and Ansar Dine turned its forces against the MNLA, capturing Timbuktu, Kidal and Gao. During this time, the Islamist armed groups destroyed several cultural landmarks, including shrines and mosques, many of which were UNESCO World Heritage sites.

An African military force, the International Support Mission in Mali (AFISMA), proposed by ECOWAS at the beginning of the crisis, was finally approved on December 20, 2012 by resolution 2085 of the United Nations Security Council. France, at the request of interim President Traoré, also engaged in a powerful military offensive under the name of Operation Serval on January 11, 2013. These operations successfully repelled the jihadist offensive that had encroached on the center of the country, reaching all the way to Konna.

The Malian army followed the French forces north and successively recaptured the three major northern cities of Gao, Timbuktu and Kidal. In the region of Kidal, French and ECOWAS forces moved on without the Malian army to pursue the jihadist AQIM and Ansar Dine fighters to their refuges and destroy their stockpiles of weapons, ammunition, fuel and food. On April 25, 2013, Security Council resolution 2100 was passed to implement the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA). MINUSMA has been tasked with overseeing political processes and supporting security-related tasks in

Mali. In June 2013, the rebels and the Malian state signed a peace agreement. The following month, Ibrahim Boubacar Keita was elected president.

The exact number of casualties from the 2012-2013 conflict in the north has not been documented; however, estimates exceed more than 1,100 for the Malian army and 100 for the MNLA forces by mid-2012 alone (Keenan 2012; Reuters 2013). During the conflict, war crimes and human rights abuses were reported throughout the region. The MNLA committed widespread looting and sexual violence according to several sources (Human Rights Watch 2014; Amnesty International 2013).3 Human Rights Watch (2014) also documented the summary execution of approximately 150 Malian soldiers by MNLA forces in Aguelhok. During the Malian army's 2013 offensive, Malian soldiers also reportedly took part in violent crimes, including 26 extrajudicial killings, 11 disappearances and 70 cases of torture of alleged Islamist rebels. Islamist fighters were reported to have recruited child soldiers, amputated civilians and destroyed important historical and cultural shrines.

The conflict had a significant impact on the largely agriculture-based Malian economy. Agriculture contributes to nearly 40 percent of gross domestic product (GDP) and employs 80 percent of the Malian population (FAO 2013). The local economies in the north were especially disrupted by the surge in insecurity. Before the onset of the 2012 crisis, geographic disadvantages and recurrent political instability already posed challenges to livestock herding, agriculture and trade—the major economic activities of the region. The areas most heavily affected by conflict are located in the Sahara desert, which receives yearly rainfall ranging from less than 150 to 200 millimeters. In particular, the 2011 to 2012 agricultural season was characterized by insufficient rainfall, unevenly distributed in time and space. The three northern regions, Gao, Timbuktu and Kidal,

experienced a collective cereal deficit due to drought that was estimated at 138,690 tons. The resulting food crisis affected over 900,000 people (Gourdin 2012).

Potential Scenarios

It remains unclear whether the capacity of jihadist groups has been reduced enough to contain the terrorist attacks against civilians, French soldiers, the Malian armed forces (Forces Armées du Mali, FAMA) and the MINUSMA forces. Despite these concerns, the defeat of jihadist forces created the conditions for a dialogue between the government and the MNLA. It also enabled the organization of presidential and legislative elections in 2013, which brought to power Ibrahim Boubacar Keita in September 2013. Donors, international organizations and bilateral organizations have renewed their assistance to Mali. The process of reforming governance structures to be more inclusive and accountable is ongoing under the supervision of MINUSMA.

With the re-establishment of legitimate institutions, the situation is stabilizing; however, the issue of Tuareg independence has yet to be resolved. Considering these recent developments in Mali, the conflict could evolve according to one of the following three scenarios: (1) The security situation stabilizes and the inclusive peace process continues as planned; (2) the security situation worsens; or (3) the conflict stabilizes, but tensions remain high as Tuareg separatist ambitions linger. Of the three scenarios, the first seems most likely to occur, given the current appeasement measures taken by the Malian government (i.e., the suspension of criminal proceedings against some rebel leaders and the release of prisoners of war); U.N. oversight of institution building and democratic governance in the country; and the relative stability provided by national and international peacekeeping and military forces.

However, the current truce with the MNLA remains fragile. In late May of 2014, MNLA forces were reported to have captured Kidal and several of its surrounding town.

Several factors that may affect the course of the conflict include:

- The participation of the Tuareg movements in the peace process. If the Tuaregs commit to the framework of strengthening decentralization and regionalization proposed by the Malian government, this could contribute to the consolidation of peace. This scenario also includes the disarmament of the rebels and their socio-economic reintegration.
- Provocation by some extremist elements of the MNLA hostile to the peace process in complicity with their jihadist allies. If further attacks occur, the Malian army may react with force, possibly resulting in civilian casualties. The deteriorating situation could lead the French and international militaries to interpose between the belligerents.
- Talks on autonomy between the MNLA and the government. Malian public opinion, the Malian government and a significant proportion of the northern populations, including some Tuareg factions, are hostile to the idea of independence or autonomy for the north. However, if the second scenario occurs and the security situation deteriorates, it may be necessary for these talks on autonomy to take place. Indeed, in discussing autonomy for the north, one might think that it is a homogeneous region with such a homogeneous population that, on the basis of a regional consensus, could take charge of its destiny. However, this is highly improbable. The northern areas are fractured along several ancestral, tribal, cultural and religious lines that would likely lead to feuds and internecine fighting.

Principles crucial to the continuing resolution of the conflict are (1) strengthening constitutional and democratic life; (2) deepening decentralization; (3) engaging in national reconciliation; and (4) initiating a sustainable development plan. While these principles do not serve as a quick fix to the conflict, they provide a basis for more inclusive governance that may allay future tensions among separatist movements, thus minimizing the likelihood of recurrent crises.

Effects of the Conflict

The General Impact

The 2012-2013 conflict had severe socio-economic repercussions on Mali, many of which affect the country today. The conflict led to the withdrawal of international nongovernmental organizations (NGOs) from the conflict-affected zones to more secure areas, such as Bamako, and in some cases, their complete withdrawal from Mali. Insecurity disrupted the provision of public services, such as hospitals, pharmacies

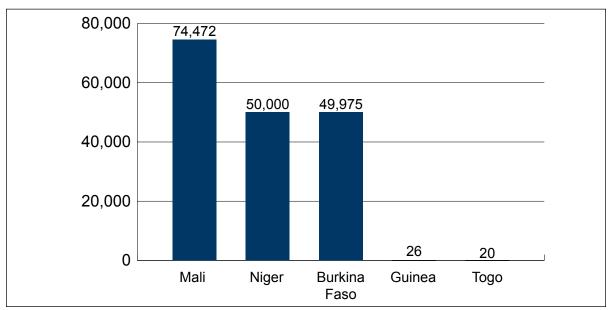
and schools, as well as infrastructure for the distribution of water and electricity. Pervasive looting of financial service providers and cereal storehouses by armed groups reduced the capacity to provide credit and mitigate food security in the region. Tourism and foreign aid were also highly affected. Moreover, the conflict displaced thousands of people within Mali and to neighboring countries. For instance, the United Nations estimated that approximately 75,000 Malians were internally displaced, and 100,000 were refugees as of June 30, 2013 (see figure 3).

Impact on Agricultural Value Chains

Crop Value Chain

In the conflict-affected zone, farmers grow primarily rice, millet, sorghum and some wheat, with rice being the main crop cultivated. In Gao, rice is the major crop grown, accounting for about 80 percent of the total area cultivated. In Timbuktu, millet is the major crop

Figure 3. Estimated Number of Malian Internally Displaced Persons and Refugees in Neighboring Countries as of June 30, 2013



Source: United Nations (2013).

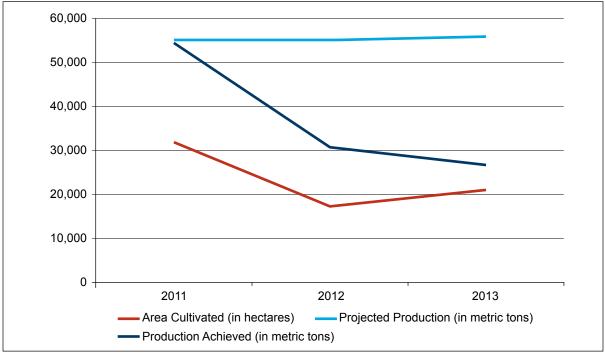


Figure 4. Rice Production Variation in Gao

Source: Gao Agricultural Extension Service.

accounting for about 50 percent of the total area cultivated in 2012 (Ministry of Agriculture, 2012). Although most of the data on the effect of conflict on crop production is not available, available data for rice production in 2012 indicates that actual yield decreased by 43 percent when compared with the amount produced in 2011 (figure 4).

Chemical fertilizers, irrigation systems, gas and improved seed supplies were the inputs most affected by the conflict. Before the conflict, fertilizers were delivered by agro-dealers to the regions in the north. However, during the conflict, fertilizers were delivered to Mopti (about 500 kilometers from the conflict zone), and farmers had to retrieve them in compliance with the rebels' rules. Many farmers were not able to obtain the quantity of fertilizer that they needed, which resulted in a reduced area of land under cultivation and lower yields.

Moreover, in some towns, water pumps were stolen by the rebels, making irrigated rice cultivation impossible. In Timbuktu, the rebels also controlled the supply of gas, forcing producers to switch to expensive, but lower-quality sources that often broke water pumps. The government restricted the supply of urea to the conflict zone because it suspected that the rebels would use it in explosive production. Seed production and supply work were interrupted as institutions dealing with seed multiplication abandoned their work or relocated it away from the conflict zone. Productivity was affected due to a shortage of labor, a lack of financial resources to purchase fertilizer and gas (given the increased prices), and high levels of insecurity associated with working in the field.

Large farms were hit hardest, as farmers were cut off from their fields and thus unable to produce their crops. Large farms are often merely a reflection of large families, which cultivate multiple plots or have big herds of cattle. They were the most affected because they could not cultivate all of their land and could not access adequate inputs.

Traders were limited in their market participation due to fear of attacks, lack of transportation, and low or unreliable supplies of crops to market. Some traders also abandoned their businesses altogether due to the conflict. Some traders went out of business because consumers did not have enough cash to buy sufficient quantities of produce. Moreover, most of the buyers from government projects or NGOs left due to the conflict, further diminishing demand for food crops.

Fisheries Value Chain

Fishing practices in the conflict region of Mali are located on the Niger River and the inner delta. The fishermen use traditional, artisanal practices, and captured fish are dried and smoked. The markets for fish are both local and for export to other regions and countries. The focus groups reported that fishing has not been affected as much by the conflict for three main reasons: 1) fishing is viewed as a low income generating activity; 2) rebels do not have a preference for fish; and 3) rebels fear the water and do not swim. Despite the fact that the rebels appear to have little interest in disturbing the fishermen, many fishermen reportedly avoided the river in the conflict zones. Fishermen also provide transportation for goods (including agricultural products) on their boats, but due to fear of attacks reduced the provision of this service.

Livestock Value Chain

The major activity affected by the conflict in northern Mali is the livestock value chain. The main actors in this value chain are the producers (herders), traders, processors (butchers) and consumers.

Herders who owned many livestock, were forced to leave places of conflict for safer areas in southern Mali or neighboring countries, whereas those who had fewer livestock were forced to raise their animals within their compounds. Moving to safer areas led to the degradation of grazing and watering points, given the limited carrying capacity of the host regions. Raising herds within compounds also proved difficult as feed supply for the animals was restricted due to security. Moreover, the burning of grazing lands and destruction of livestock water points by the rebels were key problems.

Initially, the prices of livestock fell, as stolen livestock crowded the market. Owners also wanted to sell their livestock to avoid the risks associated with theft, disease and death. Then, as the conflict escalated, the price of livestock dramatically increased due to low availability in the conflict zone. Moreover, the diets of the rebels were mainly based on meat and milk, which also contributed to the high prices of livestock and livestock products. For instance, upon the arrival of the rebels from the north into the country's more southern cities, the price of sheep increased more than twofold in Bamako and other markets that service these areas.

Table 1 shows the prices of livestock before and during the conflict. In Timbuktu, the price of meat rose from 1,250 CFA (the Malian currency; \$1 is roughly equivalent to 500 CFA) per kilogram in 2011 to 2,500 CFA per kilogram in 2013.⁴ In Gao, the price of meat with bones increased from 1,500 CFA per kilogram to 2,250 CFA per kilogram.

Similar to the large-scale crop farmers, large-scale herders were especially vulnerable to the rebels' attacks, as meat is in high demand by the rebels and grazing lands are open spaces in which the rebels operate. They also faced difficulties due to overgraz-

Table 1. Comparison of Reported Livestock Prices per Unit Before and During the Conflict (in West African CFA)

Livestock	2011: Before the Conflict	2013: During the Conflict
Cattle	115,000	400,000
Sheep	22,500	115,000
Goat	15,000	35,000

Source: Kergna 2014 focus group discussions in Gao and Timbuktu.

ing, which increased animal mortality and reduced the number of animals that could be marketed.

To meet the increasing demand for meat, many unemployed, relatively unexperienced youths and butchers moved from remote localities and began to practice butchery in the conflict zone. The lack of experience of these new butchers resulted in the sale of reportedly low-quality meat, produced using unsanitary practices.

Livestock traders faced enormous security challenges in bringing their products to market. The rebels often attacked their flocks and plundered their cash and animals. Thus, many of them were either forced to limit their activities or quit livestock marketing altogether. Also, the absence of a well-functioning banking system exacerbated the insecurity of the traders, who had no secure way of storing the cash that they earned. Equally, consumers had no access to cash to purchase the traders' animals. This led many markets to cease functioning during the conflict and forced people who depend on selling livestock for their livelihoods to barter their animals for cereals or other primary goods. Moreover, the rebels declared brokering and taxing livestock illegal, further disrupting the marketing of livestock.

Support service providers (such as meat inspection and animal health services) were also limited during

the conflict. This led to the spread of several livestock diseases, such as foot-and-mouth disease and contagious bovine pleuropneumonia throughout the conflict zone.

Agriculture-Related Services Value Chain

The major agriculture-related activities disrupted due to conflict were the transportation and credit services (including both government-run and private local service providers). Transportation was affected by the increase in the price of petroleum and because of the taxes imposed by the rebels. The rebels also appropriated store-houses and disrupted extension and farmer training services. Credit service providers, such as banks and microfinance institutions, left the conflict zone. Informal credit options, such as obtaining loans from other members of the community, were also limited given the urgent need by every individual to care foremost for his or her farm before providing additional funds as sources of credit for other community members.

Adaptation and Resilience

Activities Less Affected by the Conflict

Subsistence farming, fishing and small ruminant rearing were less affected by the conflict. Other activities outside the agricultural sector, such as handmade crafts and carpentry, were also less affected. As noted above, fishing was not affected as severely by the conflict because the demand for fish is not as high (since the rebels' diets generally exclude fish), and the activity does not generate a large amount of income (which would put fishermen at risk of attacks and theft).

More Resilient Service Providers

Although many development partners fled the conflict zone, some external partners managed to continue their activities despite the insecurity. Among those that stayed are Handicap International, CICR (Centre International de la Croix Rouge, the Red Cross), and AVSF (Agriculteurs et Vétérinaires Sans Frontières, also known as Farmers and Veterinarians Without Borders). Their activities are primarily humanitarian in nature and involve the provision of food aid, potable water, sanitation, health and nutrition services, and housing for refugees or internally displaced persons. These partners work with farmer organizations in villages, which are organized in associations, cooperatives and unions of cooperatives in order to access funding from donors or support from the government. Since these services are perceived to be vital to the rebels and are provided in a neutral way, the rebels have allowed them to continue unimpeded during the conflict.

Coping Strategies

A remarkable strategy adopted by rice farmers in Timbuktu was to enter into direct negotiations with the rebels. Through a *comité de crise* (i.e., the group that negotiated with the insurgents), the farmers spoke with the rebels and agreed to give up 40 percent of the value of subsidized fertilizers to the rebels. The rebels in turn facilitated the provision of fertilizer to the north and provided buses for farmers' safe transportation to and from their rice fields. More generally, populations within the conflict zone accepted the living conditions imposed by the rebels: They dressed as expected, put television and radio on Islamic channels, and refrained from using alcohol and cigarettes or playing

soccer—which are banned under rebel interpretations of Islamic law.

Potential for Post-Conflict Recovery

Since the liberation of the occupied regions and the beginning of the peace process, agricultural activities, particularly crop production, have begun to recover. The conflict displaced only a small number of crop farmers, and most of them moved to safer cities within the zone. Although farmers returned to their fields, many of them returned without any resources. Support from NGOs—or from donor projects that provide them with food, inputs, equipment and services—are essential to reestablishing their livelihoods.

Livestock herders, conversely, were displaced far from the conflict zone or have moved to other countries. They are also still wary of returning due to ongoing livestock thefts. Trade activities are only slowly returning to the zone because businesses were held mostly by Arabs before the conflict, and many traders fled the country during the turmoil. Transportation has rebounded actively, although many buses and trucks belong to displaced Arabic or Arab-related communities. Several service providers have returned to the conflict zone: Government entities were the first to return (although not for the full spectrum of servicesonly extension services at first), followed by NGOs. Multilateral institutions—such as the European Union, World Bank and African Development Bank—have reinitiated funding interventions in the zone, as has the U.S. Agency for International Development (USAID).

IV. FINDINGS FOR NIGERIA (A SUMMARY OF REPORTS SUBMITTED BY JIDEOFOR ADIBE AND ABIGAIL JIRGI)

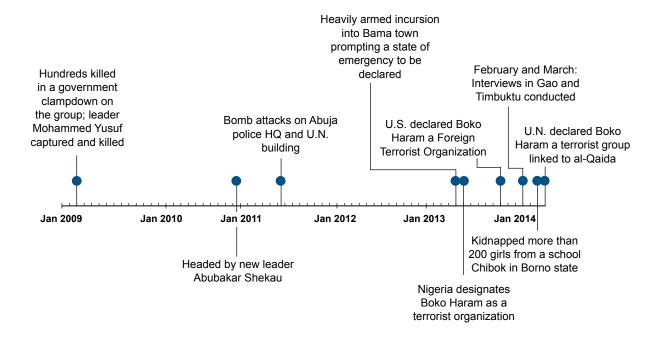
Context of the Conflict

The Nigerian case study focuses on the incidence of "new" conflict caused by Boko Haram and Ansaru in Nigeria. Throughout this analysis, new sources of conflict are distinguished from the "traditional" forms of episodic, localized conflict in Nigeria, which typically occur over scarce resources, socio-economic issues, and differences in values.⁵ In particular, a Boko Haramtype conflict is distinct from other long-standing ethnoreligious conflicts in Nigeria because the group targets both Muslims and Christians equally.

Boko Haram and Ansaru are officially designated terrorist organizations (by the U.S. and most recently the United Nations) that have a radical Islamic agenda and territorial ambitions to create a radical state governed by Shariah. The terrorist groups have perpetuated violent high-fatality attacks on schools, government and both Christian and Muslim places of worship, among other incidences. While their current attacks are concentrated in the northeast, their linkages to international terrorist organizations nationalize and globalize the threat of future acts of violence. Many observers state that Nigeria's failed institutions are the driving force behind the acts of violence by Boko Haram and Ansaru. Though the failed state argument may be a component of a multitude of motivating factors of the conflict, it does not explain the localization of the conflict to the north. The current situation can be more accurately viewed as a crisis of nation building. The insurgents do not view themselves as Nigerian nor as being included as stakeholders in the nation; rather, they see themselves as part of a fundamentalist Islamic state.

From 2009 until February 2013, Boko Haram killed an estimated 3,000 individuals (IRIN 2012). The year

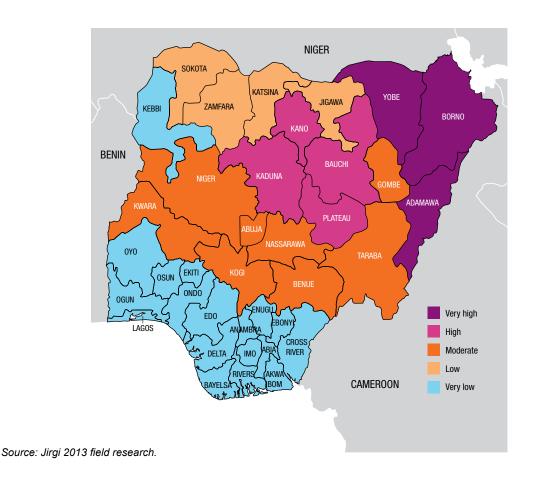
Figure 5. Boko Haram: Timeline of Major Events, 2009-2014



2014 has thus far been marked by more fatalities from bombing and school attacks. These school attacks and the 2014 abduction of more than 200 schoolgirls in the northern town of Chibok have captured global attention. The violent activities of Boko Haram have extended to the Federal Capital Territory of Abuja and to Plateau state, but attacks at high and very high levels are primarily experienced in the northeast (Adamawa, Bauchi, Borno and Yobe) and northwest (Kano and Kaduna) political zones (see figure 6).

Three northeast states feature the highest intensity of violence: Adamawa, Borno and Yobe. Borno state has arguably been the worst-hit state in the intense conflict zone. For example, as of March 2014, Borno state government ordered all schools (public and private) to cease classes due to frequent attacks on schools after a particularly violent incident in February. Adamawa has a lower incidence of attacks than Yobe and Borno states, but is perceived to be a high-risk state because of its border with Cameroon. Gombe and Taraba states are considered part of the northeast political zone, but in them the incidence of attacks has been lower. Plateau state has experienced high levels of conflict, but the incidents are most frequently long-standing ethno-religious (not attributed to Boko Haram) or are related to the conflict between pastoralists and herders.

Figure 6. Map of Nigeria Showing the Intensity of the New Conflict across the Country



The impact of Boko Haram and Ansaru on the Nigerian economy is localized for now, but the instability has had an effect on agricultural products from the north and has severely reduced cross-border trade with Cameroon, Chad and Niger. Nationally, agriculture contributes to 40 percent of Nigeria's GDP, and employs 70 percent of the workforce, including 37 percent of youths aged 18 to 35 (48 percent males, 52 percent females) (NBS 2013). The Nigerian agricultural sector grew about 7 to 8 percent each year from 2000 to 2010. The overall positive growth trend masks the impact of the conflict in the severely affected states.

Even before the current instability, the northern zones of Nigeria were areas of low agricultural productivity. The farms are typically subsistence level and feature a diverse array of cropping systems—although a majority of the cultivation is mainly rain fed and small scale, between 2 and 4 hectares. The large majority of the population (80 percent) in the severe conflict zone lives in rural areas. While agricultural productivity in the north is low, the region features products that do not grow well in the southern regions. So since Nigerian independence, the northern region of the country has provided a significant proportion of foodstuffs to the southern part. Before the onset of the Boko Haram and Ansaru conflicts, nearly 50 percent of foodstuffs and 47 percent of livestock consumed by the south were produced in the northern states (Bizwatch Nigeria 2013).

The typical types of crops grown are grains (sorghum, millet and rice), legumes (cowpeas and groundnuts), vegetables (tomatoes, onions and peppers) and cotton. Wheat production is located in the Lake Chad Basin, where it is grown via irrigation. For the farmers' surveyed, cowpeas, millet and rice were sold primarily as cash crops. Millet was sold by one large farmer solely as an export crop to Cameroon and Niger. The northeast agro-ecological zone produces cattle, goat

and sheep; while artisanal fishing and aquaculture are also important livelihood activities. The zone is primarily Sahel and semi-arid savannah that features low annual rainfall. The major ethnic groups in the northeast states are the Kanuri, the Fulani and the Bwatiye. The region faces socio-economic challenges of low GDP; a lack of human services such as credit, education and health resources; and sparse natural resources.

Background on the Main Conflict Actors and Interactions

Boko Haram's official name is Jama'atu Ahlis Sunna Lidda'awati Wal-Jihad (People Committed to the Propagation of the Prophet's Teaching and Jihad), but it has been nicknamed Boko Haram by locals in its town of origin and main stronghold, Maiduguri. The nickname literally means "Western education is forbidden," but figuratively conveys that "Western civilization is forbidden." This distinction is important because it succinctly describes the Boko Haram strategy of attacking anything Western.7 The specific history of Boko Haram is fraught with debates, but there is broad agreement that the group was radicalized in 2009 following a government clampdown on the group that resulted in the death of about 800 people (including the group's leader at the time, Mohammed Yusuf) (Adibe 2011).8 Abubakar Shekau took over as leader of Boko Haram after the clampdown. Shekau was allegedly assassinated, but he has recently resurfaced in videos regarding the abduction of 200 schoolgirls from Chibok in April 2014.

Ansaru is officially titled the Jama 'atu Asaril Muslimina Biladis Sudan (Vanguards for the Protection of Muslims in Black Africa) and was established publicly on January 26, 2012, after an attack by Boko Haram killed 150 civilians, who were mainly Muslims. The sect differs from Boko Haram because it is against the killing of innocent people (both Muslims and non-

Muslims). Ansaru also has the ambitious goal to create an Islamic caliphate stretching from Niger to northern Nigeria and on to Cameroon. The organization has had more contact with international terrorist groups, including AQIM and the Movement for Unity and Jihad in West Africa (MUJWA), than has Boko Haram. Ansaru's activity is heaviest in Kano state, where the group appears to have an operating base.⁹

The Nigerian government, over the past year, has launched an enormous military campaign of 8,000 troops in the fight against Boko Haram and Ansaru. The country has also formed a Joint Task Force made up of 5,000 people from the police force, the military and civilians who provide intelligence (IISS 2013). The government has declared states of emergency in Adamawa, Borno and Yobe states, and it has intermittently cut off cell phone coverage in attempts to dismantle terrorist communication. Human Rights Watch (2013) has recorded a series of human rights abuses by the counterterrorism campaign. In one incident, a military unit attacked and burned the village of Baga after a Boko Haram insurgent killed a soldier. Satellite images show that more than 2,000 structures were damaged in Baga. Recently, the national security adviser, Mohammed Sambo Dasuki, announced a "soft approach" strategy, the Countering Violent Extremism Program, to complement counterterrorism efforts (Campbell 2014). The program trains journalists how to report conflict incidences and civilians how to conduct diplomacy and strategic communications. It also provides skills training to increase economic opportunities especially for unemployed youth, who might be vulnerable to Boko Haram recruitment.

Potential Scenarios

There are three main potential scenarios for the future of the new conflict in Nigeria: (1) that the conflict will maintain the same characteristics and intensity, that is,

the conflict will stay relatively localized to Borno, Yobe and Adamawa, with episodic attacks in the Federal Capital Territory and surrounding states; (2) the conflict will decelerate and normalize; and (3) the conflict will accelerate.

Although trajectories for the future are always open for conjecture, the most likely scenario at the time of this paper's writing is that the conflict will accelerate—and, in a sense, the conflict has already done so. Following the declaration of a state of emergency in May 2013, Boko Haram was able to attack the air force base in Maiduguri. Between January and March 2014, an estimated 800-plus people were killed by the group. 10 Conflict due to Boko Haram and Ansaru is unlikely to abate at least until the 2015 presidential election is over, and, even after the election, the violence may not diminish, but further escalate depending on its outcome (see Annex III for more analysis on election-related violence).

There are four sub-scenarios or conditions that may contribute to the acceleration of conflict incidents induced by Boko Haram and Ansaru:

- First, if the current Nigerian president, Goodluck Jonathan, wins the presidential election in 2015, antigovernment sentiment from Boko Haram and Ansaru will likely increase. As the incumbent, President Jonathan has many campaign resources at his command and is likely to win, even if only by a narrow margin. However, the main opposition party to him is very strong, and it will likely claim election irregularities if he is re-elected.
- Second, if the areas that experience conflict expand to the southern states, then the likelihood of retaliation on northerners and Muslims may increase.
- Third, if Boko Haram is able to coordinate or outsource its efforts to Fulani herdsmen merce-

naries, it could greatly expand its attacks. Adibe (2014) gives two examples of Fulani ambushes of Christian villagers and government officials; it is unclear whether these attacks were due to long-standing Fulani conflicts with farmers of the older ethno-religious variety or whether the Fulani attackers were hired by Boko Haram.

 Finally, as the U.S. and European forces get involved in supporting Nigeria against Boko Haram and Ansaru, anti-Western sentiment could be further exacerbated if the end results are the deaths of insurgents and Muslims.

A fast resolution to the conflict inflicted by Boko Haram and Ansaru appears unlikely, despite the ongoing military campaign and the initiation of support from the United States. A proposed long-term strategy to contain the conflict is to ensure the inclusion of all citizens as stakeholders in the country. Nigeria needs to fast-track its efforts to readdress its nationhood, its level of inclusiveness, and the social construct of what it means to be a Nigerian—otherwise the problem of Boko Haram and Ansaru will probably persist and accelerate.

Effects of the Conflict

The General Impact

It is very clear that there are extensive socio-economic implications for the region due to the new conflicts outlined above. According to the United Nations' *World Investment Report 2013* (UNCTAD 2013), Nigeria's foreign direct investment dropped 23 percent from 2011 to 2012, and this drop has been attributed to the activities of Boko Haram and Ansaru. Trade and other cross-border activities into Niger, Cameroon and Chad (which shares a Lake Chad border with Nigeria) have also taken a hit due to border closures in Adamawa, Borno and Yobe by the Nigerian government in 2011. Additionally, in November 2013, the Office of the

United Nations High Commissioner for Refugees reported that there were nearly 17,000 asylum seekers in Chad, Cameroon and Niger. As of March 2014, the National Emergency Management Agency of Nigeria estimated that 4 million people were in some way affected by the conflict and that 250,000 people have been displaced by insurgency in the northeast. In addition, there has been a reduction in the delivery of health, education and other services to the region.

Impact of Conflict on Agricultural Value Chains

Crop Value Chain

The conflict has caused a sharp and substantial increase in prices for key northern agricultural crop exports to the rest of Nigeria, Niger and Cameroon. 11 This rise in prices is mainly due to a decrease in agricultural output, uncertainties at markets and an increase in transportation costs. The four farmers interviewed for this study were located in Borno state. They reported large drops in their average production of cowpeas, maize, millet, rice and sorghum, from before the conflict in the period 2004-2008 to the period during the conflict, 2009-2013 (table 2).

This reduction in the output of crops is due to a combination of factors. First, there has been reduction in the availability of labor due to the threat of attacks on farmers on their way to their fields. Both farmers and farm laborers are afraid of attacks on the farms or bombs planted on the roads to farms. The lack of labor has caused inadequate and improperly timed weeding and harvesting. Second, the four farmers interviewed have experienced increased prices, lower availability and farther distances traveled to obtain fertilizer, herbicides and improved seeds. Two of the farmers had to travel to Kano to obtain herbicides, which increased the total costs of the product for the farmers. Subsequently, the

Table 2. Farmer-Reported Typical Harvests Before and During Conflict in Borno State

Production (metric tons)				
Identification Number of Farmer	Crop	Typical harvest before conflict (2004-2008)	Typical harvest during conflict (2009-2013)	Percent Change
1	Cowpea	1.0	0.3	-70
2		2.0	0.5	-75
1	Maize	2.8	0.4	-86
2		4.8	1.0	-80
3		15.0	2.2	-85
1	Sorghum	0.8	0	-100
4		20.0	6.4	-68
3	Rice	3.0	1.5	-50
4	Millet	5.0	1.1	-78

farmers used lower applications of inputs after the start of the conflict.

The low supply has affected the other segments of the crop value chain. It has also affected processors, such as the groundnut processor who was interviewed. The processor faced a decrease in raw materials due to the reduction in the movement of internal and cross-border sources of groundnuts from Chad, Sudan and Central Africa. Before the conflict, a cowpea wholesaler would transport 600 100-kilogram bags of cowpeas to Lagos and Akure each week. During the conflict, that number has dropped to 25 bags per week. Transportation costs have increased by 20 percent, and profits have tapered off for the wholesaler. Another interviewee reported on his business as a vegetable and fruit wholesaler. Before the conflict, he would typically sell potatoes, oranges, watermelons, bananas, cucumbers and green beans. He is also a watermelon producer. During the conflict, the village-level retailers have not come to purchase his products for resale, and his watermelons have been destroyed by Boko Haram. This particular wholesaler lost his business to the conflict.

Consumers of northeastern grain products have faced an increase in prices. According to the Famine Early Warning System's Price Bulletin: Nigeria for February 2014, cowpea, maize, millet, sorghum and rice prices were all above the five-year average for 2008 to 2013. The four farmers surveyed reported price increases of 45 to 130 percent when comparing the time before Boko Haram to their current situation. The largest price increases have been for sorghum and millet. Additionally, two of the four farmers surveyed have increased the portion of their output that they use for household consumption and have reduced the amount of crops that they distribute to local agencies for charity. Some of the farmers reported having to purchase maize for consumption to supplement maize grown on the farm. The reduction in the charitable giving of grains by the farmers is likely to have an impact on general levels of food security.

Fisheries Value Chain

Fishermen, in particular, were displaced from their villages when their homes and farms in Baga and in Konduga were burnt by the insurgents. However, these fishermen maintain fishing activities near their former

villages. The two fishermen interviewed have reduced the amount of fish harvested from 7 to 1.5 cartons per day, roughly an 80 percent decrease. Transportation costs from Konduga to Maiduguri have also increased. The fish wholesaler interviewed reportedly has faced a severe reduction in supply. He also encountered attacks at fish markets in 2011 and 2013.

Livestock Value Chain

Livestock producers are uncertain about when they can safely access markets due to attacks on animal markets. For example, the Goran Market in the Mafa local government area was attacked multiple times in 2012 and 2013 by Boko Haram and Ansaru. Thus, producers incurred increased feed costs from holding animals longer. In the case of one sheep producer-trader, he sold seven fewer sheep (from 10 down to three) per week during the period of instability than in times of stability, his transportation costs increased from about \$1 to \$4, and the price per sheep increased by about 12 percent for his consumers.

According to the animal feed processor surveyed, a reduction in animal production has reduced demand for animal feeds. Production for this particular feed processor has dropped from 230 bags per week to 15 bags per week. The amount of labor working for the feed mill has dropped by 50 percent. Before the conflict, the feed processor reported four mill operators and six general laborers. Currently, the feed mill only employs two mill operators and three laborers.

The animal drug marketer reported that input suppliers of pharmaceuticals have shut down operations in the northeast. Before the conflict, the animal drug marketer had more flexibility in his relationships with pharmaceutical wholesalers, and the drugs could be sourced in Maiduguri. The interviewee would pay only 60 percent of the total costs for supplies and then pay the rest after

the products were sold. During the conflict, the drugs must be sourced in Kano or Lagos, and the entire amount for the product is required upfront. The animal drug marketer has reported a 50 percent decrease in profits on veterinary pharmaceutical products.

In terms of processing, the butcher interviewed has also faced an enormous drop in the number of cattle slaughtered. According to the butcher, the Maiduguri abattoir reportedly slaughtered 550 cattle per day before the conflict, and it now slaughters only 90. The butcher himself now only slaughters one cow per day, down from five before the conflict. Prices paid for cattle have increased 100 percent, while the profit from slaughtering has decreased by nearly 50 percent. The butcher outlined two main reasons for these price increases: (1) Attacks on cattle herdsmen on the way to the abattoir have increased the price of cattle; and (2) cattle are increasingly being raised in home compounds where there are increased feed costs. The government views the butchers as a group that is likely to be agitated, and has provided the butcher's association with funds for a revolving credit loan to maintain their livelihoods.

Livestock markets, where there are typically high amounts of cash on hand, have been disrupted. Producers, traders and consumers have been killed in market attacks. These disruptions have resulted in a reduction of consumers that are able and willing to access and purchase northeastern agricultural products and livestock.

Agriculture-Related Services Value Chain

Financial institutions and crop insurance were reported by respondents to be minimal in the region both before and during the conflict. But incidents of violence in the conflict zone have reduced investor confidence further. From 2009 to 2013, the mean amount of loans accessed from Commercial Agriculture Credit Scheme (CACS)—a fund established by the Central Bank of Nigeria and the Federal Ministry of Agriculture and Water Resources to provide loans for agricultural projects—was lower in the northeast (2.4 billion naira, the Nigerian currency; \$1 is roughly equivalent to 160 naira), where conflict is more severe, than in the north-central area (4.5 billion naira). The mean number of projects executed by the CACS was also lower for the northeast, with 2.2 projects completed, compared to 5.9 projects in the north-central region (Central Bank of Nigeria 2009, 2010, 2011, 2012, 2013).

Government agencies, agricultural extension services and research institutes that support the agricultural sector have been reduced to minimal functions during the conflict. For example, the Lake Chad Research Institute has reduced field trials and monitoring for its West African Agricultural Productivity Project in the two project sites located within a 20 kilometer radius of Maiduguri, and the institute's 2014 farmer field day was canceled. The institute has also moved its wheat project to Gombe state, where the attacks by insurgents are minimal. Extension staffers at the Borno State Agricultural Development project have fled from their posts in the villages, and most report to the headquarters in Maiduguri.

Adaptation and Resilience

Activities Less Affected by the Conflict

According to the survey respondents, some areas of production and the value chain appear to be more resilient than others. Sheep production has slowed, but has proved resilient despite market attacks. Small-scale sheep production does not require a large amount of labor, and sheep can be reared within the confines of a household's walled compound. Some of the respondents reported that crop farming and arti-

sanal fishing were the riskiest enterprises during the conflict; while fish marketing was considered less risky than artisanal fishing. However, fish marketers require a supply source and are also in danger of attacks at markets.

Coping Strategies

All the survey respondents have developed strategies to cope with the threat of conflict. At least one farmer has moved out of the agricultural sector entirely, and is instead selling cars in Maiduguri on a full-time basis. Others have been considering a switch to less risky income-generating activities but have not yet made the change. The survey found that an animal drug supplier is considering a switch to selling rechargeable cards for cell phones or starting an animal finishing enterprise (i.e., fattening of animals prior to market), and a vegetable wholesaler is considering selling kerosene or gasoline. The diversification of farm enterprises was also a strategy that was reported by the survey respondents. One crop farmer started rearing cows and has stated that this has helped him maintain food security. Fish farmers modified the times when they harvested fish, avoiding the evening, when attacks by insurgents are more likely. Aquaculture was proposed by the artisanal fishermen as a safer alternative to fishing. Aquaculture—whereby fish farmers cultivate fish in controlled ponds close to their households—precludes travel to and from the household to a body of water. However, the activity is input intensive and the fishermen also reported being attacked in their villages. The Lake Chad Research Institute and the Borno State Agricultural Development project were able to adapt by relocating some of their work, modifying their means of service delivery and reducing the amounts of service. For example, these projects trained the farmers at a central location outside the conflict zone rather than in the field.

V. POLICY IMPLICATIONS

Overall Impact of Conflict on Agricultural Value Chains

s the analyses in the sections above have shown, the recent periods of conflict and instability in Mali and Nigeria have dissimilar contexts and thus face different potential trajectories. However, four common challenges were experienced by all segments of the crop, livestock and agricultural services value chains during these periods in both countries:

- 1. Reduced human mobility: People across all value chains feared movement outside protected areas because of attacks by insurgents. Farm workers and herders feared attacks when in the field or grazing animals. Input suppliers had difficulty reaching their customers. Processors dealt with a reduced amount of workers available to operate machinery. Both traders and consumers limited their movements to markets due to intermittent attacks. In some cases, the fear of attack displaced people outside the conflict zone, further reducing labor pools.
- 2. Reduced access to inputs and markets: As a result of reduced mobility, the various actors in the agricultural value chain experienced a reduction in both the supply of inputs (fertilizer, herbicides, gasoline and seeds) and in access to consumers (demand).
- 3. Increased theft of cash, products and equipment: The agriculture sector became a target for insurgents in need of cash and food. Each segment of the sector saw increased theft. Markets were prime targets for the theft of agricultural products and large amounts of cash.
- 4. Increased prices for transportation, inputs and products: The reduction in the mobility of all value chain members and the decrease in supply increased the prices for transportation and farm inputs, and in turn of agricultural products.

In addition to these overarching impacts, the crop, fisheries, livestock and agriculture-related services value chains have experienced unique challenges due to conflict. The following sections summarize the strategies farmers have utilized to adapt to conflict and offer corresponding recommendations for donors (nongovernment, government and private investors) to maintain support within the agriculture sector. Recommendations offered here take two main routes based on the trajectory of conflict: 1) if conflict is likely to increase: promote a resilient agriculture sector and 2) if conflict is likely to abate: focus on rebuilding the sector. Some suggestions may be more or less feasible given the context; thus, some discussion of context specific caveats is provided.

Crop Value Chains

Coping Strategies for Crop Value Chains

Crop producers in Mali and Nigeria have adapted farm operations to reduce exposure to violence and theft, diversified into entirely new farm enterprises, or moved entirely out of the agricultural sector. Crop farmers in Nigeria, who were forced to evacuate their land due to violence, reported hiring agricultural contractors who were willing to remain in the conflict zone.

Some crop farmers in Timbuktu took a different strategy and negotiated with rebels to ensure safe movement to fields and to obtain necessary inputs. Crop input suppliers interviewed in Mali relocated drop-off points for farm supplies outside the conflict zone, leaving it up to farmers to arrange safe transportation. Likewise, some input suppliers adapted to conflict by relocating their businesses to safer locations. Processors interviewed in Nigeria reported having to source from different suppliers during the conflict because some supplies were sourced across borders

that had shut down. Consumers in Mali adapted to less food availability from farms by using food aid.

Options for Supporting Crop Value Chains

Opportunities exist for donors to support these coping mechanisms for the crop value chain:

- Encourage less risky agricultural endeavors as alternatives to high-risk enterprises: The conflicts in Nigeria and Mali have made traditional farm operations exceedingly dangerous. Routine travel to agricultural markets and everyday field work, for example, are in many cases now high-risk activities for farmers, their families and farm workers. An option to consider is to support crop farmers in identifying and operationalizing less risky agricultural enterprises. Farmers interviewed as part of this study identified kitchen gardens or backyard farms as less risky farm enterprises, i.e., these activities require less travel to fields and markets. Feasible options for donors to consider are trainings and other support mechanisms that incentivize diversification into low-risk agricultural enterprises. Donors may also explore the potential use of technologies, especially mobile phone-based applications, to minimize the need for travel in high-risk environments.
- · Maintain access or reconnect farmers to inputs (herbicides, fertilizers, gasoline and im**proved seeds):** During the conflict, crop farmers reduced the application of inputs that can vastly improve yields. Both conflict regions have low soil quality and low rainfall; thus, access to farm inputs is vital to meeting the demand for grains. Specifically, reductions in input use are related both to the increased cost of these goods as well as their scarcity in conflict regions. Options to explore are innovations in the delivery of inputs or subsidized costs for crop producers to increase input use. Equally, donors may consider prioritizing investments in less input-intensive crops, which may enable farmers to continue production in input-scarce zones.

Repair and replace farm equipment: In Mali, rice farmers reported damages to farm equipment, e.g., irrigation pumps. Irrigated rice is the primary crop grown in the conflict-affected communities in Mali. Under the region's new and more stable environment, farmers are returning to rice cultivation and production will likely return to previous levels. Specific support, however, could be provided to repair and replace farm equipment.

Fisheries Value Chains

Coping Strategies for Fisheries Value Chains

Fishing is the primary enterprise in many communities near the banks of the Niger River in Mali and around the Lake Chad Basin in Nigeria. In Mali, the threat of violence reduced the willingness of fishermen to work as transporters on the river. Otherwise, the Malian fishermen continued working relatively unharmed. The fishing sector was resilient because fish are not a preferred food for the insurgents in Mali and are not profitable. For the fishermen in Nigeria, the destruction of property and the danger associated with traveling to fishing grounds has significantly reduced harvests. Fishermen have also changed their work schedules so that they avoid working during the night, which is considered to be especially dangerous. Fish traders were able to continue selling by altering their suppliers but were still attacked at markets. Fish trading was still viewed by fishermen as more resilient than fish harvesting.

Options for Supporting Fisheries Value Chains

Both Malian and Nigerian fishermen and fish traders were relatively more resilient than the other value chains. In addition to having fairly effective coping strategies, fishing communities identified the following activities for donor research and support:

• Research options for high-input, home-based farm enterprises: The Nigerian fishermen interviewed as part of this study identified home-based aquaculture or selling dried fish as possible means of continuing farm operations while reducing exposure to attack. Areas for further research include the feasibility of these proposed livelihood strategies. Aquaculture in ponds, in particular, requires expensive inputs and technical training. The fishermen also reported being attacked in their homes, which might put any home-based enterprises at risk. However, if found to be feasible, donors may be able to support the transition from fish harvesting to fish rearing or marketing.

Livestock Value Chains

Coping Strategies for Livestock Value Chains

Livestock farmers were severely impacted by the conflict. Livestock farmers downsized their herds and moved the remaining animals to walled compounds to avoid being attacked. Holding herds that would regularly be sold required farmers to buy more feed. During the conflict in Mali, many larger livestock farmers sought to protect their animals by moving them on a large scale to southern regions, which created conflict with the populations in these host communities. In addition, despite herders' efforts to transport their livestock to safer areas of the country, rebels were able to steal their herds

The veterinarians and suppliers of drugs in both Mali and Nigeria have similarly shut down their operations. Animal health retailers and veterinarians now source from outside vendors. Veterinarians interviewed in Mali reported only having access to herds when protected by insurgents, leading to many untreated herds and more disease. Also in Mali, many new but unskilled butchers entered the profession to serve the insur-

gents' demand for meat, so the quality of meat has suffered. In Nigeria, butchering and animal feed operations have been affected by a reduction in the supply of cattle and reduced demand, respectively.

Options for Supporting Livestock Value Chains

The livestock sector is a large industry in both of the conflict regions and has experienced severe damage, which may explain why there are a multitude of suggestions for the livestock value chains revealed by our study. Specific suggestions for further action include:

- Support development of small ruminant production: Interview respondents and key informants cited small ruminant cultivation as a promising strategy to support farming communities in conflict. Small ruminants do not require specialized feed inputs that can fluctuate in price during periods of conflict. These farm animals also can be cultivated in relatively large numbers, reducing the risk associated with raising smaller numbers of more valuable livestock, like cattle or camels. Moreover, goats and sheep can be raised in confined spaces in closer proximity to farmer residences, minimizing the need to travel in times of instability. In addition to benefiting livestock farmers, small ruminant production was specifically mentioned by actors in other agricultural value chains (e.g., crop farmers and processors) as an option to diversify farm operations.
- Help processors market their products to conflict-resilient enterprises: Both meat and feed processors could benefit from support in marketing their services and products to enterprises that are more resilient during periods of conflict. For example, feed and meat processors may benefit from marketing their services to small ruminant production or fisheries. New entrants into meat processing could benefit from safety training.

- Maintain access to veterinary services and products: Animal herders and producers in conflict zones were unable to obtain supplies at a reasonable cost. Veterinarians could benefit from security to maintain vaccination schedules; thus, the countries would avoid the spread of animal diseases and potential human public health problems. Donors may consider research into options for maintenance of veterinary access and animal health supplies throughout conflict and postconflict.
- Manage the rebuilding and return of livestock herds: Careful management of returning livestock herds, especially in Mali, would help repair a vital industry. Donors must be aware that some of the herds belong to insurgents and may want to avoid supporting militant groups that are not participating in peace processes. However, a cautious return of livestock herds has the potential to reduce pressure on resources, further abating conflicts between pastoralists and sedentary farmers.
- Address tensions between livestock and sedentary farming communities: Localized conflict between livestock farmers and sedentary communities has been a persistent feature of agricultural activities in the region. Competition for resources, such as water and grazing lands, regularly produces tensions. While these longstanding tensions differ in many respects from the recent conflicts highlighted in this report, these localized rivalries still have strong connections to the broader conflict dynamics. For example, analysts believe that Boko Haram has co-opted Fulani herdsman in Nigeria and their grievances over access to grazing lands as a means to bolster the group's extremist agenda. Addressing longstanding agricultural-based conflicts is one area where donors may have the potential to contribute to broader pacification efforts. Additionally, cognizance of the connections between existing agricultural animosities and the larger-scale conflict is likely to improve donor efforts.

Agriculture-Related Services Value Chains

Coping Strategies for Agriculture-Related Services Value Chains

The main service providers in both countries are financial (credit and insurance), agricultural extension, other government services, and transportation (via boats or ground). In Mali, financial services reported displacement from the conflict zone due to increased theft. In Nigeria, farmers reported that the availability of financial services was low in the conflict region even before the conflict. The agricultural extension officers and researchers in Mali and Nigeria continued to work, but not at the same scale or scope. They coped with conflict by altering their work times, reducing their geographic scope, and training farmers outside the conflict zone.

Options for Supporting Related Services

Agricultural services are unlikely to expand during episodes of conflict. However, donors can work to support the remaining service providers in their adaptation to conflict:

- Support rotating credit and other low-risk financing options: Financial services are unlikely to move into conflict areas due to the high risks. However, there are innovative tools in the industry that offer low-risk credit to farmers, such as peer lending and rotating credit, which provide donors with areas for exploration.
- Provide financial tools for crop and livestock farmers to absorb conflict-associated costs:
 While successful in many ways, each strategy utilized by crop and livestock farmers in times of conflict requires new types of capital with higher costs, which many farmers struggle to absorb.
 Agricultural stakeholders could support farmers with efficient financial instruments (e.g., rotating

- credit and subsidized inputs). For example, butchers in Nigeria are seen as having a propensity for agitation; thus, the government provided some butchers with rotating low-interest loans at favorable terms.
- Build linkages between agricultural extension and traditional leaders: In Nigeria, researchers were able to maintain linkages to serviced communities via traditional leaders. Well-respected local village chiefs are able to afford protection from insurgents. In the Boko Haram conflict, specifically,
- traditional leaders are not viewed as targets, unlike state structures and institutions.
- Rebuild storehouses and grain banks: Another option for donors is to focus on rebuilding services that provide safety nets for farmers, such as storehouses for crops and feed, which are particularly vulnerable to attack. There may be options that exist to avoid the repeated destruction of storage infrastructure (e.g., relocating storage to a safer area).

VI. CONCLUSION

onors must consider the likely trajectories for conflict in Mali and Nigeria when prioritizing options to support agricultural value chains. For example, in Mali, the peace process initiated in 2012 has somewhat stabilized the region and created opportunities to rebuild. But because conditions remain very fragile, interventions require a particular consideration of ongoing conflict dynamics. In Nigeria, current levels of violence and instability are likely to increase as militant groups build on ethnic tensions surrounding the national elections, scheduled for February 2015. During this period, Nigeria's agricultural stakeholders should prepare for continued instability by focusing on strategies to help farmers cope and protect their assets.

Conflict in Mali and Nigeria has four main effects on actors and agricultural investments along the agricultural value chains: 1) reduced human mobility; 2) reduced access to inputs and markets; 3) increased theft of various assets; and 4) increased prices of inputs and products. The effects of conflict on the agricultural sector are largely due to the risk of being attacked by insurgents.

Some sectors such as fishing in Mali and fish marketing in Nigeria were reportedly more resilient to conflict. Fishing in Mali was viewed as a low-profit enterprise and did not attract attention from insurgents, not to mention that the insurgents had dietary preferences besides fish. Subsistence farming communities also experienced lower levels of disruption during times of conflict given the fact that their operations were isolated from support services before the conflict and that their profit margins are not attractive to marauding rebel groups.

Actors in all value chains moved production closer to home where they could more easily protect their farm enterprises within walled compounds. For example, one farmer in Nigeria reared small cattle in his yard to maintain income during conflict. Other key strategies reported by the actors in the value chain are a diversification of their enterprises or movement to enterprises with less risk of attack. In some cases, livelihood diversification also included abandoning agricultural activities altogether and initiating new business strategies outside the farming sector. In Mali, many farmers negotiated with insurgents to receive protection and necessary farm inputs.

Based on the results of our survey, some options, although limited, were identified for maintaining investments in conflict-affected areas. Small animal production (ruminants and poultry), kitchen gardens and some fishery production were identified by interviewees as options for maintaining farm enterprises. Other areas where donors have the potential to maintain investments are in low-risk financial tools to help farmers absorb added costs due to conflict. Technical trainings provided to farmers in safe locations are also feasible to maintain.

However, when considering how to remain in conflict zones, there is always a risk of exacerbating conflict dynamics. This escalation can be avoided by identifying and eliminating such possible connections with illicit economic activities. For example, by inadvertently supporting insurgents—as an international NGO did when it withdrew from Mali leaving its abandoned valuable materials to be seized by rebel groups. Donors may consider moving investments into further research on conflict-resilient farm enterprises and innovations for protecting the agricultural sector from insurgent attack.

One final overarching option for donors, governments and policymakers seeking to support agricultural investments in Mali and Nigeria is to provide forums for farmer-to-farmer strategy sharing. The interviews with farmers and other stakeholders revealed the many diverse coping strategies that they have pursued. Forums that will enable them to safely learn from each

other have the potential to leverage new ways to support agricultural investments, prepare for future crises and cope with existing levels of instability.

ANNEX I. SURVEY QUESTIONNAIRE

1. Description of the Agricultural System

- I. Location information
 - I.1. What is the exact region for which the information is provided? State, locality, municipality?
 - I.2. Is this an area that has been affected directly by the conflict? If not, how far is the region from where there has been conflict?
 - I.3. Is the region considered under threat of conflict?

II. Agriculture activities

- II.1. What are the main agricultural activities in your area? (e.g., crop farming, livestock, fishing)
- II.2. What are the main agriculture-related activities (e.g., insurance, credit, cooperatives, milling) in your community/ area?
- II.3. What are the major crops/livestock grown in your area?
- II.4. Which crops/livestock are grown by small-scale farmers—subsistence or cash-commercial?
- II.5. What share of subsistence production is sold in market?
- II.6. Approximately what is the average land size for subsistence farming?
- II.7. Approximately what is the average land size for commercial farming?

III. Technology of production

- III.1 Approximately what percent of farmers in your area use mechanized farming techniques?
- III.2 Approximately what percent of farmers in your area irrigate their farm?
- III.3 Approximately what percent of farmers in your area rely on traditional farming methods?
- III.4 What are the main inputs that farmers in the area use (such as pesticides and fertilizers)?
- IV. Availability of agricultural services
 - IV.1 Are services like agricultural extension, credit, input subsidy and marketing services available in your area?
 - IV.2 Who provides these services?
 - IV.3 Are these services adequate and easily available at reasonable cost?
 - IV.4 Describe the main infrastructure that supports farmers (e.g., market roads, telecommunications).

V. Market linkages

- V.1 What are the main marketing channels (where do farmers sell their products)?
- V.2 What are the main sources of inputs?
- VI. Characterization of different investments in your area
 - VI.1 Are there donor projects in your area? If yes, indicate the types of activities in which they are involved.
 - VI.2 Are there private or public research institutions in your area? If yes, please explain their major activity and their number.

- VI.3 Are there seed multiplication facilities and cooperative societies in your area? If yes, please describe them. Are there processing factories such as grain mills and cotton gins in your area? If yes, please describe them.
- VI.4 Describe the distribution of crops from farmgate to wholesalers, retailers, processors, consumers and exporters.
- VI.5 Can you describe the main private investments (agriculture non-agriculture) in your area?
- VI.6 Please add any other information that is not included here.

VII. Property rights

- VII.1 How are property rights defined and enforced in your area?
- VII.2 Is land privately held or communal?
- VII.3 Please add any other information that is not included here.

2. Channels Through Which Conflict Has Affected Agriculture Activities

- I. How do you see the effect of conflict on labor displacement (in-migration and out-migration)?
- II. What is the level of severity of damages to health and income related to conflict?
- III. How deeply is the social order interrupted (e.g., insecurity in property rights, thievery, destruction of investments, disruption of markets and market networks)?
- IV. How do you observe the change in property rights due to conflict (e.g., rebels owning and running private or government-owned investments)?
- In general, please explain the direct and indirect impact of conflict on agriculture investment.

- VI. Please explain the effect of conflict on amount of land used for agriculture, price and volume of outputs.Please explain the impact of conflict on services such as extension and credit services, artificial insemination, marketing, etc.
- VII. Please explain the impact of conflict on the amount of inputs (fertilizer, pesticides) used on agriculture.
- VIII. Please add any other information that is not included here.

3. Behavior of Farmers in Response to Conflict or the Threat of Conflict

- I. How are farmers reacting to conflict or the threat of conflict?
 - I.1 Are they fully or partially abandoning their farming operations?
 - I.2 Have they shifted to different types of activities? If so, from which type to which type?
 - 1.3 Are there changes in terms of uses and types of inputs? If yes, please explain.
 - I.4 Are there reductions of farm area? If so, by what percent?
 - I.5 Are there substitutions from the production of cash to food crops and vice versa?
- II. How do other market participants (retailers, wholesalers, processors, exporters, etc.) respond to conflict or the threat of conflict?
 - II.1 Are they fully or partially abandoning their business?
 - II.2 Have they shifted to different types of activities? If so, from which type to which type?

- II.3 Are there changes from where they source their business? (Buy from different farmers or locations?)
- II.4 Are there reductions in business capacity? If yes, by what percent?
- II.5 Please add any other information that is not included here.

4. Effect of Conflict on Other Services

- I. Is there an effect on roads, telecommunications and other infrastructure and institutions? If yes, how severe is the effect?
- II. Please explain other related effects.

5. Behavior of Conflict Actors

I. Are the rebels involved in agriculture and any other related activities?

- II. Are they supportive or destructive (extract rents)?
- III. Do the rebels cooperate with village elders in promoting service, for example, agriculture extension delivered by government agencies and NGOs?

6. Behavior of Farmers Outside the Conflict Zone

- I. Do you anticipate conflict will spill over to your area?
- II. Are there any farming or business activities that are changing or have already changed due to the anticipation of spillover effect of conflict? If yes, please explain.

ANNEX II. PROFILES OF FARMERS INTERVIEWED

	Mali			
Locations Surveyed	Gao, Timbuktu			
Number of Farmers Surveyed	2			
Gender of Farmers Surveyed	2 Male; 0 Female			
Farm Sizes and Crops Produced	Farm 1: 4 hectares (producing rice); Farm 2: 10 hectares (producing rice, millet and sorghum)			
Total Number of Value Chain Stakeholders Surveyed in Mali	17			
Professions of Value Chain Stakeholders Surveyed in Mali	Butcher, veterinarian, livestock producer, (2) cereal traders, (2) crop producers (farmers), (3) general secretaries of farmers organizations, (2) livestock extension officers, (2) livestock trader regional administrator, (2) regional agricultural extension service officers, (2) transporters			
Nigeria Nigeria				
Locations Surveyed	8 Local Government Areas in Borno State			
Number of Farmers Surveyed	4			
Gender of Farmers Surveyed	4 Male; 0 Female			
Farm Sizes and Crops Produced	Farm 1: 6.07 hectares (producing maize, cowpeas and sorghum); Farm 2: 14 hectares (producing maize, cowpeas and sesame); Farm 3: 25 hectares (producing sorghum and millet); Farm 4: 2.8 hectares (producing rice and maize)			
Total Number of Value Chain Stakeholders Surveyed in Nigeria	24			
Professions of Value Chain Stakeholders Surveyed in Nigeria	Agricultural researcher, animal drug marketer, animal feed processor, butcher, cattle marketer, (4) farmers, (2) fishermen, fish marketer, groundnut processor, (3) internally displaced persons, (6) regional administrators, vegetable and fruit marketer, whole seller of cowpeas			

^{*}The precise location and other identifying characteristics of the farmers surveyed have been omitted in order to protect their identities.

ANNEX III: ELECTION-RELATED VIOLENCE IN NIGERIA

The below essays by Jideofor Adibe were originally published on the Brookings Africa Growth Initiative's blog, *Africa in Focus*.

Explaining the Emergence of Boko Haram

May 6, 2014

Found at: http://www.brookings.edu/blogs/africa-in-focus/posts/2014/05/06-emergence-of-boko-haram-adibe

Nigeria has experienced a number of tragedies in recent weeks: The terrorist group Boko Haram has claimed responsibility for a series of recent bombings in Abuja and the kidnapping of over 200 schoolgirls in Borno State (including eight more just this morning). While these events have had devastating impacts, Boko Haram's activities in Nigeria, and those of its splinter group Ansaru, are hardly new. Under a radical Islamic agenda, these militants have perpetuated violence across northern Nigeria since roughly 2009, aiming to rid the country of any "Western influence." As leaders from across the region gather in Abuja this week for the World Economic Forum on Africa, Boko Haram and the direction of this conflict in Nigeria have received increased attention.

This month, the Brookings Africa Growth Initiative is wrapping up a yearlong study on the impact of conflict on the agricultural sectors in northern Nigeria and Mali. I collaborated with Brookings on this study and put together a long-form exposition on the possible trajectories of Nigeria's conflict. While the full report moves toward publication, Brookings asked me to publish excerpts for Africa In Focus on 1) explaining the emergence of Boko Haram, 2) discussing possible scenarios of how the conflict could evolve, and 3) offering policy recommendations for curbing the

violence. Please find below the first part of my analysis: how Boko Haram came about.

A Brief History of Boko Haram

Boko Haram members prefer to be known by their Arabic name—Jama'atu Ahlis Sunna Lidda'awati Wal-Jihad—meaning "People Committed to the Propagation of the Prophet's Teachings and Jihad." The group is believed to have been formed in the town of Maiduguri in northeast Nigeria, where the locals nicknamed its members "Boko Haram," a combination of the Hausa word "boko," which literally means "Western education" and the Arabic word "haram" which figuratively means "sin" and literally means "forbidden." While the popular belief is that it was founded around 2001 or 2002 by Mohammed Yusuf, some have argued that the sect was actually started in 1995 as Sahaba. The group claims to be opposed not only to Western civilization (which includes Western education) but also to the secularization of the Nigerian state. There is a fair consensus that, until 2009, the group conducted its operations more or less peacefully and that its radicalization followed a government clampdown in 2009, in which some 800 of its members were killed. The group's leader, Mohammed Yusuf, was also killed after that attack while in police custody.

Ansaru, whose Arabic name is Jamā atu Anṣāril Muslimīna fī Bilādis Sūdān ("Vanguards for the Protection of Muslims in Black Africa"), is a breakaway faction of Boko Haram. It first announced its existence on January 26, 2012 by distributing fliers in Kano, shortly after Boko Haram attacks in the city killed approximately 150 civilians, most of them Muslims. It is from this attack that some media reports described Ansaru's emergence as a reaction to the loss of innocent Muslim lives. From inception, Ansaru was believed to coordinate its operations in Nigeria with the

northern Mali-based al-Qaeda in the Islamic Maghreb (AQIM) and the Movement for Unity and Jihad in West Africa (MUJWA). Both Boko Haram and Ansaru were declared as foreign terrorist organizations by the United States on November 13, 2013.

There are many popular explanations for the emergence and radicalization of Boko Haram. They can be summarized under some key categories as follows:

Conspiracy Theories

Several conspiracy theories are commonly used to explain the Boko Haram and Ansaru phenomena. These include:

(a) Northern politicians sponsor Boko Haram to make the country "ungovernable" for President Goodluck Jonathan.

This theory is very popular among commentators and leading politicians from the southern part of the country. President Jonathan is a southerner from the minority Ijaw ethnic group. According to the theory, people from the north, essentially the "core north" (i.e., the Hausa/Fulani), believe it is their birthright to govern the country, and, because a Christian southerner is in charge, they decided to sponsor Boko Haram as an instrument for destabilizing the Jonathan presidency. A major weakness of this theory is that much of the mayhem carried out by the sect has been in the north and against northern Muslims. If northern politicians really want to make the country "ungovernable" for President Jonathan, why would they do so by sponsoring a group which is disproportionately killing northern Muslims and literally destroying several parts of the north?

(b) President Jonathan sponsors Boko Haram either to mobilize support from the south and Christians or to weaken and de-populate the north ahead of the 2015 presidential election.

Another conspiracy theory is that Boko Haram is actually sponsored by the Jonathan administration to make Islam look bad or give the impression that the north is out to pull down his administration or make him fail as president of the country. This would be a way for the president to mobilize the support of his "southern and Christian brethren" behind his administration. A variant of this theory is that Boko Haram is actually sponsored by the government to weaken, destroy or reduce the population of the north ahead of the 2015 elections. A number of respected leaders from the north, including the governor of Adamawa state, Murtala Nyako, and governor of Sokoto state, Alhaji Aliyu Wamakko, have legitimized this theory by coming out to subscribe to it openly.

The major weakness of this theory is that nothing in the confessions of arrested Boko Haram members supports it. Again, it is befuddling why the insurgents, who are all Muslims (going by the identity of those captured), and campaigning under the cloak of Islamic revivalism, would allow themselves to be used by a non-Muslim to kill fellow Muslims. Again, nothing supports this, either on YouTube or in press releases by Shekau, the leader of the mainstream Boko Haram who is now thought to be dead, although his death is questioned due to his continued appearance in YouTube videos.

The Failed State Argument

Some people have suggested that Boko Haram is simply a symptom that the overarching Nigerian state has failed, or at best, is failing. The problem here is that there is no consensus on the meaning of "failed state," including how to operationalize it. The difficulty of defining a "failed state" is compounded by the fact

that it is sometimes used as a tool of political blackmail. Anyone can focus on where a state is perceived as not doing well—such as in the provision of security, welfare or improving citizens' standards of living—and then conclude that the state in question has "failed" or is "failing." The argument that Boko Haram's terrorism is conclusive evidence that Nigeria has failed as a state appears exaggerated because "successful" countries like South Africa, the United States and Brazil also have serious security challenges. Despite Boko Haram's activities, it is a stretch to describe the complexities of a vast country, whose economy has been growing by an average of 7 percent since 2000 such that it now has the largest economy in Africa (and 26th largest in the world) as a "failed state."

The Human Needs and Poor Governance Theories

Human needs theorists such as John Burton¹² and Abraham Maslow¹³ Would argue that one of the primary causes of the protracted conflicts in Nigeria is the people's drive to meet their unmet needs. Those who have sought to explain the Boko Haram phenomenon within this framework point out that, despite a per capita income of \$2,700 (before the recent rebasing of the GDP) and an impressive annual GDP growth rate for over a decade, the north has one of the poorest populations in Nigeria. Within the north itself, the northeast—the base of Boko Haram's operations—has one of the largest concentrations of people Franz Fanon would call the "Wretched of the Earth." 14 Many of these people are either unemployed or underemployed, and therefore suffer from various forms of what Ted Gurr would call "relative deprivation."15

Some analysts have also attributed the relative poverty of the north to "bad governance" by the governors of the states in the region who are accused of embezzling or misappropriating the funds that should have been channelled to the development of their states.

There are some merits in the human needs and poor governance arguments, but they cannot fully explain the audacity of Boko Haram's actions or why a similar group has not emerged in other impoverished parts of the country. Moreover, poor governance is not exclusive to the states in the north, and there is actually no evidence that the states in other parts of the country are better governed.

The Frustration-Aggression Hypothesis

Otherwise known as frustration-aggression displacement theory,16 this hypothesis argues that frustration causes aggression, and when the source of the frustration cannot be challenged, the aggression gets displaced onto an innocent target. Many recent events appear to fit into this theory. For instance, recently suspended Central Bank of Nigeria Governor Sanusi Lamido Sanusi blamed the rise of Boko Haram partly on the way the revenues from the country's Federation Account—an account in which all the revenues that accrue to the Federation are paid into-are shared. Sanusi argued that the sharing is done in a manner that disadvantages the north. According to him, a "revenue sharing formula that gave 13 percent derivation to the oil-producing states was introduced after the military relinquished power in 1999 among a series of measures aimed at redressing historic grievances among those living closest to the oil and quelling a conflict that was jeopardising output. [...] There is clearly a direct link between the very uneven nature of distribution of resources and the rising level of violence."

While Sanusi's argument may be partly true, it cannot comprehensively explain why the Boko Haram type of

violence is not generalized in the north or why several states in the south that also do not benefit from the 13 percent derivation have not taken to militancy.

Another popular variant of the frustration-aggression response is, that after the reintroduction of Shariah in the 12 northern states, there was a widespread disillusionment at to the way it was implemented, and members of the sect simply tapped into that frustration. As Jean Herskovits, an expert on Nigerian politics, said, "You punish somebody for stealing a goat or less but a governor steals billions of naira, and gets off scot-free."

There is also a belief that, in Nigeria's mode of sharing privileges, the Igbo control the commercial economy, the Yoruba the corporate economy, and the north political power. The loss of this power to the south from 1999 to 2003, when Olusegun Obasanjo, a Yoruba from the southwest who was president, and again since May 2010 following the death of former northern and Muslim President Umaru Yaradua, is therefore seen as a loss of the north's lever in maintaining the power balance. This is believed to have created frustrations into which Boko Haram could tap, especially following the fallouts from the ruling party's bickering over zoning and powersharing arrangements as well as President Jonathan's decision to contest the April 2011 elections and possible plans to contest again in 2015.

Broader Crisis in Nigeria's Nation Building

A better and more comprehensive view of the Boko Haram and Ansaru phenomena is to see them as symptoms of the crisis in Nigeria's nation-building processes. While the bombings, kidnappings, and other unsavory acts linked to the sects are condemnable, it is important to underscore that Boko Haram is only one of several groups in the country that purvey terror and death because there is an increasing tendency to discuss the

spate of insecurity in the country as if it all began and ended with Boko Haram or as if without Boko Haram Nigeria would be a tranquil place in which to live.

The truth is that there is everywhere in the country a pervasive sense of what the German-American political theorist Hannah Arendt called the "banality of evil."17 Her argument is that the great evils in history are not executed by fanatics or sociopaths but rather by ordinary people who accept the premises of their actions and therefore participate in them on the grounds that those heinous actions were normal. This is the so-called notion of "normalizing the unthinkable" or the routinization of evil. This argument captures an important element of what is happening throughout Nigeria: Violent armed robberies across the entire country, kidnapping (especially in the southeast), turf war by militarized cults and gangs (in Bayelsa State), and senseless intra- and inter-communal "warfare" are all increasingly common.¹⁸ The crisis in Nigeria's nation building mixes with the crisis of underdevelopment to create an existentialist crisis for many Nigerians. For many young people, a way of resolving the consequent sense of alienation is to retreat from the "Nigeria project"—the idea of fashioning a nation out of the disparate nationalities that make up the country-and instead construct meanings in primordial identities, often with the Nigerian state as the enemy.

Based on the above, any strategy for effectively neutralizing Boko Haram and Ansaru must be hinged on resolving the crisis in Nigeria's nation-building processes. Admittedly, this will require a sense of long-term scenarios and solutions, as nation-building takes time. In the interim there are short- and medium-term strategies the Nigerian state can pursue to contain the challenges posed by the two terrorist groups. These scenarios and strategies will be the focus of the next installments in this blog series.

Explaining Possible Trajectories of the Boko Haram Conflict in Nigeria

May 9, 2014

Found at: http://www.brookings.edu/blogs/africa-in-focus/posts/2014/05/09-trajectories-boko-haram-conflict-nigeria-adibe

In a continuation of the conflict with Boko Haram in Nigeria, earlier this week suspected Boko Haram fighters killed at least 100 people when they attacked Gamboru village in the country's northeast. The village was being used as a base in the globally prominent search for the missing schoolgirls. And earlier this week, the United States joined other countries (such as France, the United Kingdom and China) in offering to assist the Nigerian government in the search. But where is this violence heading? President Goodluck Jonathan hopes that the current tragedy involving these girls could be "the beginning of the end of terror in Nigeria." However, other critics warn that outside intervention might only fan the flames.

In my last blog, I discussed theories for the emergence and radicalization of both Boko Haram and Ansaru. In my next blog, I will discuss possible strategies for containing the conflict in the short and medium term, as well as long-term strategies for neutralizing the two terrorist groups and the threats they pose to the Nigerian state. Below I discuss possible trajectories of the conflict: Can the conflict abate? Will current patterns hold steady? Or will the violence accelerate, and why?

Trajectory 1: Attacks by Boko Haram and Ansaru Decline

It is possible for the conflicts with Boko Haram and Ansaru to abate. However, this prospect does not look good in the short term. In fact, despite intensified military campaigns against the sects and the declaration of a state of emergency in Borno, Yobe and Adamawa states in May 2013 and the groups were resilient enough to carry out major attacks, such as the one on an air force base in Maiduguri last fall that left several people dead. As many experts have noted, the recent attacks show that the threats from Boko Haram and Ansaru are growing, not diminishing.

If the Boko Haram conflicts abate, it may not be before the conclusion of the 2015 presidential election, which President Goodluck Jonathan, a Christian from the minority ljaw ethnic group, is likely to contest. Though both Boko Haram and Ansaru couch their terrorism in religious revivalism, they are able to tap into social and political discontent within the local population, ensuring that at least some locals can sympathize with their cause. One of the issues appears to be a belief by some people in the north that the decision by President Jonathan to contest the 2011 presidential election flouted the ruling People's Democratic Party's (PDP) zoning and power rotation policy, thereby "cheating" the north from taking its "turn" at producing a president. Under the PDP's zoning and power rotation arrangement, the north was supposed to produce the president of the country for eight years—after Olusegun Obasanjo, a Christian Yoruba, had served out two terms of four years each. However, Umaru Yar'Adua, who succeeded Obasanjo as president and was from the north, died in office after only three years of being there, paving the way for the then-vice president, Goodluck Jonathan, to succeed him.

If a northern Muslim defeats Jonathan in the 2015 presidential election, some of the popular political discontent in the north on which Boko Haram and Ansaru feed will be removed, likely leading to an abatement in their terrorist attacks. This was precisely what happened in the restive Niger Delta when Jonathan, a minority from that region, became the vice president of the country. In fact, in the amnesty granted to the Niger Delta militants, then-Vice President Jonathan played a key role in the negoti-

ations with the militants. Under the Jonathan presidency it would be difficult for the militants in that area to renew their violent agitations because they know such actions would be perceived in the local community as undermining the regime of one of their own.

The flipside to this scenario is that if Jonathan loses the 2015 election, it could re-ignite militancy in the Niger Delta, with severe adverse implications for crude oil production. It could also send dangerous signals to other sections of the country that they need their own insurgency groups capable of holding the country to ransom for their section of the country to produce a president.

Another factor that could lead to a deceleration in Boko Haram terrorism is if the federal government replaces the civilian governors of the three most affected states (Borno, Yobe and Adamawa) with military administrators. Military governors are more likely to be in a position to slow Boko Haram terrorism in their states. On the other hand, this move could mark the beginning of the truncation of democracy in Nigeria since ambitious military officers could use the opportunity to seize power at the national level. The country's current democratic rule only started in May 1999. Though Nigeria gained her independence from Britain in 1960 and started as a Westminsterstyle liberal democracy, the military usurped power in 1966 and established a prolonged dictatorship. An attempt to re-establish democracy in the country in 1979 was stopped again in December 1983 when the military once supplanted the civilian regime and established another dictatorship that lasted until 1999.

A third factor that could lead to the abatement of Boko Haram-related violence in the country is the recent kidnap of over 200 Chibok girls and the collective anger it has mobilized against the sect both within and outside the country. Already, the United States, France, Britain and China have offered various forms of military and intelligence sharing assistance to find the girls, which

the Nigerian government accepted. About seven U.S. military officials are expected to arrive Nigeria today to help in the search for the missing girls. They will join about 60 U.S. interagency members who have been on the ground since before the kidnappings as part of United States' counterterrorism efforts within Nigeria.

If the U.S. military is able to quickly locate the whereabouts of the abducted girls and free them without many of the kidnapped girls losing their life in the process or heavy civilian casualties during any rescue operation, it will bolster the U.S.'s standing in the eyes of the Nigerian public and possibly lead to a request for a broader U.S. assistance in fighting the sect. Then, if the U.S. is able within a short frame of time to help the Nigerian government arrest the leaders and sponsors of the sect—with minimum casualties on all sides—the conflict could also abate.

Trajectory 2: Attacks by Boko Haram and Ansaru Remain the Same in Character and Intensity

Under this scenario, Borno, Yobe and Adamawa States remain the hotbeds of conflict, with episodic occurrences in other northern states. This scenario is not likely to occur because the conflict has already intensified from what it was only a few months ago. The sect has become more audacious as its recent attacks in Borno State vividly demonstrated. For instance, in the sect's attack in the town of Gamboru this week. Allegedly, the terrorists, "wearing military fatigue, came driving dozens of pick-up trucks and motorcycles, with three armored personnel carriers providing cover." Residents of Gamboru also claimed that an aircraft hovered in the skies throughout the attack, as militants wreaked havoc for four hours in the middle of the day.

Thus, the scenario of the conflict remaining unchanged in its character and trajectory is unlikely. Unless it

abates in line with the first trajectory above, the conflict will likely continue to intensify.

Trajectory 3: Boko Haram and Ansaru Accelerate and Widen the Conflict

It is possible for the Boko Haram conflict to grow far worse than it is now. This trend could happen under at least four possible scenarios.

- 1. If the core areas of the conflicts widen beyond their present concentration in Borno, Yobe and Adamawa, especially if Boko Haram and Ansaru manage to unleash attacks in any southern states, the violence could certainly increase. If this happens, Boko Haram- and Ansaru-induced terrorism will mix with ethnicity, religion and regionalism. One of the consequences could be series of retaliatory responses across the country.
- 2. If Boko Haram members choose to outsource their terrorism to Fulani herdsmen or infiltrate them. then Boko Haram's operations could also spread to other parts of the country. For instance, in March 2014, the Christian Governor Suswan of Benue State narrowly escaped death when his motor convoy ran into an ambush by suspected Fulani mercenaries at Tse-Akanyi in Guma. A few days later, his entire village at Anyii in Logo was sacked by the suspected mercenaries, with over 22 people slaughtered. Again, on March 15, in southern Kaduna—which is dominated by Christians heavily armed Fulani herdsmen reportedly killed over 100 villagers. Similar stories have emerged in Plateau and Taraba states, which also have substantial Christian populations. These tragedies have led to suspicions that Boko Haram may have been involved. If these suspicions of collaboration are true, the areas affected by Boko Haram's attacks could easily grow since Fulani herdsmen take their cattle all over the country.
- 3. If the United States and Europe openly get involved in fighting Boko Haram and Ansaru militants—especially if this involvement results in

- massive deaths of the insurgents and non-combatants—anti-Western sentiments could galvanize, turning into support for the terrorists, which will help them in membership recruitment.
- 4. If President Jonathan wins the 2015 election, the political discontents in the north will harden, further feeding Boko Haram and Ansaru terrorists. This case will be especially so given that the opposition, represented by the All Progressives' Congress (APC), which has its support bases mainly in the southwest and northern parts of the country, is now more formidable than at any other time in the country's political history, especially since the onset of the current democratic dispensation in 1999. This means that if the APC loses the election, it will easily cry that it has been rigged by the ruling PDP, which will further inflame passions and harden political discontents.

There is a strong feeling that Jonathan will contest and narrowly win the 2015 presidential election against a Muslim presidential candidate from the north and that the outcome of the election will be hotly disputed. Post-election violence in the north could be re-enacted along the lines of what happened after the 2011 presidential elections when Muhammadu Buhari of the defunct Congress of Political Change (CPC) lost to Jonathan. Boko Haram and Ansaru could tap into fairly generalized political frustrations among Muslims in the northern part of the country to increase and widen the tempo of their activities, targeting especially Christians and those thought to have collaborated with Jonathan in "rigging" the election. Under this scenario, Nigeria will be saved from anarchy or civil war only if the urge for reprisal attacks in the south is contained.

In essence, it is possible for the Boko Haram conflict to be contained or widen. In the next blog, I will discuss possible strategies for containing the conflict in the short- to-medium term as well as long term strategies for neutralizing the two terrorist groups and the threats they pose to the Nigerian state.

Boko Haram in Nigeria: The Way Forward

May 14, 2014

Found at: http://www.brookings.edu/blogs/africa-in-focus/posts/2014/05/14-boko-haram-nigeria-adibe

On Monday, in a video showing 130 of the over 200 kidnapped Nigerian schoolgirls, Boko Haram announced that it would be willing to let the girls go as part of a trade for Boko Haram militants currently held by Nigeria. Later that day, Nigerian Interior Minister Abba Moro announced that Nigeria declined the offer, stating that the sect is not in any moral position to swap prisoners for the innocent girls. As I stated in an earlier blog, this kidnapping is only the latest in a long list of attacks against the Nigerian state and its innocent civilians. Boko Haram militants have been active around the country and especially in the northeast for many years. In fact, this week President Goodluck Jonathan also asked Nigeria's parliament to extend the state of emergency declared in May of 2013 in the northeastern states of Adamawa, Borno and Yobe-the ones most vulnerable and consistently victimized by Boko Haram—by another six months.

However, the tragedies in Nigeria and the conflict with Boko Haram require more than just responses to terrorist activities. Though foreign governments are now providing Nigeria with security and surveillance support, the conflict will not end until longer-term and deeply held grievances are addressed. The strategies adopted by the government should be divided into long-term measures aimed at neutralizing the groups and short- to medium-term measures aimed at containing them and their terrorism.

Long-Term Solutions to Battling Boko Haram: Resolving the Crisis in Nigeria's Nation Building

Nigeria, the most populous country in sub-Saharan Africa as well as the biggest economy, is facing a severe crisis in its nation-building process. Virtually every part of Nigeria claims it is "marginalized." Concomitant groups have been calling for the convocation of a "Sovereign National Conference"—a euphemism for a meeting to discuss whether Nigerians want to continue to live together as one country. Something nasty has happened to the effort to create "true Nigerians"—that is, Nigerians who privilege their Nigerian identity over the other identities they bear in the country. Thus, some people still believe that Nigeria is a "mere geographical expression," a nation only in name and with only very few "true Nigerians."

The struggle in nation building mixes with poverty, inequality and a lack of development in the country, creating an existential crisis for many Nigerians. As I stated in my previous blog, for many young people, a way of resolving this sense of alienation is to retreat from the "Nigeria project"—the idea of fashioning a nation out of the disparate nationalities that make up the country—and construct meanings in chosen primordial identities, often with the Nigerian state as the enemy. I have elsewhere 19 called this phenomenon the "de-Nigerianization process." In Nigeria, there is a heavy burden of institutionalized memories of hurt, injustice, distrust and even a disguised longing for vengeance by various individuals, ethnic groups, regions and religious groups. In this sense, actions that ordinary Nigerians rightly see as heinous are seen by some as normal, even heroic.

There is a feeling that this "de-Nigerianization process" is accelerating by leaps and bounds. No individual or political authority enjoys universally perceived legitimacy across the main fault lines and therefore the country is in desperate need of creating more "true Nigerians." If this trend continues, there is a high risk of a growing number of individuals and groups impairing or even attacking the Nigerian state. Already, some of those entrusted with the nation's common patrimony steal it blind; some law enforcement officers turn the other way if offered a little inducement; organized labor (including university lecturers) sometimes goes on prolonged strikes on a whim; students may resort to cultism and exam malpractices; and workers often drag their feet, refuse to put in their best and engage in moonlighting. It seems that everyone has one form of grouse or another against the Nigerian state and its institutions.

A long-term solution for containing Boko Haram's and Ansaru's terrorism, and for neutralizing them along with other insurgency groups in Nigeria, is to resolve the crisis in the country's nation-building processes. Terrorism will end when Nigerians come to see themselves as one people and develop that sense of what Benedict Anderson calls "imagined communities." For Anderson, a nation is a community socially constructed and imagined by the people who perceive themselves as part of the group. For him, a nation "is imagined because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion."²⁰

Re-starting the stalled nation-building process is not going to happen overnight. The following measures, however, hold a good promise:

(a) I remain skeptical that the on-going ad hoc National Conference convened by the federal government to recommend solutions to the country's many challenges will succeed, because of deeply ingrained

distrust among Nigerians. However, the conference, if well managed, could be a credible platform for all stakeholders to vent their grievances and frustrations with the Nigeria project. The catharsis will be useful as the country strives for long-term solutions to its nation-building problems. In the same vein, some recommendations from the conference, if implemented, could help mollify some aggrieved groups.

(b) Perhaps one of the long-term solutions to the Boko Harm challenge could come by default. The increasing wave of "Naija optimism" could help blunt the pull of the centrifugal forces. This is a wave of new hope around the country's economic prospects, typified in the recent inclusion of Nigeria in the MINT (Mexico, Indonesia, Nigeria and Turkey) emerging economies and the rebasing of its GDP, making it the largest economy in Africa and the 26th largest in the world. Because people instinctively want to identify with success, economic growth, especially if it is accompanied with more equitable distribution and people-oriented development could pacify irredentist pressures, as separatist forces may have to contend with the fear of leaving at the time the country is being tapped as among the likely future economic superpowers of the world.

(c) As Nigeria's economy develops, the various parts of the country could develop organic economic linkages that will help further the cause of the nation-building process. For instance, if the groundnuts produced in the north are used in the manufacture of peanut butter in the southeast, and the cocoa produced in the west is used for manufacturing chocolate drinks in the north, such economic linkages will help blunt interregional animosities and thus further the cause of national unity.

What Can Nigeria Do in the Meantime? Short- to Medium-Term Solutions to the Violence

In the short- to medium-term, the government should adopt a combination of *koboko* (Hausa word for whip) and "pieces of the National cake" (a Nigerian phrase for "patronage" or "co-optation into the system"). In Western speak, carrot and stick strategies. Some of the measures the government could take include:

- (i) Empowering the state governments in the north to lead the charge and be the faces of the fight against Boko Haram. This could, if anything, address the conspiracy theory in the north that President Goodluck Jonathan's administration is funding Boko Haram either to make Islam look bad or to depopulate the north ahead of the 2015 elections. It is important to underline that the conspiracy theories have made it more difficult to mobilize collective anger against Boko Haram.
- (ii) Creating a Ministry of Northern Affairs—just like the Ministry of Niger Delta Affairs—to help address the numerous challenges in the north, including the problems of poverty, unemployment, illiteracy and radical Islam. This establishment would be one way of winning the hearts and minds of the locals and cooling local grievances on which Boko Haram feeds.
- (iii) Conducting speedy and fair trials, under Islamic laws. of those found to be Boko Haram activists or

funders and letting the law have its full course. Having suspects stand for trial for months or even years creates a backlash, and often has a way of mobilizing sympathy for the suspects. It may also be strategic to try the suspects under Islamic laws since the sect members have openly rejected Western civilization, including its jurisprudence. Whatever punishment is meted to them under Islamic jurisprudence will not be seen as part of Western conspiracy against Islam.

- (iv) Instituting a sort of Marshall Plan for the northeast aimed at winning the hearts and minds of the local populace. The plan should aim at providing quality education, building local capacity and providing jobs.
- (v) Exploring the option of offering amnesty to the more moderate members of the sects while side-lining the hardliners and finding means to effectively neutralize them.

Conclusion

There is no quick fix to fighting terrorism anywhere in the world as the experiences in Afghanistan, Somalia, Yemen and other countries have shown. However, with the above recommended short- to-medium term strategies pursued concurrently with the long-term strategy of resolving the crisis in Nigeria's nation-building processes, Boko Harm's and Ansaru's terrorism can be contained, and the groups eventually neutralized.

ANNEX IV. MODEL OF HOW CONFLICT AFFECTS INVESTMENT DECISIONS BY DIFFERENT ACTORS IN THE AGRICULTURAL SUPPLY CHAIN

n the following section, we model the behavior of producers, wholesalers and retailers in the agricultural supply chain. We analyze their behavior under risk of disruption by civil conflict. The following points guide decision-making under risk of conflict by the actors under our case study:

- · Price increases with the level of risk.
- · Price should be greater than or equal to all costs associated with doing business by an actor.
- The weights of the marginal risk of war depend on location, intensity and type of business (enterprises).

We extend the supply chain models of Qiang et al. (2009) and Nagurney et al. (2005) to agricultural supply chain analysis under risk of war or civil conflicts. Conflict zone entrepreneurs are multi-criteria decision makers, as they are concerned with both profit maximization and risk minimization. For the purpose of our model, we examine three of the main actors in the agricultural supply chain—producers, wholesalers and retailers—and assume that they are all multi-criteria decision makers who integrate the risk associated with conflict into their decision making. The behavior of consumers is not included in this analysis as we are dealing with the supply side.

Let *x* denote producers involved in the production of a given crop (such as maize); *y* denote wholesalers; *z* denote retailers; and *w* denote consumers. Let *i* denote a typical producer; *j*, a typical wholesaler; *k*, a typical retailer; and *l*, a typical consumer.

The Behavior of Producers and Their Optimal Conditions

Let q_i denote the non-negative production output of producer i. The production outputs of all producers of a given crop could be categorized into the column vector $q \in R_+^x$. We also assume that each producer i is faced with a production cost function f_i , which is a function of total outputs given as:

$$fi = fi(q), \forall i.$$
 (4)

Let c_{ij} denote the transaction cost of producer i with wholesaler j, and q_{ij} denote the quantity of crop sold to wholesaler j by producer i. Crops sold by all producers to wholesalers are grouped into the column vector $Q^i \in R_{+}^{xy}$. We also assume that producers sell to retailers. Let c_{ik} denote the transaction cost of producer i with retailer k, and q_{ik} denote the quantity of crop sold to retailer k by producer i. The crops sold by all producers to retailers are grouped into column vector $Q^i \in R_{-}^{xx}$. The transaction costs between producers and wholesalers, and producers and retailers are given as:

$$c_{ij} = c_{ij}(q_{ij}), \forall k_{i,j}$$
 (5)

$$C_{ik} = C_{ik}(q_{ik}), \forall q_{ik}$$
 (6)

Thus, the total production of a given crop by producer *i* equals to:

$$q_{i} = \sum_{i=1}^{y} q_{ij} + \sum_{k=1}^{z} q_{ik}$$
 (7)

Let $\rho^*_{_{1ij}}$ denote the price paid by the wholesaler to the producer and $\rho^*_{_{1ik}}$ price paid by the retailer to the producer. Under no risk (no conflict) the objective function of profit maximization by the producer is given as:

Maximize
$$\sum_{j=1}^{y} \rho^*_{1ij} q_{ij} + \sum_{k=1}^{z} \rho^*_{1ik} q_{ik} - f_i(Q^1, Q^2) - \sum_{j=1}^{y} c_{ij}(q_{ij}) - \sum_{k=1}^{z} c_{ik}(q_{ik})$$
 (8)

Let us assume that the producer has a risk function τ_{i} , which is continuous and convex, and is a function of the amounts sold both to wholesalers and retailers. Thus we have:

$$\tau_i = \tau_i(Q^1, Q^2), \forall_i$$

The second objective function of the producer is to minimize risk from conflict given as:

Minimize
$$\tau_i(Q^1, Q^2)$$
 (10)

Subject to: $q_{ii} \ge 0, \forall_i$ and $q_{ik} \ge 0, \forall_k$.

Assuming that all functions are continuous and convex, the optimality conditions for all producers of a given type of crop can be expressed with the following inequality (Gabay and Moulin, 1980; Bazaraa et al., 1993; Nagurney et al. 2005) and the optimal solutions for $(Q^{I*}, Q^{2*}) \in \mathbb{R}_{+}^{xy+xz}$ are given as:

$$\sum_{i=1}^{x} \sum_{j=1}^{y} \left[\frac{\partial f_{i}(Q^{1}, Q^{2})}{\partial q_{ij}} + \frac{\partial c_{ij}(q_{ij}^{*})}{\partial q_{ij}} + \alpha_{i} \frac{\partial \tau_{i}(Q^{1*}, Q^{2*})}{\partial q_{ij}} - \rho^{*}_{1ij} \right] \mathbf{x} \left[q_{ij} - q_{ij}^{**} \right] \\
+ \sum_{i=1}^{x} \sum_{k=1}^{z} \left[\frac{\partial f_{i}(Q^{1*}, Q^{2*})}{\partial q_{ik}} + \frac{\partial c_{ik}(q_{ik}^{*})}{\partial q_{ik}} + \alpha_{i} \frac{\partial \tau_{i}(Q^{1*}, Q^{2*})}{\partial q_{ik}} - \rho^{*}_{1ik} \right] \mathbf{x} \left[q_{ik} - q_{ik}^{**} \right] \\
\forall (Q^{1}, Q^{2}) \in R_{\perp}^{xy + xz}$$
(11)

The following points guide decision making under risk of conflict based on the inequality in equation (11).

- 1. α 's represent the risk level, and the higher they are, the higher the price.
- 2. The marginal cost of production plus the marginal cost of transaction plus the weighted marginal risk associated with production and transaction must be equal to the price that the **wholesaler** is willing to pay (the first term in equation (11)).

- 3. The marginal cost of production plus the marginal cost of transaction plus the weighted marginal risk associated with production and transaction must be equal to the price that the **retailer** is willing to pay (the second term in equation (11)).
- 4. The weights of the marginal risk of war depend on location of production, location of wholesale and retail, intensity, and type of crops produced (enterprises).
- 5. The bigger the risk factors, the less production and transaction will occur, and the higher the price.

The Behavior of Wholesalers and Their Optimal Conditions

Let q_{jk} denote the amount of the crop purchased by retailer k from the wholesaler j. We group this quantity into the column vector $Q^3 \in \mathbb{R}_+^{yz}$. Let c_i denote the handling costs and is defined as: $c_i = c_i(Q^3), \forall i$ (12)

Let wholesaler j charges γ_j^* amount of price for the product. The optimal condition for the wholesaler under no risk is presented as:

Maximize
$$\gamma_{j}^{*} \sum_{k=1}^{z} q_{jk} - c_{j}(Q^{3}) - \sum_{i=1}^{x} \rho_{1ij}^{*} q_{ij}$$
 (13)

Subject to
$$\sum_{k=1}^{z} q_{jk} \leq \sum_{i=1}^{x} q_{ij}$$
, (14)

$$q_{ij} \ge 0$$
, and $q_{ik} \ge 0$

 $\tau_i = (Q^3), \forall_i$

The second decision by the wholesaler is risk reduction from conflict. In conflict zones, stores of product could be confiscated by rebels, government fighters or the general public in the absence of law and order. We assume that each wholesaler j is faced with risk denoted by τ_j , with continuous and convex functional form, and dependent on the quantities bought from producers expressed as:

Minimize
$$\tau_{j}(Q^{3})$$
 (15)

Assigning β_j as a risk level for the wholesaler, the profit maximization criteria of wholesaler under the risk of war is given as:

Maximize
$$\gamma_{j}^{*} \sum_{k=1}^{z} q_{jk} - c_{j}(Q^{3}) - \sum_{i=1}^{x} \rho_{1ij}^{*} q_{ij} - \beta_{j} \tau_{j}(Q^{3})$$
 (16)

Subject to
$$\sum_{i=1}^{z} q_{jk} \leq \sum_{i=1}^{x} q_{ij}$$
 (17)

The non-negativity constraints: $q_{ij} \ge 0$, and $q_{ik} \ge 0$, for all i and k also hold.

Assuming the handling costs for each wholesaler is continuous and convex, the optimal $(Q^3) \in R_+^{yz+z}$ satisfy the optimality condition for all wholesalers:

$$\sum_{i=1}^{x} \sum_{j=1}^{y} \left[\frac{\partial c_{j}(Q^{3})}{\partial q_{ij}} + \rho^{*}_{1ij} + \beta_{j} \frac{\partial \tau_{i}(Q^{3})}{\partial q_{ij}} - \rho^{*}_{2j} \right] \times \left[q_{ij} - q^{*}_{ij} \right] + \sum_{j=1}^{y} \sum_{k=1}^{z} \left[-\gamma_{j}^{*} \frac{\partial c_{j}(Q^{3})}{\partial q_{jk}} + \rho_{2j} + \beta_{j} \frac{\partial \tau_{i}(Q^{3})}{\partial q_{jk}} \right] \times \left[q_{jk} - q^{*}_{jk} \right] \\
+ \sum_{i=1}^{y} \left[\sum_{i=1}^{x} q^{*}_{ij} - \sum_{k=1}^{z} q^{*}_{jk} \right] \times \left[\rho_{2j} - \rho^{*}_{2j} \right] \ge 0, \tag{18}$$

where ρ_{2j} is the Lagrange multiplier associated with constraints in (14) for wholesaler j and ρ_2 is the column vector for all wholesalers' multipliers.

The following points guide decision-making of wholesalers under risk of conflict based on the inequality in equation (18).

- 1. β represent the risk parameters of wholesalers
- 2. From the second term in inequality (18), if retailer k buys the crop from a wholesaler j, that is, if q_{jk}^* is positive, the price charged by wholesaler j, which is given by γ_j^* is equal to the marginal handling cost and the weighted marginal risk, plus the shadow price (the marginal utility/cost of relaxing/strengthening the constraint) term ρ^*_{2j} , which, from the third term in the inequality, serves as the price to clear the market from distributor j.

The Behavior of Retailers and Their Optimal Conditions

Let q_{ik} represent the amount crop sold to a consumer l. Let q_{ik} denote the crop bought from producer, and q_{jk} represent the crop bought from wholesalers. We group these quantities into the column vectors $Q^4 \subseteq R_+^{\text{vc}}$ and $Q^5 \subseteq R_+^{\text{vc}}$. Let c_k denote the handling cost:

$$c_{k} = c_{k}(Q^{4}, Q^{5}), \forall_{k}$$

$$\tag{19}$$

Let retailer k charges ψ^* amount of price for the product. The optimal condition of the retailers under no risk is given as:

Maximize
$$\psi_j^* \sum_{l=1}^w q_{kl} - c_k(Q^4, Q^5) - \sum_{i=1}^x q_{ik} \rho_{1ik} - \sum_{i=1}^y q_{jk} \gamma_j^*$$
 (20)

Subject to
$$\sum_{l=1}^{w} q_{kl} \le \sum_{i=1}^{x} q_{ik} + \sum_{j=1}^{y} q_{jk}$$
 (21)

$$q_{kl}$$
, q_{ik} and $q_{ik} \ge 0$

As in the case with the previous actors in the value chain, the second decision by the retailer is risk reduction from conflict. We assume that each retailer faces risk denoted by ϕ_k with continuous and convex functional form and dependent on the quantities bought from producers and wholesalers expressed as:

Minimize
$$\phi_{\iota}(Q^4, Q^5)$$
 (22)

$$\phi_{\nu} = (Q^4, Q^5), \forall_{\nu}$$

Assigning θ_k as a risk level for the retailer, the profit maximization criteria for the retailer under risk of conflict is given as:

Maximize
$$\psi^* \sum_{l=1}^w q_{kl} - c_k(Q^4, Q^5) - \sum_{i=1}^x q_{ik} \rho_{1ik} - \sum_{i=1}^y q_{jk} \gamma_j^* - \phi_k \theta_k(Q^4, Q^5)$$
 (23)

Subject to
$$\sum_{i=1}^{w} q_{kl} \le \sum_{i=1}^{x} q_{ik} + \sum_{i=1}^{y} q_{jk}$$
 (24)

$$\sum_{i=1}^{x}\sum_{k=1}^{z}\left[\frac{\partial c_{k}(Q^{4},\!Q^{5})}{\partial q_{ik}}\,\rho_{1ik}^{*}+\theta_{k}\frac{\partial \phi_{k}(Q^{4*},\!Q^{5*})}{\partial q_{ik}}\!-\!\sigma_{2k}^{*}\right]\!\mathbf{x}\left[q_{ik}\!-\!q_{ik}^{*}\right]$$

$$+ \sum_{k=1}^{y} \sum_{l=1}^{z} \left[\frac{\partial c_{k}(Q^{4}, Q^{5})}{\partial q_{jk}} \rho^{*}_{1jk} + \theta_{k} \frac{\partial \phi_{k}(Q^{4*}, Q^{5*})}{\partial q_{jk}} - \sigma^{*}_{3k} \right] \mathbf{x} \left[q_{jk} - q^{*}_{jk} \right]$$

$$+ \sum_{k=1}^{z} \sum_{l=1}^{w} \left[- \psi_{k}^{*} + \frac{\partial c_{k}(Q^{4*}, Q^{5*})}{\partial q_{kl}} \sigma_{2k}^{*} + \theta_{k} \frac{\partial \phi_{k}(Q^{4*}, Q^{5*})}{\partial q_{kl}} \right] \mathbf{x} \left[q_{kl} - q_{kl}^{*} \right]$$

$$+\sum_{k=1}^{z}\left[\sum_{i=1}^{x}q_{ik}^{*}-\sum_{l=1}^{w}q_{lk}^{*}\right] \times \left[\sigma_{2k}-\sigma_{2k}^{*}\right] + \sum_{k=1}^{z}\left[\sum_{j=1}^{y}q_{ik}^{*}-\sum_{l=1}^{w}q_{lk}^{*}\right] \times \left[\sigma_{3k}-\sigma_{3k}^{*}\right] \ge 0$$
(25)

$$\forall Q^4 \in R_+^{xy}, \forall Q^5 \in R_+^{yz}, \sigma_2 \in R_+^{z}, \sigma_3 \in R_+^{z}$$

Where σ_2 and σ_3 are the Lagrange multipliers associated with the constraint in equation (21).

The following points guide decision-making of retailers under risk of conflict based on the inequality in equation (25):

- 1. θ_i s represent the risk parameters of retailers,
- 2. In the inequality in equation (25), if a consumer l buys crop from a retailer k, that is if q^*_{kl} is positive, the price charged by the retailer k, ψ^* , is equal to the marginal handling costs (for crops purchased both from the producers and wholesalers) and the weighted marginal risk plus the shadow price terms σ_{2k} and σ_{3k} , which in the fourth term in the inequality, serve as the price to clear the market from retailer k.

REFERENCES

- Adibe, Jideofor. 2011. "Beyond Boko Haram." *Daily Trust* (Abuja). September 1.
- ——. 2014. "The Character, Impact and Trajectories of the 'New' Conflicts in Nigeria." Final draft written for the Brookings AGI Study on the Impact of Conflict on Agriculture in West Africa, March.
- AEO (African Economic Outlook). 2012. "Mali." *African Economic Outlook 2012*. Issy les Moulineaux: OECD Development Centre.
- Agricultural Research Council of Nigeria. 2010. Strategic Plan 2011–2020. Abuja: Agricultural Research Council of Nigeria.
- Amnesty International. 2013. "Mali: Civilians at risk from all sides of the conflict." February 1. http://www.amnesty.org/en/news/mali-civilians-risk-all-sides-conflict-2013-02-01.
- Bazaraa, M.S., H.D., Sherali, and C.M. Shetty. 1993. Nonlinear Programming: Theory and Algorithms. John Wiley & Sons: New York.
- Bizwatch Nigeria. 2013. "Boko Haram and Food Insecurity." http://bizwatchnigeria.ng/boko-haram-and-food-insecurity/.
- Blattman, C., and E. Miguel. 2010. "Civil war." *Journal of Economic Literature* 48, no. 1.
- Campbell, J. 2013. "Terrorism: Are Boko Haram and Ansaru Getting Back Together?" *Naij*, November 20. https://news.naij.com/52522.html.
- 2014. "A 'Soft Approach' to Nigeria's Boko Haram." Africa in Transition Blog, Council on Foreign Relations, April 29. http://blogs.cfr.org/campbell/2014/04/29/a-soft-approach-to-nigerias-boko-haram/.

- Central Bank of Nigeria. 2009. Annual Report and Statement of Accounts. Abuja: Central Bank of Nigeria.
- ——.2010. Annual Report and Statement of Accounts. Abuja: Central Bank of Nigeria.
- ——.2011. Annual Report and Statement of Accounts. Abuja: Central Bank of Nigeria.
- ——.2012. Annual Report and Statement of Accounts. Abuja: Central Bank of Nigeria.
- ——.2013. Provisional Annual Report and Statement of Accounts. Abuja: Central Bank of Nigeria.
- Chothia, F. 2012. "Who Are Nigeria's Boko Haram Islamists?" BBC African Service, January 11. http://www.bbc.com/news/world-africa-13809501.
- Chrisafis, A., and A. Hirsch. 2013. "Mali: French troops in direct combat with insurgents 'within hours'." The Guardian, January 16. http://www.theguardian.com/world/2013/jan/16/french-ground-operations-mali-underway.
- FAO (Food and Agriculture Organization). 2013. "Key Indicators." Mali CountrySTAT. http://www.countrystat.org/home.aspx?c=MLI&p=ke.
- FEWSNET (Famine Early Warning System Network). 2014. *Price Bulletin: Nigeria*. February 2014. USAID: Washington, D.C. http://www.fews.net/west-africa/nigeria/price-bulletin/tue-2014-02-18.
- Gabay, D. and H. Moulin. 1980. On the Uniqueness and Stability of Nash Equilibria in Noncooperative Games. In: Bensoussan, A., P. Kleindorfer, and C.S. Tapiero (eds.). Applied Stochastic Control of Econometrics and Management Science. North-Holland: Amsterdam.

- Gao Agricultural Extension Services. 2014. Data Collected by Alpha Kergna from the Gao Annual Agricultural Report. Ministry of Agriculture: Gao, Mali.
- Gourdin, P. 2012. "Géopolitique du Mali: Un Etat failli?" La revue géopolitique, September 23. http://www. diploweb.com/Geopolitique-du-Mali-un-Etat.html.
- Gündüz, C. and D. Klein. 2008. Conflict-Sensitive Approaches to Value Chain Development, microreport 101. Washington, D.C.: USAID.
- Gyimah-Brempong, K. and M. E. Corley. 2005. "Civil Wars and Economic Growth in Sub-Saharan Africa." *Journal of African Economies* 14: 270–311.
- Human Rights Watch. 2014. "Collapse, Conflict and Atrocity in Mali: Human Rights Watch Reporting on the 2012-13 Armed Conflict and Its Aftermath." May. http://www.hrw.org/sites/default/files/related_material/mali0514_ForUpload.pdf.
- Hsiang, S. M., M. Burke, and E. Miguel. 2013. "Quantifying the influence of climate on human conflict." *Science* 341, no. 6151: 1235367. http://www.sciencemag.org/content/341/6151/1235367. short.
- IRIN (Integrated Regional Information Networks). 2012. "Boko Haram Attacks Cripple Northern Nigeria's Economy."
- IISS (International Institute for Strategic Studies). 2013. "Nigeria's Emergency: Countering Boko Haram." *Strategic Comments* 19, no. 23.
- Jirgi, A. 2013. A Map of Nigeria Showing the Intensity of the New Conflict Across the Country. Data collected from field research. Nigeria.

- Keenan, J. 2012. "Mali's Tuareg rebellion: What next?" Al Jazeera, March 20. http://www.aljazeera.com/indepth/
- Kergna, A. 2014. Focus Group Discussions conducted in Gao and Timbuctu, Mali.
- Ksoll, C., R. Macchiavello, and A. Morjaria. 2010.

 The Effect of Ethnic Violence on an ExportOriented Industry. CEPR Discussion Paper 8074.
 Washington, D.C.: Center for Economic Policy
 Research.
- Messer, E., M. Cohen, and J. D'Acosta. 1998. Food from Peace: Breaking the Links between Conflict and Hunger. Food, Agricultural, and the Environment Discussion Paper 24. Washington, D.C.: International Food Policy Research Institute.
- Miguel, E., S. Satyanath, and E. Sergenti., 2004. "Economic Shocks and Civil Conflict: An Instrumental Variables Approach." *Journal of Political Economy* 112, no. 4.
- Miguel, E. and S. Satyanath. 2011. "Re-examining Economic Shocks and Civil Conflict." *American Economic Journal: Applied Economics* 3, no. 4: 228-32.
- Nagurney, A., J. Cruz, J. Dong, and D. Zhang. 2005. "Supply Chain Networks, Electronic Commerce, and Supply Side and Demand Side Risk." European Journal of Operational Research. 164: 120-142.
- NBS (National Bureau of Statistics) and the Nigerian Federal Ministry of Youth Development. 2013. 2012 National Baseline Youth Survey. Abuja: National Bureau of Statistics.

- Okpara, J. N., A. A. Tarhule, and M. Perumal. 2013. "Study of Climate Change in Niger River Basin, West Africa: Reality Not a Myth." *Climate Change: Realities, Impacts Over Ice Cap, Sea Level and Risks*, edited by Bharat Raj Singh. Rijeka, Croatia: InTech. http://www.intechopen.com/books/climate-change-realities-impacts-over-ice-cap-sea-level-and-risks/study-of-climate-change-in-niger-river-basin-west-africa-reality-not-a-myth.
- Qiang, Q., A. Nagurney, and J. Dong. 2009. "Modeling of Supply Chain Risk under Disruptions with Performance Measurement and Robustness Analysis." In Wu, T. and J. Blackhurst (eds.). Managing Supply Chain Risk and Vulnerability: Tools and Methods for Supply Chain Decision Makers. Springer: London. 91–111.
- Reuters. 2012. "Heavy fighting in north Mali, casualties reported." February 7. http://www.reuters.com/article/2012/02/17/ozatp-mali-rebellion-idAFJO-E81G00Q20120217.

- UNCTAD (United Nations Conference on Trade and Development). 2013. *World Investment Report* 2013. Geneva: UNCTAD. http://unctad.org/en/publicationslibrary/wir2013_en.pdf.
- United Nations. 2013. Sahel Regional Strategy Mid-Year Review 2013. New York: United Nations. https://docs.unocha.org/sites/dms/CAP/MYR_2013_Sahel_Regional_Strategy.pdf.
- U.S. Department of State. 2013. "Terrorist Designations of Boko Haram and Ansaru." November 13. http://www.state.gov/r/pa/prs/ps/2013/11/217509.htm.
- *Ynaija*. 2014. "Boko Haram in 2014: A Trail of Blood and Destruction." http://ynaija.com/politico/boko-haram-in-2014-a-trail-of-blood-and-destruction/.

ENDNOTES

- 1. For examples of existing case studies involving conflict-sensitive value chain analysis, see the following reports by USAID: Guinea, groundnuts, micro Report 90; Rwanda, tourism, micro Report 94; Sudan, shea butter, micro Report 102; and Northern Uganda, cotton, micro Report 91. These USAID case studies first describe the conflict in each context, and then map the various segments of each value chain. Each case study follows the guidelines discussed by Gündüz and Klein in Conflict-Sensitive Approaches to Value Chain Development, micro Report 101. These guidelines can assist development practitioners in assessing their approach to market-based development in a conflict environment.
- 2. A summary of reports submitted by Alpha Kergna and Moussa Djiré.
- See Human Rights Watch, "Mali: Ensure Justice for Grave Abuses—Hold All Sides to Account to Break Cycle of Violence," March 21, 2014, http:// www.hrw.org/news/2014/03/21/mali-ensure-justice-grave-abuses.
- 4. The West African CFA franc (known in French as the franc de la Communauté Financière d'Afrique) refers to the currency used by Mali and seven other West African countries. From 2011 to 2012, \$1 was approximately equivalent to 492 CFA on average.
- 5. Adibe (2014) includes the following sources of conflict in an "traditional" conflict category: intercommunal and intra-communal clashes; religious conflicts; pastoralist herders and sedentary farmers; indigene versus settler dichotomy, ethnic and ethnicity conflicts, ethnic militia versus government and multinational companies; party politics and post electoral violence and the chieftaincy tussle. These conflicts occur without destabilizing the government, despite their intensity.
- 6. The northeast agro-ecological zone includes Ad-

- amawa, Bauchi, Borno, Gombe, Jigawa and Yobe states. This zone typically has high rainfall variability between years and spatially, which explains the wide range for annual rainfall.
- 7. For example, government agencies, schools and institutions of democracy.
- There are multiple theories proposed to explain the driving forces behind the emergence of Boko Haram and the subsequent formation of Ansaru, these include: The Kanuri founders of Boko Haram have a historical opposition of Western culture: Boko Haram is a symptom of a failed state; poor governance and human deprivation have spurred the groups to act; and the northern citizens are frustrated with the unequal distribution of power and resources. These arguments are likely to be contributing factors. Yet it is good to keep in mind that nearly every state in Nigeria views itself as marginalized, but other highly marginalized areas have not spawned type of violent conflict. Furthermore, these theories do not adequately explain why most of the attacks are in the north, and a lot of victims are northerners and Muslims. There are also multiple conspiracy theories that various actors in government (both northern and southern) have set up the organizations to either make the Nigerian government or Islam look bad, depending on the perspective of the conspiracy theory. Perhaps a better theory of the main driver behind the new conflict is a crisis of nation building.
- Ansaru's main activities have been prison breaks, kidnappings and attacks against the Nigerian military. There is some speculation that Boko Haram has outsourced activities to Ansaru, and, despite differences, they collaborate from time to time.
- 10. Ynaija (2014).
- 11. A survey of Bodija market in Ibadan has shown that northern agricultural products have experienced a large increase in prices. For example, that honey beans that used to sell at 170 naira per cup

- in 2012 are now selling at 250 naira per cup, and a live cow average size sold at 90,000 naira in 2012 now sells at 130,000 to 150,000 naira (Bizwatch Nigeria 2013).
- 12. Burton, John (1990) Conflict Resolution and Prevention (New York: St. Martins Press)
- 13. Maslow, A.H. A Theory of Human Motivation, Psychological Review 50(4) (1943): 370-9.
- 14. Fanon, Frantz (2001 edition), Wretched of the Earth (London: Penguin Classics).
- 15. Gurr, Ted R (1970) Why Men Rebel (Princeton: Princeton University Press).

- 16. Dollard, Miller et al. (1939). Frustration and aggression (New Haven: Yale University Press).
- 17. Arendt, Hannah (1963). Eichmann in Jerusalem: A Report on the Banality of Evil.
- 18. Adibe, Jideofor (2011) 'Beyond Boko Haram' (Abuja, Daily Trust), September 1, 2011 (back page).
- Adibe, Jideofor (2012), Nigeria without Nigerians?
 Boko Haram and the Crisis in Nigeria's nationbuilding (London, Adonis & Abbey Publishers).
- Anderson, Benedict (1983), Imagined Communities: Reflections on the Origin and Spread of Nationalism (London and New York, Verso), p. 224.

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