Case 2

Nigeria

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Nigeria is Africa’s wealthiest country and also one of the most prone to violent conflict. Possessing enormous natural resources and a vibrant agricultural sector, it is consistently ranked near the top of Africa’s most powerful nations. However, a combination of poor governance, deep inequality, political polarization and violent conflicts have undermined Nigeria’s stability over the past decade. Compounding issues, including the persistent presence of Boko Haram in the northeast along with increasingly violent farmer-herder clashes and internal conflicts over oil resources, have caused thousands of fatalities each year and massive population displacements. As a result, Nigeria is now ranked as one of Africa’s most violent countries.

Nigeria is also highly vulnerable to the effects of climate change, which is already having direct impacts across the Sahel region. Rising temperatures, more erratic rainfall (causing both droughts and floods) and rising sea levels along Nigeria’s southern coast have contributed to large-scale changes in the agricultural sector, increased tensions over arable land and changed access to the country’s oil revenues. Environmental changes may also be contributing to population displacements across the country and the broader region, not only through diminishing arable land, but increasingly due to sea level changes. More than 50 million people may need to be relocated due to sea level rises alone in the coming years. With a population highly dependent upon agriculture, and amidst long-standing tensions around land and natural resources, changing environmental conditions present serious and immediate risks to the country.

This case study explores the links between climate change and violent conflict in Nigeria. Acknowledging that the causal chains are often indirect and difficult to demonstrate with precision, the study investigates how environmental shifts may be feeding into the existing risk landscape. It focuses particularly on: (1) resource pressures around the farmer-herder conflicts; (2) how livelihoods may be driving recruitment into armed groups; and (3) population movements and displacement. Based on an extensive literature review, interviews with Nigerian and external researchers and discussions with a range of UN officials, the study examines the Government and the UN’s responses to these emerging risks and offers an empirical and analytic basis for improving the UN’s prevention work.

This section explores the main conflict trends in Nigeria, focusing first on the presence of violent extremist groups (principally Boko Haram) and conflicts over resources. It also describes how socioeconomic trends such as urbanization, population movements, demographic growth, and shifting agricultural practices may be contributing to conflict risks. It concludes that poor governance of Nigeria’s resources, along with regional dynamics often well beyond the control of the Nigerian State, have fed into a complex and highly volatile set of interrelated risks.

Violent extremism

Operating out of the Lake Chad region, the violent extremist group Boko Haram has been the main perpetrator of violence in Nigeria and a significant destabilizing force in the northeast of the country. Between 2011 and 2018, increasing attacks by Boko Haram and violent clashes with the Nigerian security services have resulted in more than 37,500 people killed, two million displaced, and more than 240,000 conflict-driven refugees in neighbouring countries. This has worsened already dire humanitarian conditions for the eight and a half million people receiving lifesaving aid in Nigeria, and also placing greater pressure on some of the poorest communities in the country.

Chronically poor governance capacities and endemic underemployment — particularly in the broader Lake Chad Basin — has allowed Boko Haram to recruit new fighters from local communities, challenge State institutions and move quite freely across Nigeria’s porous northeastern borders. National and regional efforts to curb Boko Haram’s influence appear to have contributed to a reduction in the group’s capabilities from its peak in the 2014-15 period, but it still holds significant territories and has continued abductions and forced recruitments in much of the broader Lake Chad area.

More recently, a splinter group of Boko Haram, the Islamic State in West Africa, has affiliated with Islamic State of Iraq and the Levant (ISIL) and built an influential presence in Nigeria’s northeastern Borno State. Perpetrating horrific violence against civilian populations, often along religious lines, these groups have prompted large-scale community mobilization by vigilante groups looking to protect themselves from attack.

In this context, one of the most brutal aspects of Boko Haram and its affiliates has been the widespread use of sexual and gender-based violence against women. In areas affected by
Boko Haram, six out of ten females are reported to have suffered some form of gender-based violence, with rapid increases in rates of violence in recent years.\textsuperscript{229}

Farmer-herder conflicts

While Boko Haram has occupied much of the international community’s attention and the State’s resources, over recent years farmer-herder conflicts have caused more fatalities than the armed groups in Nigeria.\textsuperscript{230} Large pastoralist groups stretch across the Sahel region, herding cattle along traditional seasonal routes that have existed for hundreds of years. Long-standing local cooperation and mediation practices have tended to keep conflicts to a minimum, though over the past decade these have been put under strain.\textsuperscript{231} This is due to a combination of factors: demographic growth has increased the need for arable land and large-scale agriculture projects, shrinking the land available for cattle herding. The pressure for food security has driven unsustainable agricultural practices such as overgrazing, poor water management and excessive tree felling for domestic firewood and charcoal, all of which have significantly reduced the amount of fertile land.\textsuperscript{232} Violence in the northern part of the country has fractured traditional herding routes, driving pastoralists further into regions where traditional cooperation arrangements have not yet been put in place. At the same time, sprawling networks of arms smugglers and illicit traffickers have provided a steady supply of small arms and light weapons, increasing the chances that tensions might boil over into deadly violence.\textsuperscript{233}

Farmer-herder dynamics cannot be separated from religious divides within Nigeria, which have been deepened by the presence of violent extremist groups in recent years. Roughly 90 per cent of the pastoralists in Nigeria are Muslim Fulani while many of the major farming communities are Christian.\textsuperscript{234} Accusations that the Fulani have collaborated with so-called jihadist groups in Nigeria and neighbouring countries have fueled tensions at the political

levels of the country, contributing to mobilization of ethnoreligious self-protection groups amongst Christian communities in the Middle Belt in particular.\textsuperscript{235}

Focused overwhelmingly on the Boko Haram crisis, the Government has been criticized for failing to address the growing dangers of farmer-herder violence. President Muhammadu Buhari — a Fulani himself — has been accused of being overly soft on the herding communities, refusing to robustly prosecute the perpetrators of violence.\textsuperscript{236} In this context, strong anti-grazing laws passed by some state governments in 2017-18 was seen as a punitive act against herders, prompting them to move into neighbouring states where new conflicts broke out.\textsuperscript{237} More generally, the absence of strong State institutions in the northern states of Nigeria have led to widespread banditry and cattle rustling with high levels of impunity.\textsuperscript{238}

The result is that Nigeria’s Middle Belt and northernmost states have become some of the most dangerous in the Sahel.\textsuperscript{239} Some estimates suggest that up to 300,000 people were displaced between 2016 and 2018 alone, with thousands of deaths in some of the most fragile communities in the country.\textsuperscript{240} Worryingly, there is evidence that the killings have transformed in recent years from spontaneous tit for tat incidents to far deadlier planned attacks on communities.\textsuperscript{241} As later analysis will describe, climate change is contributing to this spike in violence.\textsuperscript{242}

Separatist agitation and conflicts over oil in the South

While most attention focuses on Nigeria’s volatile North, its southern delta region suffers from long-standing disputes over natural resources that are being increasingly affected by climate change. For decades, local Nigerian groups have protested the extraction practices of oil companies and the national Government, complaining that they are marginalized economically while suffering the brunt of the environmental hazards of extraction.\textsuperscript{243} Particularly in the region of the Indigenous People of Biafra, political and economic exclusion has fueled a decades-long insurgency and push for secession.\textsuperscript{244}

Poverty and inequality

While Nigeria is a relatively wealthy country, it remains deeply underdeveloped and suffers from extremely high unemployment rates and poverty levels.\textsuperscript{245} Overreliance on oil exports meant that the 2014 slump in oil prices triggered a rapid drop in economic growth and a spike in unemployment (up to 23 per cent in 2018). Today, Nigeria has the highest number of extremely poor people of any country in the world, with a poverty rate over 50 per cent.\textsuperscript{246} Facing rapid demographic growth and increasing inequalities between rich and poor, socioeconomic grievances have become a significant driver of tensions and potential violence in Nigeria.

The most obvious outcome of poor economic growth and weak governance systems in Nigeria is endemic food insecurity. The agricultural sector is underdeveloped, resulting in low productivity and a high dependency on food imports.\textsuperscript{247} At the same time, more than two thirds of the Nigerian workforce is in farming. Lacking sufficient investments in mechanized agriculture, most of the sector is dominated by rainfed farming, making crops highly susceptible to changing rainfall patterns, shifting water tables and desertification.\textsuperscript{248} Rather than invest in staple crops that might reduce dependencies on foreign imports, the Government has focused investment in so-called “cash crops,” which generate funds for farmers but do not provide food security for the broader population.\textsuperscript{249} Significant rises in food prices were compounded by a 2019 decision by the Government to close off land borders to prevent food smuggling from Nigeria’s neighbours.\textsuperscript{250}

Poverty and unemployment are not distributed evenly across Nigeria. The oil-rich South has traditionally enjoyed far greater investment
and development, leaving the North a largely neglected hinterland.\textsuperscript{251} The poorest regions also coincide directly with those that are suffering most severely from violence, whether from Boko Haram or farmer-herder conflicts.\textsuperscript{252} However, this national level data obscures the fact that many southern communities are deeply impoverished as well, living in oil-rich territories without enjoying the benefits of their natural resources.\textsuperscript{253} Economic marginalization is one of the most cited reasons for groups that have taken up arms against the State, and is a clear driver of many of the conflicts in Nigeria today.

Population displacements

Population movement is both a result and a cause of conflict in Nigeria and its neighbours, creating a vicious cycle that continues to render millions of people vulnerable in the broader region. In fact, Nigeria and its neighbours have reciprocal refugee flows: 52,000 Cameroonian have recently fled violence and sought shelter in Nigeria, while 111,000 Nigerians have left violence-affected areas and sought safety in Cameroon.\textsuperscript{254} The most visible cause of such displacements is Boko Haram, which operates in Borno, Yobe and Adamawa states, causing hundreds of thousands of people to be displaced every year.\textsuperscript{255}

According to several experts interviewed, newly arriving populations create strains on limited resources and are often the cause of renewed intercommunal tensions. More directly relevant, displaced populations are uniquely vulnerable to food insecurity and violent attacks.\textsuperscript{256}

Impact on women

Women and girls are uniquely vulnerable to the conflict dynamics in Nigeria in a number of ways. They are the target of sexual and gender-based violence, including but not limited to horrific attacks by Boko Haram and its affiliates.\textsuperscript{257} Women in displacement camps too are often vulnerable to sexual and gender-based violence.\textsuperscript{258} In farmer-herder conflicts,
the loss of male breadwinners often leaves women in highly patriarchal societies with few coping mechanisms to support themselves and their families. With low education rates and few economic opportunities, women in conflict-affected parts of Nigeria tend to suffer the most.\textsuperscript{259}

**Weak governance**

Nigeria's extremely poor governance capacities and high levels of corruption play an important role in the risks of violent conflict. With some of the worst corruption indicators in the world, the highest illicit outflows anywhere in Africa and significant diversion of oil revenues away from State coffers, Nigeria has struggled to build State governance capacities.\textsuperscript{260} The bulk of national budgetary spending is on security, often resulting in heavy-handed responses to violent conflicts without accompanying social and economic programming. For example, widespread power cuts mean that some communities are left without basic services for weeks at a time, undermining communities' faith in the central Government.\textsuperscript{261} More broadly, long-standing grievances between the northern communities (which have been traditionally cut off from largesse from the capital) and the Government feed into intercommunal tensions, Christian/Muslim antagonism and a willingness of the general population to take up arms to defend their land and communities.

**Conclusion:**

**A complex system of conflict risks**

Nigeria presents a complex system of conflict risks that tend to interact and amplify each other in dynamic and unpredictable ways. In some respects, this can be described as conflict feedback loops: violent groups undermine and weaken State institutions, leading to worse service delivery and greater poverty and unemployment; poor livelihood options in turn drive recruitment into violent groups, again challenging the ability of the State to respond. The result is a system that is extremely sensitive to new shocks, easily triggered into escalating cycles of violence from which it is difficult to disengage. As the following sections explore, climate change is acting as an increasingly important threat multiplier within this complex system.

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Climate Trends

Nigeria has been identified as a climate change “hot spot,” one of the countries most exposed and vulnerable to climate change. \(262\) \(41\) million Nigerians live in high climate exposure areas, while four and a half million face very high climate exposure. \(263\) More than 40 climate-related disasters have occurred between 2000 and 2016, ranging from storm surges to inland flooding and wildfires. \(264\) An ecologically diverse country, Nigeria’s tropical southern coastal area contrasts sharply with the arid steppe in the far North, meaning climate change is experienced differently depending on the region. This points to the need for localized, subnational data and analysis, while also examining the connections between regions within and beyond Nigeria’s borders. This section explores the three dominant effects of climate change in Nigeria: (1) temperature and rainfall variability; (2) extreme weather; and (3) rising sea levels.

Temperature and rainfall variability

Nigeria has already witnessed a temperature rise of 0.8° Celsius since the 1960s, with predictions of a rise of 2° Celsius before 2050. \(265\) This warming is most acutely felt in northern parts of the country, where the next 60 years could see temperatures rise by up to 4.6° Celsius. \(266\) Related to temperature rises, Nigeria is experiencing an increase in rainfall variability. \(267\) This includes both an increase in the number of extreme rainfall events — causing floods and crop destruction — and a prolongation and growing frequency of droughts, such as the one that plagued the Sahel region from 1968 to 1993. \(268\) The most exposed areas for changing rainfall patterns are the far north, and the eastern and central parts of the Middle Belt, including the region surrounding the capital, Abuja. \(269\) Predictions about future rainfall trends point to continued divergence from the rainfall patterns that sustained subsistence agriculture in the region for decades. \(270\)

The combination of higher temperatures and more variable rainfall patterns has contributed to the desertification of once fertile regions of northern Nigeria. \(271\) Broadly, the Sahara-Sahel is spreading southwards by about 1,400 square miles a year, swallowing whole villages and dramatically reducing the amount of arable land. \(272\) According to some estimates, two thirds of the northern and Middle Belt area affected by desertification are already now desert or semidesert. \(273\) Higher temperatures also increase evapotranspiration, contributing to an overall reduction in the amount of surface and groundwater resources. \(274\) Nigeria is extraordinarily reliant upon rainfall and groundwater resources, with populations and agricultural areas clustered around its 20 million hectares of lakes and rivers, especially...
the Niger River and Lake Chad. Reductions in river flows have been linked to droughts and variable rainfall patterns, while there is mixed evidence as to the effects of climate change on Lake Chad. Climate experts have argued that even moderate decreases in rainfall in the future would have outsized impacts on water quantities in the major rivers of Nigeria, with serious implications on management and allocation across communities. During the 25-year drought (1968-1993) for example, the Niger River Basin experienced a 60 per cent loss of water flows. National data has indicated a sharp drop in water tables over the last 50 years. Additionally, increased flooding resulting from rainfall variability contributes to declining water quality in many areas of the country, with impacts on health and agriculture.

Importantly, climate change is not an isolated factor in the loss of arable land. Changing demographics, agricultural practices and land use also influence the hydrology of the country. In fact, some studies have suggested that expanding cities and spreading agricultural production (requiring greater water use) are the dominant stressors of the Nigerian ecosystem, while climate change is better thought of as an exacerbating factor, reducing arable land and contributing to crop failure.

Extreme weather

Closely related to greater rainfall variability, climate-driven extreme weather events appear to be increasing in Nigeria. While droughts tend to be experienced as slow onset events with impacts such as wildfires and crop failures, extreme weather are rapid onset heavy storms and torrential rainfalls causing massive flooding and destruction. These have become harsher and more frequent in recent decades: in 2012, for...
example, extreme weather caused widespread flooding of the Niger and Benue rivers, which affected seven million people, killing over 360 and displacing more than two million, in addition to destroying homes and farmland. Another series of floods between 2015 and 2017 was also responsible for a number of deaths and over 100,000 displacements. Flooding also has negative impacts on water quality and water infrastructure. Over the past 40 years, recorded volumes of torrential rains increased by 20 per cent in parts of southern Nigeria, with significant impacts on the country's economy and infrastructure.

Rising sea levels

There is scientific consensus that climate change contributes to sea level rises globally, though this is experienced differently across regions. The Gulf of Guinea, which runs along Nigeria's southern coast, is already experiencing increased erosion due to sea surges and is expected to undergo a sea level rise of up to one metre by the end of this century. The 500 mile long coastline averages less than 20 feet above sea level, while the delta region has a highly flood-prone complex of estuaries running across low lying areas. Already, a number of coastal towns have been affected by sea water inundation, with significant future risks for the 21 million people living in Lagos on the south-western coast. Estimates indicate that a one meter rise in sea level could cause 75 per cent of the land in the Niger Delta to be lost, threatening millions of livelihoods. Furthermore, rising sea levels are causing saltwater intrusion/salinization and pollution of existing surface and groundwater resources in coastal areas, damaging coastal aquifers and coastal industry.
Existing scholarship has not reached a consensus on the precise causal relationship between climate change and the risks of violent conflict. While some studies have posited a direct cause-effect impact between higher temperatures and violence,\textsuperscript{290} there is a widely accepted view that climate change tends to act indirectly as a “threat multiplier,” exacerbating tensions over resources, contributing to socioeconomic grievances, weakening livelihoods, and causing displacement, all of which could add to risks.\textsuperscript{291} Here, broad generalizations about the climate-security nexus are typically unhelpful; instead, this section examines national and subnational data and the various interlinkages — direct and indirect — between environmental changes and violent conflict.\textsuperscript{292} It finds that there is some evidence of climate-driven trends affecting: (1) farmer-herder conflicts; (2) recruitment into non-state armed groups; and (3) population movements that may heighten tensions. These effects are not always direct and in some cases are open to multiple interpretations, underscoring the need for even greater localized research in the future.

Resource pressures and farmer-herder violence

The principal argument linking climate change to the recent rise in farmer-herder conflict concerns desertification and rainfall variance reducing the land used for agriculture and cattle raising. Additionally, desertification has prompted a shift in pastoralist routes across northern Nigeria, bringing herding communities into contact with new farming communities.\textsuperscript{293} In broad terms, this analysis follows the neo-Malthusian argument that shrinking resources and growing populations create new strains on societies, eventually leading to violent conflicts.\textsuperscript{294} But there are also indications that environmental changes are playing into deeply rooted social and political animosity between communities, contributing to the dramatic rise in loss of life in recent years.

Roughly 75 per cent of northern Nigeria is now desertified, while in the north-eastern part of the country the number of annual rain days has dropped by 50 per cent.\textsuperscript{295} The lifestyle of the herder Fulani community — which comprises
The bulk of the 15 million herders in Nigeria — is strongly affected by these environmental changes. Loss of grassland means they must move further south in search of vegetation. Some of this migration is permanent, meaning herders spend the entire year in the Middle Belt and southern regions of Nigeria, rather than moving in a North-South pattern over the seasons. Moreover, erratic rainy seasons have disrupted long-standing arrangements under which herding is staggered with planting and harvesting seasons, meaning today's herds are often destroying crops rather than fertilizing them. According to one study, environmental decline and resource scarcity ranked as the prime reasons for herding communities to venture further southwards in their migration patterns. Farmers too broadly cite conflicts over resources as the main cause of violence with herding communities.

Evidence from the broader Sahel region supports the finding that climate change is driving risks of greater farmer-herder conflicts in Nigeria. In Burkina Faso, for example, desertification is causing herding communities to remain around contested water points longer into the migration season. A combination of desertification, erratic rainfall, and human-caused environmental degradation in Mali has contributed to greater competition over land resources and a spike in violence (though, of course, other factors play a role there too). In Chad, the cycles of violence between farmers and herders appear to follow the same pattern as in Nigeria.

Tensions between farmers and herders take place amidst the broader identity politics of Nigeria and the worrying increase in the notion of “indigeneity” in parts of the country. With a constitutional status meaning “original inhabitant,” the concept of indigeneity is used in Nigeria to provide privileged access to key natural resources; it has also been in the background of some of the country’s worst violence. In a country with a deep North/South and Muslim/Christian divide, these dynamics play out at all levels of the country, from the presidency to the smallest farming community in the North. In interviews with experts, many pointed to growing anti-Fulani sentiment in this context, suggesting that shrinking land resources are contributing to a sharpening of xenophobia. It also intersects with the rapid rise of violent extremism in Nigeria, where the Muslim Fulani populations are often accused of supporting armed groups in the region, despite often being the target of attacks by Boko Haram and others.

As the following chapter on the Government’s response describes, farmer-herder conflicts are directly connected to the issue of governance of resources and the highly politicized nature of land tenure across Nigeria. According to experts, three interrelated drivers of the current spike in violence can be identified: (1) environmental degradation in the far north, causing encroachment into the Middle Belt grazing grounds; (2) militia attacks that raise tensions amongst the communities; and (3) poor governance, including the failure of the Government to punish past perpetrators and some states’ passage of new grazing laws (see below). As the population of the country continues to swell — demanding greater use of land for agriculture — climate change-desertification and erratic rainfall plays a “threat multiplier” role, rendering these tensions more acute.

### Impacts on livelihoods and recruitment by non-state armed groups

There is wide-ranging and detailed evidence demonstrating the direct and significant impact of climate change on Nigeria’s economy, with some links to higher conflict risks. Largely rain-fed crops constitute more than 90 per cent of the agricultural sector, and some areas are already experiencing a loss in length of growing days by 20 per cent. There is some evidence too that animal production has been negatively affected by environmental changes, which have caused greater disease, difficulties
in food storage, and a resulting 20 per cent drop in livestock production in some areas. Land degradation as a result of sandstorms, desertification and desert encroachment is increasing poverty and unemployment in many of the northern regions, while extreme weather has destroyed hundreds of millions of dollars in productive assets. Looking forward, Nigeria's vulnerability to climatic factors could result in a loss in the country's Gross Domestic Product (GDP) of between 6 per cent and 30 per cent by 2050, worth an estimated USD $100 to $460 billion. These changes are the result of interrelated trends: desert encroachment, sea level incursions into coastal farmlands, shifting agricultural practices to accommodate drier seasons and the need to feed a rapidly growing population.

With 25 per cent of the population and the bulk of the oil and gas industry located along the southern coastline, Nigeria's economy is also extremely vulnerable to sea level changes and extreme weather. For example, the oil production sector incurred over USD $630 million in losses from the 2012 flood event due to lost production and infrastructural damage. The Federal Ministry of Environment has calculated that three feet of sea level rise would cost Nigeria USD $43 billion in GDP over thirty years. Industry watchers and officials believe the added production costs, drops in investment and lost or deferred production could be extraordinarily damaging in the near future.

Recent research has demonstrated the links between livelihoods and the ability of non-state armed groups to recruit new members. In the Lake Chad area, for example, Adelphi has described a feedback loop between armed conflict and socioeconomic conditions. Years of conflict, poverty and human rights abuses by state and non-state actors have created volatile conditions for the communities around Lake Chad, rendering them more vulnerable to new shocks. Severe droughts over decades caused significant displacement from the area, while erratic rainfall seasons have left communities unable to consistently plant traditional crops. Lacking employment alternatives, residents of areas strongly affected by livelihood losses are more likely to join groups like Boko Haram; indeed, several studies have pointed to a direct link between economic marginalization/losses and Boko Haram's strength.

It is worth highlighting again the cyclical nature of this dynamic. Boko Haram's presence in Nigeria has contributed to a reduction in agricultural output, weakening livelihood options for many of the poorest communities in the country. At the same time, diminished livelihoods appear to increase the ability of the group to draw in new recruits. Poor governance and a heavy-handed response by the Nigerian State has played into the disenfranchisement of many northern Nigerian communities, again driving the cycle of marginalization and a willingness to pursue violence.

However, there is an important note of caution here. Debate between scholars concerning reasons for recruitment into groups like Boko Haram continues. Some empirical studies based on surveys of affected communities do indicate that high levels of unemployment and loss of livelihoods render young people more susceptible to joining Boko Haram. Others, however, theorize that heavy-handed counterterrorism operations and highly porous borders across the Sahel allow Boko Haram to build its strength. These findings are broadly consistent with Adelphi's conclusions that climatic factors are exacerbating long-standing tensions and generally increasing the resort to violence.

### Migration and displacement

Nigeria resides at a crossroads of the Sahel and has been traversed by migratory and displaced populations for centuries. As discussed above, there is evidence linking the impact of climate change on the migratory patterns of pastoralist communities. Where farmer-herder conflicts result in displacements — and there are credible reports of hundreds of thousands of people displaced in the past two years alone — this
study concludes that climate change is playing a contributing role.326 Similarly, the hundreds of thousands of people displaced by Boko Haram and other armed groups can be tangentially linked to some of the climate-driven factors that affect livelihoods and drive recruitment into those groups, as set out above.

However, the evidence is less clear when it comes to other forms of migration and displacement; even climate-driven population movements do not necessarily increase the risks of violence, though certainly do create greater vulnerable populations.327 One potential area where the link may be clearer is that of urbanization: as livelihoods in northern and central Nigeria have become more precarious, migration to Nigeria’s major cities has increased in recent years, with thousands of people arriving each week in Lagos alone.328 Chronic food insecurity across much of the Sahel has contributed to this trend of urbanization, where highly vulnerable farming and herding communities come in large numbers to the cities.239 The bulk of this migration is unplanned and cities are ill-prepared, meaning large numbers of migrants are forced in live in informal settlements and rely on sporadic employment; these populations are some of the most vulnerable to economic shocks, and also susceptible to recruitment into criminal gangs and other violent groups.330 Large-scale influxes of migrants have further led to identity based frictions with residents, as seen in the slums of Bauchi, Kano and Kaduna, where violence is increasingly occurring along ethnic and religious lines.331 As the OECD and others have noted, violence of one kind (e.g. domestic or gang) tends to spread into other forms, contributing to an ecosystem where the risks of violent conflict tend to grow.332 In Nigeria’s sprawling urban centres, some experts are predicting the risks of increased violence will grow dramatically in the coming period.333

Another growing issue is that of submerging coastal land as the sea levels rise along Nigeria’s coast. When combined with extreme weather, higher sea levels have contributed to massive flooding that has already displaced hundreds of thousands along Nigeria’s heavily populated coastline, displacements that often become permanent due to poor reconstruction efforts.334 These trends are worsening: one study found the homes of over nine and a half million Nigerians could be vulnerable to rising seas by 2050.335

Conclusion: The climate-fragility-cycle

Nigeria presents a complex, interrelated socioeconomic system where changes in one sector can have significant impacts in a distant arena. While the effects are often indirect, rising temperature have played a measurable role in increasing conflicts over natural resources, heightening tensions between pastoralists and farmers, limiting livelihoods of vulnerable populations that may be susceptible to recruitment into armed groups and displacing people from their land. In this sense, climate change may not act as a trigger for conflict but rather an amplifier of risks and vulnerabilities to conflict.336 Worryingly, climate change thus appears to participate in a series of feedback loops driving Nigeria into greater cycles of violence: as livelihoods worsen, people are more likely to resort to violence, causing further damage and displacements in a territory that is rapidly losing arable land.

In this cycle, the Nigerian State is largely perceived as weak and unable to manage the risks of violence in an effective or balanced manner.337 In fact, across a wide range of scholarship, long-standing grievances against the State are cited as one of the most important factors driving conflict in Nigeria, including the rise of Boko Haram.338 Central to conflict prevention is thus the Government’s role in adapting to climate trends, helping to address key sociopolitical vulnerabilities, and meeting the security challenges posed by armed groups on its territory. The following section explores this issue, and the UN’s role in supporting adaptation and prevention.
While State weakness is often at the heart of many of Nigeria’s challenges, this does not imply Government idleness in terms of tackling the impacts of climate change and conflict risks across the country. In fact, a number of measures point to increasing Government efforts to mitigate these dynamics. These can be broadly divided into three interrelated and at times overlapping areas: (1) climate change policies; (2) socioeconomic programming; and (3) conflict prevention or security responses.

Climate change mitigation and adaptation

Addressing climate change is one of President Buhari’s main policy priorities — in fact, one UN expert deems him “the most engaged president in Nigeria so far when it comes to climate issues.” Apart from scaling up its Nationally Determined Contributions connected to the Paris Agreement, Nigeria is also currently revising its national policy on climate change, including more focus on the security dimension. Nigeria was the first African country to issue Green Bonds meant to raise local and international funds for climate change projects, for instance around afforestation and renewable energies. This approach has increased the profile of green projects significantly and will continue to do so as it expands to include further climate-relevant sectors.

Another significant initiative is The Great Green Wall, where Nigeria is part of a multi-country reforestation programme stretching across the width of the Sahara-Sahel region to combat desertification and its impacts on agriculture and livelihoods. The programme is said to have restored five million hectares of degraded land in Nigeria thus far. President Buhari attributes a critical conflict prevention role to this reforestation, describing how restoring barren land counteracts the resource scarcities that are at the core of the farmer-herder clashes. A range of experts interviewed for this project agreed that reforestation and other efforts to combat desertification have reduced the risks of violent conflict between farmers and herders.

These programmes, however, are facing a number of challenges. Reforestation in Nigeria still makes up only about ten per cent of the overall deforestation rate. Vandalism and illegal tree felling, enabled by weak protection laws and poor supervision structures, works against reforestation efforts. In some instances, local communities experience reforestation as a Government intrusion on their land, refusing to engage positively with the Government. Lack of buy-in is also reported at the level of local and state governments,
pointing to a more fundamental challenge for efficient climate policies (or prevention efforts, for that matter). Experts have pointed out that land restoration in Nigeria is almost exclusively through tree planting, lacking important complementary efforts to rebuild rural livelihoods. Given that Nigeria’s decentralized structure grants significant autonomy to the states, federal impetus can only lead to wide-reaching programmes if met with sufficient political will and capacity at the state and local level.

There are also cases where adaptation or resource management approaches backfire. In the 1990s, for instance, the Government constructed two dams on the Yobe River intended to improve irrigation agriculture and water supply for Kano, the biggest city in the North and the second largest in the country. The dams captured 80 per cent of the water that had originally flowed into the Hadejia-Nguru wetland (and later into Lake Chad) — drying up the farmland and pastures of over one and a half million people who depended on the wetland for their livelihoods. Most fishers, farmers and herders in the region lost their economic base and have since relocated to Kano or outside Nigeria in search of alternative income opportunities. There are unconfirmed reports that some joined Boko Haram, which not only underlines how environmentally-based livelihood losses may drive recruitment, but also highlights the crucial role of water (mis)management in these dynamics. In fact, a Government audit of the situation in the Lake Chad Basin found that water governance practices have negatively affected the area and contributed to more resource competition, violent conflict and forced migration.

Socioeconomic programming

Socioeconomic grievances are at the core of many of Nigeria’s conflict risks and constitute an important link between climate change and violence. Economic and socioeconomic programming, therefore, can play a crucial role in mitigating the impact of climate change on conflict risks.

Given Nigeria’s heavy dependence on those sectors that are most vulnerable to climate change, economic diversification is a key measure to reduce the risk of macroeconomic shocks following extreme weather events or prolonged droughts. The Government has attempted to address this through its Economic Recovery and Growth Plan, a medium-term strategy to restore economic stability and revive growth across the country. A main pillar of this strategy is the diversification of the energy sector to include more renewable energy sources like hydro, solar, wind and biomass power as well as nuclear energy. In that way, disasters such as the flooding in 2012 that drastically disrupted the oil industry could have less of an impact on the overall economy in the future.

Strengthening the agricultural sector is a related effort. The Government’s main focus is to raise productivity and boost food production, including by subsidizing agricultural inputs such as seeds, fertilizers, and machinery. Expert assessment of this approach, however, is rather sobering. According to a UN official, Nigeria’s Government invests the least in agriculture compared to other sectors, while placing an undue focus on cash crops instead of staple crops. Many interviewees described this as a short-sighted strategy that merely focuses on short-term mitigation while neglecting long-term climate resilience and livelihood sustainability. “It’s just treating the symptoms and not the cause of the agricultural challenges,” one expert explained, while another added that much more focus needs to be placed on supporting smallholder subsistence farming, as it makes up the bulk of Nigeria’s agriculture and — being mostly rain-fed — is most vulnerable to climate change and shrinking crop yields. Similarly, Nigeria’s 2019 decision to close off land borders and prevent foodstuff smuggling was meant to boost national food production but had the unintended consequence of increasing food prices.

The Government’s economic and agricultural programming thus appears to be having some beneficial short-term impacts in some sectors
but is lacking in the longer-term sustainable investments needed to tackle climate-driven changes across the country.  

Conflict prevention and security responses

The Government’s response to farmer-herder conflicts has been largely security-driven: in the worst affected states, the Government has deployed security forces to contain the violence. While this has contributed to a short-term reduction in insecurity, the inability to maintain troops for longer periods of time, combined with the spread of violence in many areas beyond the reach of the State, has allowed farmer-herder violence to continue to grow over recent years.

Indeed, several experts suggested that the Government’s overriding focus on Boko Haram has meant far fewer resources have been made available for farmer-herder issues.

At the state level, the response has been more focused on reducing the interface between pastoralists and farming communities. In 2017-18, the states of Benue and Taraba introduced laws that banned open grazing in an attempt to curb resource-based violence. The legislation significantly restricted the movement of cattle and required herders to buy land and establish ranches, essentially banning their traditional pastoralist practices. It prompted a massive outflow of herders and their cattle into neighboring states, sparking deadly clashes with sedentary farmers there. The laws were then partly suspended following the increase in violence, though may have contributed to longer-term tensions amongst communities.

At the national level, the Government has tried to tackle farmer-herder conflicts through mediation and resource management. Government-led dialogue promotion between farming and herding communities has resulted in some reductions in tensions but has thus far been fairly small scale and ad hoc. Similarly, efforts at establishing “cattle colonies” that assign herding communities to specific areas have not resulted in major changes to the farmer-herder dynamics. More ambitious is Nigeria’s National Livestock Transformation Plan, designed to bring about an incremental shift from open grazing to ranching, reducing the movement of herding communities, modernizing livestock management and improving agricultural productivity. Embedding this into a broader regional strategy is seen as crucial, but long-standing plans for an African Union-led approach to managing Fulani transnational migration have not yet been put into action.

Here, it appears the Government has learned a lesson from the state level bans on grazing, focusing instead on incremental changes to herding areas that could gradually reduce the negative interfaces between herders and farmers. In the short term, however, it does not appear that farmer-herder conflicts are abating as a result of these new laws. Some have suggested that this points to a weakness in the resource-scarcity argument, whereas more structural issues around marginalization, weak State capacity and religious polarization are more causally important.

There is a growing recognition of the centrality of livelihoods to the issue of recruitment into Boko Haram. In response, the “Buhari Plan” has allocated significant resources for rebuilding in Boko Haram-affected areas, in the hopes of stemming future recruitment. This strategy was informed by a Recovery and Peacebuilding Assessment (RPBA) undertaken in 2016 in a concerted effort by the Government, the European Union, the UN and the World Bank (see below). The RPBA still serves as the main joint analysis for the north-east, but there have been calls for an update and an improved formulation of peacebuilding needs in the area.

Additionally, Nigeria is part of a recent regional stabilization strategy led by the Lake Chad Basin Commission. Focusing on the broader Lake Chad area, this strategy aims at socioeconomic recovery of conflict affected areas, and at improving service delivery and environmental sustainability — with an emphasized focus on climate change. According to the Commission, “all future investment in socioeconomic development must be climate-proofed: climate change fragility assessments should underpin...
the planning process to build resilience to shocks, support adaptation and mitigation, and ensure long-term sustainability. While rebuilding conflict- and climate-affected livelihoods is a key measure to curb recruitment into violent extremist or other armed groups, many projects are still in their infancy, which complicates a robust assessment.

In sum, there appears to be a growing recognition at the Government level that socioeconomic programming may hold more promise in addressing some of the major sources of insecurity in northern Nigeria. Longer-term incremental efforts to adapt agricultural and herding practices may hold some promise, particularly if it is paired with socioeconomic programming that addresses the issues of marginalization and poverty underlying many of the conflicts. In fact, these appear more likely to address the ways in which climate change is affecting security risks than the shorter-term efforts to curb grazing or deploy troops to conflict-prone areas.

**UN efforts**

The situation in Nigeria presents one of the most pressing challenges for the UN to put conflict prevention meaningfully at the forefront of its work, especially considering the already large number of violent conflicts across the country. In terms of addressing the violence and its root causes — and including the role of climate change — the UN is engaging on several fronts.

**CROSS-CUTTING ANALYSIS**

Understanding the specific conflict drivers in each context and the role that climate change might play is a key prerequisite for efficient responses and the UN has significantly increased its capacities for such cross-cutting work. According to a UN official, the RPBA for the northeast (of which the UN was a part) was the first time that a connection was made between the security situation in the Lake Chad region and climate change. However, several interviewees suggested that these kinds of reports needed to be more regularly updated and more clearly linked to revisions in peacebuilding priorities for the UN system in the region. The presence of a Peace and Development Advisor in the Resident Coordinator's Office is seen as an important resource in this regard.

The United Nations Office for West Africa and the Sahel (UNOWAS) too is focusing a bulk of its work on understanding national and particularly regional conflict dynamics, adding an important dimension as climate and transhumance issues clearly stretch across national boundaries. In his briefings to the Security Council since 2017, Special Representative of the Secretary-General Mohamed Ibn Chambas has been giving updates on the situation in the Lake Chad region, following Resolution 2349 that also called for the consideration of the effects of climate change on the region's stability. This has been a major entry point to convey analysis about the climate-security nexus to the Council. In 2018, UNOWAS released a comprehensive report about pastoralism in the Sahel, including the role of climate change in increasing resource pressures and presenting a range of recommendations for UN country teams. As of early 2020, UNOWAS' mandate explicitly calls for the organization to account for the role of climate change in driving country risks in its work, which is beginning to take shape in a new assessment project.

UNOWAS is currently conducting community-based field research in several Sahelian countries, soon including Nigeria, to explore the actual, on the ground impact of climate change on the security and livelihoods of communities. This analysis will inform the work of the Economic Community of West African States (ECOWAS), UN country teams and other regional partners, and will highlight the need to make climate adaptation plans more conflict-sensitive.

**STABILIZATION OF THE LAKE CHAD AREA**

According to a UN official, UNDP was instrumental in the drafting of the regional stabilization strategy that is currently being rolled out in the Lake Chad Basin. Starting in 2019, UNDP has been supporting Boko Haram-affected areas
through a regional stabilization facility that acts as a “rapid response mechanism to help the local authorities curtail the ability of Boko Haram insurgency by restoring and extending effective civilian security, [to] improve the delivery of basic services and livelihoods.” Despite its short-term focus, the USD $100 million project is said to help lessen the appeal for further recruitment and will be extended to provide longer-term support for community resilience.

The Lake Chad area will further see increasing engagement through the UN’s New Way of Working, where humanitarian and development actors jointly work towards collective outcomes that were formulated together with the Government. The outcomes include enhanced service delivery, food security, livelihood support, social cohesion and reconciliation. A nexus adviser helps the UN and the Government coordinate and operationalize the collective outcomes towards state level policies. While this work is in progress, there is a strong need to better link existing programming and financing to the outcomes.

Stabilization work in the north-east is crucial to counteract the mechanism by which climate-driven livelihood losses pose an additional entry point for Boko Haram and other armed groups to recruit new members. The communities in the region are facing the double burden of ongoing violent conflict and the impacts of climate change on their agricultural livelihoods; any livelihood programming needs to account for these heightened vulnerabilities, finding ways to sustainably build back rural economies in order to curb recruitment. As recruitment numbers into Boko Haram are, however, hard to track, determining the efficacy of such countermeasures remains a challenge.

**FARMER-HERDER CONFLICTS**

Responding to the spike in violence, a substantive part of the UN’s prevention work in Nigeria is centered around farmer-herder conflicts. This has involved multiple initiatives: (1) the UN was actively involved in the discussions around the National Livestock Transformation Plan, setting up a number of guiding principles to reduce tensions and build social cohesion among communities; (2) the Peace and Development Advisor created a UN-led coordination forum, bringing together all stakeholders (including representatives from farmer and herder associations) to develop action plans around the issue; (3) funded by the UN Trust Fund for Human Security and the Peacebuilding Fund, new projects were introduced in several states that are affected by the violence, looking to reduce tensions around land; (4) Human Rights Advisors have been deployed in a number of states to provide early warning and report on incidences of human rights violations; (5) UNDP is engaging in Benue, Nasarawa and Taraba states with a prevention-oriented project that supports dialogue and social cohesion, building mutually beneficial economic relations between the two groups, and attempting to identify future grazing patterns to provide enhanced early warning; and (6) UNOWAS’ comprehensive analysis of farmer-herder dynamics broadly informed the work of all relevant UN agencies in-country and was followed up by a recent workshop that brought together farmer and herder representatives from different countries to discuss best practices for local level conflict resolution and prevention. A best practice document is expected to be released mid-2020 and will help guide the UN’s prevention work going forward.

**FOOD SECURITY**

As the deficiencies of the agricultural sector and increasing climate impacts are exacerbating food insecurity across Nigeria, counteracting these developments will be crucial to prevent these grievances from tipping over into protests or violence. UNDP is conducting a food security project that addresses the agricultural deficiencies to make food production systems in Nigeria more climate resilient. This involves introducing climate-smart agricultural practices to communities (to increase yield and build adaptive capacities), improving sustainable land and water management and helping develop better storage facilities.
Lessons and Recommendations

Nigeria presents a complex terrain of interconnected social, political and economic factors, contributing to the risks of insecurity. This study acknowledges the difficulties in establishing direct, definitive causality when it comes to identifying the links between climate change and some of these conflict drivers. However, the findings indicate the importance of deepening our collective understanding of how environmental changes are contributing to risks, and how international, national, and local responses can either mitigate or exacerbate them. Drawing on the above findings and a range of interviews with experts in and on Nigeria, the following key lessons and recommendations are offered.

1 Local-level analysis and localized programming.

The links between climate change and violent conflict are complex and vary across contexts, both between and within countries. In the case of Nigeria, rising temperatures, more variable rainfall and extreme weather affect the North and the South differently — with different localized security impacts. Any risk-informed planning, therefore, needs to be based on careful, context specific analysis, taking into consideration subnational variations both of climate change impacts and the institutional capabilities that exist in each area. Equally, the UN's programmatic responses appear best placed at the local and state level as opposed to the federal, in order to: (1) match local climate-security dynamics with well-tailored localized responses; (2) engage with those levels of governance that hold major legislative and implementation power in Nigeria's federated structure; and (3) effectively use the leverage and knowledge that the UN already has at the local level. Engaging at subnational levels has already proven transformative in a number of UN adaptation and prevention projects and is a key lesson for future programming.

2 Conflict-sensitive climate adaptation programming.

As this and other studies have described, climate change acts as a threat multiplier in many contexts, feeding into pre-existing and more structural conflict risks such as socioeconomic marginalization, widespread unemployment and inequality. Any approaches to climate adaptation, both by the Government and the UN system, need to take these conflict risks into account, making sure that adaptation measures do not protract or even exacerbate existing grievances. Instead, such programming needs to actively
address tensions and inequalities, as experts point to the importance of trust building, social cohesion and inclusive governance as key factors for successful adaptation and peacebuilding.400

Climate-sensitive conflict prevention approaches. Conflict prevention strategies also, however, need to account for the role of climate change in driving risks. This means looking at the ways in which environmental changes are affecting natural resources and livelihoods, changing the migration patterns of communities or driving urbanization. Addressing farmer-herder conflicts solely from a security perspective, for instance, might mitigate the violence in the short term but does not address the underlying root causes and ensure long-term prevention. Conflict prevention approaches thus need to be informed by a climate lens, while more generally coordination should be enhanced between programmes that tackle climate change, development, security and peacebuilding issues in Nigeria.401

Develop predictive capacities. The changes occurring in Nigeria far outstrip any predictions based on past trends. This is, in part, because of the combination of factors — rising temperatures, erratic rainfall, changing agricultural practices, and population growth. Greater investment in predictive systems that can model changes based on anticipated shifts in phenomena like rainfall, including how they might affect migratory patterns in the immediate term, would greatly assist prevention efforts around farmer-herder conflicts in particular.402
5 Governance matters.

Governance is a key mitigating factor between the impacts of climate change and violent conflict. It is the Government’s response to climate-driven resource shortages or natural disasters that influences whether their consequences increase violence or not. Improved resource management, large-scale mobilization of funds and better service delivery are needed for Nigeria to better adapt and decrease its vulnerability to climate change. Efficient governance, however, is not just done by the State, but is also a community responsibility. Looking for opportunities to build local resilience and governance capacities as well as strengthening local conflict resolution mechanisms is crucial in this regard, particularly in areas in the North where climate change is having a major impact and Government reach is limited.

6 Promote and localize education.

Several experts point to the need for localized information campaigns to increase awareness around climate change and especially its links to violent conflict. Making the information easily accessible, e.g. by translating material into local languages and collaborating with NGOs on the ground, are seen as important ways to promote education around this issue. This also includes educating communities about sustainable resource management and climate-smart agricultural practices, helping farmers increase their productivity and better adapt to environmental changes. Investments are needed to build more weather stations in order to be able to provide farmers and herders with meteorological information about changing rainfall patterns and help them better prepare for shifting conditions.

7 Empower women and youth.

As the most affected by climate change and violent conflicts in Nigeria, women and youth should be meaningfully put at the forefront of possible solutions. As one interviewee put it, young people are connected to the conflict in a number of ways, “as conflict actors, as victims, and as first responders,” and should therefore be central to conflict resolution and prevention approaches. This entails their participatory inclusion in planning, programming and implementation matters, and enhanced cooperation with and financial support for youth- and women-led NGOs and civil society organizations.

8 Mobilize climate-finance to reach remote and conflict-affected areas.

Across a wide range of experts, there was clear agreement that limited resources hampered both development and humanitarian responses. Many of the most vulnerable areas of northern Nigeria are still largely cut off from international support. Here, Nigeria offers an opportunity to mobilize climate-related financial support to also help reduce the risks of conflict.
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