



# LUND UNIVERSITY

## Drought and Extremism

How Climate Change Impacts the Power of Boko Haram in  
Northeastern Nigeria

# Abstract

Findings about the relationship between climate change and conflict has, since research on the topic started in the late 1990s, been inconclusive. A more recent statistical study has however concluded that drought might prolong conflict under certain conditions. To further our understanding of this relationship, this single-N case study has investigated these recent findings on an extreme case, which is the Boko Haram insurgency in Northeastern Nigeria. The insurgency was pushed back in 2015 by a multilateral government response but has in spite of this remained a threat in the region as of 2020. This study reveals a complex chain of events which has led to Boko Haram still being able to operate, thus prolonging the conflict. Structural conditions coupled with drought, in combination with deliberate Boko Haram action's serve to make this region increasingly fragile to further climatic shocks. By placing drought within the causal chain of events this study elevates the common perception of drought being a “threat” to an integral part of the process of prolonging conflict and increasing instability.

*Key Words:* Climate Change, Conflict, Environmental Security, Drought, Boko Haram, Nigeria, Lake Chad.

*Words:* 11 045

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# List of Abbreviations

HDI – Human Development Index  
BH – Boko Haram  
ISWAP – Islamic State on the West African Peninsula  
NGO – Non-Governmental Organization  
IPCC – Intergovernmental Panel on Climate Change  
IMR – Infant Mortality Rate  
HDI – Human Development Index  
MNJTF - MultiNational Joint Task Force  
IPCC – Intergovernmental Panel on Climate Change

# 1. Introduction

In 2015 Barack Obama made a presidential remark where he stated that severe drought helped create the instability in Nigeria which made Boko Haram emerge (Obama 2015). Since then Boko Haram has been pushed back by a coordinated multilateral response and lost control over almost all the territory it controlled in 2015 (Torbjörnsson & Jonsson 2017, p. 21). However, recent developments have showed signs of Boko Haram still being a significant threat and might be a long-term one as well (The Guardian 2020; Torbjörnsson & Jonsson 2017; Pieri and Zenn 2016). The persistency of the Boko Haram insurgency to this very day implies some sort of mechanisms in place that allows prolongation. While the links between drought and conflict have not been sufficiently understood by the research community, a recent study concluded that drought in some cases might prolong conflict (Uexkull et al., 2016a). It is however clear that this development is not due to one mechanism alone. Religious divides, along with structural factors such as poverty and mass-unemployment serve as powerful mechanisms (Pieri and Zenn 2016). Oil and gas connections in the Lake Chad region has recently brought up as another reason (Omenma 2020). This study investigates whether drought might be one of these mechanisms.

It is widely recognized that human actions are the main driver of current climatic change which is pushing the earth's system outside of the stable geological era called the Holocene, into a new era defined by human impact – the Anthropocene (Rockström et al., 2009). The Pentagon had the year before President Obama's remarks stated that climate change acts as a threat multiplier and constitutes a threat to US national security (Davenport 2014). The links between climate change and conflict were starting to get noticed by this time, mainly from politicians and NGO's (Richardson 2015; Obama 2015; Middendorp and Bergema 2015). In many ways, the policy-community preceded the academic community in raising clear warning flags. However, scholars have investigated this link since 1998 (Busby et al., 2013, p. 134; Hauge and Ellingsen 1998) but found nothing conclusive regarding whether the link is there or not (Buhaug and Tiesen, p. 45-46). This scientific conundrum has been studied more heavily in recent years with the help of predominantly statistical studies (Ide 2017, p. 1-2). A lot of these studies lacked the ability to come up with a clear conclusion in different contexts, something the study by Uexkull et al. has remedied with a new data model which takes into account contextual factors on a new level. The authors conclude that climate change does not have a

definitive impact on conflict, but in some cases, it might prolong it. The study focused on ethnic civil conflict, which is an important component in the case of Boko Haram as well since around 80 percent of its fighters emanate from the Kanuri ethnic group in northeastern Nigeria (Uexkull et al., 2016a, p. 12391; Pieri and Zenn 2016, p. 84). Thus, this study also argues that the findings of Uexkull et al. is relevant when applying it to an extremist insurgency as in the case of Boko Haram.

According to these finding's climate change acts both as a threat multiplier and also has a tendency to make conflict's more drawn out. This is enough reason for concern and invokes a sense of hurry, since we have known now for a while that climate change is predicted to hit the developing world first, where also a lot of conflict hot spots are located (Buhaug and Tiesen 2012, p. 45-46; The Guardian 2013).

### **Purpose and Research Question**

It is clear that climate change affects conflict, however in a context sensitive way. Recent research on the link between climate change and conflict have primarily been statistical studies. I will therefore look at the contextual factors used in Uexkull et al.'s (2016a) statistical study, in a qualitative way. The purpose is both to test what they arrived to in a statistical way on one single case, but also to capture the complexity of the links between climate change and conflict. The aims of this study are firstly to explain the causal chain between drought and conflict and secondly, to apply the conclusions of Uexkull et al.'s study unto a conflict involving an extremist group and lastly to generalize this process. Thus, my research question will be as follows:

*What is the relationship between drought and the prolonged Boko Haram insurgency in northeastern Nigeria?*

## 1.2 Background

To investigate this topic, some background on Nigeria and Boko Haram is needed. This section is divided in two parts, with structural conditions in Nigeria coming first and an introduction to the development of Boko Haram following that.

### 1.2.1 Nigeria, Hazards and the Shrinking Lake

An important factor in investigating whether a country might handle climatic shocks good or bad involves looking at some numbers as well as context. Nigeria is estimated to have up to 50 million unemployed or underemployed young people. 63 percent of Nigerians lived on less than 1 dollar a day in 2010 and the poverty is particularly widespread in the northern regions. (Torbjörnsson and Jonsson 2017, p. 15). Nigerian education also shows some worrisome statistics with the highest number of out-of-school children in the world - around 13,2 million (Ekhomu 2020, p. 239) On the Nigerian side of Lake Chad literacy rates are around 30 percent, which is less than half of the Nigerian average (Nett and Rüttinger 2016, p. 11). However, when looking at numbers associated with the overall welfare of the society it is important to remember that the country is divided into three political entities. The North lags behind the Eastern and Western part in almost all factors portraying societal well-being, therefore only looking at Nigeria as a whole, when looking at statistics, will not give a clear picture (Ekhomu 2020, p. 238; Jacob 2012, p. 13-15). To give an example, Human Development patterns in the North are lagging behind by miles to that of the southern parts. The region around Lagos has a HDI between 0.65 and 0.69 while the northern parts has a HDI between 0.41 and 0.44, which is among the lowest in the world. (UNDP 2019, p. 134; UNDP 2015). All the four countries around Lake Chad, except Cameroon, actually scored lower on the HDI list in 2019 compared to four years before (UNDP 2019)<sup>1</sup>. If we continue to look at numbers, The Infant Mortality Rate (IMR) in Nigeria is currently at 62 deaths per 1000 live births, which places it in the bottom half of all the worlds countries, along with other developing countries (UN 2020; UNDP 2019, p. 41).

Duly noted, Nigeria is severely divided in terms of its human welfare, with the North scoring lower than the country average in almost every aspect. The climatic risks are also heightened in the North, due to this part of the region being part of the Sahel savannah, which is prone more extreme drought than the rest of the country (Ekhomu 2020, p. xxii; Adeaga

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<sup>1</sup> Niger (188, 189), Chad (185, 187), Cameroon (153, 150), Nigeria (152, 158).

2011, p. 6). Between 2014 and 2018 The FEWS network noted that the most common hazards across Nigeria were dry spells or erratic/delayed rainfall (ranked 1<sup>st</sup> 2017 and 2018 and 2<sup>nd</sup> 2016, 2015 and 2014) while crop pests seem to be the 2<sup>nd</sup> most important hazard. In northern Nigeria the region average hazard in 2018 was insurgency, however (USAID 2018, p. 5-6). The area around Lake Chad has become a stronghold for Boko Haram activity in recent years while also being the area that is the most vulnerable to climate change within Nigeria (Ekhomu 2020, p. xxii; Nett and Rüttinger 2016, p. 13). Lake Chad was some 50 years ago a body of water that covered 25 000 square kilometers while it as of now covers around 500, equal to a decrease of around 90 percent (USAID 2018, p. 31). This decrease is due to a series of droughts during the 1970s and 1980s as well as increased human activities (Musa et al., 2008, p. 1; Okpara et al., 2015, p. 312). This is taking a hard strain upon agriculture, livestock and fisheries which in turn affects people's livelihoods and threatens their economic and social well-being, without the government having been able to solve the issue (Musa et al., 2008, p. 1). It was identified in 2003 as one of the lakes at greatest risk of sociopolitical stress (Okpara et al., 2015, p. 312). In the current state of the lake, supply of water is limited to 500 m<sup>3</sup> per person per year. Another factor contributing to water scarcity in this already strained situation is the change from cultivation of low-water-intensity-crops such as wheat to high-water-intensity-crops such as rice (Okpara et al., 2015, p. 313). This area, mostly within Borno State, are home to the Kanuri Ethnic group whom Boko Haram also recruits most of its fighters from (Britannica 2020b; Torbjörnsson and Jonsson 2017, p. 46).

## 1.2.2 Boko Haram

*Jama'atu Ablus-Sunnab Lidda'Awati Wal Jihad*, commonly known as Boko Haram<sup>2</sup>, has since 2009 been in open conflict with the Nigerian state, claiming over 35 000 lives as a direct consequence (Ekhomu 2020, p. 1 & 20). The insurgent movement was founded in 1995 with the aim of providing services to the poor, widows and to vagrant children and was first led by a cleric named Malam Lawan Abubakar. When he relocated a new young charismatic leader by the name Mohammed Yusuf was chosen in 2002. The radicalization of the movement first came when Yusuf met Mohammed Alli, who had come into prominence in Afghanistan under the Taliban movement. Alli, a devout fundamentalist, strongly believed western education only led to secularization and westernization. He urged Yusuf to change society and begin by becoming a jihadist himself, along with his group (Ekhomu 2020, p. 1-5).

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<sup>2</sup> The name of the group translates into Boko (western education) Haram (forbidden).



All northern Nigerian states had by this time implemented some form of Sharia law (U.S. Dep. Of state 2008). Gaining momentum among the populace Yusuf supported Senator Sheriff, with the precondition of adopting a stricter version of Sharia Law in Borno state. The promise was not held, which further reinforced the belief that he and his group should have nothing to do with the government (Ekhomu 2020, p. 6-7). The group was growing quickly and had a strict narrative appealing to some northern youths which made them willing to do anything to further the movement. The Borno State government made several attempts to hinder the groups growth by banning Yusuf from preaching in several mosques as well as denying him television and radio appearances, but they made little use (Ekhomu 2020, p. 16). The jihadi group quickly became an existential threat to the Nigerian nation after this. The group grew large enough to change its tactics from guerrilla to conventional warfare and held a territory larger than some European states by 2014. The growth was made possible by an absence in serious governance and grew proportionally where state function was deficient (Ekhomu 2020, p. 19). In 2015 a more coordinated government operation by the name of Multinational Joint Task Force (MNJTF) began to push Boko Haram back. Foreign aid in the form of military equipment allowed the Nigerian Army to efficiently fight back the insurgency and re-take almost all the lost territory (Torbjörnsson and Jonsson 2017, p. 21). Around this time the group started rebranding themselves as Islamic State in West Africa Province (ISWAP or BH-ISWAP hereafter) and a year later Daesh appointed a relative moderate named Abu Musab al-Barnawi as leader, in 2019 replaced by Ba Idrisa. However, the previous leader Abubakar Shekau refused to step down and thus two factions were created (Torbjörnsson and Jonsson 2017, p. 21-22; Zenn 2020). Since 2016 a stalemate reigns, with the Shekau faction mainly attacking civilian targets and the ISWAP faction primarily targeting police and armed forces. Shekau's faction might cause more harm in the short term while BH-ISWAP poses the biggest long-term threat (Torbjörnsson and Jonsson 2017, p. 4). The insurgency developed into an international sect in the period between 2009 and 2015, due to its members involving citizens from four countries. In the early stages the government could have handled it as a local affair with a localized response. However, it quickly became clear after the bombing of the UN house on august 26<sup>th</sup> 2011 that the conflict had become global (Ekhomu 2020, p. 221). Its members are far from only Nigerians, illiterates and poor. Boko Haram today attracts and recruits' individuals from diverse socio-economic, educational, cultural, religious and ideological backgrounds. Thus, they do not represent one single socioeconomic group in society, however, Kanuri's stands for at least 80 percent of the recruits which points to some degree of ethnocentrism (Maza, Koldas and Akzit 2020, p. 5; Pieri and Zenn 2016, p. 84)

## 2. Theoretical Framework

In this part I will first place this study within the broader field of study and later elaborate on how the theory excerpted from Uexkull et al. (2016) will be adapted to a qualitative study.

### 2.1 Previous Research

Research on environmental scarcity and conflict began to take shape in the late 1990s with several large-N studies done on the topic (Hauge and Ellingsen 1998; Esty, Goldstone and Gurr et al., 1998). It is one out of four aspects incorporated into the broader term *environmental security*, as identified by Renner (2006).<sup>3</sup> A noteworthy study named “Climate Change and Conflict” by Nordås and Gledditsch (2007) embodied what the state of knowledge was for a long time: a clear inconclusiveness regarding whether climate change affects conflict or not. This inconclusiveness might be why the interest in this linkage has been low for the peace and conflict science community. Recent research conducted by various organizations such as NGOs, has however concluded that climate change in fact acts as a threat multiplier to conflict and unstable regions (Nett and Rüttinger 2016; Rüttinger et al., 2015; Middendorp and Bergema 2019; CNA Corporation 2007).

Since 2007 the interest in this topic has increased. Several high-ranking policymakers and institutions have started to connect the dots between the potential link between climate change and societal unrest or even war (Ide 2017, p. 1). Among researchers, the most popular method for investigating this phenomenon has undoubtedly been quantitative studies (Ide 2017, p. 4). In 2009 one such study found that higher temperatures are associated with higher civil war frequency in sub-Saharan Africa (Burke et al., 2009). In the concluding remarks the authors expand on the idea that any pacifying effects provided by economic growth and democratization might be outweighed by future warming, which is worrying and points to the relevance of studies in this area. It is also becoming clearer each year that global warming is accelerating at an alarming pace in certain areas. In its fifth assessment report (2014), the Intergovernmental Panel on Climate Change (IPCC) specifically pointed out sub-Saharan Africa as a risk-region, where global warming is predicted to rise even faster than in the rest of

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<sup>3</sup> These aspects are whether environmental scarcity impacts conflict formation, the issue of resource extraction and environmental consequences, environmental impacts of armed conflict and environmental peacemaking. This essay falls under the first aspect.

the world. In Chad, the average temperature had by 2012 in fact already increased by 0.8 degrees Celsius since 1975, which is twice as fast as the rest of the world (USAID, 2012). Researchers are starting to warn that the international community has to be very attentive to climate shocks specifically striking areas of chronic conflict (Uexkull et al., 2016a, p. 12395). The response to this fact has been mixed, but in 2017 the United Nations Security Council actually listed climate change and ecological changes as two, among other factors, that are causing the instability in the region around Lake Chad (UNSC, res. 2349).

While we should be attentive to climate change and conflict in general, the planetary security initiative concluded in a policy brief in 2019 that climate change also increases the likelihood of violent extremism (Middendorp and Bergema 2019). This link was, as mentioned in the introduction, also established by the Pentagon in 2014 and reiterated by President Barack Obama in 2015 (Davenport 2014; Obama 2015). The likelihood of an armed insurrection emerging and taking hold of a region seems to correlate with state fragility and resource scarcity (Nett and Rüttinger 2016). In the case of Boko Haram, several years of drought seem to have increased food insecurity as well as tension, thus allowing the organization to successfully recruit young men to their cause, who lacks alternative means for employment (Sida 2017, p. 17). When discussing terrorism, two scholarly paths can be distinguished. Some argue ideology is key to understanding extremist violence, such as radical Islam, others argue materialist factors, such as political grievance's override any ideological-religious dimension. In this regard I argue similarly to Ayaan Hirsi Ali, a former Muslim who is now among Islam's more prominent critics, who says that "religion merely is a smokescreen for underlying 'real' motivations, such as socio-economic grievances" (Cottee 2017, p. 443).

Early quantitative studies on the topic of climate change and conflict typically relied on country-averaged data or used arbitrarily defined grid cells as units of analysis. These approaches have several limitations. To give an example, the first one masks country-specific variations in environmental and political conditions and therefore might miss localized phenomena. To put in short, earlier research has failed to properly specify the socioeconomic and political context within which climatic extremes can undermine stability and increase conflict risk. Researchers from Uppsala University, the Peace research Institute in Oslo and the Norwegian University of Science and Technology has developed a new method which is able to distinguish these varying contexts. The authors chose to focus on drought, since it according to them is the environmental condition widely assumed to carry the highest conflict potential (Uexkull et al., 2016a, p.12391-12392). The report concluded that the impact of drought on conflict under most circumstances are limited, but under certain conditions can have the

potential to prolong already ongoing conflicts. Drought during growing season increases the risk of conflict involvement for groups with large shares of cropland, as well as increasing for each additional year of growing season drought. The same effect was not seen by predominantly non-agrarian groups. According to their dataset, prolongation of conflict due to drought seems to happen when drought affects a group which is agricultural dependent and also politically and economically marginalized (Uexkull et al., 2016a, p. 12393-12394).

However, climate-induced crop failure does not explain the eruption or prolongation of conflict by itself. Here, the authors refer to the process of grievance to as of why drought might start or sustain conflict. Simply put, the conflict-climate link does not work alone in explaining the connection. Agency, a perception of common identity, and in the case of civil conflict, a belief that the government is to blame for their hardships, is needed for the connection to work (Uexkull et al., 2016a, p. 12391; Gurr 1970). The grievance factor seems to show up quite a lot in the literature about the Boko Haram insurgency. However, greed seems to be present as well. The rich oil and gas reserves in the Lake Chad basin provides the four riparian countries around Lake Chad with enormous incomes. Controlling some parts of this, along with informal trade routes between the four riparian countries, seem to be a profitable strategy by Boko Haram. According to Omenma (2012) this points to a configuration of forces best explained by the “greed-and-grievance” theory (Omenma 2020, p. 182 & 204). While some researchers insist that ideology in the form of radical Islam is key to understanding extremist Islamic groups, I align more with the materialists that points to structural factors instead, such as drought in combination with other factors that tends to lead to grievance’s (Cottee 2017, p. 443).

What seems clear when researching the climate-conflict link is that there are two ways of doing it. Some focus on ethnic civil conflict while others focus on extremist conflict. However, the ethnic civil conflict track is followed mainly by scholars (Uexkull et al., 2016), while the extremist conflict track seems to attract more attention from the policy community<sup>4</sup> (Middendorp and Bergema 2019, Nett and Rüttinger 2016, Rüttinger et al., 2015; CNA Corporation 2007). Thus, more research seems to be needed on the extremist conflict track.

What quantitative research seem to lack is a description of the complex links upon which climate and conflict interacts. The findings of Uexkull et al. are compelling to look at, since they give a nuanced answer to the question’s researchers have been trying to answer since 1998, also with the most comprehensive large-scale test of this relationship as of yet (Uexkull

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<sup>4</sup> Policy-community: think-tanks, NGO’s, governments and research-institutes.

et al., 2016a, p. 12391). They also include conditioning factors that I argue are transferable to qualitative research. I also argue that the conditioning factors Uexkull et al. used to investigate how drought affected ethnic civil conflict are likely relevant when studying extremist conflict as well. I will therefore in the coming section elaborate on their framework and adapt it to a qualitative study.

## 2.2 Coping Capacity and Conditioning Factors

Uexkull et al.'s (2016) study concluded that drought can prolong conflict in areas where there exists a politically marginalized and agricultural dependent group, especially in areas characterized by very low socioeconomic development. Behind that conclusion, some form of process must take place. To examine how this process might look like we need to establish the preconditions for this process to happen. Therefore, I will draw on the findings of Uexkull et al.'s study and use their conditioning factors as variables of analysis. The outline of their framework rests upon an understanding of how some factors affect a society's ability to cope with climatic shocks. What they identify as central factors restricting coping capacity, derived from an IPCC report from 2012<sup>5</sup>, are a low level of socioeconomic development, a history of conflict and limited access to economic and social capital that could facilitate alternate modes of livelihood. With reference to the same study they write that "a groups vulnerability to climatic extremes can be considered as a function of its dependence on renewable resources, the sensitivity of that ecosystem to environmental changes, and the groups coping capacity" (Uexkull et al., 2016a, p. 12391). As seen in the background, Nigeria seem to inhibit a very low coping capacity. In the following segment I will describe and develop their concepts to a degree where it fits a qualitative study of how growing-season drought affects the duration of an extremist insurgency.

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<sup>5</sup> Field C, Barros V, Stocker T, Dahe Q, eds (2012) *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*. Cambridge Univ. Press: Cambridge

### ***Important factors contributing to either stability or instability***

To investigate the link between drought and conflict Uexkull et al. took into account three group-level factors that influence a group's vulnerability and one country-level factor which captures socioeconomic development. These factors are the distinguishing feature of their study, compared to previous ones, which often did not factor in contextual factors such as these. The group-level factors are agricultural dependence, economic development and exclusion while the country-level factor is infant mortality rates (IMR). Agricultural dependence is described as the condition in which large segments of a population are reliant on agriculture for livelihood and thus crop failures due to drought are more likely to cause a devastating impact. In the wake of a drought, low economic development severely limits a population's coping capacity and leave few options of alternate livelihood, in turn increasing the incentives for protest and rebellion. Regarding exclusion they point to the fact that ethnic groups excluded from political representation or subject to outright discrimination are generally overrepresented among actors in armed conflicts. The country-level factor, IMR, in contrast to GDP per capita, directly captures human wellbeing. Uexkull et al. used this factor as a mechanism for identifying the subset of least developed countries. I have, by looking at general factors in the background segment, identified Nigeria as a developing country, thus the country-level factor will not be incorporated in my analysis.

If we consider their conclusion, then the theory development required to conduct a qualitative study might be the following. If the country we are investigating is identified as a developing country, then drought might prolong conflict when it occurs in an area with low economic development, which inhibits groups that are agriculturally dependent as well as politically excluded.

**Table 1.** Drought can prolong conflict in areas in developing countries where these factors exist.

Agricultural Dependence	Low Economic Development	Exclusion
Where large segments of a population are reliant on agriculture for livelihood, crop failures due to drought are more likely to cause a devastating impact.	In the wake of a drought, low economic development severely limits a population’s coping capacity and leave few options of alternate livelihood, in turn increasing the incentives for protest and rebellion.	Ethnic groups excluded from political representation or subject to outright discrimination are generally overrepresented among actors in armed conflicts.

Source: (Uexkull et al., 2016b)

## 3. Methodology

In this section, I will explain the methodological considerations made when conducting this study. First, I will account for what kind of methods researchers normally use to study the topic as well discuss the case study design. This will be followed by a discussion on the case selection, selection of material as well as limitations.

### 3.1 A Need for Qualitative Studies

Recent research focusing on the link between climate and conflict has primarily been conducted in the form of Large-N statistical analyses, which accounts for 60 percent of the research between 2007 and 2015. The second most common is theoretical or review articles (around 18 percent) and the third most common is qualitative case studies (9 percent) (Ide 2017, p. 3). The relationship between climate change and conflict is complex one and quantitative studies often lack the ability to portray complex causal mechanism (George and Bennett 2004, p. 42-43). This points to a need of investigating the findings of various statistical conclusions more in detail.

When developing the method excerpted from Uexkull et al. (2016) I will be investigating the *duration of an extremist insurgency* instead of *ethnic civil conflict*. However, similar to their design, I will still look at growing-season drought in this context. I will conduct a single-N case study and look at the three group-level factors. By looking at the structural conditions and the deliberate actions taken by Boko Haram at each factor, hopefully I will be able to answer the question on what relationship drought has with the prolonged Boko Haram insurgency. I chose this method, as opposed to looking at several cases in a comparative study, for the case study designs strength in addressing causal complexity (George and Bennett 2004, p. 19). This study investigates a process which operate only under certain conditions, with a large number of intervening variables, which also correlates well with what George and Bennett perceives as something the case study design achieves well (George and Bennett 2004, p. 21). Single case studies are however often subject of critique by researchers for having little to none generalizability value. According to Yin (2018) this is due to a misconception about the difference between statistical and analytical generalization. Whereas *statistical generalization* requires further comparison with other cases, *analytical generalization* depends on using a



study's theoretical framework in order to establish a logic that might be applicable to other situations. In regard to this study's aim of generalizability, it develops a theoretical framework which informs us of the relationship between a particular set of factors and events and then implicates that these theoretical propositions might be applicable to situations outside the study, in line with what Yin regards as the process of developing an analytical generalization (Yin 2018, p. 18).

In regard to operationalization, this study follows the operationalizing variables described in the theoretical framework section. The study builds upon Uexkull et al.'s (2016) conclusion that drought might prolong conflict in areas with low economic development whom also are agricultural dependent and politically excluded. In the analysis structural conditions will first be looked at followed by deliberate actions taken by Boko Haram, at each factor.

## 3.2 Case Selection

Why the case of Boko Haram in Nigeria is compelling to test this concept on is due to the fact that 1) the conflict is persistent and 2) the region is at severe risk of drought and has been experiencing recurring drought for decades (Buhaug and Tiesen 2012, p. 44). We do not know exactly why Boko Haram has been able to persist this long, but I argue that drought might have something to do with it. Studies point out that one fraction of the group has significant public support and has built up resilience (Torbjörnsson and Jonsson 2017). It should be noted that this case was chosen as an *extreme case*, with the intention of providing insight for further research on the links between conflict and climate (Flyvbjerg 2006).

Even though the conflict spans the borders of all four countries surrounding Lake Chad, I have chosen to focus on the Nigerian side, due to the fact that 1) Nigeria is where the conflict erupted and 2) The Kanuri's mainly live on the Nigerian side of Lake Chad. The Kanuri's are important to bear in mind when analyzing Boko Haram, since their historic grievances have been incorporated since the start in Boko Haram ideology, as well as being the primary ethnic belonging of Boko Haram fighters.

### 3.3 Selection of Material

The material selected for this study consists of a combination of literature, both from the academic, as well as from the policy community. This study primarily uses secondary sources, such as books, reports and newspaper articles. Some primary sources are used such as statistics, for creating context (Höglund and Öberg 2011, p. 37). However, as noted in the data used for Uexkull et al.'s study, statistics and primary sources alike are lacking in the region of analysis, which prompts this study to primarily be based on previous research (Uexkull et al., 2016a, p. 12392).

### 3.4 Limitations

In this study I will limit myself to focus primarily on the conditioning factors provided in the segment describing the theoretical framework. The analysis will not provide insight on the situation in the neighboring countries Chad, Cameroon and Niger. The response on the insurgency from some of these countries will however be touched upon. The analysis will also touch upon some other theories such as the greed-and-grievance theory and structural violence. These theories are, however, not part of what this study aims to find out and will thus primarily be touched upon as a way of providing the necessary context for the conclusion of the study. It should be noted that temporal dynamics is hard to bring forth in analyzing this case, since there is a severe lack of primary data sources. It is important to also point out that few primary as well as secondary sources are available on the Kanuri ethnic group, which has led this analysis to have more of a broad focus upon the Muslim groups of the North, with a special focus on the Hausa-Fulani and Kanuri's.

## 4. Analysis

The analysis first starts with some brief information about ethnic and structural conditions in the past leading to a Boko Haram which mainly uses religion as a rallying factor in its efforts of recruiting new individuals, as well as a complex system of various incentives. After that the main part of the result follows.

### 4.1 Beyond Ethnocentrism and the Capitalization of Structural Conditions

Nigeria has a long history of ethnic conflict anteceding British colonial rule. When the British colonialized Nigeria they utilized a system of ethnocentrism which, according to some scholars, not only reinforced ethnic divisions, but even contributed to a foundation upon which the creation of a unified Nigeria was made even harder. Since independence Nigeria has consisted of three political entities: The eastern part, western part and northern part. Ethnocentrism in the wake of independence led to the politization of ethnicity. Ethnic groups schemed to attract as many federal resources to their regions as possible and culminated in the civil war between 1967 and 1970 (Jacob 2012, p. 13-15). Several military regimes preceded this, and it was first in the 1999 elections power returned to civilian rule (Britannica 2020c). Among its neighbors, Nigeria is today the only country with democratic rule (Omenma 2020, p. 205).

Nigeria has 250 ethnic groups in total, with Hausa and Fulani being the biggest ones, as well as the dominant ones in the northern part (US Embassy in Nigeria 2012; Metz 1992, p. 99). The Hausa group are often spoken about in coterminous with the North. However, in pre-colonial times when the Fulani group migrated westward, these groups have mixed and are since the twentieth century often referred to in combination as *Hausa-Fulani*. The other major ethnic group is that of the Kanuri of Borno state. They descend from Muslim conquerors in the fifteenth century, which expanded into an empire in the sixteenth century which incorporated many of the previous Hausa states. This heritage remains a factor of immense pride for the Kanuri. However, when Maiduguri, the former central city of Kanuri influence, was chosen as the capital for an enlarged northeast state many of the ethnic groups from the Hausa-Fulani moved into the city. Many Kanuri-speakers instead started getting along in the

tongue of Hausa. This assimilation of cultures gradually made the Kanuri traditions fade away (Metz 1992, p. 99-104).

Since Boko Haram mainly draws its fighters from the Kanuri population, while they also represent the dominant ethnic group in Borno state where the insurgency still rages, they will be the ethnic group in focus in the group-level analysis (Torbjörnsson and Jonsson 2017, p. 46). However, Boko Haram should not be completely understood as a “Kanuri movement”, since it comprises of ethnic groups from all over the border area around Lake Chad (Pieri and Zenn 2016, p. 68). The ethnic groups spanning the Lake Chad area share much of the same cultural, societal and religious ties, which means they can easily assimilate and integrate across borders (Maza, Koldas and Akzit 2020, p. 5). This points to Boko Haram being a group which goes beyond the traditional struggles of Nigeria with ethnocentrism being the root cause. The rally-around-the-flag effect here simply seem to be a common goal fueled by religion.

The cross-border recruitment is partly allowed to continue due to deficient border co-operation and management by the riparian states. However, the recent push-back of Boko Haram has created some degree of multilateral co-operation, with the so-called MNJTF. The countries respective security forces are allowed to chase down insurgents between 50 to 100 kilometers into any of the other countries. However, the countries surrounding the lake prefer a narrow view of defense policy, which is to secure their countries from direct attacks by the insurgent groups, instead of fully embracing multilateral co-operation. Divisions between the countries in regards to commitment to fighting the group seem to exist as well, since Cameroon for an example has been blamed by the other countries for doing too little against the fact that Boko Haram are using their territory as shelter before launching attacks into the other countries (Omenma 2020, p. 205-206). The evident lack of governance and border checks in the area is providing Boko Haram with a large recruitment-pool (Maza, Koldas and Akzit 2020, p. 5).

The effort put in by Boko Haram to attract new individuals into joining is quite complex. They employ strategies such as cash loan traps, forceful conscription, as well as promises of better welfare and improved economic conditions. My reading of the data suggests the use of suicide bombers is of minimal effect for the causal process being investigated in this analysis. The analysis therefore focuses upon the way in which Boko Haram utilizes cash loan traps and promises of better economic conditions as a way of attracting individuals (Torbjörnsson and Jonsson 2017, p. 46). Financial incentives are used as a way to lure individuals faced by structural conditions such as poverty, unemployment and poor welfare into joining the group (Maza, Koldas and Akzit 2020, p. 2). Interestingly enough these conditions, stemming from Johan Galtung’s (1969) definition of structural violence, seem to co-exist with

drought in extreme cases such as these, implying drought might be considered one such condition in the age of the Anthropocene. This is an argument which will be further elaborated upon in the discussion.

## 4.2 Group-level factors

In the following segments I will explore the group-level factors and look at how they serve to prolong the insurgency. On each factor, I will first look at structural conditions, then on deliberate actions taken by Boko Haram and lastly summarize the way in which these interact. Following the analysis, the discussion will summarize all three factors and discuss the implications of my result.

### 4.2.1 Drought and Agricultural Dependence

In this section I will shed a light on the structural conditions regarding agriculture in northeastern Nigeria. The dominant livelihood options in northeastern Nigeria, where the Kanuri's live, are fishing, livestock, millet, rice, groundnuts, maize, cowpeas and wheat (USAID 2018, p. 8). Around 80 percent of the population around Lake Chad are dependent on subsistence farming for their livelihood (Nett and Rüttinger 2016, p. 16). Since the amount of irrigated land is less than one percent in the whole of Nigeria, crop failure is always at risk of having a devastating impact on people's livelihoods (FAO 2020). Wheat, Maize and millet are expected to be adversely impacted by the effects of climate change (Nyamwaro et al., 2015, p. 44). Maize is expected to be one of the crops worst affected by climate change in Africa. Millet are also projected to reduce its suitable areas by almost half as of today (CGIAR 2015, p. 7). The crops grown in these areas are generally regarded as climate sensitive (Okpara et al., 2015, p. 318). Resilience against crop failure and unpredictable climate change events is considered to be low in the whole of sub-Saharan Africa with around four percent of all arable land being irrigated which is important to bear in mind since the conflict spans four countries (Buhaug and Tiesen 2012, p. 44). In addition, the whole agricultural sector in Nigeria suffers from an outdated tenure system that constrains access to land<sup>6</sup>, limited adoption of agricultural technical developments, high cost of farm outputs, poor access to credit, inefficient fertilizer procurement and distribution, inadequate storage facilities and poor access to markets. These factors combined keeps the agricultural productivity very low<sup>7</sup> with high postharvest losses and waste (FAO 2020). The whole northeastern part of Nigeria is completely dependent upon Lake Chad

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<sup>6</sup> 1,8 ha/farming per household.

<sup>7</sup> 1,2 metric tons of cereals/ha.

for its water supply while at the same time also being prone to extreme drought (Adeaga 2011, p. 1). As a result of recurring drought, dwindling water resources around Lake Chad has increased the rate of contact between groups with different livelihood strategies whom all compete for access to water (Nett and Rüttinger 2016, p. 15).

### ***The Boko Haram Effect***

Looking at the deliberate actions by Boko Haram it seems clear their operations continues to spark fear in farming communities around Lake Chad, thus making agricultural yields decline even more. Fisheries and livestock are also severely affected by their activity (Nett and Rüttinger 2016, p. 12; Musa et al., 2008, p. 1). Boko Haram has for an example taken control of fishing activities, employing their members whom are subject to the cash-loan trap in fish farms, as precondition for paying back their loans to the group while simultaneously amassing revenue from the activity. Other ways of paying back the loan might be to volunteer in providing the group with information on the movements and activities of the MNJTF (Maza, Koldaz and Akzit 2020, p. 6-7). When it comes to livestock, Boko Haram seem to have been exploiting the context of a dwindling water supply by poisoning water sources such as wells and streams where they are dislodged by state troops which is making water use dangerous to both humans and livestock, thus weaponizing water (Nett and Rüttinger 2016, p. 18).

It is estimated that Boko Haram has destroyed around 75 percent of the water infrastructure in the Northeast (Ekhomu 2020, p. 141). Since 80 percent of the Basin's population depend on subsistence farming, fishing and livestock for their livelihoods this problem is becoming increasingly acute and aggravated by Boko Haram activity (Nett and Rüttinger 2016, p. 16). Other activities aimed at the water infrastructure is the kidnapping of the General Manager of the Borno State Water Board, whom was later set free after a ransom was paid (Ekhomu 2020, p. 74).

### ***Summarized***

Many of the groups residing in the Lake Chad basin are indeed agriculturally dependent, which aligns with my framework. Structural conditions around Lake Chad such as the growing of climate sensitive crops in an area susceptible to extreme drought, low productivity due to poor access to markets and efficient fertilizers etc., makes livelihood by agricultural means extremely sensitive. In addition, the outdated tenure system restricting households to holding lands of about 1.8 hectares each adds to this sensitivity, by not having any margin of error when faced with crop failure. This analysis suggests that structural conditions makes households in

the Lake Chad basin and Northeastern Nigeria very vulnerable to the effects of drought. Boko Haram very clearly seem to exploit this situation as a way of pushing people away from an honest earning and into some part of their organization.

#### 4.2.2 Economic Development and the Disruption of Markets

The economic structural conditions in northeastern Nigeria primarily concerns poverty, lack of opportunities and productivity. northeastern Nigeria has strikingly high poverty levels in comparison with the rest of the country (Sowunmi et al., 2012, p. 66-67). Economic development in the area is slow and unstable with low labor productivity, large-scale informal unemployment and a lack of innovative private investments. In contrast, Nigeria's oil-rich economy has been growing with an annual 8 percent in GDP each year from 2006 (Nett and Rüttinger 2016, p. 11). The region also lacks major industries, with growth businesses primarily being government jobs and menial workers such as messengers, cleaners and gardeners. Unsurprisingly, the countries surrounding the Lake Chad area all share similar economic dislocations in the region, within each respective country, surrounding the lake (Ekhomu 2020, p. 41-42). Except the Kanuri's, the rural population around Lake Chad are composed of around 70 other ethnic groups, each relying on the resources supplied by the lake and its surroundings for their income (Ovie and Emma 2012, p. 40). On a country-wide level, an economical marginalization therefore can be seen, with the predominantly Muslim and poverty-stricken north lagging behind the mainly Christian and growing south.

##### ***The Boko Haram Effect***

Boko Haram targeting of public infrastructure has had an adverse impact on people's ability to sustain themselves, as in the case of water infrastructure above. It seems to be an integrated strategy in the group's jihad and war against westernization with attacks against telecommunications masts, transportation centers, bridges and markets. In Borno State the targeting of markets seem to be especially common with such recorded incidents all the way back in 2010 up until 2018. These attacks are often especially fatal since a lot of people gather in a small area (Torbjörnsson and Jonsson 2017, p. 19; Ekhomu 2020, p. 133-145).

Incorporated within Boko Haram activity also seem to be a strategic control of all types of economic activities in the Lake Chad basin such as cross-cutting fishing, all-season farming, water, and control of cross-border trade routes. They know that controlling these will be good bargaining instruments, should they need them. By also regularly extorting and raiding various oil ventures employed by the riparian states in the area, Boko Haram has built up a potent

economic force (Omenma 2020, p. 202-204). Among the economic activities severely struggling, some are suffering both by the effects of drought as well as Boko Haram. Fisheries in Lake Chad are one example. The effects of the shrinking lake in combination with Boko Haram activity such as control of fishing culture as well as the group using the lake's wetlands as shelter before launching attacks has been detrimental for fishing activities (Musa et al., 2008, p. 1; Nett and Rüttinger 2016, p. 12; Maza, Koldas and Akzit 2020, p. 6). Both livestock and fish processors also suffer from restricted and unpredictable access to markets (Nett and Rüttinger 2016, p. 12).

Individuals asked about the reason for joining Boko Haram explicitly cite the lack of economic opportunities, poverty, unemployment, and access to better welfare. The inability of the Nigerian government to provide these services and opportunities has led to Boko Haram filling this void. A narrative of Boko Haram paying as much as 3000 dollars each month to its fighters will inevitably be compelling for individuals in these situations (Maza, Koldas and Akzit 2020, p. 6). The way in which Boko Haram utilizes cash loan traps also capitalize on the lack of opportunities and governance, by offering the unemployed youths a loan to start new ventures and traders a loan to sustain their ailing businesses (Maza, Koldas and Akzit 2020, p. 6).

### ***Summarized***

What we can see in the analysis above is that economic development in the area are very low, also aligning with this study's framework. Coping capacity when faced with a climate disaster such as drought is, as we already know by now, severely limited by low economic development. The structural conditions here are leaving groups with few alternatives. By filling the void left by the state in providing opportunities and access to credit, Boko Haram is becoming more than just an extremist group. It might for some people be the only alternative to not putting food on the table.

### **4.2.3 Exclusion and Popular Support**

A form of structural ethnocentrism is inherent to Nigeria, as displayed above, and there are several cases of repression against ethnic groups in northern Nigeria recently. The Kanuri ethnic identity, to which both the deceased leader Yusuf and current leader Shekau belong, have for an example been heavy-handedly met by the Nigerian government in recent years due to their relationship with Boko Haram. In 2009 a government crack-down ultimately led to the capture and extrajudicial murder of Yusuf. These events seem to reinforce the existing grievances



among the population in Nigeria's northeast and also works to strengthen the support for the group within Kanuri populations (Torbjörnsson & Jonsson 2017, p. 47; Mahmood 2016). The Kanuri ethnic group are not listed as a minority group at risk, but they do however have a history of being without power since the 1960s and did not achieve a better standing until 1992 according to the ETH-EPR dataset. Since then, their power in relation to the state and other groups have fluctuated, but a noticeable change was seen in the years between 1997 to 1999 where they once again lacked power – the same period when Boko Haram was started. The government crackdowns on the group led to a small decline in power in 2011 again (Asal et al., 2008; Vogt et al., 2015).

Similar to how the North lags behind economically, the northern Muslims also perceive themselves to be politically marginalized to the Christians in the South. The sharia implementation in 12 northern states around the year 2000 sparked controversy and sectarian violence on a scale not seen since the civil war. Several failed attempts were made at the federal level to stop it (Kendhammar 2013, p. 292). The Southern Council of Islamic Affairs made a statement in 2001 where they expressed their discontent with the southern media's partisan position in support of the Christians and the negative portrayal of Muslims in the North (Ilesanmi 2001, p. 544-546). Many Muslim's in northern Nigeria expected these laws to restore Islamic social institutions. When these populist campaign promises made by many of the governors in the elections of 1999 later failed to live up to the standards promised, many Muslim's were sorely disappointed, especially since the current Nigerian constitution explicitly gives all Nigerian individuals and groups freedom of religious beliefs. This disappointment might have paved the way for radical religious critiques of poor governance such as Mohammed Yusuf and Abubakar Shekau (Ekhomu 2020, p. 6-7; Ilesanmi 2001, p. 540-541; Kendhammar 2013, p. 307-309).

The Hausa-Fulani population has in several northern states in recent years expanded greatly, which has led state and local government officials to actively favor members of indigene groups and exclude opportunities for Hausa-Fulani residents, including from state and local government employment. Muslim leaders in the North actively points this fact out and say's their respective groups have become subject to "all sorts of marginalization, discrimination, and exclusion" by the Christian state and local government officials. Independent panels have been set up to investigate this discrimination, which in turn has recommended the federal state to take action, but the government has taken no action (HRW 2013, p. 35-36).

### *The Boko Haram Effect*

Ethnicity has been utilized by Boko Haram to a large degree to mobilize support and recruit fighters. The deep resentment towards the Nigerian state within the Kanuri and other northeastern ethnicities has produced a large number of fighters and will continue to do so if nothing is done about it (Torbjörnsson and Jonsson 2017, p. 46). The religious clerics are effectively capitalizing on the socio-economic and cultural challenges by indoctrinating people into the jihadist lifestyle (Maza, Koldas and Akzit 2020, p. 7). One of these Clerics, Imam Abubakar Shekau, was very successful initially at recruiting since his message corresponded well with Muslim's disappointed in the sharia implementation. He argued the powers in the capital as well as in Borno State were corrupt and immoral. To counter this corruption, he provided people with the idea that a strict form of Islam would produce a better system of government. This narrative was mostly empty rhetoric's and illogical but provided some of the northeastern youths struggling on the harsh streets of Maiduguri and around the countryside with a God-given message which was easy to understand (Ekhomu 2020, p. 41). However, Shekau's fraction have few constraints as well as a broad repertoire of brutal acts to choose from, which may be alienating large segments of the population. It is also a personalized cult which could be easily dismantled if Shekau were to disappear (Torbjörnsson and Jonsson 2017, p. 70).

In contrast, the ISWAP faction of Boko Haram might prove to be a formidable long-term threat since they constrain themselves to targeting more 'publicly approved' targets such as the Nigerian Security forces and Christians. They are seemingly less brutal to civilians and also amass members from all Muslim ethnicities, not just from the Kanuri ethnic group, which has the potential to build a broader support base. It should be noted that BH-ISWAP still are responsible for as many as 766 civilian casualties in northeastern Nigeria between 2016 and 2019, while the same figure for Shekau's fraction are 1621 (UCDP). They also seem to inhibit stronger operational capacity than that of the Shekau faction and has a strong international presence with relationships to Daesh and recruitment across the border-region (Torbjörnsson and Jonsson 2017, p. 70). The idea of popular support for a terrorist group is in its essence quite hard to understand since the majority of any population generally will not support mass murder and plundering. However, it is clear that Boko Haram must enjoy some sort of popular support, as otherwise they would not be able to operate. It is though quite unknown to what degree the northeastern population supports the movement (Torbjörnsson and Jonsson 2017, p. 47). Studies has however revealed that Boko Haram not only interacts with the local population by

the use of propaganda and the instrumentalization of violence, but also by forming inter-group relations and strong communal bonds. They engage in preaching their jihadist messages, expressing themselves in comedy, music, drama and dance. This enables the movement to be seen as ordinary people, thus the step to joining them is not that far (Maza, Koldas and Akzit 2020, p. 4-5).

Boko haram's declaration of a caliphate was not simply an opportunistic call for attention from the global jihadist community, rather a deep-rooted historical narrative linking the movement to historical antecedents in the same area such as that of the Kanem-Borno empire in the 7<sup>th</sup> century and the Fulani-Hausa led Caliphate between 1804-1903. It is a sort of historic revivalism based on the same symbols as Dan Fodio's caliphate in the 19<sup>th</sup> century, which was to combat symbols of corruption, poverty and bad governance. All in the name of restoring moral order (Pieri and Zenn 2016, p. 68). Applying this to contemporary conditions meant creating the narrative that western civilization is to blame for the problems facing the population in northeastern Nigeria (Maza, Koldas and Akzit 2020, p. 7). This has created a form of social cohesion and common culture which has enabled the group to both recruit individuals as well as create the perception of jihadist culture as a way of life in the eyes of their supporters (Maza, Koldas and Akzit 2020, p. 4).

### ***Summarized***

What seems to be the case here, is some degree of political exclusion, yet not repression, which points to an ambiguous answer to the question whether the groups residing in northeastern Nigeria are politically excluded. The Muslim groups in the North are actively being excluded from government positions by the Christian state and local officials. However, neither Kanuri's nor Hausa-Fulani are listed as minority groups at risk and Muslims are in a majority in northern Nigeria. However, history tells us majority groups also engage in violence when faced with repression, such as in the Rwandan civil war (Britannica 2020e).

As mentioned under the structural conditions in this title, it is clear that the Nigerian establishment has looked upon the implementation of Sharia law in the northern states as a threat to the Christian minorities in the North and thus have acted to stop it. This have provided the northern population with a feeling of their religious freedoms being repressed. This *feeling* has efficiently been capitalized upon by radical elements of the Muslim community, such as Boko Haram. What seems clear when investigating this factor is that this is where Boko Haram really excels and proves their destructive capabilities in providing narrative and fuel for conflict. By also assimilating into communities, they take the edge of the

word “extremists” in the eyes of communities in northeastern Nigeria, thus making the step to joining them not too far. Uexkull et al. suggested some kind of grievance mechanism would be observable at this stage of the process. They continue by pointing out that agency, a perception of common identity and a belief that the government is to blame for their hardships is needed for a conflict to develop (Uexkull et al., 2016a, p. 12391). This analysis shows that Boko Haram are providing agency as well as reinforcing the perception of common identity and the narrative that the government is to blame.

## 5. Discussion

It is clear that the effects of drought on the duration of the Boko Haram Insurgency is a complex issue. One cannot simply give one explanation to as of why the insurgency is still ongoing and, according to some, at risk of becoming an even bigger threat in the future. Placing drought within the causal process in this study has provided a new angle to the already existing view of drought acting as a ‘threat multiplier’. Drought might in this case also be interpreted as some form of structural violence because, in combination with the other factors, it is enhancing the effects of the other traditional sources of structural violence visible here. The traditional sources being political and socio-economic structures and institutions acting as agitators of violence, but coupled with drought, they become even more intensified. Armed groups then instrumentalize these individual and group grievances, such as poverty, marginalization and discrimination, with the aim of recruiting new individuals (Galtung 1969). According to the results above, these dynamics seem to be present in the Lake Chad region.

In the case of Boko Haram and northeastern Nigeria it seems as if the impact of drought on the climate-sensitive crops around Lake Chad is especially susceptible to have a devastating impact. In turn, this region has large-scale unemployment and a severe lack of innovative investments, which makes alternative means of livelihood hard for the around 80 percent of the population in the region who relies on subsistence farming. The Kanuri’s are not repressed nor completely excluded from the political process, however to some degree they have a recent history of powerlessness, while also longing for a proud past of moral order in the region. Boko Haram has successfully included this narrative in their idea of creating a similar caliphate as the one of the Kanuri’s or Hausa-Fulani in the past, which might appeal to some. However, on a country-wide level the North lags behind in economic development with high levels of poverty and unemployment compared to the rest of the country, as well as feeling their religious freedom being repressed, which points to some degree of both political and economic exclusion. While Boko Haram started with providing basic care for some parts of the society one can hardly argue they have the same ‘philanthropic’ agenda today. It is though incorporated in their strategy to fill the vacuum left by the government in the border-region and thus create some basic services to first and foremost Muslim people. The ISWAP fraction of Boko Haram seem to have some degree of public approval, or else their continued existence and operations would not be possible. The public approval-point is important since it might be

what gives the knock-over effect for people leaning towards joining, when offered better welfare and economic conditions. For this reason, the ISWAP fraction has been the important fraction to bear in mind when analyzing these chains of events in the context of extremist insurgencies. What seems to happen after this, is that the duration of the extremist insurgency continues, which gives clear evidence of the process Uexkull et al. described in their statistical study. It should be noted that, as often in new wars, the war economy fueled by oil and gas serves as a potent lubricant as well. However, the results above show a complex causal event chain, which involves a multitude of factors, all serving to making this conflict toxic and prolonged. The results also clearly give evidence to the fact that Uexkull et al.'s conclusions might be applicable in an area of conflict encompassing an extremist insurgency as well.

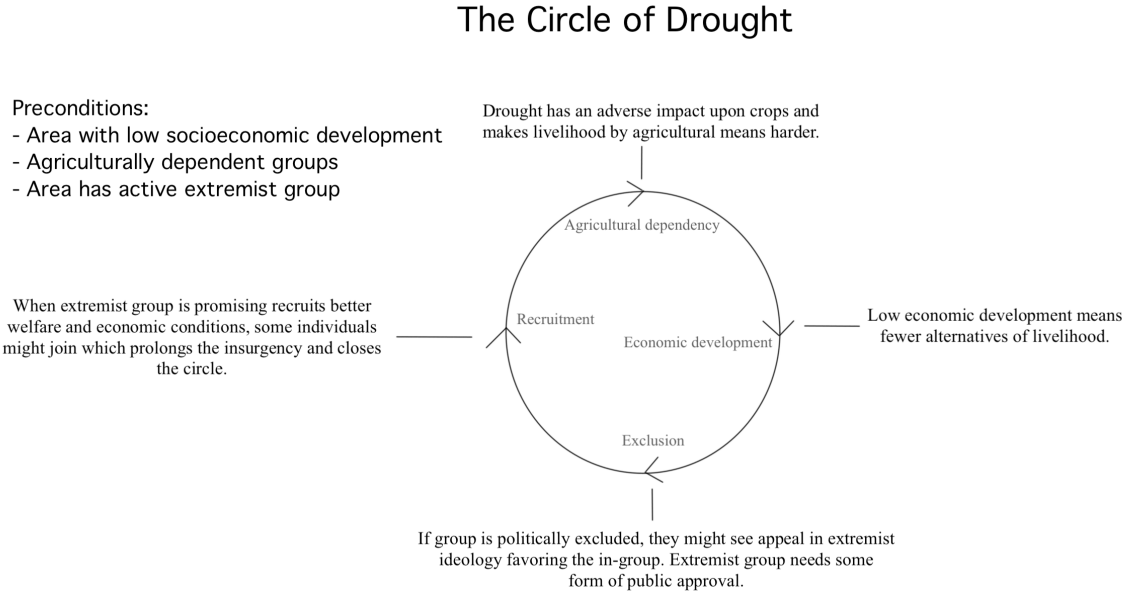
### ***The Circle of Drought***

If one were to generalize these conclusions, one needs to take into account that the area we are analyzing has an armed extremist group, low economic development and agriculturally dependent population groups whom also are relatively excluded. Based on the conclusions of this study, I argue an optimal chain of disastrous events related to drought might look like this:

1) When drought has an adverse impact on crops it makes livelihood by agricultural means harder. 2) In turn, low economic development means fewer alternatives of livelihood. 3) If the group in turn is politically excluded to some degree, they might see the appeal in an extremist ideology. That is to say that the extremist group we are referring to don't attack the in-group and has some form of public approval. 4) When also promising recruits' better welfare and economic conditions, in a society where poverty, unemployment and lack of basic services are rampant, the result might be that members of the group join the insurgency and thus the insurgency is prolonged.

The process is best illustrated by a circle; however, it is not self-evident that this order is given or that every factor needs to be incorporated. In some cases, like with the street kids of Maiduguri, all it took was a lack of other opportunities and a radical instrumentalizing of a religion. For other groups, crop-failure coupled with a lack of other means of livelihood might suffice for them to engage in extremist violence. Thus, this circle does not follow any specific individual or groups radicalization in the wake of a drought, but merely points out some kind of pattern observed in this case.

**Figure 1.** A generalization of the described drought circle derived from the results in this study.



Whether this process can actually be viewed as a circle is, as mentioned before in this study, quite hard to say, due to the lack of sources displaying temporal dynamics. However, since the results above indicate some kind of transit at each stage and the insurgency clearly is prolonged, I argue it is logical to present the conclusions of this study like this. Also due to the fact that the effects of drought are most clearly visible on one of the factors in this study, which might imply that drought does not have equally as much impact on all of the factors, according to the findings. However, when drought happens it impairs the first factor extensively, while putting heavy pressure on the other factors, thus impacting them indirectly, which indicates a design like this fit. When looking at the circle it is clear that the structural conditions interact with the deliberate actions taken by Boko Haram as well. These deliberate actions serve to enhance the negative effects of each factor, thus another way of illustrating the process might be to enlarge the circle every time the process repeats itself and deliberate actions by the extremist group is added to the effects of the structural conditions. All in all, I argue that the reason for the conflict’s prolongation is due to this circle repeating itself into a feedback-loop, however once again implying some kind of temporal dynamic which unfortunately is absent from the analysis, thus making this argument an excellent subject for further research.

## 5. Conclusion

This study shows that drought has a tendency to prolong conflict in areas inhibiting low economic development and agriculturally dependent groups whom also are politically excluded - in the case of an extremist insurgency. It has explained a complex causal chain of events, elevating the role of drought as a “threat”, to a component much alike the conditions of structural violence. Another finding include that Boko Haram are providing all the necessary components for people’s grievances to spark conflict. It has also made an effort in generalizing these chains of events in an order this study found logically consistent. The result of this study implies that drought has a tendency to prolong conflicts in already conflict-stricken areas across the globe.

### *Discussion of Conclusions*

This study has explained a potential causal chain in which drought interacts with conflict involving an extremist group. By applying these factors in a qualitative way, it has found out a process which seem to explain the part drought plays in increasing fragility and add to the prolongation of conflict, in an already active conflict. Since areas of conflict today often are climate-risk areas as well, it implies that more cases like this will appear in the future.

In contrast to research by NGO’s, Think-Tanks and the general policy community, this study has placed drought within the process itself, instead of attributing it with the role as ‘threat multiplier’, placing it outside the causal process. Of course, signs of drought can be seen on each point in the circle, but I argue drought in the case of Boko Haram, has this distinguishing role of acting as a lubricant to the whole process. Each time the process repeats itself, crossing over the part in the circle where drought has an integrated role, seem to give the process an additional force of motion, thus enlarging the circle making it spiral out of control, unless some form of action are taken to hinder the process. It also seems to work in conjunction with other research, thus contributing to a gap in knowledge. President Obama’s remarks about drought being one of the reasons for the Boko Haram insurgency might be true, however they were not discussed in this study, since it focused solely on the role drought plays to prolong conflict. It is quite clear that drought plays a part in making regions more fragile, thus prone to radicalization and a breeding ground for extremist groups. They do seem to thrive in this environment of ungoverned borderland with high climate-sensitivity, thus they are able to continue operations which in turn prolongs the conflict.



To combat this process, I argue the circle created to generalize this process might work as some kind of framework, albeit it might not always play out as a complete circle, it clearly provides some kind of clarification of the role drought has, at least in the case of Boko Haram in northeastern Nigeria. In the best of circumstances, battling any of these processes active in the circle would put an end to the repeating of the process. To hypothesize this with an example, for future research, if one were to remove public support for the BH-ISWAP it might in turn make it harder for the group to lure new recruits into joining the group, thus slowing the process down. To reinforce this argument; it seems like the Shekau fraction will not be able to sustain its activities for long without the public's support, as displayed above. To take another example, if one were to introduce crops which are more climate-resilient in the region, subsistence farmers might not lose all of their income in the event of a drought, thus they will not have to search for alternative means of livelihood. Even though the impact of climate change on conflict has not been fully understood, even with this study, it seems clear that drought and various other climate change effects impacts upon conflict is a factor the research community should give more attention.

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