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Intercommunal violence, insurgency, and agropastoral conflict in the Lake Chad Basin region

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ABSTRACT

The Lake Chad Basin region has experienced a steep increase in violence and instability since 2010, associated with ethnic identity conflict, ecological degradation, and insurgency. This article explores the association between the activities of insurgency groups – focussing on the perpetration of violence against civilians and state actors – and agropastoral conflict, against a background of ecological stresses in this region. The article finds a pattern of close spatial and temporal proximity between agropastoral conflict and insurgency violence, suggesting that there is a significant intersection and overlap between socio-economic grievances, compounded by ecological stresses, and violent instability.

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KEYWORDS Lake Chad Basin region; climate change; extreme weather; agropastoral conflict; insurgency

1. Introduction

The World Bank's 'Fragility, Conflict, and Violence Agenda' notes that 'by 2030, at least half of the world's poor people will be living in fragile and conflict-affected settings'.[1] Understanding the interlinked, underlying driving forces of violent conflict – such as socio-economic deprivation and inequality, demographic and migration pressures, state fragility, ecological degradation and resource scarcity, group domination of power, and political transition – is critically important. This is a scientific challenge because there remain significant gaps in knowledge and in turn a policy challenge because approaches to preventing, managing, and resolving armed conflict have long been regarded as inadequate.[2] Existing research on individual conflict drivers has been persuasive in demonstrating how specific conditions play

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a role in generating or contributing to instability, but it has been less effective in identifying the causal mechanisms at work – that is, how conflict drivers work in conjunction with one another – and in exploring how the impact of conflict drivers might be mitigated in different contexts. This is a particularly acute challenge as these driving forces appear to be accelerating, in particular in terms of climate change,[3] inequality,[4] and rising food and fuel commodity prices,[5] amongst others. This paper explores the theme of intersecting conflict drivers by focussing on the Lake Chad Basin region.

This region faces a range of social, economic, ecological, and political challenges, including an active threat from violent insurgencies. Within some parts of the region communities experience high levels of economic deprivation, malnutrition, and ecological disruption, in a broader context of instability and under-development. As Lake Chad water levels continue to fluctuate and decline over the long term – as a result of reduced rainfall, irrigation, and dams – the depletion of its resources forms an acute social stress point with multiple consequences.[6] The region has also experienced the impacts of extreme weather and seasonal climatic disruptions which have a severe impact upon livelihoods.[7]

The relationship between these challenges and violent conflict is complex and generally indirect, and it is widely accepted that it is not possible to identify straightforward causal links between ecological degradation and violence.[8] This paper shares the cautionary approach regarding the relationship between ecological degradation and violent conflict; although such degradation plays a contributory role, it is often indeterminate, and intermediary variables – as well as the historical, social, and cultural context – are essential explanatory conditions. Nevertheless, these pressures have indirectly exacerbated inter-communal conflict, irregular migration, and the Boko Haram insurgency, all of which have generated acute humanitarian crises and obstructed development. Interlinked pressures across the region pose an acute risk to the human rights, livelihoods, welfare needs, and physical security of millions of people, and represent a broader threat to regional security with far-reaching implications. The success of stabilisation activities – such as the Lake Chad Basin Commission's Regional Stabilisation Strategy – rests upon an understanding of conflict drivers and their interactions in order to mitigate violence and build resilience. Whilst there is valuable work in this area,[9] there remain important gaps in knowledge and greater attention to the interrelationship between conflict drivers is needed.

Specifically, although there is a large amount of literature on the impact of climate change and resource depletion in the Lake Chad Basin region,[10] there is far less on the possible interrelationship between violence associated with agropastoral conflicts and insurgencies such as Boko Haram. This paper explores the possible links between agropastoral conflicts – which is generally quite local, triggered by conflicts between settled farmers and cattle

herders – and the insurgency violence which has increased markedly since 2010. The paper focuses upon Borno State, Nigeria; Diffa region, Niger; Far North Region, Cameroon; and Lac Province, Chad. These regions are substantively significant in terms of the themes being explored in this paper, in particular conflicts related to ecological change, identity, and resource deprivation. They are also major sites of Boko Haram-related violence as well as agropastoral conflict.

This paper makes a number of academic contributions, some of which have policy relevant implications. As a primary focus, it identifies the intersecting, overlapping drivers of conflict and insecurity in the Lake Chad Basin. On the basis of this, it explores the evidence that perennial agropastoral conflict may share some causal dynamics with – and potentially exacerbate – other forms of violence in the region, including insurgency. By empirically demonstrating temporal and spatial associations between agropastoral conflict and insurgent violence, the paper raises a number of theoretical implications. It suggests that analysts should be cautious about widely employed distinctions between types of conflict drivers – related, for example, to identity, resources, or climate change – because sources of conflict are very often multifaceted, complex, and overlapping. Therefore, the categorization of violent conflict into discrete types can be problematic and requires more critical analysis, in terms of the methodology of understanding intrastate conflict. In terms of the Lake Chad case, the paper argues that the emergence of insurgent violence is linked to socio-economic deprivation and ecological stresses, rather than something that can be readily labelled as 'Islamist extremism'. In turn, the emergence and support for insurgency in this region is occasionally mis-interpreted as being driven by political or religious fanaticism, when everyday local, livelihood issues are more salient. Greater attention should therefore be paid to localized violence associated with livelihood conflicts since these may be an indication of heightened probability of larger-scale insurgencies. As a further generalisable implication, mitigating the impacts of ecological degradation and promoting sustainable incomes are an essential part of conflict prevention, counter-insurgency, and peacebuilding.

2. Methodology

In order to explore the possible temporal and spatial association between agropastoral conflict and insurgency violence, in the context of ecological and resource stresses, three data inquiries have been undertaken for this paper. First, it explores whether there is a general increase in conflict events in the Lake Chad region associated with agropastoral conflict in parallel with the increase in violence linked to insurgent groups since 2010. This is undertaken in relation to each of the four geographic areas, and for the region overall.

These subregions (Borno State, Nigeria; Diffa region, Niger; Far North Region, Cameroon; and Lac Province, Chad) have experienced a significant increase in general violence and instability since 2010 – with a peak in the intensity and frequency of conflict events in 2015 – and they also reflect a range of background conflict drivers, including ecological and resource pressures. Investigating whether there is a general correlation between different 'types' of violence is a starting point for exploring if an association exists. Second, the paper explores whether agropastoral conflicts occur in spatial proximity to violence linked to insurgency groups such as Boko Haram. Third, existing data on ecological and climate conditions are gathered to demonstrate the possible relevance of environmental variables. The paper does not assume – and much less try to identify – a straightforward causal relationship between ecological degradation and violent conflict. As the existing literature demonstrates, it is not possible to establish a simple, direct relationship in isolation from other causal factors.[11] At most, ecological degradation contributes to an increased likelihood of instability by compounding other conflict drivers. As Freeman observers, 'intervening variables determine if and how environmental change causes population movements and political violence'.[12]

The paper undertakes longitudinal and spatial analyses of georeferenced quantitative conflict data to explore spatial and temporal patterns of different conflict types, in the context of ecological stresses. It draws upon the Armed Conflict Location Events Dataset (ACLED) as a source of conflict event data from 2000 to the end of June 2023. This data is georeferenced and also includes narrative descriptions of conflict events which can be searched in order to identify event types. To identify patterns of violence associated with agropastoral conflict, the search terms 'herder', 'livestock', 'water', 'farmer', 'settler', 'cattle', 'migrant', 'agropastoral', 'drought', 'nomadic', and 'Fulani' were used. (The Fulani community is associated with pastoral and herder livelihoods, and events featuring this search term are generally related to agropastoral conflicts.) Insurgency events are identified by the occurrence of 'Boko Haram' in the descriptive narrative. For the forms of events used in the ACLED dataset, all types were used: battles, violence against civilians, explosions/remote violence, riots, protests, strategic developments, and multiple event types.[13] In terms of land use and environmental data, the paper draws upon secondary sources.

3. Theoretical mechanisms explored

This paper seeks to demonstrate that agropastoral conflict, fuelled but not necessarily caused by ecological stresses and anomalous climatic events,[14] is significantly associated with intercommunal violence and insurgency since they share some common drivers. The manner in which socio-economic

grievances play a role in insurgency violence in turn provides a significant contribution to our understanding of these conflicts in a number of ways. It demonstrates the importance of local conflict dynamics, which are linked to broader patterns of instability, suggesting that insurgencies often reflect diverse, localised sources of instability and violence and defy a single discrete narrative. Linked to this, violence which is characterized as inter-communal or religious in nature – including so-called 'fanatical' Islamist violence – generally needs to be understood as essentially socio-economic in nature, and certainly in terms of the support base of groups such as Boko Haram. Finally, this subject contributes to understanding the possible links between ecological issues, including climate change, and violence.

Debates regarding climate change as a potential driver of violent conflict have tended to be couched in very broad terms and in relation to large-scale conflict including civil war.[15] In contrast, the approach taken in this article suggests that this impact must be understood in a local context and with spatial variation, in conjunction with other conflict drivers and triggers. In turn, the article suggests that it is important to make a distinction between longer-term climate change impacts and seasonal ecological stresses, including extreme and anomalous weather events. As some analysts have demonstrated, *fluctuations* in resource availability – such as those associated with Lake Chad – are often more salient than linear changes.[16] Moreover, the existing research in this area suggests that climate change and related ecological degradation cannot be linked to violent conflict in isolation from other factors such as socio-economic conditions and governance.[17] All of this raises implications for future patterns of conflict and instability, and for policies aimed at preventing, managing, or resolving violence and for building peace in conflict-prone societies.

The following presents a theoretical model incorporating mechanisms that link agropastoral conflict with insurgency in the Lake Chad region in the context of ecological stresses, including anomalous climatic events and droughts. The migration of herders – who are often Fulani ethnic group members – in search of water and pasture leads is often perceived to lead to the deterioration of crops, access disputes, and income losses for settled agricultural farmers. Pastoral herders and settled farmers in many areas of sub-Saharan Africa are often characterized by different ethnic and religious identities, which means that agropastoral conflicts often generate or fuel inter-communal tensions, in the context of a broader perception that local and rural communities are politically marginalized. These interacting and compounding grievances are manipulated by political extremists and insurgents and provide a target for insurgent violence and atrocities aimed at exacerbating conflict, further dividing communities and facilitating recruitment and support for armed groups. This scenario does not straightforwardly fit into existing models of resource conflict or political conflict; rather, it points

to multiple compounding conflict drivers which are tied to a spatial political ecology of violence that must be understood in the local context. Traditional farmers have also sometimes been compelled to make changes in their livelihoods due to agricultural land deterioration caused by ecological changes, in some cases moving from farming to cattle grazing, a practice which has contributed to agropastoral conflict.[18]

In this article, we assume that spatial and temporal patterns of conflict and violence are significant, building upon existing work in this field.[19] Thus, the clustering of conflict events in spatial proximity – in a geographic area defined by shared social, economic, and environmental conditions – may indicate that common conflict drivers are making an impact, even if conflict events are categorized as being qualitatively different. This, in turn, suggests that there may be significant interconnections between these conflict events which can provide insights into the nature of intrastate violence. In this paper, this approach is designed to demonstrate that interlinkages and shared dynamics exist between agropastoral conflict and insurgent violence, even though they are often defined differently. Temporal proximity reinforces this argument, because if conflict events cluster in time, it indicates that contextual factors may be generally relevant, even to different 'types' of conflict. There is the possibility that a co-occurrence is at work, which could point to a spurious relationship between conflict events. However, the combination of spatial and temporal proximity suggests a significant intersection, and this is supported by the local studies reviewed in the following two sections.

4. Background: insurgency and agropastoral conflict in theory and in the Lake Chad region

A number of underlying conflict drivers in low- and middle-income countries play an important – although imprecisely defined and often contested – role in the upsurge in instability in the Global South since around 2010. In fragile settings climate change often accelerates land degradation and water shortages, but also sometimes flooding, fuelling migration, food price inflation, and exacerbating conflicts over resources.[20] While the relationship between climate change and violence is hotly contested,[21] there is significant evidence to suggest that climate change contributes to societal stresses which *indirectly* make instability more likely in conjunction with other factors, and compounds other conflict drivers. Poverty and inequality (particularly horizontal inequalities in divided societies) lead to relative deprivation grievances and lower the opportunity costs for participation in conflict.[22] Resource abundance – in things such as oil – results in conflict over access to or control of commodities, exclusion, predation, and neopatrimonialism.[23]

State weakness results in a reduced capacity to provide public goods and services, a tendency for group domination of power, poor public

security, and vulnerability to instability.[24] In conjunction with these background factors, episodic societal shocks such as rising food or fuel prices,[25] and health epidemics such as COVID-19 can exacerbate grievances related to absolute and relative social deprivation, and further undermine the capacity of institutions and thus increase vulnerability to conflict.[26]

Most of this research and a substantial amount of additional findings challenge the idea of direct, mono-causal, or generalisable relationships between conflict drivers and instability, instead pointing to complexity and spatial variation in terms of effect.[27] The cross-national data also indicate an increase since 2010 in instability and armed conflict which is state based – where a government is directly involved – and also non-state based, which is reflected in the Uppsala Conflict Data Program data.[28] Within these trends, some regions of Africa reflect a pronounced escalation in violence.

In parallel with this cross-national conflict scholarship – which tends to focus upon major conflicts and civil wars, and upon theoretical, generalizable conclusions – there is a growing scholarship on low-intensity conflict dynamics, including violence between nomadic herder pastoralists and sedentary farmers (agropastoral conflict) which is essentially local in nature – that is, where conflict events are associated with geographically limited areas and not generally linked to national movements or dynamics. This scholarship tends to be less general or cross-national in theoretical scope, and explores specific sub-regions in the Global South. A key focus of this research is the apparently increasing scale of conflict between smallholder farmers and semi-nomadic livestock herders, and there is an unresolved debate as to whether this has been exacerbated by long-term and episodic environmental changes, such as climate change, drought, flooding, and land cover changes.[29] Some of this work demonstrates how local agropastoral conflict interacts with wider political violence, providing opportunities for insurgent groups to attract financial resources and recruits and promote instability by stoking sectarian tensions.[30] Much of this scholarship suggests that regions which are prone to agropastoral conflict have a very long tradition of finely balanced resource management and stability, but that violent conflict is increasing.[31]

The tendency of arable farmers and livestock herders to reflect different ethnic backgrounds has provided an opportunity for agropastoral conflicts to fuel identity-based inter-communal violence.[32] A key example of this is the tension which exists between herders and farmers in many areas of the Sahel and West Africa and the discrimination that is widely believed to be directed against these herder communities in many societies.[33] As existing research demonstrates, herders are often framed as a security threat and associated with the minority Fulani ethnic community.[34] When these local resource conflicts occur in the context of broader instability – including insurgency –

a complex inter-relationship can occur, in which insurgency and agropastoral conflicts can shape each other.[35]

The Lake Chad region reflects many of the theoretical conflict drivers raised above, including acute socio-economic and ecological challenges. It has also experienced significant levels of agropastoral violence and political insurgency. Although both areas of research – insurgency and agropastoral violence – have focussed upon the Lake Chad region, much less of this explores the overlapping patterns in these types of conflicts and thus the possible interlinkages which may exist over space and time.

5. Ecological stresses

Three inter-related ecological themes are relevant to discussions about conflict drivers in the Lake Chad Basin region: long-term declining and fluctuating Lake Chad water resources; climate change; and episodic extreme weather events. However, a robust link between these ecological phenomena and violent conflict is far from being established. The declining Lake Chad water resources have been closely examined in relation to instability and conflict, including large-scale insurgency as well as local inter-communal and agropastoral violence. Water-level changes – driven by climate change and resource mis-management, including irrigation and damming – have been directly linked to deprivation and loss of livelihoods in the immediate lake area and across the wider region in Chad, Cameroon, Nigeria, and Niger. Herders, farmers, and communities reliant upon the fishing industry have been most acutely affected as water levels fell in the final decades of the 20th Century. Once ranked as the sixth largest inland body of water in the world (covering 25,000 km^2) in the 1960s, the lake shrank by as much as 90% by 2000 in a process which involved fluctuations as well as a general decline.[36] Water levels have started to stabilize and increase, with some seasonal variation, in the first two decades of the 21st Century,[37] although lake levels remain on average 80% less than in the mid-1960s.[38]

The human impacts of the declining Lake Chad water levels have been well documented.[39] Arable land and water for pasture have declined over many years, undermining livelihoods and promoting deprivation within farming communities which have long relied upon the Lake.[40] Fishing communities, in addition, have also suffered acute hardship as a result of this degradation as fishing stocks dwindle.[41] In turn, food insecurity – including food price inflation and price fluctuations – is endemic in the region.[42] In addition to deepening poverty, this has driven migration as people move in search of arable land in other rural areas or economic opportunities in towns and cities,[43] which often amplifies hardships. The negative human security impacts of declining Lake Chad resources are closely linked to climate change and extreme weather, including episodic flooding and drought.[44]

The degradation of the Lake Chad water resources and the impact of climate change and extreme weather have been popular topics for conflict researchers, and there is a significant amount of work which suggests that these ecological stresses are relevant to understanding instability and conflict,[45] even if a direct causal link is elusive. This research generally supports the theoretical assumptions within this paper in relation to environmental conflict, namely, that deprivation and economic shocks, competition over resources, and migration have fuelled instability by compounding other social and political drivers of conflict. According to this, climate change can play a role in impoverishing livelihoods in societies that are reliant upon primary agricultural production, generating grievances directed against governments, fellow citizens, or other communities. These grievances can exacerbate existing social divisions and act as the 'tipping point' that results in societal violence, in conjunction with other conflict drivers.[46] Climate change can also, in theory, strain state capacity which increases vulnerability to instability, weakens the ability of states to manage inter-communal conflict, and generates grievances against states because they are unable to mitigate the effects of environmental degradation, such as food insecurity, and competition over water and land.

In local contexts, the growing scarcity of habitable land and livelihoods that results from climate change displaces communities, compelling them to migrate in search of employment, services, and resources,[47] and putting them into conflict with settled communities.[48] This is certainly a scenario which can be associated with the broader Lake Chad region. Nevertheless, whether climate change has a direct causal link with conflict onset or escalation – in specific cases or as a general phenomenon – is a matter of much debate, and there is much scepticism about the 'climate change-conflict' model.[49] The general consensus appears to be that it is extremely difficult to establish the precise role of environmental factors in isolation from all other causal factors – such as political change, group domination of power, inequalities in divided societies, and institutional weaknesses – that drive instability and violent conflict. Therefore, the environmental degradation-conflict model outlined in Figure 1 must be seen as contingent upon broader triggering factors and the local context.

Nevertheless, there is broad agreement on the claim that climate change increases conflict risk alongside other factors. While specific cases of climate change conflict have been controversial – such as Syria and Sudan[50] – the Lake Chad region presents a case which is more persuasive in terms of the climate change-conflict model, in particular in terms of agropastoral conflict and other forms of localized instability.[51] The evidence in this region points to the importance of looking at local dynamics and variations – where, for example, episodic weather extremes, droughts, and flooding may be more instructive than general, long-term climate change for understanding conflict. Thus, the socio-economic and ecological perspectives of conflict and

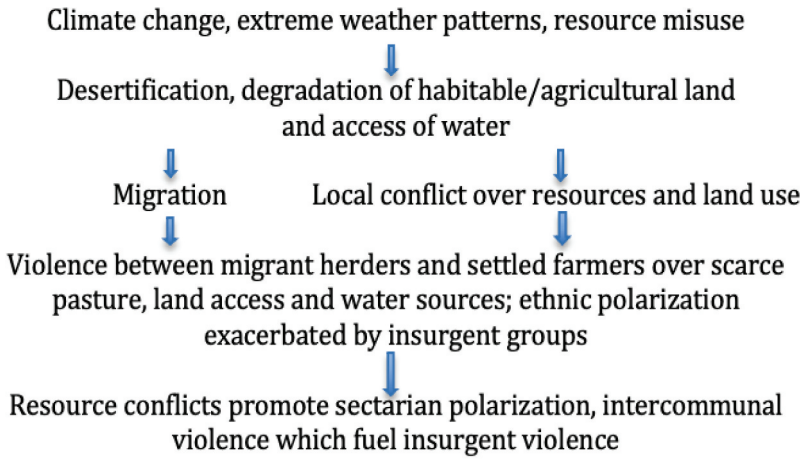

Figure 1. Environmental degradation-conflict model.

insecurity in the Lake Chad region are widely explored – as the literature engaged with in this section demonstrates – but there is inadequate attention to the intersecting dynamics of these conflict drivers and the implications of this.

6. Data findings and analysis

The Armed Conflict Location and Event Data Project (ACLED) records a total of 9053 conflict events across the regions of Borno State (Nigeria), Diffa region (Niger), Far North Region (Cameroon), and Lac Province (Chad) between the start of 2000 and the middle of 2023. Over this period there was a general increase in the frequency of most of the key indicators of instability recorded by ACLED – battles, violence against civilians, explosions and remote violence, riots, protests, and multiple event types – and an increase in intensity, in particular, from 2010 (Figures 2 and 3). This peaked in 2015. This general trend is significant in a number of respects. It reflects the steep increase in violence associated with insurgencies such as Boko Haram, but it also demonstrates that violence associated with agropastoral conflict has quite sharply increased. This increase in agropastoral violence is notable since it demonstrates that while local conflicts between herders and arable farmers have long existed, the levels of violence since 2010 are essentially new, rather than perennial or 'normal'. It also demonstrates a temporal correlation between the increases in insurgency-related violence and agropastoral violence.

Of the total number of incidents over the 22.5-year period (9053) (Figure 4) 73.27% (6633) were associated either with agropastoral conflict or insurgency or with both combined (Figure 5). Of these, 6499 (97.98%) were linked to

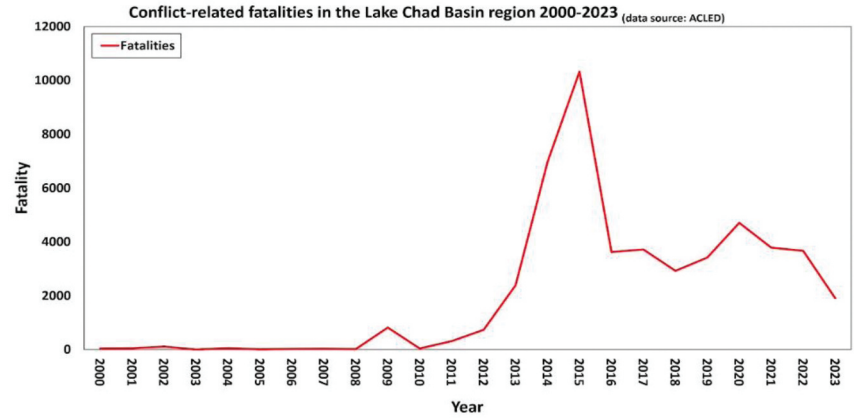

Figure 2. Conflict-related fatalities in the Lake Chad Basin region 2000-2023 (data source: ACLED)

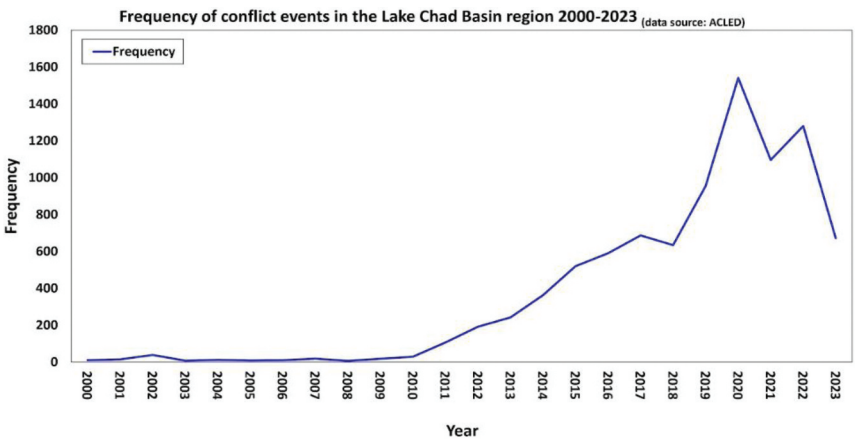

Figure 3. Frequency of conflict events in the Lake Chad Basin region 2000-2023 (data source: ACLED)

Boko Haram. This means that conflict incidents associated with Boko Haram constituted 6499 out of the total of 9,053 conflict events.

From the total number of 9053 conflict events, 134 of these were associated only with agropastoral conflict (approximately 1.48%), without explicit reference to insurgency groups. Incidents of violence associated with both agropastoral and Boko Haram in combination represented 517 out of the total of 9,053 incidents (5.71%). Thus, of all agropastoral-

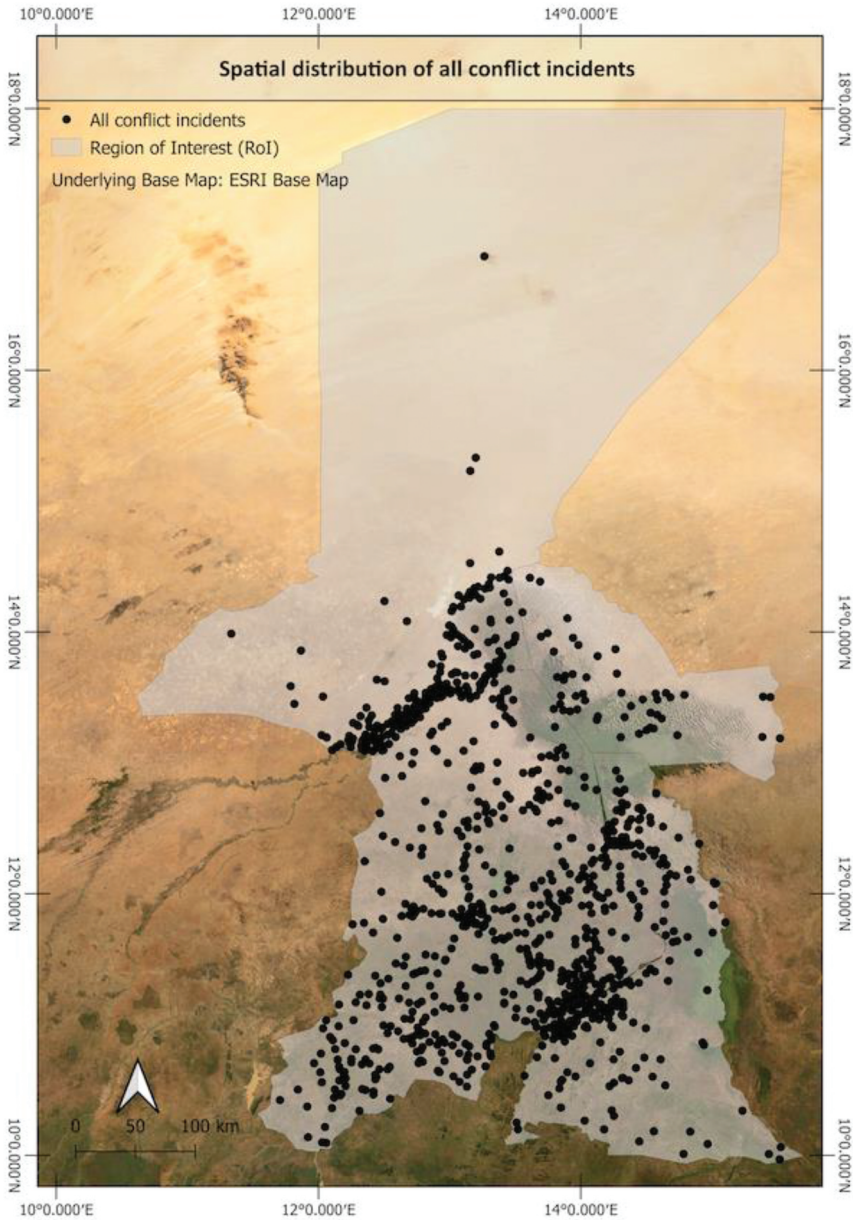

Figure 4. Spatial distribution of all conflict types including those associated with agropastoral and/or insurgency.

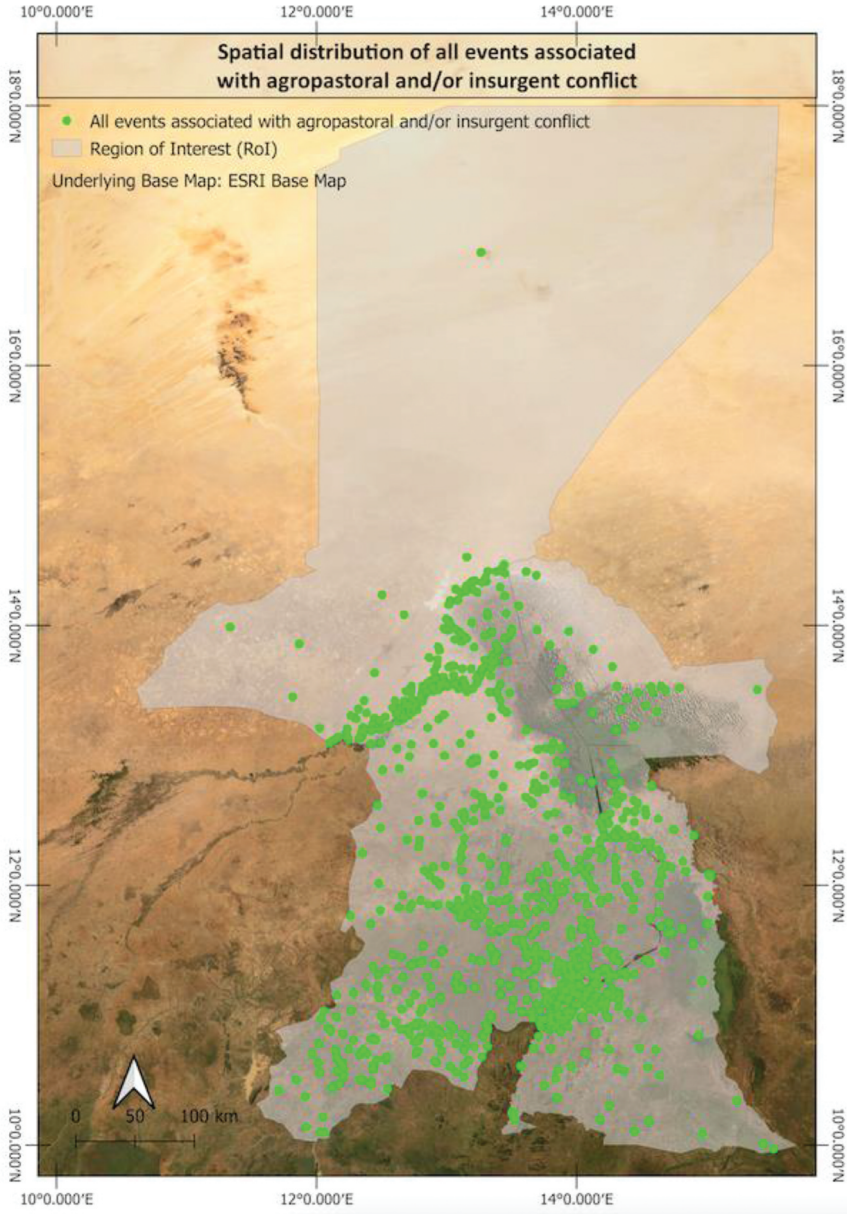

Figure 5. Spatial distribution of conflict events associated with agropastoral and/or insurgency conflict.

related conflict incidents (517), 74.08% were also associated with Boko Haram.

Of all events across the 22.5-year period associated with either agropastoral conflict or insurgency (6633), 97.98% were related to Boko Haram, and 7.79% were related explicitly to agropastoral issues. The percentages exceed 100% because of the overlapping events, where 5.89% of the Boko Haram-related conflicts also reflect agropastoral issues, and 74.08% of the agropastoral-related conflicts also featured Boko Haram.

Figure 4 indicates the distribution of all conflict incidents, with the highest proportion occurring in Borno and the Far North regions, and a distinct clustering of incidents in the border regions between Diffa (Niger) and Borno (Nigeria) and between Borno (Nigeria) and the Far North (Cameroon). The spatial distribution of different types of conflict incidents generates particularly important patterns. Figure 5 indicates the spatial distribution of events associated with agropastoral and/or insurgent conflict, which presents a concentrated geographic clustering.

A number of observations can be made on the basis of these data and in particular the spatial and temporal distribution of conflict incidents. There has been a general increase in all types of violence from 2010: Boko Haram-related insurgency violence, violence associated with agropastoral conflicts, and violence associated with both phenomena in combination (Figures 8 and 9), and the intensity of the violence, defined by fatalities, peaked in 2015 (Figure 2). This suggests that the context and dynamics of these different types of violence are likely shared, an inference which is supported by the correlation between types of violence (Figures 6 and 7) and shared peaks (Figure 9). Seventy-one per cent of the violence is associated with Boko Haram, and only 3.6% with agropastoral conflict. However, 78% of these agropastoral-related incidents were also associated with Boko Haram. This association is reinforced by the correlating temporal trends of agropastoral and insurgency-related violence (Figures 8 and 9) and the spatial clustering of violence (Figures 5, Figures 6 and 7). Thus, agropastoral violence and violence associated with Boko Haram occur in geographic and temporal proximity, and a relatively small (3.61%) but significant number of conflict incidents are explicitly associated with both insurgency and agropastoral conflict. This suggests that some common drivers may be relevant to both agropastoral violence and political insurgency, including sudden economic deprivation, relative economic grievances and horizontal inequalities, inter-communal conflict exacerbated by migration, and resource scarcity in the context of ecological stresses. In line with this, it is likely that a higher proportion of conflict incidents are driven by agropastoral friction which feeds into

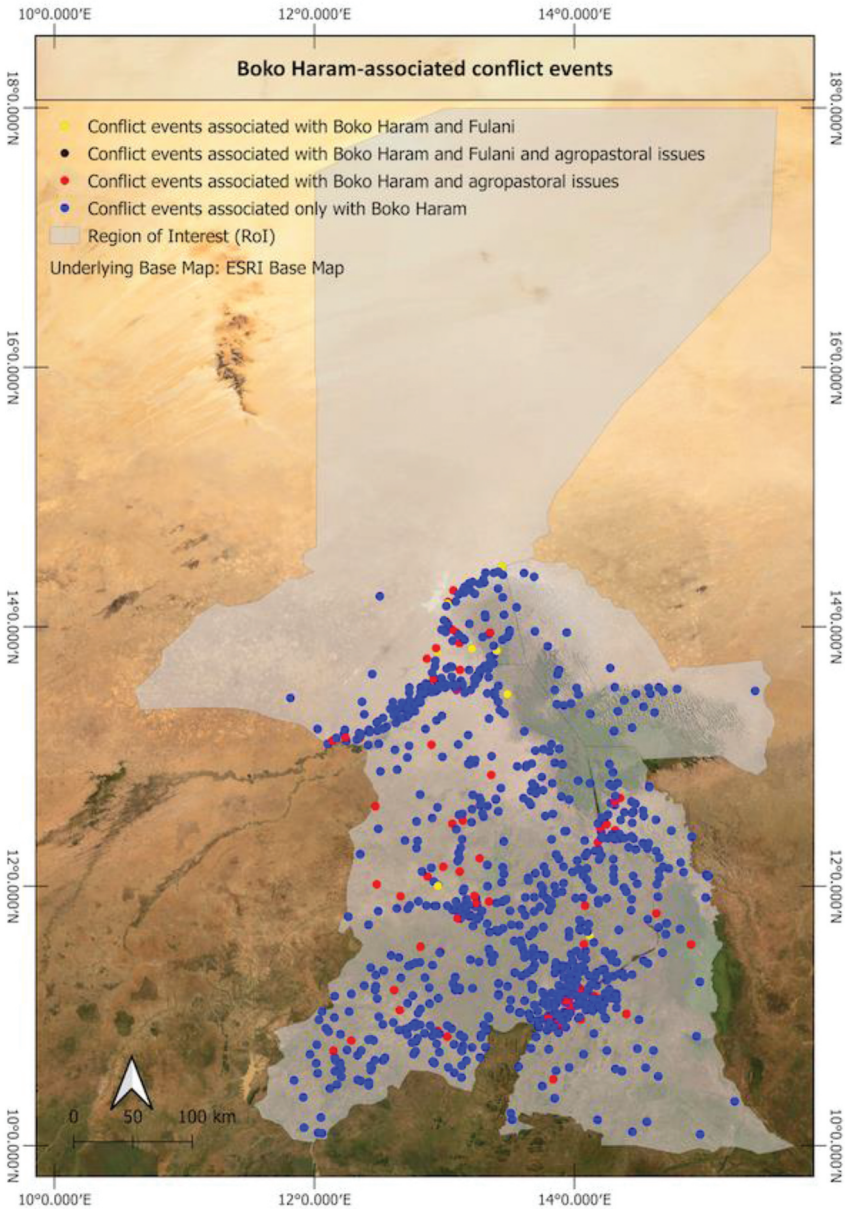

Figure 6. Boko Haram-associated conflict events.

insurgency, a proposition which is supported by the shared drivers and broader temporal and spatial clustering of violence.

Commentary on conflict types in the Lake Chad Basin region – and in other areas of Africa – has tended to make a distinction between agropastoral friction as an 'old', perennial form of conflict, and Boko Haram-related

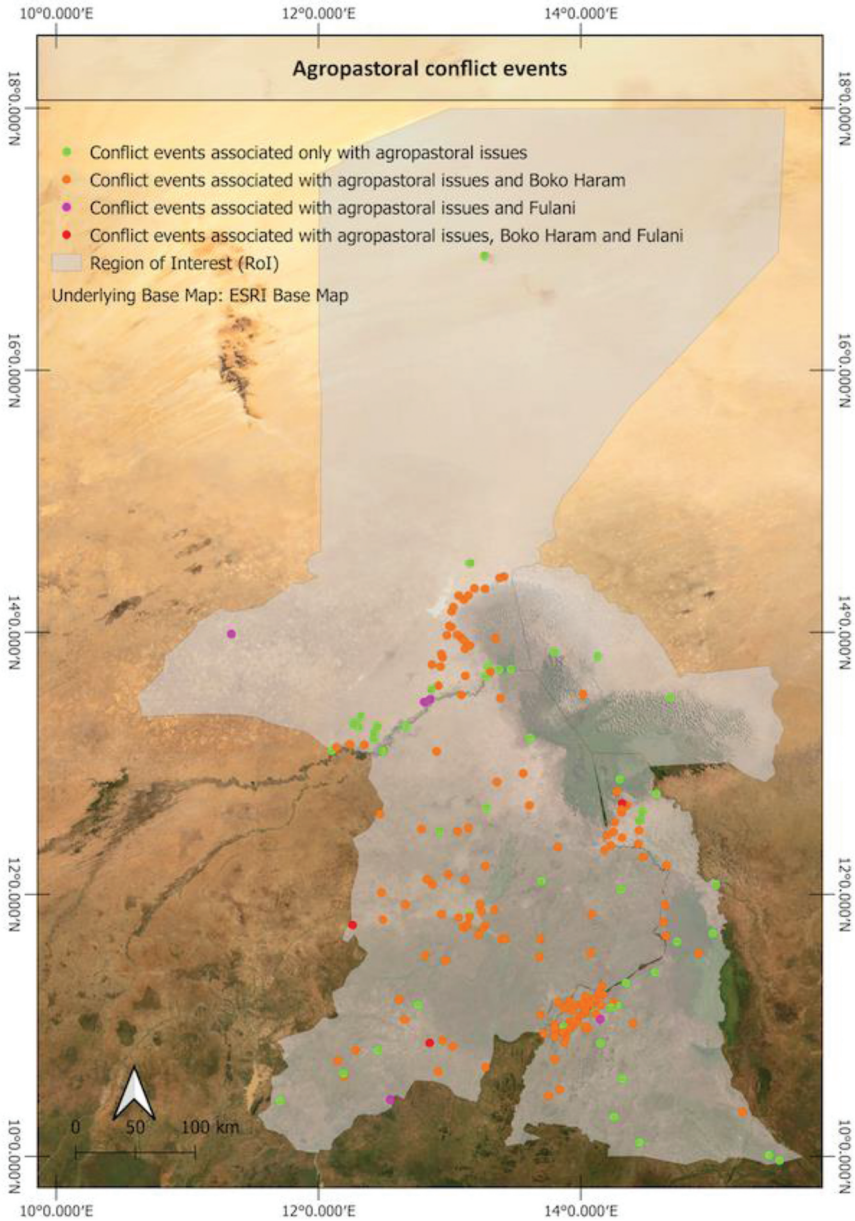

Figure 7. Agropastoral only associated conflict events.

insurgency as a 'new' type of religiously driven identity conflict linked to global networks such as the Islamic State. However, the data on when and where conflict events occur suggest shared dynamics which challenge this narrative and challenges more broadly the idea of discrete conflict types.[52] Agropastoral violence is often regarded as being endemic or even 'ancient',[53]

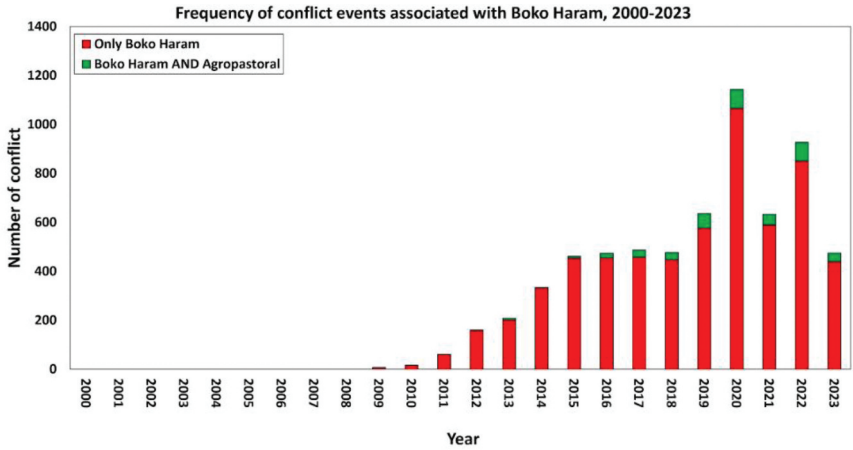

Figure 8. Frequency of conflict events associated with Boko Haram 2000-2023.

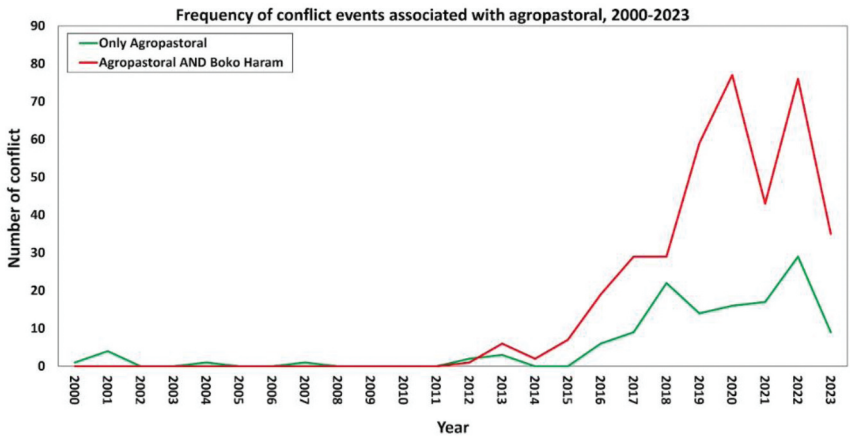

Figure 9. Frequency of conflict events associated with agropastoral conflict 2000-2023.

but the level of violence associated with this in the Lake Chad region has escalated dramatically only since around 2010, in conjunction with very significant increases in insurgency violence associated with Boko Haram, and ecological stresses. These trends are very likely not isolated co-occurrences since they share a common social, economic and ecological context.

Environmental degradation and extreme weather episodes exacerbate conflict drivers in this region because they play a key role in resource scarcity and competition, which fuels agropastoral conflict between herders and settled arable farmers. Environmental degradation can also drive migration, which is a general conflict trigger in fragile eco-systems and reinforces

deprivation. All of this can generate absolute and relative deprivation grievances which fuel inter-communal conflict and provide support for insurgency groups. However, the causal link between environmental degradation and violence is ambiguous. Some of the secondary literature, supported by data, suggests that Lake Chad resources have been improving – and not deteriorating – since 2010, when violence sharply increased.[54] Moreover, the spatial distribution of violence, which is clustered in some areas of the Lake Chad basin region, does not reflect a uniform impact of environmental stresses. This suggests that environmental factors are likely a contributory factor in the distribution of violence, but that other drivers are essential variables.

7. Conclusions and implications

Socio-economic stresses, exacerbated by ecological degradation and resource scarcity, fuel inter-communal conflict, and insurgency. Although it has long been recognized that resource scarcity plays a role in local inter-communal conflict – between settled farmers and herders belonging to different, distinct identity groups – this research demonstrates that this scarcity may contribute more broadly to insurgency groups which perpetrate widespread violence and terrorism. The close temporal and spatial association between agropastoral violence and violence linked to Boko Haram over the last 10 years – during which instability generally in the Lake Chad region has soared – demonstrates strong inter-connections between these types of violence which are often characterised as being distinct. In many cases, so-called identity conflicts, agropastoral conflicts, and ideological conflicts may be essentially indistinguishable.

A number of mechanisms may be at play. Ecological stresses, which create acute disruptions in livelihoods, can exacerbate perceptions of relative grievances which can be manipulated by extremists in order to promote general instability, which serves the broader aims of insurgents. Resource conflicts associated with identity can also be exacerbated by insurgency groups as a way to promote broader societal polarisation, which is, again, a key objective of groups such as Boko Haram. These conflicts can also be manipulated to facilitate recruitment or other forms of support into insurgency groups.

This raises a number of policy implications. Firstly, there is a likelihood of increases in violence and instability in regions, such as the Lake Chad basin area, where communities are vulnerable to economic shocks due to longer-term climate change and seasonal crises, such as extreme weather. In the context of fragile states and subsistence-based livelihoods, the capacity of public policies aimed at mitigating the impact of economic downturns is limited, and this provides an environment ripe for radicalisation and inter-communal conflict, especially when conflict entrepreneurs are eager to exacerbate such grievances.

In this context, it is not only non-state insurgent groups which seek to manipulate latent conflicts,[55] but also mainstream politicians – a phenomenon demonstrated by discriminatory narratives towards Fulani pastoralists.[56] It is therefore in the interests of peace and stability to promote more conciliatory and inclusive political discourse and to focus upon social safety nets and empowering local capacity, whilst practicing conflict-sensitive development.

Secondly, challenges such as those seen in the Lake Chad Basin region should not be reduced to environmental – or climate – 'crises' in a one-dimensional causal manner. Whilst the deteriorating resources of Lake Chad have often been presented as a key driver of conflict, in fact, as the discussion above indicates, water levels have been improving from around the time when violence began to escalate. At the intersection of development and security, multiple underlying drivers of conflict exist – including demographic pressures, socio-economic inequality, ecological stresses, and accelerating migration – and they must be understood and addressed in conjunction with each other, as compounding sources of instability.

Thirdly, it follows that counter-insurgency and peacebuilding must involve mitigating the impacts of ecological degradation and managing local conflicts over resources and must go beyond activities – including military and policing enforcement – which narrowly target insurgent groups and their supporters. The insurgencies in the Lake Chad Basin region have been associated with the international rise of 'Islamist' extremism, but they are very closely embedded into local conflict dynamics in which cultural, social, and communal factors are interlinked.

Fourth, future research and policy analysis should be aimed at learning from the resilience of communities in vulnerable regions which have *not* experienced instability and violence. The spatial analysis presented above demonstrates that violence and instability are not evenly distributed across regions afflicted by economic deprivation, ecological degradation, and insurgency. The manner in which conflict drivers interrelate and compound one another – and the role of violent conflict triggers – remains inadequately understood, which means that the causal mechanisms involved and options for conflict prevention are unclear. Thus, there is a need to identify why human insecurity and deprivation result in instability and sometimes violent upheaval in some contexts and not in others which share similar conditions. Despite a significant amount of international attention to these challenges, including various forms of material assistance in the region, there is insufficient understanding of how local stakeholders (can) play a role in responding to and mitigating conflict drivers and contributing to stabilisation and resilience. Civil society, local institutions, and indigenous norms may mitigate the impacts of conflict drivers and prevent widespread violence and extremism, and understanding the dynamics of this in different contexts is therefore

important for the communities involved and also the international donors which invest in conflict-affected regions.

Fifth, political leaders and media stakeholders should be discouraged from using language which directly or indirectly stigmatizes certain communities in the context of agropastoral disputes and incites discrimination against them. Whilst this subject is generally analysed from the perspective of material conditions – such as economic stresses, environmental degradation, and resource scarcity – an equally important factor is the political framing of these challenges by local and national leaders, which can fuel latent intercommunal antagonisms and generate radicalisation, or, conversely, help to peacefully mitigate the impact of these challenges. Responsible leadership can play a key role in managing societal stresses, just as conflict entrepreneurs can exacerbate conflict and trigger violence.

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