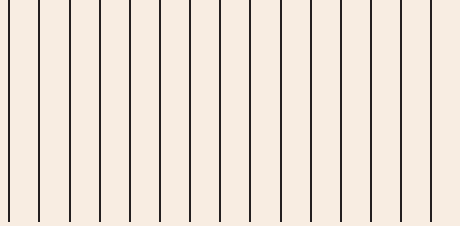


WEST AFRICAN PAPERS



IDENTIFYING LOCAL CONFLICT TRENDS IN NORTH AND WEST AFRICA



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MARCH 2024, NO. 42

Steven Radil and Olivier Walther

WEST AFRICAN PAPERS

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Abstract:

Several states in West Africa have experienced significant episodes of political violence since the early 2010s. These have included civil wars, religiously motivated terrorism, separatist insurgencies, military coups and communal strife, each of which have local, national and transnational dimensions. Intended to help guide responses to the region's political challenges, the Sahel and West Africa Club (SWAC/OECD) created an interactive, spatial tool for policy makers in 2019, the Spatial Conflict Dynamics indicator (SCDi). The SCDi monitors political violence at subnational scales. It combines different quantitative dimensions of conflict into a mappable tool that describes the circumstances in each location. The latest enhancement to the SCDi brings two new features to aid the identification of local conflict trends. First, the tool now identifies regions that are newly entering into or exiting from conflict. This allows a more detailed picture of how the geography of conflict is spreading or contracting within and across national borders. Second, the tool now characterises the current conditions in a location as either worsening or improving, based on past conditions at the same location. The SCDi is implemented in SWAC's new Mapping Territorial Transformations in Africa (MAPTA) platform.

Key words: Armed conflict, political violence, Spatial Conflict Dynamics indicator, spatial analysis, North Africa, West Africa

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This work is carried out under the memorandum of understanding between SWAC/OECD and the Sahel Research Group at the University of Florida. This collaboration aims to reinforce ties between research and policies in order to better anticipate changes in the Sahel and West Africa and promote West African expertise by strengthening links with African researchers and research centres.

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THE SAHEL AND WEST AFRICA CLUB

The Sahel and West Africa Club (SWAC) is an international platform whose Secretariat is hosted by the Organisation for Economic Co-operation and Development (OECD). SWAC/OECD produces and maps data, provides informed analyses and facilitates strategic dialogue, to help better anticipate transformations in the region and their territorial impacts. Through its retrospective and prospective approach, it promotes more contextualised policies as levers for regional integration, sustainable development and stability. Its areas of work include food dynamics, urbanisation, climate and security.

Its Members and financial partners are AFD (*Agence française de développement*), Austria, Belgium, Canada, CILSS (Permanent Interstate Committee for Drought Control in the Sahel), the ECOWAS (Economic Community of West African States) Commission, the European Commission, GIZ (*Deutsche Gesellschaft für Internationale Zusammenarbeit*), France, Luxembourg, the Netherlands, Spain, Switzerland, the UEMOA (West African Economic and Monetary Union) Commission and the United States.

For more information: www.oecd.org/swac
<https://mapping-africa-transformations.org>

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ACRONYMS

ACLED	Armed Conflict Location & Event Data Project
ANN	Average nearest neighbour
CC	Conflict concentration
CI	Conflict intensity
MAPTA	Mapping Territorial Transformations in Africa
SCDi	Spatial Conflict Dynamics indicator
SWAC	Sahel and West Africa Club
UF	University of Florida

● EXECUTIVE SUMMARY

North and West Africa have been increasingly affected by political violence since the early 2010s. Violent events have included civil wars, religiously motivated terrorism, separatist insurgencies, military coups and communal strife. In recent years, however, the political dynamics within the two “shores” of the Sahara have dramatically reversed: while political violence has considerably decreased in North Africa, it has reached an all-time high in West Africa, suggesting that the region is facing several waves of violence. Similar to recent years, all major forms of political violence have once again increased south of the Sahara in 2023, whereas violent events and resulting fatalities are at a 20-year low in North Africa.

To understand these regional trends, the Sahel and West Africa Club (SWAC/OECD) launched a new, interactive, map-based tool called the Spatial Conflict Dynamics indicator (SCDi) in 2019. The tool allows policy makers and researchers to monitor the spatial diffusion of several types of conflicts across the region, depending on their intensity and geographical distribution.

The first objective of this note is to update the SCDi for 2022 and 2023. Results show that the year-over-year number of conflict zones rose between 2016 and 2022, but may have plateaued in 2023. In 2022, 706 zones were classified into one of the four SCDi conflict types compared with 610 zones in 2021, a 16% increase. However, 2023 results identified 685 zones with an SCDi classification, a 3% decrease from 2022. As in recent years, 2022 and 2023 also continued the trend of clustered violence making up most of the mix of SCDi categories. Violence is still repeatedly occurring at similar locations within conflict zones, particularly in West Africa, where long-term patterns of clustered violence are deeply entrenched. In short, the region's conflicts have expanded geographically in recent years and, when a zone fell into violence, it typically did so by initially exhibiting low intensity patterns within it.

The second objective is to introduce two primary new features to aid the identification of local conflict trends. First, the SCDi now identifies regions that are newly entering into or exiting from conflict. This allows a more detailed picture of how the geography of conflict is spreading or contracting within and across national borders. Second, the SCDi can now identify whether the current conditions in a location are worsening or improving based on the past conditions at the same location. While the base SCDi uses region-wide global criteria to classify a conflict cell, the new metrics allow explorations of whether violence is currently more or less intense and/or concentrated than in the past in each location.

Results suggest that violence is spreading to locations that were not typically affected by conflicts in the past. For example, of the 706 zones in conflict in 2022, 113 had no record of violence of any kind in the previous 20 years. The results for 2023 were less stark but of a similar trajectory: of the 685 zones in conflict, 67 had no previous history of violence. These results further reinforce the idea that armed conflicts are now highly mobile in the region. These newly affected conflict zones for both years were primarily located in Mali, Burkina Faso, Niger and Nigeria. However, more than 10% of these zones were found in five of the littoral states along the Gulf of Guinea, including Benin, Ghana, and Côte d'Ivoire, Togo and Guinea. Given the ongoing concerns about the potential for violence to spread south from the Sahel to coastal states, this is a concerning trend.

The SCDi is implemented in SWAC's Mapping Territorial Transformations in Africa (MAPTA) platform, launched in 2022.

● INTRODUCTION

Politically motivated violence increased tremendously in the early 2010s in both North and West Africa, after the events of the Arab Spring and the emergence of a series of armed conflicts in the Sahel and Sahara. These violent events have included civil wars, religiously motivated terrorism, separatist insurgencies, military coups and communal strife, each of which have local, national and transnational dimensions. In recent years, the political dynamics within the two “shores” of the Sahara have dramatically reversed.

In West Africa, the major clusters of violence that first emerged more than a decade ago in Mali and Nigeria have expanded to several neighbouring states, including Burkina Faso, Cameroon, Chad and Niger. In combination with the series of coups d'état that have recently plagued the region and the concerns that violence is now spreading south from the Sahel to littoral countries, West Africa faces profound political challenges. However, in North Africa, the Arab Spring uprisings in Algeria and Tunisia did not lead to protracted violence, while the 2020 ceasefire and subsequent formation of a Government of National Unity in Libya have led to relative stability in that country, even though new elections have since been delayed several times.

In order to better understand these security issues, SWAC launched an interactive, map-based tool for policy makers – the SCDi (OECD/SWAC, 2020^[11]). The SCDi monitors political violence at subnational scales by combining different quantitative dimensions of conflict into a mappable tool for policy makers and decision makers. Using disaggregated conflict data from the Armed Conflict Location & Event Data (ACLED) project, it combines two separate dimensions of conflict – the intensity and concentration of conflict events – to produce information that describes the circumstances of violence in localised settings.

This paper updates the SCDi for 2022 and 2023 while also introducing two primary new features to aid the identification of local conflict trends. First, the tool now identifies regions that are newly entering into or exiting from conflict to better highlight how the geography of conflict is spreading or contracting within and across national borders. Second, the tool characterises the current conditions in a location as either worsening or improving, based on past conditions at the same location. The SCDi is implemented in SWAC's MAPTA platform launched in 2022.

● MAPPING POLITICAL VIOLENCE USING THE SCDI

How the SCDi is calculated

The analysis of violence in North and West Africa relies on a geographic indicator that assesses the changing geography of violence, over space and through time (Walther et al., 2023^[2]). The SCDi measures two properties of violence: the intensity of conflict across a region and the distribution of conflict locations relative to each other (Box 1). The SCDi has been previously applied to all of North and West Africa by OECD/SWAC using disaggregated conflict data from ACLED (OECD/SWAC, 2020^[1]; 2021^[3]; 2022^[4]; 2023^[5]).

Box 1. **Measuring conflict density and distribution**

The first property measured by the SCDi is conflict intensity (CI), which is defined as the total number of events in each zone for a given duration of time. In this paper, as with all previous applications of the SCDi in the region, a uniform grid of 50 by 50 kilometres is used to subdivide North and West Africa. The SCDi has been calculated annually for each of these zones (or grid cells) since 1997. The number of events in a cell is then divided by the area of the cell (2 500 square km), to allow for comparisons between cells.

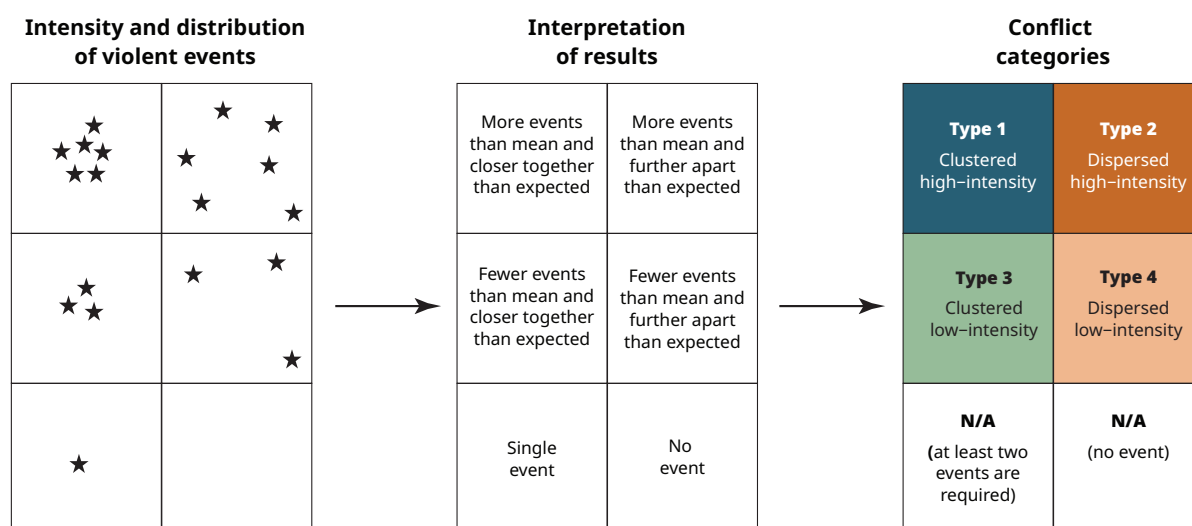
The resulting metric equals 0 if there are no events within a cell during a given year and has no upper threshold. In addition to calculating the raw score for each cell, the SCDi also classifies a cell as higher or lower than an expected value. The expected value for North and West Africa is called the “generational mean” and corresponds to the 20-year average CI between 1997 and 2016 for all cells that experienced conflict during that period. The generational mean for North and West Africa is 0.0017 events per square km per year, or four events in a single year for a 50 by 50 km cell. A cell is classified as high intensity by the indicator if four or more events occur in a grid within a given year, and as low intensity otherwise.

The second property measured by the SCDi is conflict concentration (CC), or the distribution of conflict locations relative to each other within a given area. The metric divides the observed average distance between events in a cell within a single year by the expected average distance if the same number of events were randomly distributed throughout the cell. Taking the spatial distribution of violence into consideration is important in order to characterise its evolution, since two regions may experience the same number of violent events but result in very different geographical patterns.

An average nearest neighbour (ANN) ratio is calculated to determine whether the patterns of violent events exhibit clustering or dispersion. The ANN ratio is the observed average distance among violent events in each cell, divided by the expected average distance that would have been obtained if the events had been distributed randomly. ANN ratios smaller than 1 indicate clustering, while ratios greater than 1 indicate dispersion.

The combination of CI and conflict distribution identifies four types of conflict (Figure 1). The first type is typical of conflict zones (or grid cells) that have an above-average intensity and a clustered distribution of violent events, suggesting that violence is intensifying locally. The second type are conflicts with a higher-than-average intensity and a dispersed distribution of events, indicating that the violence is accelerating and being introduced into new places within the cell. The third type applies to cells where there are fewer violent activities and most of them take place near each other, possibly indicating a decreasing range of, or constraints on, the mobility of violent groups operating there. The fourth type characterises cells in which a lower-than-average intensity and a dispersed distribution of events are combined, suggesting that a conflict is lingering. This situation may indicate that opponents are highly mobile or are unlikely to face protracted opposition in each locality.

Figure 1.
Using event distribution and intensity to identify conflict categories



Source: OECD/SWAC (2023^[5]).

New additions to the SCDi

The SCDi has been an important contribution to conflict monitoring and analysis in North and West Africa. Building on the base indicator has led to new features that further develop understanding of the intensity and spatial distribution reflecting the local dynamics of violence. These new features focus on localised and historicised metrics to better compare locations; for example, within one region or one city. While the base SCDi uses region-wide global criteria to classify a conflict cell, the new metrics allow explorations of whether violence in each location is currently more or less intense and/or concentrated than in the past.

More specifically, for each cell of the region, the tool first calculates the number of years in the prior 20 years that a cell has had at least two or more conflict events. Next, it calculates the average CI and CC scores for that location, for the set of years identified by the previous step up to a maximum of 20 years. Not all cells will have 20 years of data and a cell must have at least one year of SCDi conflict classifications in the previous 20 years to move to the next stage of calculations.

When a cell meets these criteria, it is then further classified as higher/lower intensity and more/less concentrated for the current year based on the 20-year historical mean for only that location. This is done by subtracting the local historical mean CI and CC scores from their respective current scores. For local CI scores, a positive value means that the current year's violence is more clustered than the historical average for that cell and a negative score means violence is more dispersed. For local CC scores, a positive value means that current violence is more dispersed than the historical average at that location while a negative score means that violence is more clustered.

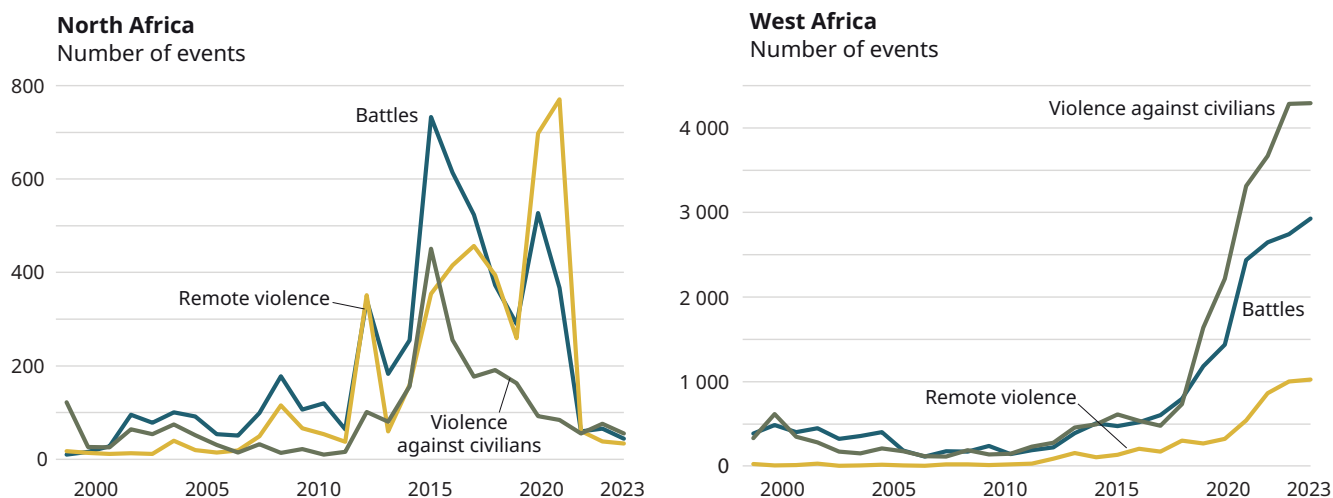
Adding these features to the local SCDi allows more insightful mapping of security changes and more nuanced understanding of current conditions. It therefore promises to be a valuable contribution to addressing key policy and security questions, such as where conflict has recently intensified, where it has become more concentrated and how it has spread to new locations.

● GEOGRAPHIES OF VIOLENCE

Highest levels of violence ever recorded in West Africa

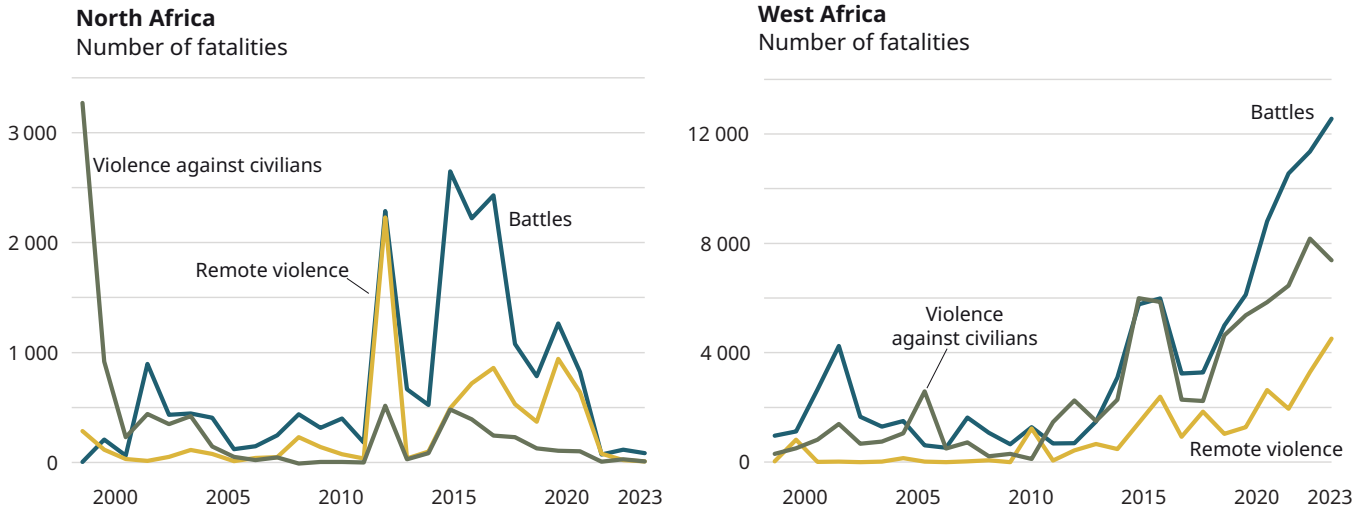
Basic metrics on the intensity of violence continue to follow a familiar regional pattern from previous years: violent events and resulting fatalities are at a 20-year low in North Africa and at a 20-year high in West Africa (Figure 2 and Figure 3). As in 2020 and 2021, all major forms of political violence once again increased south of the Sahara in 2022, particularly violence against civilians, for which more than 4 000 individual incidents are recorded. While the political tensions that remain in Libya pending the outcome of currently delayed national elections could reignite violence in North Africa, violence continued to accelerate in West Africa in 2023. Violent events in the region show a 3% increase between 2022 and 2023, while fatalities were 7% higher. In summary, 2023 was the most violent year in West Africa, a year-to-year trend that has held firm since 2016.

Figure 2.
Evolution of violent events by type in North and West Africa, 1997-2023



Source: Authors based on ACLED data (ACLED, 2024^[6]).

Figure 3.
Evolution of fatalities by type in North and West Africa, 1997-2023



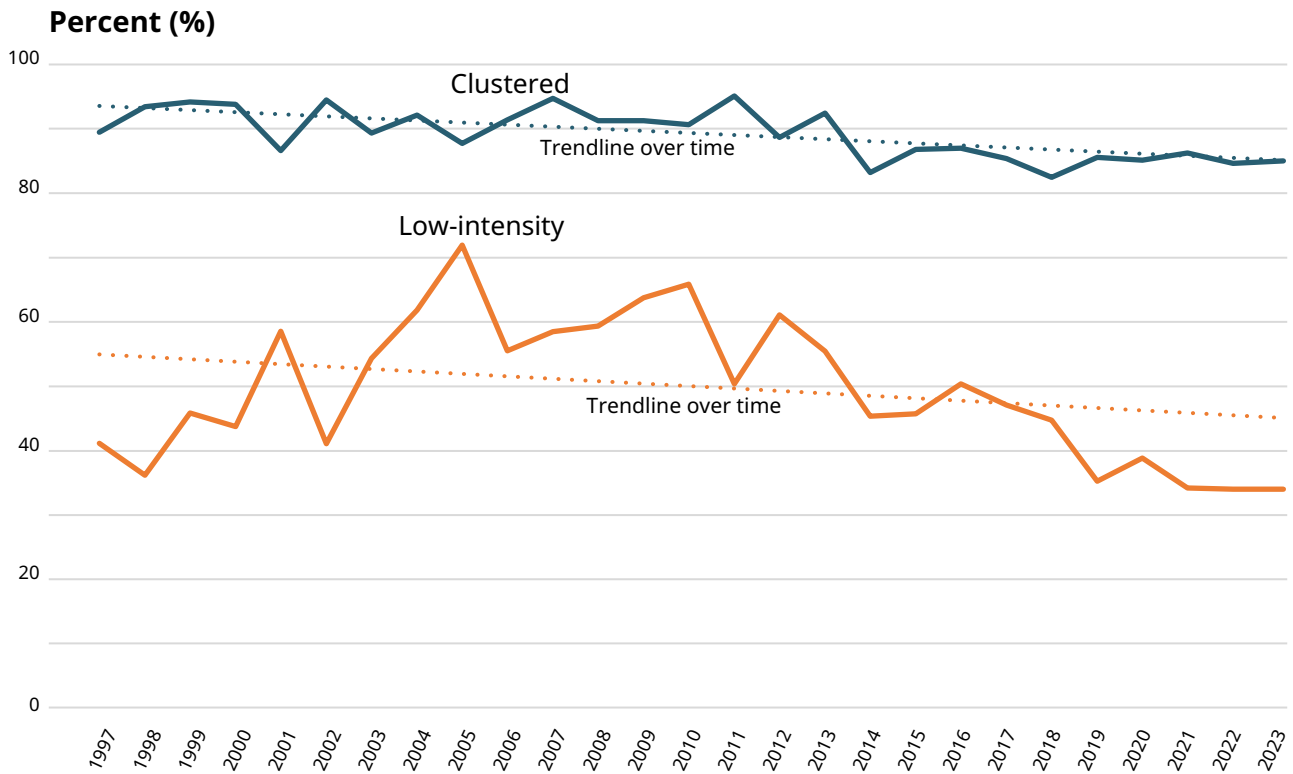
Source: Authors based on ACLED data (ACLED, 2024^[6]).

The continuation of clustered and low-intensity violence in West Africa

As with the numbers of events and fatalities, the number of cells that are classified as in conflict by the SCDi has continued to rise year-to-year between 2016 and 2022, but fell slightly in 2023. In 2022, 706 cells were classified into one of the four SCDi conflict types (clustered high intensity, dispersed high intensity, clustered low intensity and dispersed low intensity), a 16% increase from 2021. In 2023, 685 cells were in conflict, a 3% decrease from 2022.

Similar to recent years, both 2022 and 2023 also continued the trend of clustered violence making up most of the mix of SCDi categories present. Between 1997 and 2011, 92% of conflict cells were classified as clustered, meaning that the locations of violent events were nearer to each other than would be expected by chance. Within the scale of a 50 km by 50 km cell, this meant that violence was occurring repeatedly in similar locations and concentrated in the same populated places over time. The events of the Arab Spring in North Africa marked the beginning of an overall downward trend in the proportion of clustered conflict cells, reaching 83% in 2023 (Figure 4). Even with that trend, the overwhelming majority of violence still repeatedly occurs at similar locations within cells. This reflects the reality of long-term patterns of clustered violence that has become entrenched across much of West Africa.

Figure 4.
 Conflict zones in North and West Africa classified as “clustered” and “low-intensity”, 1997-2023

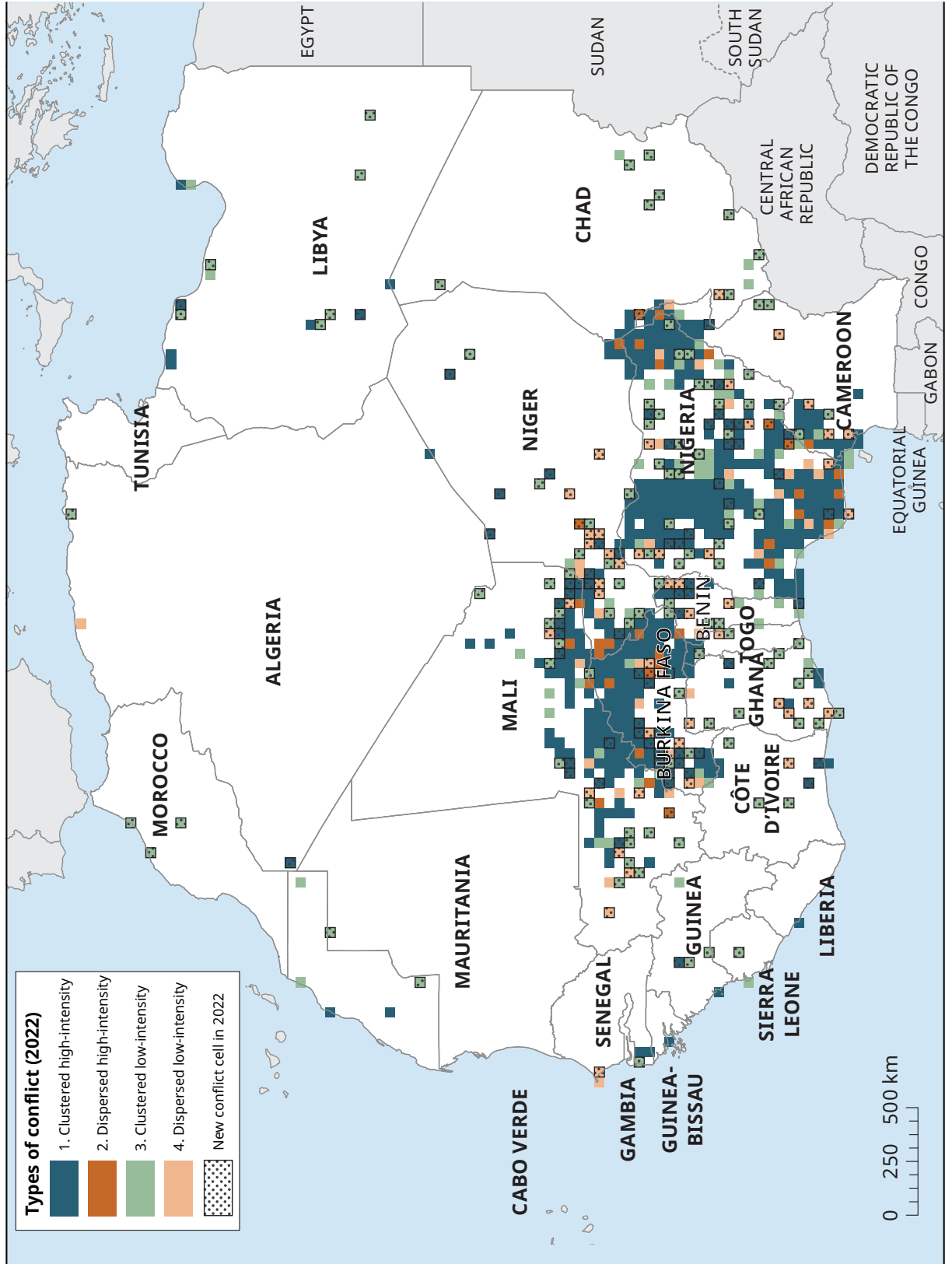


Source: Authors based on ACLED data (ACLED, 2024^[6]).

SCDi results from 2022 and 2023 also highlight the ongoing importance of low-intensity conflict as a marker of the spread of violence to new locations in West Africa. The proportion of cells classified as low intensity was 34% in both 2022 and 2023. However, of the 383 cells that experienced violence in 2022 or 2023 but were without violence the previous year, 66% of those were low intensity. Furthermore, these new locations were typically found on the edges of existing clusters of conflict cells in West Africa, especially in the Central Sahel (Burkina Faso, Mali, Niger) and Nigeria (Map 1), as well as in coastal countries along the Gulf of Guinea, most notably in Ghana and northern Benin. In short, the region’s conflicts expanded geographically in 2022 and 2023. When a cell fell into violence for the first time during these years, it typically did so by initially exhibiting low intensity event patterns within it.

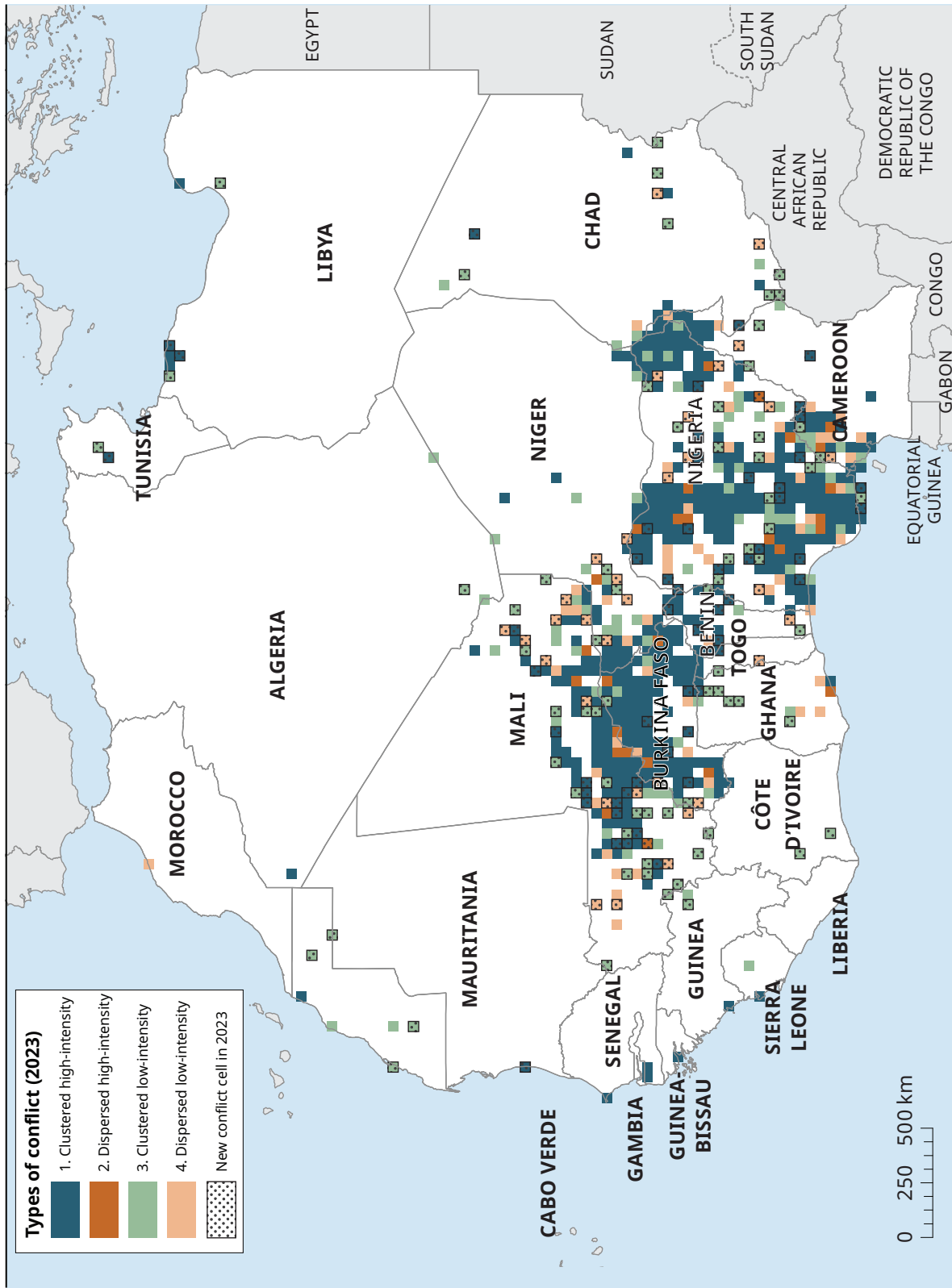
Map 1. Spatial Conflict Dynamics indicator (SCDi) in North and West Africa, 2022 and 2023

2022



Map 1. Spatial Conflict Dynamics indicator (SCDi) in North and West Africa, 2022 and 2023 (continued)

2023

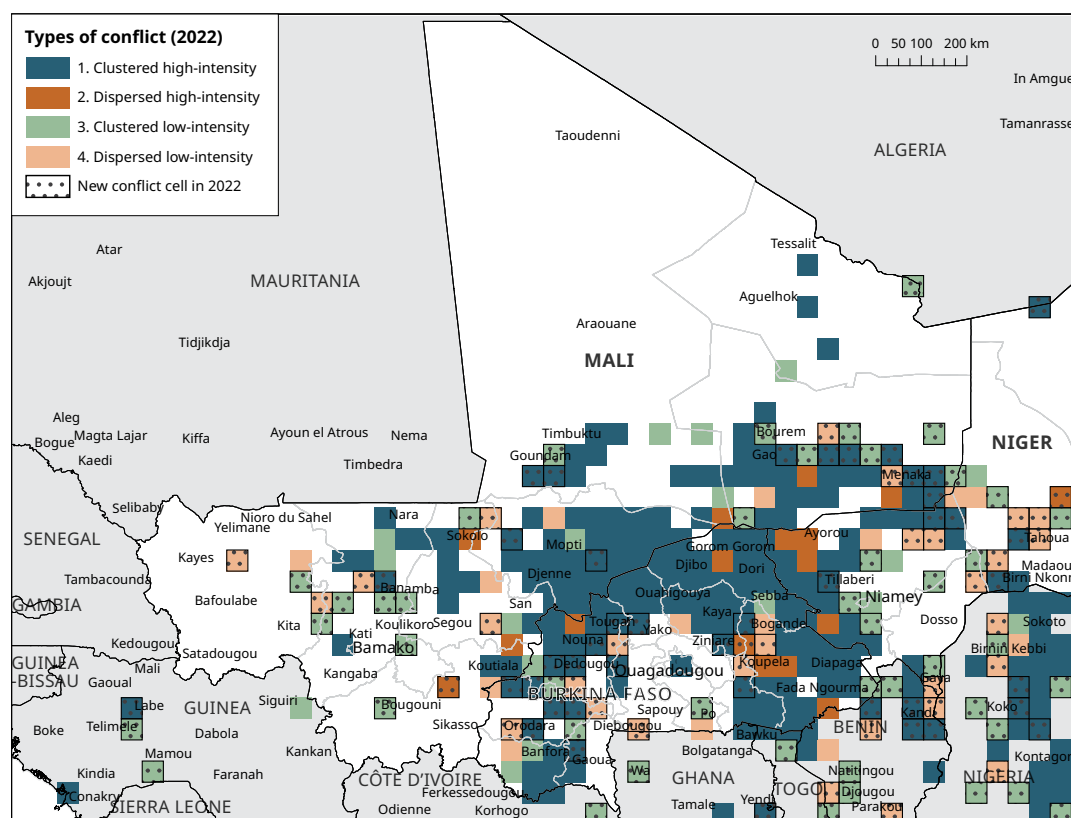


Source: Authors based on ACLED data (ACLED, 2024[6]).

In the Central Sahel, political violence has largely moved south of the Sahara, where the Malian conflict started, to include most of Burkina Faso and a significant portion of western Niger (Map 2). As noted in previous studies, much of the violence tends to affect rural regions and small urban centres (Radil et al., 2023[7]). Capital cities remain largely unaffected by violence, contributing to forming a shrinking archipelago in which communication between secure areas is increasingly difficult (OECD/SWAC, 2023[5]). The fragmentation of the national territory of Burkina Faso, Mali and Niger that results from this evolution reinforces the gap between the largest urban centres, where the political elite and most economic activities are located, and the rest of the country. The SCDi highlights that the diffusion of violence from the Sahel to the Gulf of Guinea follows national boundaries, particularly in northern Benin, Côte d'Ivoire, Ghana and Togo. This paper confirms that border regions are being actively used by extremist groups to spread south. Thus far, jihadist groups tend to use one side of the border as a safe haven and commit most of their attacks on the other side, as between Burkina Faso and Ghana.

Map 2.
Spatial Conflict Dynamics indicator (SCDi) in Mali and the Central Sahel, 2022 and 2023

2022

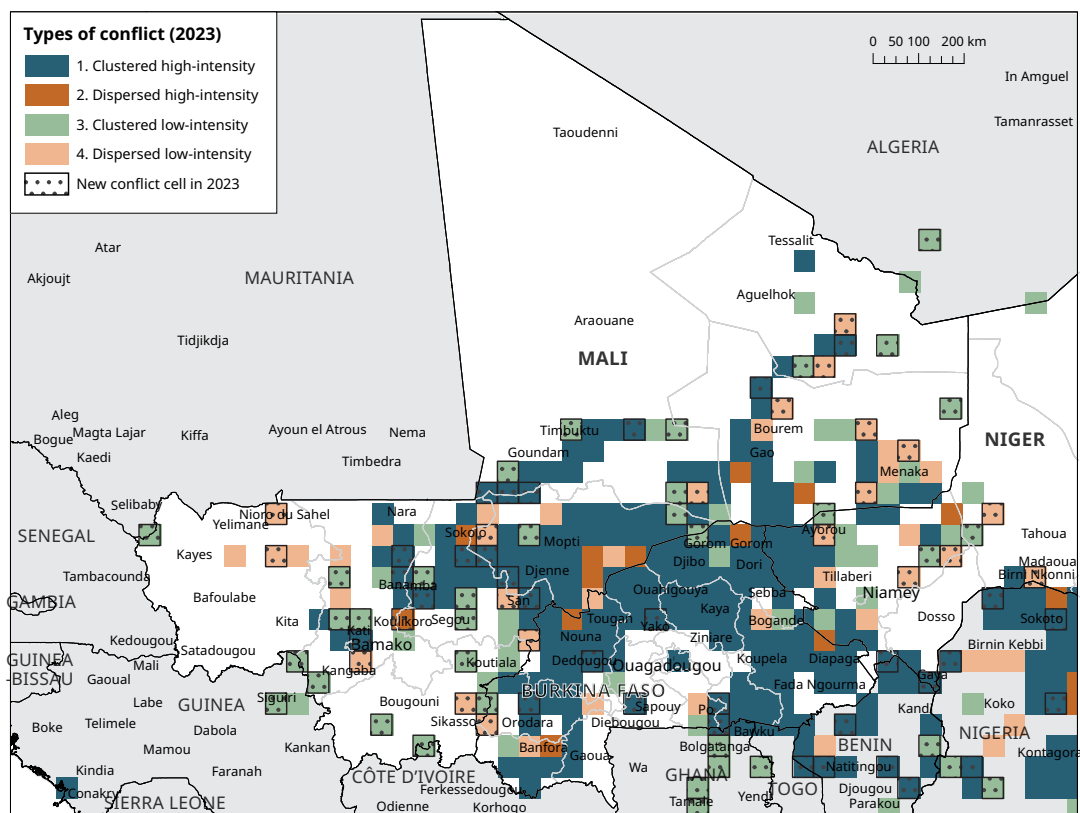


Source: Authors based on ACLED data (ACLED, 2024[6]).

Map 2. (continued)

Spatial Conflict Dynamics indicator (SCDi) in Mali and the Central Sahel, 2022 and 2023

2023

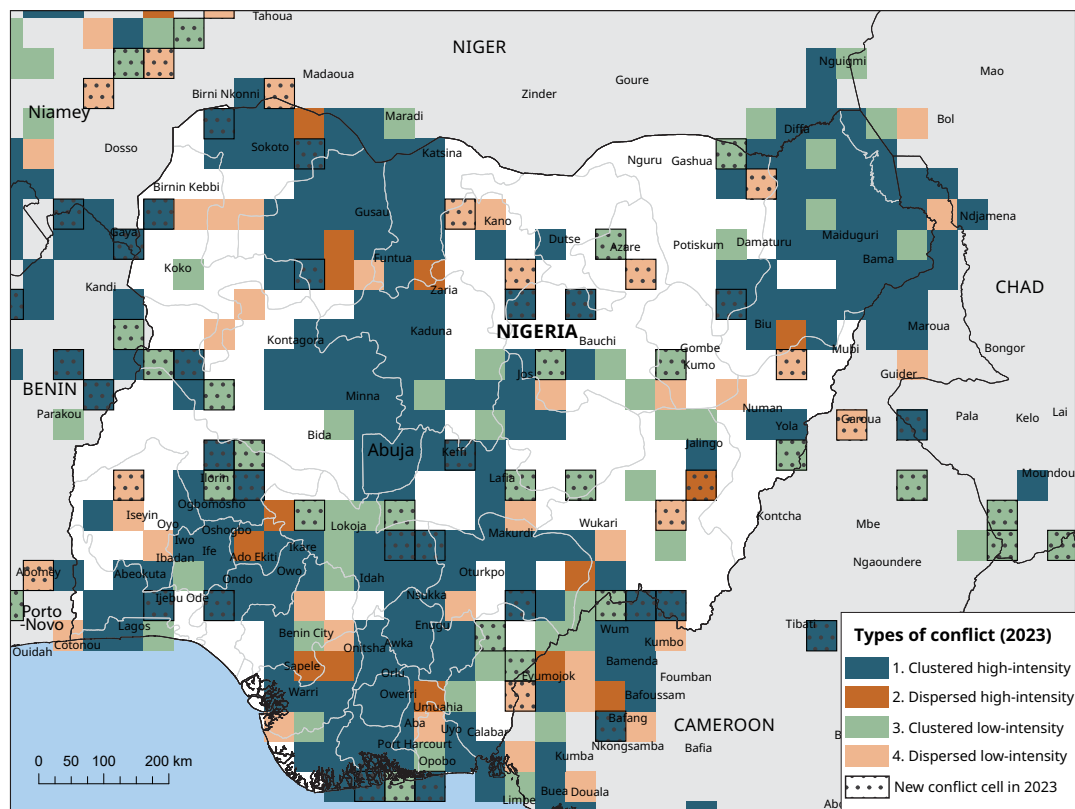
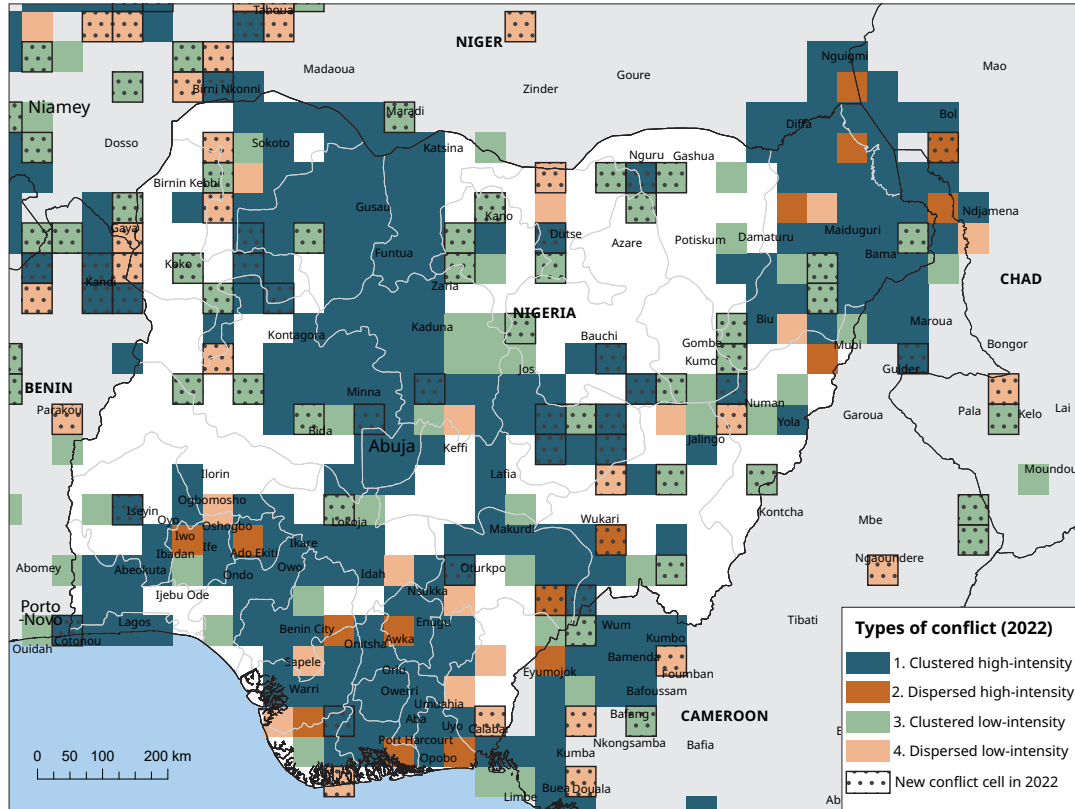


Source: Authors based on ACLED data (ACLED, 2024[6]).

Nigeria is by far the country most affected by political violence in the region. In 2022, nearly half of the people (47%) killed in West Africa as a result of battles, violence against civilians or remote violence were in Nigeria, according to ACLED. The three subnational conflict zones that have emerged in Nigeria since the 1990s (Middle Belt, Delta, Lake Chad) have coalesced to form one gigantic cluster of violence that covers more than half of the country (Map 3). The core of the Nigerian conflict zones is affected by clustered and high-intensity violence, and is surrounded by a ring of clustered and low-intensity conflict zones where violence could intensify. As already noted in previous OECD/SWAC studies (2023[5]), the north-west of the country has become a major hub of violence, notably in Kaduna, Katsina and Zamfara States, where the government is currently fighting different forms of violent activities locally referred to as “banditry”. The frequent use of air strikes by the Nigerian armed forces has led to massive civilian casualties in the region, without putting an end to instability (Human Rights Watch, 2023[8]).

Map 3.

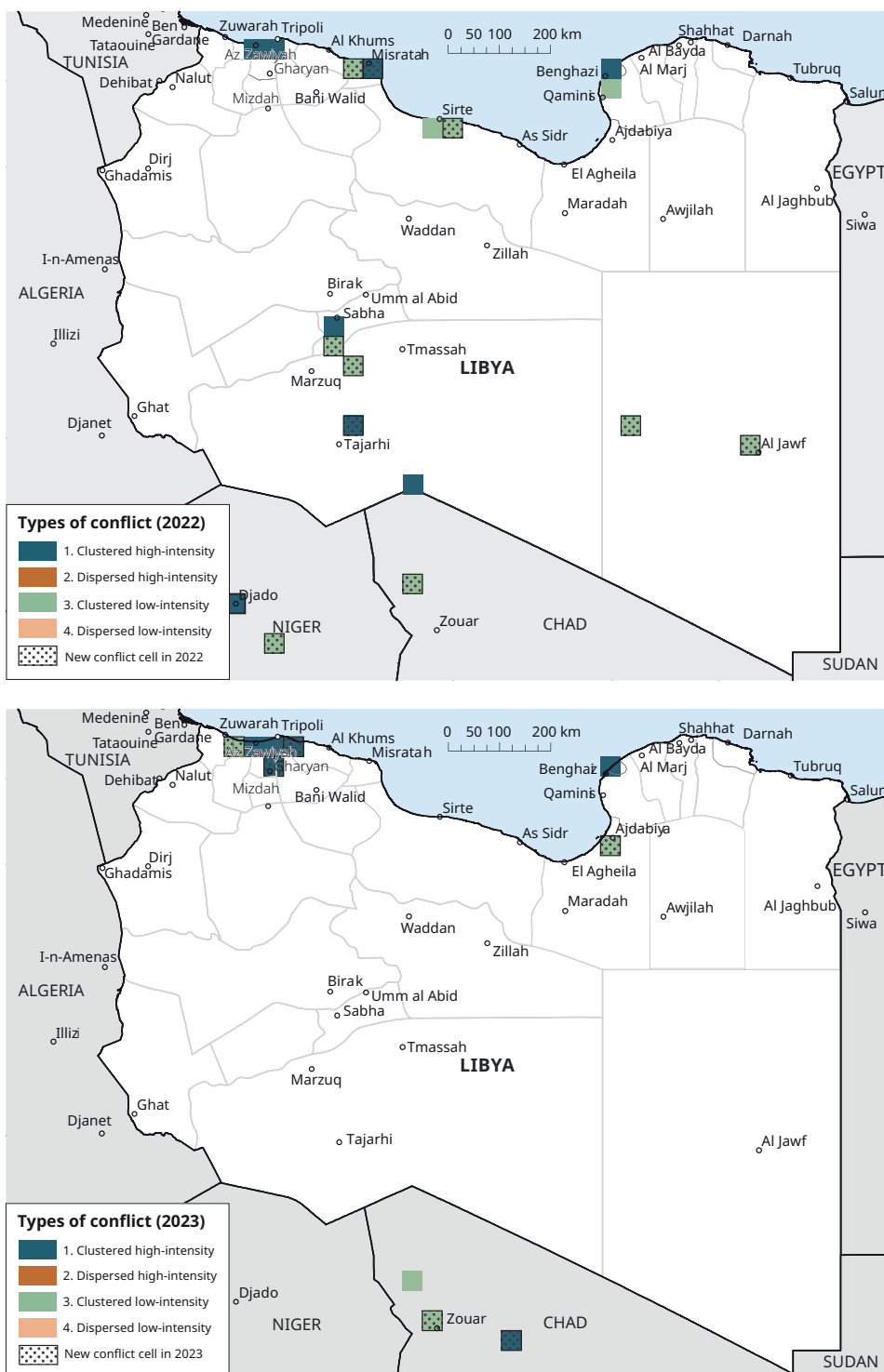
Spatial Conflict Dynamics indicator (SCDi) in Nigeria and the Lake Chad region, 2022 and 2023



Source: Authors based on ACLED data (ACLED, 2024[6]).

Although the number of new cells in conflict in Libya is quite small compared to the Central Sahel or Nigeria, 75% of such cells were low intensity in 2022 while only 50% in 2023 (Map 4). Unlike in the Central Sahel and Lake Chad region, violence in Libya during both years tended to be rather urban and concentrated in the narrow coastal area. In 2022, violence was also found in a few Saharan locations, such as the Fezzan, but was absent from the interior of the country in 2023.

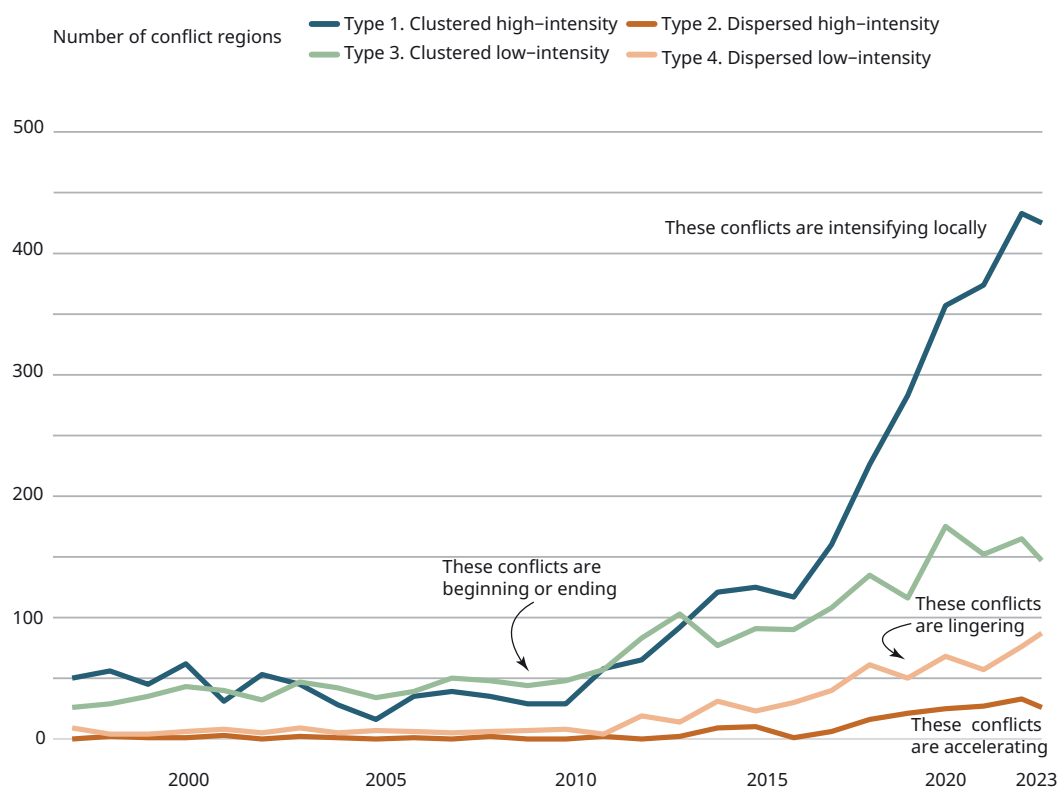
Map 4.
Spatial Conflict Dynamics indicator (SCDi) in Libya, 2022 and 2023



Source: Authors based on ACLED data (ACLED, 2024^[6]).

Overall, the results from 2022 and 2023 in West Africa reflect a continuation of the recent trajectories of violence (Figure 5). For 2023, clustered high-intensity (Type 1) cells remain the dominant type of SCDi category with 62% of cells, followed by clustered low-intensity cells (Type 3, 21%). Dispersed low-intensity (Type 4, 13%) and dispersed high-intensity (Type 2, 4%) cells are far less represented. These results indicate that political violence is rather localised in the region and often driven by very local factors, such as political disputes between communities, access to shared natural resources or grievances left unaddressed by state authorities. If “all politics is local” in general, the SCDi suggests that it is especially true in West Africa.

Figure 5.
Number of conflict zones in North and West Africa by type, 1997-2023



Source: Authors based on ACLED data (ACLED, 2024^[6]).

Localised trends using local SCDi metrics

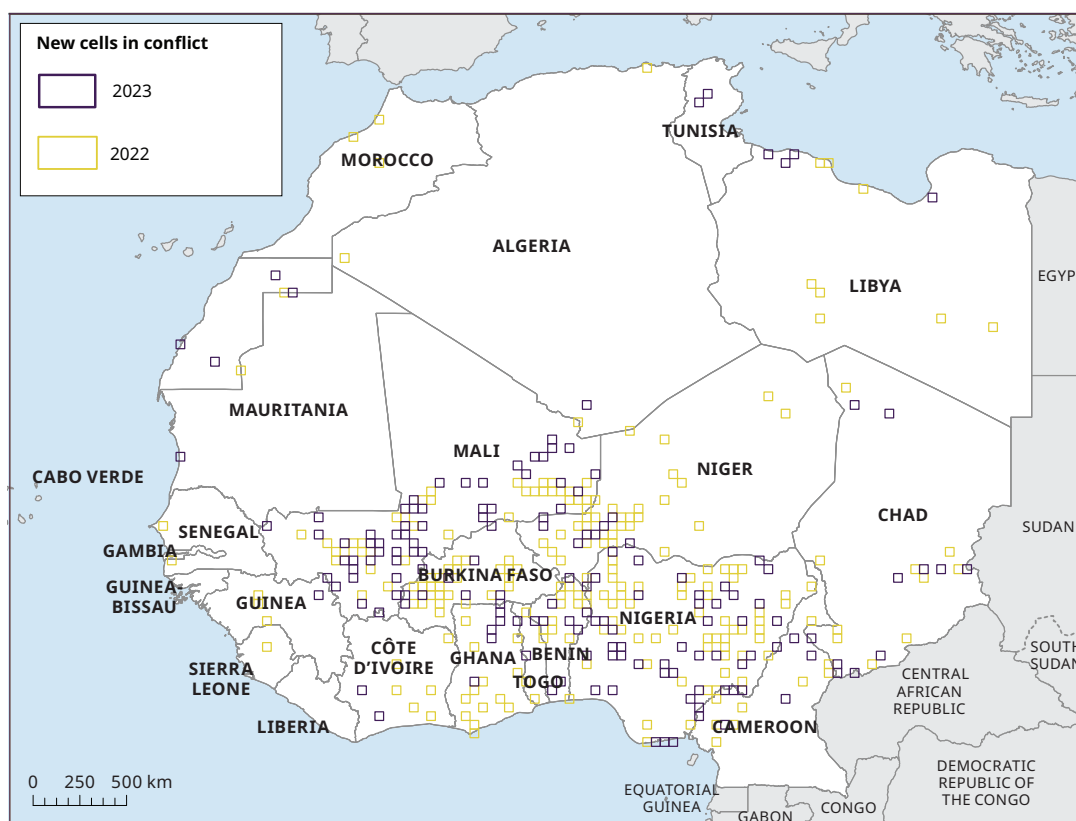
One of the new features in the SCDi is the ability to track and identify the histories of conflicts in cell locations, which provides several advantages. Perhaps most crucially, the SCDi can now easily identify locations that have become newly violent, including those that are experiencing violence for the first time in a generation. For example, as previously described, the SCDi recorded 685 cells in one of the four SCDi conflict categories in 2023. Of these, 160 cells (23%) had shifted into conflict since the previous year. For 2022, the percentage was higher, at 32% (706 cells in conflict, 223 with no conflict in the previous year). This means that over just two years, 383 cells fell into violence. As all but 26 of these new conflict cells were in West African states, this reflects the region’s ongoing and disturbing spread of violence in 2022 and 2023.

A closer look using the SCDi’s new years-in-conflict metric, which tracks how many of the past 20 years a cell has received an SCDi classification, shows an even more troubling trend. Of the 706 cells in conflict in 2022, 113 had no record of violence for the previous 20 years. Comparing this to the same criteria in 2023 yields another 112 such cases. The local SCDi metrics show that in just the two years between 2022 and 2023, 225 cells experienced violence for the first time since the early 2000s.

Considering where these new conflict cells are found offers valuable insights. Map 5 shows that 260 (68%) of these locations are associated with ongoing conflicts in just four countries: Burkina Faso, Mali, Niger and Nigeria. However, 56 (11%) of these cells were found in five of the littoral states along the Gulf of Guinea. Of these, Benin and Ghana (20 cells each) both recorded violence in the highest number of new locations, followed by Côte d'Ivoire (8), Guinea and Togo (4 each). The majority of the violent events in these five states from 2022 through 2023 were attacks against civilians (67%) followed by battles between armed groups (29%) and explosions or other forms of remote violence (4%) (ACLED, 2024^[6]). Given the ongoing concerns about the potential for violence to spread south from the Sahel to coastal states, this is a disturbing trend that merits further analysis.

Map 5.

New conflict cells in 2022 or 2023 with no violence in the preceding year

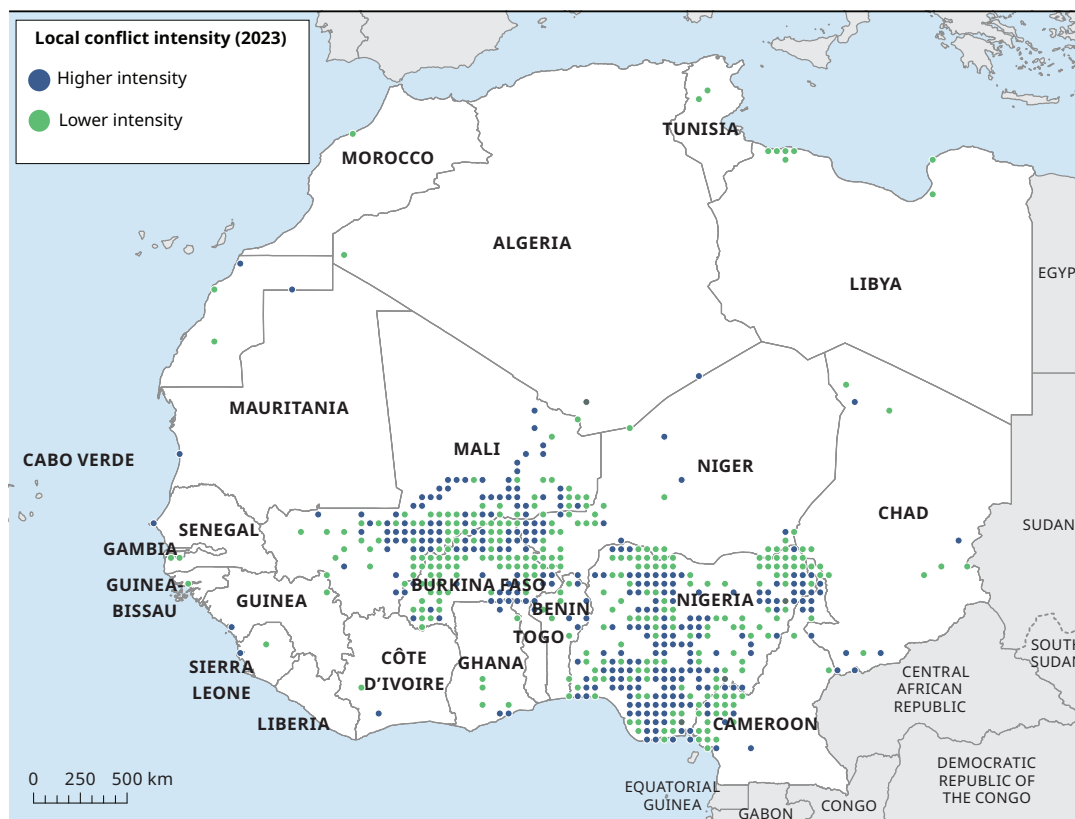


Note: The map shows cells in which conflict was observed for the first time in 2022 or 2023 that had not been conflictual the preceding year.

Source: Authors based on ACLED data (ACLED, 2024^[6]).

Another feature of the new local SCDi metrics is the ability to consider current CI and CC scores against the historical norms in those cells. Maps 6 and 7 show the 619 cells that received local SCDi classifications in 2023, meaning cells that had one or more years of conflict between 2003 and 2022. In 2023, higher than average local CI scores were recorded in 56% in the cells (347 out of 619 cells). This indicates that where violence was present in 2023, it intensified in that location when compared to past episodes of violence. The spatial distribution of the cells reflects the dynamic of armed conflicts: cells that experience a higher intensity of violence than their historical average reflects the localised nature of many armed conflicts in the region (Map 6). In the Central Sahel, higher intensity can be found in regions such as the Liptako Gourma and the Dogon Country that have been disputed for a long time, as well as in previously peaceful regions, on the periphery of major conflict zones, as in Burkina Faso. In the Lake Chad region, much of the higher intensity zones are in rural and border regions, including in Niger and Chad. In Nigeria, the Middle Belt continues to be characterised by an increase in CI, as does the centre of the Delta region.

Map 6.
Local conflict intensity in 2023 compared to 20-year average



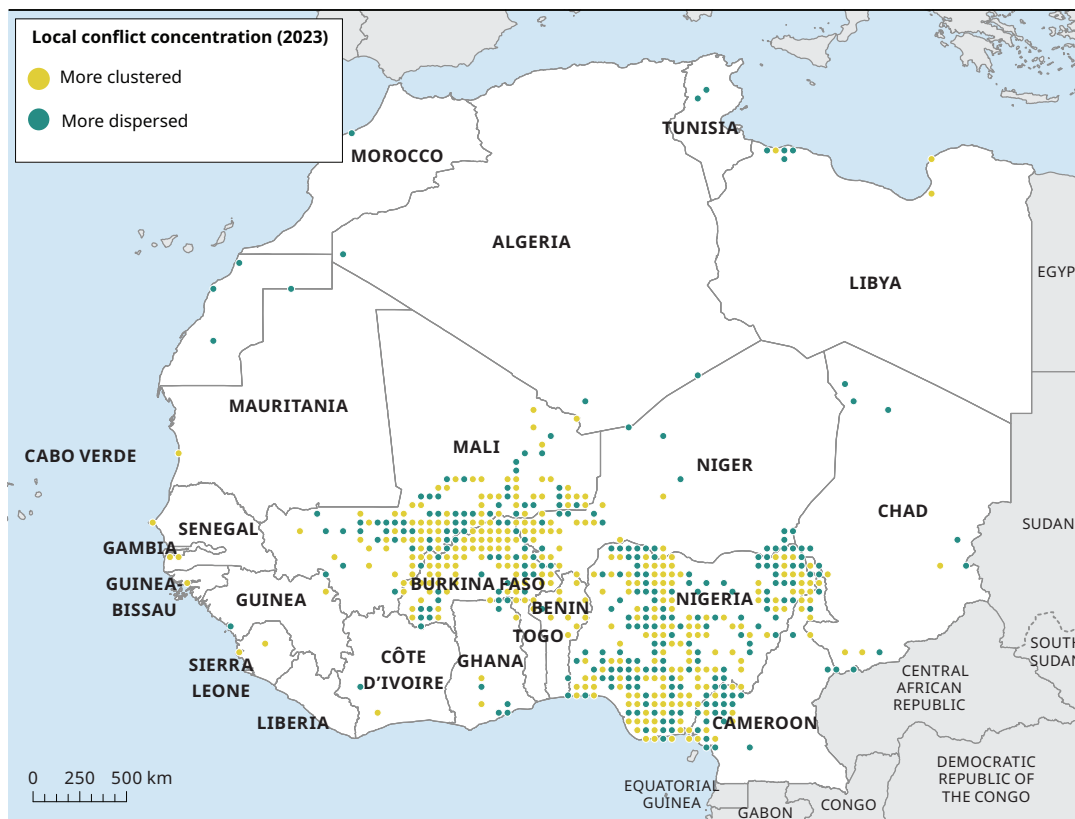
Note: The map shows cells that have a higher or lower intensity of conflict in 2023 than the average recorded locally from 2003-22.

Source: Authors based on ACLED data (ACLED, 2024^[6]).

The local CC metric for 2023 trended towards more clustering over more dispersion. The local CC results show that 54% of these cells (334 out of 619) had higher than average levels of clustering. This indicates that where violence was present in 2022, it was slightly more likely to be more clustered in that location than in the past. The spatial distribution of CC follows a more obvious centre-periphery pattern than does conflict intensity. In all the major conflict regions, violent events are more clustered in the centre of the cells than they used to be historically, while the expansion of armed conflicts is visible through dispersed patterns of violent activities (Map 7).

Map 7.

Local conflict concentration in 2023 compared to 20-year average



Note: The map shows cells that have a more clustered or more dispersed pattern of conflict in 2023 than the average recorded locally from 2003-22.

Source: Authors based on ACLED data (ACLED, 2024^[6]).

These dual metrics highlight the long-term persistence of conflict over many years in these locations, especially in the core conflict regions spanning the central Sahel and in Nigeria. Of the 619 cells with local CI and CC scores in 2023, the average number of years in conflict is five, while 82 cells (8%) have had ten or more years previously recorded in conflict. In combination with the base SCDi metrics, the new local features highlight how conflict is not just spreading to new locations in West Africa but also how persistent conflict has tended to be over time in a place once it has developed.

This context can be seen when considering cells in border regions, which have been disproportionately affected by violence since 2016 (OECD/SWAC, 2022^[4]). Border region cells, or those within 100 km of an international land boundary, represented more than half of all the cells with violence in 2022 and in 2023 (55% of all SCDi cells were found in border regions in both years). The local SCDi metrics indicate that recent violence may have different dynamics than in non-border regions. For instance, in 2023, border region violence was notably less intense than in non-border regions; 46% of cells in border regions were classified as locally less intense versus 36% in non-border regions. This may be due to the still sporadic presence of many state security forces in the various border regions, where numerous armed groups continue to operate bases. However, this circumstance did not produce differently concentrated violence in border regions (44% of cells) as compared to non-border regions (41%).

● PERSPECTIVES

The spatial indicator developed by OECD/SWAC is a unique tool to monitor the evolution of political violence in North and West Africa over the past decades. The indicator can now describe the changing geography of armed conflicts compared to both regional and localised contexts. This approach makes it easier to identify the places where conflicts emerge, which types of conflict dominate in each region and how they spread, possibly across national boundaries. The indicator highlights that the degradation of the security situation observed since the early 2010s is unprecedented in the recent history of West Africa. Nowhere else in the world are so many countries affected by so many different yet interrelated forms of violence. It is unclear when the trajectories of violence in the region will begin to change but the data for 2023 indicates that the status quo may remain undisturbed for the immediate future.

The fact that politically motivated violence is both intensifying in terms of violent incidents and fatalities, and spreading to previously unaffected regions in West Africa is worrying, both for the political stability of the region and for the civilian population. The end of the foreign and international military deployments in the Sahel and the seizure of power by military juntas in Burkina Faso, Guinea, Mali and Niger have led to an increase in politically violent events and (civilian) fatalities. The SCDi highlights that numerous localities face armed conflicts for the first time in a generation. This evolution can be explained by the fact that transnational jihadist groups have taken advantage of the political instability in Central Sahelian countries to expand to previously peaceful regions, notably in the north of coastal countries (Africa Center for Strategic Studies, 2023^[9]).

With that in mind, the SCDi results from 2022 and 2023 raise important questions about the processes that underpin the spreading violence in West Africa. For instance, it is not yet clear if the emergence of low intensity violence in several coastal states is indicative of: i) existing violent non-state armed groups expanding the range of their operations from existing conflict areas; ii) such armed groups relocating to avoid security pressures; (iii) altogether new groups emerging; or some combination of all three. While much more effort is needed to answer that question, it can be said that violence continues to spread in West Africa, both within states that have struggled with long-term insecurity and to states that have been previously at peace.

This circumstance points toward the need to support and further develop regionally focused co-operative security and stabilisation efforts, which would have to be integrated with several other important regional trends, including rapid population growth, increased urbanisation, infrastructure investment and the need for climate-change adaptation. Cross-border mobility and trade is a crucial shared policy element in all these issues and is always grounded in clear boundary establishment, demarcation and mobility arrangements between neighbouring states. Therefore, elevating and reinforcing border management partnerships in West Africa is one area that could help to stem the still-rising tide of political violence in the region.

● REFERENCES

- ACLED (2024), *Armed Conflict Location & Event Data Project*, <https://acleddata.com/>. [6]
- Africa Center for Strategic Studies (2023), *Burkina Faso crisis continues to spiral*, <https://africacenter.org/spotlight/burkina-faso-crisis-continues-to-spiral/> (accessed on 29 August 2023). [9]
- Human Rights Watch (2023), *Nigeria: Erroneous military airstrike*, <https://www.hrw.org/news/2023/12/07/nigeria-erroneous-military-airstrike> (accessed on 7 December). [8]
- OECD/SWAC (2023), *Urbanisation and conflicts in North and West Africa*, West African Studies, OECD Publishing, Paris, <https://doi.org/10.1787/3fc68183-en>. [5]
- OECD/SWAC (2022), *Borders and conflicts in North and West Africa*, West African Studies, OECD Publishing, <https://doi.org/10.1787/6da6d21e-en>. [4]
- OECD/SWAC (2021), *Conflict networks in North and West Africa*, West African Studies, OECD Publishing, Paris, <https://doi.org/10.1787/896e3eca-en>. [3]
- OECD/SWAC (2020), *The geography of conflict in North and West Africa*, West African Studies, OECD Publishing, Paris, <https://doi.org/10.1787/02181039-en>. [1]
- Radil, S. et al. (2023), "Urban-rural geographies of political violence in North and West Africa", *African Security*, pp. 1-24. [7]
- Walther, O. et al. (2023), "Introducing the Spatial Conflict Dynamics indicator of political violence", *Terrorism and political violence*, Vol. 35(3), pp. 533-552. [2]

WEST AFRICAN PAPERS

IDENTIFYING LOCAL CONFLICT TRENDS IN NORTH AND WEST AFRICA

Several states in West Africa have experienced significant episodes of political violence since the early 2010s. These have included civil wars, religiously motivated terrorism, separatist insurgencies, military coups and communal strife, each of which have local, national and transnational dimensions. Intended to help guide responses to the region's political challenges, the Sahel and West Africa Club (SWAC/OECD) created an interactive, spatial tool for policy makers in 2019, the Spatial Conflict Dynamics indicator (SCDi). The SCDi monitors political violence at subnational scales. It combines different quantitative dimensions of conflict into a mappable tool that describes the circumstances in each location. The latest enhancement to the SCDi brings two new features to aid the identification of local conflict trends. First, the tool now identifies regions that are newly entering into or exiting from conflict. This allows a more detailed picture of how the geography of conflict is spreading or contracting within and across national borders. Second, the tool now characterises the current conditions in a location as either worsening or improving, based on past conditions at the same location. The SCDi is implemented in SWAC's new Mapping Territorial Transformations in Africa (MAPTA) platform.