

# PEACEWORKS



## Linking Early Warning and Early Response Networks in West Africa

By Nate Haken, Patricia Taft Nasri, and Nikita Reece



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## ABOUT THE REPORT

This report examines the early warning and early response ecosystem in West Africa. It explores how existing systems track conflict risk for analysis and response planning, and where there might be opportunities to build on them and create deeper linkages and synergies. The research—supported by the United States Institute of Peace and carried out by the Fund for Peace—draws on data from eight early warning systems, extensive social network analysis, and interviews.

## ABOUT THE AUTHORS

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**Cover photo:** Zenabou Coulibaly Zongo, consultant and founding member of the Council of Burkinabe Women, speaks at a mosque in Ouagadougou, Burkina Faso, on October 27, 2021. Her work attempts to address gaps in public health efforts, one of the challenges that have led to an increase in violent conflict. (Photo by Sophie Garcia/AP)

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# Summary



Most types of violent conflict in West Africa increased between 2016 and 2021, as economic and security challenges eroded public confidence in governance and groups competed for scarce resources. Data show increases in violent extremism, communal violence, political violence, and criminal violence; and trends indicate a further escalation over the next decade, with devastating humanitarian implications.

For at least 10 years, many institutions and organizations in West Africa have sought to head off these patterns of violence by establishing early warning and early response (EWER) systems at the regional, national, and local levels. These systems are intended to provide information on conflict risk to allow actors with a mandate and ability to respond to do so in a timely manner and prevent the escalation or spread of violence.

However, each system, no matter how sophisticated, eventually encounters the same points of failure: gaps in data and information on factors contributing to conflict, as well as problems around coordination, collaboration, and flow of critical information and analysis to those best positioned to respond.

Research has shown that a network-of-networks approach can help reduce the barriers to successful conflict management and prevention. Because conflict dynamics are so complex, no single EWER system can be flexible enough to reliably and effectively scale, adapt, and respond. But linking existing networks can significantly increase the impact of these systems. To provide evidence, examples of EWER systems operating at the regional, national, and local levels are detailed in this report. They demonstrate how a network-of-networks approach can help address some of the persistent shortcomings of existing EWER systems.





Bola Tinubu (center) leaves his party's campaign headquarters after winning the presidential elections in Abuja, Nigeria, on March 1, 2023. Tinubu promised to improve the living conditions of communities impacted by violence and address the root causes of the security crisis. (Photo by Ben Curtis, File/AP)

# Introduction

In parts of West Africa, violence has worsened over the last several years, particularly in the Sahelo-Saharan states of Burkina Faso, Mali, and Niger. Increasingly, violence has also spilled over into the coastal West Africa states of Benin, Côte d'Ivoire, and Togo.<sup>1</sup> In West Africa's largest country, Nigeria, violence steadily increased from 2017 to 2022 and then reduced slightly in 2023. Violence has been particularly high in the northwest and in the Lake Chad Basin, with more periodic violence in the Middle Belt and the Niger Delta.<sup>2</sup> Of major concern in vulnerable parts of the region is a long-term, continual rise in structural pressures, especially environmental and demographic ones, which are already being compounded by livelihood disruptions stemming from the COVID-19 pandemic and a breakdown in governance institutions. Further complicating matters, Senegal, which has long been considered an

anchor of stability in the region and a model of good governance, has had a constitutional crisis, triggered by the postponement of elections and mass protests. Separately, Burkina Faso, Mali, and Niger have declared their intentions to pull out of the Economic Community of West African States (ECOWAS) following a series of military coups and associated sanctions. Taken together, these pressures and disruptions signal a possible surge over the next decade of violent extremism, insurgency, separatism, election violence, coups, mutinies, banditry, gang violence, and communal clashes.

According to an analysis of 2016–2021 data from eight early warning systems across the region, insurgency, separatism, and violent extremism have been the most severe types of conflict and are apparently becoming

more lethal. Behind insurgency and violent extremism, ethnic/communal violence was the second most lethal category, and it tends to rise and fall according to seasonal and election cycles. It peaked in 2018 with almost 3,000 reported fatalities, with levels returning to those of prior years since then. Political crises and election violence, which tend to spike during election seasons, have been less lethal overall but have worsened on average. Given the five-year election cycles in most of West Africa, this six-year time period is not long enough to determine whether there is an overall increase in political risk regionally. Nevertheless, the number of incidents and fatalities associated with all forms of riots and protests has steadily increased, resulting in rising pressures on governance. This is evidenced by a spate of coups and attempted coups d'état in Burkina Faso, Guinea, Mali, and Niger and rising levels of lethal gang violence and criminality (especially in Nigeria but also in Burkina Faso, Côte d'Ivoire, Mali, and Niger).

To better prepare for and prevent such violence, government authorities, multilateral organizations, community-based organizations, civil society groups, and companies have organized and sometimes collaborated in the design and deployment of a range of conflict early warning and early response (EWER) systems and security risk assessment processes. EWER systems are knowledge management tools that guide the ongoing collection and organization of data on specific indicators. These indicators track the patterns and trends of conflict risk for analysis and response planning, and they are selected based on the problem to be analyzed and the availability of data. Security risk assessments, on the other hand, while also designed to anticipate risk, are normally undertaken to ensure a company's compliance with international standards such as the International Finance Corporation's Performance Standard 4 or the Voluntary Principles on Security and Human Rights. Security risk assessments can also provide insight into the wider operational risks to a company in each environment and are updated every few years or as needed.

EWER systems can look quite different from each other, depending on the context in which they are operating and the data or information that is being gathered. For example, in West Africa, ECOWARN—the ECOWAS Early Warning and Response Network—covers a broad geographic area of almost 3.2 million square miles (5.1 million sq km) and 15 member countries. The indicators developed to cover such a diverse set of countries and conditions would look quite different from, for example, indicators designed to cover communities in Nigeria; the latter would be more focused on targeted, local-level conflict dynamics, and early warning products might be geared toward community-based organizations, civil society, and local officials instead of national-level government officials and high-level policymakers. Still, despite these differences, these systems could be linked in such a way as to enrich early warning and improve outcomes rather than reinventing the wheel to address failures or gaps. If early warning systems can be linked and exchange information, as part of an overall strategy from the onset of a project or program, the systems' datasets can—to at least some extent—be layered for cross-validation and the filling of gaps using tools like geographic information systems (GIS). If a network-of-networks can be mapped and cultivated within the design of EWER systems using tools like social network analysis, then a response may be more effective.

Some early warning systems are more sophisticated than others, but they all share the same fundamental constraints given the complexity of conflict. Eventually, the indicators may lose their relevance, as the nature and conditions of conflict can change rapidly. Even if the indicators are well conceived and highly pertinent, data may not be available for certain indicators due to turnover in staff or contacts over time or changes in technology. Even if data are available, they may not be representative across space and time. For example, data about protests and large-scale violence may be representative, but information about gender-based violence may not be, owing to uneven reporting and stigma. Data in remote areas may not be representative because of lack of



## West Africa

Adapted from artwork by Rainer Lesniewski/Shutterstock

media coverage and connectivity. Or data regarding escalation may be representative, but information about chronic issues or lingering grievances may not be, owing to a lack of indicators measuring them or the need for additional, qualitative information to fill gaps. Even if the data are representative, they may not be properly interpreted because of context-specific nuances, flawed assumptions, or the inability to accurately predict the future. Even if the analysis and interpretation are sound, end users (responders and decision-makers) must still deal with competing short-, medium-, and long-term factors—such as the availability of current resources, other donor commitments, or changes in policy decisions—that reduce their ability to lead.

All of the above constraints inevitably complicate prognosis, prevention, and response efforts. Meanwhile, the conflict landscape is prohibitively dynamic, which renders even the most well-designed EWER systems obsolete or irrelevant within a few cycles. For example, in Nigeria, intercommunal violence often morphs into banditry (or vice versa) in the Middle Belt, and, in turn, banditry or communal violence may intersect with violent extremism in the northeast or election violence dynamics in the Niger Delta, spilling over from one local government area, state, or country to another. If an early warning system has been built to focus on farmer-herder violence, for instance, as the conflict evolves, the system will have diminishing returns and will need to adapt.

The research presented in this report builds on the Fund for Peace’s work with ECOWAS’s Early Warning Directorate and the Foundation for Partnership Initiatives in the Niger Delta (PIND). It was conducted to better understand how early warning systems work across West Africa at three levels of analysis—the regional, national, and local levels—and how existing structures can be supported and leveraged for greater impact. The conclusions are based primarily on data from eight early warning systems; responses to a survey sent to 1,949 civil society, government, development, and nongovernmental actors across the ECOWAS region; and 55 interviews conducted in 2021 and 2022.<sup>3</sup> The survey asked the respondents where they work in the EWER space (governance, security, crime, health, or environment); where they are located; whom they have partnered with; and how often they collaborate. The responses from this survey and data previously collected during the Fund for Peace’s work with ECOWAS and PIND were used to develop a database of more than 1,500 peace and development practitioners for a social network analysis of the region.

## A STRATEGIC APPROACH TO EARLY WARNING

Despite the challenges mentioned above, EWER systems are necessary in West Africa and other regions globally where environmental, demographic, and economic pressures continue to grow in intensity and trigger increasingly lethal violence between individuals and groups. Donors, lenders, investors, and leaders find themselves constantly behind the curve and are continually redesigning EWER systems or plugging holes to address the latest threats. In a complex and dynamic conflict landscape, experts often find themselves reactively correcting for individual points of failure in the latest EWER system; they work hard to create new lists of indicators, improve data quality, increase data quantity, build capacity, and generate new funding. All of these steps are clearly important, but they will not address the fundamental problem, which is that, as currently structured and operated, most individual project-level EWER systems are bound to fail.

EWER systems are susceptible to three common points of failure: (1) they depend on data that may contain gaps; (2) they develop bottlenecks that prevent information from reaching appropriate decision-makers; and (3) even if information does reach appropriate decision-makers, the systems may be limited in their capacity to generate the resources and political will necessary to respond effectively.

### **Point of failure: the data and information gaps.**

Data from any single EWER system will inevitably be, to one degree or another, unevenly distributed across time, space, and indicators, and therefore of limited utility for a reliable and consistent analysis of patterns and trends. Absent reliable patterns and trends, it is impossible to develop a prognosis of future risk. A single EWER system is not flexible enough to evolve as rapidly as dynamics on the ground without constant recalibration. However, the continual addition of more sources of data through linking systems that may include new indicators, different time frames, and expanded areas of focus diminishes this problem and, furthermore, allows for cross-validation where the early warning systems overlap. This approach also widens the breadth of analysis and response options available in rapidly changing contexts.

**Point of failure: bottlenecks.** Stakeholders, whether at the regional, national, or local level, do not have visibility on the wider network beyond the actors they may know personally or professionally within other EWER systems. Therefore, they may lack the ability to identify strategic points of entry or the actors and organizations that can be targeted for more engagement and information. The flow of information can therefore get blocked instead of moving throughout the system, except through centralized and hierarchical channels. In such a case, pertinent EWER information may flow only upward in the form of reports or briefings to donors funding the network or to those in positions of authority, such as an executive or leader of a national or regional organization.



People wait for a meeting with the military junta led by Colonel Mamady Doumbouya at the People's Palace in Conakry, Guinea, on September 15, 2021. Increasing incidents and fatalities associated with riots and protests have meant greater pressures on governance, contributing to coups d'état in Burkina Faso, Guinea, and Mali. (Photo by Sunday Alamba/AP)

Of course, information gatekeepers are not always bad, especially when dealing with sensitive information: early warning does require that the data and information be treated with care to ensure conflict sensitivity and to adhere to do-no-harm principles.<sup>4</sup> There are also practical reasons for centralizing EWER systems; for example, at a multilateral organization or regional body, the coordination of data collection, analysis, and response planning requires the buy-in of those with a mandate and sufficient resources. Yet a persistent problem in early warning systems is an overly hierarchical structure where early warning information is shared exclusively with authorities or funders rather than disseminated more widely and inclusively. When these recipients eventually leave their positions—or there is a lack of buy-in by the titular coordinating entity, or the particular grant cycle ends—the EWER system can collapse. Additionally, constraints may not allow for the engagement of certain key actors,

such as those thought to be connected to malign groups or organizations, due to sanctions lists or travel restrictions. This scenario may cause an early warning system to fail if actors highly pertinent to the conflict or the context cannot be meaningfully engaged in finding solutions or de-escalating the violence.

Taking a network-of-networks approach makes it possible to adjust if bottlenecks occur. For example, a bottleneck may be created following a coup if partners are placed on sanctions lists or are subject to travel restrictions, making it impossible to proceed with the program as designed. Or as happened recently, countries may decide to leave multilateral institutions, creating a breakdown in the early warning system. Or individuals may seek to hijack an early warning system for political or bureaucratic reasons of their own. In such circumstances, a spoiler-proof network with a thick web of relationships allows for work-arounds

**Linking data and analysis from EWER systems operating at the local level with those operating at the national and regional levels allows for a more complete picture of the conflict dynamics, actors, motivations, and options for response.**

so that other partners can easily be engaged until circumstances change. The regional, national, and local examples in this report illustrate how a balance can be struck in practice.

**Point of failure: warning-response gaps.** Too often, early warning involves issuing a warning to the relevant authorities, such as the police or security forces, and then waiting for a response that may never come. Instead, the system should be more inclusive and holistic; it should be able to mobilize and facilitate the responses of authorities at every level of society.

In a network-of-networks approach to early warning, the scope of responses expands to include not only a top-down deployment of security forces or federal resources to halt an escalation cycle but also the empowerment of community, traditional, and religious leaders operating at the local level; regional or national civil society organizations (CSOs); or other nongovernmental organizations (NGOs) in a position of influence. These various stakeholders can play vital roles in building consensus, defining the problems, identifying the priorities, and leveraging social capital in the response to the warnings. Civic actors, for example, have their own knowledge, expertise, and spheres of influence that can help to prevent or manage conflict through meetings, town halls, and appeals to power brokers. They can also mount targeted or mass communication campaigns to counter narratives and messages of hate, radicalization, and extremism. This should be done in consultation and coordination with government and security forces as appropriate and as possible, whether that be simply to inform them of a meeting with a militant general who may be on a sanction or watch list or is known as an agitator or whether that be a town hall meeting that includes security forces as well as community leaders involved in a land

dispute. Civil society leaders can play a vital convening role and can create a neutral space for dialogue that the formal actors alone often cannot. Approached in this way, EWER systems can be preventive as opposed to reactive.

Additionally, the network-of-networks approach mitigates a dynamic where the success or failure of the EWER system depends entirely on the will and capacity of a single actor to respond to an urgent problem. Traditional models of top-down early warning systems are often structured to respond to *urgent* problems. The networked approach allows stakeholders to also address *latent* or *chronic* problems.

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If a project-level approach is bound to eventually fail, it does no good to start from scratch every time there is a failure—to create one-off or short-lived initiatives. Failures often occur because conflict is highly dynamic. Farmer-herder violence can morph into banditry. An ethnic conflict may seemingly end but then be reconstituted as political violence or criminality when the political economy changes or new sponsors of violence emerge. These are not new conflicts—the same people are usually involved—but an early warning system calibrated to track one type of violence will miss these evolutions if the indicators are too rigid. Therefore, given the complexity and dynamism of conflict, early warning must also be flexible, and that flexibility should not entail continual re-creation of indicator lists and data sources or starting new systems from scratch. A more strategic approach is to focus on linking EWER systems to fill the gaps and mobilize response. This will require continual assessment and evaluation in order to ensure that the analysis remains on point. Linking data and analysis from EWER systems operating at the local level with those operating at the national

and regional levels allows for a more complete picture of the conflict dynamics, actors, motivations, and options for response. This approach surfaces more accurate early warning signals because it becomes possible to triangulate data to enhance validity and provide further context and to facilitate joint analysis with additional actors who may bring a greater or more nuanced understanding of the environment and conflict dynamics. The approach is more sustainable because it builds on existing structures, such as national- and local-level EWER systems, which can then be further scaled up and made more adaptive. Linking and layering existing early warning systems also encourages a “crowding-in” effect, as other existing EWER structures also begin to link into what becomes a network-of-networks. The need for quality control remains paramount, but given the decentralized nature of this EWER ecosystem, quality control becomes more about assessing how to work with gappy, redundant, and laggy data than about trying to perfect any individual system. The use of tools like GIS for early warning and social network analysis for response can help highlight the strategic points of entry within the system and which groups of actors or organizations within the wider ecosystem have the most influence.

This analysis should happen at the coordination level. For example, in West Africa, ECOWAS coordinates early warning analysis across the member states. The National Centers for the Coordination of the Response Mechanisms (NCCRMs) coordinate early warning analysis across their respective countries, and PIND coordinates early warning analysis across the nine Niger Delta states. All of these organizations need capacity and resources to conduct this analysis. But more important than resources are nimbleness, clarity and transparency about assumptions, and an appreciation of complexity in order to effectively work with imperfect and redundant data being collected by an array of partners or grantees. Early warning cannot allow the perfect to become the enemy of a solution that is much better than nothing.

The research undertaken for this report tested the proposition that EWER systems can and should be linked rather than operating as separate and distinct early warning systems. It built on a rich baseline of (1) existing social network analysis data and (2) early warning data from eight different systems, selected based on a survey of systems in the region and the availability of early warning data. Data from the following systems were integrated and compared: ECOWARN, the Armed Conflict Location and Event Data Project, Nigeria Watch, the Community Initiative for Enhanced Peace and Development’s Conflict Watch Center, the Nigeria Stability and Reconciliation Programme (NSRP), the Liberia Early Warning and Response Network, Partners for Peace in the Niger Delta (P4P), and P4P’s Violence Affecting Women and Girls (VAWG) project.

The findings suggest that a strategic, network-of-networks approach—although not without its own challenges (e.g., limited cross-country collaboration, multiple languages, varying skill sets, and lack of interoperability of technology platforms and analysis frameworks)—can provide remedies for the three common points of failure and create an enabling environment for adaptive and scalable responses that lead to more sustainable solutions.

In practice, some networks-of-networks do exist in West Africa at the regional, national, and local levels, whether by accident or by design. Studying them can help identify ways to avoid the perennial points of failure that limit the long-term impact of individual early warning systems. Donors and practitioners can apply the lessons learned to maximize the sustainability and impact of existing and future programs and projects. The examples of EWER systems in the following sections illustrate how a network-of-networks approach can help alleviate some of the traditional points of failure and how the networks function in practice at the regional, national, and local levels.

# Network-of-Networks at the Regional Level



The ECOWAS region encompasses more than 1.9 million square miles (5.1 million sq km) with a population exceeding 350 million people across 15 countries (although as of this writing, Burkina Faso, Mali, and Niger have declared their intentions to pull out of the ECOWAS community). The size and diversity of the region present many technical, practical, and methodological challenges for ensuring the early warning of a crisis or conflict. EWER systems in the region include ECOWARN and WARN (West Africa Early Warning and Early Response Network), which is a program of the West Africa Network for Peacebuilding (WANEP), along with dozens of national, subnational, and local systems. This section illustrates the extent to which these EWER systems are linked and how proactively building on and deepening those linkages can further enhance the sustainability and effectiveness of early warning and early response in the region.

## EARLY WARNING

Although each EWER system has its own focus and perspective, layering data from all of them presents a useful high-level overview of conflict trends. The layering shows that, overall, the level of lethal violence in West Africa appears to have increased from 2016 to 2021, especially violent extremism, which killed more than 8,500 people in Burkina Faso, Mali, and Niger in 2020. In that year alone, about 15,900 people were killed by conflict in the region, based on a triangulation of early warning data from all eight early warning systems analyzed. With a rise in protests, separatism, and election violence, governance and political pressures have also worsened.

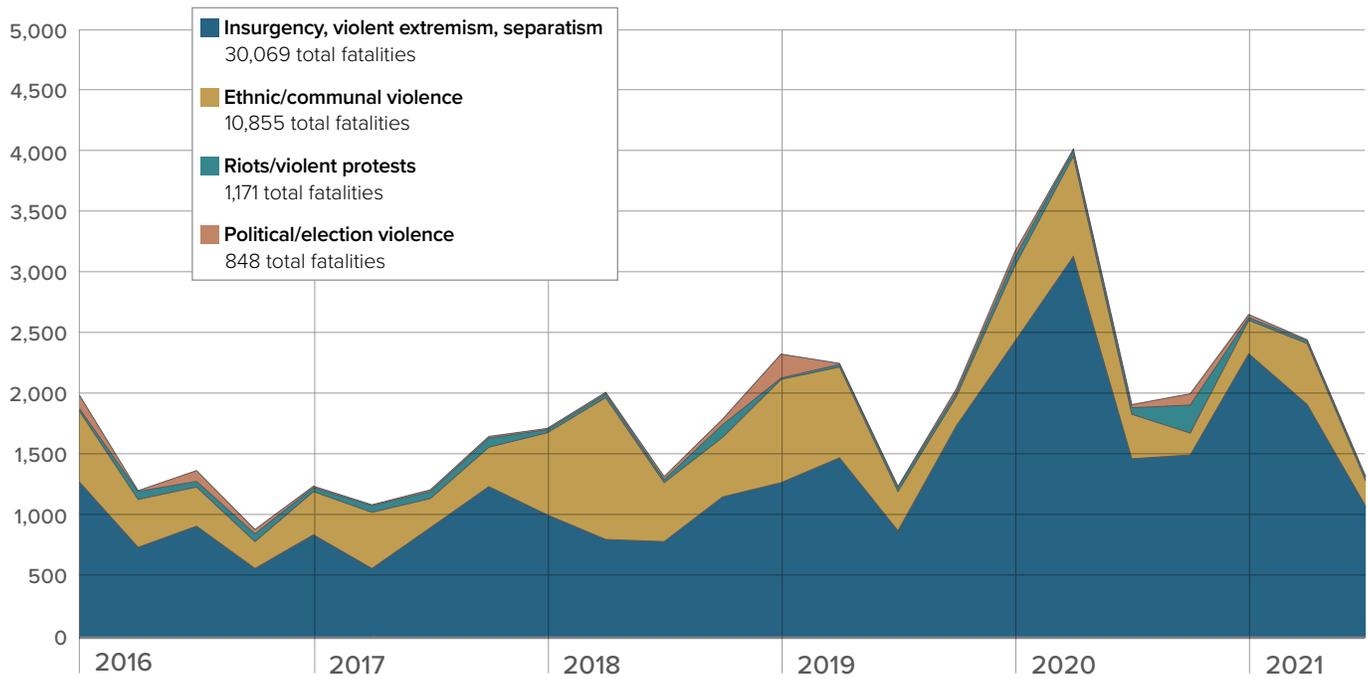
Data mining techniques across multiple early warning systems can also help surface highly contextualized insights. For example, a customized keyword search on the data collected from the eight early warning systems showed a marked increase in the number of incidents associated with attacks, protests, and clashes targeting or affecting gold mining operations in Burkina Faso, Guinea, and Mali (often connected to the presence of violent extremist groups). These incidents adversely affected the countries' local and national economies.

This type of data analysis is useful, but to improve prognosis, prioritization, and response planning efforts, early warning systems should not only capture historical trends but also compare them with known cycles, such as seasonal and election cycles, where applicable. This would create opportunities to develop theories about where violence will escalate next.

For example, in most West African countries, it is reasonable to hypothesize that transhumance-related conflict will worsen as herders move to the riverine areas (where farmers tend to settle) during the dry season and then back up to the highlands during the wet season. But there are so many other political, economic, environmental, and security factors that could prove this hypothesis false or at least show it to be incomplete. For example, in the Lake Chad Basin, long-term increases in water scarcity may change some of the seasonal effects on conflict cycles.

At the regional level, a keyword search on conflict data to isolate all incidents related to pastoralism,

**Figure 1. West Africa conflict fatalities (2016–2021)**



**Source:** Data from the Early Warning and Response Network of the Economic Community of West African States, the Armed Conflict Location and Event Data Project, Nigeria Watch, the Community Initiative for Enhanced Peace and Development’s Conflict Watch Center, the Nigeria Stability and Reconciliation Programme, the Liberia Early Warning and Response Network, Partners for Peace in the Niger Delta (P4P), and P4P’s Violence Affecting Women and Girls project.

transhumance, and livestock shows trends that seem to corroborate the theory that conflict increases during dry periods; when each year is taken as a separate unit, the relative spikes in lethal violence appear to occur consistently in the first and second quarters of each year, which tend to be the drier months. But there are always exceptions at the local level. Although it is not necessarily the case that drier years are associated with higher spikes in violence, the data do suggest that seasonality is a factor that cannot be ignored. See figure 1 on this page.

The layering or integration of data from different early warning systems also enhances the ability of practitioners to think outside the box and to go beyond an analysis of individual conflict factors to better identify the intersections of multiple factors. For instance, with the help of GIS tools, the layering of early warning data from the eight early warning systems suggests a potential

relationship between violent extremism (which is currently escalating) and transhumance-related conflict (which is, as noted above, largely seasonal). Heat maps show that while transhumance-related intercommunal violence does not always overlap with violent extremism, it sometime does. And when it does (such as in Mopti, Mali, or the Lake Chad Basin at the border of Nigeria and Niger), the conflict dynamics can become complex. In the Lake Chad Basin, for example, tensions between farmers and herders can grow more intense when Fulani pastoralists are accused by adversaries of being sympathetic toward or complicit with Islamic State extremists—a situation exacerbated by the extremists’ demand that local populations pay *zakat* (a form of almsgiving) for safe passage through trading or pastoral corridors. In Mali, clashes between Katiba Macina (which was founded in 2015 by a radical Fulani preacher) and the Dogon militia group Dan Na Ambassagou further inflame cycles of retribution and violence.



Fishermen work on Lake Nokoué in Benin. Violence in West Africa has worsened over the last several years and has increasingly spilled over into the coastal West Africa states of Benin, Côte d'Ivoire, and Togo. (Photo by Alexander Bee/iStock)

Another example of how integrating data from multiple sources can generate richer findings relates to conflict risk exacerbated by the COVID-19 pandemic. Pandemic-related incidents of protests or looting or crackdowns by governments have occurred across the entire region, in some cases increasing the risk of sectarian or anti-government sentiment. A keyword search found 373 incidents, including lethal force by police in the enforcement of restriction measures, protests by worshippers and market women against curfews, and rock throwing by youth (at police).

Because conflict is not static or linear, EWER systems must be flexible enough to account for the cascading, compounding, evolving, and spreading of conflict. A network-of-networks approach to early warning allows

for this type of analysis. As illustrated above, comparing and juxtaposing multiple sources of data can be used not only to describe historical trends but also to develop models for prognosis. A network-of-networks approach allows for a dynamic, case-by-case analysis of specific issues. To be clear, a network-of-networks does not mean a macro early warning system made up of all the others in a single megastructure. Multiple languages, varying capabilities, and technology limitations would make that impossible. However, if donors, multilateral institutions, and governments actively encourage, or even require, partnership, information sharing, and harmonization of frameworks among grantees and beneficiaries, joint analysis could become the norm instead of the exception. This is not to make the case for a single megastructure but rather to

encourage early warning systems to find ways to talk to each other as much and as seamlessly as possible.

Further, a network map of the organizations in the EWER ecosystem allows users to mount a preventive response because they are able to identify, facilitate, and empower those well positioned with influence and connections. Instead of waiting for a top-down response to a crisis that has already occurred, CSOs, community-based organizations, NGOs, government, multilaterals, and donor partners can work together to address simmering latent or chronic problems.

## EARLY RESPONSE

After conducting GIS analysis of early warning data across systems, the next step in this research was to explore the EWER ecosystem and how early warning data and analysis can be applied by key stakeholders in response efforts. As noted already in this report, to expand on data collected by the Fund for Peace from 2017 to 2020, a new survey was sent to 1,949 civil society, government, development, and NGO actors across the ECOWAS region. The survey asked them where they work in the EWER space (governance, security, crime, health, or environment); where they are located; whom they have partnered with; and how often they collaborate. The resulting information allowed the Fund for Peace to map 1,518 organizations and institutions across the 15 ECOWAS member states that are involved in EWER, and the 1,869 connections between them.

Through an analysis of this information, presented below, the research team was able to identify the organizations that have very large spheres of influence, as well as the communities within the wider network (based on who is connected to whom) that can be useful when attempting to leverage existing social capital for an activity or a project. At the regional level, the top organizations and institutions with high convening or coordinating power include WANEP, ECOWAS, the Women's Peace and Security Network (known by its French acronym REPSFECO), and P4P. Convening

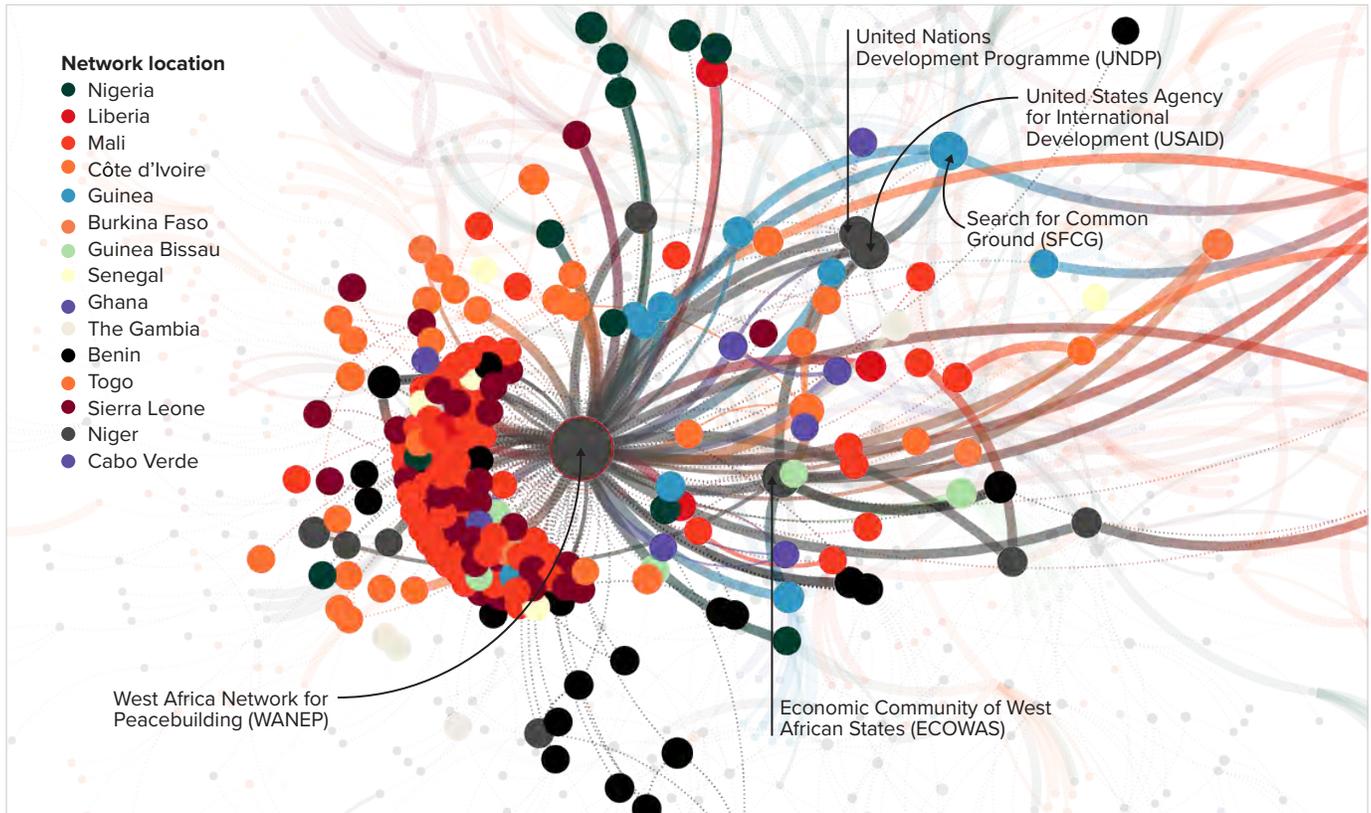
power (measured by which organization has the highest “betweenness centrality”) is an important factor in implementing a successful network-of-networks approach to early warning; connections must be made across different branches of the ecosystem to enable joint assessment, analysis, and response planning by those with crucial capabilities and social capital. The top organizations that are positioned well to disseminate information rapidly across the entire network (measured by “reach centrality”) include WANEP, the US Agency for International Development (USAID), Search for Common Ground, and ECOWAS. Figure 2 (on page 12) shows a small portion of WANEP's connections to the regional ecosystem.

The regional EWER ecosystem can be described as having four primary tiers that link in important ways: the multilateral tier (ECOWAS/ECOWARN), the regional civil society tier (WANEP), the national tier (NCCRMs), and the community and sectoral structures tier (local systems for early warning and response). These tiers are already connected, but building on these connections—for example, through training, professional exchanges, joint programming, working groups, memorandums of understanding, and harmonization of early warning indicators—can help early warning responses become more targeted, timely, and strategic.

**Multilateral (tier 1) example.** ECOWARN was established under Chapter IV of the 1999 ECOWAS Protocol Relating to the Mechanism for Conflict Prevention, Management, Resolution, Peace-Keeping and Security.<sup>5</sup> The network evolved out of the ECOWAS Peace and Security Architecture and is coordinated by the Early Warning Directorate (EWD). According to interview and project documents, the EWD collects data on 56 indicators based on the ECOWAS Human Security Framework, which covers five thematic areas: crime and criminality, environment and natural disasters, governance and human rights, health and pandemics, and security and terrorism. The EWD reports directly to the vice president of the Office of the Commissioner, Political Affairs, Peace

**Figure 2. EWER network connections to the West Africa Network for Peacebuilding**

A social network analysis based on a survey of civil society, community-based, and nongovernmental organizations across the region shows how over 1,500 organizations are connected. This figure highlights connections to the West Africa Network for Peacebuilding (WANEP), which has high convening power, measured by “betweenness centrality,” enabling connections across different branches of the early warning and early response ecosystem for joint assessment, analysis, and response planning by those with crucial capabilities and social capital.



**Source:** This image is a screenshot of a wider, dynamic, web-based map created with survey data in collaboration with the Economic Community of West African States (ECOWAS) Early Warning Directorate and with inputs from the Foundation for Partnership Initiatives in the Niger Delta: <https://kumu.io/natehaken/crva-2>.

and Security (CPAPS). The ECOWARN system relies on the reporting of 77 field monitors, based throughout the region, who provide weekly situation reports using the ECOWAS Human Security Framework. In addition, the ECOWARN field monitors produce incident reports when threats relating to human security occur. The monitors are often university students or professors who specialize or have an interest in peace and security or early warning and response data and analysis. These monitors also provide critical background context relating to incidents, as well as insight into patterns, trends, and dynamics. Further, they serve as important nodes in the ecosystem, linking the regional, national, and local

levels, particularly as they liaise between headquarters at the ECOWAS Commission in Abuja, the NCCRMs, and WANEP/civil society actors (see tiers 2–4). The monitors receive monthly stipends that enable them to do their work. The program is limited by the amount of funding available; five field monitors for an entire country (seven in Nigeria) is not a large number. If there were more funding and more monitors, data would be that much more representative.

Within the EWD, there are two teams: the systems team, which is responsible for data processing and visualizations, and the analysis team, which is responsible

for developing prognoses, scenarios, and recommendations for response efforts. Each analyst focuses on one of the five specific thematic areas in the human security framework and produces monthly reports, as well as special briefings and alerts, which are sent to CPAPS and other relevant ECOWAS directorates and departments, including the Directorate for Political Affairs and the Directorate of Peacekeeping and Regional Security. The EWD also coordinates with and supports early warning stakeholders in the region through mentorship, capacity building, and networking. Included in this support are the NCCRMs, which feature in the third tier of the regional early warning ecosystem.

**Civil society (tier 2) example.** WANEP connects the other three tiers. It has its own national and regional early warning systems but also partners with ECOWAS to provide situation and incident reports that go directly into the ECOWARN system. It also supports the African Union's Continental Early Warning System under the Protocol Relating to the Mechanism for Conflict Prevention, Management, Resolution, Peace-Keeping and Security and the union's African Peace and Security Architecture. At the national level, WANEP often works closely with the NCCRMs. In addition to the data collected by WANEP in partnership with ECOWAS, WANEP also collects early warning data as part of its own early warning systems, WARN and the National Early Warning System (NEWS), which is used by civil society and the general public.

Using its own sets of indicators, WANEP produces weekly highlights, monthly bulletins, policy briefs, thematic reports, quarterly peace and security reports, situation tracking reports, quick updates, and NEWS advisory notes, which are all shared on WANEP's listserv and inform its peacebuilding interventions.<sup>6</sup> NEWS has been operating since 2008 and utilizes data generated by field monitors and reporters in all 15 ECOWAS member states. Based on data and analysis produced by NEWS, WANEP also holds regular consultations and meetings with community-level

stakeholders, as well as trainings on early warning and response that include modules on conflict mediation and resolution at the community level. WANEP is also active in youth outreach and training around EWER and conflict prevention, and NEWS has many field monitors, trained by WANEP, who are youths. Working with volunteers and youth for early warning requires a focus on continuous quality improvement for data collection, analysis, visualization, and related processes. In the same vein, WANEP's reporters (i.e., those who produce reports from the data) often come from a journalism or academic background and have well-established networks in their local communities, further solidifying the linkages between community-level early warning networks and national and regional networks. There is also a WANEP officer seconded to the EWD at the ECOWAS Commission to ensure seamless coordination and communications at the regional level.

**National (tier 3) example.** Each ECOWAS member state has or is in the process of setting up an NCCRM. These national-level early warning hubs have different names and abbreviations in different countries (e.g., CNAP is used in Mali; CNCMR is used in Côte d'Ivoire). Like the EWD, each hub is structured in alignment with the five human security thematic areas, with one assigned expert per area. The NCCRMs' mandate is to compile early warning data and information and to produce monthly reports and other early warning products for their respective governments as well as to make recommendations to the statutory agencies for the prevention and mitigation of conflict in their countries. Frequently, the NCCRMs will convene with each other and ECOWAS for trainings, workshops, conferences, and discussions on emerging issues of concern that may require a regional approach for prevention and response.

**Community and sectoral structures (tier 4) examples.**

In each country, there are dozens of community and sectoral early warning structures that link to the other three tiers to varying degrees, whether that be the Liberia Peacebuilding Office with local field monitors

**When the early warning ecosystem is working well, methodologies, analysis, and key messages generated at a training in a remote village will quickly echo and reverberate across the entire system, informing policy and priorities at the national and regional levels.**

across the country, the P4P network in the Niger Delta with over 10,000 volunteers from Ondo to Cross River State in Nigeria, or the Observatory for Solidarity and Social Cohesion (known by its French acronym OSCS) in Côte d'Ivoire. Although there are frequent interactions between these local systems and the NCCRMs, WANEP, and ECOWAS, these relationships should be more fully developed for the benefit of all four tiers and EWER generally, especially as gaps emerge due to political, bureaucratic, interpersonal, and practical considerations and constraints.

In this regard, the private sector also has a significant role to play. Any company seeking compliance with the International Finance Corporation's Performance Standard 4 (Community Health, Safety, and Security) or the Voluntary Principles on Security and Human Rights produces security risk assessments. In some cases, there are linkages and relationships between private companies and local or national early warning structures; for example, according to an interviewee, PIND has worked with P4P to provide some early warning and conflict sensitivity support to several firms, including Chevron Nigeria. But there are opportunities for more proactive engagement in this space, which could enhance the nexus between peace and development so that companies operate with greater conflict sensitivity and so that market actors and investors are able to help consolidate peace in windows of opportunity between episodes of violent conflict. A partnership with private-sector actors might also create opportunities for PIND to generate revenue to help sustain and scale its early warning efforts.

## MEASURING SUCCESS

How do you know if a network-of-networks approach is working? From a project management perspective, it is difficult to measure success against output indicators

and targets, owing to issues of attribution and causality; so many contributing factors feed into each other. In interviews, EWER experts in the region reported that it is very difficult to determine how effective a particular alert, memo, training, fact-finding mission, workshop, briefing, or town hall was at preventing or mitigating the anticipated conflict. However, a results chain and process analysis perspective can surface insight: when the early warning ecosystem is working well, methodologies, analysis, and key messages generated at a training in a remote village will quickly echo and reverberate across the entire system, informing policy and priorities at the national and regional levels. To facilitate this kind of synergy, ECOWAS, in partnership with USAID's Reacting to Early Warning and Response Data in West Africa project, developed the Joint Analysis and Response Planning Framework and then trained the NCCRMs, which are each structured to mirror the EWD (with five thematic experts).<sup>7</sup> Further, step-down trainings have also been conducted for WANEP national network coordinators and other civil society actors at the national and local levels in Benin, Guinea, Niger, and Togo.

As a result of these relationships and frameworks, the analysis and advocacy being done at the local level amplify those being done at the national and regional levels and generate an opportunity for consensus around priorities for conflict prevention and mitigation. And while some of these interactions have developed organically, ECOWAS, for instance, has deliberately cultivated them to create an enabling environment for maximum efficiency so that it takes fewer resources to achieve a greater effect.

Across West Africa, there are a number of well-developed EWER systems, some of which have fewer links to the regional ecosystem than others. One example is the Liberia Peacebuilding Office, which falls directly under the Ministry of Internal Affairs. It uses the Liberia Early

Warning and Response Network and coordinates well with the Liberia NCCRM. Building even more linkages with this NCCRM and others would be beneficial to the entire region, as Liberia has one of the better-developed and oldest national EWER systems in West Africa. Fortunately, throughout the region—although in some countries more than others—donors and governments are increasingly recognizing that linkages between and across the ecosystem’s four tiers (regional, civil society, national, local) are critical to effective and sustainable EWER, resulting in an increase in investment in early warning.

Of the four tiers, civil society may present the greatest return on investment for donors seeking to prioritize

their support. Despite sometimes lacking resources or capacity, the civil society tier links the other three tiers, which can create a multiplier effect through the leveraging and amplification of multilateral, national, and community efforts in terms of situational awareness, the rapid dissemination of key messages for countering violent extremism, or the facilitation of joint mediation efforts. And in situations where there may be a lack of confidence or trust in the government, civil society plays an even more central role in determining how closely to collaborate and how to link efforts across countries or directly with multilateral organizations, media, and other local influencers.

# Network-of-Networks at the National Level

Widely hailed as a success story, Côte d'Ivoire emerged from a protracted and recurrent civil war and political crisis (2002–2011) to become one of the strongest economies on the continent. That strength helped the country withstand the economic headwinds associated with the COVID-19 pandemic. Still, with such a legacy of ethnic and political polarization, as well as the possibility of conflict spillover from neighboring Burkina Faso and Mali, the risk of conflict in Côte d'Ivoire remains significant and should be monitored.

This section examines the extent of the network-of-networks in Côte d'Ivoire and how it should be built upon, as well as the possibility of analyzing a combination of data from multiple early warning systems. The study looks at data on Côte d'Ivoire from 2016 to 2021, using 1,050 incidents from the Armed Conflict Location and Event Data Project (ACLED) and 893 incident reports from ECOWARN. ECOWARN covers all aspects of human security, while ACLED focuses more narrowly on conflict and violence.

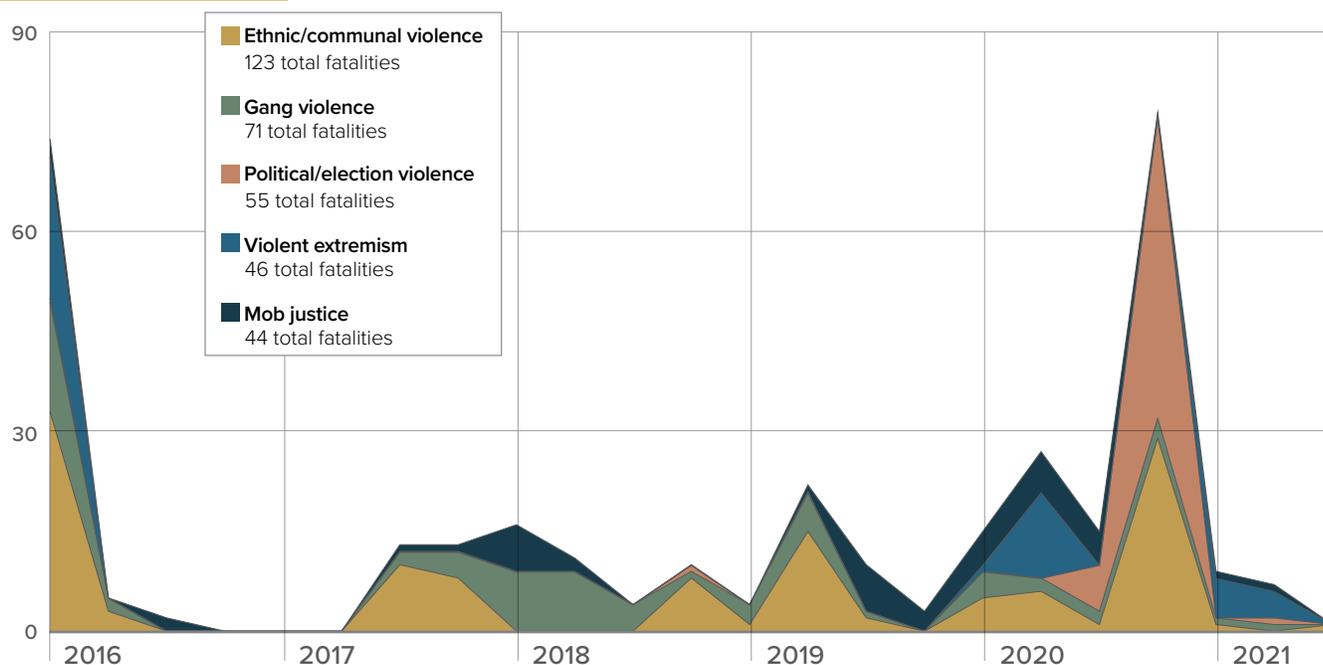
## EARLY WARNING

A layering and triangulation of early warning data reveals trends and correlations that can inform targeted responses. While insurgency/violent extremism/separatism was the most lethal conflict type at the regional (West Africa) level, in Côte d'Ivoire, the most lethal type of conflict was ethnic/communal violence, especially in the Zanzan, Vallée du Bandama, and Montagnes districts. In Montagnes District, communal violence often included clashes between Indigenous and non-Indigenous groups. Clashes were reported

between the Malinké (Mandingo) and the Yacouba, between the Yacouba and the Lobi, and between locals and Burkinabe communities as well as Guere and Dozo militias. In Zanzan District, communal violence was reported between Fulani (Peul) herders and Lobi farmers, considered to be Indigenous. In Vallée du Bandama, communal violence was reported between the Malinké and the Baoulé, considered to be Indigenous. Elections have also triggered ethnic/communal violence, including in the Montagnes, Lagunes, and Lacs districts, which accounts for the relatively sharp increase in violence in 2020. Other types of violence reported include violence perpetrated by “microbes” (child and youth gangs) and “gnambros” (gangs that extort money from taxis and buses). There have also been mutinies on military bases and several terrorist attacks—the most lethal of which was the 2016 attack at Grand Bassam beach. More recently, there were several attacks in the North (Savanes) by suspected Katiba Macina militants at the Burkina Faso border, including one that reportedly killed about 13 security agents in 2020.

Overall, although Abidjan had the highest number of conflict fatalities (133) during the period, taking the highest numbers of ACLED and ECOWARN on a quarterly basis and adding them up for the entire six-year period reveals that Zanzan District experienced the most lethal conflict per capita by district, followed by Lacs District. This means that individuals living in Zanzan or Lacs had a greater chance of experiencing violence than individuals in Abidjan. Note that if the triangulation were conducted using monthly time slices,

**Figure 3. Côte d'Ivoire conflict fatalities (2016–2021)**



**Source:** Data from the Armed Conflict Location and Event Data Project and ECOWARN, the Early Warning and Response Network of the Economic Community of West African States.

the aggregate numbers would be slightly higher. See figure 3 on this page for Côte d'Ivoire conflict fatalities between 2016 and 2021.

### EARLY RESPONSE

To assess the capacity for early response in Côte d'Ivoire, a social network analysis was conducted to identify the organizations with the highest social capital, meaning those that are best positioned as conveners and communicators. The social network analysis included data from 78 organizations and institutions, with 98 connections between them. Organizations and institutions with high convening or coordinating power include WANEP and CNCMR. Organizations with high reach—and thus positioned well to disseminate information rapidly across the entire network—also include WANEP and the CNCMR.

The Côte d'Ivoire CNCMR was one of the first five pilot NCCMRs to be initiated by ECOWAS. (The others were in Burkina Faso, Guinea-Bissau, Liberia, and Mali.) The

CNCMR is fully staffed and operational, with strong analysis capabilities across the five thematic areas (crime, environment, governance, health, and security) and is supported through national funds and other partnerships and grants. At the national level, it is well networked with local EWER systems and stakeholders, most prominently WANEP. WANEP is linked to the Ivorian CNCMR through its national office, which is then linked to the wider regional WANEP WARN and NEWS networks.

Another early warning and early response system in Côte d'Ivoire that was highlighted in both the social network analysis and field research components (23 interviews in Côte d'Ivoire) of this report was the OSCS. The OSCS has a presence in all of Côte d'Ivoire's subprefectures, has local volunteers for data collection, has the involvement of administrative authorities, and has a dynamic and searchable database. During the 2021 floods in Abidjan's Yopougon suburb, information about the location, severity, and impact of the floods

was reported to the OSCS, and families received moral and financial support through the Ministry of Solidarity and the Fight Against Poverty. In 2018, during a religious conflict where two groups were preparing to clash in the west, OSCS volunteers gathered and reported

information; the prefectural authority responded early to prevent the confrontation. There are great opportunities for synergy with other EWER structures in the country, as the demonstrated successful linkages between the OSCS, WANEP, and the CNCMR could be built upon.

# Network-of-Networks at the Local Level

While early warning and early response processes at the regional and national levels show the value of higher-level trend analysis, local-level systems require much more granularity and context and therefore can be much more difficult to analyze, especially when examining a wide geographical area with large populations. At 42.6 million according to the 2006 census, the total population of the nine oil-producing Niger Delta states in southern Nigeria exceeds the total population of every other West African country.<sup>8</sup> Such a large population would typically make data collection and analysis a significant challenge; however, the data available for this study are rich and evenly distributed at various levels of granularity due to the maturity of PIND's early warning system and the layering of data from sophisticated national, subnational, and local early warning systems developed over a decade. Likewise, the EWER networks are broad, with an array of branches and subbranches that lend themselves well to a local-level analysis. Naturally there will always be gaps, but a network-of-networks approach is designed to continually recognize those gaps and adjust as needed.

## EARLY WARNING

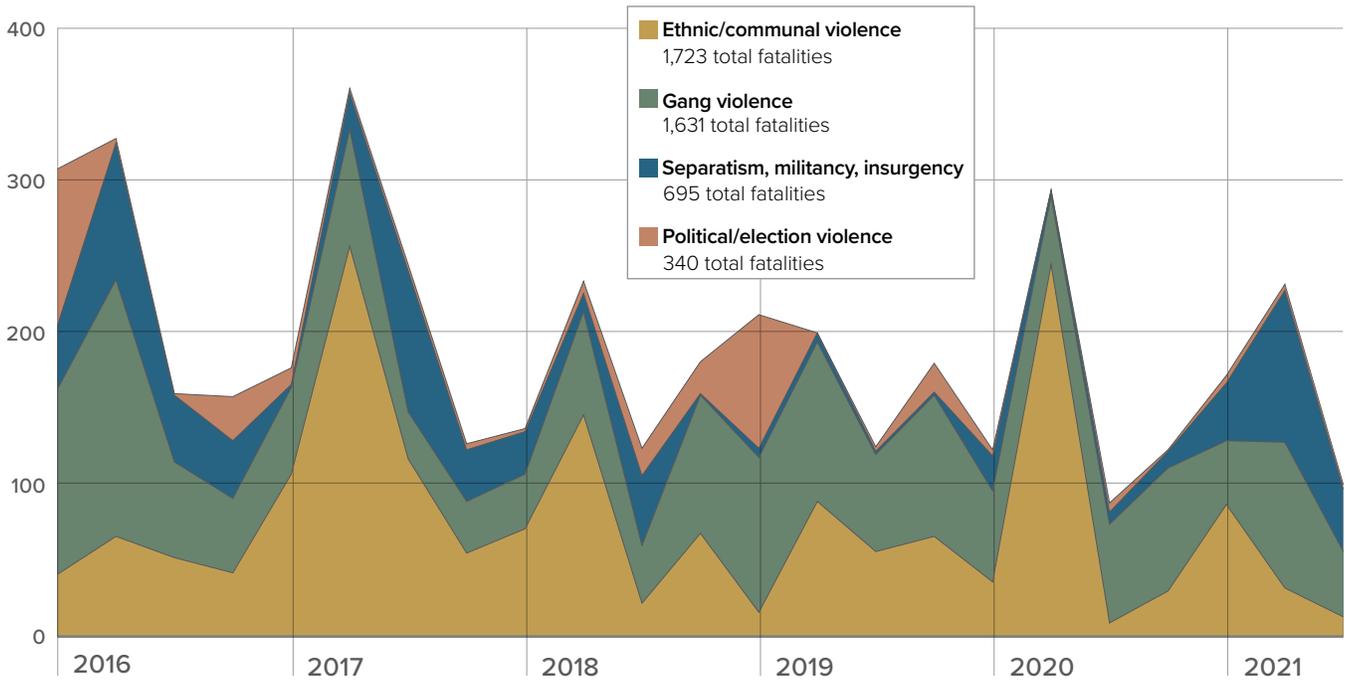
Early warning data collated for this analysis included an integration and layering of 2,820 incidents in the Niger Delta states from ACLED, 1,973 incidents mapped by the Community Initiative for Enhanced Peace and Development's Conflict Watch Center (CIEPD CWC), 3,041 incidents mapped by Nigeria Watch, 3,376 incidents mapped by P4P, 347 incidents from VAWG, and 376 mapped by NSRP sources.<sup>9</sup> These tallies were not exhaustive of all data produced by each source during the period, but they were sufficient to allow triangulation for the assessment described below.

Overall, in the Niger Delta, there have been spikes of violence in and around state and local election cycles (especially from 2015 to 2016 and in 2019). Generally, however, violence incrementally decreased from 2016 to 2021, which is notable given worsening national trends. There are concerns, however, of a resurgence in violence, especially relating to cultism and separatism and a general sense of social restiveness in response to a challenging political and economic situation.

Over the 2016–2021 period, the most lethal form of conflict was ethnic/communal violence (see figure 4 on page 20), particularly in Delta, Cross River, and Akwa Ibom States. The second most lethal type of violence was related to cultism (supremacy clashes between gangs), particularly in Rivers State. The most violent of Niger Delta states—as measured by conflict fatalities per capita—was Cross River State, followed by the so-called core Niger Delta states (Delta, Bayelsa, and Rivers).

Risk factors and dynamics vary from state to state. In some states, communal violence predominated between Indigenous communities competing for fishing and farming resources and oil rents. In other states, communal violence was more often expressed as clashes between Indigenous people and those perceived as settlers from the north or between farmers and herders. When this type of violence occurs, especially in states of the former Republic of Biafra (inhabited predominantly by Igbo), specific incidents of violence can compound sectarian or separatist sentiments, with associated national political implications. Even “cult” violence, which exists across the entire Niger Delta region, has very different

**Figure 4. Niger Delta conflict fatalities (2016–2021)**



**Source:** Data from the Armed Conflict Location and Event Data Project, the Community Initiative for Enhanced Peace and Development’s Conflict Watch Center, Nigeria Watch, the Nigeria Stability and Reconciliation Programme, Partners for Peace in the Niger Delta (P4P), and P4P’s Violence Affecting Women and Girls project.

dynamics, drivers, and incentives, with some cult groups focused on illicit oil bunkering and political thuggery or militancy and insurrection and other groups focused on human and drug trafficking.

It is a mistake to classify the types of violence and armed groups too rigidly, however, as there is a long history of groups moving from militancy to political and election violence to criminality and back, depending on the political environment of the day; the largesse of bosses, godfathers, power brokers, and donors; or the price of oil. Certain conflict entrepreneurs opportunistically straddle all of these lines, while they simultaneously work with government officials or even civil society actors and academics. For EWER systems to be successful, they must respond quickly to de-escalate specific conflicts but also address the wider structural pathologies that persist. This morass of conflict peddlers can present challenges for the network-of-networks approach to early warning as these actors may

themselves be part of a network in one way or another, and they can discredit the data, influence the analysis, or slow down the response. However, the whole purpose of a decentralized network-of-networks is to create a spoiler-proof system to the extent possible by enabling redundancies and work-arounds in situations where there may be bottlenecks.

At the level of local government areas (LGAs), the most violent area in the Niger Delta over the 2016–2021 period—as measured by conflict fatalities per capita and after triangulating data across multiple sources—was the Itu LGA in Akwa Ibom State, where there were lethal communal clashes involving Oku Iboku community members and neighboring Ikot Offiong community members over access to land for farming and fishing, among other conflict issues. The next most violent was the Biase LGA in Cross River State, where there were clashes between the Abanwan, Orugbam, and other communities over

farmland. Two other LGAs where fatalities per capita were particularly high were Aba North in Abia State and Emohua in Rivers State. In Aba North, fatalities resulted from violence involving Biafran protesters as well as incidents involving the Bakassi Boys and other vigilantes, cult groups, and security services. In Emohua, the most lethal violence involved cult groups such as the Icelanders, Greenlanders, and Deybam.

## EARLY RESPONSE

The response networks in the Niger Delta are highly interconnected, showing significant opportunities for a network-of-networks approach. In the Niger Delta, the social network analysis conducted for this report included 160 organizations and institutions, with 171 connections between them. Organizations and institutions with high convening or coordinating power include P4P, the Better Community Life Initiative, PIND, and the National Youth Council of Nigeria.

Organizations with high reach (and thus positioned well to disseminate information rapidly across the entire network) also include P4P and PIND, as well as the Independent National Electoral Commission and the Nigeria Police Force. This reach makes them vital partners in the system, notwithstanding potential limitations of credibility and effectiveness in certain situations.

PIND leaned heavily into the network-of-networks approach by starting P4P in 2013. As of April 2023, P4P had more than 10,000 members across 104 LGAs (out of 185 in the region) who meet monthly to discuss conflict early warning, assessment, and response efforts. Members pay dues and can vote for their executive committee representatives and attend trainings and activities. The P4P network is composed of nine Niger Delta state chapters and more than 100 LGA-level subchapters throughout the region. Each P4P chapter also has its own PREVENT Committee for rapid response. PREVENT committees—made up of civil society organizations and individuals with knowledge of conflict actors or contexts, as well as those with

connections to the security services, traditional leaders, and other crucial stakeholders—are tasked with the management of urgent conflict issues as they arise and are given specialized training by PIND staff and partners on conflict management, mitigation, and sensitivity.<sup>10</sup> PREVENT committees are also closely linked to women and youth groups and other vulnerable populations such as people with disabilities.

To ensure an integrated, data-driven approach to EWER, PIND makes use of a text messaging–based early warning and early response system, through which trained field monitors and PREVENT committee members can share incidents of conflict risk from anywhere in the region. Data from the platform are then transferred to P4P’s “Peace Map”; layered, juxtaposed, and integrated with other data from sources such as ACLED, Nigeria Watch, and the CIEPD CWC; and then used to produce conflict bulletins and analysis products. The Peace Map is a unique interactive platform that displays data not only on conflict incidents and patterns but also on the location of response actors, called “peace agents” (those with the mandate and experience to respond). The data usefully inform both the analysis and the planning of possible responses by P4P chapters, PREVENT committees, and other local stakeholders. Anyone registered as a peace agent on the map can also receive automated email alerts if conflict risk spikes anywhere in that agent’s state.

Another example of PIND’s network-of-networks approach is its partnership with Academic Associates PeaceWorks (AAPW), which is dedicated to training local civil society actors in conflict early warning and conflict sensitive response, including monitoring and mitigation of election violence. PIND and the AAPW have partnered to jointly analyze conflict incidents, train field monitors on conflict reporting in their communities and around elections, and coordinate responses with other local organizations and security services.<sup>11</sup>

In support of these and other partnerships, the Peace Map brings together multiple data and information

sources on conflict risk. It allows users to search by preset or customized parameters, create visual displays of conflict incidents by date and location, and read the details of the incidents. The Peace Map also contains a filter that allows users to sort for incidents of gender-based violence (GBV) and indicates the locations of peace agents who specialize in GBV prevention or provide support services for those who have experienced GBV (including children). In encouraging joint analysis and response planning based on the data from the Peace Map, local

stakeholders have ownership of these efforts, as well as the implementation of interventions and the identification of training needs in the local community. Overall, the P4P Peace Map represents one of the largest integrated databases of conflict incidents in the region and the largest in the Niger Delta. This is critical, as multiple organizations gather data in Nigeria on conflict risk, violence, and fatalities but usually focus on different topics, locations, and time periods. By comparing these different sources, P4P members can fill gaps and develop targeted response interventions.

# Recommendations



The regional, national, and local early warning and early response systems examined in this report illustrate how organizations have championed a more dynamic approach to early warning. Instead of getting hung up on rigid indicator lists or information gatekeeping, they are working in a way that allows for flexibility and resilience. This strategic network-of-networks approach helps avoid the common pitfalls of individual EWER systems operating in isolation. It minimizes gaps in early warning information by enabling the sharing and analyzing of data across multiple systems. Because the network does not rely on a vertical structure alone, it also prevents the blockage of information and action.

Linking numerous early warning systems to build a cohesive early warning ecosystem is certainly challenging, as many unconnected or minimally connected EWER systems operate in multiple languages and have different capacities, resources, and, in some cases, levels of trust between key stakeholders. However, an evaluation of the EWER ecosystem at the regional, national, and local levels shows that linked networks do exist at each level (at various degrees of maturity) and should be built upon by donors and implementers trying to improve EWER impact in a region that has a high risk of conflict escalation over the coming decade.<sup>12</sup>

This is not a call for a single, formal, macro early warning structure. But a network-of-networks approach should strategically encourage partnerships and the bottom-up harmonization of systems and frameworks. Harmonization does not mean formal interoperability but rather that each mechanism should seek to find areas of compatibility with the others and gradually work toward greater synergy over time. Donors could

adopt this approach in the design of notices of funding opportunities. Multilateral organizations, government agencies, civil society organizations, and communities could also adopt the approach. If done correctly, this would not lead to conflict between organizations as they compete for smaller pieces of the pie, but rather create an opportunity for a “crowding-in” effect, as donors see more prospects for greater returns on their investment, particularly if those returns can be demonstrated through a process-tracing approach, compelling proof points, and efficiencies created by the cultivation of social and human capital across the EWER ecosystem.

If the EWER ecosystem can be cultivated and enhanced, then each individual EWER system will ultimately be more effective. In a network-of-networks approach, the question of who takes the lead is not answered by organizational structure but rather by who in the wider ecosystem has the strategic positioning to lead in data collection, analysis, coordination, and response—that is, the resources, tools, frameworks, and key relationships. And leadership can happen simultaneously at the regional, national, and local levels. The approach is also flexible enough to adapt to specific situations and the rapid changes in contexts, funding goals, and policy and project priorities.

Specific recommendations for donors and practitioners designing requests for proposals and developing early warning strategies include the following:

**Use social network analysis to identify and map local peacebuilding and response actors across each member state.** This will help all actors better understand who is available where, as well as how much in terms of knowledge, expertise, and resources

**The conflict early warning and early response ecosystem in West Africa is at the point of takeoff and rapid growth. For donors, now is the time to invest in these systems. For practitioners, now is the time to design platforms and linkages. For implementers, now is the time to collaborate.**

they can put forward to bolster analysis and response capacities. Crucially, regional actors can use social network analysis to see where potential actors and resources are positioned at the national and local levels, what they specialize in, and how they are linked. Meanwhile, national and local actors can see how they fit into the bigger picture and how they might achieve greater impact through targeted engagement with potentially well-connected organizations. This knowledge can help in the selection of grantees, partners, and participants for various missions, projects, and consultations. It can also help identify or inform response options. For example, social network analysis performed during the proposal process can provide important information regarding priority target beneficiaries and implementation objectives and activities and can reduce the time needed at the start of a project to map the environment and actors.

**Prioritize innovation in EWER to stay relevant as, over time, databases degrade and tools become obsolete.** EWER changes rapidly (including data science and technology), so if a system is not continually innovating with new models, simulations, and tools, it will quickly lose relevance and efficacy—which will ultimately affect funding, sustainability, and impact. This does not mean starting a new EWER system from scratch but rather finding new ways to look at the data being collected and shared across existing EWER systems. Innovation efforts must also be coupled with the training and capacity building of network actors involved in data processing and analysis.

**Make a strong business case, as funding is always a challenge.** A network-of-networks approach helps actors make a business case to donors who seek a greater return on their investment (or impact) and to companies that recognize that a small investment

in conflict prevention can save enormous amounts of money in security management. Any organized network with high human and social capital is a valuable resource. Philanthropic, corporate, and government foundations frequently seek to leverage, scale, and replicate successful networks to avoid having to start from scratch and to encourage local ownership and sustainability—which in practice means more value for less money. Also, the flexibility of a network-of-networks approach allows EWER systems to shift in response to changing donor priorities and contexts on the ground. From the point of view of civil society or community-based organizations, participating in a network-of-networks can help accrue human and social capital, which better positions them, individually, to apply for grants or seize business opportunities.

**Continue to build connections and linkages with other systems to fill gaps in data and avoid bottlenecks caused by relying on one centralized gatekeeper or one set of actors for information sharing and response efforts.** Partners in the design and implementation of collaborative EWER can include, for example, universities, companies, civil society organizations, and community-based organizations, as well as government agencies, security agents, and other donor partners that may be working on related development, peace, and governance challenges. This may require additional resources and expertise dedicated to filtering and quality control.

**Reframe EWER as persuasion, not just provision.** In other words, analysts should analyze, not just inform. Sometimes, decision-makers do not lack information but rather have too much, especially when they have many competing priorities. This makes it difficult to act strategically. Therefore, information on early warning should be organized and shared in a coherent and

accessible way, with the goal of building consensus and mobilizing around key issues or priorities rather than just informing decision-makers about a conflict in a particular location. This approach would build on the analytical capabilities of existing early warning infrastructure, going beyond the publication and dissemination of trackers and memos to also include the facilitation of dialogue and consultation with those in a position to respond, and proactive engagement with key actors involved in relevant decision-making processes and project cycles. Early warning products should be designed with a range of target audiences in mind, including civil society and community leaders, and should be bold enough to propose answers to the question of what is likely to happen, all other things being equal, if certain recommended actions are not taken. This can be challenging, particularly as practitioners are often trained to avoid going beyond what they can empirically prove and objectively assert. It requires extrapolation and inference and a blurring of the lines between the purviews of intelligence and policy. However, if assumptions are stipulated and the logic is clearly laid out, then decision-makers will have a clear basis for decisions about how to weigh and prioritize the findings and recommendations.

**Focus on harmonization, not standardization or the creation of one formal, macro early warning system.**

Harmonization includes developing broad sets of indicators and analysis frameworks and stepping down trainings on these tools. It also includes conducting joint assessments and joint analyses and encouraging professional and educational exchanges with a view toward greater and greater synergy (adaptive learning and innovation, customized training programs, knowledge sharing, and professional development). In this way, visibility, knowledge, insight, and consensus will naturally move throughout the network-of-networks,

from the local level to the regional and back down again. This approach is increasingly viable in a post-COVID 19 world where virtual forums are more common, even in remote areas of West Africa.

**Focus on civil society for maximum impact.** While functioning EWER systems require the engagement and participation of governments, multilateral organizations, the private sector, and community-based organizations, it is civil society that links and amplifies the efforts of all the others. Even though civil society may lack resources and critical capabilities at times, working with it can have a multiplier effect across the entire EWER ecosystem. It is also the case that CSOs are sometimes deliberately targeted, isolated, or weakened by those with an interest in perpetuating conflict. By cultivating and supporting CSOs, EWER systems can be more effective at countering these efforts.

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A rich and dynamic conflict early warning and early response ecosystem in West Africa has been developing by fits and starts over the last decade, both by accident and by design. Efforts focused on harmonization, collaboration, and sharing are still extremely challenging. However, due to recent innovations in, and access to, technology; leadership and outreach on the part of donors, multilaterals, civil society, and companies; and most importantly, urgent calls for better conflict management, the ecosystem is at the point of takeoff and rapid growth. For donors, now is the time to invest in these systems. For practitioners, now is the time to design platforms and linkages. For implementers, now is the time to collaborate. If building this ecosystem is treated as a strategic priority, it will improve outcomes for people across West Africa and serve as a model for other conflict-affected regions around the world.



# Notes

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1. Sampson Kwarkye, "West African Coastal Terror Attacks: Just the Tip of the Iceberg," Institute for Security Studies, March 9, 2022, <https://www.issafrica.org/iss-today/west-african-coastal-terror-attacks-just-the-tip-of-the-iceberg>.
2. Idayat Hassan, "Nigeria's Rampant Banditry, and Some Ideas on How to Rein It In," *The New Humanitarian*, November 8, 2021, <https://www.thenewhumanitarian.org/analysis/2021/11/8/Nigeria-banditry-peace-deal-jihadists-how-to-rein-it-in>; Aishat Babatunde and Adebowale Oluwaseun, "Violence in Lake Chad Basin Drives 360,000 Refugees into Niger Republic," *HumAngle*, May 5, 2022, <https://www.humanglemedia.com/violence-in-lake-chad-basin-drives-360000-refugees-into-niger-republic>; Katarzyna Rybarczyk, "The Herder-Farmer Conflict in Nigeria—Is There Hope for the Future?," Institute of Development Studies, June 22, 2021, <https://www.ids.ac.uk/opinions/the-herder-farmer-conflict-in-nigeria-is-there-hope-for-the-future>; and John Campbell, "Significant Rise of Insecurity in the Niger Delta Through 2019," Council on Foreign Relations, February 26, 2020, <https://www.cfr.org/blog/significant-rise-insecurity-niger-delta-through-2019>.
3. Interviews were conducted with 55 early warning and early response (EWER) experts and practitioners between November 2021 and January 2022 in the following cities in Nigeria: Abidjan, Abuja, Benin City, Calabar, Kaduna, Onitsha, Port Harcourt, Umuahia, and Warri.
4. Phuong N. Pham and Patrick Vinck, "Technology, Conflict Early Warning Systems, Public Health, and Human Rights," *Health and Human Rights Journal* 12, no. 2 (2012), <https://www.hhrjournal.org/2013/08/technology-conflict-early-warning-systems-public-health-and-human-rights>.
5. The text of the Economic Community of West African States (ECOWAS) Protocol Relating to the Mechanism for Conflict Prevention, Management, Resolution, Peace-Keeping and Security is available via the Oxford Public International Law website at <https://www.opil.oupilaw.com/display/10.1093/law-oxio/e242.013.1/law-oxio-e242>.
6. "Early Warning & Response," West Africa Network for Peacebuilding, <https://www.wanep.org/wanep/early-warning-response>.
7. "ECOWAS Launches the Joint Analysis and Response Planning (JARP) Compendium & Regional and Country Risk and Vulnerability Assessment (R/CRVA)," ECOWAS, September 30, 2020, <https://ecowas.int/?p=44307>.
8. This figure is from the most recent official census, conducted in 2006. The National Population Commission of Nigeria began conducting the country's first census since then in 2023.
9. Figures reported by these organizations as of April 27, 2023.
10. "An Integrated Conflict Early Warning and Early Response System: Manual for Data Collection and Analysis," Foundation for Partnership Initiatives in the Niger Delta (PIND), 2019, <https://www.pindfoundation.org/pind-integrated-conflict-early-warning-early-response-ewer-system-manual>.
11. "Integrated Peace and Development Unit," PIND, <https://www.pindfoundation.org/project/integrated-peace-and-development-unit-pind>.
12. The impact of these EWER mechanisms is difficult to measure, particularly because the attribution of outputs and outcomes to a given set of interventions at the systems level is often impossible due to counterfactuals and the complex combinations of many interdependent variables. However, a process-tracing approach, as done in this study, shows the validity of a network-of-networks approach, and suggests principles and strategic points of entry that can further amplify that impact.



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Most types of violent conflict in West Africa have increased as economic and security challenges have eroded public confidence in governance and groups have competed for scarce resources. Many institutions and organizations in West Africa have sought to head off these patterns of violence by establishing early warning and early response (EWER) systems. However, each system, no matter how sophisticated, eventually encounters the same points of failure: gaps in data and information on factors contributing to conflict, as well as problems around coordination, collaboration, and flow of critical information and analysis to those best positioned to respond. Using data from 2016 to 2021, this report looks at EWER systems operating at the regional, national, and local levels and how a network-of-networks approach can help address persistent shortcomings.

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