



USER GUIDANCE PACKAGE: USE OF TOOLS AND APPROACHES TO ANTICIPATORY ACTION FOR CONFLICT IN THE START FUND (February 2023)

This guidance package provides Start Network members, implementing and partner agencies with the necessary information and guidance on the use of open-source conflict forecasting tools and data sources to inform conflict-related anticipatory action. It gives clear guiding criteria, recommendations, and tips to support raising comprehensive and risk-informed anticipatory alerts notes to enable informed decision-making in the Start Fund's anticipatory alert note process. In addition, a mapping exercise of more than 50 existing conflict anticipation resources, tools, and models, categorized into typology categories (e.g., type of data analysis, type of conflict risk, geographic scope etc.), accompanies this resource.

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GLOSSARY OF TERMS

Key Term	Definition
Alert	The process by which members inform the Start Network's membership of a crisis. This is done through an alert note, which outlines the crisis and why the Start Fund is the best mechanism to respond.
Anticipation	The expectation or prediction of a specific crisis that is likely to unfold, based on forecasting information.
Anticipatory Action	Anticipatory action is defined as acting ahead of predicted hazardous events to prevent or reduce acute humanitarian impacts before they fully unfold. ¹
Forecast / Forecasting	To estimate or predict conditions by analysis of data. For instance, the analysis of meteorological data to forecast the likelihood of specific weather conditions. From a technical standpoint, the term forecasting is often used to refer to machine learning and other statistically-driven methods for making predictions and is a subset of the larger risk analysis toolkit. For the purposes of this resource, forecasting refers to all methodologies for risk analysis and anticipation i.e., risk forecasting = risk anticipation via risk analysis (using qualitative, quantitative, mixed methods, etc.) to provide anticipatory warnings.
Forecast-Based Action	Disaster Risk Management Actions that are initiated on the basis of a forecast: more broadly, a synonym for Forecast-based Finance. ²
Forecast-based Financing	An anticipatory action approach that releases pre-agreed finance for pre-agreed activities to prevent or mitigate the impact of an imminent hazardous event or shock when forecast triggers are reached. ³
Likelihood	Probability of occurrence (often in % or low, medium, or high), meaning the probability for a scenario to unfold in the time window under consideration.
Mitigation	Mitigation measures or actions are meant to prevent or reduce the severity of the identified risk or adverse effects of something.
Modellable Risks	Modellable risks refer to risks that can be quantified and modelled using statistical/mathematical equations and techniques. This includes risks related to environmental and economics pricing, currency, liquidity, and interest rates
Predictive Analytics	Analysis of current and historical data to anticipate an event or some characteristic of an event (its likelihood, severity, magnitude, or duration). In the context of humanitarian response, predictive analytics uses modelling methodologies aimed at anticipating humanitarian needs arising from shocks. ⁴
Requested allocation amount	An amount assigned to respond to a crisis to which the Start Fund has been alerted.
Risk	The probability of an outcome having a negative effect on people, systems, or assets. Typically calculated in disaster risk management using the equation: Risk = Hazard x vulnerability x exposure.
Risk Impact	Risk impact is an estimate of the potential losses associated with an identified risk.
Trend	A consistent pattern measured over a period of time, which allows for predicting the future based on past data.
Uncertainty	An element of a situation that is not known, or the feeling of not being sure of what will happen in the future.

1 Glossary of Early Action Terms, Risk-informed Early Action Partnership (2022): <https://www.early-action-reap.org/glossary-early-action-terms-2022-edition>

2 Ibid.

3 Ibid.

4 <https://centre.humdata.org/predictive-analytics/>

SECTION ONE: OVERVIEW - USER GUIDANCE PACKAGE

How can this resource help me?

The Start Fund enables members to anticipate crises and begin responding to a crisis before it turns into a disaster.

This User Guidance Package - Tools and Approaches to Anticipatory Action (AA) for conflict in the Start Fund is designed to complement and build on other Start Fund guidance on anticipatory action (refer page 22) Anticipatory action for conflict is not as common as other crisis types, such as flooding or drought. Historic Start Fund alerts for conflict have focused on very clear situations with known key dates, such as upcoming elections or pre-announced military action. This guidance package aims to support Start Network members with approaches and tools to anticipate conflict and raise Start Fund anticipation alerts for upcoming conflict-related crises.

The Start Fund is a financing mechanism with a dynamic and flexible process based on the [Start Fund Alert Cycle](#). Anticipatory funding allocations are based on expert decision making using set Start Fund Allocation criteria, and not determined by pre-determined trigger thresholds typically associated with Anticipatory Action. For example, Start Network's Start Ready financing mechanism utilises pre-determined trigger thresholds as well as other actors (i.e., International Committee of the Red Cross's Disaster Response Emergency Fund (DREF), the UN's Central Emergency Respond Fund (CERF), etc.). To support the Start Fund's more dynamic approach to Anticipatory Action, providing a strong narrative of risk-informed and timely anticipatory alerts facilitates the decision-making process for allocating funds.

The Start Fund's [Pre-alert guidance note on conflict and displacement](#) (April 2017) provides advice on when and what information is useful to include when raising an alert, including key considerations around future likely scenarios, humanitarian impacts and an understanding of who the vulnerable groups are. So too, the [Alert Note Guidance Anticipation \(May 2022\)](#) provides further guidance on how to answer the questions in the Alert note template.

There is a wide spectrum of available tools and approaches to data collection in the AA for conflict space, from leveraging direct community relations and social networks, to the use of forecasting predictions, AI and machine learning. These all come with benefits, risks, and limitations. This resource aims to support the selection of tools that can complement, validate, and lend evidence to other approaches already employed by many Start Network members, such as engaging directly with hyper local networks and leveraging people relations.

The resource is laid out with the following main sections, including:

- Key considerations for deciding what, when, and how to employ predictive or forecasting tools for conflict-related anticipatory action;
- Relevant categories and guiding criteria to look out for when using tools and/or models; and
- Tips for preparing a Start Fund Anticipation alert for conflict.

It also includes: a snapshot summary of tools and associated key criteria to support conducting risk analysis for the anticipatory alert note process, which also links to a data catalogue containing the mapping and review of the 50+ tools and models (Annex I); and two case study testimonies from practitioners illustrating the benefits of using direct community engagement and social networks combined with such tools to complement and validate risk analysis (Annex II).

SECTION TWO: USING FORECASTING AND PREDICTION TOOLS TO ANTICIPATE CONFLICT

What are key considerations for deciding what, when, and how to employ predictive or forecasting tools for conflict-related anticipatory action?

Current expert debate on the use of forecasting tools and predictive analytics to inform conflict-related AA, note that there is, “insufficient justification for exclusively relying on conflict prediction models to drive anticipatory action due to several factors, including poor performance in predicting the onset of new conflicts; the lack of clear connection between predicted conflict and resulting humanitarian impact; and the dominance of ongoing conflict as a predictor of future conflict.”⁵

In November 2022, experts came together at the symposium, “Thinking ahead: avenues and challenges in crisis forecasting” hosted by the Center for Crisis Early Warning of the German Federal Armed Forces at the University of Munich.⁶ One of the symposium’s key findings reinforced the value of combining the use of risk analysis tools with the wisdom of crowds and expert knowledge - which largely outperforms migration forecasting models – and noted that unstructured data sources such as text, social media and image data are promising sources for early crisis detection. Accordingly, the use of conflict forecasting and prediction tools, complements the use of other types of qualitative or mixed method approaches, such as capturing data through social networks and direct community engagement to demonstrate the need for acting early in conflict settings.

In considering the above, the decision of whether and when to employ forecasting tools for AA in conflict settings should be made on a case-by-case basis, considering the specific context and objectives of the forecasting effort.⁷ That said, there are several general themes to be considered when deciding whether, when, and how to use such tools:



⁵ UNOCHA’s Center for Humanitarian Data, “Assessing the Technical Feasibility of Conflict Prediction for Anticipatory Action” (Oct. 2022). To see the full findings and recommendations, read the report [here](#). The core research focus was to assess if it is feasible to use similar techniques as to those used to predicting climate events and disease outbreaks, to also predict and act ahead of a conflict. The research was presented at an expert panel discussion which can be viewed [here](#).

⁶ The symposium brought together experts and practitioners working in cross-cutting fields such as conflict, climate, and security to discuss current advances and limitations in conflict forecasting and predictive analytics tools and approaches.

⁷ This means the consideration should take into account a combination of criteria, such as the type of conflict risk identified (i.e., broad or specific events like political violence from elections, coup details, etc.), the type of context (i.e., if there has been ongoing chronic conflict in certain regions, climate-impact inducing conflict, etc.), and at what level of granularity is being looked at (i.e., subnational, localised area, several locations, etc.)



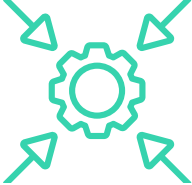

- I. **Feasibility:** Firstly, it is important to consider the feasibility of using forecasting tools or models for conflict-related anticipatory action, including:
- **The speed and timeliness of the forecasting tool or model:** The use of forecasting tools (here forecasting is meant in the technical definition vs. the other approaches as mentioned in the terms glossary) and data driven models (I.e., machine learning, etc.) can require significant investments in technology and data infrastructure, as well as specialized training and expertise. For example, some practitioners working in conflict settings, conducting rapid or very localised responses on the ground, may not have enough time or resources to send out an assessment team to capture data for the tool. In this case, for conducting risk analysis for conflict-affected anticipatory action, it may be helpful to select tools that are 'ready to use' data products (i.e., ACAPS' Crisis Insight, etc.). Further, consider if there is enough lead time to use such forecasting tools in the window of opportunity to act ahead of conflict.
 - **Resourcing and Costs:** It is important to consider some forecasting and data analytics tools have cost implications (i.e., subscription based, purchasing software to install, and run, the program, etc.) and can be expensive to develop and maintain. Fortunately, a number of data, tools or products for conducting risk analysis are free to access for humanitarian or not-for-profit organisations (i.e., ACLED, Crisis Insight, CrisisWatch, etc.). The summary of tools and models The summary of tools and model (refer Annex I) identifies a number of these free to access tools.
 - **The context and complexity of the situation:** Data or forecasting tools may not be appropriate or effective in all situations, particularly in complex or rapidly changing environments. It is important to carefully consider the specific context and complexity of the situation before using these tools.
- II. **Potential benefits:** It is helpful to consider the potential benefits of using different tools. For example, current conflict predictive models are mainly beneficial for country level risk profiling vs. sub-nationally, with most advanced sub-national conflict risk predictive models forecasting risk over large subnational areas. It can also help to improve the accuracy of forecasts by providing more and better information about potential conflicts, when combined with other risk analysis tools and approaches i.e., social networks, direct community engagement, etc.), as mentioned above. They can also help to reduce the impacts or consequences of conflict by providing early warning of potential problems and by helping to prevent or mitigate the effects of conflict. Another benefit could be in terms of building up risk monitoring, conflict analysis and alert raising capacity/readiness in coordination mechanisms between communities, local partners and awarding agencies i.e., by providing experience in setting up and enabling anticipatory response routines and mechanisms.
- III. **Potential risks:** It is important to consider the potential risks of using AA tools and approaches in conflict forecasting. Examples of this can include: the selected tool(s) being misused or misinterpreted by actors, leading to false positives or false negatives. It can also lead to a false sense of security, leading people to believe that a conflict is less likely to occur than it is. Another key risk is perception by authorities (both state and non-state actors) who may view such actions as a breach of sovereignty or a security risk- especially if local partners are using sophisticated machine learning-based tools. Yet another is the lack of understanding of the impact of acting, where it can be difficult to determine if such action benefits one group at the expense of others (e.g., how is aid distributed? who is benefiting? how many recipients vs. those who are left out?). It is important to consider the identified risks against potential gains or benefits.
- IV. **Negative implications:** Anticipatory action tools and approaches in conflict forecasting can have several negative implications. For example, they can lead to false alarms and overreaction if the predictions are not accurate. They can also lead to a lack of transparency and accountability, as well as a potential misuse of resources if the anticipated conflict does not materialize. Additionally, the use of these tools and approaches can create a sense of complacency among decision makers, who may become overly reliant on the predictions and fail to consider other possible scenarios.

Strategic plan for implementation: If it is determined that the use of forecasting tools is appropriate and feasible, it is important to have a clear plan and timeline for implementing and evaluating the results of the forecasts.

What criteria and categories are useful to consider when using data or forecasting tools for risk analysis?

To support the process of deciding which tool or model best meets your risk assessment and forecasting for conflict risk needs, it is particularly useful to consider:

Criteria	Definition & Examples/Questions to consider
 <p data-bbox="113 701 360 745">Accessibility</p>	<p data-bbox="464 465 1193 499">Refers to cost and approach to accessing the tools or models.</p> <p data-bbox="464 521 1358 577"><i>Examples include: Free to use; Requires a free account subscription; Requires a paid subscription; Access if through an organisation or focal point; etc.</i></p>
 <p data-bbox="113 999 379 1093">Best phase to use the tool</p>	<p data-bbox="464 763 1369 824">Refers to the phase in the humanitarian cycle a particular tool would be most useful to support anticipatory action for conflict.</p> <p data-bbox="464 846 1222 880"><i>Examples include: Preparedness; Anticipation; Response; Recovery, etc.</i></p>
 <p data-bbox="113 1312 373 1406">Data analysis type</p>	<p data-bbox="464 1113 1123 1146">This refers to the method of research for data collection.</p> <p data-bbox="464 1169 1361 1339"><i>Examples include: Qualitative research relies on data obtained by the researcher from first-hand observation; interviews; questionnaires (on which participants write descriptively); focus groups; participant-observation; recordings made in natural settings; documents; case studies; and artifacts. Quantitative research is data driven and focuses on quantifying the collection and analysis of data; Mixed method (i.e., both Qualitative & Quantitative).</i></p>
 <p data-bbox="113 1659 336 1753">Geographic scope</p>	<p data-bbox="464 1424 1310 1458">Refers to the level of location(s) to which the risk analysis is undertaken.</p> <p data-bbox="464 1480 1331 1536"><i>Examples include: Global; Regional; National; Sub-national; Localised to a specific area; etc.</i></p>
 <p data-bbox="113 2009 395 2054">Historical data</p>	<p data-bbox="464 1774 1321 1865">Applying the use of comparative analysis by using historical data against current data through comparative analysis starkly illustrates urgency of escalation or unprecedented occurrence of potential conflict risks.</p> <p data-bbox="464 1888 1342 2002"><i>Examples include: Climate, agro-meteorological, vulnerability, exposure, damage or loss data to understand the location, timing and severity of past shocks. Lacking, incomplete, or insufficiently granular data impedes the definition of an "out-of-the-ordinary" event (Centre for Humanitarian Data, OCHA, 2022).</i></p>

 <p>Limitations</p>	<p>Refers to a tool or models shortcomings or restrictions.</p> <p><i>Examples include: Unavailability of resources; Small sample size; Flawed methodology, etc.</i></p>
 <p>Potential biases of the data or tool</p>	<p>Data and forecasting tools, like any other tool, may be subject to biases or assumptions that can affect their accuracy. It is important to carefully examine the potential biases of the data or tool and take steps to mitigate them.</p> <p><i>Questions to consider: What potential biases may the data or tool have? What steps can be taken to mitigate these potential negative impacts?</i></p>
 <p>Potential impact of the analysis on decision-making</p>	<p>The output of the analysis should be used as one input among many when making decisions about anticipatory action.</p> <p><i>Questions to consider: What are the potential implications of the analysis? How will it be used in decision-making?</i></p>
 <p>Reliability and accuracy of the data or forecasting tool</p>	<p>It is important to use data or tools that have been validated and shown to be reliable and accurate in predicting the likelihood and severity of potential conflicts.</p> <p><i>Questions to consider: Has the tool been validated by other users? Has it shown consistently when reviewing past products and analysis to be reliable and accurate in predicting the likelihood and severity of potential conflicts?</i></p>



Sources of quality information

When using local knowledge, consider the following:

- The diversity and inclusiveness of the stakeholders consulted
- The credibility and legitimacy of the local knowledge and perspectives
- The relevance of the local knowledge and perspectives to the specific situation being analyzed
- The transparency and accountability of the process for incorporating local knowledge and perspectives into the analysis

Questions to consider: Have consultations been inclusive and a diversity of community voices included in the analysis? Is the process of collecting local knowledge and perspectives into the analysis clear and transparent?

When using quantitative methods, consider:

- The accuracy and reliability of the statistical models or algorithms being used
- The accuracy of the analysis will depend on the availability and quality of data used as input
- The relevance of the data to the specific situation being analyzed
- The transparency and interpretability of the results

Questions to consider: Is the data relevant and up to date? Does it accurately reflect the situation on the ground? How exhaustive are your resources?



Transparency and accountability

The transparency and accountability of the process for incorporating local knowledge and perspectives into the analysis.



Example: Tools developer publishing clearly its methodology, accuracy and/or limitations in an open and accessible way



Type of analysis produced

This refers to how the data or information is presented and understanding of what output they are useful for.

Examples include: Data mapping; Data collection; Scenario building; Interactive dashboard; Impact evaluations; etc.

 <p>Type of conflict risk</p>	<p>Refers to the different types of risk identified in each context.</p> <p><i>Examples include: Broad or specific events such as political violence from elections or coup details; Security risks to sustainable development from impacts of climate change; Violent events; Explosions/Remote violence; Protests; Riots; Community violence; Displacements; Impacts on peace and security, Development; and Resilience due to climate stressors, etc.</i></p>
 <p>Update frequency</p>	<p>How often the tool or model is updated.</p> <p><i>Examples include: Weekly; monthly; quarterly; annually; etc.</i></p>

Understanding key pieces of information about the tool or model such as the timeliness of updates, transparency on methodology, accuracy, and limitations, as well as trustworthiness and credibility of the source, can inform a “statement of confidence” in the forecast provided and is something useful to include in a Start Fund anticipation alert note, as it helps decision makers understand the level of uncertainty in the given context.

See also the summary of key open-source tools and models (Annex I) and associated criteria that can be useful for conducting risk analysis to inform conflict-related anticipated action, that can be employed to complement the use of other types of qualitative or mixed method approaches.

SECTION THREE: TIPS FOR PREPARING A START FUND ANTICIPATION ALERT FOR CONFLICT

i. Recommendations on approaches to conducting forecasting and risks analysis to inform conflict-related anticipatory action

01 Use forecasting tools (see this definition and other relevant terms in this Glossary of Terms) to information anticipatory risk analysis. Data analysis and foresight are a critical element of anticipatory action. Anticipating conflict requires good understanding of hazards and vulnerability that determine the risk to populations. Continual monitoring of risk and using pre-identified quality sources will strengthen your alert note and increase the chances of an activation. Being also clear on deciding when to act. The aim is to balance between reliability of the forecast and the window of opportunity to intervene.

02 Combine and complement conflict forecasting and risk assessment tools with other types of qualitative and mixed method approaches. Adopt a systematic and multi-disciplinary approach – such as drawing on insights from a range of fields including political science, economics, and sociology - to provide a comprehensive understanding of the situation. Combining and triangulating different data sources and approaches to analysis supports a data driven and qualitative risk analysis.

Read these three testimonial case studies from humanitarian workers on the value and impact of combining the use of tools with direct community engagement and social networks.

03 Engage with local communities and stakeholders to understand their perspectives on the potential sources of conflict (both actors and factors) and their concerns about potential risks. This data can then be combined with other collated data and analysis to inform assessing vulnerability and exposure, and to triangulate, and verify data gathered under point two to further understand the impacts, especially for those most at-risk groups.

04 Look at what has been successful previously for approved anticipatory alerts to inform raising your alert note. This includes, among others:

- ensuring the alert is backed up by strong forecast and risk analysis,
- providing suitable lead time for anticipating the crisis and implementing the anticipatory actions,
- agencies capability of reaching identified hotspots,
- agencies that had considered the timeframe of activities in the proposal stage to ensure a balance before and after the peak date of the crisis, and
- proposing interventions that focus on small-scale and achievable aspects of the potential conflict, among others.

See here a fuller list of useful criteria that informed the Start Funds committee's previous allocations for acceptance or decisions not to fund.

05 When considering which tools are relevant to use in the process of conducting risk analysis for the context, the decision should be made on a case-by-case basis. Once you've selected the tool(s) you will use, ensure to review the data analysis type and the criteria it includes. It is important to consider and gain clarity on the feasibility, speed and timeliness of the forecasting tool or model, resourcing, costs, the context and complexity of the situation and potential risks and implications, as well as the strategic plans for implementation. Statistically-driven conflict forecasting and predictive analytics are two common techniques used in risk analysis. See here for further detail on the distinctions between using these machine learning techniques and other risk analysis techniques. See here for more information on these considerations.

For reviewing the data analysis type, consider: Is it qualitative (i.e., such as observations, interviews, questionnaires, or surveys, focus groups; recordings made in natural settings; documents; case studies etc.)? Is it quantitative (i.e., raw data, data visualisation, percentages, etc.)? Can you source data from both, to provide a mixed methods approach to complement your risk analysis?

In conducting your risk analysis, looking also at the following criteria:

- the **geographic scope** (national, sub-national, community level, etc.) in the data being looked at,
- **historical data** to apply the use of comparative analysis illustrates the urgency of escalation or unprecedented occurrence of potential conflict risks (i.e., Climate, agro-meteorological, vulnerability, exposure, damage or loss data to understand the location, timing and severity of past shocks, etc.)
- **Type of analysis produced** (i.e., Data mapping; Data collection; Scenario building; Interactive dashboard; Impact evaluations; etc.)
- **Type of conflict risk** (i.e., Broad or specific events such as political violence from elections or coup details; Security risks to sustainable development from impacts of climate change; Violent events; Explosions/ Remote violence; Protests; Riots; Community violence; Displacements; Impacts on peace and security, development; and resilience due to climate stressors, etc.), and
- **Update frequency** (i.e., Weekly; monthly; quarterly; annually; etc.)

This list of key criteria and categories provides further details on points useful to consider and support the process of deciding which tool or model best meets your risk assessment and forecasting for conflict risk analysis needs.

06 Understanding key pieces of information about the tool or model can inform a “statement of confidence” in the forecast provided. Consider the effectiveness of the tool(s) being used, looking at how transparent the tool is and what kind of data it provides mapped against what you are looking to outline in the risk analysis. This includes criteria such as the timeliness of updates, transparency on methodology, accuracy, and limitations, as well as trustworthiness and credibility of the source. This type of information is something useful to include in a Start Fund anticipation alert note, as it helps Start Fund allocation decision makers understand the level of uncertainty in the given context.

07 For Start Fund anticipatory alerts, focus on the current context analysis and impacts and proposed mitigating interventions. While providing brief background context is useful, avoid providing extensive detail. Though it is important to prioritise AA to mitigate the impacts of potential conflict-crises, and in some cases prevent the conflict from occurring or escalating, consider the “Do no harm” approach to avoid exposing people to additional risks through actions taken. Consider: Have the potential negative consequences of acting ahead been assessed through your risk analysis process?

08 Use data and information gathered to build an account of the anticipated conflict risk. Utilizing quantitative methods such as trend or comparative analysis and statistical modelling can help to discover patterns or trends in data that could potentially signal conflict risk – both to identify common patterns and trends across different conflicts, as well as to highlight differences and unique features of individual conflicts. This can help to provide context and perspective, and to identify potential opportunities and challenges for intervention and resolution.



Applying the use of historical data with current data through comparative analysis starkly illustrates urgency or unprecedented occurrence of potential risk. Observed data and comparative analysis of conflicts can also be used for contextualisation purposes in several ways. For example, observed data can be used to provide a factual and objective account of the conflict, including key events, actors, and trends. This can help to provide a more nuanced and accurate understanding of the conflict and its underlying causes and dynamics.

09 Present a compelling account of the risk information and the potential impacts (various scenarios if there are multiple). Data visualisation is powerful for illustrating a compelling, data-supported narrative. For example, using maps can help to demonstrate the geographic distribution of the risk/event, and charts and graphs can help demonstrate the urgency of the risk (i.e., it is unprecedented, it hasn't been this bad for 20 years, etc.). Refer to these tips on depicting and presenting anticipatory risk analysis for anticipatory alert notes.

10 Clearly and concisely raise awareness of the potential risks and the designed actions that are proposed being taken to prevent or mitigate them. Design activities in collaboration/consultation with local communities and tailored to their specific contexts and needs.

ii. What has and hasn't worked with previous Start Fund anticipatory alert applications?

Below is a list of useful criteria that informed the Start Funds committee's previous allocations for acceptance or decisions not to fund (refer also to the resource [Start Fund Allocation Decisions](#) (April 2022)):

 Previously approved anticipatory alerts	 Decisions not to fund anticipatory alerts
<ul style="list-style-type: none"> • Anticipatory alert is backed up by strong forecast and risk analysis • Provide suitable lead time for anticipating the crisis and implementing anticipatory actions • Proposed interventions focus on small-scale and achievable aspects of the potential conflict • Applicant agencies present and active in locations of interest • Outlining the agencies and other entities capacity to respond (i.e., government, other agencies responding) • Inclusion of protection activities, especially on preventing gender-based violence • Familiarity with Start funding process and application • Clear gaps identified and a real identified scope for a short-term project to make a positive impact • Agencies had considered timeframe of activities in the proposal stage to ensure a balance before and after the peak date of the anticipated crisis • An identified activity or event (i.e., election) context is a well-justified case for anticipatory crisis • Real humanitarian need (conditional on other issues as well) • Feasibility given budget size and timeframe, and appropriateness to identified needs and geographic targeting • Mitigation and preparedness activities that could be carried out immediately • Capability of reaching identified hotspots • Crisis profiles that may be prioritised: underfunded small to medium scale crises; forecasts of impending crises; spikes in chronic humanitarian crises. 	<ul style="list-style-type: none"> • Alert is not backed up by strong or quality risk analysis (i.e., in terms of credibility, is the forecast source credible? Can it be triangulated?) • Potential scale of the crisis (i.e., too large) • Funding landscape (i.e., there are other potential funding landscape by other major organizations/major donors such as OCHA, ECHO, UNHCR, etc.) which may mobilize other funds) • Conflict already receiving wide-spread media attention enough to mobilize other funding actors • Possibility of being perceived as complicit in force returns • The humanitarian impact was not fully understood by the committee members • Start Fund pot is low (i.e., money could have more impact on a future crisis)

iii. Advice for depicting and presenting anticipatory risk analysis for alert notes

There are two categories for Start Fund allocation decisions: i). Response Alerts (Rapid onset, Slow onset), and ii). Anticipation Alerts. For the purposes of this resource the information below focuses on the Anticipation category.

1. Use **clear and concise language** to describe the potential sources of conflict and their potential impacts. Avoid using technical jargon or complex terminology that may be difficult for non-experts to understand.
2. Use **visual aids, such as maps, graphs, or diagrams**, to help illustrate the key points of the analysis. These visual aids should be well-designed and easy to understand and should provide additional information or context to support the narrative of the analysis.
3. Provide a **clear and compelling case for action**. The presentation should outline the potential risks of conflict and explain why it is important to take action to prevent or mitigate these risks.
4. **Trends analysis can help to understand patterns in your context**. For instance, illustrating the 'long view' through a simple graph that highlights conflict points between upper and lower boundaries, outlining radical shifts or if there is seasonal or cyclical nature of the conflict, etc. can help establish a baseline and depict where trends are present.
5. Using **data triangulation** (i.e., the data is verified by multiples sources), and ensuring that the narrative combines mixed methods analysis (i.e., both qualitative, such as written narrative that 'tells a story', and quantitative such as statistics or data visualisations that illustrate data to support the narrative) which supports quality risk analysis and credibility.
6. Linking more closely to **outline the humanitarian impacts of the potential conflict spark or escalation**, including geographic areas and/or affected communities, helps the decision-maker to see clearly how taking this anticipatory action can help mitigate or prevent such impacts.
7. **Engaging with local networks and Communities of Practice** to delve into broader knowledge hubs and support use of other technical tools.
8. **Use concrete examples to illustrate the potential impacts of conflict and the potential benefits of acting**. This can help to bring the analysis to life and make it more relatable to the audience.
9. **Engaging with the audience and encourage dialogue and discussion**. The presentation should provide opportunities for the audience to ask questions and provide feedback on the analysis and proposed actions.

Overall, the key to depicting and presenting conflict risk analysis is to be clear, concise, and engaging. The presentation should provide a thorough and well-supported analysis of the potential risks of conflict and should make a compelling case for action.

iv. Tips and approaches to for conducting anticipatory risk analysis

Building on the guidance provided in [Start Fund - Alert Note Guidance Anticipation](#) and the [Start Network Crisis Anticipation Window Guidance Note](#), the following section provides additional guidance for conducting anticipatory risk analysis to support answering the questions in the alert note:

1. Information gathering: What are the main conflict prediction models and approaches to assessing the probability of a conflict risk occurring and what are their limitations?

UNOCHA's Center for Humanitarian Data report on "Assessing the Technical Feasibility of Conflict Prediction for Anticipatory Action" (Oct. 2022) [surmises](#), "there are three types of conflict prediction models: classification, risk prediction, and continuous prediction."

The report defines risk prediction models "generate a measure of underlying conflict risk, often in the form of a probability of conflict in a geographic area over a certain period." Continuous prediction models are defined as a way to "predict a specific measure of conflict, such as the number of fatalities or conflict events, without categorizing the results." It characterizes classification models as one that "predict whether or not a conflict will occur in a certain area and time, either in a binary form (e.g., yes/no) or multiclass format (e.g., major, minor or no conflict, or a 1-5 scale)."

The research found this type of model as relates to anticipatory action for conflict is “technically infeasible due to poor performance.”

Common issues affecting the usability of all three models are the scale of predicted conflict, predicting conflict onset and escalation, and the lack of linkages between predicted conflict and humanitarian impact. This is why we encourage the use of conflict forecasting and risk assessment tools 'to complement the use of other types of qualitative or mixed method approaches. See the report for more granular detail on limitations around predicted conflict and overall performance.

2. Risk Analysis: How can using forecasting tools help strengthen the anticipatory risk analysis and what criteria is useful to include in the alert note?

Capacities for data analysis and foresight are a crucial element of anticipatory action, which requires a good understanding of hazards and vulnerability that determine the risk to populations, as well as continual monitoring to inform action. If the event is yet to happen and there is a window to act to put in place sufficient mitigation measures, using forecasting tools to inform the anticipatory risk analysis will strengthen your alert note and depict the urgency of the identified conflict risks involved to activate the Start Fund anticipatory window and release funds.

For Start Fund anticipation alerts, it is useful to focus on the current context analysis, 'potential impacts and proposed mitigating interventions and proposed mitigating interventions. While providing brief background context is useful, avoid providing extensive detail.

Utilizing quantitative methods such as trend or comparative analysis and statistical modelling can help to discover patterns or trends in data that could potentially signal conflict risk. Leverage machine learning if resources are available in your organization. Looking at different sources and using forecasting tools can also complement or give you a fresh perspective on the information you already have.

There are a range of useful tools that can be employed to support anticipatory risk analysis for raising the alert. The tools mapping as a part of the users' guidance package ([link](#)) is intended to provide a broad overview of a range of tools that can inform your analysis. In particular, [Armed Conflict Location and Early Data Project \(ACLED\)](#), the Violence Early Warning System ([ViEWS](#)), IOM's [Displacement Tracking Matrix](#), the [NGO Incidents Data Dashboard](#), OCHA's [The Humanitarian Dashboard](#), and the EU Commission's [INFORM Risk and Severity Index](#) can all be useful tools for conducting risk analysis, to name a few. These are all helpful for gathering quantitative data, such as providing data for monitoring potential conflict escalation or historical data (refer to section two on criteria and categories to support the process of deciding which tool or model best meets your risk assessment needs).

Observed data and comparative analysis of conflicts can be used for contextualisation purposes in several ways. For example, observed data can be used to provide a factual and objective account of the conflict, including key events, actors, and trends. This can help to provide a more nuanced and accurate understanding of the conflict and its underlying causes and dynamics.

Comparative analysis can be used to identify common patterns and trends across different conflicts, as well as to highlight differences and unique features of individual conflicts. This can help to provide context and perspective, and to identify potential opportunities and challenges for intervention and resolution. Applying the use of historical data with current data through comparative analysis starkly illustrates urgency or unprecedented occurrence of potential risk. Fig. 2 depicts the use of data visualisation to illustrate historical comparative analysis of South Sudan's Sudd wetlands flood levels from 1998 to 2022. To leverage observed data and comparative analysis of conflicts for contextualization purposes, it is important to use a systematic and rigorous approach, and to carefully consider the limitations and potential biases of the data and analysis.

In the Start Fund Anticipation Alert, helpful for:

- Demonstrating historic trends to inform future potential conflict risk
- Highlighting differences and unique features of individual conflicts

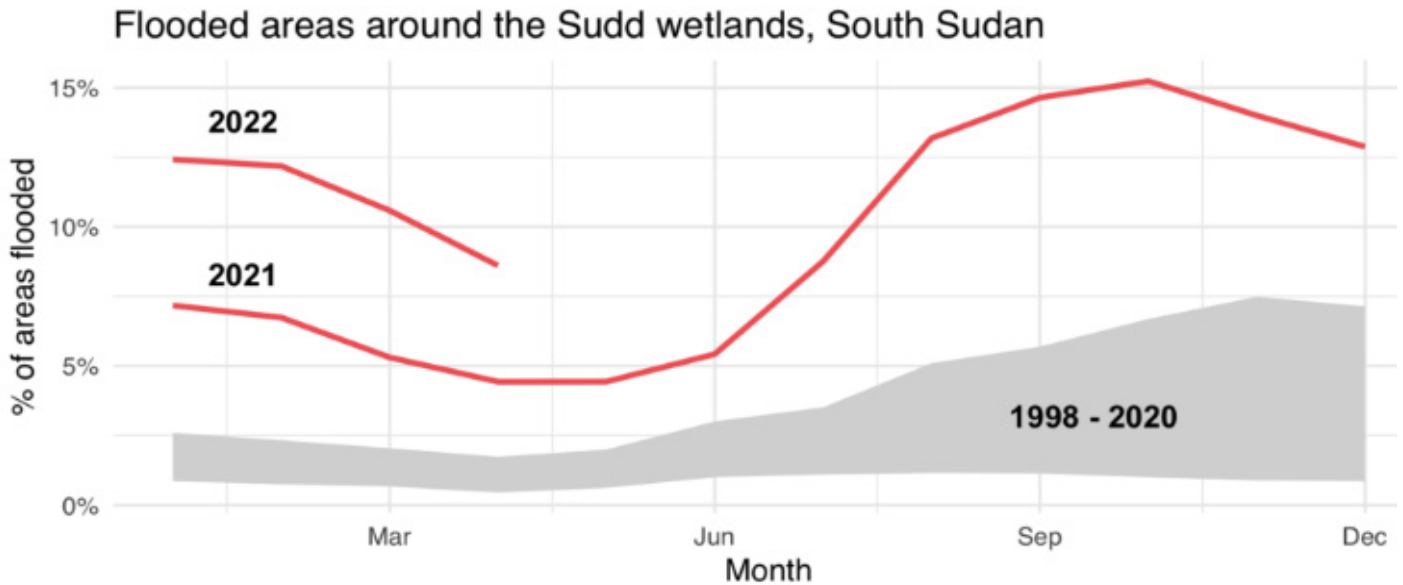


Fig. 1: Example of the use of visualization for historical comparative analysis - South Sudan Sudd wetlands flood levels, January 1998 to April 2022, [Flood Risks for South Sudan's 2022 Rainy Season](#).

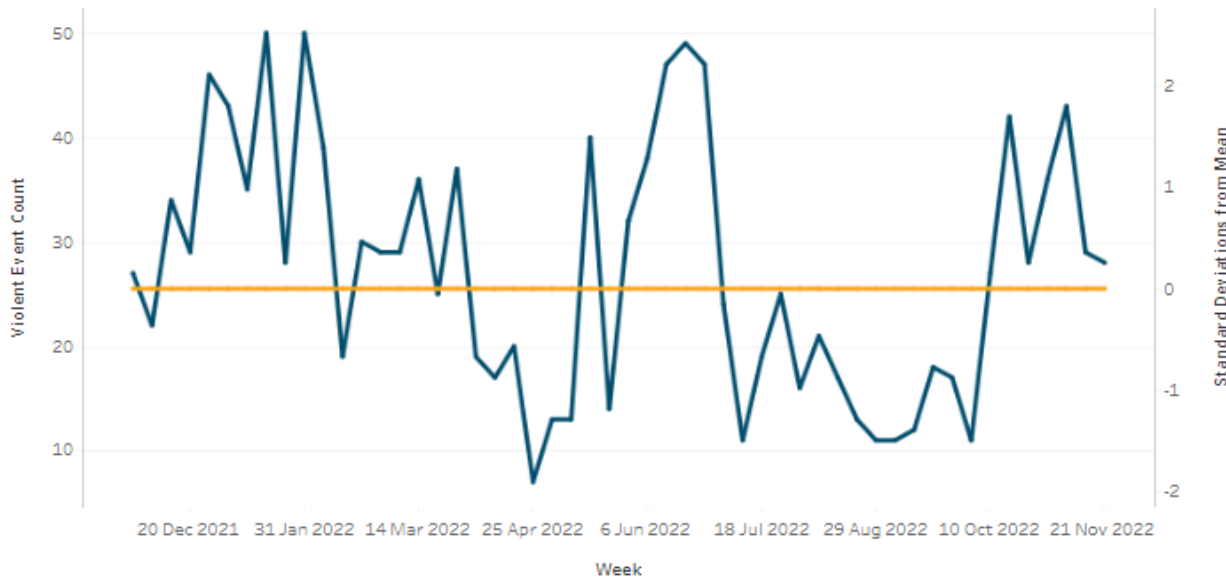
ACLED's Volatility and Risk Predictability Index supports early warning and risk management by providing practical information for monitoring conflict environments. The index tracks positive deviations (increases) from baseline violence levels to assess the frequency and intensity of conflict surges. Rather than predict conflict rates far into the future with limited applicability, the index evaluates the stability and frequency of the patterns of high and low violence rates in specific areas.

Volatility and Risk Predictability Index

Data as of 2 December 2022

Country: Democratic Republic of Congo Admin1: Nord-Kivu (Democratic Republic of Congo)

Event Count in Nord-Kivu (Democratic Republic of Congo)



Current Volatility & Risk Predictability Index:	Volatility	# of Weeks
Extreme risk	High activity anomaly (2 to 5 SDs over baseline)	6
Previous Volatility & Risk Predictability Index:	Violence within expected bounds (less than 2 SDs over baseline)	46

Fig 2: Volatility & Risk Predictability Index. Source: Armed Conflict Location & Event Data Project (ACLED), <https://acleddata.com/early-warning-research-hub/volatility-and-risk-predictability-index/>

In the Start Fund Anticipation Alert, helpful for:

- Tracking frequency of the patterns of high and low violence rates in specific areas.
- Supports identification of most at-risk areas experiencing highest intensity of violence and of any particularly vulnerable groups living in the identified areas. Using this information, can assess any needs requiring attention for the Alert note.

In the Anticipatory Alert note include data such as clear assessment on potential humanitarian impacts on the area under focus. Forecasting tools can help outline data figures to show, for example, numbers of people displaced following a spike or escalation in violence (employing the tools mentioned). By providing numbers from credible sources, this strengthens the case that this alert note is well-informed.

Emphasise also how proposed interventions will support mitigating and preventing secondary impacts that are likely consequent from the anticipated conflict risks (i.e., description of potential number of refugees and their needs, numbers on particularly vulnerable groups, etc.).

3. Use quality data: Why is it useful to include data at a sub-national level in your anticipatory risk analysis for the alert?

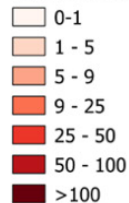
Using existing relevant, open-source conflict data If your organization has in-house GIS capacities, leverage this, or risk tracker platforms, such as ACLED's [sub-national sub-event type variables](#) - which disaggregates event types further intended to be used to develop for more nuanced analysis - to track risk sub-nationally and include relevant data in your alert note. This provides a solid basis for the proposed interventions that are intended to mitigate impacts on the at-risk areas.

To incorporate this, it is important to be aware and look at the type of data the tool uses. For example, the ACLED collects weekly updated real-time dynamic data on the locations, dates, actors, fatalities, and types of reported political violence and protest events. Whereas the INFORM index is a structural risk index so isn't going to give a dynamic (real-time) assessment of anticipated risk. Yet on the other hand, the INFORM can provide useful historical data that can be triangulated or overlaid with a tool that provides such dynamic assessment. You can also utilize external conflict data, such as from the ACLED or Uppsala Conflict Data Program (UCDP) to generate conflict intensity maps, as part of your risk analysis to visually illustrate the geographic regions of vulnerability (see Fig. 4).

Conflict Intensity in Burkina Faso and Tri-Border Area (January-July 2021)

□ national borders

Number of Incidents at Sub-State Level



OpenStreetMap



100 200 300 400 500 km



raw data source: Armed Conflict Location & Event Data Project (ACLED); acleddata.com.

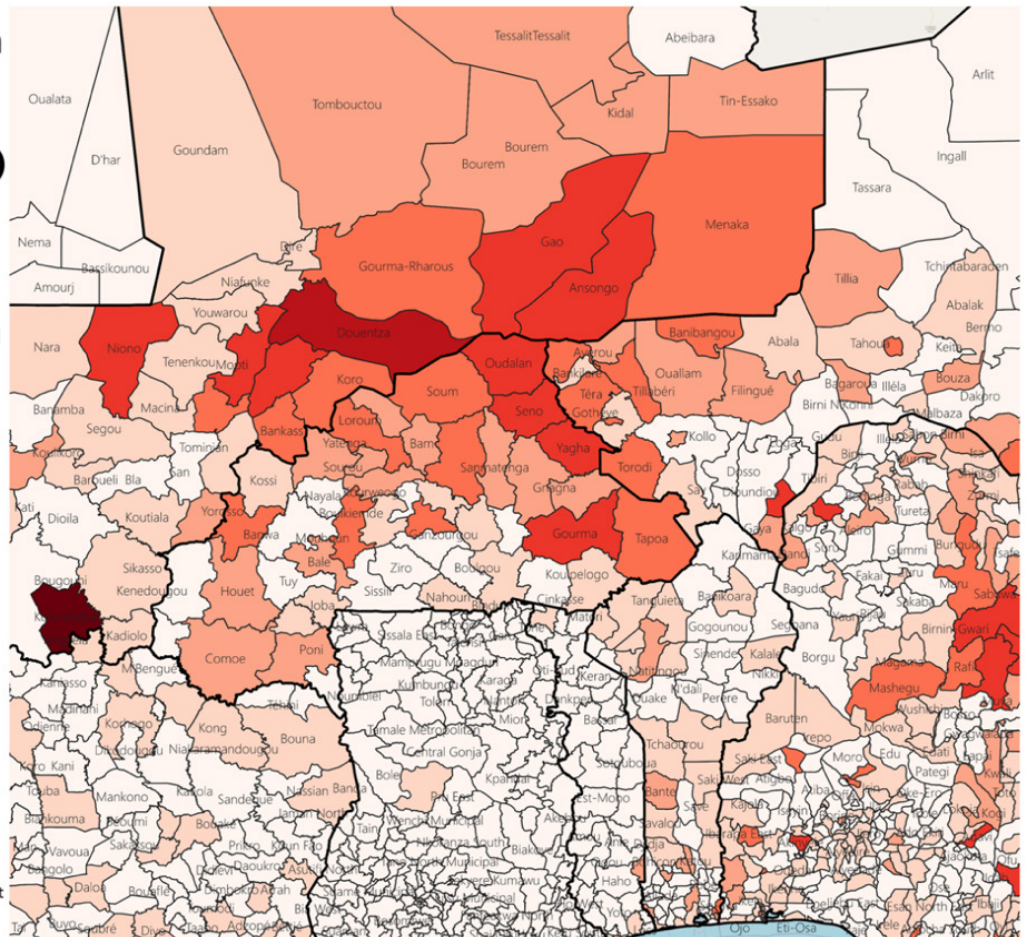
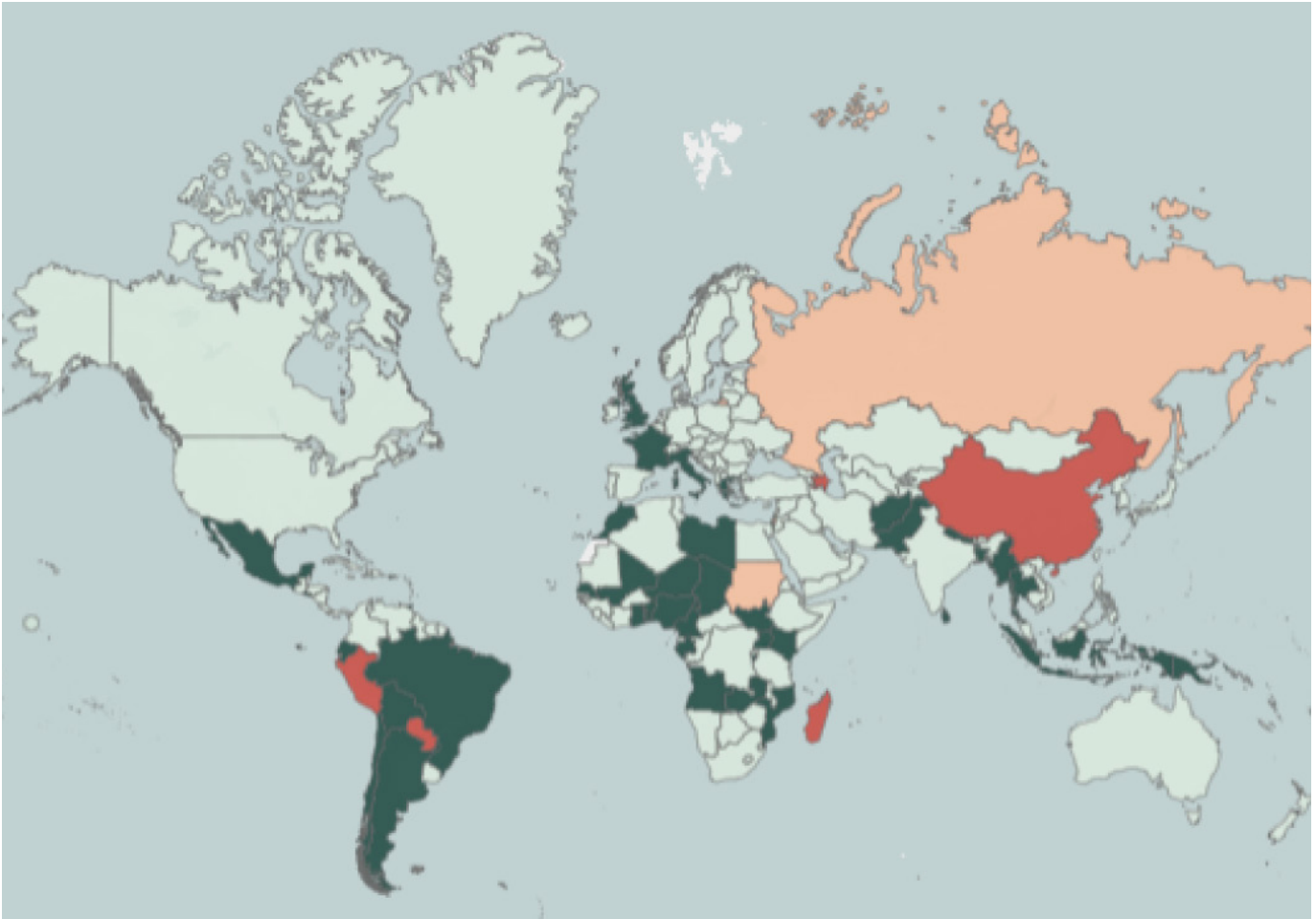


Fig. 3: Source: Armed Conflict Location & Event Data Project (ACLED), www.acleddata.com.

In the Start Fund Anticipation Alert, helpful for:

- Tracking risk sub-nationally with dynamic assessment data supports rationalisation for proposing targeted interventions for mitigating or preventing humanitarian impacts in most at-risk communities or locations.

Another very useful tool to highlight is the Sub-national Threat & Surge Tracker pinpoints local-level spikes in violence. The interactive dashboard tracks all first-order administrative divisions (e.g., states, provinces, governorates, etc.) that register a significant increase in political violence. The Sub-national Surge Tracker flags cases in which a first-order administrative division has seen an increase of 100% or more in violent events during the most recent week of data relative to the average number of events per week over the past month.



Short-Term Surge Watchlist (marked *red* on map)

@2022 Mapbox @OpenStreetMap

Fig. 4: The Subnational Threat & Surge Trackers, Armed Conflict Location & Event Data Project (ACLED), <https://acleddata.com/early-warning-research-hub>

You can select the area of concern and check out which sub-national areas are classified under extreme risk category (the best predictor of future violence is a history of previous violence i.e., stubborn, recurring hotspots are likely to remain the same), so given everything else remains equal (no major changes such as peace agreements or economic breakthroughs, etc), use this information to inform your monitoring. Enrich it with information from other local partners/ social networks approach.

Conducting hotspot analysis, by for instance, running a tool such as the Density-based Spatial Clustering of Applications with Noise (known as DBSCAN) on external conflict data (i.e., from ACLED) can help you identify conflict hotspots (statically significant areas where conflict is likely to continue) and the type of conflict expected –can help your organization prioritize the allocation of resources in your Areas of Operations and on the most relevant type of violence (of concern) to your agency. Note, to use this tool requires technical in-house GIS expertise.

In the Start Fund Anticipation Alert, helpful for:

- Identifying conflict hotspots (statically significant areas where conflict is likely to continue) and the type of conflict expected, which can help your organization prioritize the allocation of resources on the most relevant type of violence of concern to your agency.

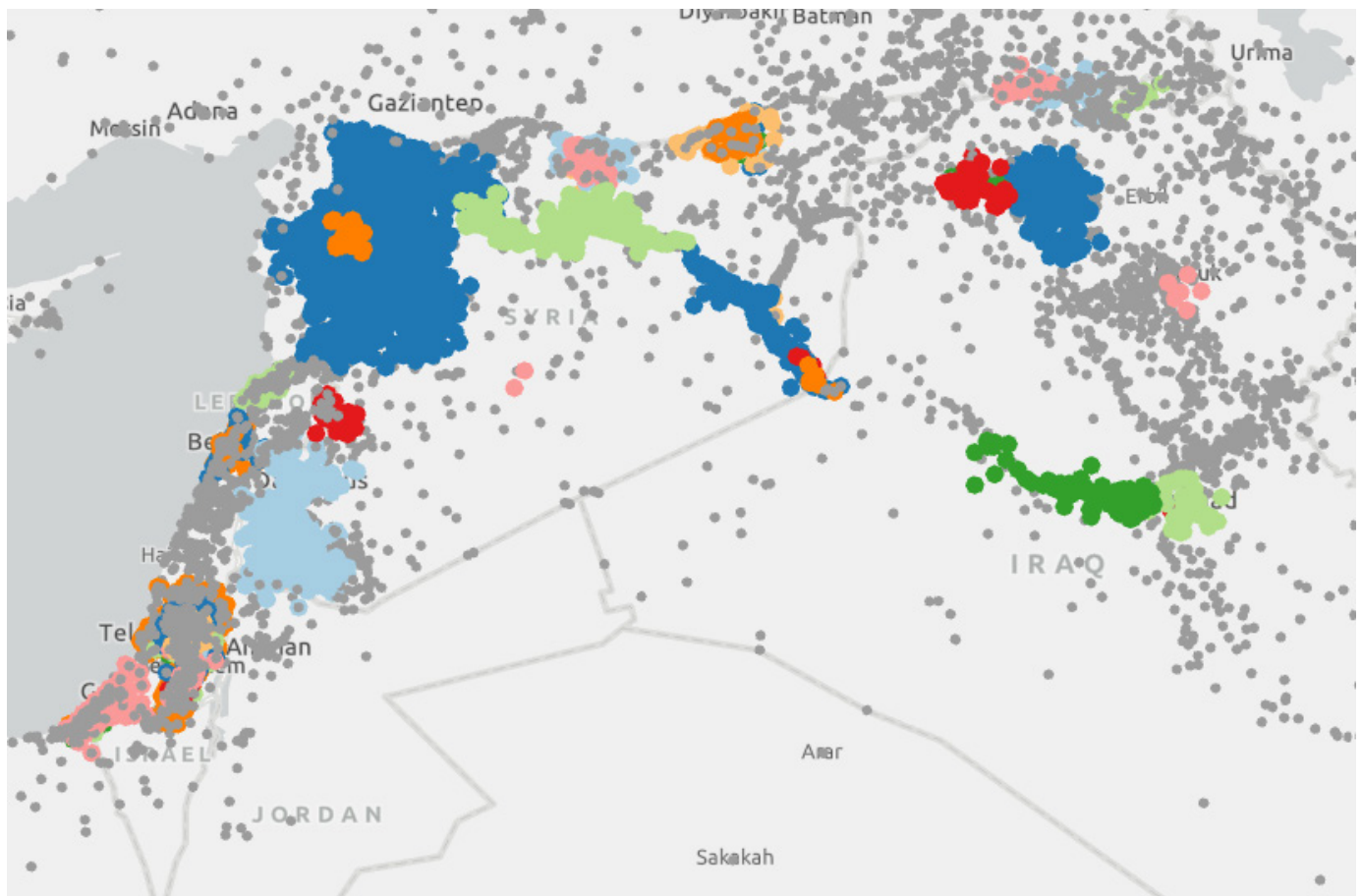


Fig. 5: Source: Analysis Type: Density-based spatial clustering of applications with noise (DBSCAN), SCI CAFU internally produced analysis, with ACLED data overlaid from: Armed Conflict Location & Event Data Project (ACLED), www.acleddata.com

Data visualisation is powerful for illustrating a compelling, data-supported narrative. Using data visualisation such as maps, charts and graphs, helps demonstrate the urgency of the risk (i.e., it is unprecedented, it hasn't been this bad for 20 years, etc.). The below (Fig. X) illustrates a sample conflict risk narrative (the use of text, statistics, and maps) to depict identified anticipated localised conflict risks. While this is more of a context update, this type of information can be utilised in an anticipation alert note to support illustrating the conflict risk narrative.

Ukraine Crisis

Week of 26 November - 2 December 2022



Ukrainian forces continued counteroffensive operations along the Svatove-Kreminna line in the Luhansk region last week. Ukrainian forces also engaged in counterattacks in the western part of the Donetsk region and eastern part of the Zaporizhia region. Meanwhile, Russian forces continued ground attacks towards Bakhmut in the Donetsk region, with Russia reportedly occupying several settlements in the area.



Russian forces also continued to target civilian infrastructure with artillery shelling and missile strikes, reportedly killing around a dozen civilians in the Dnipropetrovsk, Donetsk, Kherson, and Sumy regions. Two more civilians were reportedly killed and around four injured in landmine explosions in the Kharkiv, Kherson, and Sumy regions. Separately, Russian human rights groups reported that thousands of Ukrainian prisoners were transferred from occupied parts of the Kherson region to Russian prisons, where they have faced torture and ill-treatment. According to these reports, Russian authorities are planning to review their cases under the Russian Criminal Code to prolong their sentences and set them up for recruitment by the Wagner Group, in order to send them back to war. Additionally, dozens of civilians were reportedly forcibly relocated from the occupied Kinburn Spit in southern Ukraine.

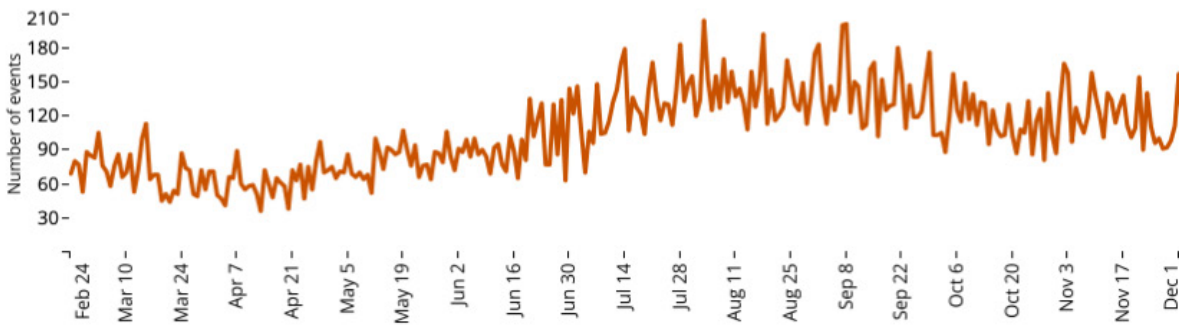
Russian Invasion: In Numbers

29,734
Political violence events
since the invasion

756
Political violence events
(26 November - 2 December 2022)

2,785
Violence targeting civilians
since the invasion

Political violence events (24 Feb 2022 - 2 Dec 2022)



Political violence events (26 Nov - 2 Dec 2022)



Fig 6: Source: Armed Conflict Location & Event Data Project (ACLED), www.acleddata.com

In the Start Fund Anticipation Alert, helpful for:

- Illustrating the conflict risk narrative; data complements qualitative narrative on why the Start Fund is appropriate for the anticipated conflict risks.
- Comparing historical data with current data, which relays urgency or unprecedented occurrence of potential risk.

4. Access Start resources: What resources are available to Start Network members to support conducting anticipatory risk analysis for raising the anticipation alert?

In the process of conducting your anticipatory risk analysis, the [Start Fund team](#) can provide feedback on anticipation alerts before they are formally submitted to the network and can connect Start members to forecast providers.

As ever, please notify the [Start Fund skype group](#) if you are considering submitting an alert so that other members can help determine the scope and timeframe of an expected crisis and contribute to the drafting of this, if appropriate.

The Start Fund offers the Analysis for Action Grant for up to £10,000 for collaborative information collection and analysis to support your anticipatory risk analysis needs. Please find the Analysis for Action Grant request form [here](#).

Start Network members can also access the forecast-based warning, analysis and response network (FOREWARN) community, which is a network of aid professionals, humanitarians, academics and risk experts. FOREWARN aims to quickly bring together the right people to predict disasters and support humanitarians closest to an anticipated crisis. The goal of FOREWARN is that Start Network members have an improved understanding of expert analysis and can effectively use risk information in advance of crises.

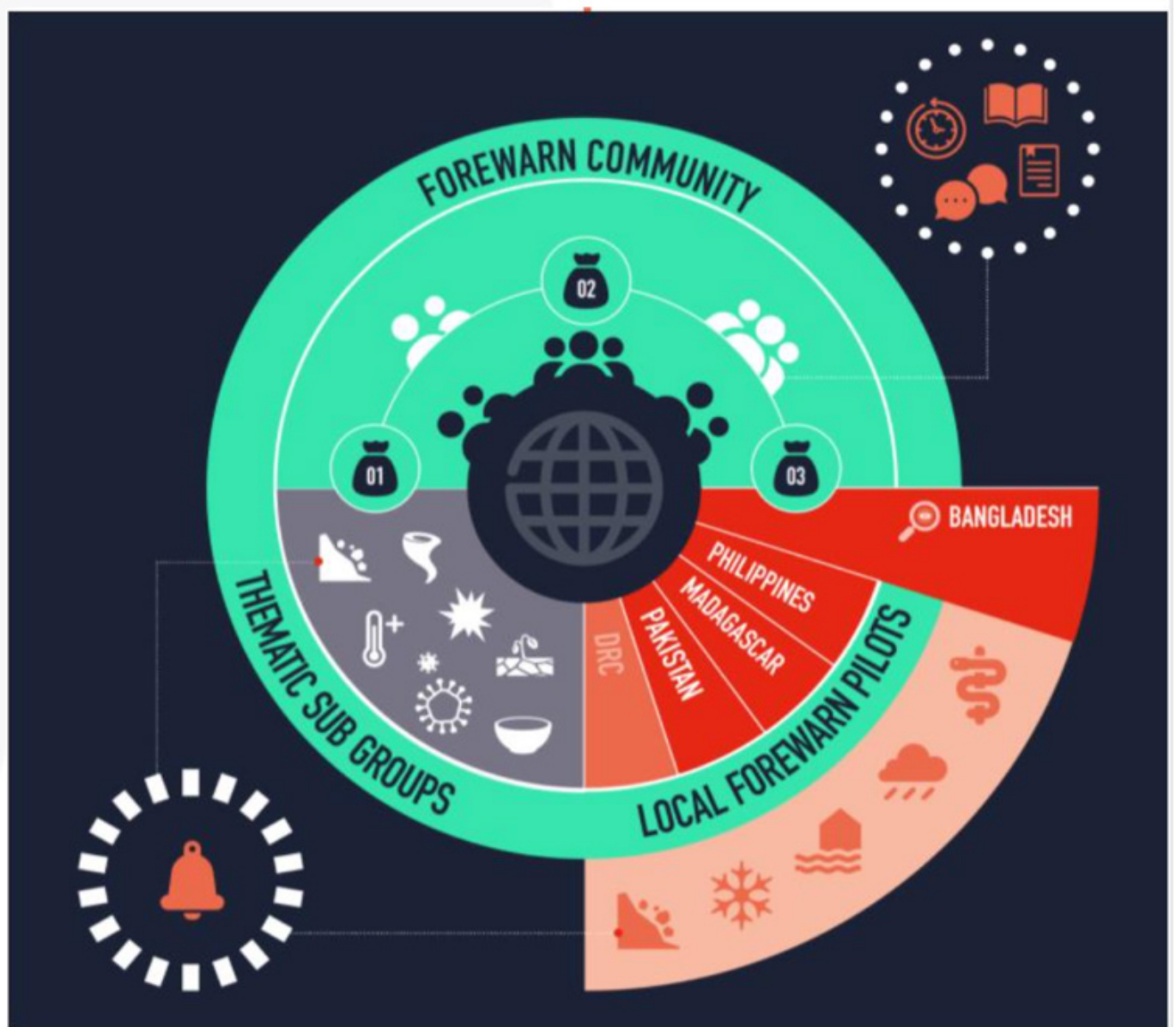


Fig 7: FOREWARN configuration overview.

Source: Start Network, <https://startnetwork.org/funds/disaster-risk-financing-support/forewarn>.

FOREWARN includes a group of researchers, academics, and scientists, organised into subgroups which are aligned to their areas of expertise. These individuals provide specific advice to anticipatory projects led by Start Network members, including Start Fund alerts and forecasting tools. There are also four National FOREWARNs. These are in Bangladesh, Madagascar, Nepal, Pakistan and the Philippines. Through these projects, Start Network members can engage with hazard experts to collaborate on anticipation work in the way that most makes sense to members. [See here](#) for more information on the network, and to be in touch contact- forewarn@startprogrammes.org.

5. Check guidance: What other materials are there to learn more about crisis anticipation in the Start Fund?

Resource
Start Fund Crisis Anticipation Window (Link)
Start Fund - Alert Note Guidance Anticipation (May 2022) (Link)
Start Fund Anticipatory Alert Note Template (May 2022) (Link)
Start Fund Allocation Decisions (April 2022) (Link)
Pre-Alert Guidance Note: Conflict & Displacement (July 2018) (Link)
Start Fund Anticipation Alert Cycle Presentation Deck (Link)
Start Fund Handbook (Link)

ANNEX I: SNAPSHOT: KEY TOOLS & MODELS (AND RELEVANT CRITERIA) THAT CAN SUPPORT ANTICIPATORY RISK ANALYSIS

Find here a (non-exhaustive) summary of open-source tools and models that can be useful for conducting risk analysis to inform conflict-related anticipatory action including key criteria outlined in section three. All the tools included below are identified open-source or free subscription. These tools all share a common objective to inform decisions that can reduce the worst impacts of conflict. For a longer-list of collated tools and models, you can access the data catalogue [here](#).

Tool/Model ⁸	Brief explainer	Data analysis type? (i.e., Qual., Quant., Mixed methods)	What type of analysis? (data mapping, data collection, etc.)	What type of conflict risk? (i.e., political violence from elections, coup details, etc.)	Geographic scope (i.e., subnational, localised to a specified area, etc.)
Armed Conflict Location & Event Data Project (ACLED)	Event-based dataset: Incident information on political violence, demonstrations, and related non-violent developments around the world, that constitute political disorder. Detail the event type, involved actors, location, date, and other characteristics of these incidents.	<ul style="list-style-type: none"> Quantitative GIS News sourcing and verification AI machine learning 	<ul style="list-style-type: none"> Data mapping Interactive dashboard 	<ul style="list-style-type: none"> Battles Explosions/Remote violence Violence against civilians Protests Riots Strategic developments <i>Useful to monitor for potential conflict escalation</i> 	Worldwide (national level)
Crisis Insight (ACAPS)	Identifies key changes and humanitarian trends - Daily monitoring and independent analysis of more than 150 countries, including risk analysis and risk analysis updates / reports.	<ul style="list-style-type: none"> Compound risk analysis Mixed method (qualitative & quantitative) Community based, scenario building News sourcing and verification 	<ul style="list-style-type: none"> Data mapping Interactive dashboard Reports 	<ul style="list-style-type: none"> Security risks to sustainable development from impacts of climate change Violence trends Violent events Community violence <i>Useful to monitor for potential conflict escalation</i> 	Worldwide (national, subnational, localised to a specific area)

CrisisWatch (International Crisis Group)	<p>Global conflict tracker, a tool designed to help decision-makers prevent deadly violence by keeping them up to date with developments in over 70 conflicts and crises, identifying trends and alerting them to risks of escalation and opportunities to advance peace.</p>	<ul style="list-style-type: none"> • Compound risk analysis • Qualitative, community based, scenario building • News sourcing and verification 	<ul style="list-style-type: none"> • Data mapping • Interactive dashboard • Reports 	<ul style="list-style-type: none"> • Security risks to sustainable development from impacts of climate change • Violence trends • Violent events • Community violence • Useful to monitor for potential conflict escalation 	<p>Worldwide (national, subnational, localised to a specific area)</p>
Data Entry and Exploration Platform (DEEP)	<p>An intelligent web-based platform offering a suite of collaborative tools tailored for qualitative and secondary data review. Meets the needs for compiling, storing and structuring data and qualitative information.</p> <p>A robust, collaborative and transparent approach to needs assessments and situation analysis</p>	<ul style="list-style-type: none"> • Qualitative • AI/machine learning • Open source • Compound risk Analysis • Protection monitoring • Secondary data review 	<ul style="list-style-type: none"> • Data collection tool to tailor own analysis 	<ul style="list-style-type: none"> • Security risks to sustainable development from impacts of climate change • Violence trends • Violent events • Community violence 	<p>Worldwide (national, subnational, localised to a specific area)</p>
Displacement Tracking Matrix (DTM) (IOM)	<p>A system to track and monitor displacement and population mobility. It is designed to regularly and systematically capture, process and disseminate information to provide a better understanding of the movements and evolving needs of displaced populations, whether on site or en route.</p>	<ul style="list-style-type: none"> • Mixed method (qualitative & quantitative) • GIS • AI/machine learning • Registration of displaced populations • Compound risk analysis • Community based • News sourcing 	<ul style="list-style-type: none"> • Data mapping • Interactive dashboard • Reports 	<ul style="list-style-type: none"> • Mobility and displacement tracking, Flow monitoring • provides primary data and information on displacement • Protection mainstreaming 	<p>Worldwide (national, subnational, localised to a specific area)</p>

Famine Early Warning Systems Network (FEWS NET) (USAID)	<p>Provider of early warning and analysis on acute food insecurity around the world. Reports on conditions in the world's most food-insecure countries: Monthly reports and maps detailing current and projected food insecurity, Alerts on emerging or likely crises. Access to data, learning, and analysis of the underlying dynamics of recurrent and chronic food insecurity and poor nutritional outcomes, to improve early warning and better inform response and program design.</p>	<ul style="list-style-type: none"> • Multidimensional • Mixed method (qualitative & quantitative) • Compound risk analysis • Community-based, scenario building • GIS • News sourcing and verification 	<ul style="list-style-type: none"> • Data mapping • Interactive dashboard • Reports 	<ul style="list-style-type: none"> • Food insecurity • Impacts on peace and security, development, and resilience due to climate stressors 	<p>Worldwide (national, subnational)</p>
Good Enough Context Analysis for Rapid Response (GECARR) (World Vision)	<p>A tool, funded through the Start Fund Analysis for Action Grant, produces context analyses with likely scenarios and key needs for forecast conflict/displacement. It provides a macro-level analysis of a country or a specific region during or in anticipation of a crisis. The output is a short document analysing the country context and needs, key actors, sources of cohesion and division (connectors and dividers) and likely future scenarios. It includes internal and external recommendations.</p>	<ul style="list-style-type: none"> • Qualitative, community-based, scenario building: FGDs, KIIs, scenario planning workshop • Connectors/dividers • Compound risk analysis 	<ul style="list-style-type: none"> • Data collection tool to tailor own analysis • Reports 	<ul style="list-style-type: none"> • Security risks to sustainable development from impacts of climate change • Violence trend • Violent events • Community violence 	<p>Worldwide (national, subnational, localised to a specific area)</p>


INFORM Risk & Severity Index (EU Commission)	<p>The INFORM (Index for Risk Management) is a global, objective and transparent tool for understanding the risk of humanitarian crises, helps identify where and why crisis might occur, as well as measure and compare the severity of humanitarian crises and disasters globally.</p>	<ul style="list-style-type: none"> • Quantitative • Compound risk analysis • AI machine learning • GIS 	<ul style="list-style-type: none"> • Reports • Interactive dashboard 	<ul style="list-style-type: none"> • Community violence • Violence trends • Violent events • Hazards • Vulnerabilities • Coping strategies • numbers of people in need • people displaced • people affected • people killed • <i>Useful to monitor for potential conflict escalation</i> 	<p>Worldwide (national level)</p>
KoBo Toolbox	<p>A data collection, management, and visualization platform used globally for research and social good. Our mission is to support open-source data systems and technology for humanitarian action, development, environmental protection, peacebuilding, and human rights. Very positive that it was designed for offline use and for inexpensive mobile devices—while still providing advanced functionalities for data management and visualization.</p>	<ul style="list-style-type: none"> • Mixed method (qualitative & quantitative) • Community based (FGDs, KIIs) 	<ul style="list-style-type: none"> • Data collection tool to tailor own analysis 	<ul style="list-style-type: none"> • Security risks to sustainable development from impacts of climate change • Violence trends • Violent events • Community violence 	<p>Worldwide (national, subnational, localised to a specific area)</p>

NGO Incidents Data Dashboard (International NGO Safety Organization - INSO)	INSO works by deploying safety experts, analysts and other specialists across high-risk countries. They work to understand the context by creating deep local information networks and data collection: Conflict Data dashboard, updated weekly, presents security incidents affecting NGOs by date, location, type and perpetrator including the number of casualties, sending 24/7 incident operational alerts on incidents, provide advanced, evidence-based analysis that helps NGOs anticipate, understand and prepare for most likely scenarios.	<ul style="list-style-type: none"> • Compound risk analysis • Mixed method (qualitative & quantitative) • Community-based, scenario building • GIS • News sourcing and verification 	<ul style="list-style-type: none"> • Data mapping • Interactive dashboard • Reports 	<ul style="list-style-type: none"> • Community violence • Violence trends • Violent events • Useful to monitor for potential conflict escalation 	Regional: West, Central and East Africa, Asia and the Middle East. (national, subnational, localised to a specific area)
Live Universal Awareness Map (Liveuamap)	Live Universal Awareness Map is a leading independent global news and information site dedicated to factual reporting of a variety of important topics including conflicts, human rights issues, protests, terrorism, weapons deployment, health matters, natural hazards, and weather-related stories, among others, from a vast array of sources.	<ul style="list-style-type: none"> • AI machine learning • Mixed method (qualitative & quantitative) • News sourcing and verification • GIS 	<ul style="list-style-type: none"> • Data mapping • Interactive dashboard • Reports 	<ul style="list-style-type: none"> • Impacts on peace and security, development, and resilience due to climate stressors • Security risks to sustainable development from impacts of climate change • Community violence • Violence trends • Violent events • <i>Useful to monitor for potential conflict escalation</i> 	Worldwide (national, subnational, localised to a specific area)

<p>The Humanitarian Dashboard (Humanitarian Response – OCHA)</p>	<p>ReliefWeb Response will replace the Humanitarian Dashboard as of May 2023</p> <p>Information management service provided to the humanitarian community: Platform with country sites that enable the sharing of operational information between clusters, IASC etc.</p>	<ul style="list-style-type: none"> Mixed method (qualitative & quantitative) 	<ul style="list-style-type: none"> Information/ Data sharing & Visualisation Reports 	<ul style="list-style-type: none"> Security risks to sustainable development from impacts of climate change Violence trends Violent events Community violence 	<p>Worldwide (national, subnational, localised to a specific area)</p>
<p>Violence Early Warning System (ViEWS)- Economic & Social Commission Western Africa (ESCWA) model</p>	<p>ViEWS: is an open-source project that provides monthly forecasts (early warnings) for different forms of political violence through a rigorous, data-focused system, that is publicly available. The system predicts the probability of political violence on a national and subnational level three years into the future and for three types of organised violence; armed conflict involving states and rebel groups, armed conflict between non-state actors, and violence against civilians.</p> <p>ViEWS/ESCWA: is the expansion of ViEWS to the Arab States. It is designed specifically to analyse the probability of experiencing deadly violence in which the state is at least one party.</p>	<ul style="list-style-type: none"> Multidimensional: ViEWS provides forecasts 36 months into the future Compound risk analysis quantitative GIS AI /machine learning 	<ul style="list-style-type: none"> Data mapping Interactive dashboard Reports 	<ul style="list-style-type: none"> Violent events: state-based, non-state, and one-sided violence, at both the country- and sub-national levels. Violence trends Prediction on number of fatalities <i>Useful to monitor for potential conflict escalation</i> 	<p>Worldwide (national, subnational, local to a specific area)</p>

ANNEX II: CASE STUDY TESTIMONIALS ON USE OF TOOLS AND APPROACHES FOR ANTICIPATORY ACTION IN CONFLICT SETTINGS

What is conflict risk analysis?

 Conflict risk analysis is a method for identifying and assessing potential sources of conflict in a given situation. This analysis typically involves examining factors such as the history of conflict in the region, the political and economic climate, and the presence of potential triggers for violence. The goal of this analysis is to anticipate potential conflicts and take action to mitigate the impact of conflict escalating on the affected population of concern.

There are several tools and approaches that can be used in conflict risk analysis. One common approach is to use a structured decision-making framework, such as the Conflict Risk Assessment Matrix, to systematically identify and assess potential sources of conflict. This matrix typically includes a set of criteria or indicators, such as the presence of political instability or economic inequality, which are used to assess the likelihood and severity of potential conflicts.

Another approach to conflict risk analysis is to use quantitative methods, such as statistical modelling or machine learning, to identify patterns or trends in data that may indicate the likelihood of conflict. This approach can be useful in situations where there is a large amount of data available, such as in the analysis of economic or demographic trends.

Ultimately, the success of conflict risk analysis depends on the ability of analysts to anticipate potential conflicts and take appropriate action to prevent them.”


- Global Conflict Analyst, Context Analysis and Foresight Unit (CAFU)

Save the Children International

Fig 8: Palestinian Refugee camp in Lebanon



Case study testimonials on use of tools and approaches for anticipatory action in conflict settings

 Part of the team providing humanitarian assistance (WASH, etc) support, direct community engagement and bolstering local social networks, such as by providing solar heating panels, rehabilitation of units, in-kind support, etc., to civilians (Palestinian refugees from the Zaatari camp in Syria fleeing the war) relocating to collective shelters controlled by radical non-state armed groups in a major Palestinian Refugee camp in Lebanon.

Through the delivery of assistance services, we established good rapport and managed to grow the relations with the local commander, which in turn opened a dialogue on International Humanitarian Law (IHL) and health, and security. The commander would notify us of possible upcoming flare ups, advising us on when to not visit the camp (i.e., conflict anticipation through network connection).

To complement this data on potential clashes, we would conduct regular risk analysis of the context, using several tools to triangulate and validate the information coming in. Tools and approaches we used included GIS analysis ACLED conflict data, PESTLE framework, and actor analysis,

Additionally, given our relations and good standing with both parties to the conflict - the army and the non-state armed group, we managed to deliver emergency fuel and medical aid to support the shelters residents in times of conflict escalation between the armed groups and the army (i.e., taking action)."

- Humanitarian worker (to further dilute the reference to the hiring agency) working in Lebanon supporting Palestinian refugees in Zaatari camp in Syria fleeing the war (2014-2015)



Fig 9: Palestinian Refugee camp in Lebanon

Using mixed method approaches: Data collection & risk analysis to inform conflict-related anticipatory action

Whenever we want to plan an intervention in an area and conduct risk analysis, we do so by connecting our field staff and field mobilisers and representatives, by building and maintaining relations with local communities and group/tribal leaders in the areas we work. We conduct Focus Group Discussions in small groups and KAP surveys with those at the frontline, we get relevant information regarding the risks we might confront and how to mitigate them, after introducing to them our projects and sites we plan to work in. We also consult with local authorities.

On using more specialised tools: “in many places in Afghanistan, the Internet connectivity is poor, especially in remote areas, and illiteracy levels taken into consideration, text and voice messages are an innovative way for people from remote areas sending info/alerts.

We also use INSO alerts as we receive info on every single security incident daily by receiving email alerts.”

- Humanitarian Program Manager, Start Network member organisation

In certain relevant conflict contexts – much of the time identified as fragile contexts - we mainly use on the ground local data gathered through KIIs and Focus Group Discussions; our staff and local partners come together at the end of each day to triangulate information and identify any irregularities or variations in info/data gathered.

HQ and regional inputs on context analysis further complement local data gathering and support in building final picture of context analysis.

As Global Humanitarian Operations Manager, as much as possible teams in the headquarters work with partners ‘on the ground’ to undertake and provide risk assessment using tools such as: INFORM Index, Disaster Web, Relief Web, FEWSNET, ACAPS.”

- Start Network member practitioner with experience successfully navigating and raising anticipatory alert notes to release funding, Start Network member organisation