ACAPS ANALYSIS HUB
MIDDLE EAST

METHODOLOGY NOTE

SYRIA AREA-BASED ANALYSIS (SABA) DASHBOARD AND CORE DATASET

(V1 FEBRUARY 2026)

OVERVIEW

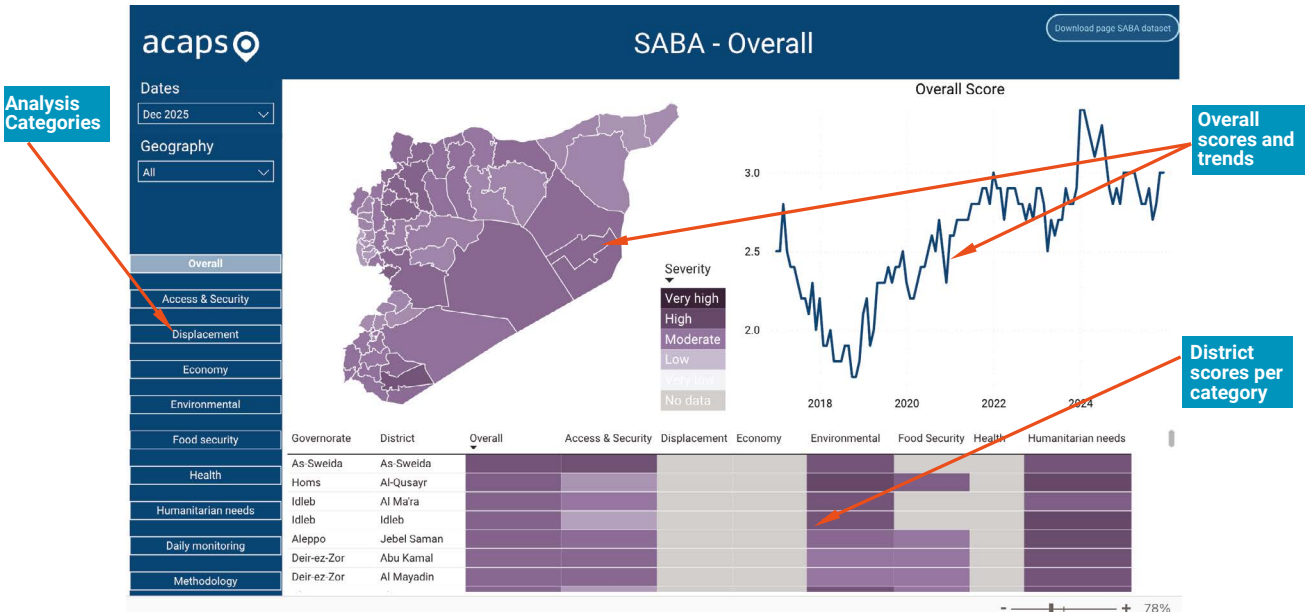
The Syria area-based analysis (SABA) dashboard is an ACAPS analytical tool designed to identify and prioritise areas of greatest humanitarian vulnerability across Syria. By combining multiple quantitative indicators with continuous qualitative monitoring, the dashboard enables comparison of conditions across all Syrian districts (admin 2), revealing both structural needs and acute shocks, helping decision makers prioritise areas with the greatest need and more rapidly adapt their response. The tool also enables more accurate monitoring of changes over time at intervals shorter than the assessments currently provided by broad-based coordination mechanisms.

This tool provides granular and timely information to assist donors and humanitarian organisations in improving their use of limited resources. The dashboard can also support anticipatory action by highlighting early warning signals, such as a steady rise in access constraints or essential service disruptions, well before these issues are reflected in longer-term assessments. By demonstrating a general uptick in needs across the territory, the dashboard helps identify risks and highlights when the overall context may be reaching a critical point, enabling quicker planning and response adjustments.

The dashboard aims to complement the Humanitarian Needs Overview (HNO) process, including the Joint Intersectoral Analysis Framework severity analysis. Whereas the HNO and Humanitarian Response Plan are published once a year, this tool is updated every month, allowing humanitarian responders to adjust their programmes to better align with the evolving context they serve. The tool provides an overview of the areas of greatest need and which areas have higher risks and potential humanitarian vulnerabilities. SABA provides consolidated datasets on a platform that combines complementary quantitative and qualitative analysis. Continuous qualitative analysis aligning with statistical data is particularly important in the Syria context, where quantitative data may be incomplete, delayed, or unavailable. This qualitative analysis also provides a richer understanding of the changing context, as quantitative data alone may not provide a full picture. The interactive nature of the tool also allows users to break down the data to inform their individual programmatic needs, strengthening evidence-based decision-making.

* *This analysis is funded by the UK Humanitarian Innovation Hub, which is supported by UK Aid*

Figure 1. SABA dashboard homepage 'Overall'



The dashboard integrates 56 indicators across seven analytical categories, as summarised below. The indicators have been chosen in consultation with stakeholders and in line with the risk monitoring indicators and areas identified in the Syria HNO. The tool (as well as the SABA framework) also remains flexible enough to incorporate new indicators when data becomes available and suitable for integration, ensuring continued relevance as the context evolves.

Table 1. Indicator categories and number of indicators

CATEGORY	NUMBER OF INDICATORS	DESCRIPTION
Access and security	5	Conflict activity, civilian harm, and access restrictions.
Displacement	1	Percentage of IDPs to total population in a district.
Economy	8	Exchange rate, market accessibility, and market prices.
Environment	7	Rainfall, drought index, and Agricultural Stress Index.
Food security	2	Food Consumption Score and Reduced Coping Strategies Index.
Health	14	Facility functionality, disease outbreaks, and hospital services.
Humanitarian needs	19	OCHA severity scores and sector-specific needs.

All the data used in the dashboard can be found in the core dataset, which can be downloaded from both the Humanitarian Data Exchange and the dashboard itself. The core dataset is a one-stop shop for relevant publicly available datatsets on Syria, allowing users to conduct their own independent analysis of trends and emerging dynamics.

* *This methodology note will be updated as new data or scoring methods are added to the dashboard (V1 February 2026).*

AREA-BASED ANALYSIS

Area-based analysis (ABA) is an approach that examines humanitarian conditions within a defined geographic unit, such as a district, subdistrict, neighbourhood, or camp, to generate a holistic understanding of people's needs, their vulnerability to further needs, and access constraints. Instead of analysing sectors in isolation, ABA integrates multiple dimensions of crisis impact within one spatial frame, enabling prioritisation of the most affected areas and more locally tailored decision-making. The approach is widely used in protracted crises in which needs vary significantly across locations and data availability is uneven (IECAH 23/12/2025; CCCM Cluster 2021; FMR 02/2020; IASC 04/2018; Parker and Maynard 07/2015).

Core features of area-based analysis

1. **Integrated, place-specific understanding of crisis impact:** ABA contextualises needs within a geographic area (e.g. admin 1–3, neighbourhoods, and settlements), analysing how shocks such as conflict, displacement, market disruption, and service collapse interact to drive humanitarian needs locally. Using common administrative or settlement boundaries also ensures consistency across datasets and allows for meaningful cross-area comparison, aggregation, and trend analysis. This geographic alignment underpins interoperability with cluster data and enables dashboards and maps to present patterns clearly. Tools like the SABA dashboard provide visual, map-based comparison, enabling decision makers to prioritise humanitarian interventions geographically instead of by sector, while still analysing sector-specific drivers of need.

2. **Temporal monitoring and trend tracking:** ABA often includes regular (monthly or quarterly) updates that capture evolving conditions. This enables early warning by, for example, detecting rapid price inflation, rising displacement, or deteriorating service functionality. The ACAPS area-based global models (ACAPS Severity Index) and SABA dashboard use this method to reveal patterns that annual assessments, such as the HNO, may miss.

3. **Indicator-based scoring and severity models:** this method assigns numerical scores to indicators that reflect conditions such as market stress, access constraints, food security levels, and health system functionality. Scores are then aggregated to produce area-level humanitarian vulnerability or severity rankings.

4. **Triangulation of quantitative and qualitative evidence:** to compensate for data gaps, ABA incorporates qualitative sources such as key informant interviews, monitoring reports, expert judgement, and field observations, to validate and/or contextualise quantitative indicators.

Relevance of area-based analysis for prioritisation tools

1. **Supports strategic allocation of limited resources:** by consolidating multiple dimensions of humanitarian vulnerability into district-level scores, ABA helps humanitarian responders target areas with the highest severity and most significant unmet needs. This is critical in Syria, where the number of people in need far exceeds available funding.

2. **Enables early warning and anticipatory action:** ABA structures allow for monitoring of environmental shocks, market fluctuations, conflict dynamics, and service disruptions, helping responders identify deteriorating areas before conditions reach crisis thresholds.

3. **Improves coherence between humanitarian planning and operational decision-making:** ABA-driven prioritisation supports alignment with frameworks such as the Humanitarian Needs Overview/Humanitarian Response Plan, OCHA's severity scales, and cluster response plans while providing more frequent updates and more granular geographic insight.

DATA SOURCES AND INDICATOR SELECTION

The selected indicators are related to the main drivers of humanitarian vulnerabilities in Syria. While some indicators are strictly related to conflict and humanitarian needs overall, others factors may exist regardless of the conflict, but could be aggravated by it, such as environment and health indicators. This methodology ensures that selected indicators accurately reflect humanitarian vulnerabilities at the district level, allowing for targeted and data-driven humanitarian responses.

The final selection of the indicators was based on relevance, reliability, frequency, and geographic coverage. In September 2025, ACAPS conducted a review of the Syria analytical framework, assessing data source availability, frequency, latest updates, and format suitability for the dashboard. Despite Syria's contextual changes since December 2024, the main drivers of humanitarian needs and vulnerabilities remain those identified and included in the SABA dashboard. Through desk reviews and consultations with the wider sector, ACAPS will conduct regular monthly reviews of the analytical framework, assessing whether new sources have become available and/or if new indicators need to be added to reflect the latest developments.

Below is a short description of the relevance of each indicator to the Syrian context.

Access and security

The frequency of active conflict incidents and civilian fatalities signals the overall safety and security conditions in each district, with intensified violence placing both civilians and humanitarian workers at grave risk. Shelling, landmines, and direct attacks on populated areas, health facilities, schools, and aid operations create an environment of extreme insecurity that not only restricts movement but also prevents communities from accessing essential services and increases risk of displacement. Conflict-related blockades, access denial, and administrative obstacles further compound these challenges by delaying or preventing the delivery of food, water, medicine, and shelter. As services collapse and people are displaced into areas with limited support, humanitarian organisations are often forced to reduce their presence, adopt remote management, and operate under higher costs with fewer resources, reducing the precision and reach of aid. Reflected in the OCHA access score indicator, districts with both low access scores and high conflict activity face some of the most severe barriers to assistance, leaving civilian populations increasingly at risk and often driven to coping mechanisms with potential harmful effects, as lifesaving services remain out of reach. Indicators track conflict intensity, fatalities, shelling, airstrikes, and access constraints.

Table 2. Access and security indicators

INDICATOR	SOURCE	DESCRIPTION	FREQUENCY
Civilian fatalities	ACLED Data Export Tool	Number of civilian fatalities (at admin 3 level) aggregated to admin 2 level.	Daily
Active conflict incidents	ACLED Data Export Tool	Number of reported conflict incidents (at admin 3 level) aggregated to admin 2 level.	Daily
Access severity	OCHA	OCHA severity scores of access constraints for the UN, INGOs, and national NGOs.	Daily

Displacement

Population displacement is a central indicator of humanitarian vulnerability, and tracking IDP prevalence at the district level helps reveal where needs are most acute. In Syria, an estimated seven million people (27% of the total population) remained internally displaced by November 2025, with 1.4 million people living in IDP sites and the rest among host communities (UNHCR 27/11/2025). These figures show that a significant share of the population in many districts is uprooted and dependent on external assistance.

High levels of displacement, and a high ratio of IDPs to total population, signal critical stress on local resources and services. Districts with elevated IDP prevalence often confront overcrowding, inadequate shelter, increased competition for limited jobs and basic resources, and strained water, sanitation, health, and education services. Many displaced families have also lost homes, livelihoods, or land, which reduces their resilience, increases reliance on humanitarian support, and limits opportunities for return. Returnees, people who attempt to go back to their area of origin, face additional challenges if their homes remain destroyed or unsafe, or if services and infrastructure have not been restored.

Displacement also drives deeper humanitarian vulnerabilities by compounding risks. Overcrowded living conditions and limited access to hygiene and health services raise the risk of disease outbreaks. Households may adopt coping mechanisms with potential harmful effects, such as reducing consumption, skipping essential healthcare, or taking on debt.

For humanitarian responders, large and fluid population movements also increase the difficulty of reaching all people in need. Rapid influxes of IDPs, or complex patterns of secondary displacement and returns, can overwhelm local capacity, making delivery of assistance, protection, and basic services more challenging.

By including IDP prevalence in the dashboard, humanitarian and development stakeholders gain a reliable, spatially disaggregated measure of displacement-related vulnerabilities. Data analysis covers which districts host large displaced populations, which are overstretched, and where urgent shelter, livelihood, protection, or health interventions are most required. This helps to prioritise response, plan resource allocation, and monitor evolving displacement pressures over time.

Table 3. Displacement indicators

INDICATOR	SOURCE	DESCRIPTION
IDP prevalence	IOM	Percentage of IDPs to total population in a district.

Economy

Economic hardship is a central driver of humanitarian vulnerabilities, making it essential to monitor indicators that directly shape household purchasing power and access to basic goods and services. Exchange rate is a critical metric, as currency depreciation immediately raises the cost of imported staples and essential commodities, diminishing household purchasing power and constraining the operational capacity of humanitarian organisations whose budgets fluctuate with currency movements. Considering that Syria has to import wheat to cover domestic needs, as well as foreign currency to finance those imports, tracking exchange rate trends helps identify where economic pressures may escalate humanitarian needs (FAO 18/08/2025; FEWS NET 31/12/2025).

The food basket price serves as a direct proxy for food security. Even modest increases in food costs correlate with higher levels of moderate and severe food insecurity, pushing households to adopt coping strategies with potential harmful effects, such as skipping meals, reducing dietary diversity, or taking on debt. Monitoring food basket prices enables early identification of districts with rising malnutrition risks.

Fuel price is included because fuel is a cross-cutting driver of inflation. Higher fuel costs increase transportation costs for food, water, and humanitarian supplies, while also raising agricultural production expenses. For households, elevated fuel and energy costs force difficult trade-offs with other essential needs.

Similarly, cooking gas prices directly affect households' ability to safely prepare food. When cooking gas becomes unaffordable, families may shift to unsafe or inefficient alternatives, reduce meal preparation, or change consumption patterns, affecting nutrition and health. As such, rising gas prices are a meaningful indicator of deteriorating living conditions.

Water prices reflect the affordability of one of the most essential basic needs. In many areas where piped or safe water is unreliable, households depend on trucked or market-supplied water. Increases in water prices force families to ration consumption, reduce hygiene practices, or rely on unsafe sources, conditions that significantly heighten health risks, especially during crises. Tracking water costs helps flag areas where water-related vulnerabilities are likely to escalate.

The cost of public transport is also a critical indicator, as it determines whether people can access work, markets, schools, and healthcare facilities. Rising transport prices disproportionately affect low-income households, increasing isolation and reducing their ability to engage in income-generating activities or seek medical care. Monitoring transport prices helps identify where economic barriers are contributing to deeper social and protection risks.

Finally, the market functionality score measures whether local markets are able to supply essential goods. Even if households have cash, disrupted supply chains, damaged infrastructure, or collapsed credit systems can prevent markets from functioning effectively. Weak market functionality undermines household resilience, limits the feasibility of cash-based assistance, and signals broader economic distress.

Table 4. Economic indicators

INDICATOR	SOURCE	DESCRIPTION	FREQUENCY
Exchange rate	World Bank	Average exchange rate of all markets within the admin 2 area.	Monthly
Food basket price	World Bank	Weighted sum of 14 food items, taking the average values of all markets.	Monthly
Food index	World Bank	The World Bank's food index is determined on a year-wise comparison of the weighted average of all commodities, taking the average values of all markets within the admin 2 area.	Monthly
Diesel price	World Bank	Average price for diesel in a parallel market for all markets within the admin 2 area.	Monthly
Cooking gas price	World Bank	Average price for cooking gas in a parallel market for all markets within the admin 2 area.	Monthly
Water price	WFP	Average price of a 1.5L water bottle for all markets within the admin 2 area.	Monthly
Public transport price	WFP	Average price of public buses for all markets within the admin 2 area.	Monthly
Market accessibility	WFP	Market prevalence is a value between 0–1, where 1 indicates a nonfunctional market. The value is per admin 1, applied to all admin 2 in the same area.	Daily

Environment

Environmental conditions are a major driver of humanitarian vulnerabilities, particularly in contexts in which livelihoods heavily depend on agriculture, water availability, and functioning infrastructure. Climate-related shocks such as drought and floods can rapidly intensify existing needs or create new crises, making it essential to monitor reliable indicators that capture both slow-onset and sudden environmental stresses.

The Standard Precipitation Index (SPI) for dry and wet conditions provides an early warning of extreme rainfall deficits or surpluses. Drought conditions, reflected in negative SPI values, lead to crop failure, livestock deaths, and severe water scarcity, all of which directly increase food insecurity and malnutrition. As rainfall decreases, communities may be forced to travel long distances to access water, often from unsafe sources, while the loss of agricultural and pastoral livelihoods pushes households deeper into poverty. Conversely, excess rainfall and flooding, reflected in positive SPI values, can destroy homes, health facilities, schools, and transportation networks, cutting off communities from essential services and hindering humanitarian access. Flooding also heightens the risk of waterborne disease outbreaks and often triggers rapid-onset displacement, creating immediate shelter, food, and medical needs.

The Agricultural Stress Index (ASI) complements the SPI by measuring how environmental pressures translate into impacts on crop production. The ASI helps identify districts where drought, heat stress, or irregular rainfall patterns threaten agricultural yields. Reduced agricultural output not only undermines local livelihoods but also contributes to broader food shortages, increasing prices and reducing availability at national and regional levels. This makes the ASI a crucial indicator for anticipating emerging food security crises and understanding where livelihood support or agricultural interventions may be required.

Environmental shocks compound existing humanitarian vulnerabilities by disrupting markets, eroding incomes, and straining the humanitarian system. Loss of crops, livestock, and assets traps families in cycles of poverty, while scarcity of water or arable land can heighten tensions between communities and increase displacement. The growing frequency and intensity of climate-related hazards often overwhelm local response capacities, underscoring the need for timely, data-driven monitoring.

By integrating the ASI and SPI into the dashboard, humanitarian responders gain the ability to track both immediate and slow-onset environmental risks, identify districts where conditions are deteriorating, and prioritise areas at heightened risk of food insecurity, displacement, disease outbreak, and livelihood collapse. Monitoring these indicators helps ensure that humanitarian planning anticipates environmental stressors before they escalate into full-scale crises.

Table 5. Environmental indicators

INDICATOR	SOURCE	DESCRIPTION
Agricultural Stress Index	FAO	The ASI is a quick-look indicator that facilitates the early identification of crop land with a high likelihood of water stress (drought). Each administrative area (admin 1) is classified according to the percentage of area affected based on satellite images.
Standard Precipitation Index	WFP	The WFP provides rainfall data in millimetres per ten-day period, which ACAPS aggregates to a monthly level by summing the values. The SPI is then calculated for different time windows: 1, 3, 6, 12, and 24 months.

Food security

Food security is a foundational component of household wellbeing, and its deterioration rapidly increases humanitarian vulnerabilities and cascading impacts on nutrition, livelihoods, and other areas. In Syria, food insecurity remains a widespread and deepening crisis: by 2025, around 14.6 million people were estimated to be food insecure (OCHA 24/07/2025). As such, monitoring food security conditions is essential to identifying where humanitarian vulnerabilities are deepening and interventions are most urgently required.

The Food Consumption Score (FCS) is a core indicator for measuring the quality and frequency of household food intake. Low FCS values signal that households are consuming fewer meals or relying on monotonous, low-nutrient diets. In the Syrian context, many families have reported cutting back on protein-rich foods or replacing fresh produce with cheaper, less nutritious alternatives because of rising prices and reduced incomes. Such dietary shifts contribute to increased micronutrient deficiencies, acute malnutrition among children, and long-term health problems that weaken overall household resilience. Tracking FCS trends helps identify districts where families are unable to meet basic nutritional needs and targeted food assistance is critical.

The Reduced Coping Strategies Index (rCSI) captures the behavioural responses households adopt when they can no longer access enough food. Rising rCSI scores indicate growing reliance on coping strategies with potential harmful effects, such as skipping meals, reducing portion sizes, borrowing food, consuming seed stocks, or sending children into labour. In Syria, prolonged economic deterioration has forced many families to take such measures, deepening humanitarian vulnerabilities and risking long-term socioeconomic harm. High rCSI levels provide an early warning that food access is becoming unsustainable and households may be approaching Crisis (IPC Phase 3) or Emergency (IPC Phase 4) levels of food insecurity.

Together, the FCS and rCSI offer a comprehensive picture of household food security: the FCS shows what people are eating and the rCSI reveals what they must sacrifice to meet minimum consumption needs. Including these indicators in the dashboard enables humanitarian responders to detect emerging hotspots, track how households are coping with rising food insecurity and limited incomes, and allocate resources more effectively to prevent further deterioration.

Table 6. Food security indicators

INDICATOR	SOURCE	DESCRIPTION
Food Consumption Score	WFP	The FCS is a composite score based on households' dietary diversity, food consumption frequency, and the relative nutritional value of different food groups. Data on households' FCS is collected over a seven-day recall period.
Reduced Coping Strategies Index	WFP	The rCSI measures the frequency and severity of households' food consumption behaviours resulting from food shortage in the seven days prior to the survey.

Health

A fragile, fragmented health system is both a consequence and a multiplier of humanitarian vulnerabilities. As such, measuring health services and disease burden at the district level directly indicates where people face the highest immediate and medium-term risk. In Syria, approximately 15.9 million people require health assistance, while 38% of hospitals and 59% of primary healthcare facilities are partially or completely nonfunctional, reflecting a system struggling to meet even basic needs (OCHA 25/03/2025). Districts with limited service availability, rising disease burdens, and shortages of medicines and equipment are more likely to experience preventable deaths, deteriorating wellbeing, and increased dependence on humanitarian aid.

Indicators linked to child health and nutrition provide early warning of declining conditions for the most at-risk age group. Deterioration in child morbidity or nutrition often signals broader failures in food security, WASH, and primary care. Tracking communicable diseases and priority disease cases (for under and over five years) is essential in Syria's context of overcrowding, weakened water systems, and frequent displacement, where outbreaks can spread rapidly and overwhelm facilities.

Environmental health indicators highlight WASH-related risks such as waterborne diseases, especially in IDP sites, flood-affected districts, and areas relying on unsafe water sources. The availability of priority medicines, essential and specialised equipment, maternal and newborn care, and functional general, emergency, and hospital services determines whether facilities can provide trauma care, obstetric services, neonatal support, and treatment for chronic or acute conditions. Shortages in these areas, widely reported across Syria, translate directly into avoidable morbidity and mortality.

Indicators related to non-communicable diseases and mental health capture the chronic needs of a population living through protracted crisis; interruptions in treatment for diabetes, cardiovascular diseases, and psychological distress can quickly escalate into severe health outcomes.

Areas with poor service availability, insufficient equipment, or high disease prevalence face heightened mortality and may require surge support, mobile medical teams, or expanded referral mechanisms. By tracking these factors consistently, the dashboard helps identify where the health system is under the greatest strain and humanitarian intervention can most effectively prevent excess deaths and safeguard wellbeing.

Table 7. Health indicators

INDICATOR	SOURCE	DESCRIPTION
Child health and nutrition	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Communicable diseases	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Environmental health	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Essential equipment	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
General and specialised clinical services and emergency	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Hospital services	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Maternal and newborn care	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Non-communicable diseases and mental health	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Other disease cases (for people aged below five years/ five years and above)	WHO	The WHO offers a list of new recorded cases for several diseases, categorised into priority/other diseases and people aged below five years/ five years and above.

INDICATOR	SOURCE	DESCRIPTION
Priority disease cases (for people aged below five years/ five years and above)	WHO	The WHO offers a list of new recorded cases for several diseases, categorised into priority/other diseases and people aged below five years/ five years and above.
Priority medicines	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.
Specialised equipment	WHO	The WHO indicates service availability with a value between 0–100, where 0 indicates lack of availability.

Humanitarian needs

Sectoral and intersectoral severity scores offer a comprehensive picture of the humanitarian conditions affecting communities. Because crises rarely affect only one domain, these scores capture overlapping humanitarian vulnerabilities across education, early recovery, food security, health, NFI, nutrition, protection, shelter, and WASH, allowing a more accurate assessment of overall humanitarian stress. By using OCHA's standardised severity, the dashboard can identify districts where needs are deepest and populations face multiple, reinforcing deprivations.

OCHA also provides annual people-in-need figures for each sector, alongside monthly people-reached data, allowing the calculation of sectoral response gaps – i.e. the proportion of people whose needs remain unmet. These indicators are essential because districts with high sectoral severity and large response gaps face conditions in which basic needs such as food, healthcare, education, shelter, and water cannot be met through existing coping capacities or available services. For example, severe WASH conditions often coincide with public health risks; critical education needs can indicate long-term protection concerns for children; and high severity in food or nutrition sectors reflects risks of malnutrition and livelihood collapse. Intersectoral severity helps highlight where the combined effects of multiple crises – such as economic hardship, displacement, environmental shocks, and conflict – can produce disproportionate humanitarian vulnerabilities.

By integrating sectoral severity scores and response gaps into the dashboard, humanitarian responders gain a clearer understanding of not only where needs are highest, but also where the system is failing to keep pace with deteriorating conditions. This enables more targeted prioritisation, supports evidence-based planning, and helps ensure that scarce resources are directed to districts facing the most acute multidimensional humanitarian stress.

Table 8. Humanitarian needs indicators

INDICATOR	SOURCE	DESCRIPTION
Intersectoral severity	OCHA	OCHA provides a severity score between 1–5, with 5 being the most severe.
Sectoral severity (education, early recover, food security, health, NFI, nutrition, protection, shelter, and WASH)	OCHA	OCHA provides a severity score between 1–5, with 5 being the most severe.
Sectoral response gap	OCHA	Percentage gap between people in need and people reached per month.

DATA STRUCTURE AND COVERAGE

This section outlines the organisational principles guiding how data is collected, standardised, and integrated into the SABA dashboard. As indicators originate from multiple sectors, sources, and administrative levels, establishing a coherent and consistent data structure is essential to ensuring comparability across districts and over time.

Geographic structure

All indicators in the SABA dashboard are standardised to the admin 2 (district) level to ensure comparability across the country. While a limited number of datasets are available at admin 3, these are aggregated upward by computing an unweighted average value for each corresponding admin 2 district. Conversely, when data is only available at the admin 1 level, the same value or score is assigned to all admin 2 areas within that governorate. This approach provides full national coverage while maintaining consistency across indicators with differing native resolutions. Geographic boundaries follow the most recent OCHA administrative reference datasets to ensure alignment with inter-organisation reporting.

Temporal structure

The dashboard is updated monthly, enabling near-real-time tracking of emerging trends and deteriorations. Indicators sourced from organisations with less frequent reporting (e.g. quarterly disease surveillance or annual education severity scores) are carried forward until new data becomes available. Where high-frequency data exists (e.g. market prices), the latest observation for each month is used. The harmonised monthly timeline allows for the production of comparable monthly severity and humanitarian vulnerability scores across all districts.

Population coverage

Population figures are derived from the latest available inter-organisation population estimates. Indicators that relate to population ratios – such as IDP prevalence or people in need reached – use these baselines to ensure comparability between districts of varying sizes. Displacement data covers both IDPs and returnees, acknowledging their distinct needs and contributions to local service pressure.

Data harmonisation and limitations

Given varying reporting frequencies, methodologies, and administrative coverage across organisations, harmonisation steps include spatial standardisation to admin 2, temporal alignment to monthly periods, and normalisation of indicators on common scales. Some areas face data scarcity, particularly in access-constrained districts; in such cases, sectoral severity scores and qualitative monitoring help fill analytical gaps. While every effort is made to ensure completeness, the dashboard reflects the best available data at the time of each update.

SCORING METHODOLOGY

Each indicator is assigned a score between 1–5 for each district for each month, where 5 is the highest severity level and 1 is the lowest. The average of each indicator's severity level informs the corresponding category severity score. The scores from each category are then combined in the 'Overall' tab, providing a total severity score for each district on a monthly basis.

The scoring methodology applies several types of thresholds, each matched to the behaviour of the underlying indicator. For indicators that follow a numerical range and change in relatively regular increments – such as market accessibility, price changes (exchange rates, food basket, and key commodities such as diesel, gas, water, and transport), agricultural stress, and the availability of health services – equal-step thresholds are used. In these cases, indicators are assigned scores based on clearly defined value ranges (e.g. increases above 5%, 10%, 25%, and 50%, or availability dropping below 80%, 60%, 40%, and 20%). This approach is also used for several food security indicators for which prevalence values between 0–1 reflect the share of the affected population. These stepwise ranges allow the system to translate smooth, continuous changes into discrete severity scores that reflect worsening conditions.

By contrast, indicators that are unevenly distributed or strongly skewed, particularly those capturing shocks or extreme events, are evaluated through percentile thresholds. This method is applied to civilian fatalities, active conflict incidents, and disease cases across multiple age and disease categories. Because these indicators tend to have a long tail of high-intensity outliers, the use of percentiles ensures that the highest 5%, 10%, 20%, and 50% of historic values correspond to increasingly severe scores. This makes the system more sensitive to exceptional spikes that would be flattened by equal intervals. The percentile method also supports comparability across geographic areas where absolute numbers differ widely but relative intensity matters for understanding risk.

Some indicators come pre-classified by authoritative sources and already contain a scale from 1–5. For these, including access constraints reported by UN, INGO, and national NGO responders and the severity scores produced by OCHA humanitarian clusters, ACAPS applies cluster-defined thresholds directly. These scores reflect sector-specific methodologies and expert consensus on severity levels in areas such as education, health, protection, food security, nutrition, shelter/NFI, and early recovery. Similarly, gap indicators linked to unmet needs are scored based on the proportion of people in need who have not been reached by assistance. These also follow a simple escalation from gaps above 50%, 70%, 90%, and finally 100%.

Altogether, these thresholding methods ensure that each indicator is scored in a way that reflects both its statistical behaviour and its operational meaning.

- **Equal-step thresholds capture gradual deterioration in prices, availability, and environmental conditions.**
- **Percentile thresholds identify extreme concentrations of conflict or disease.**
- **Cluster-defined thresholds preserve sector-expert scoring systems and humanitarian response metrics.**

Table 9. Overview of indicator thresholding methods

THRESHOLD METHOD	INDICATORS	DESCRIPTION
Equal-step thresholds	Prices, availability, and rates	Numeric range are divided into equal sections for 1–5 scores.
Percentile thresholds	Conflict incidents and fatalities	The top 5–25% of values are used to assign higher severity.
Cluster-defined thresholds	Humanitarian needs severity	Officially defined sector scoring systems are used.

See Annex I for a comprehensive list of the scoring approach used for each indicator.

QUALITATIVE DATA INTEGRATION

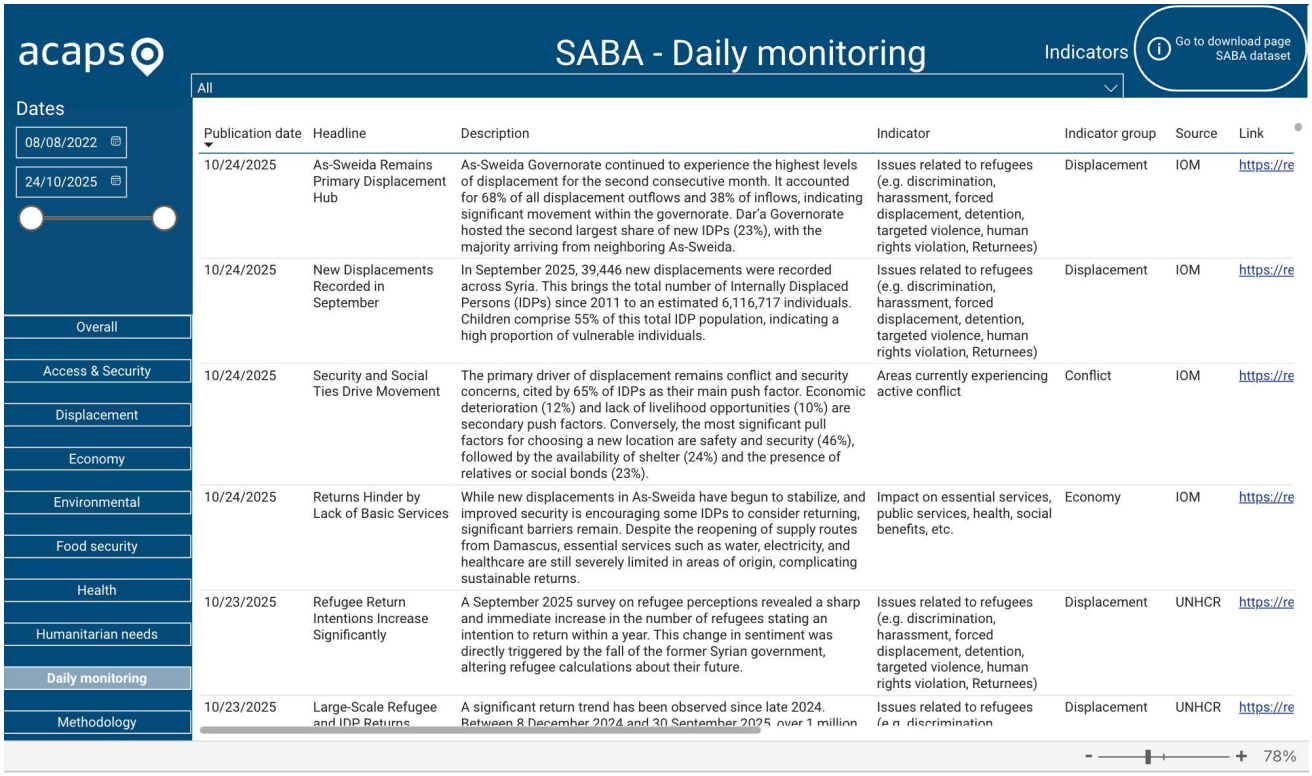
In this version of the dashboard, a 'Daily monitoring' tab has been integrated to strengthen the analytical value of the platform and support a more contextual interpretation of trends observed across indicators. This tab provides a structured overview of major contextual developments in Syria and, where relevant, the wider region, aligned with the Syria analytical framework. Each entry in the 'Daily monitoring' tab captures a key event or update and includes the date of publication, a concise headline, a short descriptive text, the related indicator, the indicator group or category, and the original source with a direct link. By systematically linking qualitative information to specific indicators, the tab creates a transparent bridge between quantitative scores and contextual developments.

Although monitoring is designed to track daily events, the page itself is updated on a weekly basis to ensure quality control and analytical relevance. Its primary purpose is to facilitate independent and informed analysis of indicator changes over time. Instead of presenting scores in isolation, the dashboard allows users to interrogate why changes occur and how broader dynamics shape the data. For example, if the conflict score increases in a given period, users can navigate to the 'Daily monitoring' tab, filter by the relevant indicator group (e.g. Access and security) and timeframe, and identify contextual updates describing conflict incidents, escalations, or security-related developments that may explain the shift. This functionality supports triangulation between quantitative trends and qualitative information, enhancing interpretability and analytical confidence.

To support ease of use, users can select indicator groups from a drop-down menu at the top of the page, enabling targeted exploration of events related to specific thematic areas such as conflict, displacement, food security, health, or humanitarian access. This design allows analysts to quickly narrow down information relevant to their area of focus without having to review unrelated updates.

Looking ahead, the 'Daily monitoring' tab is designed as a flexible component that can be expanded in future iterations. Potential enhancements include the integration of geolocation, more granular or sub-indicators, and additional filtering options, further strengthening the tab's role as a companion tool to the dashboard's quantitative analysis.

Figure 2. SABA 'Daily monitoring' tab



VALIDATION

The dashboard applies a robust, multilayered validation approach to ensure that findings, datasets, and contextual reporting are accurate, credible, and grounded in operational realities. Validation is treated as a continuous process instead of a one-off exercise, combining technical review, contextual triangulation, and sustained stakeholder engagement.

The project is underpinned by regular, sustained consultation and collaboration with a range of humanitarian stakeholders, including coordination bodies such as OCHA and cluster systems, UN organisations, donors, INGOs, and Syrian civil society organisations. ACAPS builds on established relationships from previous Syria-focused initiatives to mobilise both international and regional networks. These partnerships play a critical role in refining the dashboard by contributing expertise in data collection, indicator relevance, validation of assumptions, and contextual interpretation.

A multistakeholder workshop – held in Damascus in November 2025 – convened key partners, including Syrian civil society organisations, INGOs, and technical working groups. The workshop provided a structured space to jointly review and refine the dashboard's analytical framework, scoring methodology, and outputs, while also promoting transparency, buy-in, and practical use of the analysis across the humanitarian community.

Validation is also strengthened by continued contextual monitoring. Tracking of political, security, economic, and humanitarian developments allows the analysis to be continuously crosschecked against evolving realities. This ensures that trends and findings remain contextually plausible and interpreted in line with current dynamics, with input from contextual experts when discrepancies or unexpected shifts emerge.

LIMITATIONS

While the SABA dashboard provides a structured, multisectoral approach to analysing humanitarian vulnerabilities, several methodological and data-related limitations must be acknowledged. These limitations highlight important caveats in interpreting the results and underscore the need to use the dashboard as an evidence-informed, decision-support system that is most effective when used alongside contextual analysis, expert judgement, and field-level insights.

Data availability and quality

The robustness of humanitarian vulnerability scores depends heavily on the quality, timeliness, and completeness of the data feeding into the system. Many datasets on Syria face reporting delays, inconsistent coverage, or incomplete geographic reach. Some indicators are updated regularly, while others may only be refreshed annually or when assessments occur, creating uneven temporal coverage. Funding cuts, access restrictions, and operational pauses can affect data collection and lead to sudden gaps or irregularities in data streams. Such disruptions may create temporary blind spots in the calculation of humanitarian vulnerabilities.

While ACAPS continuously works to integrate new sources and advocates for more data sharing and better assessment capacities, the dashboard will always remain limited by the quality of underlying inputs.

Granularity

Although the dashboard standardises all indicators to the district (admin 2) level, not all data is originally collected at this geographic resolution.

- **When data is available only at admin 3, it must be averaged upward.**
- **When indicators exist only at admin 1, a single value is applied across all districts in that governorate.**

These necessary adjustments may obscure localised disparities and reduce the accuracy of district-level comparisons. As such, the resulting scores should be interpreted as approximations instead of precise measurements of local conditions.

Indicator comparability and scoring assumptions

The methodology uses equal stepwise and percentile scoring to normalise indicators with different units and scales. While this ensures comparability across diverse datasets, it also assumes that each indicator contributes proportionally and similarly to overall humanitarian vulnerability. In practice, some phenomena (e.g. sudden mass displacement, disease outbreaks, or conflict escalation) can have a far greater humanitarian impact than slower-onset trends such as gradual economic deterioration. As such, composite scoring may underrepresent the intensity of certain shocks. Qualitative monitoring helps mitigate this by adding contextual interpretation, but qualitative inputs themselves depend on access to reliable localised networks and transparent information sharing.

Interpretation of trends

While monthly updates aim to capture evolving dynamics, shifts in indicator values may reflect changes in data availability, reporting practices, or methodological adjustments instead of real-world deterioration or improvement. Users should interpret trendlines with caution and consider the broader data context presented in the methodology notes and qualitative narratives.

Despite these limitations, the SABA dashboard remains a valuable tool for comparing conditions, identifying emerging risks, and guiding prioritisation. By crosschecking multiple sources, transparently documenting scoring methods, and cataloguing indicator metadata in the methodology annex, ACAPS aims to ensure that limitations are clear to users.

ANNEXES

Annex 1. Thresholds per indicator

INDICATOR	SOURCE	DETAILS	THRESHOLD 1	THRESHOLD 2	THRESHOLD 3	THRESHOLD 4	THRESHOLD 5
Civilian fatalities	**ACLED**	We aggregate to admin 2 level the number of civilian fatalities and use a percentile approach to determine the score. The highest 5% of historical recorded incidents scores 5, the highest 10% scores 4, the highest 20% scores 3, the highest 50% scores 2, and the remainder scores 1.	Number of fatalities ≤ 50th percentile	Number of fatalities in 51st–80th percentile	Number of fatalities in 81st–90th percentile	Number of fatalities in 91st–95th percentile	Number of fatalities > 95th percentile
Active conflict incidents	**ACLED**	We aggregate to admin 2 level the number of events labelled as conflict incidents and use a percentile approach to determine the score. The highest 5% of historical recorded incidents scores 5, the highest 10% scores 4, the highest 20% scores 3, the highest 50% scores 2, and the remainder scores 1.	Number of active conflict incidents ≤ 50th percentile	Number of active conflict incidents in 51st–80th percentile	Number of active conflict incidents in 81st–90th percentile	Number of active conflict incidents in 91st–95th percentile	Number of active conflict incidents > 95th percentile
Access severity	**OCHA**	We aggregate to admin 2 level. OCHA assesses access using a severity score with a value between 1–5, with 5 being the most severe.	OCHA access severity score of 1	OCHA access severity score of 2	OCHA access severity score of 3	OCHA access severity score of 4	OCHA access severity score of 5
Market accessibility	**WFP**	We use admin 1 values for all included admin 2 areas. The market prevalence is a value between 0–1, where 1 indicates a nonfunctional market. We score these prevalence values using a stepwise approach: a value of more than 0.8 scores 5, above 0.6 scores 4, above 0.4 scores 3, above 0.2 scores 2, and 0.2 and below scores 1.	Prevalence ≤ 0.2	Prevalence between 0.2–0.4	Prevalence between 0.4–0.6	Prevalence between 0.6–0.8	Prevalence > 0.8
Exchange rate	**World Bank**	We take the average exchange rate of all markets within the admin 2 area. The percentual change over the last 3 months and 12 months is determined and the average of these two is taken as the average percentual change. This value is scored as follows: a value higher than a 50% increase scores 5, above a 25% increase scores 4, above a 10% increase scores 3, above a 5% increase scores 2, and a 5% increase and below scores 1.	Average of the 3- and 12-month increase ≤ 5%	Average of the 3- and 12-month increase > 5%	Average of the 3- and 12-month increase > 10%	Average of the 3- and 12-month increase > 25%	Average of the 3- and 12-month increase > 50%
Food basket	**World Bank**	The food basket consists of a weighted sum of 14 food items following the definition in the Food Security Cluster's Survival Minimum Expenditure Basket, Northern Syria: Guidance Document. We take the average values of all markets within the admin 2 area, determine the percentual change over the last 3 months and last 12 months, and take the average of these as the average percentual change. This value is scored as follows: a value higher than a 50% increase scores 5, above a 25% increase scores 4, above a 10% increase scores 3, above a 5% increase scores 2, and a 5% increase and below scores 1.	Average of the 3- and 12-month increase ≤ 5%	Average of the 3- and 12-month increase > 5%	Average of the 3- and 12-month increase > 10%	Average of the 3- and 12-month increase > 25%	Average of the 3- and 12-month increase > 50%

INDICATOR	SOURCE	DETAILS	THRESHOLD 1	THRESHOLD 2	THRESHOLD 3	THRESHOLD 4	THRESHOLD 5
Food index	**World Bank**	The World Bank's food index is determined on a year-wise comparison of the weighted average of all commodities. We take the average values of all markets within the admin 2 area, determine the percentual change over the last 3 months and last 12 months, and take the average of these two as the average percentual change. This value is scored as follows: a value higher than a 50% increase scores 5, above a 25% increase scores 4, above a 10% increase scores 3, above a 5% increase scores 2, and a 5% increase and below scores 1.	Average of the 3- and 12-month increase ≤ 5%	Average of the 3- and 12-month increase > 5%	Average of the 3- and 12-month increase > 10%	Average of the 3- and 12-month increase > 25%	Average of the 3- and 12-month increase > 50%
Cooking gas, diesel (transport), public transport, and water price	**World Bank/ WFP**	We take the average price in a parallel market of all markets within the admin 2 area, determine the percentual change over the last 3 months and last 12 months, and take the average of these two as the average percentual change. This value is scored as follows: a value higher than a 50% increase scores 5, above a 25% increase scores 4, above a 10% increase scores 3, above a 5% increase scores 2, and a 5% increase and below scores 1.	Average of the 3- and 12-month increase ≤ 5%	Average of the 3- and 12-month increase > 5%	Average of the 3- and 12-month increase > 10%	Average of the 3- and 12-month increase > 25%	Average of the 3- and 12-month increase > 50%
Agricultural Stress Index	**FAO**	The ASI is a quick-look indicator that facilitates the early identification of cropped land with a high likelihood of water stress (drought). Using satellite images, each pixel is assigned a value between 0–100, where 100 indicates that 100% of the area is in water stress. Each administrative area (admin 1) is classified according to the percentage of area affected. The values are then scored using a stepwise approach in which a value higher than 80 scores 5, above 60 scores 4, above 40 scores 3, above 20 scores 2, and 20 and below scores 1.	ASI ≤ 20%	ASI > 20%	ASI > 40%	ASI > 60%	ASI > 80%
Standard Precipitation Index (dry)	**WFP**	The WFP provides rainfall data in millimetres per ten-day period, which we aggregate to a monthly level by summing the values. The SPI is then calculated for different time windows: 1, 3, 6, 12, and 24 months. To categorise the dryness of an admin 2 area, a value below –2.5 is assigned 5, below –2 is assigned 4, below –1 is assigned 3, below 0 is assigned 2, and 0 and above is assigned 1.	SPI one month ≥ 0	SPI one month < 0	SPI one month < –1	SPI one month < –2	SPI one month < –2.5
Standard Precipitation Index (wet)	**WFP**	The WFP provides rainfall data in millimetres per ten-day period, which we aggregate to a monthly level by summing the values. The SPI is then calculated for different time windows: 1, 3, 6, 12, and 24 months. To categorise the wetness of an admin 2 area, a value above 2.5 is assigned 5, above 2 is assigned 4, above 1 is assigned 3, above 0 is assigned 2, and 0 and below is assigned 1.	SPI one month ≤ 0	SPI one month > 0	SPI one month > 1	SPI one month > 2	SPI one month > 2.5
Food Consumption Score	**WFP**	We use admin 1 values for all included admin 2 areas. The FCS prevalence is a value between 0–1, where 1 indicates that 100% of the population living in that area reports inadequate food consumption. These prevalence values are scored using a stepwise approach: a value of more than 0.8 scores 5, above 0.6 scores 4, above 0.4 scores 3, above 0.2 scores 2, and 0.2 and below scores 1.	FCS ≤ 0.2	FCS > 0.2	FCS > 0.4	FCS > 0.6	FCS > 0.8

INDICATOR	SOURCE	DETAILS	THRESHOLD 1	THRESHOLD 2	THRESHOLD 3	THRESHOLD 4	THRESHOLD 5
Reduced Coping Strategies Index	**WFP**	We use admin 1 values for all included admin 2 areas. The rCSVI prevalence is a value between 0–1, where 1 indicates that 100% of the population in that area reports rCSVI ≥ 19. We score these prevalence values using a stepwise approach: a value of more than 0.8 scores 5, above 0.6 scores 4, above 0.4 scores 3, above 0.2 scores 2, and 0.2 and below scores 1.	rCSVI ≤ 0.2	rCSVI > 0.2	rCSVI > 0.4	rCSVI > 0.6	rCSVI > 0.8
Priority disease cases	**WHO**	We use admin 1 values for all included admin 2 areas. The WHO offers a list of new recorded cases for several diseases, categorised into priority/other diseases and people below five years/five years or more. For each category, we use a percentile approach to determine the score. The highest 5% of historical recorded cases scores 5, the highest 10% scores 4, the highest 20% scores 3, the highest 50% scores 2, and the remainder scores 1.	Priority disease cases ≤ 50th percentile	Priority disease cases in 51st–80th percentile	Priority disease cases in 81st–90th percentile	Priority disease cases in 91st–95th percentile	Priority disease cases > 95th percentile
All other health indicators	**WHO**	We aggregate to admin 2 level by taking the average of all admin 3 values. The WHO-assigned value between 0–100, where 0 indicates lack of availability, is then taken and the values are scored using a stepwise approach: a value below 20 scores 5, below 40 scores 4, below 60 scores 3, below 80 scores 2, and 80 and above scores 1.	Child health and nutrition treatment availability ≥ 80%	Child health and nutrition treatment availability < 80%	Child health and nutrition treatment availability < 60%	Child health and nutrition treatment availability < 40%	Child health and nutrition treatment availability < 20%
Sectoral and intersectoral severity	**OCHA**	We take the average admin 3 values for each sector to aggregate to admin 2. OCHA provides a severity score between 1–5, where 5 is the most severe. We use the same scoring provided by OCHA.	Severity score 1	Severity score 2	Severity score 3	Severity score 4	Severity score 5
Sectoral gap	**OCHA**	We take the average admin 3 values for each sector to aggregate to admin 2. OCHA provides both the annual number of people in need for nine sectors and the number of people reached with assistance per sector on a monthly basis. We calculate the percentage gap of people in need and not reached by assistance. This percentage gap is then scored as follows: a value of 1 (corresponding to 100% gap) scores 5, above 0.9 scores 4, above 0.7 scores 3, above 0.5 scores 2, and 0.5 and below scores 1. It is to be noted that the response does not target the whole population in need. As such, if there is a 50% gap, this may correspond to 100% of the people targeted being reached.	Gap ≤ 50%	Gap > 50%	Gap > 70%	Gap > 90%	Gap 100%
IDP prevalence	**OCHA**	We aggregate the number of IDPs to admin 2 level and determine the percentage of IDPs in that admin 2 area with respect to the total population. The area scores 5 if the value is above 33%, 4 if above 20%, 3 if above 10%, 2 if above 5%, and 1 if 5% and below.	% IDPs with respect to total population ≤ 5%	% IDPs with respect to total population > 5%	% IDPs with respect to total population > 10%	% IDPs with respect to total population > 20%	% IDPs with respect to total population > 33%