2023 MSNA IN UKRAINE – METHODOLOGICAL OVERVIEW

This methodological overview covers the following:
- **Final overview of the MSNA methodology**: final scope and coverage of the assessment, secondary data sources, ethical considerations and limitation (including deviations from the ToRs);
- **Living standard gaps analysis**: short description and explanation of the framework behind the construction of the sectoral composite indicators (living standard gaps or LSG);
- **Annexes:** further details on the country LSG framework, the identification of the LSG and capacity gaps, the estimation of the overall severity of needs (Multi-Sectoral Needs Index), and the partners that participated to the research cycle.

About REACH

REACH facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery, and development contexts. The methodologies used by REACH include primary data collection and in-depth analysis, and all activities are conducted through inter-agency aid coordination mechanisms. REACH is a joint initiative of IMPACT Initiatives, ACTED and the United Nations Institute for Training and Research - Operational Satellite Applications Programme (UNITAR-UNOSAT). For more information, please visit our website. You can contact us directly at: geneva@reach-initiative.org and follow us on Twitter @REACH_info.

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List of Acronyms

AAP: Accountability of Affected Populations
AoK: Area of Knowledge
CARI: Consolidated Approach for Reporting Indicators of Food Security
CATI: Computer-assisted telephone interview
F2F: Face-to-face
HH: Household
HNO: Humanitarian Needs Overview
HRP: Humanitarian Response Plan
IDP: Internally Displaced Person
KII: Key Informant Interview
NFI: Non-food items

Geographical Classifications

Oblast: First-level administrative unit
Raion: Second-level administrative unit
Hromada: Third-level administrative unit
Settlement: Fourth-level administrative unit

General and specific objectives and research questions

General and specific objectives

The main objective of the 2023 Multi-Sectoral Needs Assessment (MSNA) in Ukraine is to understand and analyse the demographics, multi-sectoral humanitarian needs, service access, and displacement dynamics or of populations living in Ukraine; to inform the Humanitarian Needs Overview (HNO) and Humanitarian Response Plan (HRP) for 2024 and contribute to a more targeted and evidence-based humanitarian response.

The assessment had six specific objectives:
1. To understand household demographics and displacement trends.
2. To identify vulnerabilities and humanitarian needs of households, both internally displaced (within and outside of collective sites) and host communities, residing in Ukraine driven by the escalation of the war in February 2022.
3. To understand the variation of humanitarian needs among different household demographics across the surveyed area, including displaced and non-displaced households and rural and urban settled households.
4. To measure household reliance on consumption-based and livelihood coping mechanisms as defined in the Consolidated Approach to Reporting Indicators of Food Security (CARI guidelines).
5. To determine the characteristics of households with deprivations in their essential needs and living standard gaps within each sector and across sectors to identify compounding humanitarian needs, households' overall sectoral needs, and the severity of these needs.
6. To understand accountability to affected populations, including preference for types of and satisfaction with humanitarian assistance as well as needs and preference for types of information to be received.

Research questions

To achieve these objectives, the MSNA sought to answer the following research questions:
1. What is the demographic breakdown of households (HHs) and what are the displacement trends in Ukraine?
2. What are the essential needs of households related to shelter and NFI, WASH, food security, infant and young child feeding, education, health, livelihoods, emergency telecommunication, and protection?
3. What are the patterns of income, expenditure, savings, and debt amongst different categories of households?
4. What is the variation of humanitarian needs among different household demographics across the surveyed area, including displaced and non-displaced households and rural and urban settled households?
5. To what extent do affected populations rely on coping mechanisms to meet their immediate needs, and what are the most prevalent ways of coping?
6. What are the geographic differences in the severity of living standard gaps between the assessed areas? What are the differences of needs across the sectors between areas? What are the specific needs and vulnerabilities of the population residing in collective sites? How do sectoral needs overlap with one another and influence the overall severity of living standards gaps across sectors?

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7. What types of humanitarian assistance are being offered to affected populations, and are affected populations satisfied with the provided assistance? What types of information would affected persons like to receive and in what format?

Scope and coverage of the assessment

The MSNA was conducted throught the whole of Ukraine (with AoK for inaccessible areas)—at the Household (HH) level—using a mixed-method approach, and included a cross-sectoral demographic section and Accountability of Affected Populations (AAP) alongside separate sectoral sections for Education, Food Security, Health, Livelihoods, Protection, Shelter and Non-Food Items (NFI), and Water Sanitation and Hygiene (WASH).

Map 1: Ukraine MSNA 2023 Coverage and Sampling Approach

Groups of population and sampling strategy

REACH developed a sampling strategy designed to allow for disaggregation by key geographic areas and population groups, balanced against time, access, and resource constraints. REACH's sampling approach was guided by the aim of conducting more targeted data collection in areas along the front line and Russian border, where results from the 2022 MSNA suggested more localised needs profiles of respondents.

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The sampling approach is therefore comprised of three, complimentary sampling methods, with a precision of 95% confidence level and 7% margin of error across all stratum. Findings are representative at the variously stratified levels. The most granular data, representative at the raion level was collected using F2F surveys in 25 raions within 7 oblasts situated along the front line (as of June 2023) and border. Where access was more limited, data representative at the grouped-raion level was collected using CATI surveys in 23 raions across 9 oblasts also situated along the frontline and border. Finally, data representative at the oblast level, stratified for rural-urban representativeness, was collected using F2F surveys in 58 raions within 13 oblasts in the West and Center of Ukraine.

Data collection and geographical coverage

Overall, the MSNA collected 13,322 household-level interviews across 24 oblasts and 105 raions. This assessment employed a quantitative data collection methodology, including 11,427 face-to-face (F2F) and 1,895 computer-assisted telephone interview (CATI) surveys conducted at the household (HH) level in inaccessible, as well as 'area of knowledge' (AoK) data collection at the settlement-level in selected areas of the country. F2F HH surveys were conducted in secure areas which were directly accessed by enumerators, while CATI was used in inaccessible areas where F2F data collection was not feasible but where phone networks were still functioning (see Map 2). The AoK approach was then applied in areas which were not under the control of the Government of Ukraine (GoU) during data collection, and therefore inaccessible using either F2F or CATI methodologies. Under the AoK approach, F2F settlement-level interviews were conducted with individuals who were knowledgeable about the target settlement. This entailed surveying respondents who had been (within the 14 days prior to the start of data collection) in the settlements of interest or have had contact with family members/friends living in these areas and were thus knowledgeable of the situation. Identification of respondents were through a combination of WFP beneficiary lists, REACH networks developed under the Humanitarian Situation Monitoring (HSM) research cycle, and via surveys conducted in transit and collective sites.

Map 2: Ukraine MSNA 2023 Data Collection Modalities

Secondary data sources

As part of this assessment, REACH will use the below secondary resources:

- 2021 REACH Ukraine Multi-Sector Needs Assessment (MSNA)
- 2022 REACH Ukraine Multi-Sector Needs Assessment (MSNA)
- 2023 REACH Ukraine Gender Focus Brief (MSNA)
- 2023 REACH Ukraine Area Based Assessment (ABA) Lvivska oblast
- 2022 REACH Ukraine Area Based Assessment (ABA) Dnipropetrovska
- 2022 REACH Ukraine Area Based Assessment (ABA) Kharkiv
- 2022 REACH Collective Site Monitoring
- 2023 REACH Collective Site Monitoring
- IDP Collective Site Monitoring Dashboard
- Ukraine Social Protection Assessment
- Ukraine Shelter Sector Assessment
- Ukraine Education Sector Assessment
- Ukraine Health Sector Assessment
- Ukraine WASH Sector Assessment
- 2022 REACH Ukraine Humanitarian Situation Monitoring (HSM)
- 2023 REACH Ukraine Humanitarian Situation Monitoring (HSM)
- 2023 Ukraine Humanitarian Needs Overview (HNO)

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- [2022 Ukraine OCHA](#)
- [2022 IOM Displacement Tracking Matrix (DTM)](#)
- [2022 Ukraine UNFPA Population Statistics](#)
- [WFP Hunger Map Live Ukraine (HML)](#)

Ethical considerations and limitations

Ethical considerations

Within the general approach used by REACH, the ethical implications of data collection and information dissemination were considered and investigated:

- To adhere to the "do no harm" principle, REACH conducted a "do no harm" analysis during the design phase. All questions in the tools were assessed against IMPACT Initiatives' Standard Operating Procedures on Personally Identifiable Information.
- All necessary personally identifiable data collected was not shared with external partners and access to the information was restricted within REACH. Any other personally identifiable information was deleted before the publication of the dataset.
- All respondents were provided with the Complaints and Feedback Mechanism (CFM) phone number managed by IMPACT.
- Has been coordinated with relevant stakeholders to avoid unnecessary duplication of data collection efforts.
- Does not involve data collection with minors. i.e. anyone less than 18 years old.
- Respects respondents, their rights and dignity (specifically by seeking informed consent, designing length of survey/discussion while being considerate of participants' time, and ensuring accurate reporting of information provided)
- Does not expose data collectors nor respondents/their communities to any risks as a direct result of participation in data collection.
- The assessment included questions on vulnerability, income, chronic illnesses, effects of UXO on a HH, safety and security concerns for women, any of which can be sensitive for a respondent. Risk is mitigated by careful phrasing of the questions and adding an option to refuse to answer. In addition, enumerators are trained on how to approach sensitive topics during interviews.
- While vulnerable groups are not purposefully sampled as part of this assessment, Heads of Households (HoH) or household members that are interviewed could represent an at-risk group. Respondents have the right to refuse the whole interview or answering specific questions.
- Finally, the outputs for the quantitative component were translated into Ukrainian, to allow for better dissemination to partners operating in the country.

Limitations and challenges
- Remote data collection: due to access issues, part of the data collection for the 2023 MSNA was conducted over the phone. This created some challenges and limitations:

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- o The expected poor connectivity and the lack of personal interaction during a phone-based interview, the length of the questionnaire was limited to prevent losing the respondent's attention,
  - o As privacy could not be ensured, sensitive topics were not included in the assessment to avoid creating risks for respondents.
- Underrepresentation of certain population groups in specific locations: Considering the immense internal and external displacement since February 2022 and the scarcity of these dynamic population figures, it is likely that some of the population groups were underrepresented in the survey.
- The purposive selection of raions for data collection, and the prioritization of raions in areas closer to the conflict may have had an impact on the demographic breakdown of the country-wide sample. Therefore, we recommend against using the MSNA data to make inferences on the prevalence of specific population groups in areas not covered by data collection.
- Gender disaggregation: Given a lack of available updated population data on gender disaggregation and the used sampling approach, any gender disaggregation is to be considered indicative only.
- Underrepresentation of protection concerns: While the multi-sectoral questionnaire included a section dedicated to protection, including access to documentation and safety and security concerns, for areas where the survey was administered via phone it is not equipped to fully capture all protection concerns, which are therefore likely to be under-reported.
- Reporting bias: Certain indicators may be under- or over-reported due to the subjectivity and perceptions of respondents. For instance, indicators with an extended recall period of six months (such as questions related to expenditures) may be liable to a certain degree of inaccuracy, as they are dependent on respondent's ability to remember events in the past.
- Subset indicators: Findings related to a subset of the overall population may have a wider margin of error, potentially yielding results with lower precision. Any findings related to subsets are indicated as such throughout the output.
- Geographical coverage: data collection focused on raions that were manually selected within each oblast. As not all raions in Ukraine were covered, comparison between locations in the country is limited.
- The collection was done during the summer season—versus winter where needs may be more— and the time of the collection was done during the day, leading to a older demographic.

ANALYSIS OF LIVING STANDARD GAPS

For details regarding the indicators and thresholds used in this analysis, please refer to Annex 2.

Each year, REACH facilitates the collection and analysis of crisis-level data across sectors and population groups through Multi-Sector Needs Assessments (MSNA) to support decision-making by humanitarian actors. MSNAs are conducted within a strong partnership framework at sector and inter-sector level. They are timed to inform strategic decision-making milestones along the humanitarian programme cycle (HPC), such as the Humanitarian Needs Overview (HNO) and the Humanitarian Response Plan (HRP).

Note: The MSNA data analysis framework is completely independent from the Joint Inter-Sector Analysis Framework (JIAF). While some of the conceptual elements for the MSNA do come from the JIAF 1.1 (e.g., 'Living Standards Gap', indicators, severity categories), the methodology used is different. Furthermore, the JIAF is being developed through an inter-agency group and implemented primarily to produce inter-sectoral PiN (and area-level severity) using different data sources available in-country. Meanwhile, the REACH MSNA analysis method was developed internally by REACH and is implemented primarily using household-level data collected through the MSNA. In line with the research questions, the analysis aims to provide a crisis-wide overview of humanitarian needs and the underlying drivers, that influence access to basic needs and services.

The methodology relies on a two-step aggregation process (see F*igure 1*):

(1) **Aggregation of indicators at the sector level**: Construction of sectoral Living Standard Gaps (LSG), see Annex 3 for further details;

(2) **Aggregation of sectoral LSGs into a multi-sectoral composite result**: Multi-Sector Needs Index (MSNI), see Annex 4 for further details.
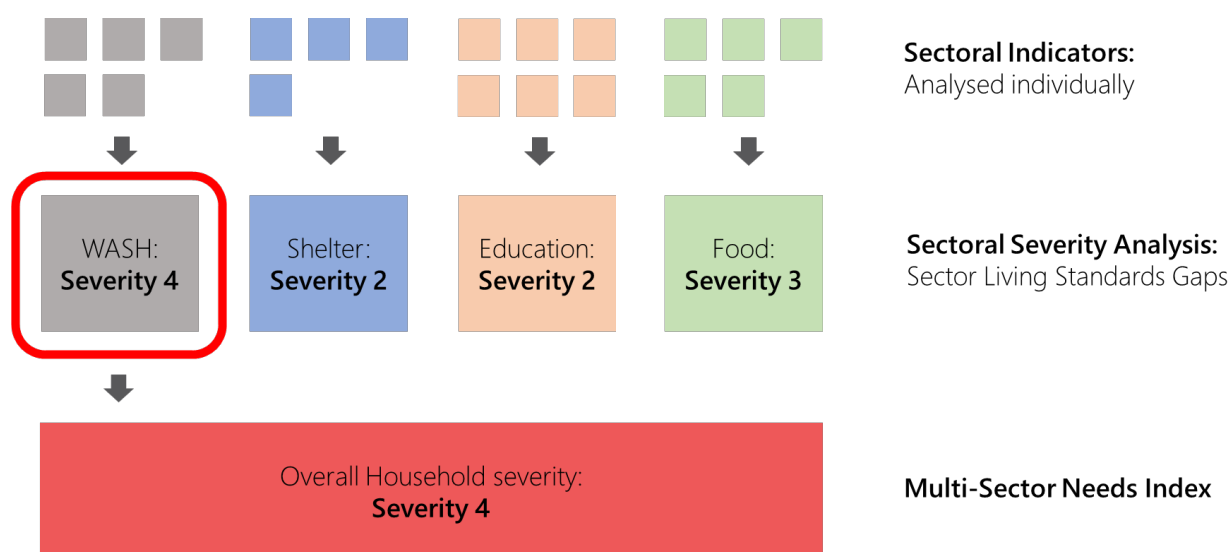

Sectoral Indicators:
Analysed individually

WASH: **Severity 4**   Shelter: **Severity 2**   Education: **Severity 2**   Food: **Severity 3**

Sectoral Severity Analysis:
Sector Living Standards Gaps

Overall Household severity: **Severity 4**

Multi-Sector Needs Index

Figure 1: Approach for the MSNA analysis

The key analytical components are:

- **Living Standard Gap (LSG)**: signifies a need in a given sector, where the LSG severity score is 3 or higher.

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- **Livelihood Coping Strategies Index (LCSI)**: signifies that negative and unsustainable coping strategies are used to meet needs. Households not categorised as having an LSG may be maintaining their living standards through the use of negative coping strategies.
- **Severity**: signifies the "intensity" of needs, using a scale that ranges from 1 (minimal/no gap) to 4 (extreme needes)/4+ (very extreme needs).
- **Magnitude**: corresponds to the overall number or percentage of households in need.
- **The Multi-Sectoral Needs Index (MSNI)** is a measure of the household's overall severity of humanitarian needs across sectors (expressed on a scale from 1 to 4+), based on the highest severity of sectoral LSG severity scores identified in each household.

The severity scale is based on the type of severity scales that exist in versoin 1.1 of the Joint Intersectoral Analysis Framework (JIAF), an analytical framework being developed at the global level to improve understanding of the needs of affected populations. This framework measures the gradual deterioration of a household's situation towards the worst possible humanitarian outcome. While the JIAF severity scale includes 5 classes ranging from 1 (none/minimum) to 5 (catastrophic), for the purpose of this MSNA, only a scale of 1 (none/minimum) to 4 (extreme) is used. The "4+" score (very extreme) is used when the data indicates that the situation could be catastrophic. But the term "catatstrophic" is not used in this analysis. This is because the data needed to establish a "catastrophic" score is mainly collected at the area level (e.g., mortality rates or malnutrition prevalence), which is difficult to take into account in an analysis at the household or individual level.

The different levels of severity can be broadly defined as follows:
Very extreme (4+): Indications of total collapse of living standards, with potentially immediately life-threatening outcomes (increased risk of mortality and / or irreversible harm to physical or mental well-being).
Extreme (4): Collapse of living standards. (Risk of) significant harm to physical or mental well-being.
Severe (3): Degrading living standards, with reduced access to / availability of basic goods and services. (Risk of) degrading physical or mental well-being.
Stress (2): Living standards are under stress. Minimal (risk of) impact on physical or mental well-being / stressed physical or mental well-being overall.
Minimal (1): Living standards are acceptable, at a maximum showing some signs of deterioration and / or inadequate access to basic services. No or minimal (risk of) impact on physical or mental well-being
To construct these scales, some indicators are identified. There are two types of indicators: critical and non-critical indicators.
- **Critical indicator**s: Critical indicators are those that by themselves can indicate any severity above 1, i.e. severity levels 2 to 4+ (see definition of severity levels above).
- **Non-critical indicators**: Non-critical indicators are those that are generally indicative of lower levels of severity, and by themselves would not be considered to justify assigning a severity level greater than 1 to a household. In combination, however, the gaps experienced according to the non-critical indicators can indicate severity levels 2 or 3.

Based on the severity scale, LSG scores (by sector) were then calculated by aggregating indicators by sector. A simple aggregation methodology was identified, based on the Multidimensional Poverty Index (MPI) aggregation approach. *For details on the aggregation methodology, please refer to Annex 3.*

The Multi-sectoral Needs Index (MSNI) is a measure of the overall severity of needs experienced by a household over all sectors (expressed on a scale of 1 to 4/4+), based on the highest LSG severity score for a given sector and identified within each household. The MSNI approaches multi-sectoral needs from an overall perspective. A household is considered in need if any of its sectoral LGG score is 3 or higher. Whether a household has very severe need in a single sector or co-occurring severe needs in several sectors, its final MSNI score will remain the same. While this approach makes sense from a response planning perspective—if a household has an extreme need in a single sector, this may substantiate a humanitarian intervention regardless of the co-occurrence with other sectoral needs—, further analyses are needed to unpack the MSNI and understand these differences in magnitude and severity between households. *For details on the MSNI construction, please refer to Annex 4.*

In addition to the MSNI, the bulletin includes additional analysis on the overall proportion of households by severity, the overall proportion of households in need by sector (i.e., LSG), the overall proportion of households in need by total number of sectoral LSGs, the most common needs profiles (LSG combinations), humanitarian needs and drivers, and accountability for affected population.

Annex 1: Related publications (terms of reference, datasets, dashboards)

All documentation and outputs related to the 2023 MSNA in Ukraineare available on the REACH Resource Center:

- [Terms of reference](#)
- [MSNA Dataset](#)
- [CCCM MSNA Dataset](#)
- [MSNA DAP](#)
- [MSNA MSNI Framework](#)

All REACH multisectoral outputs can be found ***here***.

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Annex 2: Details on the indicators used for the Living Standards Gaps and Capacity Gaps

Protection Critical indicators
1. % of HHs with at least one child not residing in the HH
2. % of HHs reporting concerns in relation to property or land raised in the last 3 months and remaining actual as of today
3. % of HHs reporting experiences of safety and security incidents in the community where they are living in the last 3 months
4. Legal Services
      4.1. % of HHs reporting barriers to accessing social or legal services
      4.2. % of HHs of which at least 1 member is in need of legal assistance

Protection Non-Critical indicators
1. % of HHs by most common barriers to accessing child protection services faced by boys and girls
2. % of HHs reporting awareness of available GBV response services
3. % of HH by type of safety or security concerns for women reported
4. % of children by main safety and security concern - boys/girls

Health Critical Indicators
1. % of individuals with a healthcare need
2. % of individuals with an unmet healthcare need
3. % of individuals by self-reported barriers to accessing healthcare services
4. % of individuals seeking medicines
5. % of individuals by self-reported barriers to accessing medicines
6. % of individuals identified as having disabilities (in line with the Washing Group Short Set questions)

Education Critical Indicators
1. Enrollment in school
2. Modality regularly (4 days a week) attended
3. Reasons for lack of access to school
4. Ability to and main barriers to travel safely to school and learn in safe conditions at school
5. Ability to and barriers to learn in acceptable conditions

Livelihood Critical Indicators
1. HH income over the last 30 days, by source
2. HH income per capita over the last 30 days, compared to MSNA median income per capita
3. Use of livelihood coping strategies

WASH Critical Indicators
1. Access to safe drinking water and use of water treatment

2. Access to sufficient drinking water
3. Access to safe, private sanitation facilities
4. Access to handwashing facilities with water and soap

Food Security Livelihood Critical Indicators
1. Food Consumption Score (FCS) and Reduced Coping Strategies Index (rCSI)
2. Economic Capacity to Meet Essential Needs (ECMEN)
3. Livelihoods Coping Strategies Index (LCSI)

Shelter/NFI Critical Indicators
1. % of HHs living in a functional domestic space
2. % of households living in safe and dignified dwellings
3. % of HH by type of heating source and with functional facilities
4. % of HHs reporting missing non-food items (NFIs)

Annex 3: Living Standards Gap – Aggregation

The analysis is conducted in 3 steps:

(A) Combination of critical indicators into a final score for the critical component

Apart from the Food Security LSG, the final sectoral severity score of a household for the critical component will always be the maximum severity level it obtained on any of the included critical sectoral LSG indicators (or combination of indicators) (see Table 3 below as an example).

(B) Combination of non-critical indicators into a final score for the non-critical component

The final sectoral score for the non-critical indicators (where available) will be obtained as follows:

1. Calculate the average of all included non-critical indicators (average of binary values).

2. Assign severity levels as follows:
   - Severity level 1: Non-critical indicator average <= 1/3
   - Severity level 2: Non-critical indicator average <= 2/3 & > 1/3
   - Severity level 3: Non-critical indicator average > 2/3

(C) Combination of the critical and non-critical components into a final sectoral LSG score

The final sectoral LSG score will be the maximum severity level reached across your critical and non-critical components. If no non-critical component is included, it will just be the result of the critical component. Figure 3 below summarizes the aggregation process.
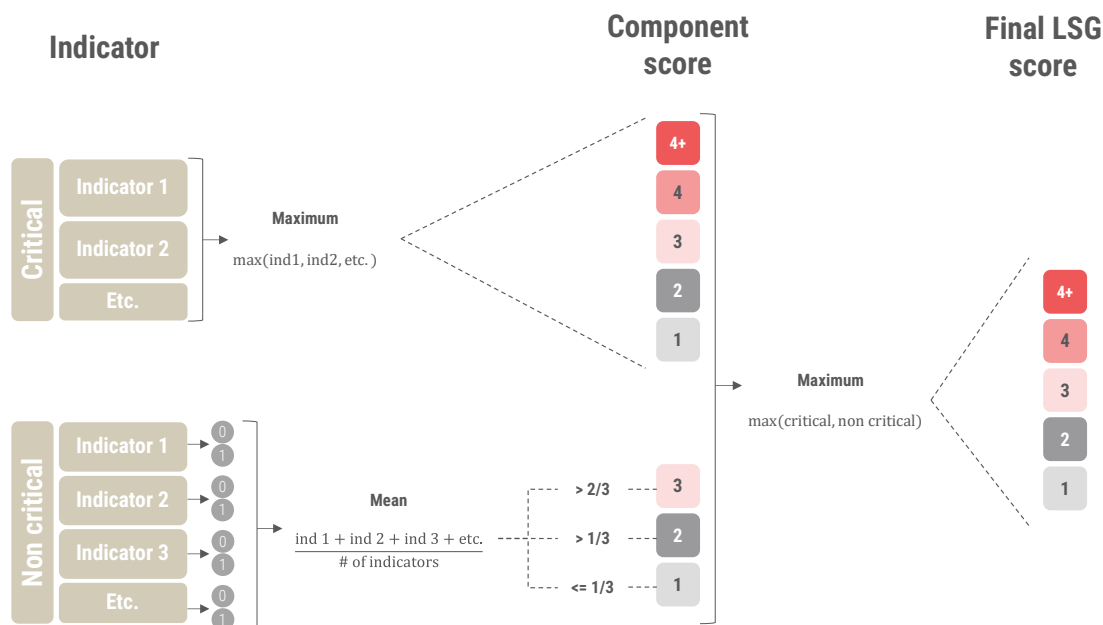

Figure 1: Aggregation of critical and non-critical indicators into a final LSG score

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Annex 4: Multi-Sectoral Needs Index – Aggregation

The final 'multi-sectoral severity level' or Multi-Sector Needs Index (MSNI) is obtained for each household as the maximum severity level the household scored across all sectoral LSGs (see Figure 4 below):

MSNI = max(Food Security LSG, Livelihoods LSG, WASH LSG, Health LSG, Education LSG, Protection LSG)

	Sectoral LSG severity score						MSNI
	Food sec	Health	WASH	Protection	Education	Etc.	
HH1	4	4	4	4	3	3	4
HH2	2	2	4	2	1	1	4
HH3	3	3	3	4+	2	1	4+
HH4	2	3	1	1	2	1	3

Figure 2: Example of MSNI calculation per household

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Annex 5: List of partners (terms of reference, data, dashboards)

Funded by:
- USAID's Bureau for Humanitarian Assistance (BHA)
- European Civil Protection and Humanitarian Aid Operations (ECHO)
- The UK Foreign, Commonwealth and Development Office (FCDO)
- United Nations High Commissioner for Refugees (UNHCR)

Research design/tool development, Consulting partners, and Data collection partners:
- *Kyiv International Institute of Sociology (KIIS)*
- *World Food Programme (WFP)*
- *Camp Management Camp Coordination (CCCM) Cluster*
- *United Nations Office for the Coordination of Humanitarian Affairs (OCHA)*

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