# ENSURING DATA AND ANALYSIS IS USEFUL AND USABLE FOR RESPONSE



These tools are an output of the **Working Group on Useful and Usable Data and Analysis (EDAUUR)** under the Grand Bargain work stream on Needs Assessment.



# The Working Group on Useful and Usable Data and Analysis (EDAUUR) group is composed by:

- Global Clusters and AoRs (including Global CCCM Cluster, Global Child Protection AoR, Global Education Cluster, Global Food Security Cluster, Global GBV AoR, Global Health Cluster, Global Protection Cluster, Global Shelter Cluster, Global UNICEF Cluster Coordination Team, Global WASH Cluster)
- UN Offices and Agencies (including UNHCR FICS, DTM IOM, WFP VAM, OCHA FIS, OCHA NAAS)
- Donors (including DIFD, ECHO, OFDA)
- NGOs (including DRC, Geneva Centre for Humanitarian Demining, MapAction, REACH - Impact, Terre Des Hommes Lausanne) and
- Other organizations and initiatives (including ACAPS, JIPS, PIM, IDMC, ICRC)

# Needs Assessment Process: Common Steps among Organizations/ Clusters

When comparing Needs Assessment processes, it is evident that most steps are common among organizations/clusters that participated in this comparison.

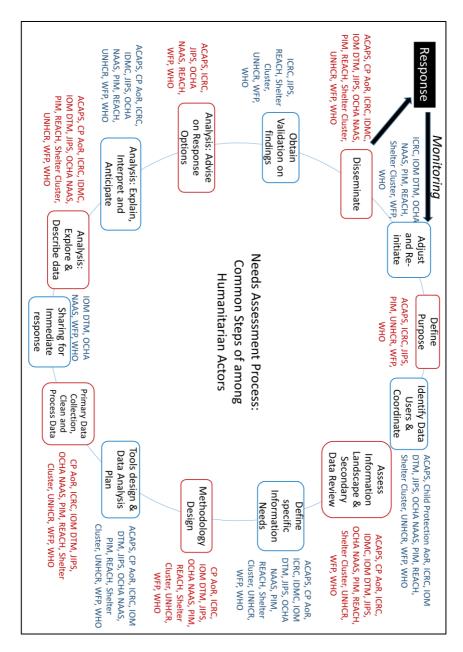
Sometimes the order of implementation may vary among processes, and often organizations/clusters have different denomination for the same step.

Some organizations, for example, start with coordination and identification of information needs, others with defining the purpose, others conduct assessment of information landscape is done even before a new crisis, and included in "data preparedness".

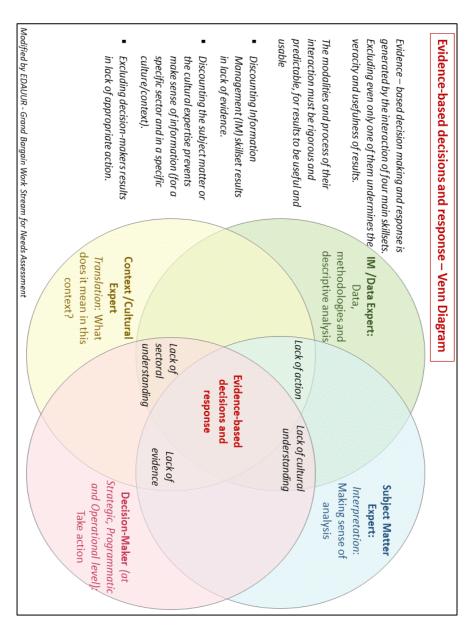
In a few cases, some steps are implemented only by some organization/cluster. This is mostly due to the specific mandate of each organization/cluster: e.g., some do not do primary data collection, others collect data as a service for other responders.

Some organizations include "capacity strengthening with national/local actors on needs assessments", as part of their process, others look specifically at various modalities for dissemination to ensure they reach decision makers (e.g., presenting results to sectoral or inter-sectoral meetings, "elevator pitches", in addition to preparing reports, infographics and website content).

**Steps:** The main steps identified by participating organizations/clusters are visualized below.



**Skillsets I**: The visuals below illustrate the four minimum skillsets necessary for evidence-based decision-making and the consequence of excluding even only one of them



Skillsets II: Concrete examples of who they may be in a response

## and decision makers are in a Concrete examples of who such experts humanitarian response: specific context expertize International researchers with Anthropologists Local Academia and researchers Local Organizations knowledge Local staff with contextual Local authorities (sectoral... Context / Cultural Expert, e.g.: Spatial analysis experts Data Management experts Analysts Information management Officers **Needs Assessment experts** IM /Data Expert, e.g.: Programmatic and Operational Authorities (local, national) Decision-Maker (at Strategic, Programme Officers Heads of Delegation Heads of Organizations Coordinators Cluster and Inter-Cluster **Humanitarian Coordinator** level), e.g., : experts (including local staff, Food Security, Health, Nutrition, GBV, WASH, Protection, Shelter, Operations Coordinators Authorities (sectoral experts International Cluster members (National and Cluster Coordinators Counter Trafficking, Migration CASH, AAP, livelihood, CCCM, Child Protection, Education, Subject Matter Expert, e.g.:

# Four key steps where the 4 skillsets have to work together

Close cooperation among the four skillsets is crucial at all steps of the Needs Assessment process. The group identified four key steps of the process where it is particularly important that the four skillsets work together, each according to their role:

- 1. Define Specific Information Needs,
- 2. Methodology Design,
- 3. Tools and Data Analysis Plan Design,
- 4. Analysis. Analysis is considered one 'composite' step.

# Roles for each of the four 'skillsets, Guiding Questions and Checklists at each key step

As each skillset contributes to the process complementarily. It is essential that each actor understands the complementarities of the different roles and respects the different professional competences. Roles at the four identified steps are illustrated below, together with tools (guiding questions and/or checklists of actions to be taken) that help each actor clarify their own role and clearly identify the role of the others.

### Step 1 – Identify information needs

Identifying information needs before developing questions is essential to get the needed results for response. Questions can thus be more targeted and obtain the right data.

#### **Roles:**

- Decision-Makers clearly identify the decisions they have to take, and, with others support, the information they need in order to take such decisions.
- Subject-Matter Experts identify what information is available
  and accessible, and where gaps are. They identify the essential
  building blocks of sectoral information. They help IM experts
  identify most appropriate sources of sectoral information and,
  with IM support, unit of analysis and modality of data
  collection. They provide the sectoral perspective to the
  conversation.
- Cultural/Context Experts help turn abstract information needs into specific local 'meaning'. They identify the most appropriate way of translating information needs into questions that will be correctly understood in that specific context/culture.
- IM Experts contribute their technical know-how on data analysis, questionnaire development and data collection methods. They translate information needs of decision makers as well as sectoral and cultural perspectives into questions that can be analysed to inform decision-making.

#### Questions (and who should answer):

- 1. What is it that we have to do? (Decision Makers)
- 2. What are the decisions we need to make? (Decision Makers)
- 3. What information do you miss in order to make that decision? (Decision Makers, supported by Sectoral experts, Context experts and IM expert)
- 4. How often should that information be updated, at a minimum, to be still usable? (Decision Makers, supported by Sectoral experts, Context experts and IM expert)
- 5. Is that information already available/ accessible? (Sectoral Experts, Context Experts and IM experts)
- 6. Can we integrate this information need into already existing or planned data collection exercises? (Decision Makers, supported by Sectoral Experts, Context experts and IM experts)
- 7. How will this information help in the decision-making (What are logical flow & benchmarks)? (Decision Makers, supported by Sectoral Experts, Context experts and IM experts)
- 8. What are the components of the information (e.g., data that can be analysed to obtain the needed information)? (Sectoral Experts, Context Experts and IM experts)
- 9. Are any of these data already available/accessible (review secondary data<sup>1</sup>)? (Sectoral Experts, Context Experts and IM experts).
- 10. What are the missing data we need to collect? (Sectoral Experts, Context Experts and IM experts)

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<sup>&</sup>lt;sup>1</sup> Reviewing secondary data includes quantitative and qualitative information, like "stories" that sectoral or cultural experts have previously been told by members of the community. These guide the identification of info needs.

## Step 2: identification of Methodology

#### Roles

- IM experts is responsible to facilitate the process towards the identification of an appropriate and sound methodology for the specific context and purposes. Decisions on the methodology will be often taken jointly with sectoral, cultural experts and ultimately decision-makers. The choice will be based on type of needed information, the level of details, the time frame, access and available resources. IM experts also help others understand how and why different data collection methods and unit of analysis impact results. Note that in some organizations Needs Assessment experts are tasked with designing the methodology (included under IM experts for the purpose of this document).
- Sectoral Experts are fully involved in the process to define the methodology, as their expertise is needed to identify, among others, appropriate unit of measurement, method of data collection, typology of respondents, resolution of data<sup>2</sup> and affected groups to focus on.
- Cultural/Context Experts are crucial part of the conversation, as they provide insight on information that lead to the choice of methodology: for example, on most appropriate respondents, affected groups, geographic boundaries (e.g., groups living across admin boundaries, control of territory), accessing gatekeepers, respondents' likely reaction to a type of interview.

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<sup>&</sup>lt;sup>2</sup> Resolution of the data may be villages, sub-districts, districts, etc.). See: Aldo Benini, *Documenting methods and data in rapid needs assessments*, ACAPS, 2012

Decision Makers are crucial to the identification of the methodology, and their involvement in deciding on methodology greatly increases their understanding of meaning and reliability of final results. It also increases their level of trust in the results. If Decision-Makers cannot participate, they take necessary time to understand the limitations and strengths of results and reasons for agreed methodology. The limitations and strengths of results as well as the reasons for choosing such methodology should be presented to decision-makers in a format they can easily absorb and communicate to others.

### **Guiding Questions:**

**IM Experts** use these questions to facilitate the identification of a sound and appropriate methodology. Identification is done jointly with Sectoral Experts, Cultural Experts and Decision-Makers; however <u>IM</u> skillset is crucial to choose a methodology that can give quality results, in line with what Decision-Makers need for their response.

#### WHERE:

What are the geographic boundaries?

#### WHEN:

- What is the timeframe for the assessment?
- Should this be a 'one off' or an 'on-going' exercise?

#### **HOW MUCH:**

- How much will it cost?
- Who /how many will need to work on it?

### HOW - Data collection methods:

- Is the needed information better collected through qualitative or quantitative methods?
- What is the most appropriate unit of analysis<sup>3</sup> (e.g., individual, household, community or facility), or a structured phased

<sup>&</sup>lt;sup>3</sup> Unit of Analysis can be individual, household, community or facility (e.g., health center or school). Methods of data collection can be used for various unites of analysis, e.g., surveys (representative or non-representative) can be used for individual and household level, Key Informants Interviews and Focus Group Discussions are used for community level, and administrative records and KII are used for facility level.

- approach is to be used over time, starting with community-level information, then household /individual- level?
- Do we need the results to be generalizable or can we use some type of convenience sampling?
- What method of data collection is most appropriate?<sup>4</sup> (e.g., KII, FGD, surveys, administrative data)
- Do results need to be reproducible and comparable over time?
- Do we/others need to re-use the data for other purposes?
- Is the information better captured through structured or semistructured interviews?

#### WHO

• Who do we ask? (e.g., selection of KI, composition of groups...)

- Can we access the relevant gatekeepers?
- Define the universe, the set of units (affected groups, communities, areas)<sup>5</sup> about which the assessment was conducted

<sup>&</sup>lt;sup>4</sup> Useful tools to jointly identify most appropriate system for data collection include: PIM matrix, that can be adapted to other sectors (http://pim.guide/wp-content/uploads/2018/04/Quick-Reference-Flyer Principles Matrix Process 2018-1.pdf); ACAPS "Direct Observation and Key Informant Interview Techniques for primary data collection during rapid assessments": https://www.acaps.org/direct-observation-and-key-informant-interview-techniques; UNHCR overview of data collection methods and their use in UNHCR Needs Assessment Handbook, p 81: http://needsassessment.unhcr.org/

<sup>&</sup>lt;sup>5</sup> Aldo Benini, Documenting methods and data in rapid needs assessments, 2012.

 Define the resolution of the data (villages, sub-districts, districts, etc.)

#### AND VERIFYING:

- Would Decision-Makers be able to make identified decisions based on data from these sources, methodologies/modalities and unit of analysis?
- How will the selected method, timeframe, geographic boundaries, selected respondents impact on the results and ability to accurately inform decision-making?
- Would Decision Makers trust results obtained with this methodology?
- What are the possible negative consequences that may result from data collection/analysis done with this methodology and how can these be mitigated? (this must be include all actors Sectoral experts, Context/Cultural experts, IM, Decision-Makers, in addition to Protection experts)

#### Step 3: Data Analysis Plan and Assessment Tool Design

The purpose of developing and sharing a data analysis plan is to visualize the final descriptive analysis and verify whether it provides the information originally identified as needed by decision makers.

#### **Roles:**

IM experts develop draft questions with support of sectoral and cultural experts, in coordination with decision-makers, to ensure the link between NA objectives and draft questions is clear and correct. IM experts then visualize potential results using fake data. Results are discussed with decision makers, cultural and sectoral experts to verify the questions can provide needed information. IM experts make necessary changes to the questions, finalize and share the data plan. IM also designs the tool, according to best practices<sup>6</sup>.

# Guiding Questions and Tasks (and who should answer/do it):

- In this context, using this methodology/modality at this level of analysis, what question/questions we should ask in order to obtain the data we need? (Sectoral Experts, Context Experts and IM experts)
- In this context, using this methodology/modality at this level of analysis, what options for answers we should give in order to obtain the data we need? (Sectoral Experts, Context Experts and IM experts)

<sup>&</sup>lt;sup>6</sup> For example, see ACAPS brief on questionnaire design: https://www.acaps.org/sites/acaps/files/resources/files/acaps technical brief q uestionnaire design july 2016 0.pdf

- In this context, using this methodology/modality at this level of analysis, can this question and its analysis do harm? (Protection experts, Decision-Makers, Sectoral Experts, Context Experts and IM experts)
- Questions and answers are included in a data plan, which may also include dissemination modality, source of data and more<sup>7</sup>. (IM Expert)
- 5. Fake values are attributed to each question and mock-up visuals (e.g., charts, maps and tables) are created for each question, and combination of questions, as deemed appropriate. (IM Expert)
- Mock-up visuals are discussed with Decision- Makers to verify whether the analysis of the questions would provide the information identified as needed by decision makers. (Decision Makers, Sectoral Experts, Context/Cultural Experts and IM Experts)
- 7. Changes to questions, options for answers and visualizations are made according to outcome of previous discussion, and final version is shared with other actors. (IM Expert)
- 8. Assessment tool is designed, according to best practices (IM Expert).

<sup>&</sup>lt;sup>7</sup> For an example of Analysis Plan, see page 14 of ACAPS Questionnaire Design, How to design a questionnaire for needs assessments in humanitarian emergencies, July 2016, available at:

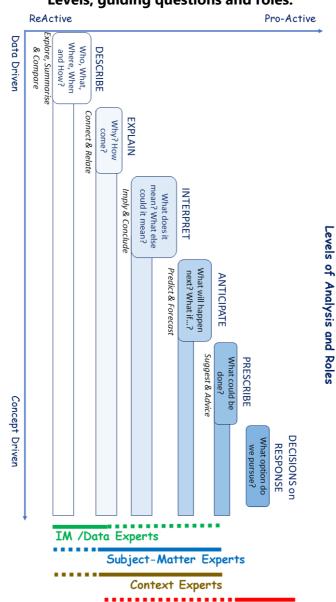
https://www.acaps.org/sites/acaps/files/resources/files/acaps technical brief questionnaire design july 2016 0.pdf

#### Step 4: Analysis

As analysis is done at various levels, those levels should be clear to all actors. In each level of analysis different actors/ skillsets answer different questions. Each level relies on the preceding ones.

- **Descriptive analysis**: Describing data means to summarize and reduce large amount of data to a representation where it is easier to compare between them and identify the main points, important stories and relevant messages, e.g. a percentage, average, mean, mode, etc.
- Explanatory analysis looks for associations, correlations and more generally for connections between observations and measurements.
   It allows for formulation of better hypothesis or theories, based on careful investigation of relationships, underlying processes or causal mechanisms.
- Interpretive analysis aims at moving beyond findings to identify key
  messages and drawing well-supported conclusions, through careful
  argumentation, evaluation of the strength of evidence available and
  attention to plausibility in context.
- Anticipatory analysis identifies the likelihood of future events and outcomes at a specific time, based on current and historical data. It combines predictions (a one-off estimate of a specific event in the future – What will happen?) and forecast (a set of possible futures that include probability estimates of occurring – What else might happen?)
- Prescriptive analysis entails both response analysis and planning.
   This process is generally conducted in a workshop setting and uses results from both secondary and primary data collection.

# Levels, guiding questions and roles:



Modified from Pherson, ACAPS and Okular Analytics

**Decision-Makers** 

# Summary flow chart for planning data collection

