

Analytical Framework Review report



A framework analysis of analytical frameworks

A review for the Joint inter-sectoral analysis group, August 2017, by
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Background

The 'Grand Bargain' agreed upon as a follow-up to the High-Level Panel on Humanitarian Financing (HLPHF) report to the Secretary-General and the Secretary-General Report to the World Humanitarian Summit (WHS) call for improvements in the way assessments are done so that analyses of humanitarian situations and needs are comprehensive, reliable and timely. This requires greater collaboration between stakeholders, as well as an improvement of existing approaches, methods and tools to enable the use of different pieces of information in a coherent manner.

OCHA's Coordinated Assessment Support Section (CASS), based in the Programme Support Branch (PSB) in Geneva, as co-lead with ECHO of the Grand Bargain Needs Assessment Work stream, is taking on this challenge by convening and facilitating an inter-agency initiative to strengthen the coordination and quality of humanitarian needs assessment and analysis. This 'Joint Intersectoral Analysis Group' (JIAG) has commenced work focusing on 2 pillars:

1. Refinement or development of methods and tools
2. Conduct of joint inter-sectoral analyses in crisis contexts.

Key to Pillar 1 is the development of an *analytical model* for inter-sectoral analysis, to assist with the identification of inter-linkages between various factors and sectors resulting in given outcomes for the lives and livelihoods of crisis-affected people. This model should have a foundation in current best practices in needs analysis and adapted to address requirements across all sectors.

In order to build this foundation, existing analysis frameworks must be themselves reviewed, analysed and compared. The results of the review will then be used for developing an analysis framework for inter-sectoral understanding of needs and the factors related to needs. ToRs for the consultancy are available at <https://goo.gl/a7033D> and detail the following activities:

- 1) *Review existing sectoral and intersectoral definitions of needs analysis frameworks detailing how the needs are interpreted in relation to other factors, related indicators, and thresholds that define levels of severity:*
 - *In consultation with CASS and JIAG, set the bounds for review across different fields and contexts (i.e. humanitarian vs. development, local vs global, chronic vs. acute needs, etc.)*
 - *Conduct literature review to compile a bibliography/compendium of needs analysis frameworks; investigate possible lessons learned, strengths/weakness, evidence of use etc. via consultations with framework owners/custodians, users. Etc.*
 - *Develop matrices or visualization method to enable sector cross - comparison of selected analytical frameworks*
 - *Visualize / compile results; identify data/information requirements related to establishment of levels of severity of need, thresholds for response, etc.*
- 2) *Identify commonalities and discrepancies between sector and inter-sectoral approaches on how needs and severity are defined, using given analytical frameworks, and propose ways to harmonize definitions and seek coherence across sectors:*
 - *Prepare a presentation of the comparison(s) of how needs are defined, analysis frameworks, indicators and severity thresholds to the wider group*
 - *Identify gaps, or 'weak links' in the fabric of the assembled frameworks*
 - *Highlight all opportunities for harmonization of language, analysis approach (e.g. focus/level of analysis), data (interoperability), use of COD, units of measure, thresholds etc.*

Photo on the cover page represents a sunburst visualization of Benjamin Beccari's database of indicators from 56 composite measures on risk, resilience and vulnerability (2016).

Contents

Introduction	5
Analysis Frameworks in a nutshell	6
Selection of Analysis Frameworks for the Review	7
Methodology and Tools for the Review	7
Limitations of the Review	8
Main Findings	9
Specific Findings	13
Roadmap for developing an analytical framework	20
Annex 1 Analysis frameworks - Profiles	24
MIRA Frameworks	24
The MIRA Guidance (2012-2015, IASC)	26
The Coordinated Data Scramble (2015, IMWG)	27
The Data Entry and Exploration Platform (2017)	28
Guidance note on Multi-Sector Analytical Framework (2016, ACAPS/UNICEF)	29
The Global Crisis Severity Index (2017, INFORM, draft)	30
The needs analysis framework (NAF) (2007, IASC CAP sub working group)	31
Poverty Frameworks	33
The Global Multidimensional Poverty Index (2010, MPI)	37
Conceptual framework on dimensions of poverty (2017, Sida)	38
The Basic Needs and Response Analysis Framework & toolkit (2017, Cash working group, Draft)	40
Poverty Assessment Tools (2008, USAID, Grameen Foundation, IRIS center)	42
Livelihood Frameworks	43
ICRC Economic Security Conceptual Framework (2015, ICRC)	47
Household Economy Approach (HEA) (2008, Save the Children)	50
Integrated Livelihood Vulnerability Analytical Framework (2013, Reed)	51
Livelihood Resilience Framework (2014, Ifejika Speranza, et al.)	52
Vulnerability Frameworks	55
Vulnerability and Capacity Assessment (1999, IFRC)	61
The Pressure and Release Model (1994, PAR)	62
Southern Africa Vulnerability Initiative (2004, SAVI)	64
The Household Vulnerability Index (2004, HVI)	65
Framework for Vulnerability Analysis in Sustainability Science (2003)	67
The MOVE framework of vulnerability (2013)	69
INFORM (2017)	70
The BBC Conceptual Framework (2006)	70
UNHCR/UNICEF/WFP Vulnerability Assessment of Syrian Refugees (VASyR) in Lebanon	71
UNHCR Vulnerability Assessment Framework in Jordan (2013-2015)	71
Resilience frameworks	73

The Disaster Resilience Framework promoted by DFID (2011, TANGO/DFID).....	78
Tufts Livelihoods Change Over Time (2012, LCOT) Model.....	79
Resilience Index and Measurement Analysis (RIMA) II (2016, FAO).....	80
OECD Conceptual Framework for the Resilience Systems Analysis (2014, OECD).	82
IFRC Framework for Community Resilience (2014, IFRC).	85
Resilience of Systems framework (2014, Proag).....	86
Risk Frameworks	87
The Index for Risk Management INFORM (2015, IASC)	89
Displacement Frameworks	92
Framework on Durable Solutions for Internally Displaced Persons (2010, IASC).....	93
Statelessness: An Analytical Framework for Prevention, Reduction and Protection (2008, UNHCR).....	94
The Migration Governance Index (MGI) (2016, the Economist Intelligence Unit, IOM)	95
Integration Evaluation Tool (IET) (2012, UNHCR)	97
Refugee integration, Migration and Refugee Services (2016, MRS).....	98
Wellbeing Frameworks	99
Hierarchy of needs (1943, Maslow)	103
The Better Life Initiative (2011, OECD)	104
The Humanitarian Emergency Settings Perceived Needs Scale (HESPER) (2011, WHO, Kings college London) ..	105
The Global Well-Being Index (2012, Gallup-Healthways)	107
The Integrated Phase classification	108
Annex 2 They are called framework... but are not always such	113
Annex 3 Literature Review Analysis Frameworks	115
What is an analysis framework?	115
When to use an analysis framework?	117
How to build an analysis framework?.....	119

Note from the author

The documents reviewed are available using the following dropbox link.

<https://www.dropbox.com/sh/qxg7e70ixwrgg3u/AABGLVw7eRoUV1mSdffGhvtHa?dl=0>

All frameworks mentioned in the main findings and recommendations part are hyperlinked to their profile in Annex 1. For an unknown reason, it was not possible to hyperlink the exact framework but only the first page of the framework family. We apologize for the inconvenience caused in navigating the document.

Introduction

This review intends to support the work of the Joint Intersectoral Analysis Group' (JIAG), an inter-agency initiative to strengthen the coordination and quality of humanitarian needs assessment and analysis. The group focuses on the refinement or development of methods and tools for conducting joint intersectoral analyses in crisis contexts.

The JIAG proposes the development of an *analytical model* for inter-sectoral analysis, to assist with the identification of inter-linkages between various factors and sectors resulting in given outcomes for the lives and livelihoods of crisis-affected people. This model should have a foundation in current best practices in needs analysis and adapted to address requirements across all sectors.

To conduct the review and develop appropriate recommendations, we made the following assumptions regarding the focus and design of the future Analytical Framework (AF):

- AF will include both theoretical AND conceptual framework and detail the entire methodological ecosystem required to develop and derive quality and credible analysis. It will be supported by appropriate guidance, facilitation, training and standards.
- AF will be used primarily for humanitarian needs analysis and situation analysis (see definitions below). It will focus on a holistic and inter-sector analysis at crisis/country level.
- AF focuses on strategic/programmatic humanitarian decision making, i.e. is not meant to inform operational decision-making.
- AF covers four levels of the analysis spectrum, i.e. description, explanation, interpretation and anticipation. This implies that, at a minimum, the AF is need AND risk based.
- AF will be conducted by various stakeholders on behalf of the humanitarian community and require joint/collaborative analysis.

Some definitions are necessary to situate the work in its broader context.

Needs analysis is the process designed to estimate or provide informed opinions about deficiencies, their underlying mechanisms and their humanitarian consequences. It entails a systematic set of procedures and the use of specific lines of inquiry undertaken for the purposes of setting current and forecasted priority needs and informing at a later stage, during the response analysis, appropriate decisions about program design, system improvement and allocation of resources (adapted from ACAPS 2014, Witkin & Altschuld, 1995).

Situation analysis is broader than just needs analysis and entails both the assessment of needs AND the operational environment (humanitarian access, context, stakeholders, market functionality, response capacity, etc.) to provide all information required for an appropriate analysis of response options. The term *situation analysis* and *needs analysis* are often conflated but in this document, are not considered interchangeable.

Typically, the future framework could support the development of a Humanitarian Needs Overview (HNO), a Situation Analysis (phase 1 of coordinated assessments) or a Multi-Cluster Initial and Rapid Assessment (phase 2 of coordinated assessments).

This document is structured as follows:

1. First, we detail what analytical frameworks are, based on a literature review of social research guidance.
2. We present the approach and methodology used to do the review (selection criteria and tools), as well as the limitations and difficulties faced during the research.
3. We then detail the main findings of the review and implications for the JIAG. In addition, we provide 25 recommendations and a roadmap for the development of the JIAG Framework.
4. In Annex 1, we present a profile for each of the 39 frameworks selected for the literature review.
5. In annex 2, we provide examples from the literature review which have been labelled "framework", but which do not match our definition.
6. In annex 3, we detail the results of the literature review of social research guidance's on the importance, value, use and design of analytical frameworks.

Analysis Frameworks in a nutshell

Analysis Frameworks help researchers to approach a problem with logic and in a systematic way, and to set a clear driving force behind their lines of inquiries. Developing frameworks suppose breaking down the issue at stake into sub-components and creating a mental model, often presented visually, that provides a foundation and a guide for data collation and analysis, as well as their boundaries.

Analytical frameworks are essentially a *methodological ecosystem* aiming at guiding and facilitating sense making and understanding. They are found in the humanitarian sector in thematic research such as vulnerability, risks, needs, food security, nutrition, displacement, etc. Their use goes much beyond humanitarian settings and they are considered foundational and indispensable in all applied research fields, e.g. social science, statistics, physics, etc. (See literature review available in annex 3).

Analytical, conceptual, and theoretical frameworks are intimately linked to the sense making theory, or the process through which the human mind fits data into a model, creating a frame to contain, contrast and derive meaning from data.

Frame or structure allowing to organize knowledge, information and thinking, are called *conceptual framework*, and drive methodology and rigor in inquiries. They differ from *theoretical frameworks* in terms of scope and detail. A *theoretical framework* usually precedes the *conceptual framework* and includes a general representation of the investigated topic:

Example of theoretical framework

- Risk = Hazard * Vulnerability / Capacity to cope
- Response Gap = Needs – Response
- Needs = Desired standard – current condition
- $E = mc^2$

A *conceptual framework* includes specific information on the research scope and objectives, as well as how the problem will be explored (synthesis of what is already known about the issue, information gaps, data collection techniques, tools, information needs, etc.). An analysis plan is generally part of the conceptual framework and summarizes the research question(s) and the steps to conduct the research project in detail.

Theoretical and conceptual frameworks are both part of the methodological toolbox of researchers. Together, they are referred to as *analytical framework*.

Analytical framework = theoretical + conceptual framework (secondary data review, analysis plan, methodology, tools)

What theoretical frameworks are made of? A framework is an abstract but sophisticated version of the map of the territory being investigated. But not randomly, nor without rationale or order. The best theoretical frameworks have five common characteristics:

- *Logical*: common-sensical, theory-driven or causal (e.g. baseline, input, outputs and outcomes)
- *Relationships*: Break down the issue at hand into main components/sub-components. Connect/group components and show the presumed associations between them
- *Interaction*: Detail how components are related and intersect analytically to provide with more analytical value ($A+B=C$)
- *Operational*: Can be applied easily and intuitively (quantification, database, report template, etc.)
- *Visual*: Fit in one page and are visually displayed, easy to communicate and intuitive

Building a robust, simple and valid theoretical framework is a long process (often years...) and all researchers highlight the iterative nature of their development, before maturity can be reached. Sense making is a complex process in which the model and the frame help making sense of the data, but also are shaped and modified by newly available and analyzed data. The mental model, or frame, is used until new data contradict, question or challenge it and makes it necessary to review or adapt the model.

Even with time and resources, the best models generally stay imperfect. For instance, the general theory of relativity breaks down in black holes. George Box in 1976 offered the famous line “all models are wrong, some are useful”. His point was that we should focus more on whether something can be applied to everyday life in a useful manner rather than debating endlessly if an answer is correct in all cases. “Scientists generally agree that no theory is 100 percent correct. Thus, the real test of knowledge is not truth, but utility. Science gives us power. The more useful that power, the better the science.” Yuval Noah Harari.

Why frameworks are important? Defining a theoretical framework forces researchers to be selective, to decide which variables are most important and necessary, which relationships are likely to be most meaningful, and, therefore, what information should be collected and analyzed. Data collected using frameworks is ordered in descriptive “chunks” which support question-focused analysis and comparisons. Analysis conducted using frameworks is systematic, comprehensive and transparent and reduce the impact of selection and process biases. If multiple stakeholders are involved, the framework helps them study the same phenomenon using the same categorization and provide with a good defense against information duplication and overload.

Selection of Analysis Frameworks for the Review

A large number of frameworks are already being used in applied research (academics, public health, intelligence, civil protection, etc.), and reviewing all of them goes beyond the scope of this consultancy. In order to focus only on those the most relevant to the work of the joint intersectoral analysis group, a preliminary list of frameworks and conceptual models was drawn from existing literature using the following keywords:

Box 1. Key word list for research

- Vulnerability, needs, risk, wellbeing, quality of life, welfare, human security, public health, displacement, resilience, or poverty AND/OR
- Cross concepts such as *severity* and *priorities* AND/OR
- Theoretical/conceptual/analysis/analytical framework/model, index, indices AND/OR
- Review, literature review, desk review AND/OR
- UN agencies, academics, IASC, ILNGOs, civil protection, intelligence AND/OR
- Humanitarian crisis, conflict, natural disaster, etc.

From this initial list, exclusion criteria were applied as listed in Box 2.

Box 2. Exclusion criteria

- “Things” called “framework” which are in fact “process” or “step by step” charts (See Annex 2)
- Listing of dimensions, variables or information needs without hierarchy or relationships between them (table format), unless unique to the category under review
- Sector specific and unique frameworks, as the review focuses on supporting the development of an intersectoral AF
- “Events” or “drivers” specific frameworks, such as fragility, conflict, etc. The only exception to this rule was for displacement and migration frameworks.

A list of 15 frameworks was originally selected and presented in the inception report. As the review progressed, it became obvious that the available frameworks were at different stages of maturation and implementation, and some were just iterations of others. To avoid repetition, frameworks were grouped into “families”, e.g. vulnerability frameworks, Poverty frameworks, etc.

In total, 39 frameworks or initiatives were reviewed regrouped into eight families: MIRA, Poverty, Risk, Vulnerability, Resilience, Wellbeing and Displacement. The IPC framework was reviewed individually as not fitting in one category. When possible and if one country initiative was available and based on a particular framework family, it was added as a complement. For instance, the 2013-2015 UNHCR vulnerability framework in Jordan was added to the Vulnerability framework’s family.

Methodology and Tools for the Review

Each family review is supported by a conceptual background and a description of the related frameworks or initiatives, in no particular order. A profile is proposed for each analytical framework, summarizing concepts and key information (date, tools, owner, framework visual, dimensions and sub dimensions, school of thoughts, etc.) if, and when available. In addition, key characteristics of each framework were captured to allow a summary comparison. 20 characteristics (Box 3) were mapped grouped around four main pillars: *relevance*, *analytical value*, *reproducibility*, *evidence of use*. For each characteristic, a simple yes/no was recorded. When no evidence of presence or absence of the characteristic was found, we let the characteristic blank.

Box 3. 20 characteristics mapped for the Review:

Relevance (the extent to which the framework is relevant to humanitarian settings):

- AF was developed specifically by humanitarians and for use in humanitarian settings
- AF is multi-sectoral (>3 sectors/clusters are included)
- AF implementation, use or tools are applicable and adapted for joint, collaborative or multi stakeholder’s settings
- AF is used/promoted in humanitarian settings for >3 years
- AF is used/promoted by >3 different NGOs or agencies

Analytical Value (the extent to which the framework’s use leads to conclusions commonly required in humanitarian needs or situational analysis, e.g. MIRA, situation analysis and HNO templates):

- AF aims at multi-dimensional prioritization (affected groups, geographical areas, interventions or resource allocation) and proposes methodology, tools, approaches or guidance for ranking (priority) and rating (severity)
- AF includes “meta-concepts” (e.g. impact, needs, risks, vulnerability) and “micro-concepts” (e.g. drivers, underlying factors, humanitarian outcomes, etc.) commonly used for humanitarian needs or situation analysis
- AF covers at least three analytical levels (descriptive, explanatory, interpretive, anticipatory)
- AF includes guidance on how to deal with uncertainty and incomplete data
- AF displays clear association or relationships between concepts and/or analytical conclusions. A visual display of the theoretical framework is available to ease and conceptualize relationships

Reproducibility (the extent to which documentation, expertise, tools and templates are available and accessible so humanitarian workers can use or implement the framework in a systematic and rigorous way):

- AF has at least one public guidance document available, detailing concepts, methodology, tools, etc.
- AF is supported by a detailed list of information needs/indicators and sources
- AF is accompanied with tools and templates (database, questionnaire, templates, thresholds, severity scales, etc.) allowing its use or adaptation at the field level
- AF is supported by at least one official training/certification package
- At least one external review on the use and value of the AF is publicly available

Evidence of use (the degree to which the framework and its outcomes are being used in the humanitarian sector):

- AF has been used at least in 5 different humanitarian crises
- AF has been used/adapted at field level in the last 6 months
- AF is re-used/mentioned in articles, guidance's, academic papers, assessment report, articles, etc.
- A dedicated specialist/community of practice currently exists to roll out the framework and deploy in emergencies
- At least one official communication/website is available to promote the AF

Those 20 characteristics are used to form a simple theoretical framework allowing to focus on and identify interesting features of the 39 Frameworks. Criteria used in this mapping focuses on establishing the degree of success the frameworks encountered in the humanitarian world, and subsequently, of interest the joint inter sectoral analysis group should give to a particular initiative. The chart below is the visual representation of the theoretical framework. The result of the mapping is available next page.



In addition to the review, a specific research was made regarding indices or meta-review of composite measures. Composite measures (e.g. risk, resilience, vulnerability) are interesting for our purpose and objectives as representing a deliberate attempt and effort to link and operationalize theoretical and conceptual framework. Designing an index implies that specific attention is given to the choice of dimensions and sub-dimensions that form the index, as well as their measurement. They are accompanied with a list of indicators and sub-indicators, and gathering/classifying them provides with an overview of metrics commonly available or chosen to measure concepts.

A meta-review of risk, resilience and vulnerability indices from Benjamin Beccari in March 2016¹ was used to map dimensions and sub-dimensions of 56 composite measures, as well as the indicators of more than a hundred of them. The raw data, generously shared by Benjamin Beccari, provides with a unique opportunity to map existing indicators and link them to upper level dimensions. Indicators and dimensions/sub dimensions are stored in an excel spreadsheet available to the Joint inter-sectoral analysis group.

Limitations of the Review

With 39 frameworks included, this review is far from being exhaustive. However, we believe that the main frameworks of interests have been selected and that the selection is more than good enough to provide with a lay of the land of existing frameworks, concepts and approaches relevant for consideration by the Joint inter-sector analysis group. Other frameworks not represented in this review offer only slight variations to the ones already included and would not bring added-value to the findings, apart from ensuring equal representation of agencies framework.

The framework profiles have unequal structures, mostly due to the amount of information publicly available (or not) for each selected framework and the existence of external reviews. Establishing strengths or weaknesses of each framework proved difficult and was not systematically done.

It was challenging to go deep into the analysis of the framework's indicators without specific guidance from the joint intersectoral analysis group on the objective or function of the future analytical framework. One task of the ToR was to identify and highlight relevant indicators and severity thresholds. We believe this work should come after discussion, agreement and consensus from the Joint inter sectoral analysis group on the function and objective of the framework, as well as decisions on levels and typology of humanitarian outcomes that the framework will take into consideration. We focus in this document on process recommendations for the design of the framework. Recommendations on severity estimates draw heavily on the work from Aldo Benini on severity measures (2016)².

Due to the particular timeframe of the review (July-August), consultation couldn't happen with framework's custodians, at least to the extent required by the ToRs.

The following persons have been interviewed for the review:

- OECD, Hugh Macleman
- UNOCHA, Andrew thow
- IFRC, Bruno Haghebaert
- ICRC, Lauren Herby
- JIPS, Assanke Koedan
- PhD, Benjamin Beccari
- IOM, Daunia Pavone
- OHCHR, Wilhelmina Welsch
- OCHA, Agnes Dhur

¹ Beccari B. A Comparative Analysis of Disaster Risk, Vulnerability and Resilience Composite Indicators. PLOS Currents Disasters. 2016 Mar 14 . Edition 1. doi: 10.1371/currents.dis.453df025e34b682e9737f95070f9b970.

² Benini, Aldo (2016). Severity measures in humanitarian needs assessments - Purpose, measurement, integration. Technical note. Geneva, ACAPS.

Main Findings

Comparison matrix of 39 analytical frameworks (see methodology and definitions in Box 3), sorted by order of relevance

A comparison matrix of 39 Analytical Frameworks - August 2017

Available
Not available
Unknown

A comparison matrix of 39 Analytical Frameworks - August 2017				Relevance					Analytical Value				Reproducibility				Evidence of use						
				Developed for use in Hum setting	Multi sectoral (>3 sectors)	Adapted for multi stakeholders settings	Used in Hum sector > 3 years	Used/promoted > 3 organisations	Allow for ranking and rating (multi dimensional)	Include meta and micro concepts	Covers at least 3 of analytical levels	Include guidance on uncertainty/incomplete data	Display relationships between concepts and conclusions	>= 1 public guidance available	Supported by detailed list of info needs	Supported with tools and templates	Supported by >= 1 official training/certification package	>=1 independent review on use/value of the framework	Used >= 5 times in a crisis country;	Recent use of the tool (< 6 months)	Mentioned in >= 1 articles or guidance	Dedicated specialist/community of practice	Communication/website, introductory documents

39 Analytical frameworks are compared in the above matrix, organized in descending order from very relevant for consideration by the JIAG to less relevant. Some information was difficult to ascertain, such as the recent use of the AF in the field or the number of crises the AF has been used in.

The age of the frameworks varies from 1948 (Maslow's pyramid) to a few months old (Draft Basic Needs and Response Analysis Toolkit, Cash working group, June 2017). A notable increase in the number of frameworks produced is observed since 2012, likely due to the increased attention of agencies and organisations on analysis rather than data collection. This evolution follows trends in social research (four books on qualitative analysis were published between 2013 and 2016 and dedicate special chapters to the design and importance of analytical frameworks).

Generally, the most relevant frameworks are those:

- Systematically providing ranking and rating procedures, therefore useful for decision making and policy decisions,
- Having a strong community of practice and expert base for deployment and facilitation,
- Dedicated leadership (including buy-in at the government level) and receiving regular funding for implementation and use,
- Frequently used at the field level, having a global reach and acceptance.

Particularly interesting for consideration by the JIAG are the [Integrated Phase Classification](#), the [OECD Resilience Framework](#), the [Household Economy Approach](#), the [Economic Security Framework](#) and the [INFORM](#) initiatives. The following page display the theoretical framework of the Integrated Phase Classification, the only reviewed initiative where the 20 assessed characteristics are present.

The frameworks with less relevant characteristics are those "stuck" at the academic or experimental level and never operationalized/piloted and/or lacking specific tools, templates or communities of practices (the second or third often being a direct consequence of the first). They contributed to the debate on concepts and brought new ideas or angles to the methodological discussion but are not applied, or if so, only for small geographic areas. This is particularly the case for some of the vulnerability and resilience frameworks presented in this document. Overall, the weakest characteristics of the reviewed frameworks are:

- The lack of documentation or procedure to deal with uncertainty (only 5 out of 39 include some),
- The lack of training package (only 12/39 have one),
- The lack of guidance on how to do the analysis (only 12/39 include guidance going beyond description,

explanation or interpretation and offer forward looking guidance),

- The lack of guidance on how to perform analysis in group setting. Only 14 of the frameworks offer some recommendations or procedures on collaborative analysis.
- The scarce guidance on how to estimate severity levels. 16 reviewed frameworks only provide guidance on severity.

The degree of accompanying or support guidance varies considerably from one framework to another.

Some have a large panel of tools, templates and guidance available, e.g. the [Integrated Phase Classification](#) or the [OECD Resilience Framework](#), while others have virtually none, e.g. [Livelihood Resilience Framework](#).

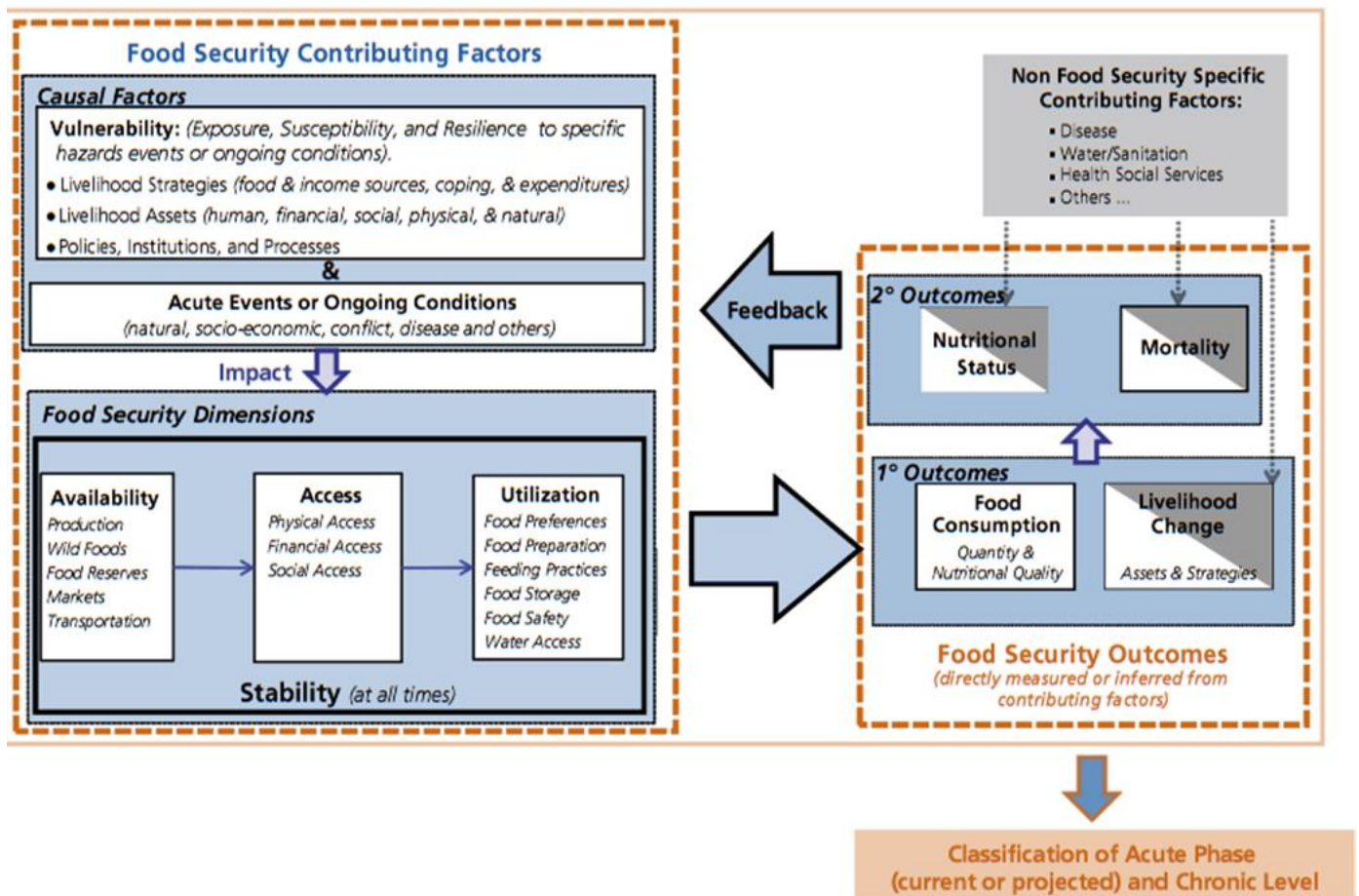
The review highlight significant confusion, overlap and missed opportunities around definition and use of basic concepts.

For instance, definitions of *vulnerability* differ so widely that the term is useless in a humanitarian context without further specification. Recent so called "vulnerability assessments" in Ukraine, Nigeria or Jordan misuse the concept, conflate its meaning with *deprivation of basic needs*, poorly specify the vulnerable system, the hazard people are exposed to, the attributes at risk from this exposure and the time period considered.

The issue goes beyond terminology and definitions. The hybridization of concepts from different traditions or school of thoughts contributes to considerable confusion regarding appropriate and clear conceptualizations. In the climate change context for instance, the most prominent interpretations of vulnerability are *contextual vulnerability* and *outcome vulnerability*. These interpretations of vulnerability are based on different definitions and conceptual frameworks, they produce different rankings, and they suggest different strategies for reducing vulnerability.

Another finding is the lack of connection between school of thoughts.

Some measurement traditions have evolved in parallel and simply never connected or learned from each other. For instance, *poverty measurement* in the last decades evolved considerably and moved away from the welfarist concept (poverty defined as level of income) to focus on basic needs and capabilities. In its current conceptualization, *poverty* presents disturbing and unexploited similarities with the measurement of *unmet needs* so familiar to humanitarian workers. Other concepts, developed in circles closer from the humanitarian world, are better integrated into humanitarian thinking and methodologies, such as the [OECD](#), [IFRC](#) and [FAO resilience frameworks](#), or [the livelihood frameworks](#).



Our criticism over misuse of concepts and definitions is not simply of academic concern. Socrates posited a long time ago that *the beginning of wisdom is the definition of terms*. Designing a robust analytical framework requires clarity over its primary purpose and the associated concepts. Given the diversity of decision makers and contexts which require situation analysis, the design of an analytical framework is as much political as a scientific task. The underlying normative, ethical or philosophical preferences/assumptions behind the framework **MUST** be specified. This requires extreme attention to definitions, concepts and their interrelation or intersection. This also entails being transparent regarding ontological, epistemological, and methodological stances. According to Pat Bazeley (2013), *analysis is laid on the foundation of our understanding about how the world works, what makes it what it is (ontology); and how we, as human beings, can understand and learn about that world and especially about the world of people (epistemology)*.

The review highlight a constellation of frameworks available for situation analysis, each providing with a particular piece of the puzzle. Each reviewed framework was built with a purpose in mind and comes with a unique set of theoretical, conceptual or measurement model, often attached to a particular school of thought or definitions. We examined how the different concepts intersect conceptually and the possible connections between the different framework

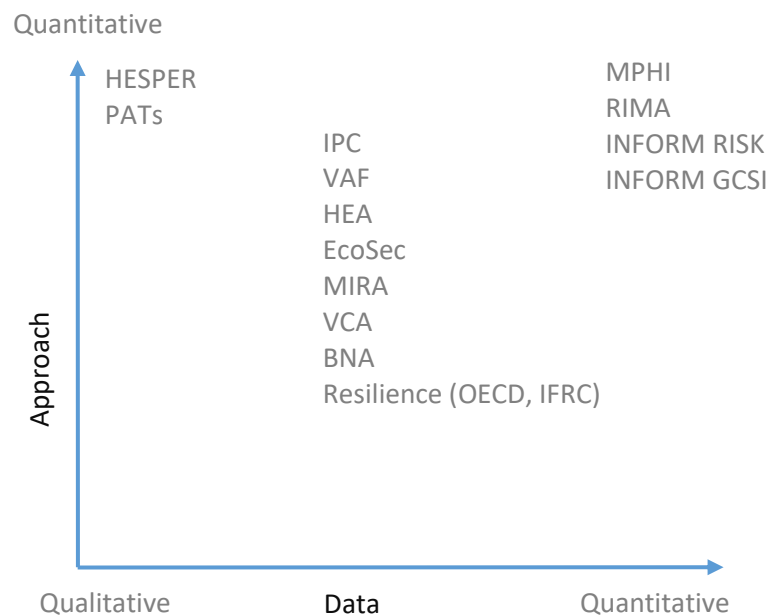
families and their value for situation analysis. We propose a classification of frameworks in the diagram next page, designed to orient the readers to the ones the most relevant, based on the type of analysis and focus:

- Analysis of the pre-crisis conditions, vulnerabilities to an existing hazard and aggravating factors. [Vulnerability](#), [livelihoods](#) and [resilience](#) frameworks are particularly relevant to this understanding and analysis.
- Analysis of the event or shock itself (conflict, earthquake, tropical cyclone, etc.), its magnitude or force (e.g. Modified Mercalli Intensity Scale for earthquake, Conflict barometer classification for conflict, Saffir-Simpson scale for tropical cyclone, etc.). Those frameworks were not specifically reviewed, but readers should know that a large body of literature exist for each type of event.
- Analysis of the impact of the event or shock. Impact is defined in this document as the primary effect(s) of a shock (houses destroyed, crop losses, number of people displaced, etc.). Different foci exist, depending if we want to understand impact on systems (markets, rule of law, governance, water networks, public infrastructure, etc.) or people (displacement, demography, income, assets, livelihoods, etc.). The scope and scale of impact is highly dependent on the pre-existing vulnerability to the shock and the capacity/resilience of the system and/or the population to cope with the effects of the shock. Here,

some segments of the [MIRA](#), [displacement](#), [Integrated Phase Classification](#) and [livelihood](#) frameworks are relevant for consideration.

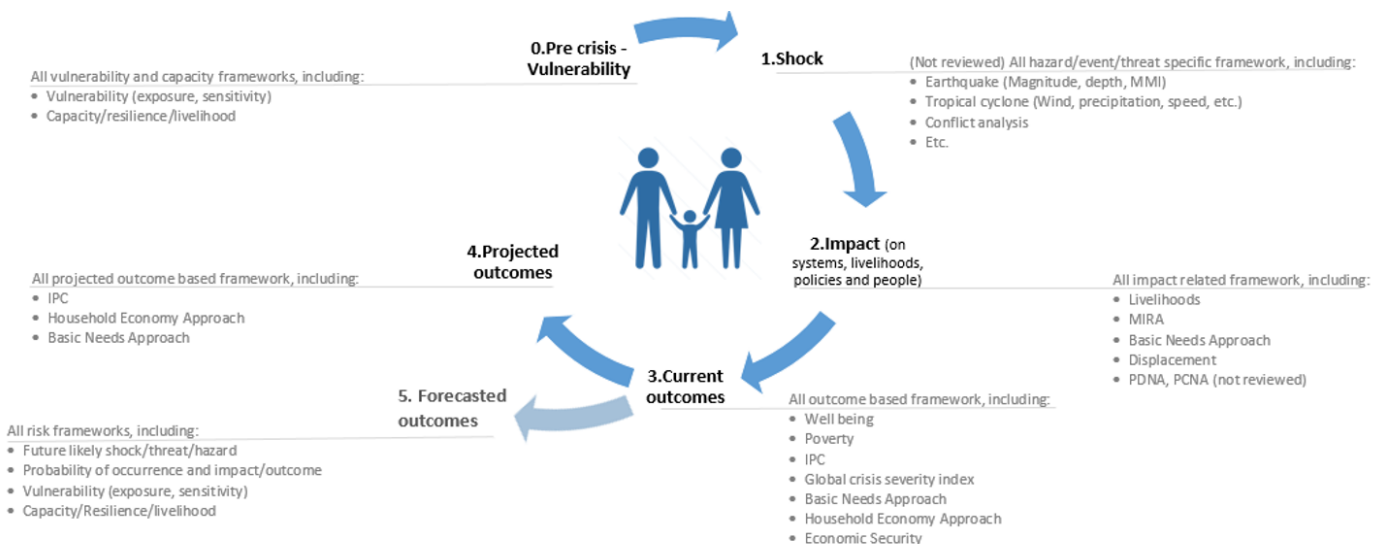
- Analysis of the current outcomes resulting directly from the event's impact or from a previous situation. We refer to "outcome" as secondary/tertiary consequences of the disaster, such as reduced purchase power, change in consumption or health seeking behaviour, physical or mental health, etc. Distinction can be made between chronic or newer outcomes. Several layers of outcomes can be distinguished. For instance, the [Integrated Phase Classification](#) differentiates primary and secondary outcomes, [ICRC Economic Security framework](#) has three levels: short, medium and long term. ACAPS has two levels (first level focusing on access, availability, use, awareness and quality, and the second focusing exclusively on physical and mental outcomes). In addition to the initiatives already mentioned, we add the [MIRA](#), [poverty](#), [Household Economy Approach](#) and the [wellbeing](#) frameworks as relevant for consideration.
- Analysis of the anticipated outcomes, projected or forecasted, so as to ensure analysis covers the period during which programmes will take place. This anticipative analysis entails both projection (how outcomes will evolve if no additional assistance is provided, taking into account upcoming and certain events such as winter, lean season, etc.) and forecasting (what might happen if specific risks or scenario unfold, including new or aggravated impact or outcomes). To be noted that projection and forecasting can apply to future or potential shocks, impact or outcomes equally. A very limited number of frameworks reviewed detail procedures for anticipation. The [Integrated Phase Classification](#) and the [INFORM Risk framework](#) are the only ones offering "real" guidance on this field. To be noted that risk involves elements of [vulnerability](#), [resilience](#) and [livelihoods](#) frameworks.

Qualitative and quantitative data and approaches are both used to populate frameworks and process data. **However, relevant frameworks for humanitarian settings all adopted a mixed approach**, likely adapting to the challenges and difficulties to obtain timely data during crises. Indicators used to populate the frameworks are highly dependent on the function and purpose of each. In the absence of clear indications regarding the purpose of the future framework, we limit our observations to the type of data and approaches commonly used. We group the most relevant frameworks around two axes, one based on the type of approach, and the other based on the type of data. Only abbreviations of the AF are represented in the graph.



From the visualization, we observe that the reviewed frameworks can be divided into three categories, depending on their reliance on quantitative data and methods (indices or composite measures such as [INFORM](#), [RIMA](#), [Multi-Dimensional Poverty Index](#), [INFORM](#)) or qualitative ones, e.g. [Hesper scale](#), [Poverty Assessment tools](#), etc. Some frameworks fall in a middle

Link between the different framework's families and relevance for situational analyses



category and use both approaches and data, such as the [Integrated Phase Classification](#), the [Vulnerability assessment framework from Jordan](#), the [Household economy Approach](#), the [MIRA](#), the [Vulnerability and Capacity Assessment](#), etc. The majority of AFs in this category are applied for humanitarian purposes and use mixed approaches and data obtained through secondary data review, surveys, field assessments, focus group discussions, expert judgements, etc.

Other common features can be derived from the review. The most relevant frameworks all:

1. Are “easily” developed from available data, secondary AND primary, qualitative AND quantitative;
2. Enable temporal and spatial comparisons;
3. Be feasibly applied at multiple scales (households, community, livelihood zones, admin levels, etc.); and
4. Possess subjective and objective elements.
5. Are transparent on limitations and information gaps

We focus here only on the last two points as the other ones are rather obvious and logical in a humanitarian setting. Objective vs subjective measures have been object of long controversies over the last decades. *Subjective* has come to represent things less meaningful, whereas *objective* has come to represent things important. Our point is not which measure provides with the most accurate results, but rather about what is feasible in humanitarian settings and under time pressure. Most of the data we collect at the early stages of an emergency is subjective. At later stages, more objective measures are performed, when resources and time are sufficient. Considering the current data landscape and the strong push for accountability and voicing the affected population, measurements should plan for both objective and subjective measures, and account for limitations inherent to both types (subjective measures, for instance, suffer from many systematic biases). [Wellbeing](#) and some [poverty](#) frameworks are particularly relevant for consideration when planning to insert subjective measures in an analytical framework.

In addition, information gaps are quite common in humanitarian crises. Relevant analytical frameworks provide with a way to measure the impact of uncertainty and sources of errors on the final conclusion. The [INFORM risk Index](#) and the [Integrated Phase Classification](#) both recommend transparency and honesty about uncertainty and offers tools for this. Other tools, e.g. [MIRA](#), mention the issue but don't offer practical recommendations or tools to address it.

Specific Findings

At this stage of the review, we take a step back and make the following observations on key requirements of an effective analysis framework for situation analysis:

- The *time* dimension is key to situational analysis and require conclusions to be dynamic. Richard Garfield (2012) summarized it as “*What can yesterday and today tell us about today and tomorrow?*”. The most relevant frameworks reviewed all support strategic thinking, are forward looking and use baseline information to compare the before and after. Some frameworks have a redundant applicability. Vulnerability, livelihoods and resilience/capacity frameworks can be used to support an understanding of the past, the present but also the future. Events or shocks create new vulnerabilities or aggravate existing ones, and this has influence for understanding the likely impact or outcomes of potential new events. This implies feedback loops and redundancies that need to be embedded in the framework and the supporting guidance.
- Impact and outcomes: One thing leads to another. As explained earlier, events have *immediate or direct impact(s)*, e.g. houses destroyed, displacement, which in turn create (negative) *outcomes*, e.g. cold at night, fear, etc. Both notions call for conceptual differentiation and an understanding of linkages, levels of consequences or association between causes and effects. The review shows that for each level, specific frameworks already exist or can be developed. We could see these as collapsible frameworks, or frameworks within the framework (similar to a Russian doll). Some are specifically about events or shocks, e.g. conflict frameworks, some apply specifically at the impact level e.g. [displacement](#), economic losses, etc. and some other at the outcome level, e.g. [wellbeing](#), [poverty](#), etc. The way we define outcomes depends entirely of what we are intending to measure. In the humanitarian sector, outcomes are generally measured in terms of [living standards](#), or the [degree to which \(basic\) needs are being fulfilled](#). Three practical questions, of direct interest for the JIAG and the design of an analytical framework for situation and needs analysis, emerge from this:
 - *What is a need?*
 - *Which needs should be considered in a humanitarian context?*
 - *By which underlying mechanism do needs interact, connect or cumulate to lead to humanitarian outcomes?*

- Knowing outcomes (type, number, relationships and underlying mechanisms) is insufficient. From this we obtain only a list of problems, and such list is only useful if we can prioritize issues and provide decision makers with the necessary information to design a proportionate, timely and appropriate response. Priority setting is a difficult undertaking. It requires an answer to three questions:
 - *What is the degree of negative consequences, suffering or harm for each outcome and overall (severity),*
 - *How acceptable are those outcomes? (thresholds based on different considerations, e.g. normative, ethical, moral, physiological, social, etc.),*
 - *What response to a given degree of severity and unacceptability is appropriate and proportionate?*³

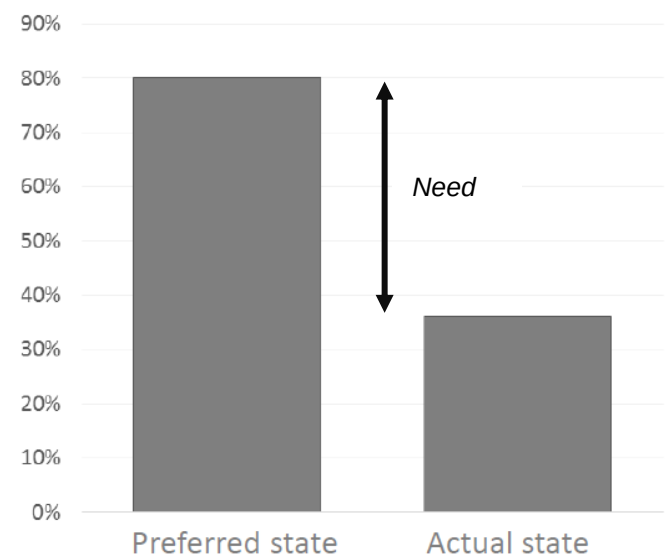
The difficulty with the last questions is dual: the lack of a universal list of severity thresholds applying across contexts and human beings, and the absence of agreement on a methodology for aggregating the severity of conditions across people, needs/sectors and geographic areas. In the reviewed frameworks, thresholds are very often qualitative ([Household Vulnerability index](#)), not prescriptive or open to adaptation ([Economic Security Framework](#)), sometimes so much that it defeats comparability between country initiatives.

In the following sections, we focus on these questions and use the results from the review to provide the JIAG with examples, lessons and recommendations. We discuss the concept of needs and detail some AFs who attempted to define their nature, number and types. We follow with a discussion on the severity concept and a classification of methodologies and initiatives for establishing severity levels, drawing heavily from the work of Aldo Benini on severity measures (2012-2017)

Defining “needs” in the humanitarian context. Humanitarians focus on ensuring minimum living standards are accessible to an affected population. Practically, this implies that some needs, necessary to survival and personal/societal development, are fulfilled or satisfied.

When a shock occurs, we generally observe disruption in or of access, quality, availability, awareness or use of goods and services. The satisfaction of needs is challenged and deprivation follows. This leads to *unmet needs*, the actual difference between a preferred state or condition, and the actual one.

Visual representation of the need concept, ACAPS training on coordinated needs assessments, 2013



A need is essentially a gap, or a deficiency. There is an important difference between need as *noun* and need as *verb*.

The *noun* need specifies a gap or discrepancy between a state of being at present and a different desired state. The need is neither the present nor the future state; it is the gap between them. In a sense, a need is like a problem that should be attended to or resolved. The statement *IDPs are thirsty and have less water on average than before they were displaced*, defines a need as a noun.

The *verb* need is not a state of being but instead a proposed act or solution to resolve the discrepancy identified. The statement *IDPs need more water and food* refer to solution strategies, without specifically stating a sense of the problem or the measured discrepancy to be resolved.

According to James Darcy (2003): *Very often in Needs Assessments, the two meanings of 'need' get mixed. Given the time and resource constraints frequently involved, 'assessment' sometimes becomes a needs-analysis and a response analysis process rolled into one. When this happens, assessment teams jump prematurely to solutions before identifying and prioritizing needs or identifying underlying problems. Good situation analysis separate problem analysis from response planning. Maintaining the distinction between these two elements is essential to maintaining objectivity, and to producing results that are comparable and can be aggregated. Making explicit the deficit, or need, permits the consideration of specific solutions, whereas failing to distinguish the two leaves confused the prioritization, magnitude, and extent of needs to be responded to.*

³ The last question on appropriate and proportionate type of response is not tackled in the review, as response analysis frameworks were discarded.

Unmet needs are identified during situation and needs analysis, where people have needs that are not being met or addressed adequately. When they are aware of such needs, the awareness is often expressed as demands. When people are not aware, the needs are not expressed or latent. Needs analysis seek to uncover and examine unmet needs, both recognized and latent.

Need is sometimes an absolute state (one needs oxygen within 3-4 minutes or dies), but usually a relative state. What is considered a need is influenced by one's values, prior experience, and assumptions. What is viewed as a need often changes over time as the meeting of a basic need permits the awareness of a less urgent need. As a relative and progressive term, need is without widely agreed boundaries. It must often be operationally defined in each usage, according to history and current context (Royce, 1982).

Need is a multidimensional concept. People have multiple concurrent needs, and therefore, defining a generic typology of humanitarian needs, i.e. what constitute the basis for living standards, is not easy. We detail hereafter three initiatives that are relevant to the practical identification and definition of needs, for consideration by the JIAG. They are the Maslow pyramid, the Basic Needs and response analysis toolkit and the Hesper Scale.

Maslow established in 1948 the well-known [Hierarchy of Needs](#), containing five stages:

- **Physiological needs:** These are the needs necessary to maintain life: oxygen, food, and water. These basic needs are required by all animals and are the primary focus of infants.
- **Safety needs:** When an individual's physiological needs are met, the focus typically shifts to safety needs, which may include health, freedom from war, and financial security.
- **Community and belonging:** If safety and physiological needs are met, a person will focus on the need for a community and love. These needs are typically met by friends, family, and romantic partners.
- **Esteem:** Esteem is necessary for self-actualization, and a person may work to achieve esteem once needs for love and a sense of belonging are met. Self-confidence and acceptance from others are important components of this need.
- **Self-actualization:** Self-actualization is the ability to meet one's true potential, and the necessary components of self-actualization vary from person to person. A scientist may be self-actualized when able to complete research in a chosen field. A father might be self-actualized when able to competently care for his children.

In this categorization, humanitarians focus mostly on the first two levels, physiological and safety needs.

In 2013, Maya Semrau published her thesis on the [Humanitarian Emergency Settings Perceived Needs Scale \(HESPER\) \(WHO, Kings college London, 2011\)](#).

The Scale is people centered and defines perceived needs as *needs which are felt or expressed by people themselves and are problem areas with which they would like help*.

26 items are being proposed in the scale:

1. Drinking water
2. Food
3. Place to live in
4. Toilets
5. Keeping clean
6. Clothes, shoes, bedding or blankets
7. Income or livelihood
8. Physical health
9. Health care
10. Distress
11. Safety
12. Education for your children
13. Care for family members
14. Support from others
15. Separation from family members
16. Being displaced from home
17. Information
18. The way aid is provided
19. Respect
20. Moving between places
21. Too much free time
22. Law and justice in the community
23. Safety or protection from violence for women in the community
24. Alcohol or drug use in the community
25. Mental illness in the community
26. Care for people in the community who are in their own

In this classification, needs relate both to the individual and to society. A need is a disposition of the individual that, if met, gratifies him as well as continues the fabric of society. If the need is left unmet for significant time, it impacts the individual (mostly negatively) and alter the fabric of society itself.

In 2017, the Cash Working group in Geneva mandated Okular-Analytics to develop the [Basic Needs and Response Analysis Framework & Toolkit](#). The guidance is still in draft version. The concept of basic needs refers to *the essential goods, utilities, services or resources required on a regular or seasonal basis by households for ensuring survival AND minimum living standards, without resorting to negative coping mechanisms or compromising their health, dignity and essential livelihood assets*.

This definition is adapted from the [Basic Needs Approach \(ILO, 1976\)](#), one of the most significant approaches to the measurement of absolute poverty in developing countries. It attempts to define the absolute minimum resources necessary for long-term physical well-being, usually in terms of consumption goods. The poverty line is then defined as the amount of income required to satisfy those needs.

The Basic Needs Approach (BNA) views poverty as “deprivation of consumption” (inadequate food, nutrition, clean water, education, health, etc.) and is often opposed to the capability approach (CA) in which poverty is seen as “deprivation of opportunities” related to lifestyles people value. When it is used as an input (consumption) based approach, the Basic Needs Approach fails to connect deprivation with people’s values, aspirations and the result (well-being). Focusing on consumption, the BNA aims to give the poor adequate access to some minimum benchmark of consumption; thus, assuring the poor of subsistence. The Capability Approach, on the other hand, focuses on capacity development of people rather than how much they consume. The [Basic Needs and Response Analysis Framework & Toolkit](#) and the tools developed consider both aspects of wellbeing: survival and development capacities. A review of basic needs literature, minimum expenditure baskets and living standards provided with an initial and comprehensive list of basic items that can be adapted at country level, through participative methods:

Category	Items commonly included
Food	Staple, vegetable, meat, milk, condiments, oil, sugar, salt, etc.
Potable water	Water, containers, treatment, etc.
Shelter	Rent, furniture’s, material, repair, etc.
Household items	Utensils, pots, mats, blanket, mosquito net, cooking set, etc.
Sanitation and hygiene	Clothing, washing, basic items (soap, toothbrush, pads, diapers, etc.)
Education	School fee, uniforms, shoes, stationaries, books, transport, etc.
Healthcare	Medicine, healthcare, delivery, baby kit, critical event, etc.
Energy	Cooking, lighting, charging, heating (kerosene, electricity, firewood, charcoal, etc.)
Transport	All except education (transport to work, health centre, markets, etc.)
Communication	Phone, credit, internet, etc.

One need often hide another. The most relevant analytical frameworks reviewed all present a conceptualization of the effects and consequences of a particular event, set or combination of events and the progression of outcomes, from drivers to aggravating/underlying factors and up to humanitarian outcome(s). Initiatives such as the [Integrated Phase classification](#), the [Basic Needs and Response Analysis](#)

[Toolkit](#), the [Economic Security Framework](#) or [MIRA](#) have all built-in cause/effect relationships in their frameworks.

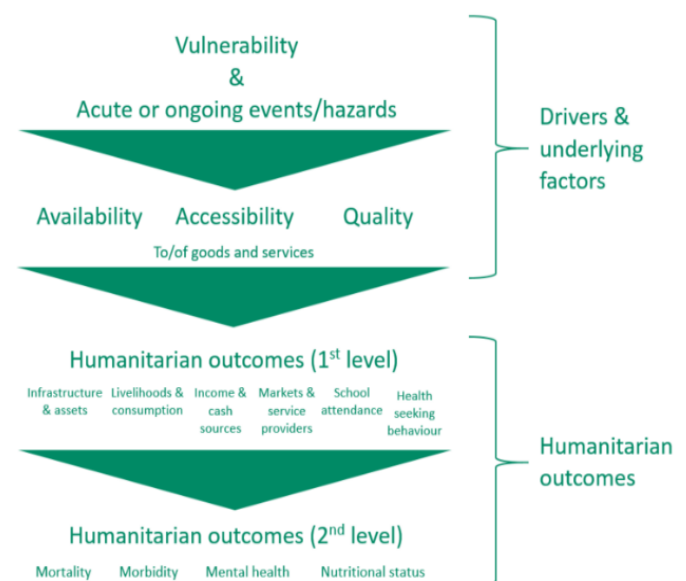
Modelling cause-effect relationships has several advantages.

- Identify the set of events or mechanisms that contribute directly or indirectly to humanitarian outcomes.
- Understand the drivers or causal mechanisms that contribute the most to unmet needs. For instance, increased food insecurity can be the result of lack of food on the markets and/or lack or insufficient income to purchase it.
- Separate symptoms from causes to allow the design of programs that are relevant and address the root cause(s) of the issue.
- When information is not available for one level, then inferences based on information available at a lower level can be used to draw assumptions or hypothesis.

Essentially, an effective theoretical framework should read as a problem tree, display levels and relationships between dimensions and provide with analytical outputs for each step.

The diagram below, extracted from the draft guidance on the [Basic Needs Analysis and Response Toolkit](#), is the most recent attempt of establishing a cause-effect diagram, and was used as a basis for their theoretical framework.

Sample cause-effect relationship diagram, Basic Needs Analysis and Response Toolkit, 2017, Cash Working Group, Draft.



The Draft Guidance proposes some definitions and a typology of underlying factors, based on the work from ACAPS (2013). The following is an extract from the guidance.

Underlying factors refer to the set of events or mechanisms that contribute directly or indirectly to humanitarian outcomes. For instance, increased food insecurity can result from a lack of food on the markets and/or a lack of sufficient income. Identifying underlying factors allow to design programs that tackle the root causes of the problem and not only their symptoms. A typology of underlying factors commonly influencing humanitarian outcomes is proposed in the diagram below and can be adapted at country level, namely the lack of availability, access or awareness of goods or services, or issues related to the quality or use of the services or the goods. Each of those categories have sub-categories. For instance, access constraints can be due to a physical problem (for example, the bridge is broken or the roads are flooded), an economic problem (for instance, loss of income or price inflation make difficult for households to access health services regularly) or safety issues, such as checkpoint or attacks on the way to school.

Typology of underlying factors, Basic Needs Analysis and Response Toolkit, 2017, Cash Working Group, Draft.



Definitions and example are further provided for each category:

- **Accessibility:** refers to the ability to access and benefit from services and goods to as many people as possible. It often has to do with the physical location of services, but can also be influenced by purchasing power or security. Those who do not have transportation means may not be able to travel some distance to receive services. Although the residents may know that the services are available and that they are eligible to receive them, lack of transportation, high fees or insecurity may prevent their accessing services. Other than physical location, accessibility issues can include inconvenient hours of operations, lack of staff or facilities to meet the needs of specific vulnerable groups (elderly, children), fee for services, eligibility for services based on income, age or geographic boundaries.

- **Availability:** refers to the physical presence of goods and services in the area of concern through all forms of domestic production, commercial imports and food aid. Availability of goods and services might be aggregated at the regional, national, district or community level.
- **Awareness:** The quality of being aware of the existence of goods and services. Perhaps the first consideration when looking at services in the community is the simple question “do the community know that service XYZ exists?”. If services exist but are not visible or known to residents, then the need may be for an information campaign rather than the creation of new services (see: communication, information).
- **Quality:** it refers to the degree of excellence of something, the degree of benefits one can enjoy when consuming a good or a service.
- **Usability/Utilization:** The extent to which a product (such as a device, service, or environment) can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use (see: practice, attitude, knowledge, belief). Example: food utilization refers to households’ use of the food to which they have access, and individuals’ ability to absorb nutrients.

We leave now the need and outcomes concepts to focus on the severity challenge.

Ranking and rating are mandatory features for the future analytical framework. The most relevant analytical frameworks reviewed were built to answer two questions:

- How severely [vulnerable, in need, poor, deprived, unhappy, etc.] is the affected population? This involves rating a situation by qualifying the degree of harm or negative consequences faced by the population considered.
- What/who/where is/are the most in need of [supply, assistance, services, etc.]? This involves ranking, meaning ordering groups, sectors or geographical areas based on the degree of attention to give them.

In the humanitarian field, the terms *ranking* and *rating* translate directly into *priority* and *severity*. *Severity* implies a measurement based on defined or agreed outcomes (the intensity/degree of something harmful, undesirable or unacceptable), while *priority* implies an order of preference. In other words, *priority* is a relative measure, while *severity* relies on anchors and absolute metrics. Pushing a bit further the sometimes-incestuous relationship between both concepts, a first priority expressed by the affected population could be classified as “of no concern” in a severity scale. This essentially means that without an indication of the severity, priorities fall short of informing on the significance of the problem and only reveal a relative degree of preference. One

other interesting point is that priorities can be derived easily from severity metrics, but severity can't be established only using priorities.

In a period of funding scarcity, growing number of people in need, push for “back to the basics” (e.g. basic needs approach), and increased requirements for transparency, *priority* as a relative concept does not suffice anymore and, even when applied appropriately and at cross sector level, is proving insufficient to satisfy or inform appropriately. To be useful, an analytical framework for situational analysis should support an understanding/estimation of the severity of conditions and outcomes faced by the affected population. Hence the need for more absolute and *outcome based measurement*.

The testing, use and application of both the *severity* and *priority* concepts have suffered significant limitations and challenges in the humanitarian sector, especially at cross-sector level, for both technical and political reasons.

If the technical feasibility of priority setting is established, documented and follows same principles within and between sectors, its political acceptability is significantly challenged at the cross-sector level. Priority setting across sectors is perceived as favouring one sector compared to some others, and “risk” skewing funding in one direction rather than another one. Thus, strategic and inter sectoral documents cautiously avoid cross-sector prioritization⁴, often under pressure of sector's representatives.

The use of the severity concept at the cross-sector level has for a long time been object of hot debates (e.g. Needs Assessment Task Force, humanitarian dashboard, MIRA, etc.), to the point where cross-sector severity became “topic-which-must-not-be-named” in the highest humanitarian spheres. The argument mirror the passionate debate between lifesaving and non-life saving sectors, the unfortunate fact that not all sectors fall in the same categories of the Maslow's pyramid and the fear that lifesaving sectors would receive more attention and funding than “non-life saving” ones. As a result, any recent attempt to discuss, agree or solve the cross-sector severity challenge at global level failed rather lamentably, suffered long and painful death (e.g. the humanitarian dashboard) or was heavily censored ([Humanitarian population figures guidance, 2016 IMWG](#)).

Beyond the political acceptability of severity measures, aggregating severity estimates from several needs areas or sectors is challenging. In the absence of global guidance, practices vary considerably from one operation to another⁵ and uncoordinated cross-sector severity initiatives started proliferating a few years ago (UC ranking system in Pakistan 2008, Syria SINA 2013, Whole of Syria Severity Scales 2016-2017, OCHA prioritisation tools 2013-2017, [INFORM Global Crisis Severity Index 2017](#), [Score card vulnerability assessment UNHCR Jordan 2015](#), etc.).

Technically, defining severity criteria and thresholds is a difficult (however not impossible) undertaking. It implies deciding on grades of severity (classification) and which observed conditions (or combination of) qualify for a given interval of acceptability (thresholds), based on how acceptable those conditions are. Thresholds can be derived from historical data (last 5-year average, etc.), international or national standards (e.g. SPHERE, Cluster guidance), participative methods (e.g. focus group discussion or expert panel), the data itself (cut-off points established based on the data). Normative, ethical, cultural, social and physiological considerations can intervene in the definitions of thresholds. Working with severity estimates also requires methods and recommendations for measuring/aggregating the intensity or degree of negative outcomes at different levels (population group, geographical area, event, etc.).

In the absence of empirical validation, severity classifications and thresholds often require a strong consultation and consensus among actors before to become used and accepted. In the next paragraphs, we focus on decrypting the common ways severity of unmet needs is measured in the reviewed frameworks.

Aldo Benini in his note on *Severity measures in humanitarian needs assessments (2016)*⁶ reports that severity measures in the humanitarian domain fall broadly into two categories:

1. Measures directly related to humanitarian sectors (food security, WASH, protection, etc.) for the most part come in the form of rating scales (HNO Whole of Syria 2016, 2017). The benefits of this approach are its “relative” simplicity (each sector needs to define a severity scale), its easy implementation (results can be determined through secondary data review and complemented through field data collection) and operational value (allow for profiling of geographical area). The limitations are several. People in Need numbers per sector are often missing or all-encompassing, and the methodology for aggregation

⁴ A quick research brought this document, as a point in case. JORDAN REFUGEE RESPONSE INTER-SECTOR WORKING GROUP Priorities for the Jordan Humanitarian Fund Call for Proposals August 2016 available at <http://reliefweb.int/report/jordan/jordan-refugee-response-inter-sector-working-group-priorities-jordan-humanitarian-0>

⁵ 2016 ACAPS Severity measures in humanitarian needs assessment, purpose, measurement, integration.

https://www.acaps.org/sites/acaps/files/resources/files/acaps_technical_note_severity_measures_aug_2016_0.pdf

⁶ Benini, Aldo (2016). Severity measures in humanitarian needs assessments - Purpose, measurement, integration. Technical note [8 August 2016]. Geneva, (ACAPS).

across several sectors is not commonly agreed. In addition, since sectors define their number and types of outcomes differently, they are often not comparable. Several of the adaptation of the [MIRA framework](#) follow this approach. We also find a detailed description of this method in the [Humanitarian population figures guidance, 2016 IMWG](#).

2. Measures not defined in terms of sectors result from a combination of indicators that cover several dimensions of the crisis. Common dimensions include vulnerability, intensity, exposure:

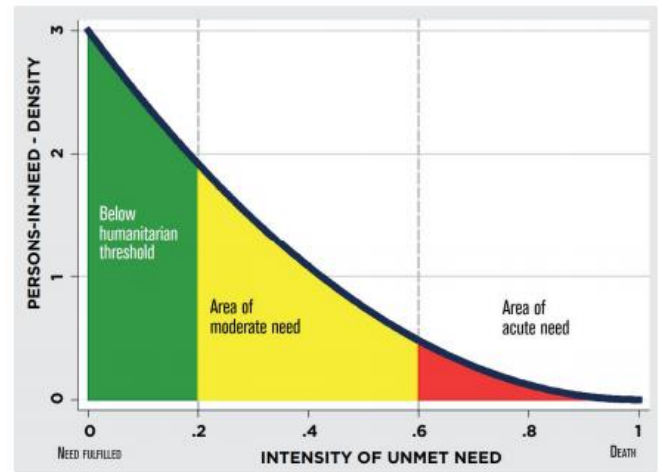
- Vulnerability is the degree to which an affected unit lets a given event type cause harm.
- Intensity is the strength or degree of harm.
- Exposure is scope and scale of affected units, expressed chiefly as population or area.

An example of this approach in the humanitarian domain is the Risk index from [INFORM](#) or the [Global Crisis Severity Index](#). Outside the humanitarian realm, [well-being](#) and sometimes [poverty frameworks](#) fit this category.

The main output of those two categories is a severity classification at the geographical level. In other word, in those models, severity is an attribute of the location, not affected people (Severity = intensity X size). This is not entirely satisfying for humanitarian programming purposes (although probably enough for geographical targeting) as the intensity of unmet needs generally varies across a given population and location.

More interesting are the population-distributed models, allowing to identify the number of people in a given severity class, rather than the total number of people living in a geographical area with a severity class X. Benini (2016) also highlighted existing models or initiatives offering this feature as the most promising. He indicates: *Plausibly, the intensity of unmet needs varies from “no need” to “death as a result of deprivation”. The distribution of the population over this range can take variable shapes. If the intensity has a metric (e.g., the probability of death attributed to a particular unmet need), it can be represented as the distribution of a continuous variable.*

Distribution of needs, Benini et al, 2016.



Only a few of the reviewed frameworks offer this feature: The [Integrated Phase Classification](#), the [Household Economy Approach](#), the [Basic Needs and Response Analysis Toolkit](#), the [Multi-Dimensional Poverty Index](#), the [Household Vulnerability Index](#) and the [Vulnerability assessment in Jordan](#).

The most advanced, documented and successful analytical framework using the population distributed model is without any doubt the [Integrated Phase Classification](#), due to its 5 points scale (more discriminatory power than 3 points scale and severity classifications), its large use in the humanitarian sector (available in more than 40 countries) and its applicability to the most challenging environments (rely on field data, expert judgement and secondary data).

It is important to note that for population distributed severity models, the severity of conditions is calculated at people's level (individual or household) and allow for aggregation or inferences (if the sampling is adequate) at the population group and/or geographical area level.

The next section focuses on practical recommendations and steps for the development of an inter sector analytical framework, based on the findings of the review.

Roadmap for developing an analytical framework

Despite recent improvements in assessment policy, guidance and practice, emergency responders still struggle to make sense of data in complex and dynamic situations. Large amounts of data are now generated but attention to their utilization lags behind. The link between problem and response analysis remains weak, and assessment information often remains unused and poorly documented in response plans. Recent declarations at the World Humanitarian Summit requested increased efforts in relation to coordinated assessments, but left humanitarian organisations to identify how further improvements could be achieved.

Reframing the analysis concept for humanitarian settings. Improving analysis in the humanitarian sector first requires defining what *analysis* means and how the sense making process differs in humanitarian settings, compared to other fields of expertise (statistics, data science, etc.). Ten parameters are proposed to frame the analysis challenge in humanitarian settings.

Parameters challenging analysis in humanitarian setting

- **Time pressure:** Emergencies' working environment is challenging and constraining to quality and credible analysis. Good analysis requires *time* and *focus* (Few, 2016). The EU recently spent four million Euros and three years of research on reducing the impact of cognitive biases on analysis to arrive the exact same conclusion: *Slow down* ([Recobia project, 2012](#)).
- **Cost of being wrong:** The wrong decision potentially leads to death or additional/avoidable suffering.
- **Complexity.** Environments are dynamic and often fast changing, calling for frequent updates and assessments
- **Costly decisions:** Analysis inform multibillion dollar decisions. 23.5 Billion dollars are requested in 2017 for 101 Million people in need ([Global Humanitarian Overview 2017](#)).
- **Need for transparency:** More than ten years ago, James Darcy ([According to needs, 2003](#)) wrote that the third purpose of assessments was to justify decisions (behind programming and influencing). This is more probably the first one, as the recent push for more *independent assessments* shows ([Grand Bargain 2016](#)).
- **Information overload:** Some countries are information rich (Philippines, etc.) and demand adapted skills, approaches and procedures to differentiate signal from noise.
- **Incomplete data:** Information gaps cripple analysis and require assumptions and their careful interpretation.
- **Ambiguous data:** Use of different definitions, standards and methodologies create inconsistencies. The more data, the more inconsistencies, and the more attention, time and resources required to make sense of it.
- **Collaboration and agreement:** The need to agree on results to ensure buy in and use of the data doesn't come without challenges, especially in a humanitarian system where collaborative analysis rules are virtually inexistent.
- **Trust issues:** Distrust among partners sometimes impedes information sharing and agreement. Despite policies and white papers recognizing the importance of data and evidence based decision making, humanitarian operations more often than not are politically rather than data driven.

Any initiative aiming at improving analytical capacity, methodology, framework, tool or procedure should be designed keeping those challenges in mind.

Principles for analytical framework design

1. **Speed:** The analytical framework should be simple and intuitive enough to be deployed and used quickly in crisis situation, with limited facilitation or coordination required. It should be designed to be used across different types of assessments (in 72 hours, two weeks, bi-annual, etc.)
2. **Pragmatic:** Specific arrangements should allow for integration of various type of data, qualitative or quantitative. Under time pressure, the framework could use only expert judgment and secondary data.
3. **Scalable:** Degree of details (e.g. admin 0, 1, 2, 3, humanitarian profiles level 1, 2, 3 and 4, etc.) should be built in to deploy simpler or more complex version of the analytical framework, with the possibility to use higher or deeper level categories without modifying the core structure of the framework. In a sense, the frameworks should be composed of several frameworks with varying degrees of details.
4. **Modular:** The framework should allow to add contextual or additional dimensions to a core module, depending on the context, objectives, time and resources (conflict vs sudden onset, current vs anticipative, conditions vs. capacities, etc.).
5. **Cost:** The analytical framework deployment, implementation or use should call for minimal additional expenses or support. The cost of the analytical infrastructure should link or be proportional to the appeals volume.
6. **Quality and credibility:** Rigorous and tested procedures to mitigate the impact of biases should be applied across the analytical process. The credibility of conclusions should be measured and rated to inform on the degree of uncertainty attached to important conclusions.
7. **Consensus:** Degree of consensus or dissent on final conclusions should be duly noted and communicated. Specific procedures for use in collaborative settings should be provided as to mitigate the impact of individual or group biases on the final conclusions.

Practical steps for the development of the analytical framework include:

Function, definitions and concepts

1. Identify the core function of the analytical framework and the key question(s) it will answer, decisions it will inform (e.g. programming, resource allocation, prioritization across groups, admin areas, sectors, etc.) as well as the programming phase for which it will be used (lifesaving, re-establishing access to basic services, early recovery, etc.). If easier, plan for a modular approach, e.g. one framework for emergency response and one iteration for early recovery, etc. Summarize the objective of the framework with a catchy sentence. For instance, the [INFORM risk index](#) is *the probability that a country will require additional assistance in the next 6 months*. [MIRA](#) identifies *current and forecasted priority needs*, etc.
2. Clearly state the philosophical, normative or ethical stances or values system supporting the framework and their historical background (e.g. basic needs and

capability approaches, right, needs or risk based, minimum living standards, etc.). At a minimum, the framework should be *needs* and *risk* based to fit information requirements for strategic thinking.

3. Cautiously and systematically define concepts (e.g. needs, vulnerability, risks, impact, humanitarian outcomes, etc.) and how they intersect or link analytically. Ensure consistency between definitions to avoid conceptual overlapping and confusion. Make sure definitions are internally consistent, then check externally with existing literature and school of thoughts. Make sure conceptual differences with existing literature are justified and explained.

Getting started with the theoretical framework

4. Select and review the theoretical frameworks displaying cause-effect relationships and rebuild the chain using differentiated levels for both *Impact* and *Outcomes* categories. Relevant frameworks to review are [MIRA](#), [Integrated Phase Classification](#), [Basic Needs Approach \(Cash Working Group, Draft\)](#), [Economic Security Framework \(ICRC\)](#). This will provide with a skeleton for the theoretical framework, and help define underlying mechanisms, humanitarian outcomes, and their respective levels.
5. Build impact and outcomes levels so one can be used as a proxy to the next level outcome if information is unavailable (see [Integrated Phase Classification](#), [Basic Needs and Response Analysis Toolkit](#) and [Economic Security Frameworks](#) for reference).
6. Once done, rearrange the framework as to highlight analytical levels (Description, Explanation, Interpretation, Anticipation) and analytical outputs (Humanitarian profile, crisis severity, humanitarian constraints, underlying factors, etc.). For an example see the [MIRA framework UNICEF](#) 2015.
7. Test the scalability (the ability of the different dimensions or pillars to collapse into higher or lower level dimensions) and modularity (the ability of the framework to accommodate or plugin additional modules such as a particular organisation capacity, future risks, new programming phase etc.). The [INFORM Risk index](#) and [Global Crisis Severity Index](#) accommodate this last feature.
8. Stay “category-of-analysis” neutral and universal. A category of analysis is the level at which you will be able to breakdown your framework, e.g. for displaced vs. not displaced, urban vs rural, wash vs health, conflict vs sudden onset, male vs female, etc. Refrain inserting those elements in the framework, as the framework should be used at each category level. Avoid mentioning “sectors” at this stage. Refer rather to cross concepts such as damages, losses, assets, livelihoods, demography, systems, goods, services, physical or mental conditions, etc. Design for universality and ensure your framework can be applied at any group, sector or geographical area level. [MIRA](#) proposes standards categories of analysis and was built to avoid this pitfall.

Built-in severity focus

9. Before to start any work on the analytical framework, test appetite and support for built-in severity estimates in the analytical framework. Consider that in the current humanitarian landscape, creating a new analytical framework without tackling *severity* is rather meaningless (the [MIRA](#) is already doing a decent job at this).
10. Severity is a “project within the project”. Establish a specific technical working group in charge of the development of the severity model and ensure technical/expert consultation for thresholds and classification. Time bound the project so experts don’t have the time to rotate. Partner with universities and scientific bodies to support the project, e.g. Karolinska Institutet, Joint Research Centre. Link with the INFORM sub-group initiative on [Global Crisis Severity Index](#).
11. Build on existing frameworks and agreed methodology and benefit from previous initiatives, testing or academic/scientific validation. [Integrated Phase Classification](#) is the most recognized population distributed severity model in use in the humanitarian sector. Look also into [Multi-Dimensional Poverty](#), result of hundred years of debates, consultation, testing and who benefitted from the involvement of several Nobel prizes.
12. Design severity measures so they compare across crises types, e.g. sudden-onset, protracted, etc. Severity of unmet needs should be measured the same way and based on same indicators type, regardless of the setting, e.g. rural/urban, type of crises or population group.
13. Plan for all data situations, when the needed information is primarily available from sectors or from not sector specific data.
14. Design the severity scales and select thresholds for different levels of aggregation: households, community, affected group and geographical area. Two scales are essentially required, one for classifying severity at the population group level, and one at the geographical area level. Make sure boundaries for the scale are non-overlapping and precise as to avoid excessive adaptation. Avoid the easy way out and proposing only an example. Method and rigor are required, and giving too much choice or room for adaptation is dangerous and not conducive of any comparability. Consider expanding on the [Integrated Phase Classification](#) reference tables for ease of future integration.
15. Opt for a collapsible scale, e.g. a 7 points scale that can collapse into a 5 and 3 points scale when and if necessary, offering established and comparable intervals with existing initiatives ([IPC](#), [Multi-dimensional Poverty Index](#), [Household Economy Approach](#), sector severity scales, etc.). Think “response analysis” and design severity classifications so they match response and programming phases.

Measurement model

16. Develop an analysis plan detailing a hierarchy of preferred indicators, from objective (count, registration, etc.) to subjective (expert opinion, population perception, etc.). Detail substitution, complementarity and aggregation procedures. Provide with most likely sources and data collection techniques for each information required.
17. Think your framework as a database and an index: each pillar and sub-pillar would receive a numeric value and processing would provide with an overall and single result, indicating crisis severity. Thinking “index” forces designers to account for different types of data but also to decide on and establish the relationships between pillars, sub-pillars and indicators (additive or multiplicative, etc.).
18. As much as possible, chose metrics available from existing and granular country datasets (DHS, MICS, Census), so as to ensure a baseline is available and comparability is possible over time.

Getting finished with the analytical framework

19. Peer review the theoretical framework. Compare analytical outputs with strategic documents templates and information needs (HNO, situation analysis, etc.) to assess the degree to which information needs are covered.
20. Test the comprehension of the framework when totally collapsed or expanded. You might end up with two versions of the theoretical framework, one for external communication (simple and intuitive) and one internal and more detailed for technical purposes and database design.
21. Pilot and test the use of the framework and the severity classification system (link with the GCCG and the INFORM sub-group on Global Crisis Severity Index initiatives) in several countries to pilot

methodology and more specifically scales across several crises types. During trials, run both indicator and sector based model and try to identify and discuss the reasons for discrepancies. Compare results with other existing country initiatives to test validity, e.g. priority index from Netherland Red Cross, if available. Refine the model if necessary.

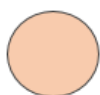
Analysis guidance and standards

22. The analytical framework MUST be accompanied with guidance, tools and templates. We recommend at a minimum an analytical workflow with accompanying procedures, tools and list of analytical outputs.
23. As mentioned earlier, analysis in humanitarian settings is challenging and unique (see list of ten parameters earlier in this section). Each context is different. The focus of the guidance must be on ensuring good enough, quality and credible analysis in humanitarian settings and implies a shift of attention from data quality to analysis quality. We recommend JIAG to develop analytical standards, providing end users with a rating of the overall process that led to the conclusions. Some criteria for judging the quality of a conclusion (ACAPS/CDC 2016) are represented in the graph below. Take inspiration from the only reviewed framework offering a minimum of practical analytical guidance, the [Integrated Phase Classification](#).
24. Develop simple ways to measure and communicate uncertainty to end user's. This goes beyond the treatment of missing values and implies considering the different ways identified or potential sources of errors impact the final conclusions (confidence levels or intervals, margin of errors, etc.).

Evaluating evidence.....

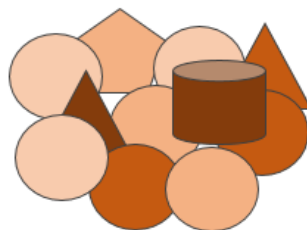
...and use of evidence

Evaluating one piece of evidence



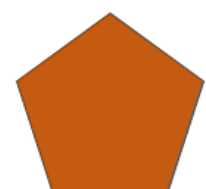
- Usability / fitness for use
- Objectivity (source reliability)
- Accuracy and validity (methods)

Evaluating a body of evidence



- Usability / fitness for use
- Objectivity (source reliability)
- Accuracy and validity (methods)
- Credibility (corroboration, plausibility)

Evaluating conclusions



- Strength of the knowledge base
- Number/importance of key assumptions used to fill info gaps
- Strength of the underlying logic (analytical technics uses)
- Degree of consensus among subject experts

Link with existing initiatives

25. Several existing initiatives are looking into similar or related topics. Opportunities for partnerships should be assessed with the following groups or initiatives. (This list is probably not exhaustive as it was drawn from memory):

- The Common Information Management Systems initiative is developing and currently looking into analytical frameworks, under the leadership of OHCHR.
- The Protection Information Management Initiative is starting a working group on analytical framework, under the leadership of DRC.
- The Basic Needs Approach from the Cash Working group is aiming at finalizing its draft guidance in October 2017.
- The Joint analysis project from the GCCG started in 2017 under the leadership of the Food Security cluster
- The INFORM sub group on Global Crisis Severity Index
- The Integrated Phase Classification
- The working groups working on the recommendations of the grand bargain on improving humanitarian assessments
- The CDC/ACAPS training and guidance on humanitarian analysis
- The ACAPS/JIPS training on collaborative analysis
- The CAIM training
- The Secretary General is currently looking into integrated analysis and just release a report on improving UN situational awareness⁷
- The DEEP platform that will (most likely) be used to populate the Global Crisis Severity Index
- The HDX data literacy pillar

The final consideration is around coordination and project management. The development of the Analytical Framework per se is difficult but not impossible. However, its piloting and validation will require additional funding, dedicated leadership, strong and stable technical expertise. The governance and funding model of [INFORM](#), [IPC](#) and the [OECD resilience initiative](#) are relevant for consideration by the group.

⁷ https://www.stimson.org/sites/default/files/file-attachments/UNSituationalAwareness_FINAL_Web.pdf

Annex 1 Analysis frameworks - Profiles

MIRA Frameworks

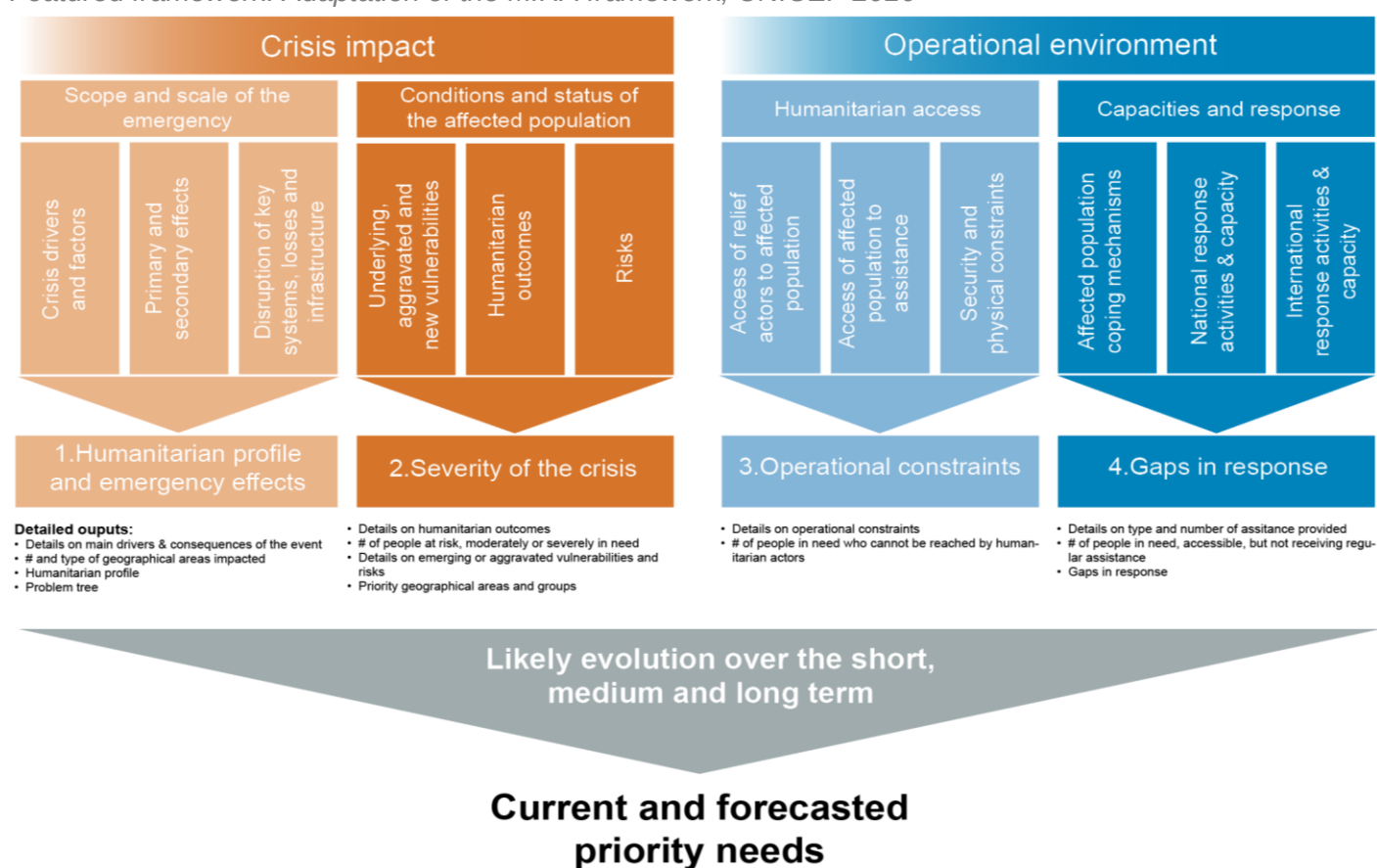
Date: 2012 - Now

By IASC NATF, IMWG

Inspiration: IRA 2006, Humanitarian Dashboard, Needs Analysis Framework, INFORM, RSAT

Reviewed initiatives: Coordinated Data Scramble, Data Entry and Exploration Platform, UNICEF multi-sector framework, Global Crisis severity index, Needs Analysis Framework

Featured framework: Adaptation of the MIRA framework, UNICEF 2016



Guidance & tools

[2012 Provisional Guidance](#)
[2015 Final Guidance](#)

Country use: 19

Colombia, Yemen, Tajikistan, Kirgizstan, CAR, Philippines, Haiti, Nepal, OpT, Ivory coast, Pakistan, Somalia, Kenya, Bangladesh, South Sudan, Syria, Libya, Ukraine, Burundi

Languages Russian, Spanish, English, French

Training packages 2

Overview. MIRA is commonly applied or referred to in the humanitarian sector and evidence of use or adaptation can be found in nearly 20 crisis countries. Developed by the Needs Assessment Task Force in 2012, the provisional version of the MIRA included a skeleton of theoretical framework but little details on how to practically use it. In 2015, the revision of the MIRA gave an opportunity to refocus the guidance on analysis rather than data collection and a theoretical framework was developed, supported by a comprehensive annex dedicated to the information required to fill the framework.

The main pillars and sub pillars of the MIRA theoretical framework focus on:

- *Scope and scale* of the emergency provides an understanding of the nature of the conflict or hazard and pre-existing vulnerabilities or underlying factors. Analytical outputs include the geographical areas affected (to the lowest possible administrative levels), the effects of the crisis on the availability and access to main goods and services, an estimate of the number of people affected, and the humanitarian profile (detailing whether the population is displaced, in which setting, etc.).
- *Conditions and status of the affected population* describes the humanitarian outcomes of the crisis and their severity. These include mortality rates, morbidity, nutritional status, food insecurity, psychological trauma, among others. New emerging vulnerabilities, threats, or risks are identified in order to forecast and anticipate how the crisis might unfold in the coming months. Analytical outputs include estimates of people in need per sector and the severity of conditions (i.e., people at risk, moderately or severely in need).
- *Humanitarian access* describes the ability to access people in need and the ability of people in need to access services provided by the humanitarian community. Both physical and security issues are included. Analytical outputs include an analysis of access constraints and an estimate of the number of people in need who don't have regular access to humanitarian assistance.
- *Capacities and response* looks at the human, material, and financial resources available for the response. It describes the coping mechanisms of the affected population as well as the response being mounted by the humanitarian community and the national authorities. Analytical outputs include resource and response gaps.

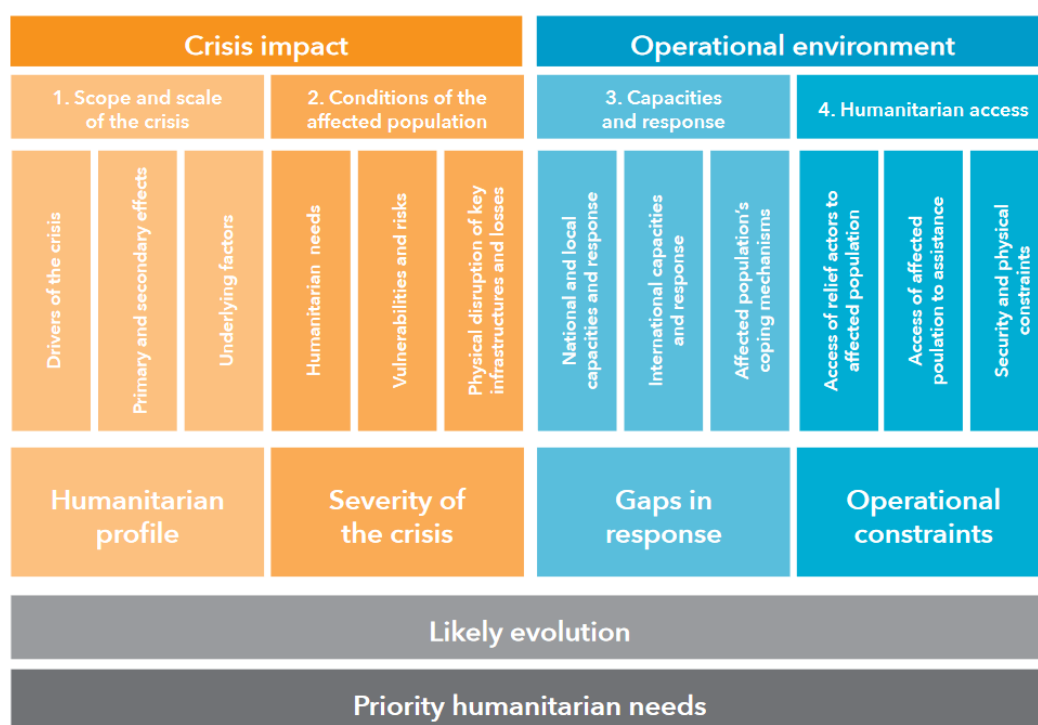
The analytical outputs for each pillar of the framework should provide an overview of the current situation, how it differs from the pre-crisis situation, and its likely evolution in the coming months. As a result, it enables identification of critical response gaps and current or forecasted priority needs. Information gaps that affect confidence in the final results should be noted and communicated.

Since 2012, the MIRA theoretical and conceptual framework were refined, linking the pillars with humanitarian population figures and adapting/improving especially the pillar dedicated to the conditions of the affected population. Despite improvements, work remains to be done to fully operationalize the MIRA framework, especially in relation to the measurement of the severity of conditions, the computation or forecast data and the aggregation of severity measures/estimates across sectors and in terms of standard field data collection forms.

Over the years, various initiatives have built on the MIRA framework and tried to use it as a reference for data collection and analysis. Five particularly have been selected for the review (in addition to the official MIRA guidance), the coordinated data scramble, the Data Entry and Exploration Platform (DEEP), the UNICEF multi sector analysis framework, the Global Severity Index and the Needs Analysis Framework.

The MIRA Guidance (2012-2015, IASC). Despite mitigated successes, the MIRA remains the most promoted or used

MIRA Framework, 2015



assessment guidance at the IASC level for sudden onset disasters. Often used but rarely successful, several reviews (Haiyan 2013, Washi 2011) and experts highlighted shortcomings in the application of the approach, such as the lack of applicability in conflict settings, the lack of tools or standard questionnaires and the absence of guidance on how to process data and derive severity or priorities across sectoral data. No direct criticism was found on the framework itself, its components or logical structure. Draft guidance to adapt MIRA to urban and conflict settings were

drafted in 2016 but were never published.

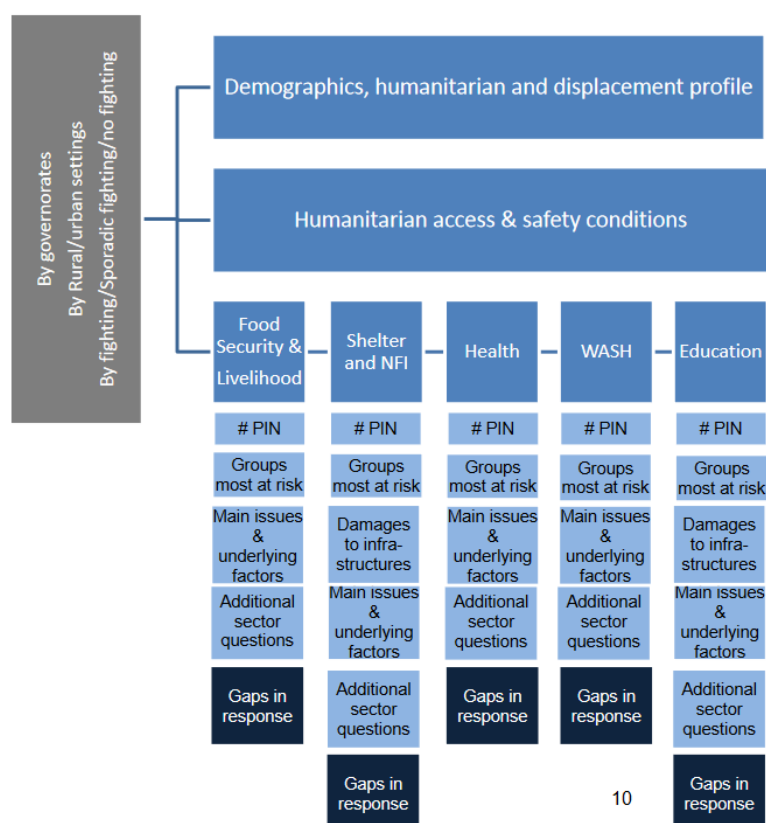
The MIRA ecosystem is supported by numerous tools, templates (HNOs, Situation Analysis, Humanitarian Dashboard) and supporting documentation on data collection (both primary and Secondary, see Annex 2 of the MIRA manual 2015). However, little is available on how to analyse data collected using the MIRA framework, especially in relation to the pillar on conditions of the affected population. A toolbox for the MIRA was under development in 2015-2016 but never saw daylight. The guidance is available in 4 languages.

There is evidence of use of the MIRA approach in at least 19 countries and several country assessment preparedness initiatives are using the framework as a reference (Colombia, Tajikistan, Kirgizstan, etc.). Several training packages (CAIM or ACAPS) are entirely based on the MIRA approach. Several adaptations of the MIRA are found in conflict setting under the name MSNA (Multi Sectoral Needs Assessment) and were used in Ukraine, Syria or even Libya, with varying degree of success. Only the 2014 MSNA in Syria was found to explicitly refer and represent an analysis framework.

MSNA Analysis framework, Syria 2014

Categories of analysis
analysis steps

MSNA Framework



Reference documents

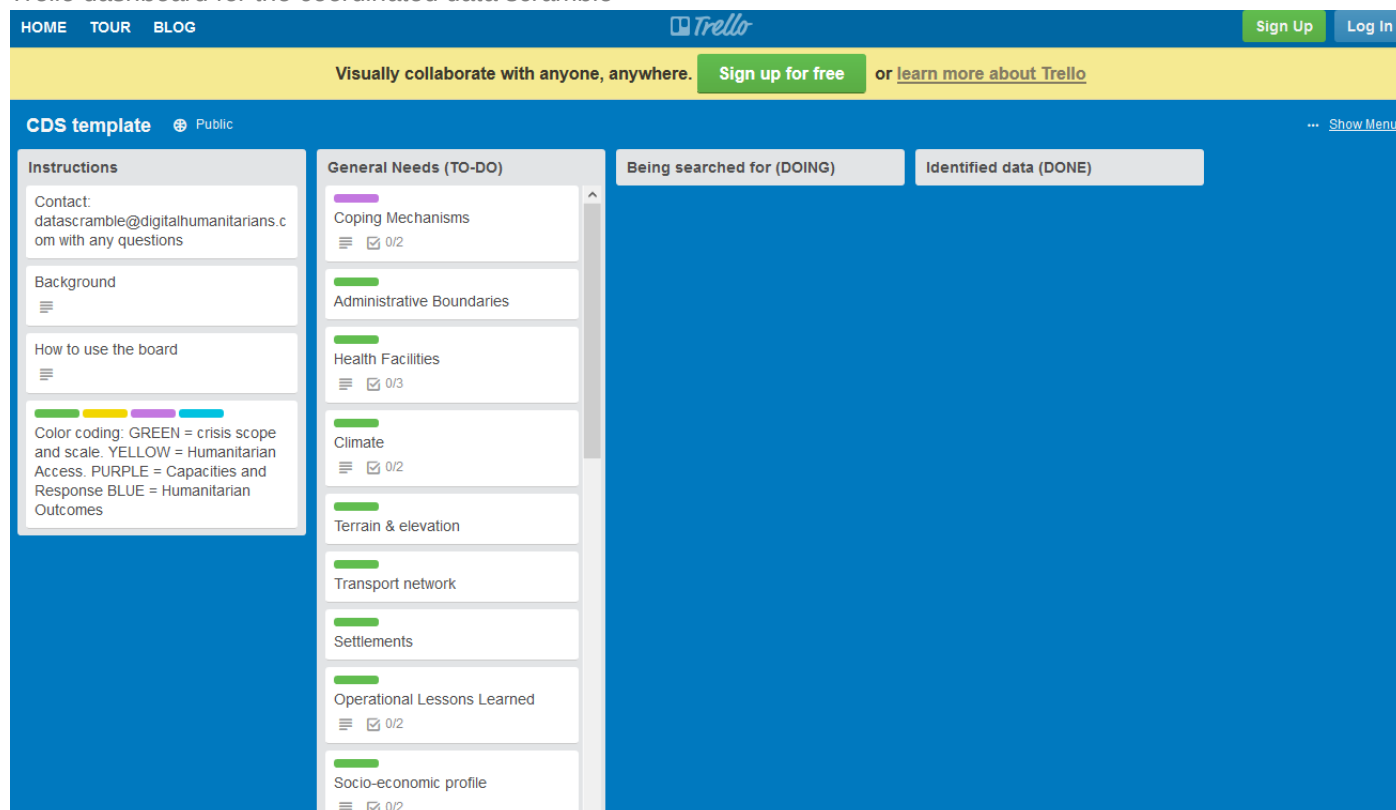
[MSNA 2014 Syria](#)

[MIRA Revision July 2015](#)

The Coordinated Data Scramble (2015, IMWG) is an initiative of the Information Management Working Group in 2016, helps to shape a common situational awareness through procedures designed to improve sharing of data during emergencies

The CDS involves pre-emergency planning and collaboration to help identify Who the decision makers are; What key questions decision makers need answers to; What data (& analytical techniques) are needed to help inform the answers to these questions; What tools and techniques can be used to monitor the timely availability of information, and to improve access to this information.

Trello dashboard for the coordinated data scramble



Coordinated Data Scramble Trello Dashboard, 2017

The coordinated data scramble was activated and used in at least two sudden onset emergencies: Ecuador and Haiti 2016. Further efforts are being put into the initiative to develop specific information needs list per type of disaster.

If the initiative makes direct reference to the MIRA framework, it doesn't per se allow to process the information so as to reach higher level analytical outputs such as priorities and severities, but will rather map the data and information products available that are providing with this type of information.

Reference documents

<https://sites.google.com/site/commonoperationaldataset/other-country-specific/cds>

A list of information needs, based on the MIRA framework, is available at <https://trello.com/b/e0C9Zytk/cds-template>

The Data Entry and Exploration Platform (2017) is an online software developed to support secondary data review. A specific section of the platform is dedicated to crisis monitoring and include an adaption of the MIRA framework that allow on-the-fly capture of relevant pieces of information. This is the first version of the framework that is broken down per humanitarian sector, making the framework explicitly multi sectorial.

In this iteration and operationalization of the MIRA framework, several changes were made to the original framework:

- The pillar “humanitarian access” was separated from the main framework as it is a cross sector pillar and information would repeat if information is captured at the sector level.
- Similarly, a cross pillar on communication and population profile appeared, in order to account for communication with beneficiaries and population displacement in a more systematic way.
- In addition, a Context pillar was implemented to capture contextual events or trends.

DEEP Data entry screen, 2017

The screenshot displays the DEEP Data entry interface. At the top, there's a text input field with a sample entry: "The Nigerian Army has said that more than 447 Boko Haram terrorists were...". To the right of the input are buttons for CANCEL, SAVE, SAVE AND NEXT, and MORE TAGS. Below the input is a section for TEXT and IMAGE uploads. The main part of the screen is a navigation menu with tabs for Context, Population Profile, Communication, and Humanitarian access. The Context tab is active, showing a sub-menu with Overview, Politics and Security, Stakeholders, Economy, Society and Community, Hazard developments, Lessons learnt, Key events, and Risk. The Politics and Security sub-tab is selected, showing a sub-menu with Humanitarian Profile, Population movement, Demographic Profile, Population with specific needs, and Casualties. The main area is a grid of sub-pillars and their associated indicators, color-coded by sector: orange for Scope and scale, orange for Humanitarian conditions, and blue for Capacities and Response. The grid includes columns for WASH, Livelihood, Food, Protection, Shelter, NFI, Health, Nutrition, Education, Cross, Agriculture, and Logistic.

PILLAR	SUB-PILLAR	WASH	Livelihood	Food	Protection	Shelter	NFI	Health	Nutrition	Education	Cross	Agriculture	Logistic
Scope and scale	Drivers/aggravating factors												
	Systems disruption												
	Damage												
	Losses												
	Lessons learnt												
Humanitarian conditions	1st level outcome												
	2nd level outcome												
	Risks												
	Vulnerabilities												
	Unmet needs												
Capacities and Response	Lessons learnt												
	Coping Mechanisms												
	National Response												
	International Response												
	Market functionality												
Response gaps	Response gaps												
	Lessons learnt												
	Lessons learnt												

This is also the first time that the framework is directly linked to the reporting, where each pillar/ sub pillar become a chapter/sub-chapter of the final report.

The DEEP is currently piloted to monitor >150 countries. In its new release from June 2016, user can adapt their analysis framework based on their own information needs.

Reference documents

www.thedeep.io

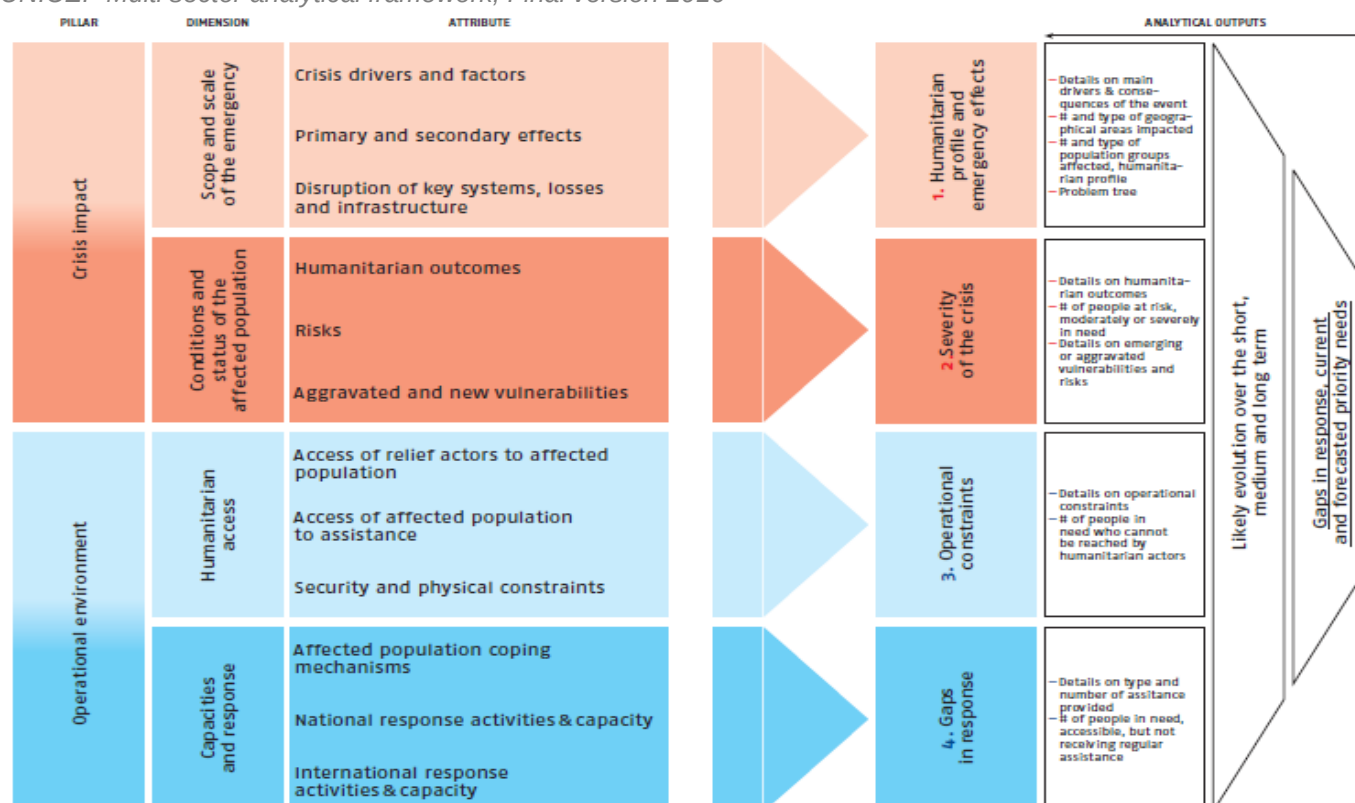
Guidance note on Multi-Sector Analytical Framework (2016, ACAPS/UNICEF) was developed through collaboration between ACAPS and UNICEF Led Clusters and Areas of Responsibility (AoR) in 2016.

The analytical framework was created to support the identification of informational and analytical needs for the wider humanitarian community, including the development of Secondary Data Reviews (SDRs).

The guidance describes the analytical framework components and the information required to populate them; describes how and when the framework can be used; illustrates how partners can use the framework, and shows how it can produce data to support preparedness efforts.

Notable in the UNICEF version is the explicit inclusion of analytical outputs in the main theoretical framework and for each pillar, as well as the refined focus on key metrics as the analysis progresses and the pillars collapse into deeper analytical conclusions.

UNICEF Multi sector analytical framework, Final version 2016



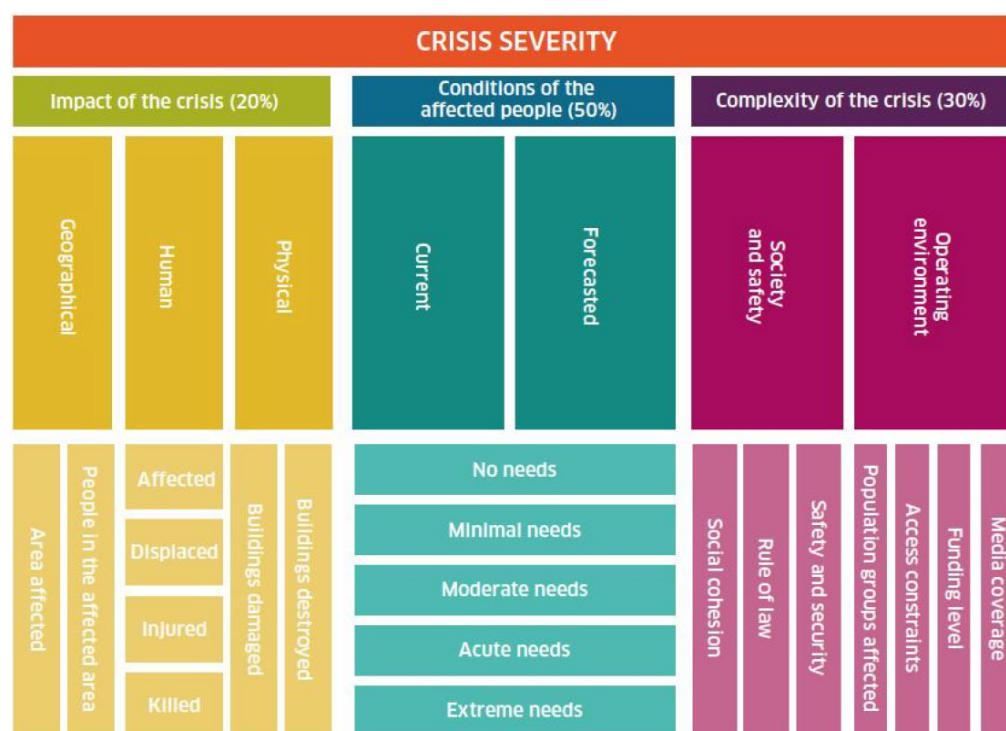
The UNICEF Framework was never published and, to the extent of our knowledge and as far as evidence goes, has never been used nor circulated widely.

The Global Crisis Severity Index (2017, INFORM, draft). Improving the response to humanitarian crises and disasters requires a widely-shared understanding of their severity. There is no universally agreed way to measure/estimate or categorize severity in the humanitarian system and existing methods are not widely adopted or face a number of technical challenges. In 2015, a small group of experts started to review existing methodologies and proposed to create a sensitive, regularly updated and easily interpreted model for measuring crisis severity that will assist decision-makers and contribute to improved effectiveness and coordination in humanitarian action. This work has been carried out by a technical working group, guided by a larger group of organisations convened under the INFORM initiative - a multi-stakeholder partnership of humanitarian and development organisations, donors and technical partners. The framework developed is still experimental and is based on a review of existing tools, an initial scoping workshop in April 2016, a further technical workshop in December 2016, and a prototype method proposed early 2017.

Global crisis severity index, Draft, INFORM sub group, 2017

The group proposed that an analytical framework for measuring crisis severity should include dimensions that tells: 1) about the impact of the crisis itself, in terms of the scope of its geographical, human and physical effects; 2) about the conditions and status of the people affected; 3) about the complexity of the crisis, in terms of factors that affect its mitigation or resolution (Figure 1). These dimensions and their constituent components have been determined through expert consultation.

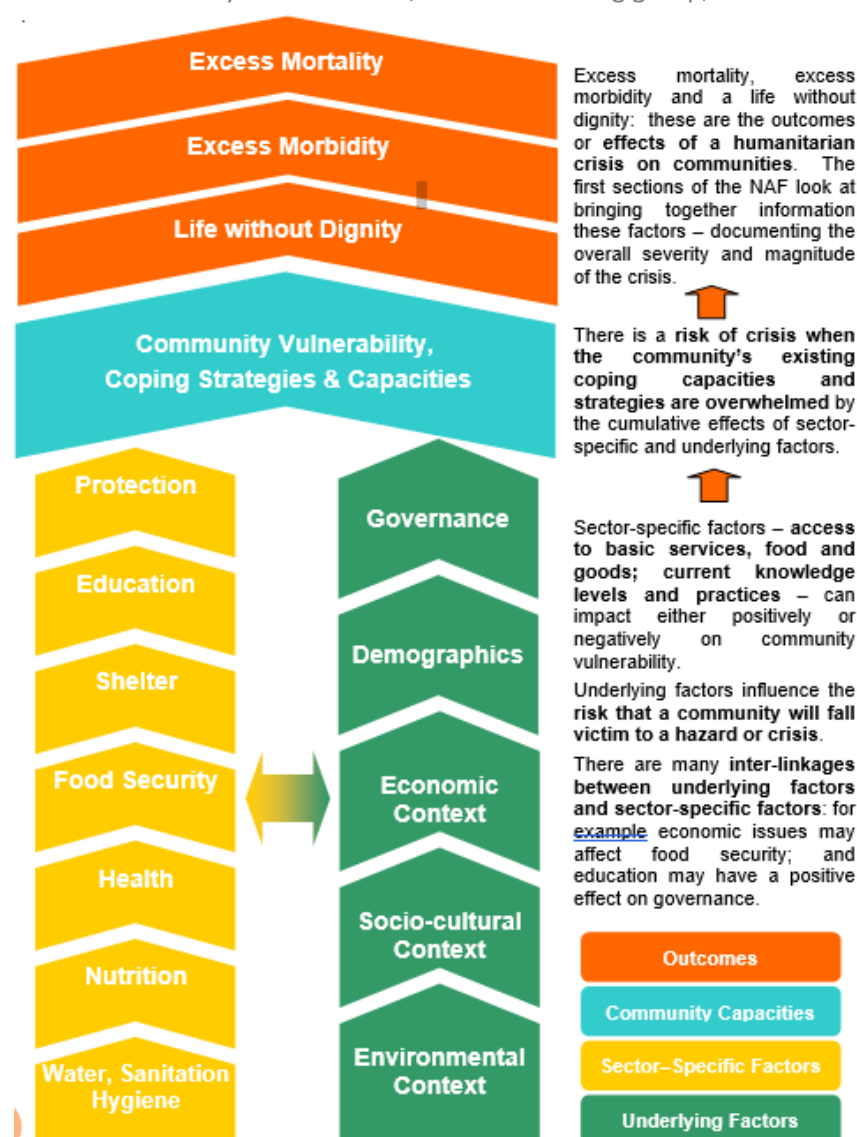
The group excluded 'pre-existing vulnerability' from the model because it does not measure the current status of a crisis and should already be de facto included in any assessment of the number of people in need. In addition, its inclusion may 'blur' the purpose of the model, when other tools are available that can tell about risk and vulnerability (e.g. INFORM). 'Capacity' for response was also excluded from the model, since it does not directly affect the severity of a crisis in real time. Furthermore, there is no universal concept of capacity to respond, since it depends on the actor/s in responding. The model is designed so individual organisations can add a capacity dimension, which is tailored to their own circumstances and decision-making processes.



The crisis severity model is a composite indicator, which brings together around 30 indicators about the specific crisis or the affected country, which directly or indirectly measure the components proposed in the analytical framework. The data comes from a variety of reliable sources, including international organisations, research centres, and media analysis. All the indicators are categorised on a scale of 1-5, where 5 represents a higher contribution to overall severity. This categorisation is based on thresholds developed through assessment of past crises and expert opinion. These scores are then aggregated into components, dimensions and the overall severity category based on the analytical framework, and using a combination of arithmetic and geometric average. The three dimensions are weighted according to their contribution to severity: impact of the crisis (20%); conditions of affected people (50%); complexity (30%). The weightings are currently a best estimate and will be refined using expert analysis and statistical methods.

The needs analysis framework (NAF) (2007, IASC CAP sub working group). The Needs Analysis Framework is a tool developed in 2007 by the CAP sub-Working Group to help Humanitarian Coordinators and IASC Country Teams organise and present existing information on humanitarian needs in a coherent and consistent manner, so Humanitarian Coordinators and IASC Country Teams could use the framework as a blueprint to consolidate existing needs assessments and analyse them prior to developing a CHAP (what is called now the Humanitarian Response Plan).

Needs Analysis Framework, CAP sub-working group, 2007



The Framework is nothing more, and nothing less, than a structure to document findings and conclusions in a systematic way within countries. It is meant to assist in the collection of information to construct the overall and sectoral needs. The headings, indicators and descriptors related to each area of concern in the framework, are suggestions that help make descriptions in a systematic way. This also allows trend analysis, comparison between populations and areas within a crisis context, and aggregate information to an overall context level. The assumption is that the NAF can be created from information that is already available. Country teams may adapt the framework to the context, customising it by removing headings that are not useful, and adding those that are.

Humanitarian crises are the result of the complex interaction of a large number of factors; and these are represented by the different sections of the NAF. The underlying elements are interdependent, and problems multi-causal. These interactions may differ in each context. To establish insight in causalities and interdependence, when needs related to a specific area have been defined, one should ask basic questions like 'what may have caused or contributed to these needs', and 'how does this factor influence other areas of concern?' Needs

analyses are used to better understand the interdependence of these factors and their impact on the overall humanitarian situation. Ideally, for each crisis the interagency country team should develop an analysis model, specifying the key variables and the relations between them in their particular context. Such a model helps focus attention on what information to collect, the nature of the relationship between variables, and to determine how each contributes to the humanitarian outcomes examined.

The NAF model shows clearly the inter-linkages of different factors in a typical humanitarian crisis. Each element represented in the diagram should be assessed both in its own right and as part of the overall analysis. The result of the NAF should be a clear picture of needs and their causes – leading to the best possible decisions about prioritising resources for effective humanitarian action

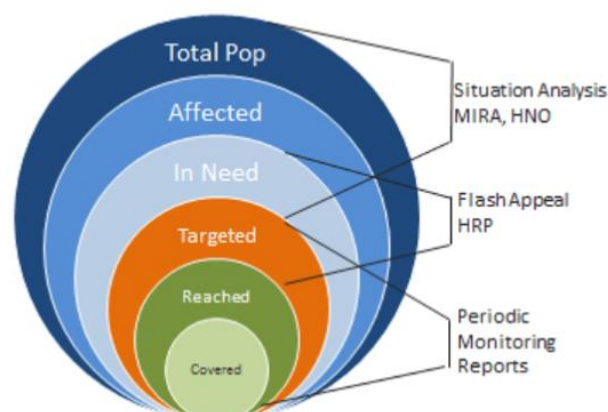
Of particular interest in the evolution of the MIRA framework between 2015 and 2017 is the multiple changes and adaptation of the pillar “Conditions and status of the affected population”, demonstrating the attempt of the humanitarian community to understand better and refine how to measure the (severity of the) conditions faced by the crisis affected population.

Elements previously included such as *physical disruption of key infrastructure* were moved to the first pillar *Scope and Scale* as not directly related to humanitarian conditions and in order to keep only information related to conditions, risk or vulnerabilities in the second pillar.

This neater separation allows to use the framework pillars as categories for calculating humanitarian population figures. The pillar *Scope and Scale* result in the number of people affected, the pillar *Humanitarian outcomes* provide with the number of people in need, etc.

It is notable that the MIRA framework is not totally aligned with the onion model available in the 2016 Humanitarian profile Support guidance: Humanitarian Population Figures, which does not take into account the people in need with limited humanitarian access.

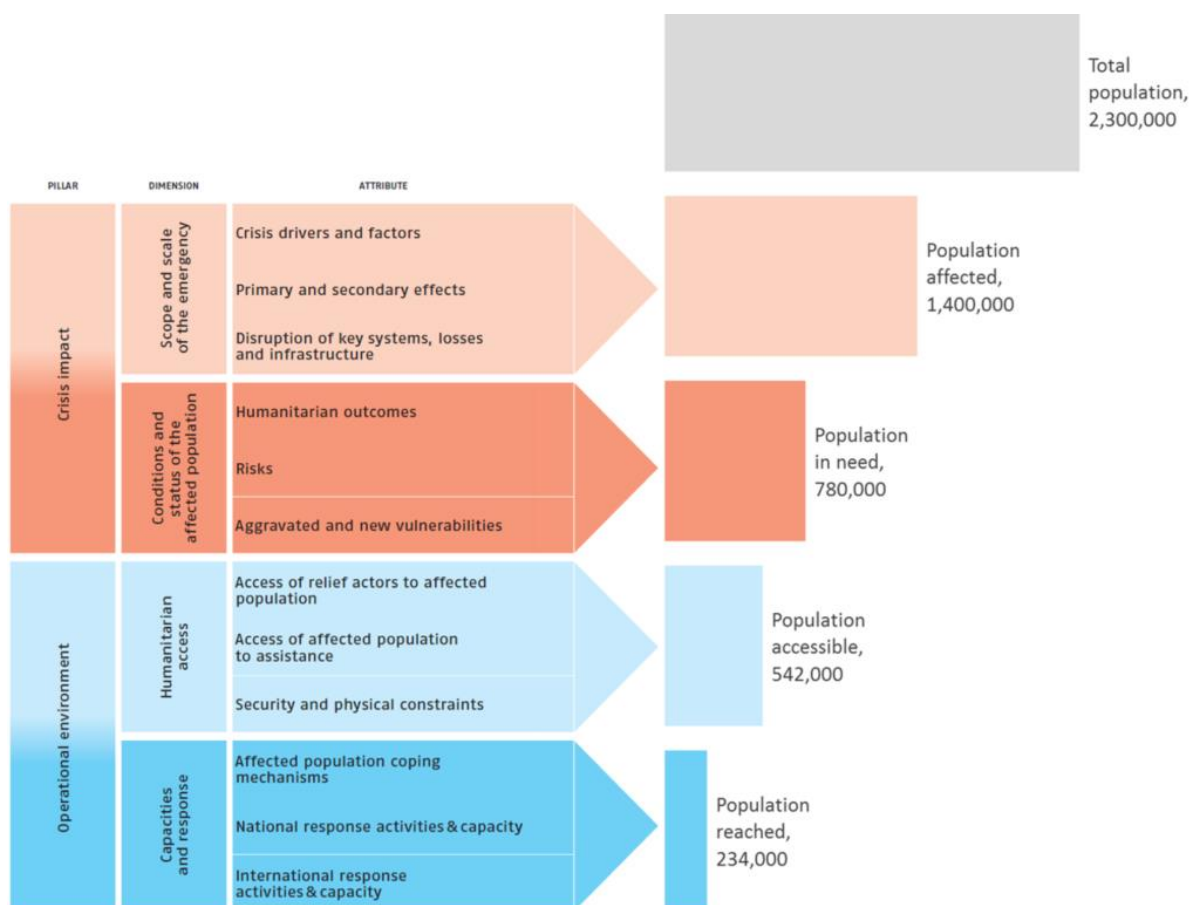
Onion Model for humanitarian population figures, IMWG, 2016



Link between Framework pillar and humanitarian population figures, ACAPS/CDC Analytical thinking training package, 2016

Reference documents

[Humanitarian Profile Support Guidance: Humanitarian Population Figures](#)



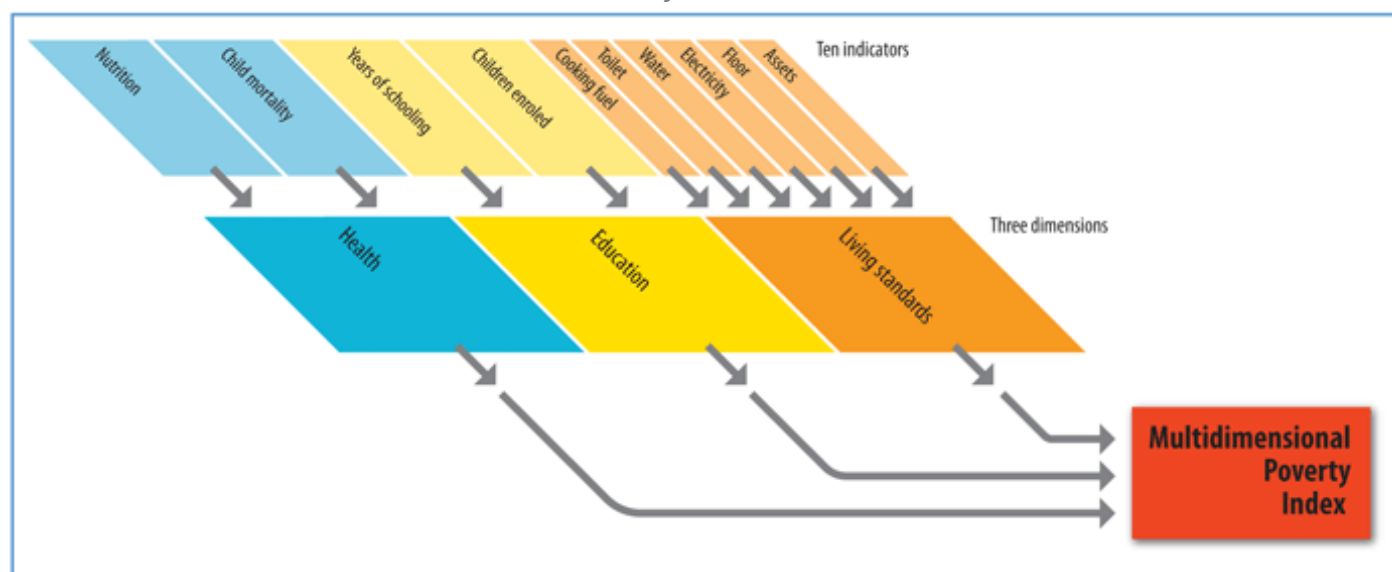
Poverty Frameworks

Date: 1700 - today

By **OPHI, UNDP, Governments, etc.** Inspiration: Basic needs, capability approach, etc.

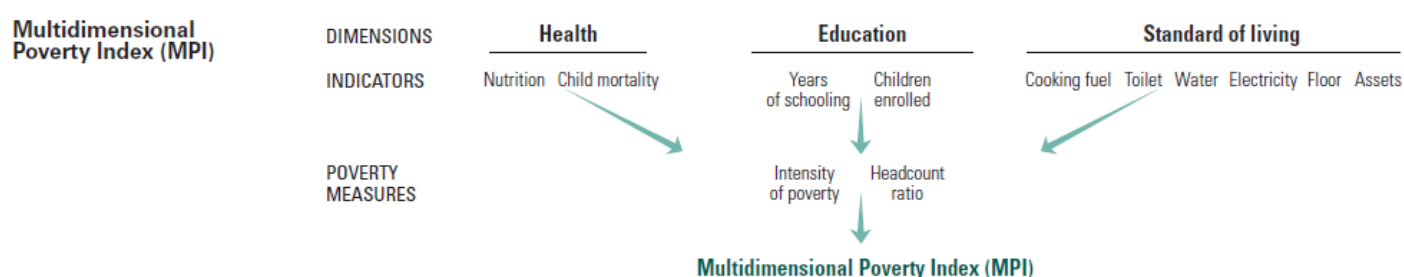
Reviewed initiatives: Multi-dimensional poverty Index, Sida poverty conceptual framework, Basic Needs Approach (Cash Working Group), Poverty Assessment Tools

Featured framework: *The Multi-Dimensional Poverty Index, OPHI, 2010*



Note: The size of the boxes reflects the relative weights of the indicators.

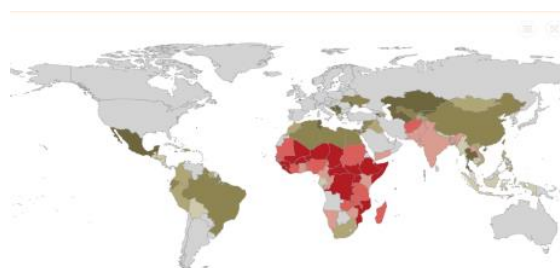
Source: Alkire and Santos 2010.



Guidance & tools

[2010 OPHI GMPI](#)
[2017 OPHI Methodological notes](#)
[OPHI resource centre](#)

Country use: 103



Training packages: 3

including videos, webinars, seminars, Summer school, etc.

Languages: English

Overview: The concept of poverty takes its origin in social ethics. Essentially, to think about poverty means to identify individual situations which are judged unacceptable, that means unfair, unjust, in a given society. Thus the concept of poverty arises basically from normative considerations, in regards to equity.

Poverty cannot be analyzed without referring to our conception of the desired equality in the framework of the social arrangement. Poverty measurement means the production of numbers by which we can assess the overall degree of poverty in a given society and by which we can identify the members of this society which are to be considered as poor. To decide which numbers we are to produce, we need a theory about the object we want to measure. The fact is that there are different theories on poverty. This part is central in the sense that the concept of poverty mirrors the basic structure of the social arrangement, more specifically the conception of justice and equity, which prevails in this society. In the practical work of identifying and measuring poverty in a society, a lot of methodological choices are made, reflecting implicitly, if not explicitly, the social philosophy supporting these choices. It is important to be as conscious as possible of the ethical paradigm dissimulated in apparently inoffensive technical choices, since, through policies leaning on these measurements, the whole social structure will be deeply affected.

The idea of equality also faces an important difficulty, the basic heterogeneity of human beings: With a same level of freedom, different persons won't necessarily realize the same achievements. In well-off households, it can happen, due to cultural factors, that some or even all household members suffer from malnutrition. People having the same resources have not necessarily an equal freedom to the same achievements: due to metabolic differences, same aliments are not transformed in equal amounts of nutrients, so that an equal income does not insure access to the same quality of nutrition for different persons. To sum up: One of the consequences of «human diversity» is that equality in one space tends to go, in fact, with inequality in another.

The literature on poverty is extremely abundant and characterized by an unusual level of ambiguity relative to economic theory. It provides many different definitions of what poverty is, each concept obviously leading to a particular identification of the poor. The three main schools of thought concerning poverty are the **Welfarist school**, the **Basic Needs school**, and the **Capability school**. As will be seen, while these three approaches differ in many ways, they all imply that « something », to be defined, doesn't reach a level considered to be a reasonable minimum. That is, a person is judged to be poor whenever he or she is lacking, with respect to the reasonable minimum, the particular « thing » in question.

Common domains of individual or social life where poverty is revealed are listed below:

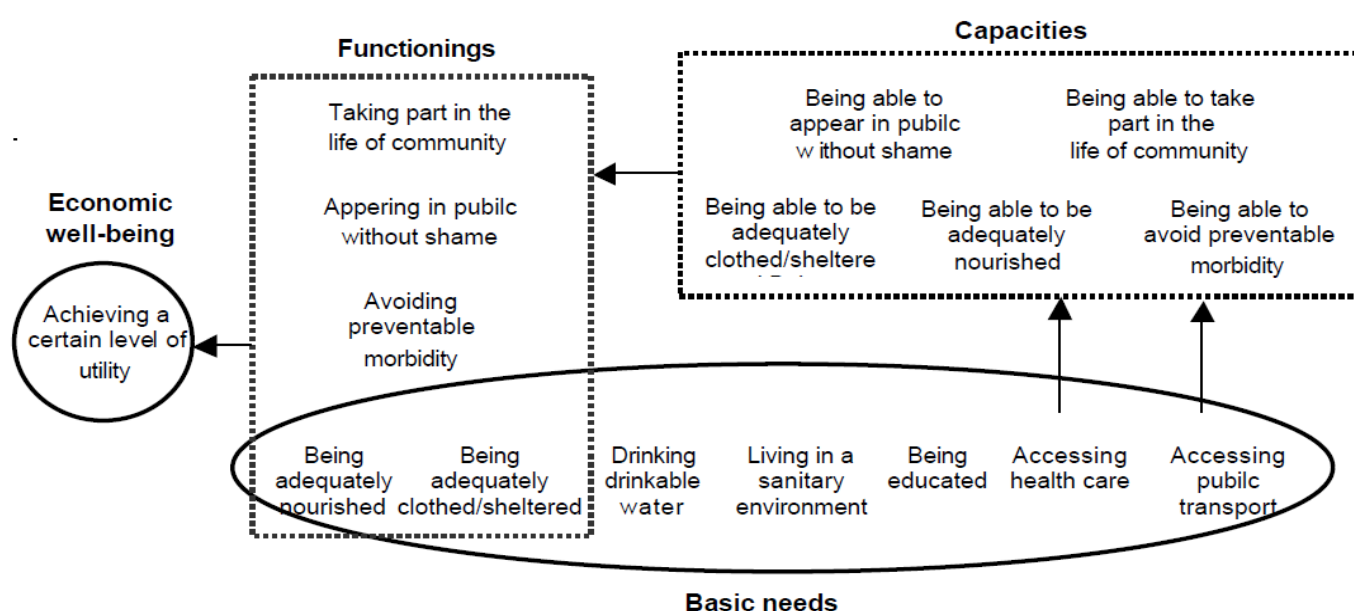
1. Nutrition / Food Security
2. Health / Sanitation
3. Income
4. Birth Control
5. Assets
6. Education / Information
7. Housing
8. Land / Agriculture
9. Protection/civil security
10. Personal Dignity
11. Public Expenditure / Good
12. Credit
13. Social Implication
14. Vulnerability to Crisis
15. Housework
16. Economic Infrastructure
17. Labour
18. Rights / Liberties /freedom
19. Self-perception
20. Clothing

School of thoughts. A dominant doctrine since two centuries, in the western industrialized world, is a welfarist theory better known as **utilitarianism**. It has been developed as a strictly economic view of the best social arrangement, dominated by two concepts: growth and efficiency. Equity is a by-product of aggregate utility maximization, and then consists of equal marginal individual utilities. Income determines the utility level. Poverty is then defined as a socially unacceptable level of income and poverty alleviation policies will mostly try to increase the productivity of the poor. For the welfarist, «something» means economic well-being. Economic wellbeing is sometimes referred to as economic welfare. Utility itself is conceived as a psychological feeling like happiness, pleasure, desire fulfillment generated by commodity consumption. The term «standard of living» is another term sometimes used to refer to economic well-being. An example of the definition provided by the welfarist approach is: "Poverty" can be said to exist in a given society when one or more persons do not attain a level of economic well-being deemed to constitute a reasonable minimum by the standards of that society. The welfarist school is currently the dominant approach and until recently was seen as the unique norm. In fact, as a leader among organizations, the World Bank strongly promotes the welfarist concept, and defines poverty in absolute terms. The bank defines extreme poverty as living on less than US\$1.90 per day, and moderate poverty as less than \$3.10 a day.

The **basic needs school** transposes the equity debate from social theory to the policy area and proposes that some types of poverty must be identified and eradicated, with a short-term perspective. It identifies a small set of achievements corresponding to the satisfaction of some basic needs, and requires that poverty alleviation policies insure as quickly as possible that everybody achieves these basic satisfactions. Strictly speaking, this school is not guided by welfarist objectives, neither by freedom considerations, but essentially by humanitarian preoccupations. This school considers that the «something» that is lacking in the lives of the poor is a small subset of goods and services specifically identified and deemed to meet the basic needs of all human beings. The needs in question are called «basic» in the sense that their satisfaction is seen as a pre-requisite to quality of life; they are not initially perceived as generators of well-being. As Lipton says, you have to "be" before you can "well-be". Instead of focusing on utility, the attention is here on individual requirements relative to basic commodities. In the traditional BN approach, the basic goods and services usually include: food, water, sanitation, shelter, clothing, basic education, health services, and public transportation. As we can see, these needs go beyond the needs necessary for existence, generally known as minimal needs which only include adequate nutrition, shelter and clothing. Even before addressing the issue of what means «enough», the subset of basic commodities is understood to be different according to sex and age: children, and women require specific health services, basic education may mean primary school enrolment for a 7-year old child and functional literacy for an adult, etc. The definition of poverty adopted by the government of the Philippines is an example of this approach taken in its broad sense: ... *the sustained inability of a family to meet its basic needs for survival (food and nutrition, water and sanitation, health and clothing), security (income, shelter, peace and security), and empowerment (basic education and functional literacy, psychosocial and family care, and participation in political process)*. One of the main problems which confront this school is the simple determination of what the basic needs are. This school ranks second to the welfarist school in importance. Although its origins date to the early 1900s, it did not truly take form until the 1970s, when it arose in reaction to the inattention paid to the needs of individuals.

In contrast to welfarism or Basic Needs is the **capability approach** to equity. The space where equality should be looked for is the freedom space, consisting of a set of specific capabilities defined in reference of corresponding types of achievements called «functionings». Poverty is then defined in reference to a subset of capabilities identified as «basic capabilities», and by unacceptable deficiencies in these basic capabilities. For this school, the "thing" that is lacking refers neither to utility nor to the satisfaction of basic needs, but to human abilities, or capabilities. The capability approach differs from welfarist evaluation in making room for a variety of doing and being as important in themselves (not just because they may yield utility, nor just to the extent that they yield utility). In this sense, the perspective of capabilities provides a fuller recognition of the variety of ways in which lives can be enriched or impoverished. So, functionings are achievements, where having utility is an example, while capability to function refers to the liberty to choose from among different functionings. Since "acting freely and being able to choose are, in this view, directly conducive to wellbeing", the value of someone's life is better seen in terms of capabilities than functionings. The capability school will thus consider as poor a person that doesn't have the possibility to achieve a certain subset of functionings. Therefore, for this school, "something" means neither utility nor satisfied basic needs, but some capabilities seen as minimally acceptable.

Three main approaches to poverty – Mapping of key dimensions and sub-dimensions, Louis-Marie Asselin, Anyck Dauphin, 2001



Agreeing on the significance of the term "poverty" is insufficient for identifying the poor. It is not sure that what we would like to measure is actually measurable or is measurable at a low cost. In fact, neither economic well-being, nor the satisfaction of needs, nor the capacities of an individual, are directly observable. Given these conditions, it becomes necessary to use proxy indicators that allow for the approximation of what we refer to by the term poverty. For instance to measure economic wellbeing, the total annual household expenditure can be used. A **poverty indicator** should not be confounded with a **poverty measure** neither with a **poverty index**. Poverty measures or indices require that we go further with the poverty indicator, by giving a precise meaning to a critical level usually called **poverty line**.

The three poverty concepts discussed above, by specifying what is missing differently, necessarily favor certain indicators over others. Good proxies for economic well-being, are not necessarily the same as good proxies for basic needs satisfaction or capacities. Without studying how each indicator is situated in relation to the three schools (because there are many indicators) we will try to determine which ones are preferred by each school.

- For the welfarist school, an individual is poor when he/she lacks economic wellbeing. The subjectivity of the concept, combined with the fact that it is unobservable, makes evaluation of economic well-being very hazardous. As a result, the welfarist school falls back on income and expense type indicators. While recognizing the limited influence of these variables, they are nonetheless preferred over other indicators because they do not favor one good over another, thus leaving room for the preferences of individuals.
- Once again, it is difficult and costly to directly observe the satisfaction of basic needs. Indicators favored are thus *proxies* of their satisfaction. We can think of indicators in the area of nutrition, education, health, lodging and clothing, favoring indicators of accomplishment with respect to indicators of access. For example, an indicator such as the number of cases of certain diseases per 100,000 inhabitants (tuberculosis, etc.) would be preferred to the number of doctors per 100,000 inhabitants.
- On the other hand, the capacity school favors access indicators above all. Desai (1995), who tried to make the approach operational, also suggested using the death rate and life expectancy, disaggregated by sex and age group, to judge the capacity of individuals to prevent avoidable death and illness, as well as all indicators of basic needs satisfaction. In terms of capacity to socially interact, Desai proposes using indicators of rights to associate with others.

Reference documents

[OPHI 2009 An introduction to the Human development and capability approach](#)
[Louis-Marie Asselin, Anyck Dauphin, 2001, Poverty Measurement, A Conceptual Framework](#)

The Global Multidimensional Poverty Index (2010, MPI) was developed by the Oxford Poverty & Human Development Initiative (OPHI) and the United Nations Development Programme. It replaced the previous Human Poverty Index and uses different factors from the previously mentioned school of thoughts to determine poverty that constitute poor people's experience of deprivation – such as poor health, lack of education, inadequate living standard, lack of income (as one of several factors considered), disempowerment, poor quality of work and threat from violence. This new measure of poverty is now favored for the following reasons:

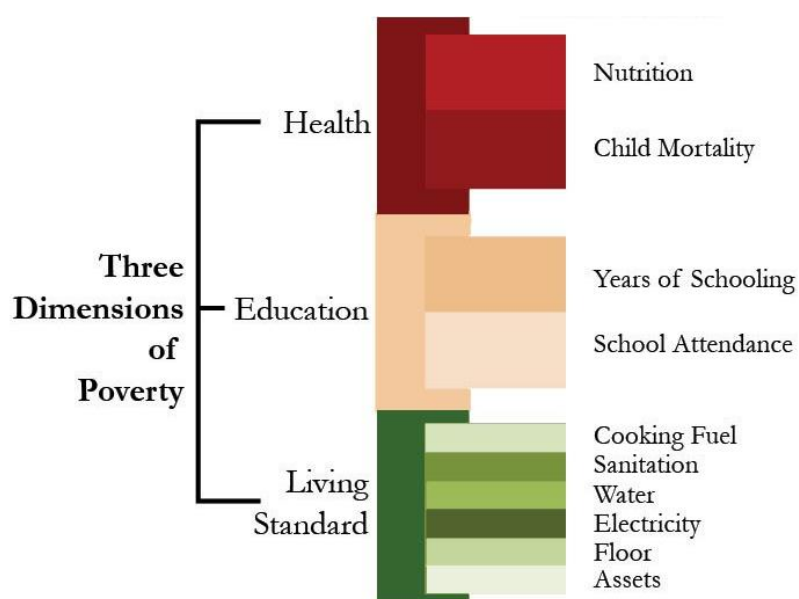
- Income alone can miss a lot. For example, economic growth has been strong in India in recent years. In contrast, the prevalence of child malnutrition has remained at nearly 50 per cent, which is among the highest rates worldwide (Citizens' Initiative for the Rights of Children Under Six, 2006).
- Poor people themselves describe their experience of poverty as multidimensional. Participatory exercises reveal that poor people describe ill-being to include poor health, nutrition, lack of adequate sanitation and clean water, social exclusion, low education, bad housing conditions, violence, shame, disempowerment and much more.
- The more policy-relevant information there is available on poverty, the better-equipped policy makers will be to reduce it. For example, an area in which most people are deprived in education is going to require a different poverty reduction strategy to an area in which most people are deprived in housing conditions.
- The multidimensional measurement method (developed by Alkire Foster), can be used for additional purposes. In addition to measuring poverty and wellbeing, OPHI's method can be adapted to target services and conditional cash transfers or to monitor the performance of programmes.

The global MPI is released annually by OPHI and the results published on its website. It is an international measure of acute poverty covering over 100 developing countries and complements traditional income-based poverty measures by capturing the severe deprivations that each person faces at the same time with respect to education, health and living standards. The MPI assesses poverty at the individual level. If someone is deprived in a third or more of ten (weighted) indicators, the global index identifies them as 'MPI poor', and the extent – or intensity – of their poverty is measured by the number of deprivations they are experiencing. These characteristics make the MPI useful as an analytical tool to identify the most vulnerable people - the poorest among the poor, revealing poverty patterns within countries and over time, enabling policy makers to target resources and design policies more effectively.

Reference documents

[OPHI, Multidimensional Poverty Index, 2011, Brief Methodological Note](#)
[2010 OPHI GMP](#)
[2017 OPHI Methodological notes](#)
[OPHI resource centre](#)

Multi-Dimensional Poverty Index, MPHI, 2017



Conceptual framework on dimensions of poverty (2017, Sida). In 2017, Sida updated its *Perspectives on Poverty* policy paper (2002) to reflect on new developments and challenges faced by poor population. The model is a conceptual

Sida's Poverty Conceptual Framework,
2016



framework to be referred to and used in Sida's different processes and introduce a structure for multidimensional poverty analysis (to be developed in 2017). According to this model and in line with the policy framework, poverty is not only about the lack of material resources but also other poverty dimensions such as the lack of power and voice. Hence, according to Sida's definition, a person living in poverty is resource-poor and poor in one or several of the other dimensions. The underlying understanding is that poverty is complex. Knowledge about this complexity and how it is manifested for different groups of people is fundamental to being able to define effective policy measures and approaches to reduce poverty. The four dimensions assist in identifying the main ways in which poverty manifests itself and how it is experienced by people living in poverty. The four dimensions also help identify groups of people living in poverty. All the poverty dimensions are interlinked. In most cases, multiple deprivations interplay to push people into poverty – and to keep them there. For example, being poor in terms of resources often implies being poor in terms of opportunities, choice, power and voice, and vice versa. Being poor in terms of human security can

mean poverty in terms of opportunities, that is, the possibility people have to develop and use their resources so as to move out of poverty. Being poor in one dimension can also aggravate poverty in another dimension. Conversely, improvements in one dimension can reduce poverty in another dimension.

Resources: Being poor in terms of resources means not possessing and/or having access to or power over resources that can be used to sustain a decent living standard, meet basic needs and improve one's life. Resources can be both material and non-material: a decent income or physical and human capital, such as being educated or have professional skills, being healthy, having agricultural tools or a push cart to transport goods in towns. Resources can also be access to natural resources and ecosystem services, such as land, clean air and water, goods and services from forests, livestock and fish. It can also be having time and a social network, formal or informal. What resources a person needs and has access to or power over is context-specific and depends on variables like gender, age, etc. Resources are interlinked with the three other dimensions. For example, professional skills are linked to opportunity to find employment, access to capital and land could be linked to power and voice, and health can be related to interpersonal violence in the household.

Examples of questions to ask:

- Who lacks sufficient *income*, access to land or credit? Who controls and benefits from these resources? Who does not?
- Who lacks *power and voice* at work, at home, in the community, in the society?
- Who lacks *power* over their own bodies?
- Who lacks the *opportunity* to express themselves freely and exercise the right to vote?
- Who lacks *control of the agenda for decision-making*? Where? In the household, in the community, in the parliament?
- Who lacks *opportunities and choices* to productive employment, to get an education, access health services, or access financial services?
- Who *lives in insecurity* or suffers from violence? Where? In the household, at work, on the street?

Opportunities and choice: Being poor in terms of opportunities and choice concerns one's possibilities to develop and/or use resources to move out of poverty. The lack of opportunities and choice is both a consequence of poverty in the other three dimensions and a consequence of a disabling context, such as the lack of access to education, health clinics, infrastructure, energy, markets and information. Lacking resources, power and voice and living in insecurity negatively affect the choices available and opportunities to escape from poverty.

Power and voice: Being poor through lacking power and voice relates to people's ability to articulate their concerns, needs and rights in an informed way and to take part in decision-making affecting these concerns. This applies to decision-making in the private sphere and participation in public life and engagement with public institutions. It is important to fully understand the channels that women and men, girls and boys have access to – and which channels they may be excluded from. Power is a relational concept that allows us to better understand socio-cultural hierarchies and relations of age, caste, class, religion, ethnicity, sexual identity, and not least gender. Reinforcing forms of discrimination based on such socio-cultural relations may increase an individual's poverty in this sense. The lack of power and voice therefore deprives people of the freedom to take part in private and/or public decision making that is of fundamental importance to them.

Human security: Being poor in terms of human security means that violence and insecurity are constraints to different individuals' and groups' possibilities to exercise their human rights and to find paths out of poverty. Conflict and insecurity are often volatile and rapidly changing, and a person's security can differ radically depending on gender, ethnicity, age, identity or in which region one lives. Generally, people already experiencing poverty or deprivation in other dimensions are worst affected by conflict and insecurity. Besides the obvious harm and trauma that insecurity and violence cause, it also has other severe effects that deprive the lives of women, men, girls and boys. Living in insecurity can make parents stop sending their children to school; it can make farmers unable to harvest their crops or sell them in the market. Insecurity can cause people to die from curable diseases because the hospital is not safe or perceived as not safe. Violence and conflict makes people refugees, or they force people to stay home; for a girl or a woman, home can be the most dangerous place. Being poor in terms of security often contributes to increased poverty in other dimensions of poverty.

To understand the causes of poverty, the opportunities to move out of poverty, and the main risks that could aggravate poverty, it is important to understand the context in which a person lives. Sida analyses the development context along four areas: The economic and social context; The political and institutional context; Conflict/Peaceful context; The environmental context. In the model, the development context has been added as an outer circle. The outer circle has several functions. Firstly, it is the explanatory framework for the degree and dimensions of poverty (why). Secondly, it also contains the main elements of a development analysis that explains opportunities and constraints for inclusive and sustainable development, for resilience to risks as well as for people living in poverty to change their situation. Thirdly, it provides an understanding of poverty at a structural level.

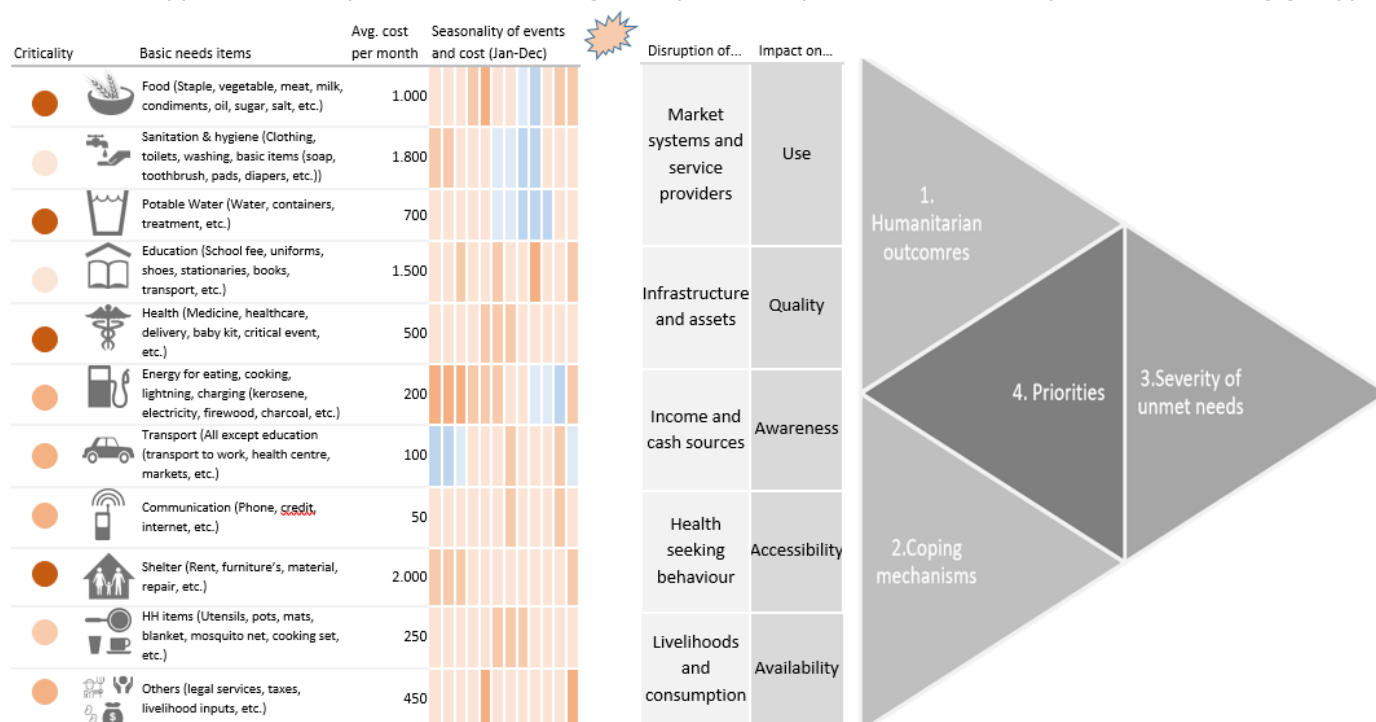
Reference documents:

[SIDA 2017 Dimensions of poverty](#)

The Basic Needs and Response Analysis Framework & toolkit (2017, Cash working group, Draft) is part of an ECHO ERC funded project to increase the uptake of Multi-Purpose Cash Grants (MPGs) in emergency responses for more efficient and effective humanitarian action. The purpose of the Framework & Toolkit is to generate a better understanding of changes since the beginning of the crisis, priority needs, capacities and preferences of affected people, and constraints faced by people in securing what they need from local markets/service providers. The BNA framework is at the cross road of the welfarist, basic needs and capability school and measure elements pertaining to the three schools of thoughts. The Framework & Toolkit specifications were drafted in February 2017 after consultations with members of the Cash Working Group at global level, and was tested in Nigeria in May 2017.

To guide data collection and analysis, a conceptual framework was designed based on feedback from a global and a multi sectoral peer review group. The Framework & Toolkit was developed to consider primarily the needs and preferences expressed by the affected population (demand), but also the operational environment and the functioning/capacity of market and service providers (offer).

Basic Needs approach Conceptual Framework, Nigeria report 2017 (Draft not endorsed by the Cash working group)



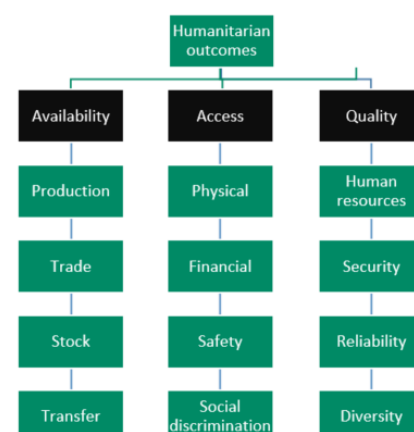
List of basic needs, Nigeria report 2017

Category	Items included
Food	Staple, vegetable, meat, milk, condiments, oil, sugar, salt, etc.
Potable water	Water, containers, treatment, etc.
Shelter	Rent, furniture's, material, repair, etc.
Household items	Utensils, pots, mats, blanket, mosquito net, cooking set, etc.
Sanitation/hygiene	Clothing, washing, basic items (soap, toothbrush, pads, diapers, etc.)
Education	School fee, uniforms, shoes, stationaries, books, transport, etc.
Healthcare	Medicine, healthcare, delivery, baby kit, critical event, etc.
Energy	Cooking, lighting, charging, heating (kerosene, electricity, firewood, charcoal, etc.)
Transport	All except education (transport to work, health centre, markets, etc.)
Communication	Phone, credit, internet, etc.
Others	Agricultural inputs, seeds and tools

The concept of basic needs refers to the essential goods, utilities, services or resources required on a regular or seasonal basis by households for ensuring survival AND minimum living standards, without resorting to negative coping mechanisms or compromising their health, dignity and essential livelihood assets. An initial list of 10 essential items was selected based on a meta-review of existing

Minimum Expenditure Baskets and Living Standards. A category "other" allows respondents to enunciate other items that they consider important for their survival and minimum living standards.

Basic Needs Approach
Underlying factors, 2017



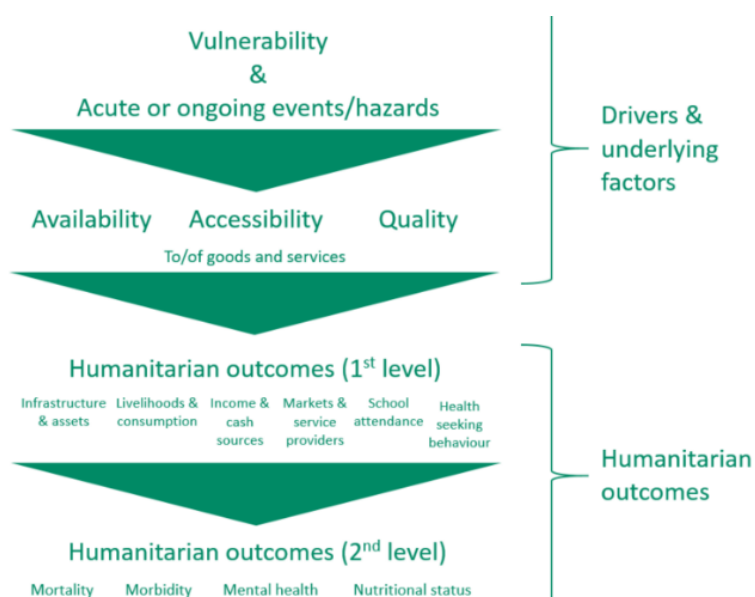
Of particular interest is the typology of underlying factors commonly influencing humanitarian outcomes (adapted from ACAPS) proposed in the Nigeria BNA methodology. The BNA map first the processes and contributing factors intervening in the generation of humanitarian outcomes, before to specifically focus on the measurement of accessibility, availability and quality of/to basic goods and services.

Accessibility refers to people's ability to access and benefit from goods and services. It often concerns the physical location of services (distance, road access, bridges, etc.), but can also be influenced by purchasing power, social discrimination or safety and security issues that constrain movements.

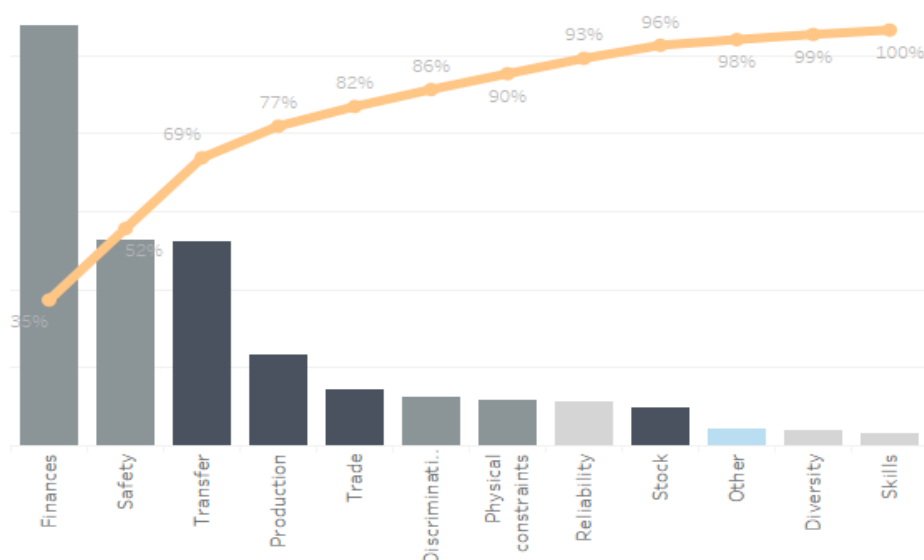
Availability refers to the physical presence of goods and services in the area of concern through all forms of domestic production (e.g. agriculture), trade (commercial imports), stock (food reserve, contingency stocks, etc.) and transfer (aid or subsidies or services) by a third party (the national government, local authorities or humanitarian actors).

Quality refers to the degree of excellence, benefits or satisfaction one can enjoy when consuming a good or a service. Quality may depend on the number of people with the required skills and knowledge to perform a given service or produce a good, but is also influenced by reliability (consistency of quality over time), diversity and security of the provided service or good (i.e. water quality, sterilization of medical tools, etc.).

Causal chain, Basic Needs Approach, 2017, Draft



Contributing factors, Basic Needs Approach, 2017, Nigeria Report



The contribution of underlying factors to humanitarian outcomes is showed using a Pareto chart in the Nigeria BNA report. This type of chart is used when analysing data about the frequency of problems or causes in a process, when there are many problems or causes and it is important to focus only on the most significant or when analysing broad causes by looking at their specific components.

Reference documents:

[Basic Needs & Response Analysis Framework Report Nigeria, 2017](#)

Poverty Assessment Tools (2008, USAID, Grameen Foundation, IRIS center). Though poverty measurements capture only one dimension of vulnerability and lack a predictive function, poverty remains highly correlated with vulnerability and can be useful, in addition to other measures, to an assessment. Poverty Assessment Tools and the Progress out of Poverty Index are simple tools designed to help microfinance institutions (MFIs) target poor or extremely poor clients in response to congressional requirements for poverty targeting. Among poverty assessments used by MFIs, only PAT and PPI “are directly derived from international or national poverty lines, have known levels of accuracy, and are relatively simple to administer” (SEEP Network Social Performance Working Group, 2008).

Poverty Assessment Tools (PAT) were developed by the IRIS Center at the University of Maryland for USAID. They “are short household questionnaires with 16 to 33 questions on topics ranging from consumer durables ownership to educational attainment. The individual questions have been chosen to balance practicality of implementation and the accuracy of aggregate poverty predictions” (SEEP Network Social Performance Working Group, 2008). So far, there are 37 countries with developed PATs.

The Progress out of Poverty Index was developed by the Grameen Foundation with funding from CGAP and the Ford Foundation. The PPI consists of a scorecard based on answers to ten questions about household characteristics and asset ownership. Scores are then interpreted in terms of the likelihood that an individual falls below the poverty line. The score itself is not a measure of poverty, but a measure of poverty likelihood. PPIs are available for 46 countries (Grameen Foundation, 2013).

To be useful in vulnerability assessment, the PPI and PAT should be used to complement other vulnerability measures. The accuracy of a given tool depends on quality of national survey and “spatial differences in underlying poverty relationships” (Ford Foundation, CGAP, & Social Performance Task Force, 2010). They can both be used to segment populations by poverty level. Also, though both generate poverty scores at the individual or household level, their use for individual targeting is contested. PAT was not designed for the purpose of stand-alone use for poverty targeting. “PATs are calibrated to be accurate at the aggregate level and household-level misclassifications are expected ... However, when used in conjunction with other measurements related to poverty, income, assets or other targeting criteria, some organizations have used HH level PAT expenditure calculations for analysis” (USAID, 2013). On the other hand, while also not designed for targeting, the developer of PPI has suggested that individual level scorecards can be used for this purpose (SEEP Network Social Performance Working Group, 2008). It is generally not recommended to use either tool for targeting, as the design of the tools is only statistically accurate at a group level (Ford Foundation et al., 2010). Both PPI and PAT are simple to use, tested tools for assessing poverty incidence. However, they only measure poverty ex post, rather than examining ex ante vulnerability. PPI and PAT measures have been developed for a limited number of countries, not all of which have updated measures. Finally, they do not distinguish “between urban and rural households, which will likely have different poverty characteristics”. Distinctions between PPI and PAT may determine selection of one or the other, as described in the table attached (SEEP Network Social Performance Working Group, 2008).

Item	PAT	PPI
Purpose	Provide low-cost and accurate estimate of poverty incidence	Provide low-cost and accurate estimate of poverty incidence Measure change in poverty incidence through time Targeting
Method	Estimate percentage of population falling below absolute extreme poverty line using a short set of proxy indicators for household expenditures	Estimate percentage of population falling below absolute poverty line using a short set of proxy indicators for household expenditures Poverty status is probabilistic
Source of Information ^a	Existing data from recent national household survey Primary data collection by IRIS on nationally representative sample	Existing data from recent national household survey
Derivation Method ^b	Selects the most accurate model for each country from a pool of eight potential regression methods	Unique process based in part on Logit regression
Types of Indicators ^c	Simple and practical Most indicators show variation over time	Simple, objective, practical, and objectively verifiable Indicators show variation over time

Item	PAT	PPI
Poverty Lines ^d	Extreme poverty: \$1 DPCE - Bottom 50% below national poverty line	Extreme poverty: \$1 DPCE \$2 DPCE (CEE countries) - Bottom 50% below national poverty line - National extreme poverty line - Other extreme poverty lines Poverty: \$2 DPCE \$4 DPCE (CEE countries) - National poverty line - Other poverty lines
Data Collection	Collected in field by staff or other enumerators not known by the interviewee	Collected in field by loan officers
Poverty Calculation	Automated—done at office by customized freeware computer program	Can be calculated by loan officers or survey enumerators in the field or in the office by hand or with electronic device (e.g., PDA or computer)
Level of Poverty Analysis ^e	Aggregated	Individual client Aggregated
Poverty Targeting ^f	Not used for poverty targeting	Used for poverty targeting
Transparency ^g	Enumerator does not see poverty score	Enumerator sees poverty score Scoring weights are public knowledge
Poverty Monitoring ^h	Some indicators used for poverty tool do not vary or vary little over time	Indicators used for poverty tool are objective and vary over time with changes in poverty status

Reference documents:

[Poverty Assessment tools](#)

Livelihood Frameworks

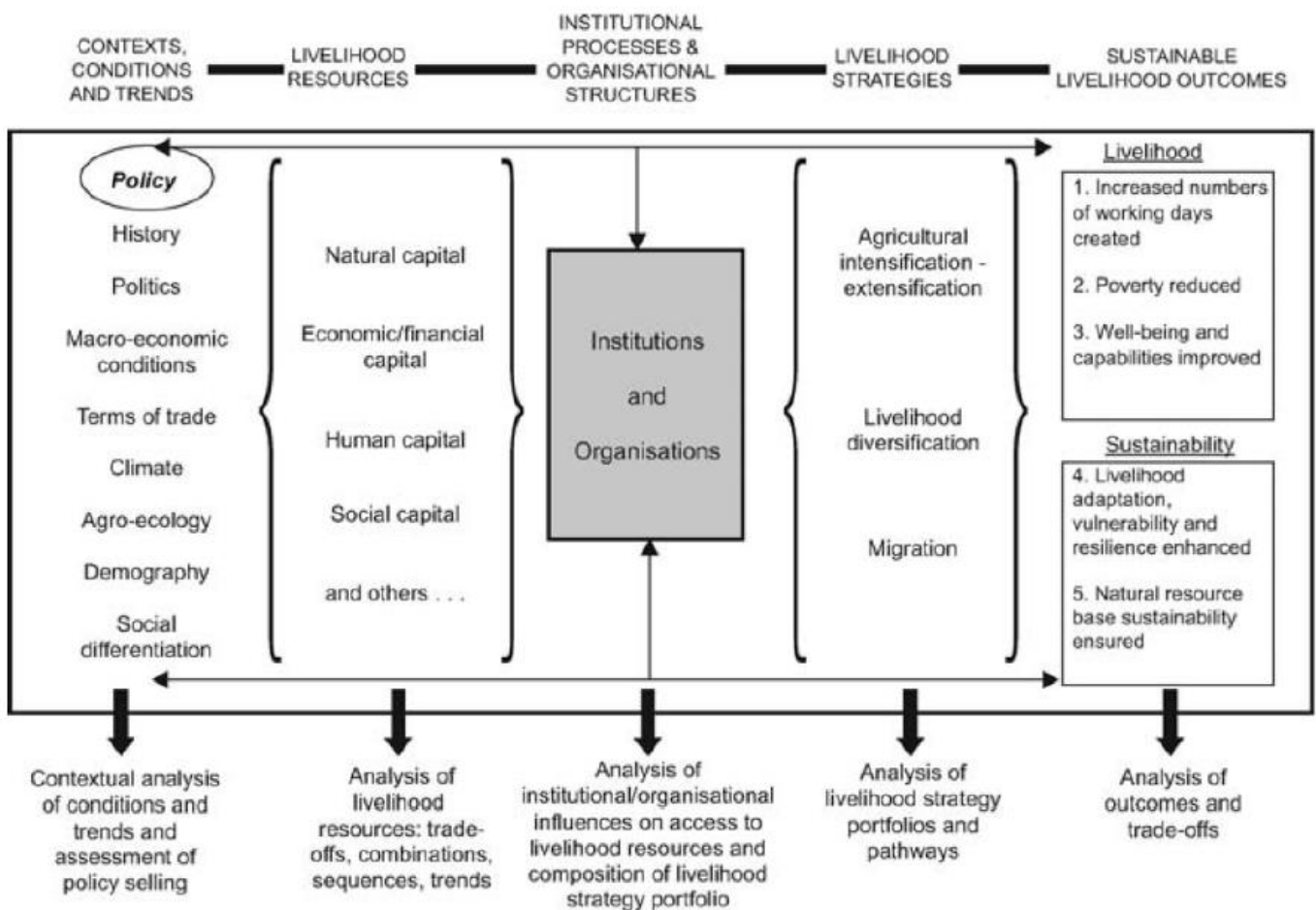
Date: 1970 - today

By DFID, ICRC, Save the children, etc.

Inspiration: 1970s Integrated Rural Development, 1990s Sustainable Livelihoods, Chambers-Conway's definition of livelihoods

Reviewed initiatives: DFID Sustainable livelihood framework, Livelihood Resilience Framework, ICRC Economic Security Framework, Household Economy Approach, Integrated Livelihood Vulnerability Analytical Framework

Featured Framework: Sustainable Livelihoods Framework, Scoones (1998).



Overview. Sustainable livelihood approaches are often used to complement vulnerability frameworks, which offer an understanding of vulnerability at the household or individual scale. Sustainable livelihood approaches originally emerged from the seminal work of Amartya Sen in the 1980s on inequality and famines, and later the work of Chambers and Conway in the early 1990s (Ashley & Carney, 1999; Wisner et al., 2004). The concept of ‘Sustainable Livelihoods’ constitute the basis of different ‘Sustainable Livelihood Approaches’ (SLA) and has been adapted by different development agencies such as the British Department for International Development (DFID). Sustainable livelihood approaches are people-centred, fundamentally concerned with how people live their everyday lives and the constraints that people face in pursuit of their livelihood goals (Ashley & Carney, 1999).

Sustainable livelihood approaches frame peoples’ livelihoods in accordance to peoples’ capacities, which are largely based on their access to and combination of assets or capital, including human, social, physical, financial, and natural. Accordingly, livelihood approaches aim to integrate an analysis of the capacities and assets available to individuals and households with a wider understanding of the context in which people live and the institutional structures and processes that constrain or support people’s livelihood assets and strategies.

Livelihoods are by definition about people. When referring to livelihoods, it is therefore always necessary to specify whose livelihood is being spoken/written about. In practice, livelihood frameworks are used primarily to describe either the livelihoods of individual households (HHs) or of entire livelihood groups. A *livelihood group* is a group of people who share similar basic means of livelihood and lifestyles – the same main subsistence activities and social and cultural practices – and face similar risks to their economic security (ICRC 2017).

Although the application of the livelihoods approach is flexible and adaptable to specific local settings and to objectives defined in participatory manner, it underlies a couple of core principles (Kollmair et al., 2002):

- **People-centred:** People rather than the resources they use are the priority concern in the livelihoods approach, since problems associated to development often root in adverse institutional structures impossible to be overcome through simple asset creation.
- **Holistic:** A holistic view is aspired in understanding the stakeholders’ livelihoods as a whole, with all its facets, by a manageable model that helps to identify the most pressing constraints people have to face.
- **Dynamic:** Just as people’s livelihoods and the institutions that shape their life are highly dynamic, so is the approach in order to learn from changes and help mitigating negative impacts, whilst supporting positive effects.
- **Building on strengths:** A central issue of the approach is the recognition of everyone’s inherent potential for his/her removal of constraints and realisation of potentials. Identifying these strengths rather than the needs and problems is the starting point of this approach, in order to contribute to the stakeholders’ robustness and ability to achieve their own objectives.
- **Macro-micro links:** Development activity tends to focus at either the macro or the micro level, whereas the SLA tries to bridge this gap in stressing the links between the two levels. As people are often affected from decisions at the macro policy level and vice-versa, this relation needs to be considered in order to achieve sustainable development.
- **Sustainability:** A livelihood can be classified as sustainable, if it is resilient in the face of external shocks and stresses, if it is independent from external support, if it is able to maintain the long-term productivity of natural resources and if it does not undermine the livelihood options of others.

Reference document

[Martin & Marschke 2016 A Review of Vulnerability and Livelihood Frameworks](#)

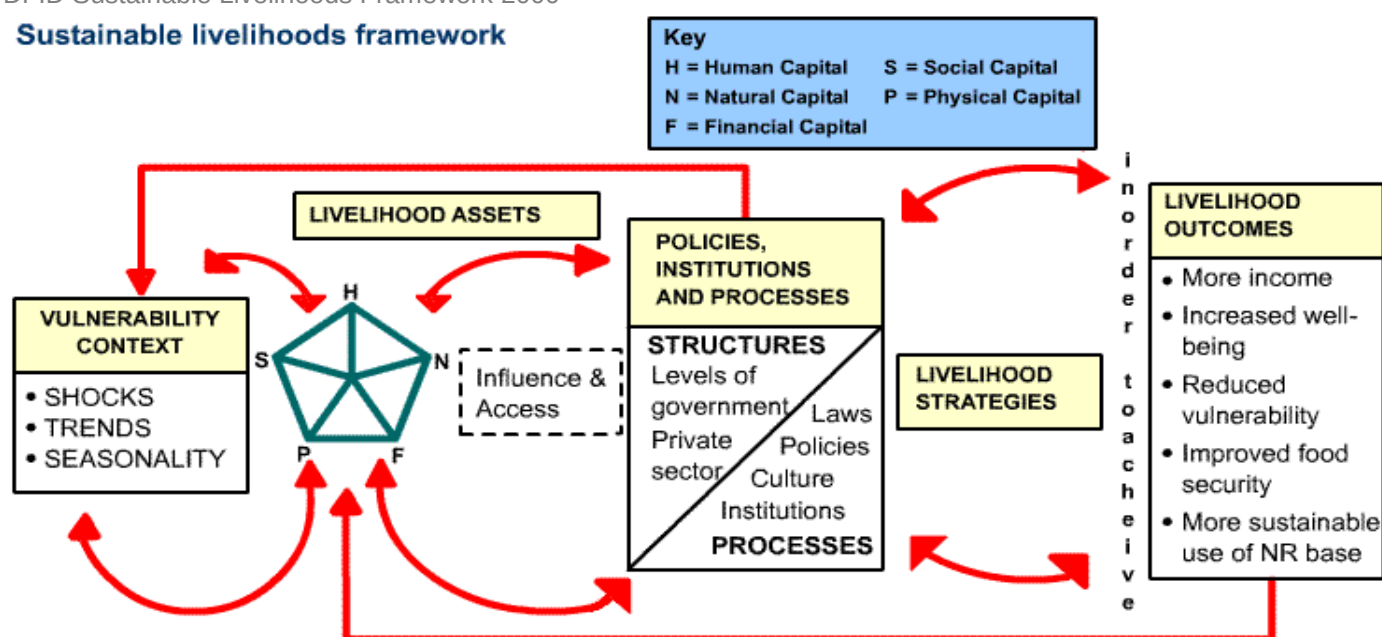
The **DFID Sustainable Livelihoods Framework (SLF) (1999, DFID)** was established by academics and practitioners working at UK Department of International Development in the 1990s in response to research dealing with issues of vulnerability, livelihoods, and poverty. It was developed to gather an understanding and analyse livelihoods of poor populations. This DFID framework has been widely applied by practitioners working within climate change, rural livelihoods and disaster risk reduction research, and is based on an adapted version of Chambers Conway's definition of livelihoods: "A livelihood comprises the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base" (DFID, 2000).

The Sustainable Livelihoods Framework is a people-centered approach to poverty reduction, focusing on the priorities that people identify and the livelihood strategies that they adopt in the pursuit of these priorities. The framework provides a broad overview of factors to consider relating to how people live and the strategies that they employ to achieve their desired outcomes. In particular, the framework provides a checklist of the important factors that influence and shape the livelihood strategies of the poor, while drawing attention to the linkages between elements considered.

The Sustainable Livelihoods Framework aims to consider how individuals and households make a living in light of their differential assets and entitlements. Scoones defines a livelihood as comprising of "the capabilities, assets (including both material and social resources) and activities required for a means of living" (1998, p.5). Further, a sustainable livelihood is deemed as one that can "cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base" (Scoones, 1998). Livelihoods are considered according to people's assets, their objectives, and the livelihood strategies that they adopt in pursuit of these objectives. Important to this are the feedback loops that shape elements within the framework, where livelihood outcomes influence the livelihood assets of individuals and households, and therefore future livelihood outcomes. Also of importance is how transforming structures and processes shape the vulnerability context, in which informal and formal institutions shape the exposure and sensitivity of peoples' livelihoods to shocks and stresses.

DFID Sustainable Livelihoods Framework 2000

Sustainable livelihoods framework



Broken down, the framework first considers situational factors and trends such as history, politics, and socio-economic conditions to understand the context in which people pursue their livelihoods. This is referred to as the Vulnerability Context, broadly referring to the environment in which people live. Here, shocks, stresses, and seasonality are explicitly considered in relation to the asset profiles of individuals and households. Shocks can destroy and damage assets directly, while also forcing people to abandon their homes and dispose of assets as part of coping strategies. Trends are more predictable, and tend to be more benign, often affecting the rates of return to livelihood strategies. Seasonal shifts affect the prices, employment opportunities, and the availability of resources to individuals and households. To understand the livelihood context it is necessary to understand the types of livelihood strategies employed by local people and what factors constrain or support them in achieving their livelihood objectives. Due social analysis is thus required in order to understand the relationship between particular social groups and factors within the Vulnerability Context.

The framework then considers the livelihood resources or Livelihood Assets that are available to individuals and households. Livelihood resources draw on the sources of capital available to individuals and households to pursue certain livelihood strategies. In the pursuit of livelihoods, individuals combine capital endowments, access to and control over resources, personal capabilities and tangible assets. Livelihood Assets represent the five forms of capital that individuals and households draw upon in order to pursue their livelihood objectives. Capital is broken down into human, social, physical, financial, and natural assets. Human capital is often measured in terms of education, health, access to information, and knowledge. Social capital refers to the networks that people draw on in the pursuit of their livelihood objectives. Networks can either be vertical (patron/client) or horizontal (shared interests, familial, kinship). Social capital is often measured through membership to formal organizations and groups, as well as informal relationships of trust and reciprocity between individuals. Natural capital refers to the natural resource stocks from which people draw to pursue their livelihoods. Natural capital varies from productive assets to intangible assets. The vulnerability context has a direct effect on natural capital, in which shocks and stresses may damage the natural resources in which people draw to pursue their livelihoods. Physical capital refers to the basic infrastructure and goods that are required in order to support livelihoods. Infrastructure comprises of transport, shelter, water supply and sanitation, energy, and communications. Here, access is a key area of concern, particularly in the urban context, in which certain groups may have differential access to infrastructure and services. Last, financial capital refers to the financial resources that people use to achieve their livelihood objectives, drawing on available stocks such as savings in the form of cash or liquid assets, regular inflows of money such as earned income, government transfers, and remittances.

The five key types of assets that compose the asset pentagon according to the SLF are:

- Human capital: skills, knowledge, the ability to work and good health. Good health is not simply a means to earning a livelihood; it is of course an end in itself.
- Social capital: the social resources that people draw on to make a living, such as relationships with either more powerful people (vertical connections) or with others like themselves (horizontal connections), or membership of groups or organisations. Generally relationships of trust, reciprocity and exchange that the poor can draw on in times of need, and that lower the costs of working productively together. Like human capital, social capital has an intrinsic value; good social relationships are not simply a means, they are an end in themselves.
- Natural capital: the natural resource stocks that people can draw on for their livelihoods, including land, forests, water, air and so on.
- Physical capital: the basic infrastructure that people need to make a living, as well as the tools and equipment that they use. For example, transport and communication systems, shelter, water and sanitation systems, and energy.
- Financial capital: savings, in whichever form, access to financial services, and regular inflows of money.

Attention is also placed on the institutional processes that mediate the ability of individuals and households to carry out their livelihood strategies. Termed as Transforming Structures and Processes, this can be understood in the way that institutions, organizations, and policies structure access to and control over resources, and in turn livelihoods. These structures and processes operate at multiple levels, determining access to capital assets, livelihood strategies, the terms of exchange between types of capital and the returns to any given livelihood strategy. Structures refer to the organizations that implement policies, deliver services, and perform functions that affect livelihoods. Processes on the other hand refer to the way in which structures and individuals operate and interact. It is important to note the power relations that structure institutional and organizational processes, and how these structures are political and value laden. Accordingly, individuals and households pursue livelihood strategies, which are determined in part by their access to and control over livelihood resources. Livelihood strategies are the pathways that lead to desirable outcomes on behalf of individuals and households. Livelihood strategies can take many forms, including: agricultural intensification or extensification; livelihood diversification; resource accumulation; and/or migration. People's livelihood strategies or pathways give way to livelihood outcomes, which take the form of longer periods of employment, reduced poverty, and improved well-being and capabilities. Sustainable livelihood outcomes involve additional factors, including reduced vulnerability to shocks and stresses, as well as the overall sustainability of the natural resource base in which a person's livelihood draws. This step involves the analysis of livelihood outcomes and the trade-offs involved in achieving desirable outcomes.

Reference Documents

[DFID 2008 Sustainable Livelihoods Approach and its Framework](#)

[SOAS The Sustainable Livelihoods Framework](#)

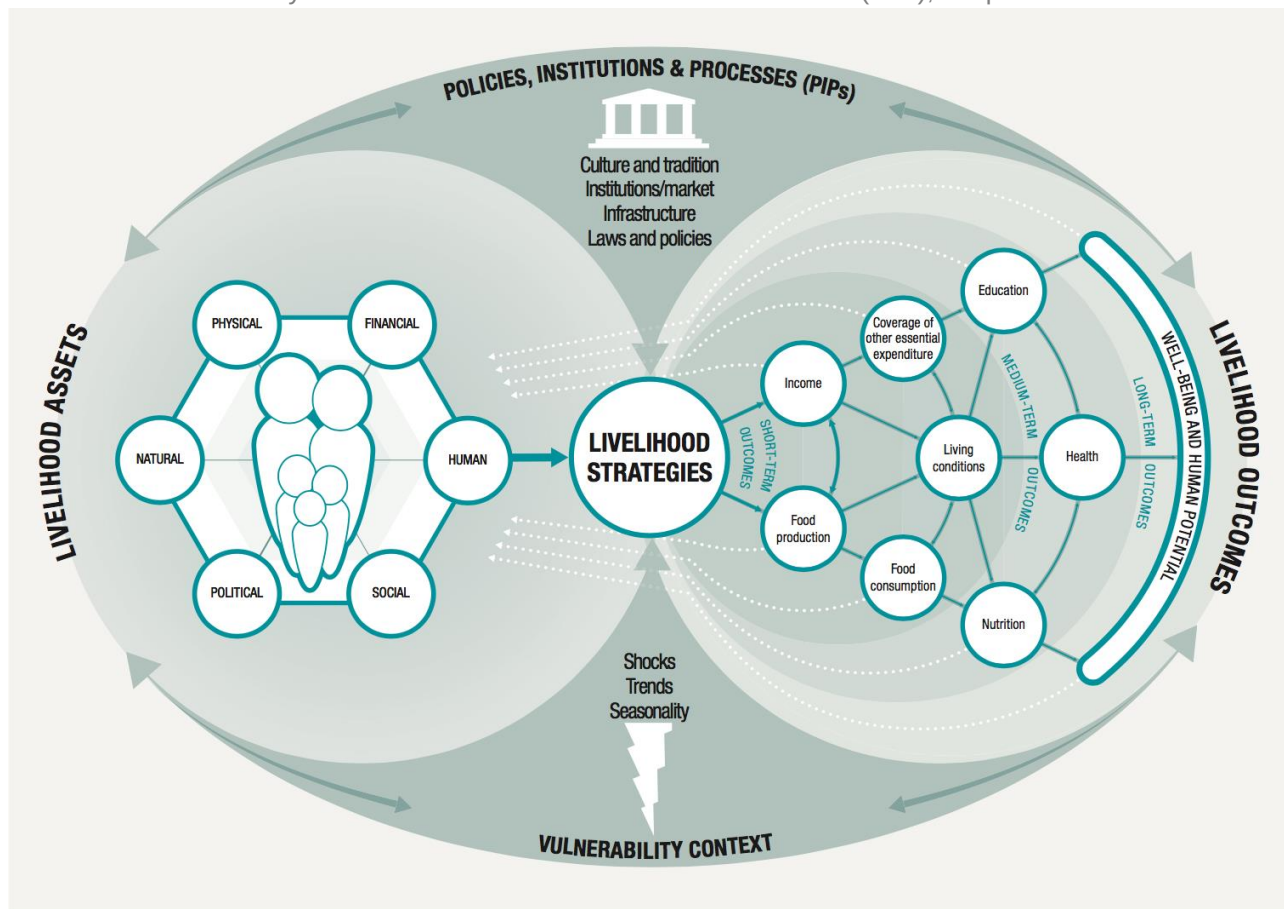
[Lautze and Raven-Roberts 2003 The Vulnerability Context: Is There Something Wrong With This Picture?](#)

ICRC Economic Security Conceptual Framework (2015, ICRC). In order to assess the economic security of individuals, households and communities, the ICRC developed an Economic Security (EcoSec) framework, adapted from the 1999 DFID Sustainable Livelihoods Framework. The framework aims to analyse basic needs in terms of livelihoods, but also in terms of hygiene, shelter, and other essential needs. It analyses “the interaction between livelihood assets, strategies and outcomes, and how they are affected by and influence policies, institutions and processes (PIPs) and the ‘vulnerability context’” (ICRC, 2017). For ICRC purposes, the SLF:

- helps to understand economic security at the household (HH) level;
- describes how people achieve economic security;
- helps to find out who is vulnerable to specific types of shock;
- allows the causes of the vulnerability to be identified; and
- supports the analysis of what could be done to improve the situation.

The six components of the SLF – people, assets, livelihood strategies, livelihood outcomes, PIPs and the vulnerability context – are presented below:

ICRC Economic Security version of Sustainable Livelihoods Framework (SLF), adapted from Chambers and Conway



In the EcoSec framework, livelihood assets influence livelihood strategies that - in a system affected by policies, institutions and processes (PIPs), as well as shocks, trends and seasonality – lead to specific livelihood outcomes. Livelihood outcomes involve not only the food production and consumption but also more general living conditions of the household involving also education, health and other factors (ICRC, 2017).

Households Assets, EcoSec Framework, ICRC 2017

Asset type	Description	Notes
Human	Physical condition Health and nutritional status, ability to work, ability to move Capacities Skills and education	A HH's human assets are the people themselves, their condition and their capacities. A HH's human assets can be seen as a balance between productive human assets (labour force, good education, well-developed professional skills) on the one side and the HH's liabilities (poor physical condition, illiteracy, high number of dependants,* chronically ill family member needing care, etc.) on the other.
Social	Solidarity networks such as the extended family, kinship structures, neighbours and religious groups as well as benefits gained through prestige and influence	Social assets comprise solidarity mechanisms available to a HH that extend beyond the HH (core family) but remain at an informal (non-government) level. Such networks are particularly important after a HH has experienced a shock. Example In many cases, displaced populations seek refuge in areas where they expect to experience solidarity from relatives or members of their ethnic group.
Political¹⁰	Rights acquired through citizenship, relations with the authorities	Political assets describe people's relationship to political power structures and decision-makers. Typical negative examples of this are favouritism and marginalization. Political assets also include the basic rights deriving from citizenship – or the absence of them if people are refugees, for example.
Natural	Natural resources such as (public) land, water, wildlife, biodiversity, the atmosphere and solar energy	Natural assets comprise the natural environment that is <i>not</i> privately owned and that, <i>in principle, is accessible to everyone</i> . The preservation and exploitation of these resources is usually regulated by formal or customary laws (regulations to protect water quality, the exploitation of timber, hunting, etc.).
Physical	Basic goods and infrastructure at HH level**	Physical assets are mostly related to living conditions and means of production and can be divided into the following categories: 1. Basic infrastructure(HH level) related to water, sanitation, transport, communication and energy; 2. Housing / shelter; 3. Non-food items: cooking, clothing, bedding, etc.; 4. Means of production: livestock,*** tools and devices used for livelihood activities as well as privately owned land.**** HHs' living conditions and their capacity to produce food often depend on physical assets.
Financial	Savings, gold and jewellery, remittances, credit, scholarships, pensions	These are HHs' <i>direct</i> "reserves" of cash. Income and salaries are not included because they are realized through livelihood activities and are thus classified under livelihood outcomes. Financial assets are crucial because they can be easily converted into other assets and therefore provide flexibility. For example, money can buy physical assets, be used to develop human assets through education or enhance political capital if used to pay bribes.

PIPs	Main functions	Examples
Policies and laws	Regulate access to resources and protect them Determine how resources and assets can be used and traded	Laws on land tenure and property rights, mining, environmental protection, hunting and fishing regulations, taxes, import and export regulations, subsidies on fuel
Institutions • Public • Private • Civil society	Manage resources Enforce laws and regulations Build and maintain infrastructure Provide services for people and goods	Government ministries responsible for roads and infrastructure, health services, markets and education, agricultural and veterinary extension services, labour unions, National Red Cross/Red Crescent Societies, international organizations, local water committees
Processes	Refer to <i>how</i> things are done and include routines, conventions and customs. Many of these "rules of the game" are based on culture and tradition.	Religious customs, marriage and dowry payments, class and caste system, access of women to employment, kosher and halal meat

market or the fuel market.

Category	Description	Examples
Shocks (general or idiosyncratic*)	Natural disasters, conflict, economic shocks, diseases (human, animal and plants), etc. Shocks are categorized by rapid onset. They are often impossible or difficult to predict.	Armed clashes, devastation through flooding, outbreak of the Ebola pandemic, rapid rise in global wheat prices, outbreak of foot-and-mouth disease in cattle herds, etc.
Critical trends/stress factors	Population growth, urbanization, environmental degradation, national and international economic trends, spread of new technologies, climate change, etc. Unlike shocks, trends evolve gradually and are therefore often more predictable.	Massive influx of IDPs into the area, high prevalence of HIV in the population, change in the length of the rainy season, soil erosion through deforestation, air pollution, threat to traditional livelihoods through industrial or mass production, etc.
Seasonal changes	Some elements that place additional stress on people's livelihoods recur annually and are predictable.	Hunger gap, bushfires, malaria season, peak of animal diseases, isolation due to road conditions (rainy season), etc.

* Idiosyncratic shocks, such as the death or illness of a family member, job loss or the destruction of private property, affect individual people or HHs rather than entire communities.

Assets or capital are the main building blocks for people's livelihoods. A household's asset base comprises its human resources, the physical and financial capital owned by its members and the material (natural resources) and non-material resources (social and political networks) to which they have access. The SLF accordingly distinguishes between six types of assets, as shown on the left.

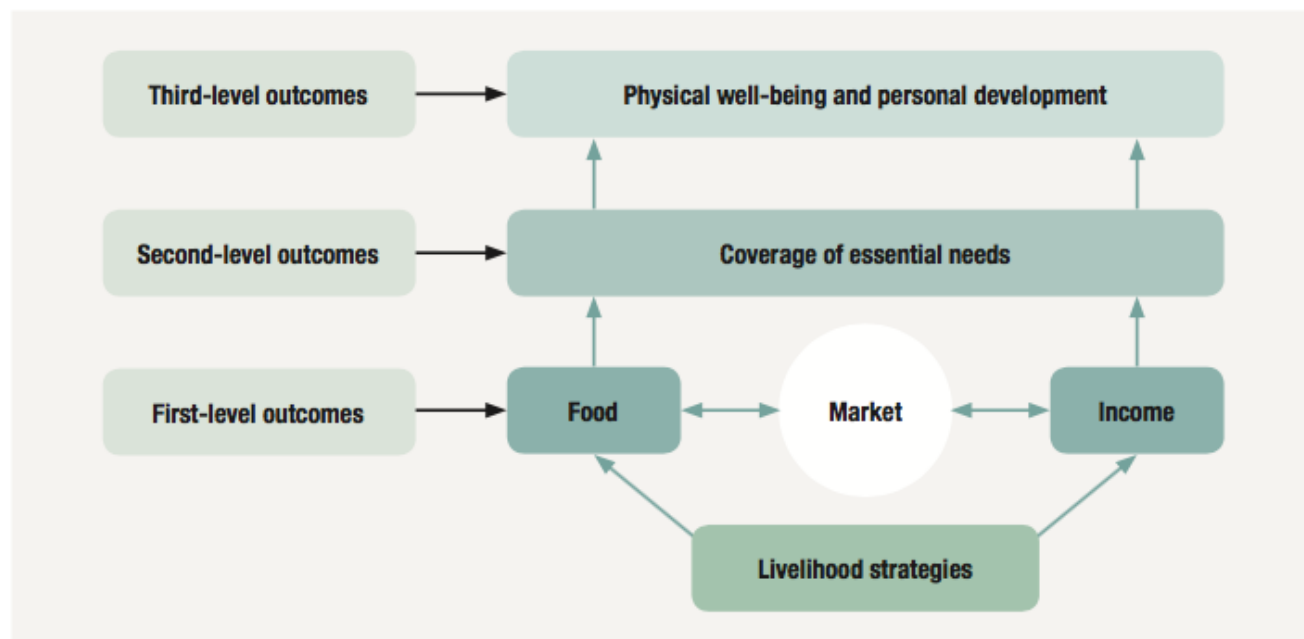
Policies, institutions and processes (PIPs) constitute the governance environment in which HHs pursue their economic activities. Because of the influence of PIPs on a HH's economy, it is vital to evaluate the presence and functioning of relevant institutions, services and infrastructure during an assessment. If crucial PIP elements are dysfunctional, any response that sets out to strengthen HHs' asset risks will be unsustainable. In a normal situation, well-developed PIPs provide a stable and predictable environment that favours economic activities and sets conditions that are equitable for everyone. However, there are situations in which PIPs are not enabling but have a discriminating and oppressive effect on all members of the society or some marginalized groups.

Markets are crucial institutions that exist in every society. They are essential for people's livelihoods and economic security as they allow them to buy goods, sell their produce or find jobs. There are two main ways in which reference is made to markets; First, a market is a physical location where people sell and buy goods and services, for example the Treichville market in Abidjan. Second, the term "market" refers to a delocalized and more comprehensive trade system that allows market actors to buy and sell a specific commodity, e.g. the livestock

The vulnerability context can be understood as the external causes of people's vulnerability; it therefore includes the elements of change and instability that shape the wider setting of people's livelihoods. While elements of the vulnerability context can be natural in origin or man-made, individual HHs have little or no influence on them. The vulnerability context is the driving force of a crisis and affects all aspects of livelihoods. Main types of elements in the vulnerability contexts are represented in the left table.

Livelihood strategies. A household's livelihood strategies comprise the range of economic and social activities undertaken by its members. In simple terms, they can be said to be what people do to earn a living. Members of a HH often pursue several activities, which may vary considerably at different times of the year. Consequently, livelihood strategies are often complex and multifaceted. Diversified livelihood strategies have the advantage of making the best use of the available capacities to earn income or to produce food and this diversity also makes HHs less vulnerable to shocks.

Livelihood outcomes. Livelihood outcomes are the result of livelihood activities and reflect how successful – or not – livelihood strategies have been at achieving the goals that people set for themselves. Three levels of livelihood outcomes are detailed in the EcoSec Framework:



Reference document

[ICRC 2017 EcoSec Handbook – Assessing Economic Security](#)

[ICRC 2017 Acquiring and Analysing Data in Support of Evidence-Based Decisions - A Guide for Humanitarian Work](#)

Household Economy Approach (HEA) (2008, Save the Children). The Household Economy Approach is a livelihood-based analytical framework developed by Save the Children UK in the early 90s designed to obtain information on how people access food and cash based on multi-level analysis. It draws from anthropology and sociology, disaster management, and the sustainable livelihoods and food security strand of the economics literature. HEA is primarily used to predict the impact of national-level shocks and disasters across different wealth groups, seeking to answer the following questions: “Where is assistance needed, and of what type? Who needs it? How much is needed, when and for how long?” (Lawrence et al., 2008).

The HEA was developed on the principle that information on events that beset a particular area or community – late rains, land reform, rising food prices – can only be properly interpreted if seen against the context of how people normally live. For instance, households that depend on their own production for much of their food needs will be affected by crop failure more severely than households that buy more of their food using income gained from casual employment in the towns. An understanding of people’s livelihoods is therefore essential for analysing the impact of any significant positive or negative change on households.

At the heart of HEA is a depiction of how people get by from year to year and of the connections with other people and places that enable them to do so. This is called the Baseline and has three components: livelihood zoning, a wealth breakdown and an analysis of livelihood strategies for each of the identified wealth groups.

The Outcome Analysis is the investigation of how that baseline access to food and income might change as a result of a specific hazard such as drought or as the result of a positive change, such as a program input or beneficial price policy.

The figure attached is the Household Economy Analytical framework which shows how these two components integrate to create a holistic view of livelihoods and the impact that a positive or negative change may have on these livelihoods.

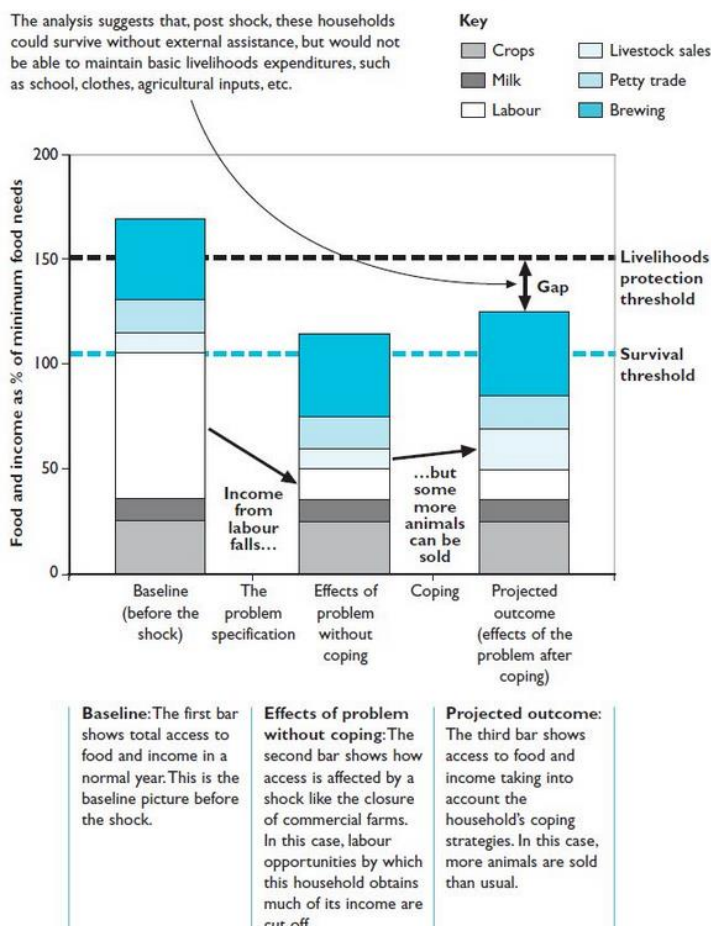
HEA is not a field tool, but a framework with discrete steps to follow to answer this set of research questions. It was initially developed to “provide large-scale (e.g. national) predictions of food emergencies,” but has since been adapted to assess an array of shocks (Petty & Seaman, 2004) and is used by most National Vulnerability Assessment Committees in southern Africa (SADC FANR Vulnerability Committee, 2004). HEA uses mixed methods, which can include analysis of secondary data, quantitative primary data, and participatory and qualitative approaches.

HEA can be used to create a comprehensive baseline for vulnerability analysis at the population level or can be combined with other frameworks and tools, such as political economy analysis, to create a four-way wealth breakdown and predict the impact of shocks. It can also be disaggregated to be useful at the individual and household level using the Individual Household Model described below. There are a number of free available tools, resources, and methodological guidance made available by Save the Children UK and other organizations on HEA. It is a fairly commonly-used framework and has been adapted according to the needs of various interventions

Reference documents

[The Household Economy Approach: A guide for programme planners and policy-makers](#)
[The practitioner guide to the Household Economy Approach](#)
[HEA Framework Overview](#)

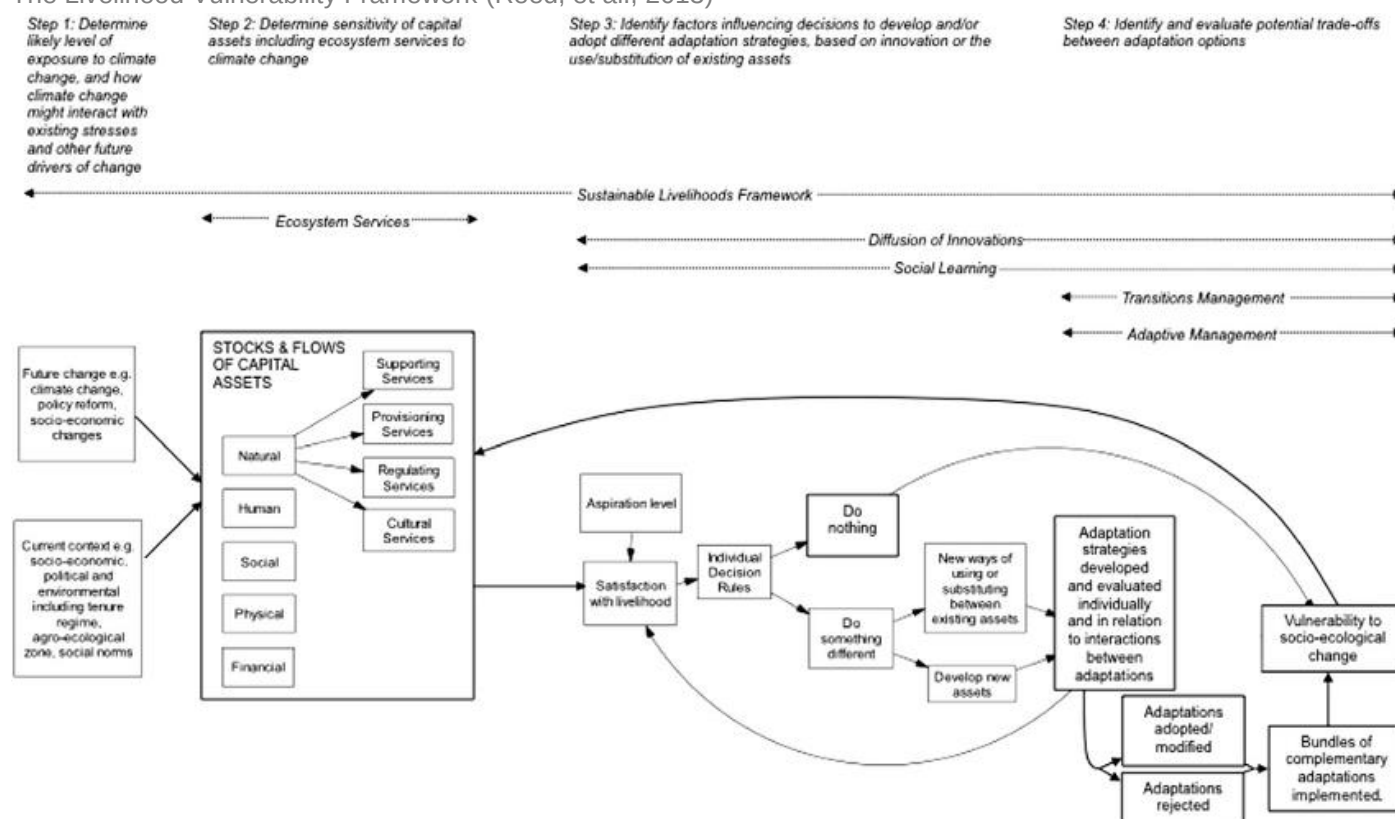
Figure 1: The HEA analytical framework – a simplified illustration



Integrated Livelihood Vulnerability Analytical Framework (2013, Reed) is an adaptation of the SLF to assess the vulnerability of livelihoods to climate change. It aims to provide a system to analyse the vulnerability of livelihoods in relation to ecosystem services, social learning, and adaptation strategies. This framework is ambitious and innovative in the way that it combines analytical frames of sustainable livelihoods and adaptation in the context of climate change.

The integrated livelihood vulnerability framework developed by Reed et al. represents a holistic approach to understanding livelihood vulnerability in relation to ecosystem services, social learning, and adaptation strategies. The framework adapts the Sustainable Livelihoods Framework to consider ecosystem services, social learning, transitions, and adaptive management. The framework seeks to understand how livelihoods adapt to shocks, seasonality, and wider socio-economic trends, and how livelihood strategies can build adaptive capacity to reduce people's vulnerability to current and future shocks and stresses. Livelihood vulnerability is assessed, while also considering the range of adaptation options available to individuals and households. In this way, the framework identifies not only sources of vulnerability to livelihoods, but also the potential range of options for households and communities to adapt to current and future changes.

The Livelihood Vulnerability Framework (Reed, et al., 2013)



The implementation involves four key steps which are:

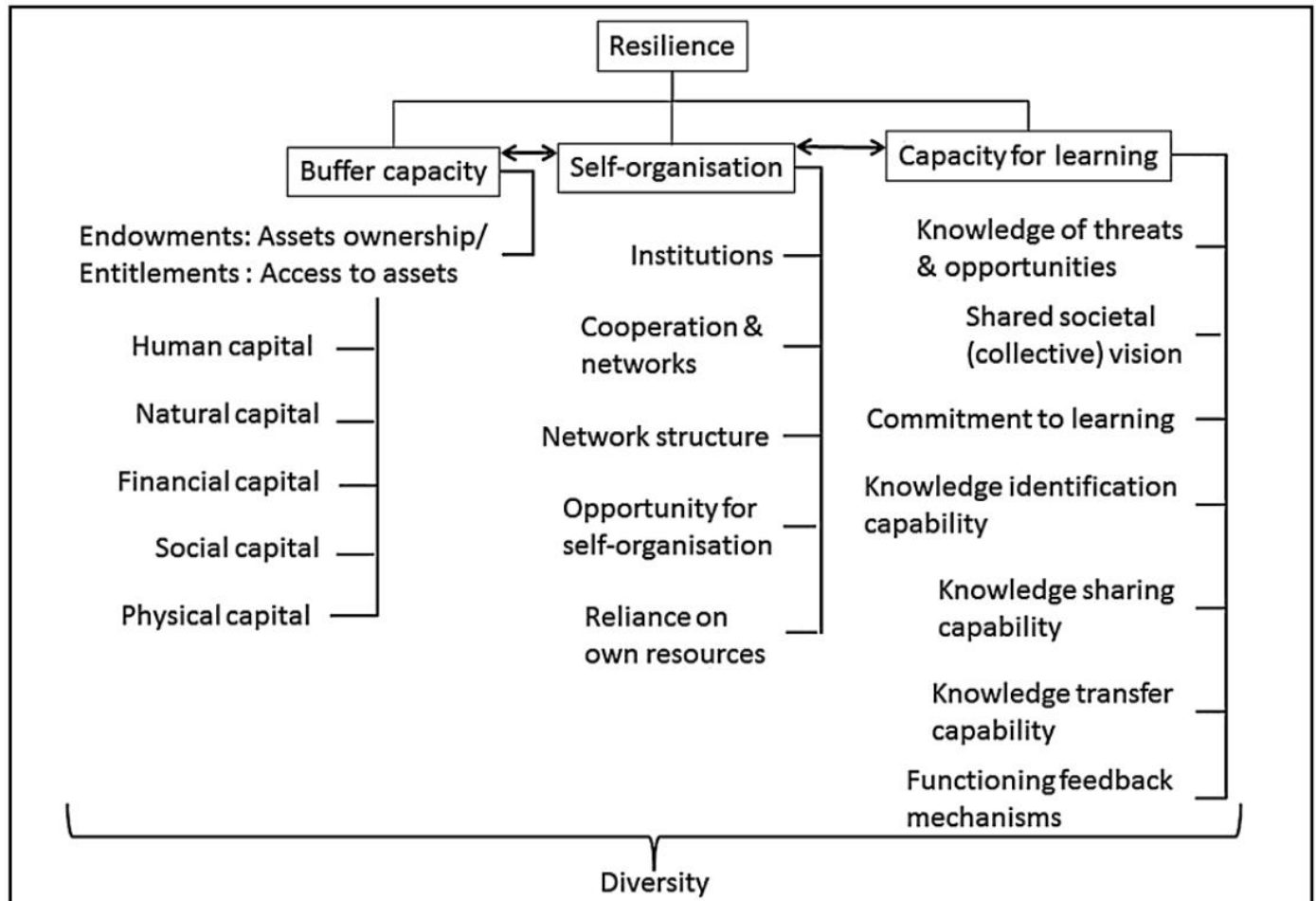
- Determining level of exposure to climate change and how climate change can interact with existing shocks and stresses,
- Identifying the level of sensitivity of livelihoods assets to climate change and stresses on the base of specific indicators,
- Identifying options for adaptations and other factors influencing decision-making for adaptation,
- Determining possible “tradeoffs” between different adaptation options.

Reference document

[Reed et al. 2013 Combining analytical frameworks to assess livelihood vulnerability to climate change and analyse adaptation options](#)

Livelihood Resilience Framework (2014, Ifejika Speranza, et al.). This framework aims to integrate the SLF resilience thinking, considering livelihoods in a system with socio-ecological factors. It uses an indicator-based approach with proxies in order to assess household- and community-level livelihood resilience. Livelihood resilience is defined as “the capacity of livelihoods to cushion stresses and disturbances while maintaining or improving essential properties and functions” (Ifejika Speranza, et al., 2014).

Conceptual and Analytical Framework for Livelihood Resilience (Ifejika Speranza, et al., 2014)



The three dimensions of resilience according to the framework are: the buffer capacity (assets ownership and access to assets), social self-organisation, and capacity for learning (both social and individual). Each dimension has a set of indicators on a base of a 5-point Lickert scale for both individual/household, and group/village/district levels.

Buffer capacity refers to the extent of change a system can undergo, while still retaining its essential structure, function, and identity. Buffer capacity is measured through livelihood capitals and dynamics. Indicators draw from the Sustainable Livelihoods Framework, considering both the endowments and entitlements that individuals draw from in their livelihood strategies. Endowments refer to the resources that an actor has ownership of, which is measured through the assessment of livelihood assets. Entitlements refer to an individuals or households access to resources, which a person can gain access to depending on their rights and opportunities.

Assessment Framework for Analysing the Buffer Capacity dimension of Livelihood Resilience (Ifejika Speranza, et al., 2014)

Dimensions of resilience	Indicators (changes in)	Resilience check – indicator-variables ^a	Individual/ household	Group/village/ district
Buffer capacity through a rural livelihood lens	Endowments/entitlements	Ownership and access to resources – <i>assessing levels and changes in conditions of and access to livelihood capitals</i>		
	Human capital – literacy level	Level of education – the higher the education the more literate	X	X
	Knowledge (experience)	Number of years in farming	X	X
	Skills	Other non-farm skills being practiced	X	X
	Health condition	Ability to use household labour; presence of a disabled household member	X	X
	Financial capital – income/yields	Crop yields as proxy – e.g. kilogram per hectare produced last season and last drought affected season	X	X
	Savings	Context specific – e.g. livestock	X	
	Labour income	Number of days of labour sale multiplied by income per man day	X	X
	Expenditure	Recall consumption expenditure in the last week	X	X
	Dependency ratio (DR)	The higher the DR the higher the financial burden for a household: Sum of 0–14 years and >64 years old divided by Number of 15–64 years old; household members not earning an income divided by those earning an income	X	X
	Social capital	Increase in other assets due to membership or participation in social networks; Labour support from group members	X	X
		Income gained through membership in groups	X	X
		Use of group tools, equipment and infrastructure	X	X
	Physical capital	Machinery, buildings, equipment, water ponds, granary – their financial equivalents.	X	X
	Natural capital	Soil fertility (nutrients), soil organic carbon, agroforestry and tree carbon, soil moisture content, biomass, runoff/erosion, pests, diseases – observations and measurements	X	X

Source: Own design based on literature mentioned in this section.

^a A 5-point Likert measurement scale can be used to capture the contributions to resilience: 0: none; 1: very low; 2: low; 3: average; 4: high; 5: very high.

Self-organization refers to the levels of freedom, autonomy, collective action, and selfreliance that individuals and communities draw from in order to shape social resilience. Selforganization explicitly emphasizes human agency and highlights its relationship to social capital and adaptive capacities. Self-organization is broken down into three indicator categories, including institutions, cooperation and networks, and network structure. Institutions refer to the formal and informal rules, social norms, codes of conduct, and organizational structures that influence livelihood strategies and outcomes. Here, it is important to understand the extent to which institutions support or constrain livelihoods, as well as how much an actor's livelihood practices contribute to developing institutions that are conducive to coping and adapting to stresses and shocks. Cooperation and networks refer to the interactions between actors and organizations within a community. This can be measured through a number of social capital proxies, including membership in groups, degree of group participation, and social cohesion. Last, network structure refers to the level of connectivity between actors and the social and ecological system. Here, attention is placed on the levels of reliance between actors in a livelihood system.

Assessment Framework for Evaluating the Self-Organisation Dimension of Livelihood Resilience (Ifejika Speranza, et al., 2014)

Dimensions of resilience	Indicators (changes in)	Resilience check – indicator-variables ^a	Individual/ household	Group/village/ district
Self-organisation	Institutions	E.g. policies, rules, local norms; existing rules and regulations governing land and water use Enforcement of rules and regulations governing land and water use (e.g. applied sanctions for non-compliance?); government encourages collective action (e.g. government support to/partnerships with farmer organisations)		X
	Cooperation and networks	Current group memberships: Number and type of groups in which farmer is a member	X	X
	Participation	Number of times a farmer missed the meetings of his/her main group in the last 12 months	X	X
	Trust	Village members can generally trust each other in matters of lending and borrowing money	X	X
	Reciprocity	Number of households in labour exchange		X
	Network structure	Context specific attributes of the SES' network-structure that are desirable for maintaining and improving resilience (e.g. network size, density, degree, bonding, proximity, homogeneity, connectivity levels, centrality, and network ties).	X	X
	Reliance on own resources	Major source of farm inputs (farm/non-farm); duration or distance to input source – the shorter the time/distance required to access inputs the better the livelihood resilience	X	

Source: Own design based on literature mentioned in this section.

^a A 5-point Likert measurement scale can be used to capture the contributions to resilience: 0: none; 1: very low; 2: low; 3: average; 4: high; 5: very high.

The final component of livelihood resilience is measured according to the capacity for learning. Social learning is an often-cited element to adaptive capacity and resilience as it indicates the extent that an individual, household, or community has acquired knowledge from past experiences and has incorporated lessons into current action. Indicators are based on knowledge of threats and opportunities; collective vision on behalf of individuals and institutions; government support and democratic decision making; and the application and spread of knowledge through social networks.

Assessment Framework for Evaluating the Learning Capacity Dimension of Livelihood Resilience (Ifejika Speranza, et al., 2014)

Dimensions of resilience	Indicators (changes in)	Resilience check – indicator-variables ^a	Individual/ household	Group/village/ district
Capacity for learning	Knowledge of threats and opportunities	Ability to analyse threats/potential opportunities (e.g. threats to farm production and opportunities to increase production over the last 12 months)	X	X
	Shared vision	Policies on farming and their fit with farmers practices, number of farmers with same/similar practices, frequency of discussing core practices in an extension platform in the last 12 months	X	X
	Commitment to learning	Public extension services organise open meetings regularly, access of all farmers in the community to extension services, frequency of discussing the performance of a last season with the extension service and with other farmers, time spent per month to access needed production information	X	X
	Knowledge identification capability-monitoring	Knowledge of prices for inputs and products (at beginning, middle of farm season and after harvest); of the best time to purchase and sell; of new agricultural practices in the area in the last 12 months, frequency of consulting forecasts	X	
	Planning	Farmer's planned new practices in the next farm season	X	
	Participation to access information	Number of times a farmer attended information events in the last 12 months and farmer's actions in those events (listening, discussing, etc.)	X	
	Experimentation	New items/methods tested in the last 12 months and how many adopted or dropped, new items/methods used in current farming season	X	
	Openness	Farm production/management problems, number of times farmer discussed farm production/management problems with other actors in the community during last 12 months	X	X
	Knowledge sharing capability	Number of farmers a farmer gave information/new methods to in the last 12 months	X	
	Knowledge transfer capability	New ideas/practices a farmer learned from other farmers (and other actors) in the last 12 months	X	
	Functioning feedback mechanisms	Frequency of interaction with key actors in farm production in the community in the last 12 months (e.g. other farmers, extension officers, district agricultural officers, local politicians, ministry directors, researchers, input traders, others-specify), new ideas and practices farmers learnt from these actors in the last 12 months	X	X

Source: Own design based on literature mentioned in this section.

^a A 5-point Likert measurement scale can be used to capture the contributions to resilience: 0: none; 1: very low; 2: low; 3: average; 4: high; 5: very high.

Important to the framework is the cross-cutting theme of diversity, which is a key element to understanding the resilience of livelihoods to shocks and stresses. The consideration of diversity can be applied in the context of sources of income, social networks and membership, and capital assets.

To operationalize the framework, an understanding of the social-ecological system in which livelihoods and livelihood strategies are shaped is needed. Here, attention to levels of exposure and sensitivity of the social-ecological system to climatic shocks, stresses, and disturbances is key to understanding existing sources of vulnerability. Further, it is also important to understand the respective positionality of actors within the social-ecological system. Here, it is important to understand the availability and accessibility of resources that enable the capacities of actors, as well as the opportunities that actors have in influencing their social-ecological system.

Reference document

[Ifejika Speranza et al. 2014 An indicator framework for assessing livelihood resilience in the context of social–ecological dynamics](#)

Vulnerability Frameworks

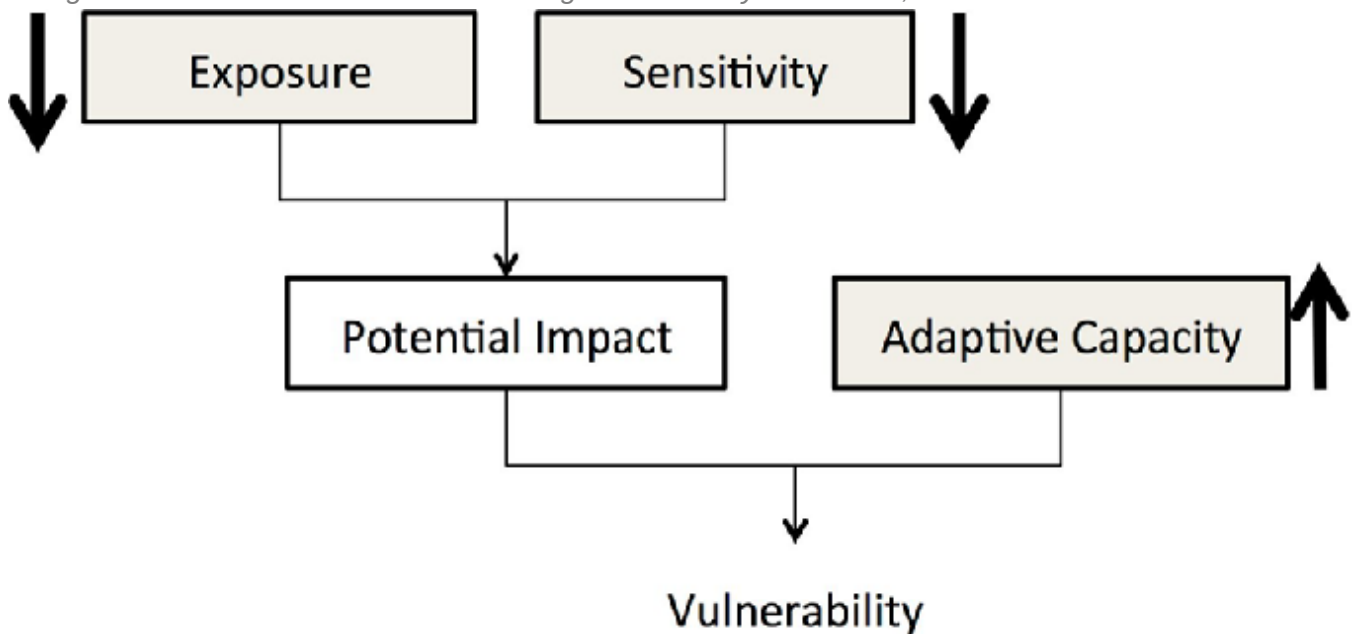
Date: 1960 - today

By: Countless organisations and governments

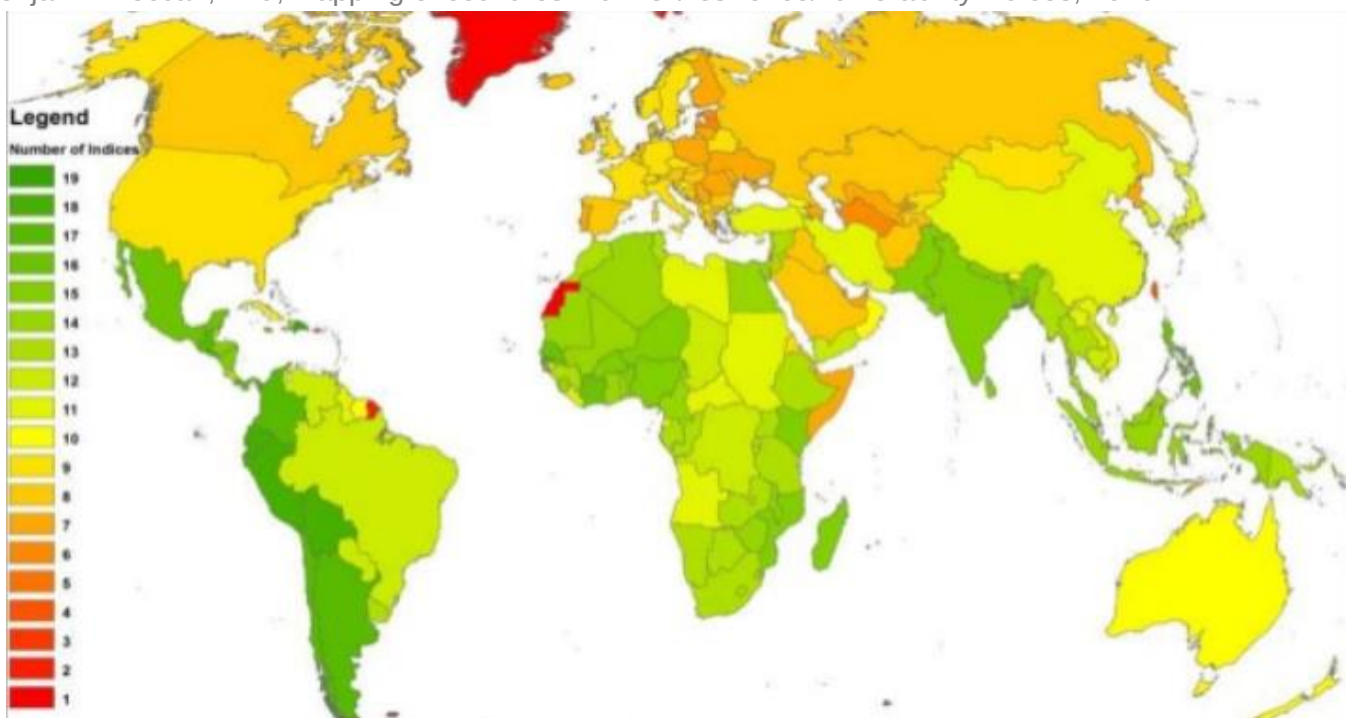
Inspiration: Risk Hazard/human geography, Social constructivist, Hazard of place

Reviewed initiatives: The IFRC Vulnerability and capacity assessment, Pressure and Release Model and the Access Model, Southern Africa Vulnerability Initiative Framework, Household Vulnerability Index, Framework for Vulnerability Analysis in Sustainability Science, MOVE framework of vulnerability, Local Vulnerability index, BBC Conceptual Framework, UNHCR vulnerability framework for refugees in Jordan

Intergovernmental Panel On Climate Change vulnerability framework, 2014



Benjamin Beccari, Phd, Mapping of countries with risk/resilience/vulnerability indices, 2016



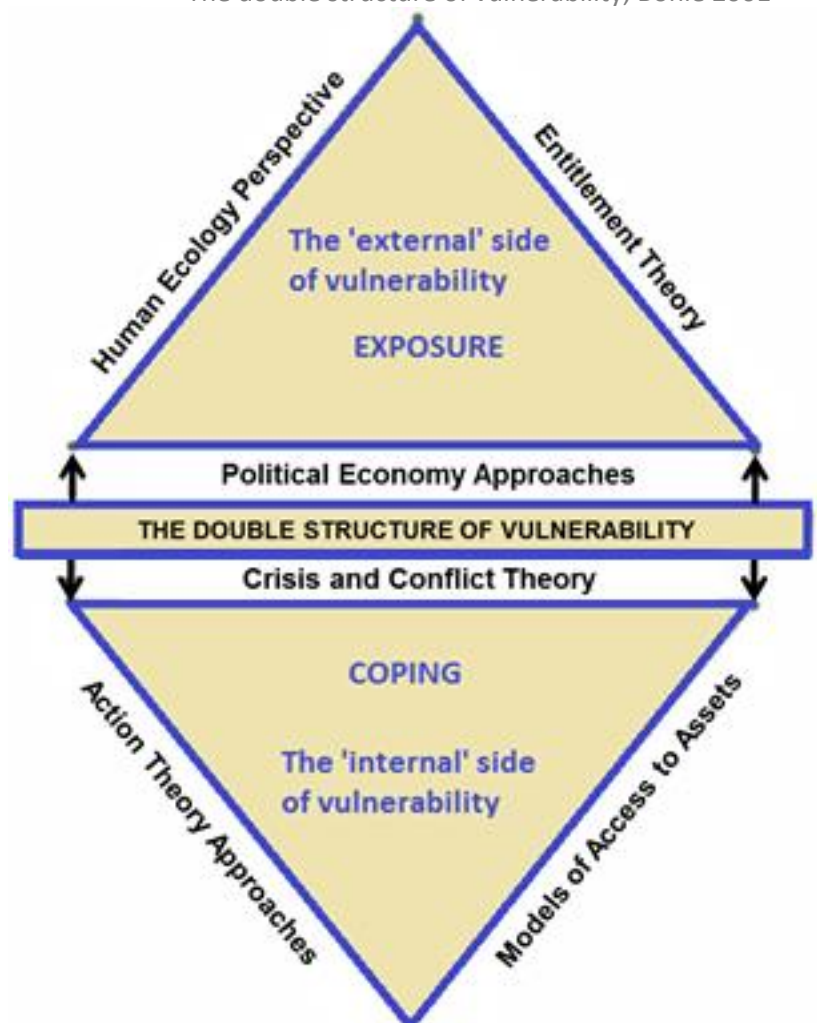
Background. The term *vulnerability* has been defined in many different ways by various scholarly communities and disciplines. Thywissen (2006) documented no less than thirty-six definitions, that differ so widely that the term becomes almost useless in an interdisciplinary context without further specification.

The ordinary use of the word 'vulnerability' refers to the capacity to be wounded, i.e., the degree to which a system is likely to experience harm due to exposure to a hazard. The scientific use of 'vulnerability' has its roots in geography and natural hazards research but this term is now a central concept in a variety of research contexts such as natural hazards and disaster management, ecology, public health, poverty and development, secure livelihoods and famine, sustainability science, land change, and climate impacts and adaptation.

Vulnerability is conceptualized in very different ways by scholars from different knowledge domains, and even within the same domain. Almost 30 years ago, Timmermann (1981) posited that "vulnerability is a term of such broad use as to be almost useless for careful description at the present, except as a rhetorical indicator of areas of greatest concern". Liverman (1990) noted that vulnerability "has been related or equated to concepts such as resilience, marginality, susceptibility, adaptability, fragility, and risk". Exposure, sensitivity, coping capacity, criticality, and robustness could easily be added to this list. Several authors have emphasized that the term 'vulnerability' can only be used meaningfully with reference to a particular vulnerable situation and should be complemented with four additional dimensions: the system of analysis, the valued attributes of concern, the external hazard, and a temporal reference.

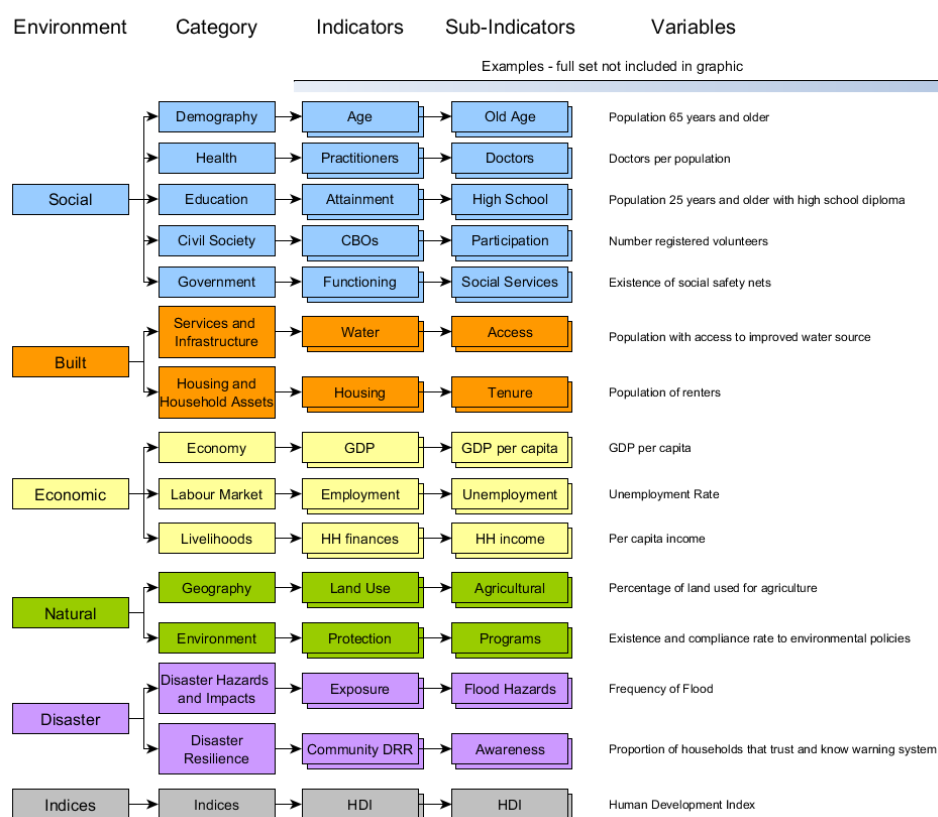
According to Bohle (2001), vulnerability can be seen as having an external and internal side. The external side is related to the exposure to risks and shocks and is influenced by Political Economy Approaches (e.g. social inequities, disproportionate division of assets), Human Ecology Perspectives (population dynamics and environmental management capacities) and the Entitlement Theory (relates vulnerability to the incapacity of people to obtain or manage assets via legitimate economic means). The internal side is called coping and relates to the capacity to anticipate, cope with, resist and recover from the impact of a hazard and is influenced by the Crisis and Conflict Theory (control of assets and resources, capacities to manage crisis situations and resolve conflicts), Action Theory Approaches (how people act and react freely as a result of social, economic or governmental constraints) and Model of Access to Assets (mitigation of vulnerability through access to assets). The conceptual framework of the double structure indicates that vulnerability cannot adequately be considered without taking into account coping and response capacity.

The double structure of vulnerability, Bohle 2001



Hoddinott and Quisumbing (2003) pose five questions that a vulnerability assessment should answer. First, "What is the extent of vulnerability?" and "Who is vulnerable?" In a stable environment without shocks, vulnerability to poverty is a good enough measure, but if there are shocks, an assessment should examine which households will move in and out of poverty. Next, the authors asks, "What are the sources of vulnerability? How do households respond to shocks?" and "What gaps exist between risks and risk management mechanisms?" Answering these questions requires multiple data collection methods and additional data, including the identification of "proximate causes of vulnerability as they relate to structural poverty and consumption volatility" (Chaudhuri and Christiaensen 2002). They also require data on response to shocks as well as private and public responses to risk.

Classification Hierarchy for Variables in Composite Indicator Methodologies



A 2016 review from [Benjamin Beccari](#) analysed 106 initiatives and methodologies for risk, resilience and vulnerability indices. The variables used in each index were recorded and grouped into sub-indicators, indicators, categories and environments based on the phenomena each variable was measuring. This classification hierarchy is illustrated in the left diagram.

The Indicators were grouped under 15 categories. The number of methodologies that included variables from each of the categories is shown in the left table.

A majority of the methodologies included some measure of demographics, education and health, with existing indices and measurement of aspects of government and the environment being used the least.

The 15 categories were grouped into 6 environments, to better enable visual analysis of the composition of each index. The use of variables in these 6 different environments in the different methodologies is summarised in the right table.

The most common variables are related to various social aspects of communities especially demographics, education and health. Respectively population density, number of doctors and literacy rate were the three most common variables in these categories.

Variables representing various economic aspects of communities: livelihoods, labour market and economy were the next most common. Respectively per capita income/per capita welfare receipts, unemployment rate and per capita GDP were the most common variables in these categories. Variables measuring housing, household assets, services and infrastructure were also very common, present in 70% of the methodologies. The number of renters and access to clean water were, respectively, the most common variables in these two categories. Despite purporting to measure disaster risk, vulnerability or resilience only 75 (71%) of the methodologies included some measure of disaster hazard, impact or resilience. Existing indices were used in only 21 of the methodologies, with most relying instead on directly collected data.

Number of methodologies using variables in each of the 15 categories

Category	Number of methodologies
Demography	87
Education	67
Health	64
Services and Infrastructure	61
Economy	59
Disaster Hazards and Impacts	59
Labour Market	47
Livelihoods	47
Housing and Household Assets	47
Disaster Resilience	41
Civil Society	39
Geography	37
Environment	28
Government	24
Indices	21

The diversity of theoretical and conceptual approaches to understanding vulnerability is challenging.

Over time three primary research frameworks emerged from understandings of vulnerability, as characterized by Fussel (2005). The first of which is the risk-hazard approach, used most often in technical research. This approach focuses on human geography and assesses the level of risk to the system being considered as a result of exposure to a hazard. In a risk-hazard approach the system whose vulnerability is being assessed is usually a physical one (e.g. built infrastructure). The second research framework is the social constructivist approach, focused on human ecology and with a focus on who is most vulnerable and why. A social constructivist approach is most frequently found in the poverty and development literature. Vulnerability in this framework is often understood as socio-economic vulnerability, and the associated ability or capacity to respond to a hazard or stressor. The final, and most currently prevalent, research framework is the hazard-of-place approach. Typically found in the climate change literature this framework understands vulnerability as an integration of exposure to a natural hazard, and adaptive capacity of the system in question. Five observations are consistent across the literature:

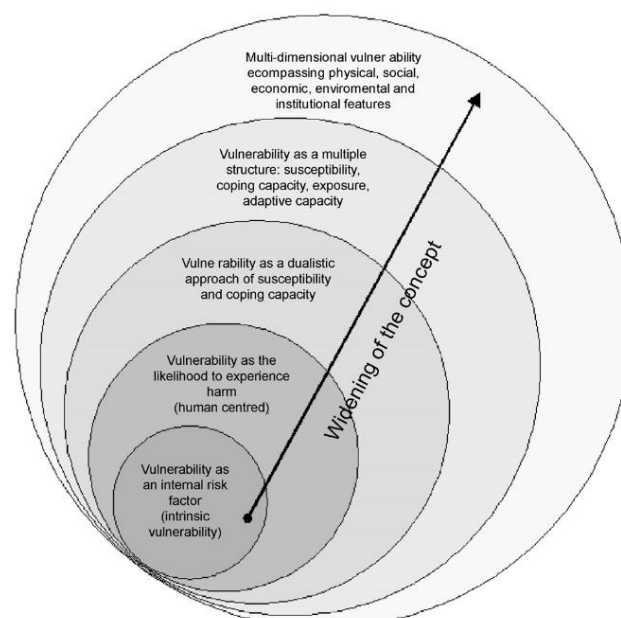


Fig. 1. The spheres of vulnerability. Source: Birkmann (2005).

Vulnerability as an integration of exposure to a natural hazard, and adaptive capacity of the system in question. Five observations are consistent across the literature:

- vulnerability is bound to a specific location and context;
- vulnerability is dynamic (i.e. it changes over time) due to a range of climatic, physical and socio-economic drivers;
- vulnerability is not experienced: it is a theoretical construct that is deductively assessed; and
- in order to be vulnerable to an extreme weather event, one has to be exposed to it in the first place. However, an entity can be exposed to an extreme weather event but not be vulnerable if it is not susceptible to harm from the event.
- Vulnerability and resilience can be seen as opposite constructs, i.e. a state may either be vulnerable or resilient but not both.

Within the disaster risk management literature, vulnerability is a component of risk. Vulnerability refers to the degree to which a system, or part of it, may react adversely during the occurrence of a hazardous event. The concept of vulnerability implies some risk combined with the level of social and economic liability, and the ability to cope with the resulting event. Thus people become “vulnerable” if access to resources either at a household, or at an individual level is the most critical factor in achieving a secure livelihood or recovering effectively from a disaster. The households with direct access to capital, tools and equipment, and able-bodied members are the ones which can recover most quickly when a disaster strikes. As such the most vulnerable people are the poorest, who have little choice but to locate themselves in unsafe settings. Despite the range of approaches to measuring vulnerability, several best practices in vulnerability assessment emerged over the last decades.

Vulnerability interacts with the hazard and exposure to the hazard to indicate the level of risk. The following formulation is used to understand risk: $Risk = f(Hazard, Exposure, Vulnerability)$ where:

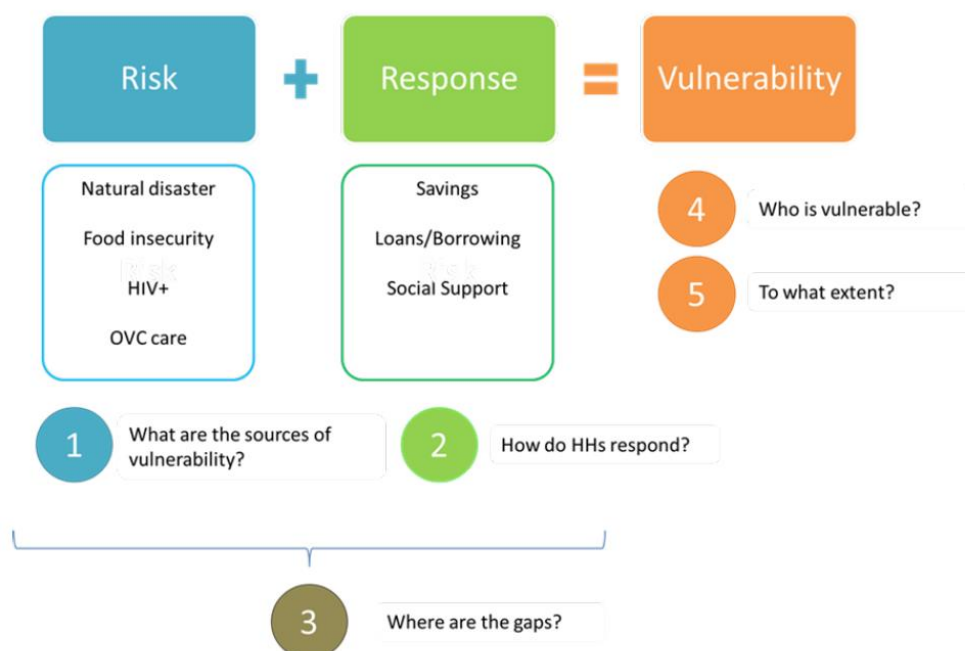
- **Hazard:** the extent, severity and probability of the hazard of interest, or ‘source of potential harm’.
- **Exposure:** refers to ‘people, property, systems, or other elements present in hazard zones that are thereby subject to potential losses’ (UNISDR, 2009).
- **Vulnerability** ‘the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard’ (UNISDR 2009).

Hazard	Exposure
Physical	Physical vulnerability relates to buildings, infrastructure and agriculture. Although the focus is on physical assets, it also includes the potential loss of crops and other infrastructure necessary to livelihood. Vulnerability analysis should examine the risk faced by critical facilities, which are vital to the functioning of societies in disaster situations, such as hospitals and dispensaries, emergency services, transport, communication systems, essential services, etc.
Social	Vulnerable groups include women, mentally and physically handicapped persons, children, and elderly persons, the poor people, refugees, and livestock.
Economic	Economic vulnerability assesses the risk of hazard-causing losses to economic assets and processes. These fall into two groups: Direct. Damage to or destruction of physical and social infrastructure and its repair or replacement cost, as well as crop damage Indirect. Loss to production, employment, vital services, income disparities

The right table details various levels of exposure of persons and property to different hazards (Virendra Proag, Concept of vulnerability and resilience, 2014).

In the humanitarian and development community, vulnerability has become an important concept used to guide the design, evaluation, and targeting of programs. In southern Africa, for instance, governments, NGOs, UN agencies, and other groups formed country-level Vulnerability Assessment Committees starting in 1999 to harmonize and improve methods of assessing vulnerability, with a focus on food aid (Frankenberger, Mock, & Jere, 2005). As the concept has matured, practitioners have given greater emphasis to the multidimensionality of

vulnerability, working with a variety of measures to capture its complexity. Most of the humanitarian literature adheres to some variation of a basic formula recurrent throughout the literature:



$$\text{Risk} + \text{Response} = \text{Vulnerability},$$

or, as articulated in Holzmann et al.'s guidelines on the Household Economy Approach (2008):

$$\text{Baseline} + \text{Hazard} + \text{Response} = \text{Outcome}$$

Part of measuring the response include incorporating a sustainable livelihoods perspective to assess capabilities and assets that contribute to resilience (Naudé, Santos-Paulino, & McGillivray, 2009).

Vulnerability is a multi-dimensional concept with multiple stressors. Over the past decades, methods of vulnerability assessment have been developed in a wide range of development-related fields, ranging from natural hazards research, food security research and poverty analysis, to sustainable livelihoods research and related fields. Several conceptual models have been developed to give risk managers a framework for understanding vulnerability to natural disasters and how to reduce it. Experiences with these frameworks suggest that vulnerability is a complex subject that has many dimensions (economic, social, political and geographic), which may often have overlapping effects that make it difficult to tease out the precise cause-effect relationship. Vulnerability is obscure as a stand-alone concept and only serves a practical purpose once we ask the question, “vulnerability to what?”. The tendency in answering this question is to isolate a single cause of vulnerability. However, the literature has moved away from this approach to a more systemic perspective, in recognition of the complexity of vulnerability and the interaction of various causes and effects of vulnerability. As Adger (2006) notes, more recent work on the topic now “emphasizes multiple stressors and multiple pathways of vulnerability”. This also suggests that the different perspectives on the vulnerability concept across disciplines are increasingly influenced by one another, taking natural hazards, social vulnerability, and economic vulnerability into consideration with varying degrees of emphasis. As such, measures of vulnerability continue to vary and operate according to different definitions and purposes. The complexity entailed in encompassing and measuring various geographical, spatial, temporal and social dimensions of vulnerability has resulted in a multitude of different methodologies for measuring vulnerability, and only a subset is being listed in this review. Ultimately, selecting vulnerability assessment methods will depend on the purpose and focus of the vulnerability assessment.

Vulnerability vs. poverty. Economic strengthening programs seek to reduce poverty, so targeting beneficiaries according to poverty level seems intuitive. Poverty levels, however, can fluctuate, and people on the cusp of the poverty line may be more vulnerable to shocks than those who are already deemed poor. The consensus in the literature agrees that poverty cannot be conflated with vulnerability, and that vulnerability analysis requires forward-looking information including indicators of risk (Naudé, Santos-Paulino, & McGillivray, 2009; O'Brien, Quinlan, & Ziervogel, 2009; Prowse,

2003). Understanding vulnerability helps practitioners better understand future trajectories for different groups, and thus design and target interventions more effectively.

Vulnerability vs. resilience. In recent years, the concept of resilience has been featured very strongly in the language of the development community, referring to “the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change” (Adger 2000). Where vulnerability is focused on risk, resilience is concerned with coping. Although the Food and Agriculture Organization of the UN (2010) notes vulnerability and resilience are complementary concepts, it warns that the tendency of vulnerability measures to focus on a single shock can oversimplify measurement. This is echoed in Bene et al. (2012), who note that the literature on resilience, which tends to be more focused on ecology, features a more systemic perspective than much of the literature on vulnerability.

Vulnerability assessments should have a predictive function (Naudé et al., 2009) that “define[s] vulnerability in relation to a socially acceptable level of outcome” and evaluates both idiosyncratic (individual) and covariate (systemic) risk in addition to a “system’s ways and means of coping”. Frankenberger (2005) suggests that “vulnerability assessment data should be easily aggregated and disaggregated from the household to the regional level”. In reality, this level of disaggregation is only feasible when utilizing quantitative household measures.

A final key feature of vulnerability assessment is the inclusion of community perceptions of vulnerability into the assessment design and definition of vulnerability (Kalibala, Schenkb, Weissc, & Elsond, 2012). Participatory methods, such as Participatory Rapid Appraisal (PRA), are considered a best practice.

Reference document

[2016 A Comparative Analysis of Disaster Risk, Vulnerability and Resilience Composite Indicators](#)

[Vuwiki, A Knowledgebase and Ontology for Vulnerability Assessment Methods](#)

Vulnerability and Capacity Assessment (1999, IFRC). IFRC defined vulnerability “as the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard. The concept is relative and dynamic. Vulnerability is most often associated with poverty, but it can also arise when people are isolated, insecure and defenceless in the face of risk, shock or stress”.

IFRC also defined capacity as “the resources available to individuals, households and communities to cope with a threat or to resist the impact of a hazard. Such resources can be physical or material, but they can also be found in the way a community is organized or in the skills or attributes of individuals and/or organizations in the community”

IFRC work on Vulnerability and Capacity started in the 1990s with the first Vulnerability and Capacity Assessment (VCA) guide published in 1999, and then revisited and republished in 2006. The aim of such framework, historically based on the Pressure and Release model (also called “Disaster Crunch”) detailed below, is to understand the exposure of people to natural hazards and their capacity to resist and support the development of community-based disaster preparedness programmes in both urban and rural environments.

VCA is complementary to national and sub-national risk, hazard, vulnerability and capacity mapping exercises that identify communities most at risk, and is undertaken in communities to diagnose the specific areas of risk and vulnerability and determine what action can be taken to address them. The VCA allows for identifying priorities and defining the most appropriate measure to be put in place in order to mitigate the impact of disasters. In this model, the level of exposure of the population to a specific hazard, together with the sensitivity of the population to that hazard have a potential impact, which is mitigated by the population’s level of capacity to adapt. The result is the level/degree of vulnerability of the population to that hazard.

The implementation of the VCA calls for highly participatory data collection techniques. The total number of Vulnerability and Capacity assessment available to date in the world is unknown, but the current IFRC repository contains more than a hundred reports. Each National Society adapt the tools and questionnaires contained in the manual. In 2016, the IFRC complemented existing guidance with the publication of the Framework for community resilience (2014) and the Road Map to Community Resilience (2016). Those frameworks are further detailed in the resilience section of this report.

Reference Documents

[IFRC 2006 Vulnerability and capacity assessment: Lessons learned and recommendations](#)

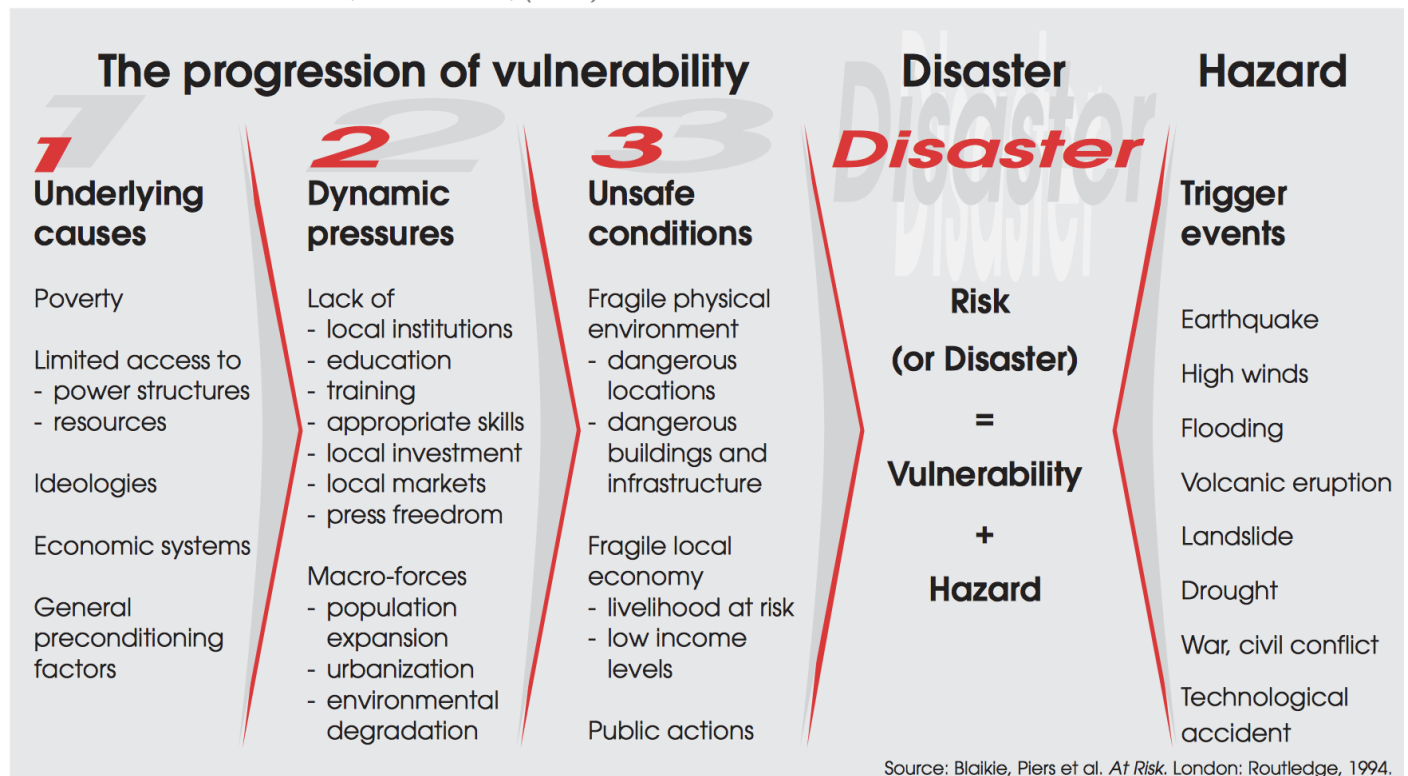
[IFRC What is Vulnerability?](#)

[2006 IFRC What is VCA](#)

[2016 IFRC Vulnerability and Capacity Assessment \(VCA\)](#)

The Pressure and Release Model (1994, PAR) model of vulnerability is one of the most well-known and often cited conceptual frameworks within vulnerability research. The model represents the leading framework for the assessment of social vulnerability. The pressure and release model (PAR model) views a disaster as the interaction of two major forces: on one side the hazard event while on the other side those processes generating vulnerability. In this context vulnerability is defined within three progressive levels: root causes, dynamic pressures and unsafe conditions. Thus, the model avoids direct identification of vulnerability and refers to underlying causes of why the population is vulnerable. The approach underlines the fact that efforts to reduce vulnerability and risk involves changing political and economic systems that in turn help to change local capacity. Again, in multi-causal situations and dynamic environments, it is hard to differentiate between the causal links of different dynamic pressures on unsafe conditions and the impact of root causes on dynamic pressures.

Pressure and Release Model, Blaikie et al., (1994)



The PAR Model is based in a social constructivist approach to vulnerability, in which the social, political, and economic structures that cause populations to be vulnerable to natural hazards is at the core of analysis. The PAR model was originally developed by Blaikie et al., (1994), and later revisited in the second edition of Blaikie et al. *At Risk* in 2003. The PAR Model considers risk according to the interaction of vulnerability and hazards. Accordingly, vulnerability is seen as a causal chain, comprising of three linked components – root causes, dynamic pressures, and unsafe conditions. Root causes refer to the general processes that stem from the centre of political and economic power and extend to the taken for granted social relations of society.

- Root causes are determined by the social, economic, and political structures that shape the distribution of power and resources between and amongst social groups. Here, processes of social and economic marginalization are considered in relation to the exposure and sensitivity of disenfranchised populations.
- Dynamic pressures on the other hand, refer to the processes that channel the effects of root causes into unsafe conditions. The contemporary patterns of social, economic, and political events and processes in turn shape dynamic pressures, which include patterns of population growth, rapid urbanization, war and conflict, and debt. Dynamic pressures in turn lead to unsafe conditions, which render populations at risk to hazards.
- Unsafe conditions refer to the location, capacity, livelihoods, and entitlements of populations, which can range from the hazardous location of settlements to issues of access to resources or services. It is important to note how unsafe conditions are dependent on the preliminary welfare of populations, and differs between and amongst social groups, households, and individuals. Further, the consideration of the tangible and intangible assets of individuals and households is also important in determining differential capacities to cope with adverse impacts.

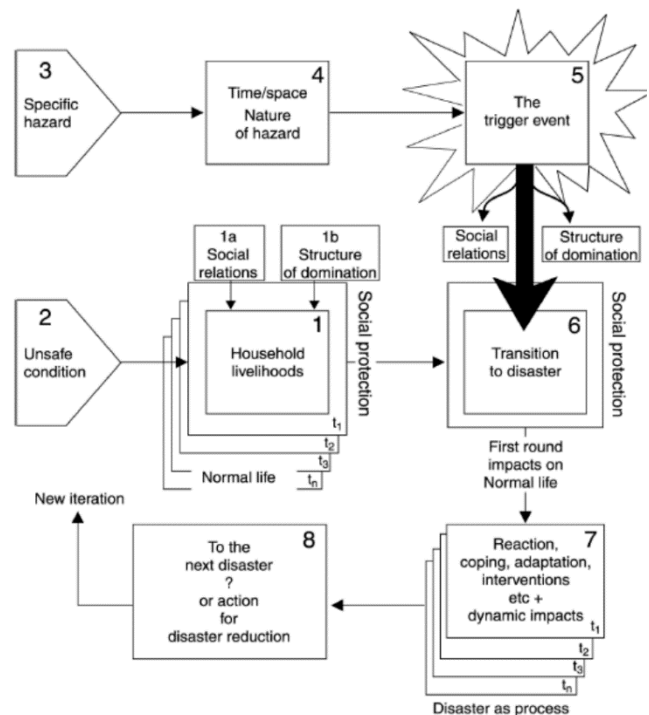
The PAR Model is an organizational framework that is useful for understanding the relationship between root causes, dynamic pressures, and unsafe conditions, and the vulnerability of at risk populations to hazards. It is important to recognize that the PAR Model is based in the understanding that no single factor should be considered in isolation, as the sources of vulnerability ultimately stem from the underlying root causes that lead to unsafe conditions. The release aspect refers to this, which is based in the idea that in order to attend to the pressures that lead to vulnerability, the underlying root causes need to be addressed. The PAR Model thus presents a tool for understanding the sources of vulnerability for at risk populations on a societal level, however, taken by itself, it lacks an understanding of the detailed conditions of vulnerability at the household and individual scale. Therefore, the PAR Model uses a complementary Access Model to consider in detail the vulnerability of populations at the micro level, considering the impact of a hazard at the individual and household scale. Here, the impacts of a hazard on specific at risk populations is considered through the analysis of the agency of individuals and their capacity to cope in the case of hazardous events.

The complementary Access Model is in many ways a response to the recognized limitations of the PAR model, which compensates for the static and macro characterization of vulnerability by developing a more detailed account of vulnerability at the individual or household level. As the name of the model suggests, access is key to understanding how vulnerability is differentially distributed amongst society by analyzing through a detailed account of peoples' access to capabilities, assets, and livelihood opportunities. Here, the emphasis is placed on understanding peoples' differential ability to cope and recover from a trigger event such as a disaster by analyzing a household's or individual's differential access to material, social, and political resources.

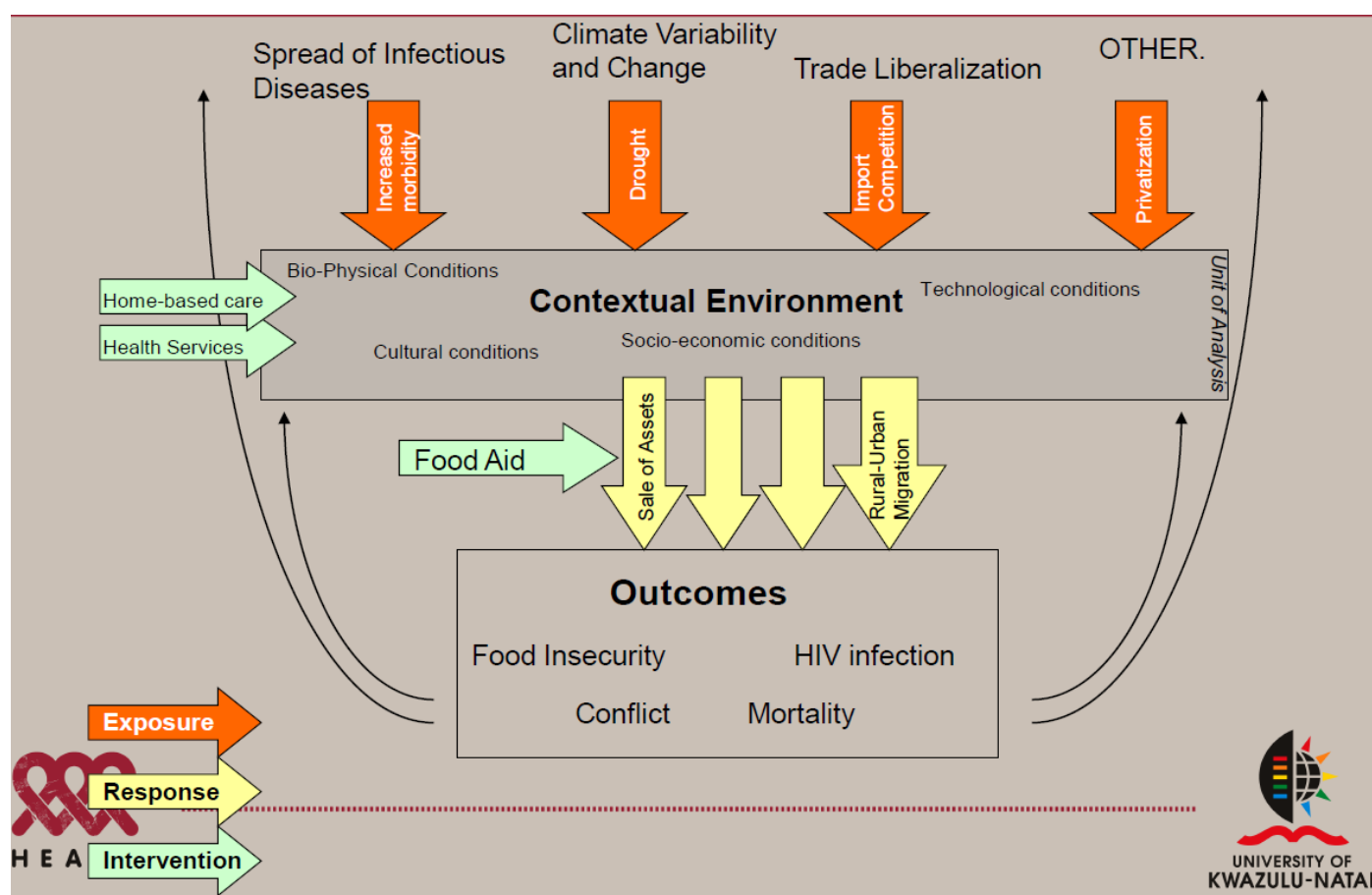
The Access Model is comprised of a series of cause-effect linkages, in which the social, political, and economic structures and relations shape a household's vulnerability based on their living conditions, and their access to resources, assets, and capabilities. Fundamental to this understanding of access is the concept of livelihoods or the decisions that people make to earn a living. Blaikie et al. (2004) contextualize household livelihoods according to the social and political structures that influence their access to resources and their capabilities to make livelihood decisions.

Social protection is also seen as critical to understanding household vulnerability, referring to the presence of precautions and preparedness on behalf of the state or local collective action. Key to the Access Model is the conceptualization of dynamic relationships and feedback loops that take place between vulnerability and risk and adaptation. Accordingly, how a household responds to a trigger event is termed as 'disaster as process', which comprises of a series of responses: reactions, dynamic impacts, coping, and adaptation. This process of responses to a disaster loops into the question of the next disaster, which depending on the responses taken may mitigate or compound vulnerability. As part of this transition is the understanding of how a household is impacted by a disaster, and how this fundamentally affects a household's access to capabilities, and by extension the social relations within society. The Access Models represents a much more dynamic and detailed approach to understanding vulnerability and risk, complementing the strengths and limitations of the PAR model. When considered together, the PAR Model and the Access Model present a fairly strong and holistic framework for understanding vulnerability through the analysis of societal structures and the social causation of vulnerability and how unsafe conditions are manifested at the individual and household level.

The Access Model Wisner et al., (2004)



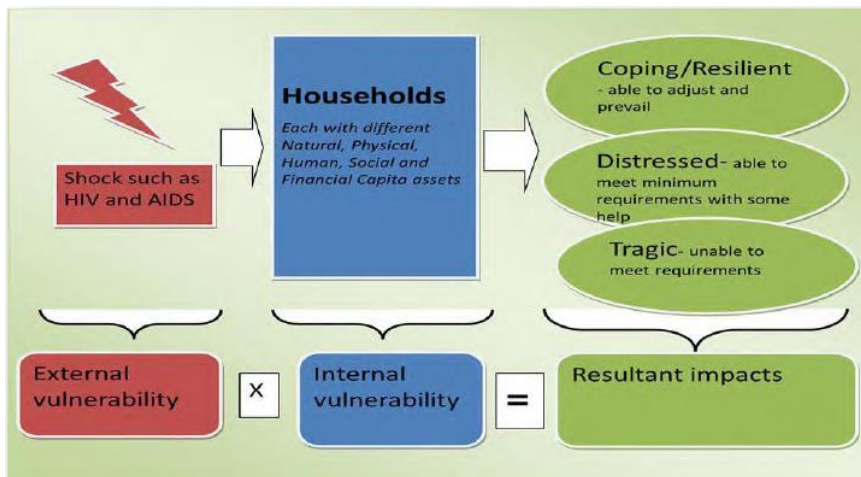
Southern Africa Vulnerability Initiative (2004, SAVI). The Southern Africa Vulnerability Initiative (SAVI) framework is a conceptual approach that emphasizes interconnections of multiple stressors, including HIV/AIDS, that was developed by group of scientists in 2004 (O'Brien et al., 2009). It draws on the vulnerability literature originating in the disciplines of anthropology/sociology, economics, and disaster management. Though it does not provide a toolkit or instructions for the selection of instruments for measuring vulnerability, the SAVI framework provides a set of research questions that can be used to drive the development of an assessment.



The framework's focus on the interaction of multiple stressors is based on the premise that ignoring these interactions hides certain vulnerabilities. Instead of conceiving of vulnerability as an "end-point" of an assessment, as many assessments in the hazards literature, the SAVI approach encourages examination of the dynamism of vulnerability, including how coping mechanisms and responses change vulnerability (Casale, Drimie, Quinlan, & Ziervogel, 2010). Casale and colleagues explain how sites for development interventions "can be described as 'entangled crises' in which different stressors, people's responses and development interventions become entwined. Development efforts to disentangle one thread or another of the knot all too easily do not succeed. Equally, assessments of the problem in terms of vulnerability do little more than justify interventions if the concept is used simply as a synonym for poverty.

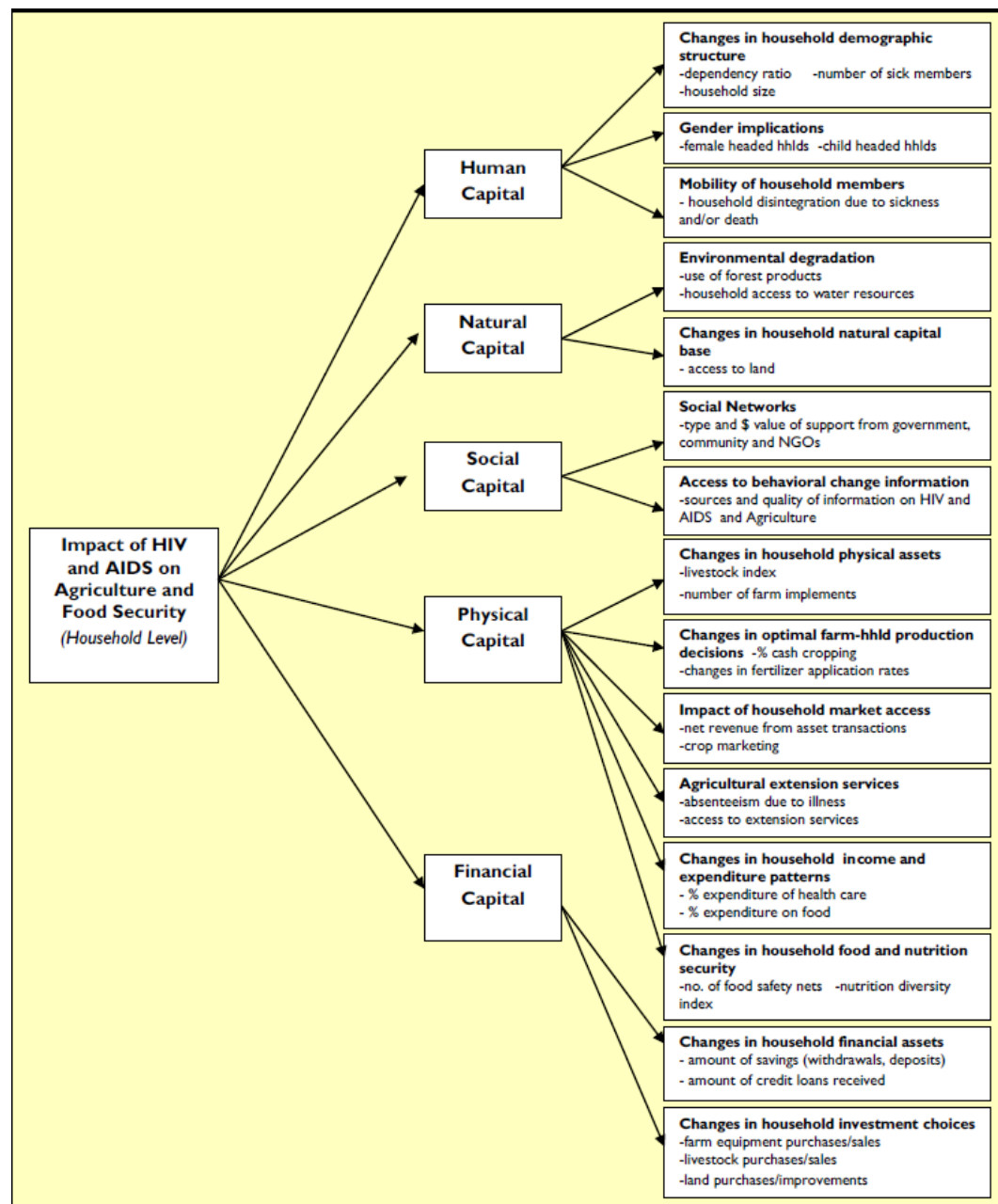
The SAVI framework can be used to guide the development of a comprehensive vulnerability assessment aimed at understanding the context of vulnerability at different levels, providing insight on the secondary data required for analysis, and which data collection methods and tools might be most appropriate. Case studies using the framework include examples of employing micro-level qualitative methods in different regions to identify multiple stressors (on larger scale) and how they interact in specific context to distinguish idiosyncratic as well as covariate risks. The framework offers the benefit of resisting over-simplification by uncovering "hidden" vulnerabilities through deep and context-specific evaluation. However, it is not a tool and does not serve as a monitoring instrument. Because it focuses on root causes, assessments utilizing the SAVI framework will be more complicated and resource-intensive than those using a single-stressor approach.

The Household Vulnerability Index (2004, HVI) is a statistical index developed by the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) in 2004 to measure household vulnerability. The index is part of the sustainable livelihoods and food security traditions of the economics literature on vulnerability. As a product of southern Africa, the index examines household vulnerability through the lens of the influence of “HIV and AIDS pandemic on household agriculture and food security” (FANRPAN, 2011). The HVI is concerned with the following two questions: “How can the ‘most vulnerable’ be identified and assisted?” and “How can



the impact of the epidemic on household food security be monitored and evaluated over time?” (Kureya, 2013a, p. 5). It defines vulnerability as the “presence of factors that place households at risk of becoming food insecure or malnourished, “which is assessed on the levels of “external vulnerability,” which refers to exposure to external shocks or hazards; and ‘internal vulnerability,’ which refers to the capacity to cope with or withstand those shocks (resilience)”.

The HVI tool uses fuzzy logic on 15 variable dimensions to explore the relationships between vulnerability and a household’s access to and use of five capital assets (natural, social, physical, human and financial). These assets are: natural capital (2 dimensions); physical capital (6 dimensions); financial capital (2 dimensions); human capital (3 dimensions); Social capital (2 dimensions).



Households are classified into three categories based on their statistical HVI score (between 0-100). The HVI has both internal and external vulnerability components employed. External vulnerability is assessed separately and used to adjust weights on the household's access to the five capitals. Each of the 15 dimensions measures internal vulnerability.

The Three HVI Categories

The HVI categorises households into three classes according to their level of vulnerability as follows: 1. Low Vulnerability – Coping or resilient 2. Moderate Vulnerability – Can cope after receiving assistance 3. High Vulnerability – Tragic (point of no return – require special intervention)

Capital	Low vulnerability (Category 1)	Moderate vulnerability (Category 2)	High Vulnerability (Category 3)
Human	- Household is headed by an economically active household member - Dependency ratio is low, less sick household members and no orphans. - More economically active household members than dependants.	- Household is headed by an economically active, elderly or child - Dependency ratio is high, more orphans and sick household members. - Economically active household members are few.	- Household is headed by an economically inactive, elderly or child - Dependency ratio is high, more orphans and sick household members. - No economically active members.
Natural	- Household use both inorganic and organic fertilizers - Sustainable agriculture activity - Utilize all available land for subsistence or commercial farming - Household has extra labour and time to manage the environment	- Organic fertilizers are the main sources of fertilizers - Low agriculture activity - Utilize less land for subsistence farming - Household cannot manage the environment well	- Organic fertilizers are the main sources of fertilizers - Very low or no agriculture activity - Utilises very little land for subsistence farming - They cannot manage the environment well
Social	- May receive some means of support from NGO's and government, but could do without. - More knowledgeable on agriculture and shock-related issues that are discussed regularly in the household	- Needs or receives support from NGO's and government, and most of the support goes to food and health - Knowledgeable on agriculture and shock-related issues that are sometimes discussed in the household	- Needs and may not be receiving support from relatives, community, NGOs and government. - Most support goes to food, health and education. - Limited capacity to discuss agriculture and shock related issues
Financial	- Have a diversified income source - Household income is used on a balance of needs (farming inputs, education, health, recreation etc)	- Have limited sources of income - Most of the household income is used on food and medicines	- Have no basic source of income - Most of the household income is from charity, and is used on food and medicines
Physical	- Own important livestock eg cattle, in sustainable numbers - Have labour for farm and off farm work - Receive some agricultural extension services - Regularly have three meals per day	- Own important livestock in agricultural production - No adequate labour for farm and of farm work - May own farm implements in limited numbers - Do not regularly eat three times a day	- Do not own important livestock in sustainable numbers - No labor for farm and of farm work - Do not own farm implements - Do not regularly eat three times a day

Most data is collected via semi-structure household interviews. FANRPAN has developed a generic questionnaire which can be modified. Primary household data is supplemented by secondary data. A pre-programmed HVI database is used to calculate the index, and an online portal allows for both sharing and online calculation of the index. Using sampling methods, the HVI can be used for population level analysis. It can also be used as a census-type instrument for either population level analysis or individual and household level monitoring and targeting. FANRPAN estimates that the resources required to undertake an HVI survey is comparable to other baselines (2013).

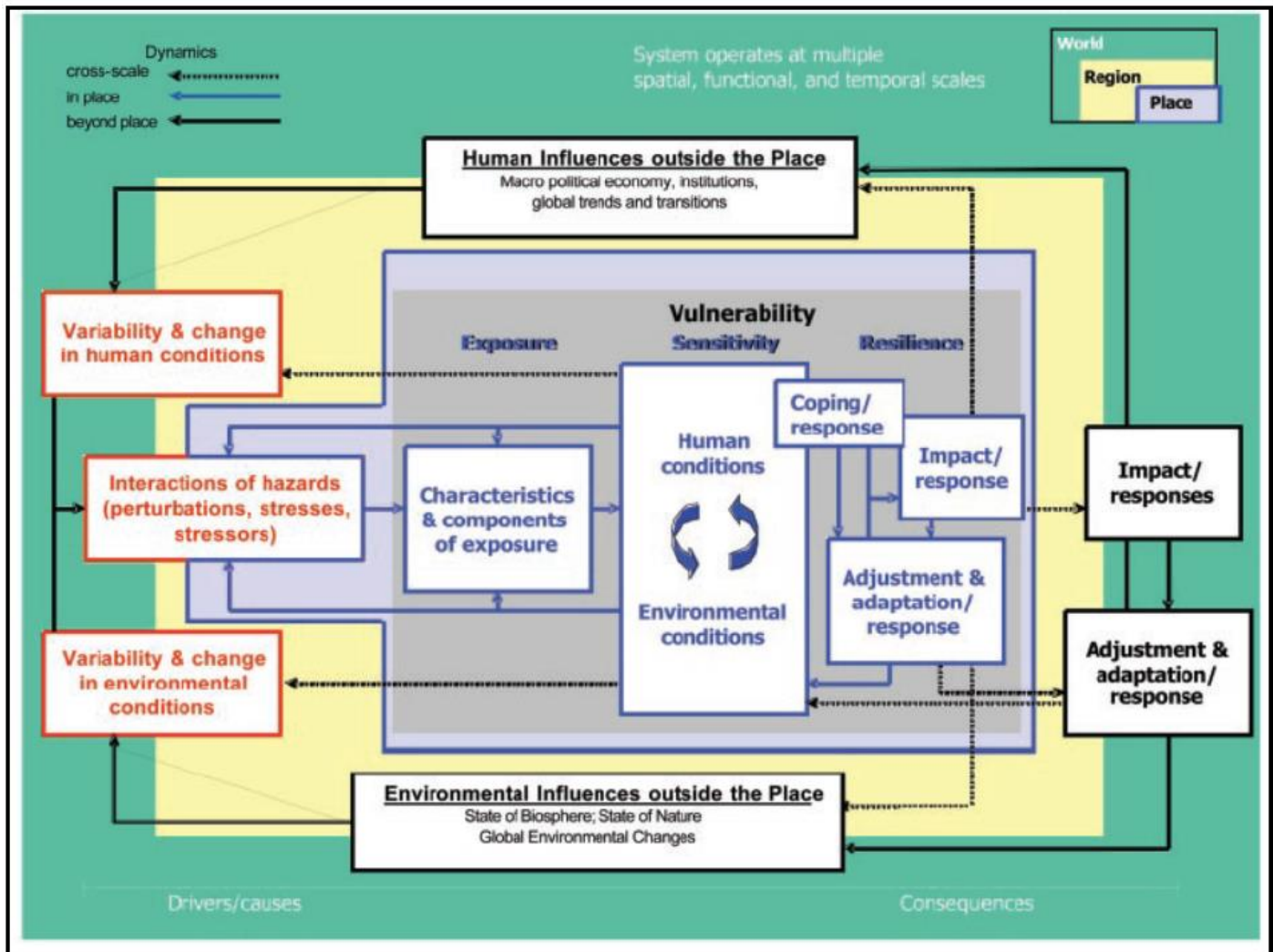
The HVI offers several benefits. It accords with current best practices by using a sustainable livelihoods focus to analyse the dimensions of both vulnerability and coping. Additionally, it can be used for targeting purposes as well as population level analysis. However, its focus on food security may not be universally appropriate. Further, though the model invites community participation as a possibility, current published guidelines do not emphasize it.

Reference document

[2011 Household vulnerability index](#)

Framework for Vulnerability Analysis in Sustainability Science (2003). The Sustainability Systems vulnerability framework is another well-known, widely cited framework within vulnerability research that emphasizes the social-ecology perspective of risk. The framework explores elements of exposure, sensitivity, and resilience, which is modelled according to the *Coupled Human Environment System (CHES)*. This framework utilizes an integrated approach that considers biophysical and social factors and the multiple interacting scales and feedback loops that influence place-specific vulnerability. It stresses the transformative qualities of society with regard to nature and also the changes in the environment on social and economic systems. Vulnerability encompasses three strongly interconnected aspects: Exposure, sensitivity and resilience. However, complex interdependencies introduced in the model hinder its practical application.

Turner et Al. 2003. *A framework for vulnerability analysis in sustainability science.*



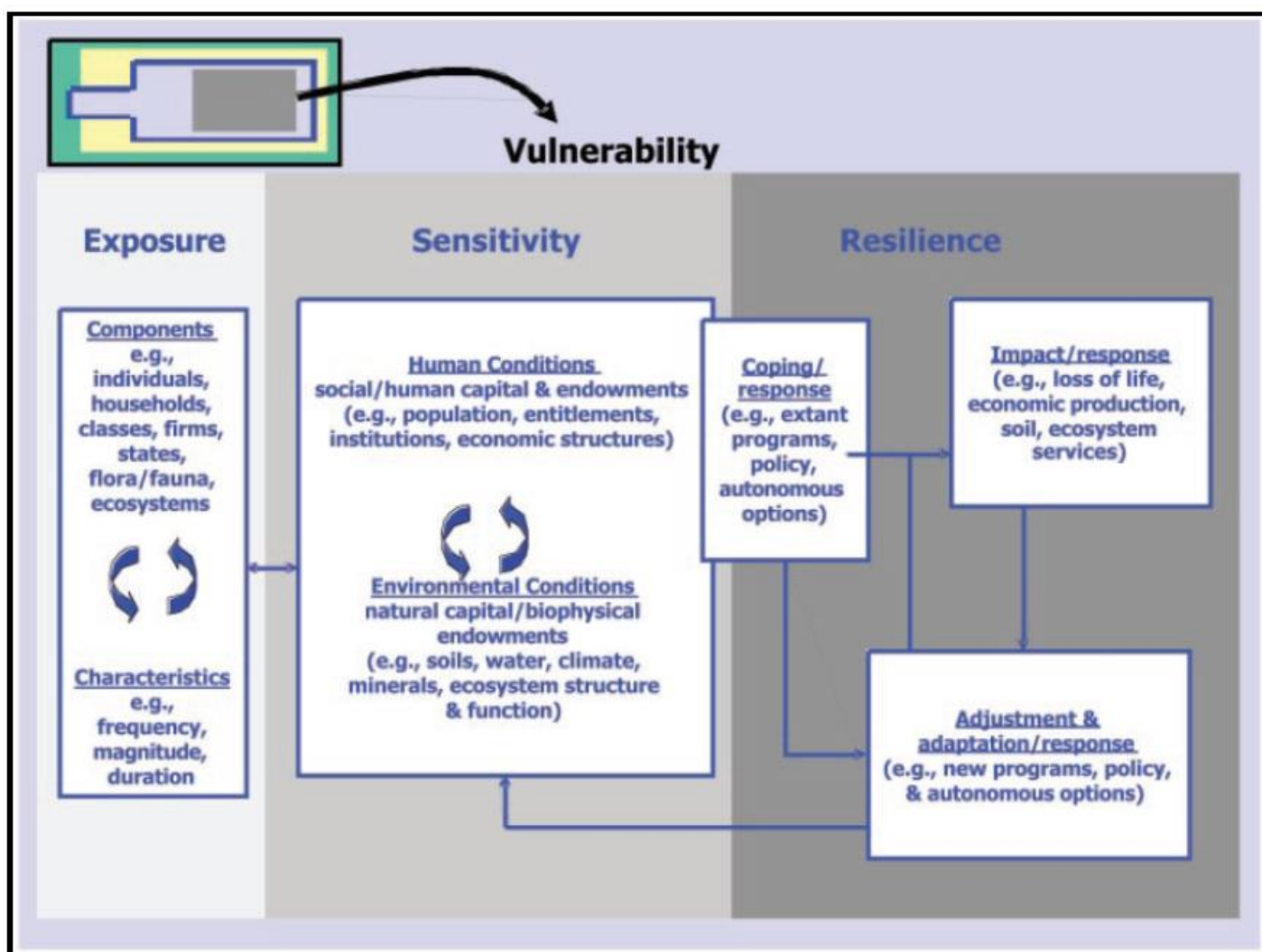
The Sustainability Systems vulnerability framework represents an innovative approach to understanding the multiple hazards, impacts, and scales that interact to produce the vulnerability of biophysical and social systems. At the centre of the framework is the coupled human environmental system, which posits that social and environmental systems interact through complex and dynamic feedback loops and linkages. The framework conceptualizes that there are multiple interacting stressors that affect the CHES, in which impacts depend on the sensitivity of the system exposed. Here, social and biophysical capital influences the coping mechanisms of the system to respond to impacts. Important to note is how social and biophysical responses interact with the CHES. As such, social responses may potentially make the biophysical subsystem less able to cope. In turn, impacts filter through the systems' capacity to cope, respond, and adapt through a series of responses, considered here as resilience.

Within this framework, vulnerability is framed according to exposure, sensitivity, and resilience. Exposure refers to the extent to which components such as individuals, households, infrastructure, and ecosystems are subject to disturbances and stressors. Exposure interacts with the sensitivity of the human and environmental conditions of the CHES. Sensitivity is framed according to social and biophysical capitals and endowments. Last, resilience is modeled as a matter of response in terms of impacts, coping, and adaptation.

Critical to this conceptual framework is the consideration of nested scales, in which hazards interact at multiple levels, and have cascading impacts. Although the Sustainability Systems vulnerability framework considers the local, regional, and global scales that interact to shape the hazards and stressors that impact the CHES, this framework is nevertheless rooted in a place-based approach to understanding vulnerability.

Also essential is the recognition that groups, systems, and places are differentially vulnerable based on differential levels of exposure, sensitivity, coping and adaptive capacities. Furthermore, attention is placed on the role of institutions in shaping vulnerabilities and hazards. Another key element of the framework is the emphasis placed on the role of local stakeholders in defining issues of vulnerability that are of local concern, while extending analysis to the various scales in which these hazards originate and interact. Thus, the Sustainability Systems framework places emphasis on employing both qualitative and quantitative data, while drawing on local stakeholders perspectives in a collaborative assessment process.

Details on vulnerability components of the sustainability systems vulnerability framework Turner et al., (2003).

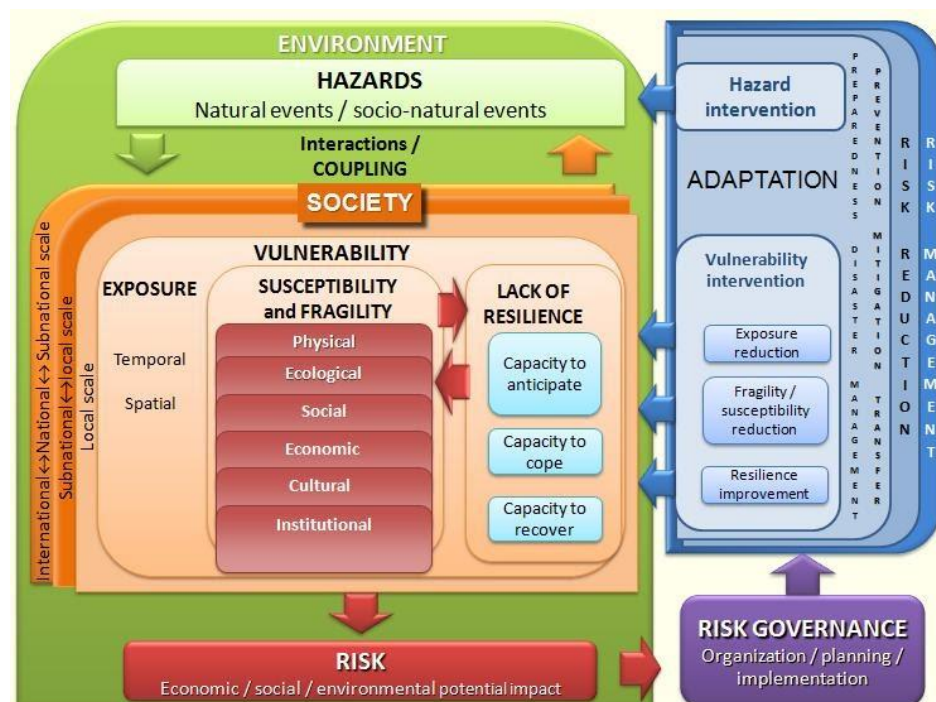


Reference document

[A framework for vulnerability analysis in sustainability science](#)

The MOVE framework of vulnerability (2013) is based on the collaborative work of many key scholars within vulnerability research. The MOVE framework incorporates elements of the coupled human environment system, the multiple scales that influence the hazards of specific places, as well elements of exposure, vulnerability, and resilience.

MOVE framework, Birkmann et al., (2013)



The MOVE framework is included in this analysis because it represents an ambitious and innovative approach to understanding vulnerability, while also combining concepts of vulnerability and resilience.

Here vulnerability is composed of exposure, susceptibility or fragility, and lack of resilience. Accordingly, exposure refers to when a given unit is within the geographical range of a hazard event. Units may refer to physical attributes such as infrastructure or human systems such as livelihoods bound to specific resources. Susceptibility refers to the predisposition for elements of risk to suffer harm. Lack of resilience or lack of societal response capacities refers to the limitation in access to or

utilization of resources of a community or socio-ecological system in responding to identified hazards. Lack of resilience is modelled as a measure of the capacity to anticipate, cope, and recover from a natural or socio-natural event or shock.

The MOVE framework breaks down vulnerability into thematic components to account for its multi-dimensional character. The components include physical, social, ecological, economic, cultural, and institutional factors. The social dimension refers to the propensity for human wellbeing to be disrupted or damaged in terms of mental and physical health, as well as collective aspects such as health and education. Economic dimensions refer to the propensity for loss in terms of assets or productive capacity through the mobilization of resources for livelihoods. Physical dimensions refer to the potential for loss to physical assets such as infrastructure or capital. Cultural dimensions refer to the potential for loss to beliefs or customs.

Environmental dimensions refer to the potential for loss to ecosystems or environmental services. Lastly, institutional dimensions refer to the potential for hazards to weaken governance systems or formal or informal rules.

The MOVE framework also conceptualizes the relationship between hazards, vulnerability and risk, where risk refers to the interaction between hazards and vulnerable conditions. Risk is therefore considered the potential for losses to social, economic, physical, cultural, environmental, and institutional dimensions of vulnerability. Important to the consideration of risk is the concept of adaptation, which is framed according to a series of interventions that reduce exposure and sensitivity and in turn improve the resilience of a system.

Important to the MOVE framework is the theoretical undertone of systems theory, which recognizes the interlinked complex and non-linear relationships that form between systems and system components. A part of this is the use of the Coupled Human Environment System to model the complex relationships and feedback loops that form between social and ecological components. Also key to the MOVE framework is the recognition that vulnerability is dynamic and always changing, and so risk can be mitigated through risk governance, which can intervene by reducing aspects of exposure, susceptibility, and thereby improve the overall resilience of the system under analysis.

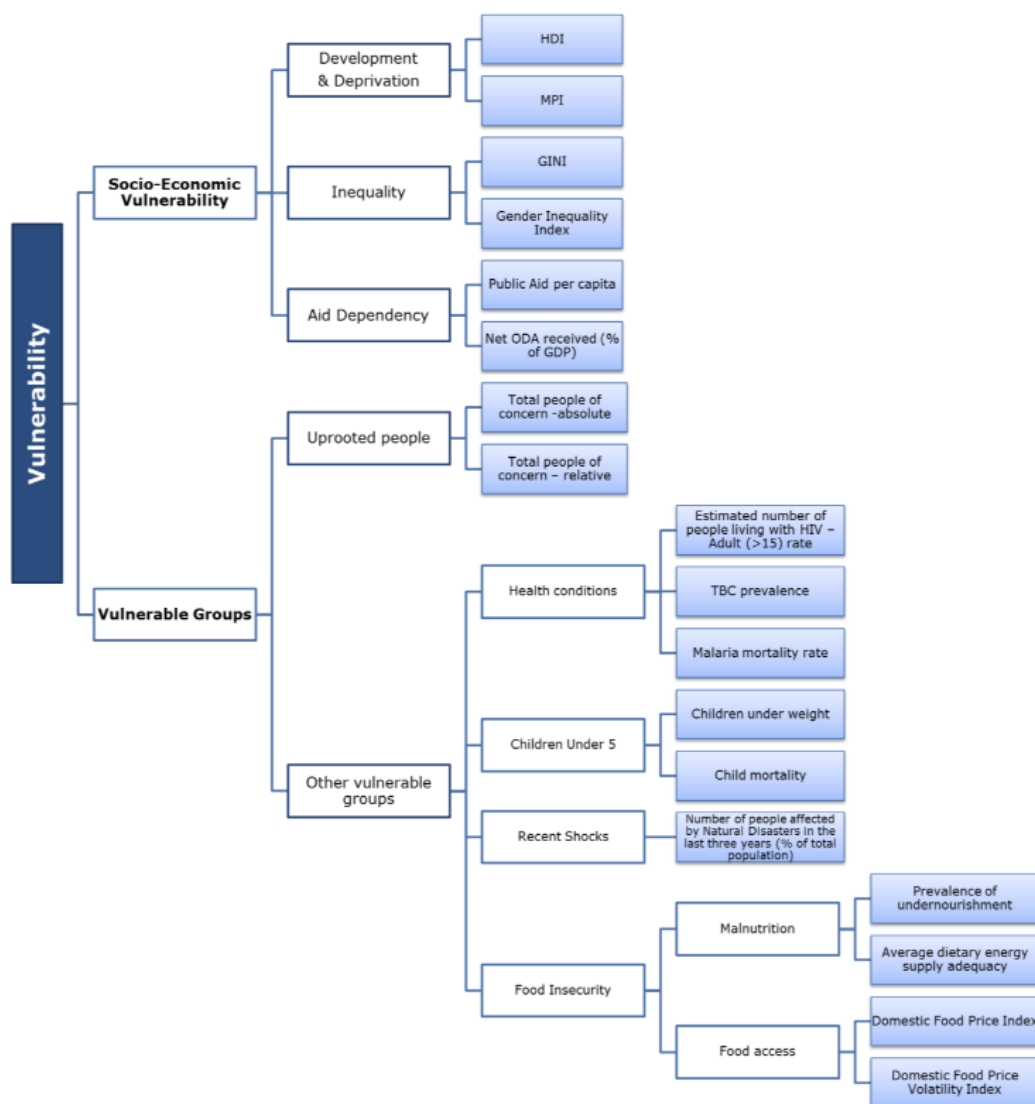
Reference document

[2013 MOVE framework](#)

INFORM (2017) is reviewed more in depth in the Risk section of this report. however, the vulnerability dimension of the

Index is presented here to give justice to the most popular risk index in the humanitarian sector.

The Vulnerability dimension in INFORM addresses the intrinsic predispositions of an exposed population to be affected, or to be susceptible to the damaging effects of a hazard, even though the assessment is made through hazard-independent indicators. So, the Vulnerability dimension represents economic, political and social characteristics of the community that can be destabilised in case of a hazardous event. Physical vulnerability, which is a hazard dependent characteristic, is dealt with separately in the Hazard & exposure dimension. There are two categories aggregated through the geometric



average: Socio-economic vulnerability and vulnerable groups. The indicators used in each category are different in time variability and the social groups considered in each category are the target of different humanitarian organisations. If the socio-economic vulnerability category refers more to the demography of a country in general, the vulnerable group category captures social groups with limited access to social and health care systems.

The BBC Conceptual Framework (2006) is a holistic and multi-dimensional approach to vulnerability analysis, which integrates concerns of sustainable development and disaster risk management. The framework builds off of previous vulnerability frameworks of Bogardi and Birkmann (2004) and Cardona (2001). The framework evolved from the aim of linking vulnerability and sustainable development through a holistic approach that considers causal elements of environmental degradation and disaster risk. The framework differs from other models of vulnerability in the way that it places emphasis on the dynamic character of vulnerability, modeled according to elements of exposure, susceptibility, coping capacities, and intervention or mitigation strategies.

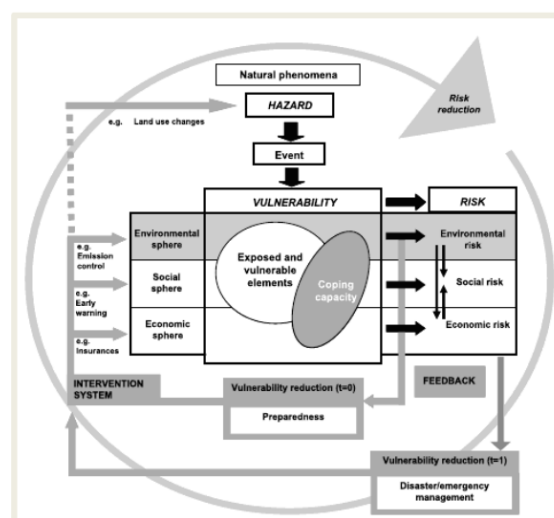


Figure 2: The BBC conceptual framework (Source: Birkmann, 2006: 34)

Specifically, the BBC framework considers the exposure of social, economic, and environmental systems to specific hazards and events. Here, risk is seen as the interaction between the exposure of a system and the hazard. Unique to the conceptual framework is the integration of social, environmental, and economic spheres, which represent the three

pillars of sustainable development. Here, vulnerability is explicitly considered in relation to social, economic, and environmental elements as a factor of exposure and coping capacity. Adaptation is modelled according to feedback loops between social, economic, and environmental risk and vulnerability reduction modelled as disaster management and disaster preparedness, which loops back into risk. Birkmann recognizes that additional frameworks can be integrated to add to the vulnerability analysis, specifically in reference to the sustainable livelihoods framework (useful in considering social and vulnerability, as an understanding of livelihood assets can aid in assessing the susceptibility and coping capacities of households at the micro level).

UNHCR/UNICEF/WFP Vulnerability Assessment of Syrian Refugees (VASyR) in Lebanon. UNHCR, UNICEF, WFP, and partners have conducted specific vulnerability assessments of the Syrian refugee population in Lebanon, with the first one conducted in 2013, and the second one in 2016. The 2016 assessment included 4,596 households of Syrian refugees sampled through a two-stage cluster sampling based on geographical areas. It looked at both economic and livelihood vulnerability, shelter, family sizes, and living conditions, as well as at coping strategies and capacity. As indicated in the report, “since 2013, the VASyR has been an essential process and partnership for shaping planning decisions and programme design” (UNHCR, UNICEF, and WFP, 2016).

Reference Documents

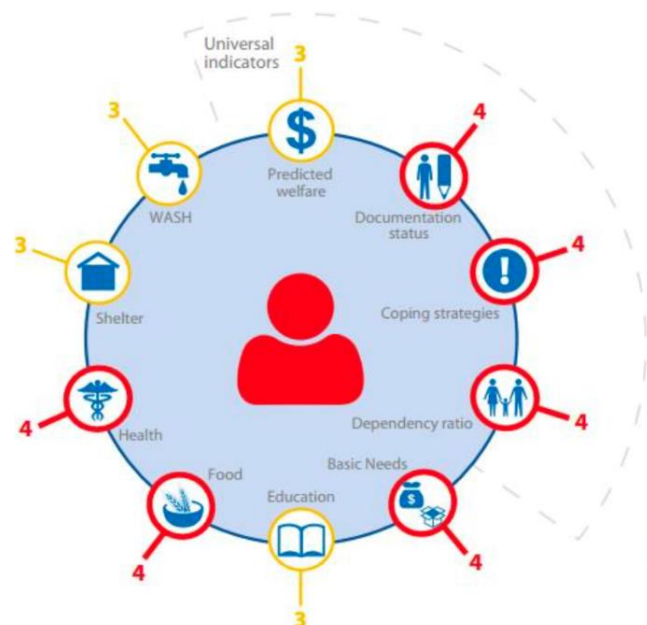
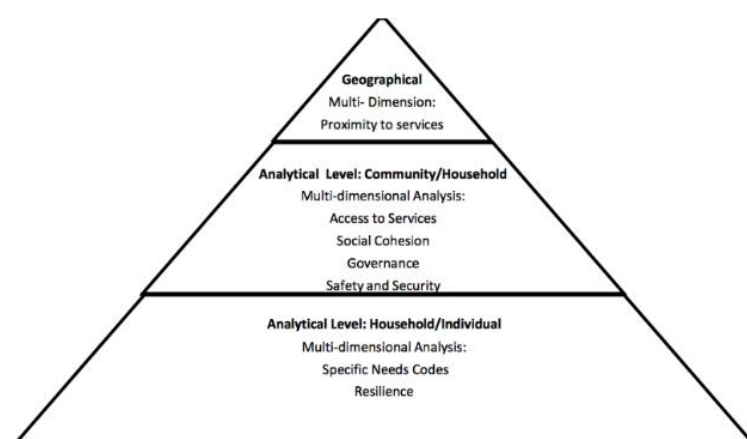
[UNHCR, UNICEF, and WFP 2016 Vulnerability Assessment of Syrian Refugees in Lebanon](#)

UNHCR Vulnerability Assessment Framework in Jordan (2013-2015). UNHCR’s Vulnerability Assessment Framework (VAF) project started in 2013 aiming to develop an observation and reporting system for the vulnerability of Syrian Refugees in Jordan, in order to improve monitoring, and the provision of assistance, also strengthening coordination and decision-making (UNHCR, 2017).

Vulnerability in the Jordan context is defined as the risk of exposure of Syrian refugee households to harm, primarily in relation to protection threats, inability to meet basic needs, limited access basic services, and food insecurity, and the ability of the population to cope with the consequences of this harm

The approach used to analyse vulnerability is the score card approach with three layers of vulnerability analysis (ACAPS and UNHCR, 2013):

- Geographical location and proximity to services
- Community/Household level factors such as access to services, community cohesion, safety and security
- Individual/Household vulnerability based on UNHCR specific needs codes and resilience



The following indicators are proposed for combination:

Universal indicators

1. Predicted Welfare
2. Dependency Ratio
3. Coping Strategies
4. Documentation Status
5. Disability (to be introduced in 2017)

Sector Indicators

1. Socio economic vulnerability / Basic Needs
2. Food Security
3. WASH
4. Shelter
5. Health
6. Education

The use of score cards at both community and household level allowed for vulnerability profiling. An example of score card at the household level is displayed below.

Dimension/Question	Vulnerability Score					Score	Data Source
	Low				High		
Access to safe water: Does the family have access to enough safe water?	1 Always Less than 30 minutes waiting time at water point and Adequate storage at household (piped water or at least 2 containers of 10-20 lt)	2 Very often Less than 30 minutes waiting time at water point and Adequate storage at household (piped water or at least 2 containers of 10-20 lt)	3 Often Less than 30 minutes waiting time at water point and Adequate storage at household (piped water or at least 2 containers of 10-20 lt)	4 Seldom Less than 30 minutes waiting time at water point and Adequate storage at household (piped water or at least 2 containers of 10-20 lt)	5 Never Less than 30 minutes waiting time at water point and Adequate storage at household (piped water or at least 2 containers of 10-20 lt)		
Access to Sanitation: Does the family have access to enough sanitary facilities?	1 Always No more than 20 people/toilet Safe for women and children	2 Very often No more than 20 people/toilet Safe for women and children	3 Often No more than 20 people/toilet Safe for women and children	4 Seldom No more than 20 people/toilet Safe for women and children	5 Never No more than 20 people/toilet Safe for women and children		
Access to Health Services: Does the family always have access to adequate health services?	1 Always Have free access to health services	2 Very often Have free access to health services	3 Often Have free access to health services	4 Seldom Have free access to health services	5 Never Have free access to health services		
Access to Education Services: Does the family have access to education services?	1 Always Children able to attend school in a safe and secure manner	2 Very Often Children able to attend school in a safe and secure manner	3 Often Children able to attend school in a safe and secure manner	4 Seldom Children able to attend school in a safe and secure manner	5 Never Children able to attend school in a safe and secure manner		
Access to Electricity: Does the family always have enough electricity supply?	1 Always	2 Very often (bi-weekly cuts that last less than 4 hours)	3 Often (weekly cut that lasts more than 4 hours)	4 Seldom (daily cuts that last more than 4 hours)	5 Never		
Access to durable shelter: Does the family live in a shelter that is suitable for both summer and winter conditions?	1 Suitable for both winter and summer Ventilation, furnishing/blankets Heating	2 Suitable for summer Ventilated, light furnishing, no heating	3 Suitable for winter Limited ventilation, heavy furnishing, heating	4 Not suitable for summer or winter Unable to control ventilation, No furnishing, no heating	5 No shelter		

When combined in the score card, the indicators provides with a detailed information on the vulnerability status of the household (Sample case-level snapshot: Severely Vulnerable (UNHCR, 2017).

Reference Documents

[ACAPS and UNHCR 2013 A Vulnerability Analysis Framework for Syrian Refugees in Jordan](#)

[UNHCR 2017 Vulnerability Assessment Framework Guidance Note](#)

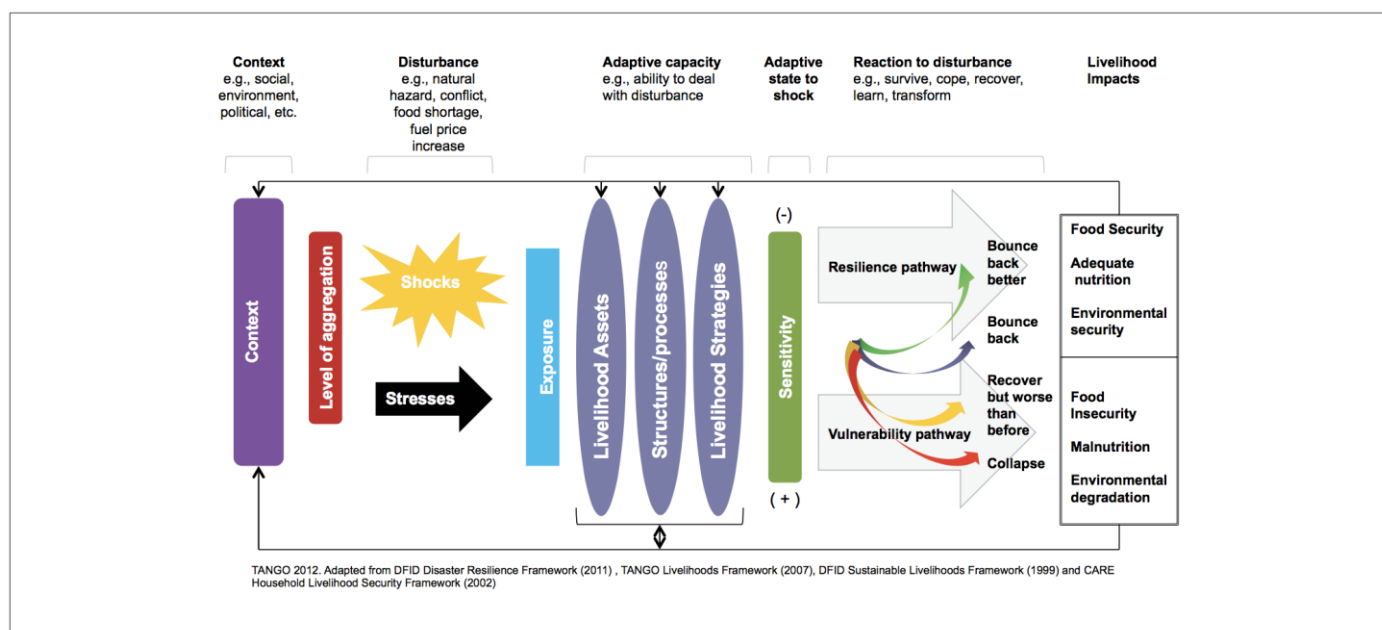
	Predicted expenditure 3	Predicted per capita 43 JOD			
	Documentation status 4	PA Documentation PA is missing MOI	Family Documentation Family registered		
	Coping strategies 4	1 emergency strategy being implemented			
	Dependency ratio 4	1 autonomous adult 4 children			
	Basic Needs 4	Coping strategies Emergency strategies	Dependency ratio Poor dependency	Economic state High debt per capita	
	Education 3	Attendance risks Finance main risk	3 school aged children 2 years missed education 2 children attending		
	Food 4	Social vulnerability High dependency ratio, Single headed	CARI score FCS = 103, 20% spent on food, Emergency		
	Health 4	Access to services Missing PA doc, not had problems accessing	Family composition No under 5's and over 60s in case	Existing conditions Existing disabilities present	
	Shelter 3	Housing conditions Missing essential items, showing poor signs	Security of tenancy Has contract but high debt	Family composition Female-headed house, high dependency ratio	
	WASH 3	Health No issues	Access to latrines Shared access with 1 house and safe access	Access safe water Municipality source 1 instances without	Waste management 0 instance water 3 instances solid

Resilience frameworks

Date: 1980s - Today

By: UNDP, IFRC, FAO, DFID, Tuft, OECD, Governments, etc.

Reviewed initiatives: Community Based Resilience Analysis, Disaster Resilience Framework, Livelihoods Change Over Time Model, Resilience Index and Measurement Analysis, Conceptual Framework for the Resilience Systems Analysis, Framework for Community Resilience, Resilience of Systems framework,



Background. Historically a key concept of the fields of psychology and ecology, resilience has become in the past four decades increasingly popular amongst policy-makers and scientists of disaster management due to increasing frequency and severity of disaster events. The UN 2030 Agenda for Sustainable Development refers to resilience as a core concept of sustainable development (Bosetti et al., 2016).

Resilience is used by a variety of practitioners from different disciplines, which have produced their own definition of the concept depending on their practical applications, and sometimes their own ways of measuring it. In its most basic form, resilience can be broadly understood as *'bouncing back faster after stress, enduring greater stresses and being disturbed less by a given amount of stress'* (Martin-Breen and Anderies, 2011).

The simplest version has the caveat of focusing on the risk, the shock, as opposed to the subject receiving the shock, its inherent features and well-being in the face of the shock (Martin-Breen and Anderies, 2011). Resilience is also the capacity to learn from experience, to transform and improve systems and institutions and this depends on the subject's features (Bosetti et al. 2016). There are different units of analysis to assess resilience: at the individual level, household level, community level, local government, national government, organisations and regional and global level (IFRC, 2014).

Different traditions

Engineering resilience provides a rigorous way of formalising the concept of resilience. The engineering field uses resilience to assess how a material changes shape and bends when an external force is supplied to it, and when the material will eventually return to its original form. Resilience here brings together resistance, elasticity, and the stability domain of the material. Stability is key to resilience: something is resilient if it can resist external forces and quickly come back to its normal state (Martin-Breen and Anderies, 2011).

The psychology view contrasts with engineering resilience because it involves several interacting individuals, and evolves over time. There are two streams of resilience in **psychology**. One looks at the impacts of crises and abrupt changes impacting families, and the other one looks at how children, often in conditions of poverty, are able to avoid falling victim of many traps that most of their peers do. Early developmental psychology sees resilience as a practical positive outcome to achieve. More recent views explore resilience from bi-directional interactions, as an on-going process of continual positive adaptive changes to adversity, which status enable future positive adaptive changes (Martin-Breen and Anderies, 2011).

Departing from these individual-focused approaches, other approaches have looked at **systems**, such as Complex Adaptive System (CAS). CAS have the following features: sustained diversity and individuality components, localised interactions among those components and an autonomous process that selects from among those components based on the results of local interaction, a subset for replication or enhancement (Levin, 1998). From these features it is possible to attempt to evaluate the resilience of CAS. Although CAS do not necessarily inform resilience theory, they provide a perspective on how systems are self-structuring over time (Martin-Breen and Anderies, 2011).

Finally, **economic** theories are more at the margin of resilience research. However, since they have departed from the ideal of equilibrium analysis, and moved towards more complex dynamics, economic theories have used the notion of resilience to account for non-equilibrium dynamics and continuous change (Martin-Breen and Anderies, 2011).

Systems resilience. Looking at “systems” enables to account for both sudden changes and internal slower changes. Systems resilience refers to fixed functions (economic, social and political) that individuals need to survive or generally want to maintain (Martin-Breen and Anderies, 2011). A system generally works at a certain level of performance, and its performance can deviate by different degree when it is affected by disruptions, stresses, shocks (Proag, 2014). The resilience of a system can be defined as ‘*the ability of the system to reduce the magnitude and duration of the deviation as efficiently as possible to come back to its usual level of performance*’ (Proag, 2014).

The strength of a system in resisting disturbances is not enough to account for its resilience. A system can respond to stresses in different ways: by resistance and maintenance, that is, being able to keep operating under disturbances; by changing at the margins, meaning acknowledging the problem, discussing it and maybe adapting to it; by opening and adapting, which means being highly flexible to reduce vulnerability. A more complete understanding of resilience takes into account:

- Its **absorptive** capacity: ability to absorb the event
- Its **adaptive** capacity: capacity to adapt to the event
- Its **restorative** capacity: ability of the system to recover.

As a result, recent school of thoughts separate resilience in two distinct categories (Proag 2014):

- Hard resilience, which refers to the direct strength of institutions or structures when placed under pressure
- Soft resilience, which refers to the ability to absorb and recover from the impact of disruptive events without fundamental changes. This depends on the flexibility and adaptive capacity of the system.

Amongst different conceptions of resilience in systems, the ideas of learning, flexibility and options are recurrent as key feature of resilient systems (ODI 2015). In a thorough review of components of resilience concepts in 2013, OECD proposed a list of components critical for individuals, communities, and for developing countries and their institutions to be resilient:

List of components for resilience, OECD 2013

	Individual	Community	Developing countries and their institutions
Components	Knowledgeable Healthy Has economic opportunities Has economic resources/risk financing options Is connected – to neighbours and family, active participation in society Food secure Organised, self-motivated, determined	Organised Cultural cohesion, common identity, full participation Has infrastructure and services, that it can maintain/repair and improve Can manage its natural resources Is connected – to authorities and external actors Access to markets and/or employment Conflict prevention and resolution mechanisms Land tenure Recognition of the key role of women Leadership	Territorial security Physical and psycho-social safety Economic security Ecological security Social and political stability External reputation and influence Good governance/Rule of law/Absence corruption Leadership Accountable and responsible Legitimacy Energy diversity/ independence Promotes innovation Domestic revenue generation (tax) Capacity to respond to crises

Current application. Resilience is used for a wide variety of purposes: from ecological uses with the goal of restoring ecosystems, to urban resilience that focuses on networks in urban settings and can inform urban planning, to mitigating the effects of climate change. However most actual projects or policy based on resilience-frameworks are limited to ecosystem and disaster management. With increasing attention to climate change and incurred losses, development organisations have adopted this paradigm, by measuring and assessing progress of disaster risk reduction through resilience (ODI 2015).

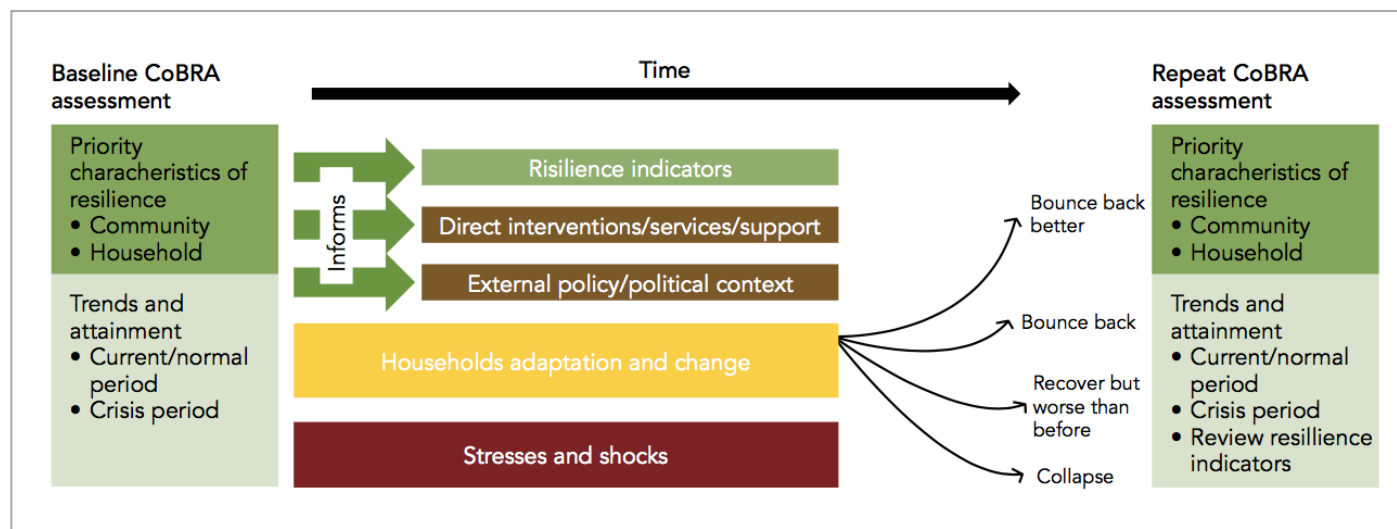
Resilience has recently taken a more multidimensional approach that incorporates community multi-spectrum levels with more socio-economic and political aspects (Bosetti *et al.* 2016). However, frameworks developed to assess resilience still face several limitations. First, they are generally more designed for natural disasters rather than economic, political and conflict risks. Secondly, they focus on bigger units of analysis at the expense of smaller scale analysis. For example, analysis of the resilience of local government in fragile conflict-affected settings is limited. There is more work to be done with sub-national dimensions. Finally, they tend to rely on theory of change and lack empirical testing and evidence (Bosetti *et al.* 2016).

Reference Documents

[Bosetti L., Inavonic A., Muhnshey M. 2016. Fragility, Risk and Resilience: A Review of Existing Frameworks.](#)
[Martin-Breen P: and Anderies J.M. 2011. Resilience: A Literature Review. The Bellagio Initiative.](#)
[IFRC 2014. IFRC Framework for Community Resilience](#)
[ODI 2015. A Comparative Overview of Resilience Measurement Frameworks.](#)
[Proag 2014. The Concept of Vulnerability and Resilience.](#)
[OECD 2013 Risk and Resilience: From Good Idea to Good Practice](#)

The **Community Based Resilience Analysis (2014, CoBRA)** Framework was developed in 2014 building on various existing models, including the TANGO Resilience Assessment Framework and the DFID Sustainable Livelihoods Framework. The main aim of the CoBRA Framework is to provide a conceptual base for assessing and measuring resilience, and how affected communities cope with stress and shocks. The CoBRA Framework is the result of four full assessments run between June and August 2013. The methodology uses both Key Informant Interviews and Focus Group Discussions in order to address several questions on types of crises affecting communities, what characteristics make them resilient, and what interventions were put in place by households to improve resilience of the community.

Revised UNDP CoBRA Model



Over time, various factors – including policies, support, changes in context or autonomous household adaptation and change – can influence the resilience of communities to shocks and stresses. Resilience level may be assessed based on how communities cope with and overcome various shocks and stresses: those that are able to bounce back to their condition in the pre-crisis period, or even improve their situation, may be considered resilient, while those that are collapsing or are recovering but are worse off than previously may not be resilient.

To measure resilience and the impact of interventions on resilience, baseline information must be established. Doing so involves answering these fundamental questions:

- What are the main characteristics of resilience at community and household levels?
- Which households are more resilient and able to cope with shocks and stresses?
- What kinds of factors are affecting their ability to cope?
- How do communities score their attainment of these priority characteristics in a normal period and in a crisis period?

The scoring exercise during FGDs provides important data on community perceptions concerning their status and their progress towards resilience. The characteristics can also be used to develop indicators to quantitatively assess resilience, using existing survey data. CoBRA Assessments cannot be considered stand-alone measurements of resilience and they should be based on and add to existing monitoring measurements and assessments. Additionally, CoBRA assessments can't evaluate individual services or programmes, but only multidimensional resilience. The resilience attainment scores are not statistically significant because they are based on perceptions and can possibly be subject to change. Moreover, such scores cannot be compared between different locations, because they are a product of separate processes in different contexts (UNDP, 2014).

Components and potential indicators of resilience, Cobra 2014

Category	Definition	Examples	Potential Indicators
Physical	The basic infrastructure (roads, railways, telecommunications) that people use to function more productively.	- Infrastructure – roads, water, electricity, telecoms - Access to new technologies / equipment - Land security / ownership	<i>Capital</i> - Access to all weather roads % households with electricity supply <i>Capacity</i> % households with year round access to clean water - Water storage / reserve capabilities - Crop storage / reserve capacity
Human	The sum of skills, knowledge, labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood outcomes.	- Educational and skill levels of household members - Food security of household - Health and nutritional status of household members	<i>Capital</i> % households requiring formal food/cash assistance % global and severe acute malnutrition rates - Gross / net enrolment rates <i>Capacity</i> # Households members with secondary education or higher # Household members economically active
Financial	The cash that enables people to adopt different livelihood strategies. This can be in the form of savings, or a regular source of income such as a pension or remittance. The inputs that support livelihoods, as well as the producer goods (tools, equipment, services) that contribute to the ability to increase financial capital.	- Income reliability and growth - Opportunities for employment and trade - Productivity of livelihood - Price and income variations - Functioning markets - Risk financing / insurance - Assets owned and goods produced – livestock/ crop /stock - Access to financial services	<i>Capital</i> - Income level % of households with secure access to land for livelihood purposes - Livestock numbers and value - Crop production / value <i>Capacity</i> # household sources of earned income - Access to functioning markets - Access to saving and credit facilities - Access to agric / livestock extension services
Natural	The natural resources (land, forests, water) and associated services (e.g. erosion protection, storm protection) upon which resource-based activities (e.g. farming, fishing etc.) depend.	- Access to and quality of natural resources – land / rangeland / forests, water, soil - Sustainable management and regulation of natural resources - Carrying capacity – human and animal populations	<i>Capital</i> - Extent of natural tree cover - Households undertaking reforestation activities # functional NRM/ rangeland management committees <i>Capacity</i> % time quality pasture available - Quality of rangeland management - Rate of deforestation
Social	Access to and participation in networks, groups, formal and informal institutions. Peace and security.	- Local kinship support networks - Number, scale and functionality of community organisations / governance structures and self-help groups - Participation in the above groups - Community ability to plan, mobilise resources and implement; - Conflict reduction - Improved services - Natural resource management - Fair and transparent access to resources - Leadership role of women	<i>Capital</i> # functioning local structures / committees % of households with woman and marginalized groups involved in local planning processes <i>Capacity</i> - Quality of leaders /institutions (fair, responsive, non-corrupt) % population living in peace and security % year there are no incidences of conflict / insecurity - Community resources raised to build resilience

Reference document

[UNDP/ECHO 2014 Community Based Resilience Analysis \(CoBRA\) Conceptual Framework and Methodology](#)

[FSIN 2014 A common analytical model for resilience measurement](#)

[UNDP 2014 Understanding Community Resilience: Findings from Community-Based Resilience Analysis \(CoBRA\)](#)

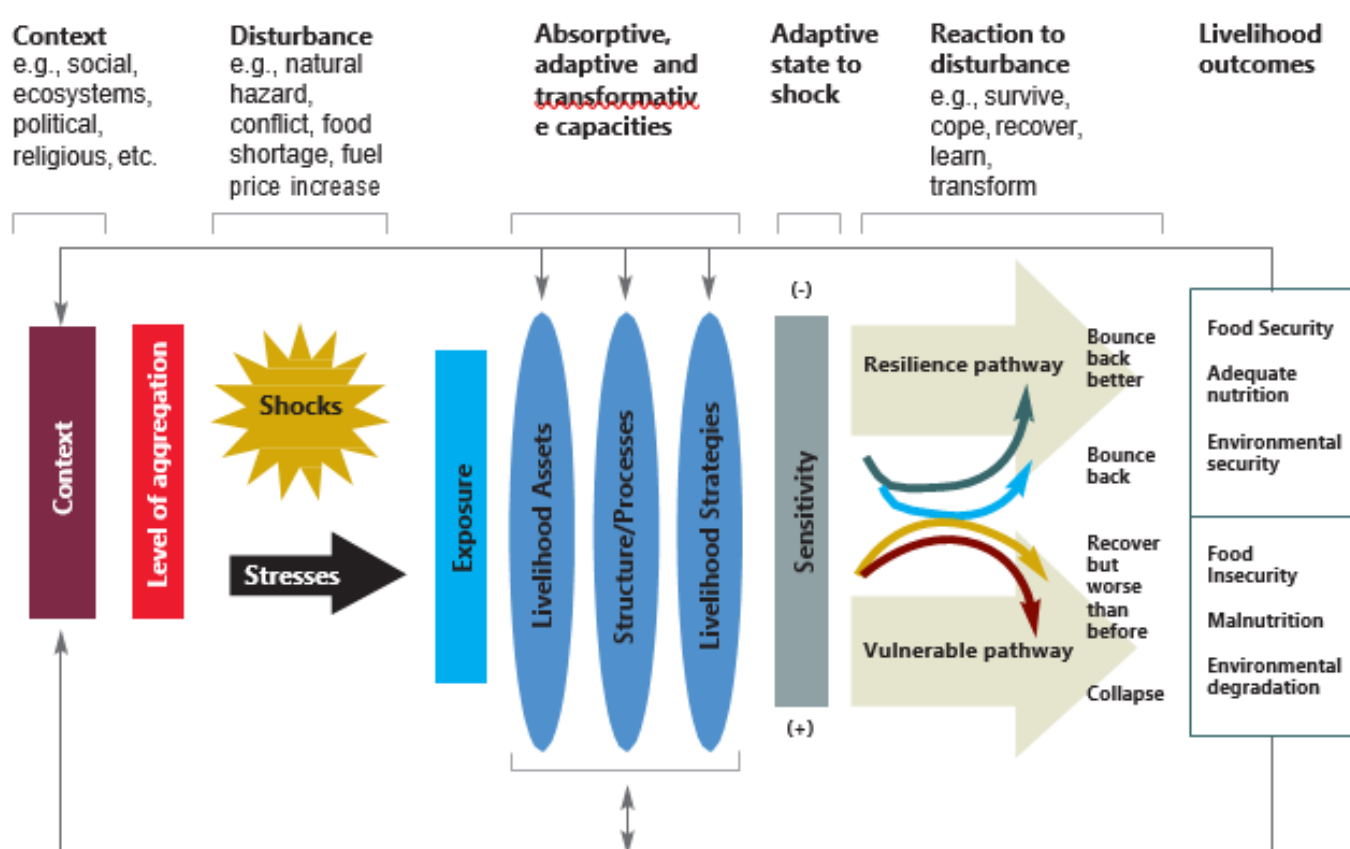
[Assessments - Marsabit, Turkana and Kajiado counties, Kenya and Karamoja sub-region, Uganda](#)

[UNISDR, 2014. Building Disaster Resilience for Sustainable Human Development](#)

The Disaster Resilience Framework promoted by DFID (2011, TANGO/DFID) involves four elements that describe resilience: context, disturbance, the capacity to deal with disturbance and reaction to disturbance. This approach considers whose resilience (e.g., individuals, households, communities, national governments), resilience to what (the shock or stress to which the system is exposed), the degree of exposure (large- scale versus differential exposure), sensitivity (ability to cope in the short-term), the ability to adapt – both in anticipation of and in response to – changing conditions over the long term, and how the system responds to the disturbance (e.g., survive, cope, recover, learn, transform) (Brooks et al. 2014).

The resilience framework presented by Frankenberger et al. (2012) – and updated here – integrates livelihoods, DRR and climate change adaptation approaches into a single framework for assessing resilience (Frankenberger et al. 2014). This integrated systems approach emphasizes the importance of absorptive, adaptive and transformative capacities that include access to productive assets, household livelihood strategies, and institutional structures and processes, as well as preparedness, prevention, response and recovery activities formulated to achieve well-being outcomes in response to shocks and climate-related stresses.

TANGO/DFID Resilience Framework, 2011



The important variables of interest are composite measures based on several other measures. In many of these cases, principal Components analysis (pCa) or polychoric factor analysis is used to construct an index. This approach has been applied in Niger, Somalia and, more recently, Ethiopia.

Reference document

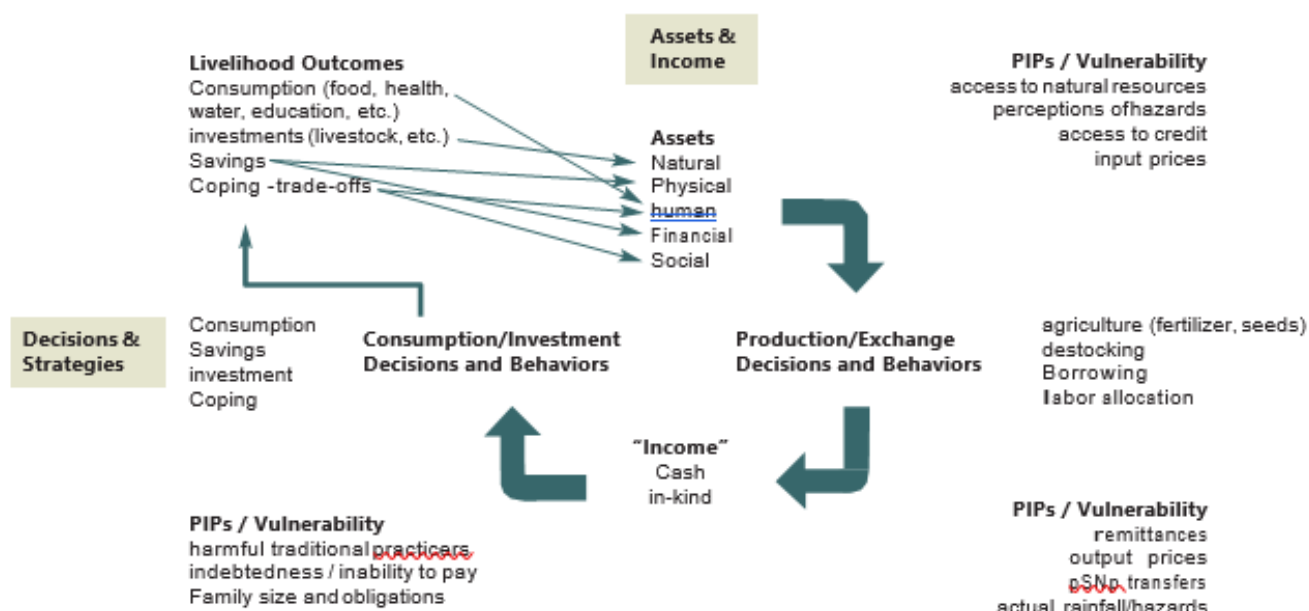
[FSIN 2014 A common analytical model for resilience measurement](#)

Tufts Livelihoods Change Over Time (2012, LCOT) Model. The Feinstein international Center at Tufts university, in collaboration with world Vision and the College of dryland agriculture and Natural resources at Mekelle university in Tigray, is measuring resilience in Northern Ethiopia by assessing “livelihoods change over time” (ICoT) (maxwell et al. 2013; Vaitla et al. 2012).

The LCOT conceptual model captures static livelihood outcomes (e.g., food security, health status, education level), which are typically measured in a fairly linear manner, as well as more complex outcomes based on dynamic interactions between livelihood strategies, policies and programmes, and institutions, which can enhance or limit household responses.

Based on a livelihoods cycle framework, the LCOT assessment involves first understanding the shocks inherent in the system (i.e., what types of shocks or hazards are occurring within the targeted population), and subsequently how a given shock affects different stages of the livelihoods cycle (i.e., how assets are affected by a particular shock, how production and other decisions are impacted by a shock, and how policies/institutions mitigate the risk of a shock). Such information is then used to identify who is most vulnerable to what types of shocks. rather than collect the large amount of data required to directly measure various parts of the livelihoods cycle, a model is used to estimate relationships between initial asset levels, variables at different stages of the livelihoods cycle, and outcome measures of household resilience (maxwell et al. 2013; Vaitla et al. 2012).

LCOT framework, Ethiopia, Maxwell et al. 2012



To measure resilience, the study utilizes a number of indices, scores and individual variables to look at changes in seven indicators of livelihoods outcomes and household well-being across years (i.e., from hunger season to hunger season): household Food insecurity and access Scale (HFIAS), Coping Strategies index (CSI), Food Consumption Score (FCS), illness Score, Value of productive assets, Net debt, and income (per capita daily expenditure).

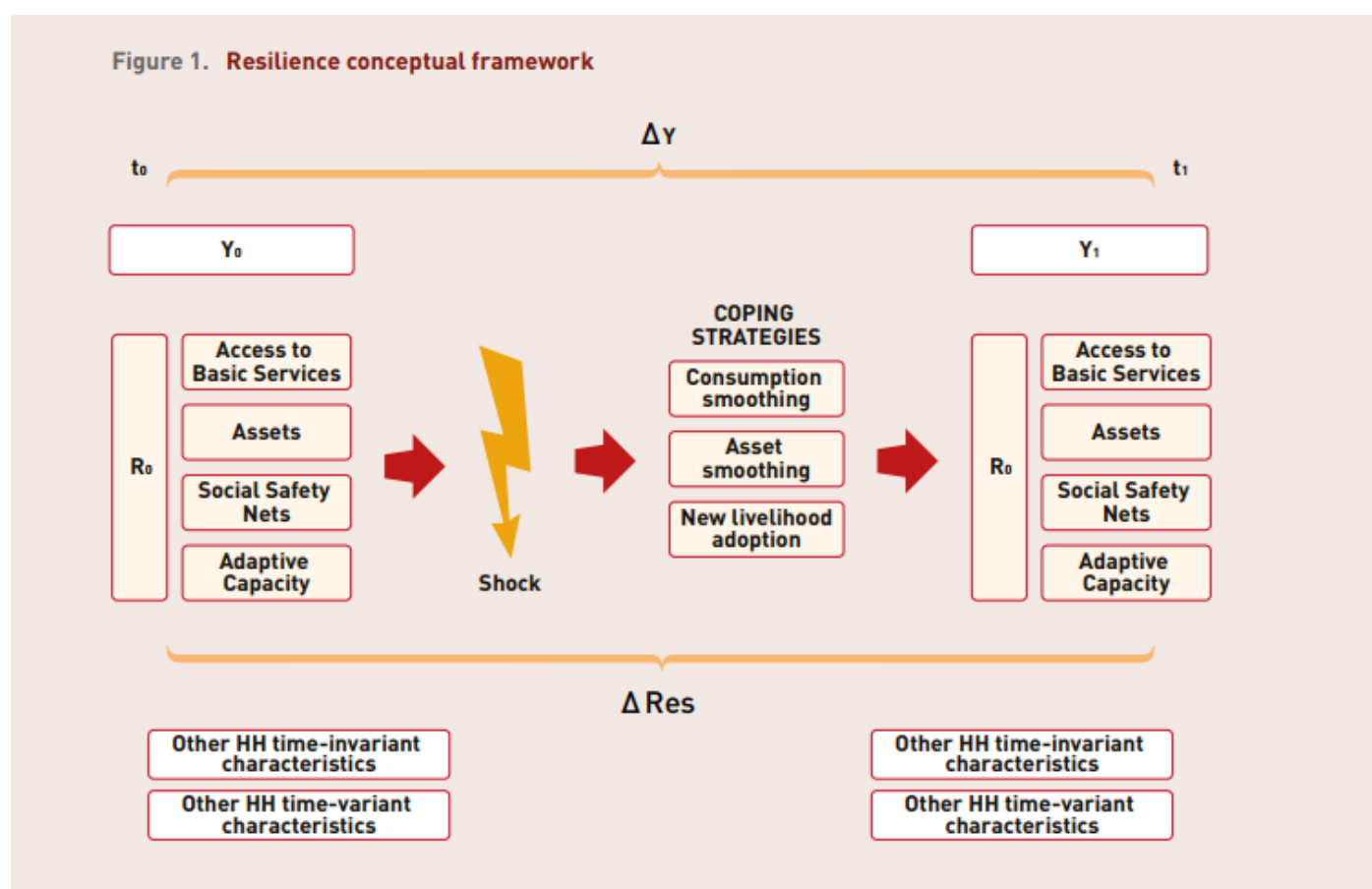
The HFIAS, CSI and FCS are used to assess food security. An illness score measures human capital. additional scores (or indices) include access to community resources (i.e., access to community-owned land, pasture/grazing land, water sources, forest resources); support network score (i.e., ability to access non-family networks in case of a shock); social participation score (i.e., household participation in formal and informal groups); and crop diversity index (i.e., cropping system patterns). Asset variables include both those more likely to change in the short term (e.g., value of land, livestock, productive assets) as well as those more likely to change over the long term (e.g., literacy, participation in social organizations).

Reference document

[FSIN 2014 A common analytical model for resilience measurement](#)

Resilience Index and Measurement Analysis (RIMA) II (2016, FAO). RIMA was created using the following definition of resilience: “The capacity of a household to bounce back to a previous level of well-being (for instance food security) after a shock”. RIMA II is based on five pillars, which are considered determinant of the resilience of households: access to basic services, assets, social safety nets, sensitivity and adaptive capacity. In 2016 FAO developed the RIMA II (Resilience Index Measurement and Analysis) tool to measure resilience, a revised version from the initial RIMA developed in 2008. Although aimed at being widely applicable, its premises are largely informed by food security as its ultimate objective. RIMA explores resilience at the household level. It combines both a direct (descriptive) measure of resilience, which ranks households from more or less likely to resist a shock and allows for comparison between households, and indirect (inferential) measure that explores the main determinants of resilience. The following graph describes what happens to a household when a shock occurs and resilience mechanism are activated.

RIMA II Resilience framework, 2016



Y_0 (e.g. food security at time 0) is obtained through a set of time-variant and time-invariant characteristics, a number of pillars contributing to household resilience capacity. When a shock occurs, a series of coping strategies is activated, principally consumption smoothing, assets smoothing and adoption of new livelihood strategies. Household resilience contributes to these absorptive, coping and transformative capacities in an attempt to bounce back to the previous state of well-being. This can result (over the long-term) in an increase or decrease in Y . Any change in Y has an effect on resilience capacity and, consequently, can limit future capacity to react to shocks.

Fundamental pillars of resilience in RIMA are Access to Basic Services, Assets, Social Safety Nets, Sensitivity And Adaptive Capacity. Details are provided in the next table.

Pillar	Definition	Significance	Indicators/Measurement
Access to Basic Services (ABS)	Refers to access to schools, health centres, water, electricity Includes both access to services and the quality of access to these services	It is important because (i) the capacity of generating income from assets (key to resilience) is constrained by market, non-market institutions, public service provision and public policy (ii) ABS is essential to assess the risk exposure of households and communities (iii) the relationships between the state and civil society is important to adapt to shocks	Proxy for access to services: schools, hospitals, markets, roads, safe houses. Proxy for quality of access: monetary costs of access to services.
Assets (AST)	Refers to what households own (productive and non-productive)	Shocks can have big impact on assets, and households can change their behaviour which will impact assets: ie. households might reduce their consumption to preserve their assets, or sell their assets	Productive and non-productive assets such as agricultural assets, animals
Social Safety Nets (SSN)	Formal (institutionalised exchanges) and informal transfers (various forms of exchanges that take place outside formally institutionalised channels)	With income, transfers are most likely the first response mechanism activity when a shock occurs. The extent to which households can refer to formal or informal channels depends mainly on existence of healthy credit institutions. Informal transfers include borrowing from friends, relatives, and are highly determined by social cohesion	Formal transfers: amount of cash and in-kind assistance received, quality and frequency of assistance, existence of microfinance institutions. Informal transfers: position of the head of household within the community, ethnic provenance, age and familiar interconnection with other households of clans.
Sensitivity (S)	The extent to which a household is affected by a specific shock	Sensitivity is key to determine a household's coping capacity in front of shocks. It determines the persistence and resistance of a household to shocks	Assess the frequency and intensity of shocks affecting a household over a given period of time. Using regression analyses to evaluate the real impact of shocks on resilience capacity.
Adaptive Capacity (AC)	A household's ability to adapt to the changing environment in which it operates	Being able to reorganise and adapt to a new situation is crucial for resilience in front of shocks	AC is connected to the existence of institutions and networks that enable learning and storing knowledge and experience, as well as be flexible and balance power among interest groups For example: income diversification for reducing risks in face of hazards

Household resilience can be measured using multidimensional surveys that focus on household behaviour. Considering the described resilience pillars, a resilience-oriented survey should include aspects of:

income and income generating activities; access to basic services; access to infrastructure; productive and non-productive assets; formal and informal safety nets; social networks; shocks; food security indicators; institutional environment; and climate change.

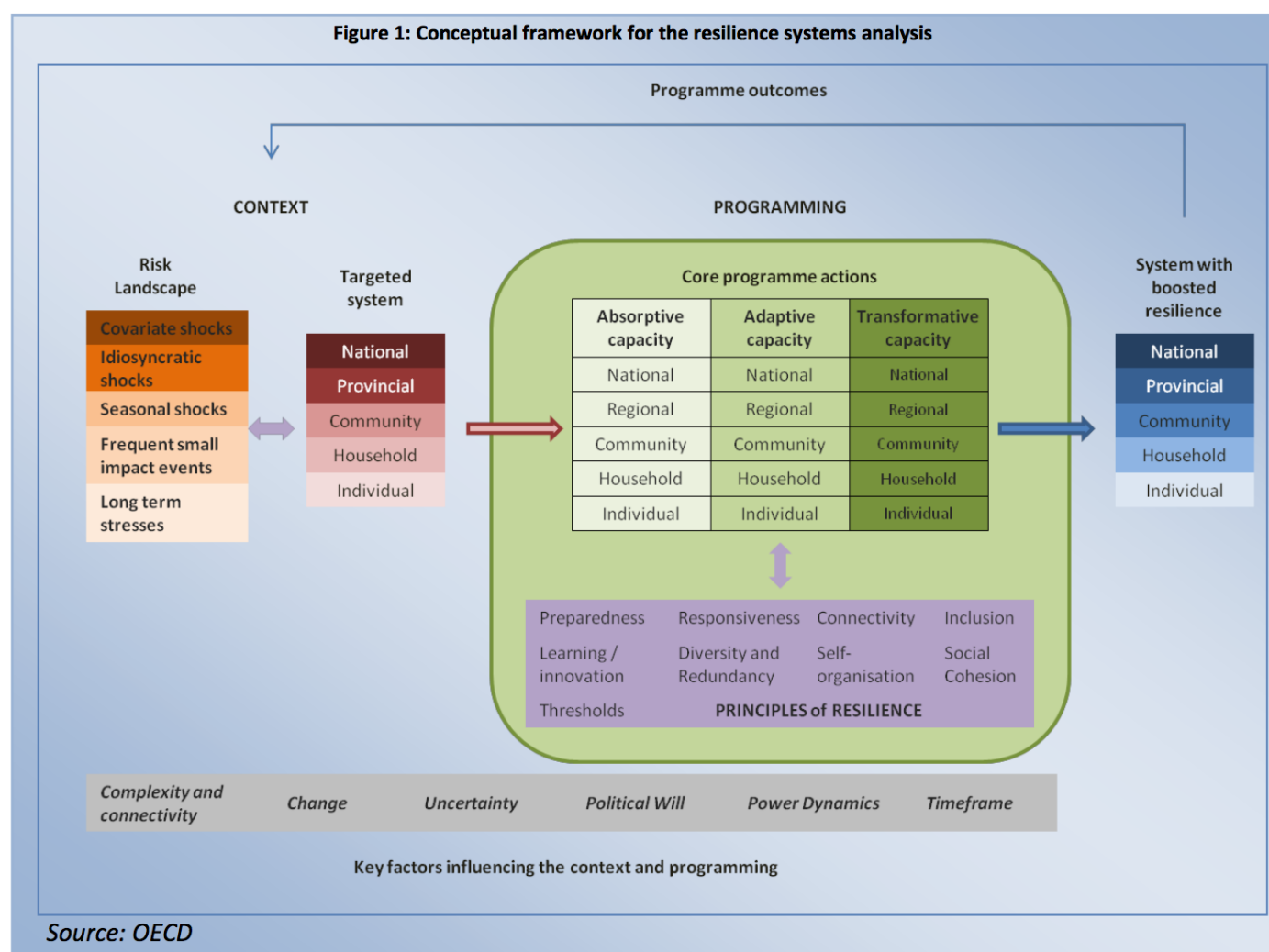
Reference Documents

[FAO 2016. Resilience Index Measurement and Analysis – II.](#)

OECD Conceptual Framework for the Resilience Systems Analysis (2014, OECD). The OECD framework looks at how specific programming based on the principles of resilience can help develop systems with boosted resilience, which are then more able to withstand the existing Risk Landscape of the context. The programming needs to take into account factors such as complexity and connectivity (how factors are interrelated), change, uncertainty (complexity makes events unpredictable), the existing political will and power dynamics, as well as a Timeframe for implementing the programs designed (OECD, 2014).

The OECD framework measures the impact of a shock on the resilience of a system. It aims at comparing different components of a system before and after the shock, in order to determine the impact of the shock on the system, and its resilience. This framework highlights the difficulty of measuring resilience if no shock has occurred: analysing resilience is therefore highly dependent on a shock occurring here, and on estimating the impact of the shock on the system to measure its resilience. The framework was piloted in Syria, Jordan and Lebanon, Somalia, Sudan, South Sudan, Kenya and Ethiopia.

Conceptual Framework for the Resilience Systems Analysis, 2014



The *resilience systems analysis* brings together an analysis of different risks that a system faces; how priority system components are affected by shocks and their ability to absorb or adapt to shocks; a power analysis of the different stakeholders and processes that influence the system; and an identification of gaps in the system's resilience.

The framework proposes different ways of measuring the impact of a shock on the resilience of a system: system resilience indicators, negative resilience indicators and proxy impact indicators. Process indicators and output indicators are additional methods that focus on assessing the impact of measures implemented to boost resilience.

System Resilience indicators are indicators that make up six types of 'capital' which form resilience, extracted from the Sustainable Livelihoods Approach (DFID 1999).

Example of assets for each group of capital (OECD 2014)

Capital	Asset
Financial	Additional production for sale Banking facilities Credit/ savings group Formal employment Gifts / Donations Income to cover basic needs Informal employment Savings Transfer of funds
Human	Competencies, knowledge, habits Education Health Vocational skills
Natural	Biodiversity of the environment Forest Land for agriculture / livestock Livestock Minerals Rivers and waterholes Source of drinking water
Physical	Commodities Drinking Water Energy Essential Household items Means of Transportation, Livestock Productive Land/Productive capital Sanitation Shelter Social Infrastructure
Political	Access to those in authority Knowledge of rights and duties Membership in political parties Participation in community meetings Participation in community organizations influencing local power structures Participation in democratic processes (elections, decentralization)
Social	Community committees Formal/informal conflict management mechanisms Informal social interaction Measures to protect girls and boys Membership in formal community groups Mutual support Participation of women in community life

Indicators for each capital are attributed a score based on their strength in the system. The OECD proposes a scale from 0 to 4 to measure the strength of an indicator, 0 being weak and 4 being strong. The final score of a capital, similarly estimated on a scale of 0 to 4, is the average of the scores of each indicator that make up that capital. This score informs of the strength of this specific indicator for a specific system.

Example of table to determine the indicators to measure system resilience (OECD 2014)

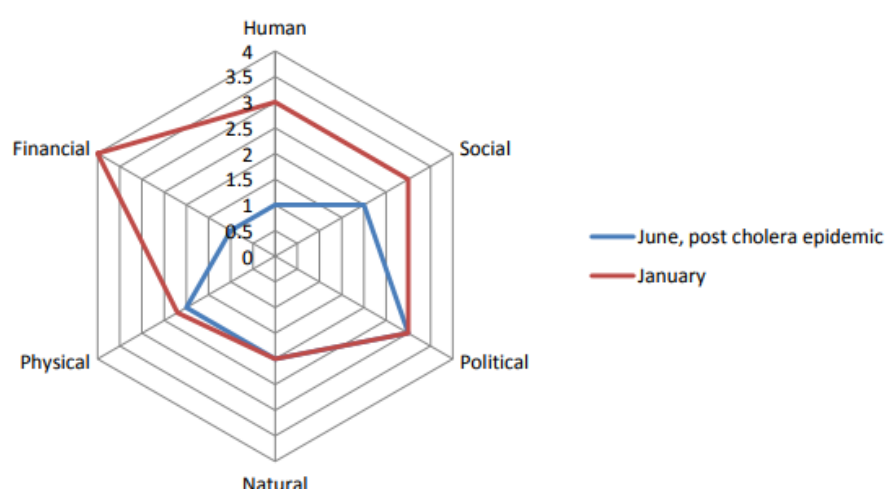
Figure 16: Example of table to determine the indicators to measure system resilience

Capital	Asset	Indicator	Score based on scale
Human	Formal Education	Proportion of girls, and boys, attending school	2
		Proportion of classes with less than 55 students	
	Vocational Education	New indicator required	3
	Physical and mental health	Mortality rate per 10,000 people per day	3
		# of confirmed cholera cases per week	
		# of new disease cases per 1000 people per month	
		% of births that were facilitated by a midwife	2
		Mortality rate per 10,000 children under 5 per day	3
	Health of babies and children	Incidences of diarrhea in children under 5 every 2 weeks	
		% of children under 1 vaccinated for childhood diseases	1
		% of children who are underweight	2
		AVERAGE (BASKET) SCORE FOR HUMAN CAPITAL	2.29

This then allows to map the resilience of a specific system at different points in time and allows for comparison.

Example of system resilience pre- and post-cholera epidemic (OECD 2014)

Figure 17: Example of system resilience pre- and post-cholera epidemic



This diagram shows that while human, financial and social capitals were strong before the cholera epidemic, they were severely affected by the epidemic. However, the epidemic did not affect the system's natural and political capital.

Another way of measuring resilience is by evaluating **negative resilience indicators**. Negative resilience refers to "strategies that people or assets use to absorb shocks, or adapt or transform so that they are less exposed to shocks and that may have negative impacts on certain aspects of

their system" (OECD 2014). Based on FAO's strategy to monitor the severity of negative coping strategy, the OECD proposes to monitor the trends in negative resilience, changes in strategies and how they impact the system.

Example of severity analysis of negative resilience (OECD 2014)

In the past 30 days, how often have community members had to:	RATE OF OCCURRENCE					SEVERITY	RATE x SEVERITY
	All the time/every day	Pretty often/ 3-6x a week	Once in a while/ 1-2x a week	Hardly at all <1x week	Never	Raw Score	Relative score
	7	4.5	1.5	0.5	0		
Shifting to traditional medicine	7					7	2
Taking out new loans			1.5			1.5	3
Selling productive assets		4.5				4.5	2
Sending children out to work			1.5			1.5	2
Enrolling in armed groups			1.5			1.5	4
Prostitution				0.5		0.5	2
Sale of household assets			1.5			1.5	2
Reduction in daily food rations				0.5		0.5	2
Crime			1.5			1.5	3
Deforestation		4.5				4.5	3
Illegal use of land				0.5		0.5	1
Early harvest		4.5				4.5	3
TOTAL FOR THIS COMMUNITY							74

Proxy indicators can be used to determine the impact of a shock on the resilience of a system such as number of dead per number exposed to the shock, percentage of reduction in household and economic losses (perhaps as a % of GDP due to shocks). However, the OECD acknowledges that this focuses on losses from the impact, rather than the people who survived and their overall well-being, which make for resilience.

Reference Documents

[OECD 2014 Guidelines for Resilience Systems Analysis](#)

[OECD 2013 Risk and Resilience: From Good Idea to Good Practice](#)

[OECD Risk and Resilience](#)

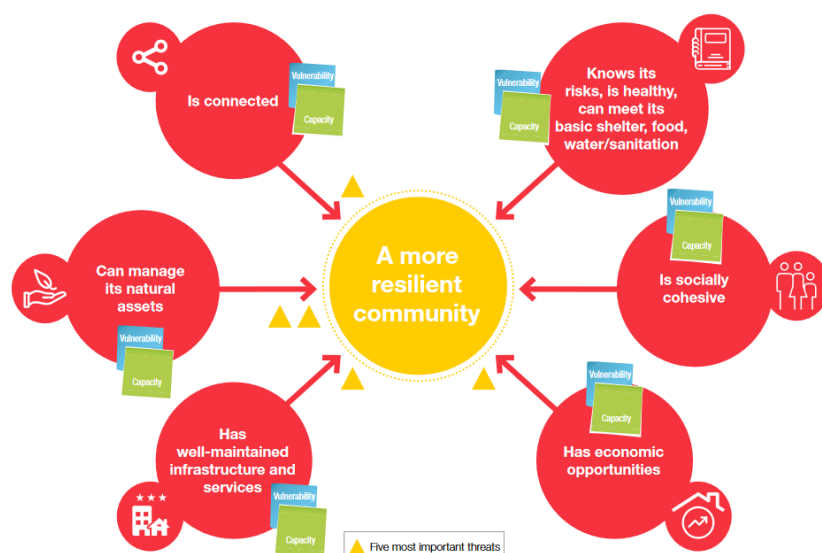
IFRC Framework for Community Resilience (2014, IFRC). Updated in 2014 from a first version published in 2008, the Framework for Community Resilience (FCR) developed by IFRC assesses resilience at the community level. Its purpose is to support national societies in assisting communities based on a holistic assessment of vulnerabilities of a community, and the risks that they face. It was complemented in 2016 by the Road map to community resilience.

According to the definition of IFRC, “resilience” is “the ability of individuals, communities, organizations or countries exposed to disasters, crises and underlying vulnerabilities to anticipate, prepare for, reduce the impact of, cope with and recover from the effects of shocks and stresses without compromising their long-term prospects” (IFRC, 2014). This definition implies that resilience takes place at multiple levels, where it can also be strengthened. These levels include: individual, household, community, local government, national government, organizations such as the National Red Cross and Red Crescent Societies, regional, and global levels.

A **community** is considered resilient when:

- It is knowledgeable, healthy and can meet its basic needs
- It is socially cohesive
- It has economic opportunities
- It has well-maintained and accessible infrastructure and services
- It can manage its natural assets
- It is connected

IFRC's Framework for Community Resilience combines the characteristics of the community with IFRC's own impact and contribution to the resilience of the community.



A. Characteristics of a resilient community	B. Formulations of the question: How can you tell if a household in this community...?
1. (a) Is knowledgeable about threats. (b) Is healthy. (c) Can meet its basic needs.	... is knowledgeable about **cholera, road accidents, floods, changing risks**? ... can regain or maintain health after a **road accident, illness, flood**? ... can find or restore shelter during/after **violence, earthquake, mudslide, flood**? ... can keep feeding its children during a **strike**, in spite of **price hikes**? ... can find clean water to drink during or after a **cholera epidemic, flood, drought**?
2. Is socially cohesive	... has neighbours or family nearby on whom it can rely during **a storm, flood, conflict**? ... does not feel at risk of violence from someone in the community or neighbourhood?
3. Has economic opportunities.	... can find or hold on to a job during or after the **conflict, earthquake, drought**?
4. Has well-maintained and accessible infrastructure and services.	... can draw benefit from **the market, school, clinic** despite the **strike, flood, conflict**?
5. Can manage its natural assets.	... takes care to respect the **nearest water source, forest, soils**?
6. Is connected	... makes regular visits outside the community? Is aware of relevant policies and laws and how they both affect the community and can support the community as it acquires resilience?

To measure their own resilience, communities identify indicators to evaluate each of the six characteristics that make a community resilient according to IFRC. A compendium of indicators is available for each of the six characteristics.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
Community is healthy	• The number of community health workers. • The number of functional health facilities providing selected relevant services. • The number of non-functional health facilities. • The number of outpatient consultations per person per year (attendance rate or consultation rate). • The number of consultations per clinician per day. • The coverage of measles vaccination (%). • The coverage of DTP3 in < 1-year-old (%). • The percentage of births assisted by a skilled attendant. • The percentage of deliveries by caesarean section. • The incidence of selected diseases relevant in the local context, including malnutrition (GAM/SAM). • The case fatality ratio (CFR) for most common diseases, including malnutrition. • The percentage of households possessing one or more effective insecticide-treated mosquito nets. • The percentage of pregnant women, children under five and other vulnerable people sleeping under effective insecticide-treated mosquito nets.

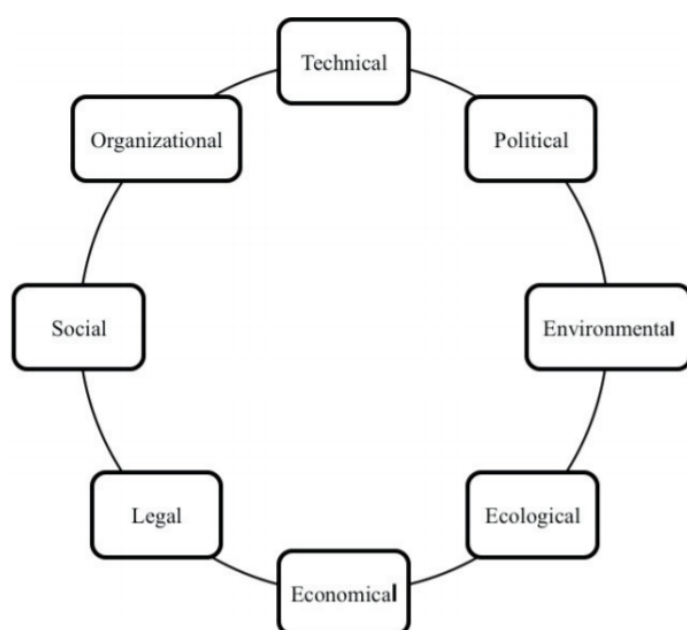
Reference Documents

[IFRC 2006 Vulnerability and capacity assessment: Lessons learned and recommendations](#)

[IFRC 2014 IFRC Framework for Community Resilience](#)

[IFRC 2016 A roadmap to community resilience](#)

Resilience of Systems framework (2014, Proag). This framework assesses resilience by evaluating different systems (political, legal) and measuring their capacity to resist, adapt and recover from disruptions (natural disasters, economic). The aim is to evaluate the degree of resilience of these systems, in order to reduce the population's vulnerability to disruptions. The framework identifies key 'sectors needing resilience' (Proag 2014). Sectors where system resilience may be important include:



The framework takes the example of infrastructure resilience and identifies several variables to assess the general resilience of a country's infrastructure.

Possible performance metrics (Proag 2014)

Infrastructure System	System Performance Metrics
Agriculture and Food	Average food price, exposure to food contamination
Chemical	Pollution
Communications	Number of dropped telephone calls
Emergency Services	Lives saved; average response time
Energy:	Consumption, profitability of energy companies
Information Technology	Number of cyber attacks, internet access speed
Public Health and Healthcare:	Mortality rates, patient attendance
Transportation Systems: Highway	Average speed and cost of shipments; length of traffic jams

It suggests two ways of measuring these indicators. Qualitatively, by conducting a risk analysis and the potential impact of the risk. Quantitatively, by measuring:

- **Resilience efficiency:** the ration of the output under shock divided to normal output
- **Resilience quality:** comparing the time it took for two equally damaged systems to recover back to normal performance (the baseline depends on whether they were fully functional or not in the first place)
- **Effort (cost) resilience:** a comparison of the effort required to build a new system and the effort required to recover to an equivalent system. quality and effort (cost resilience).

Reference Documents

[Proag 2014. Assessing and Measuring Resilience](#)

Risk Frameworks

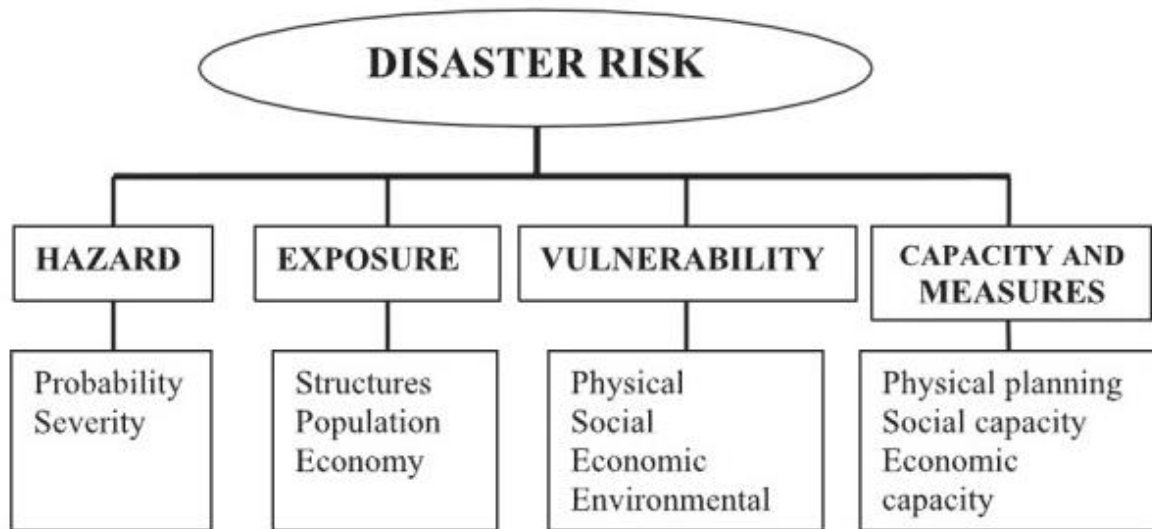
By: Countless organisations and governments

Date: 1960 - today

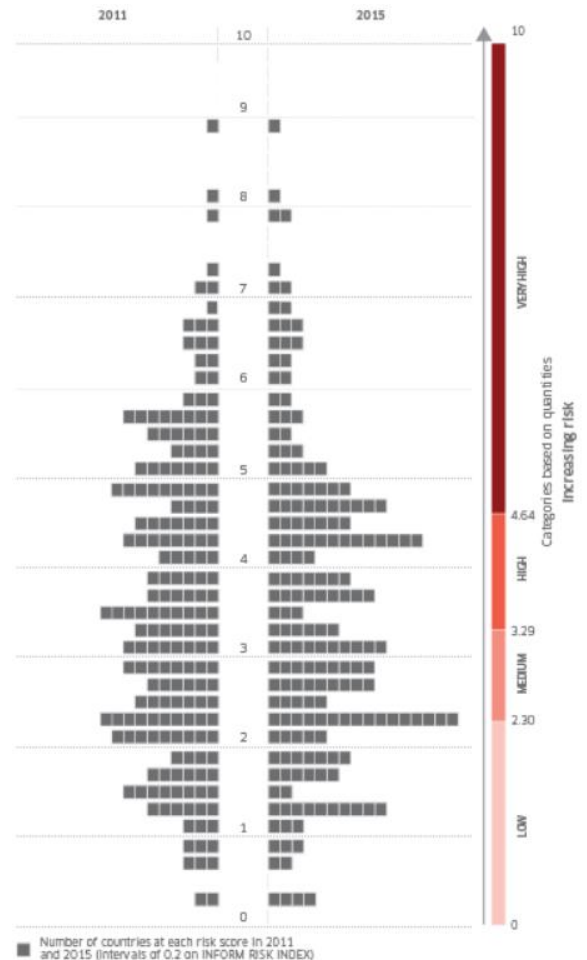
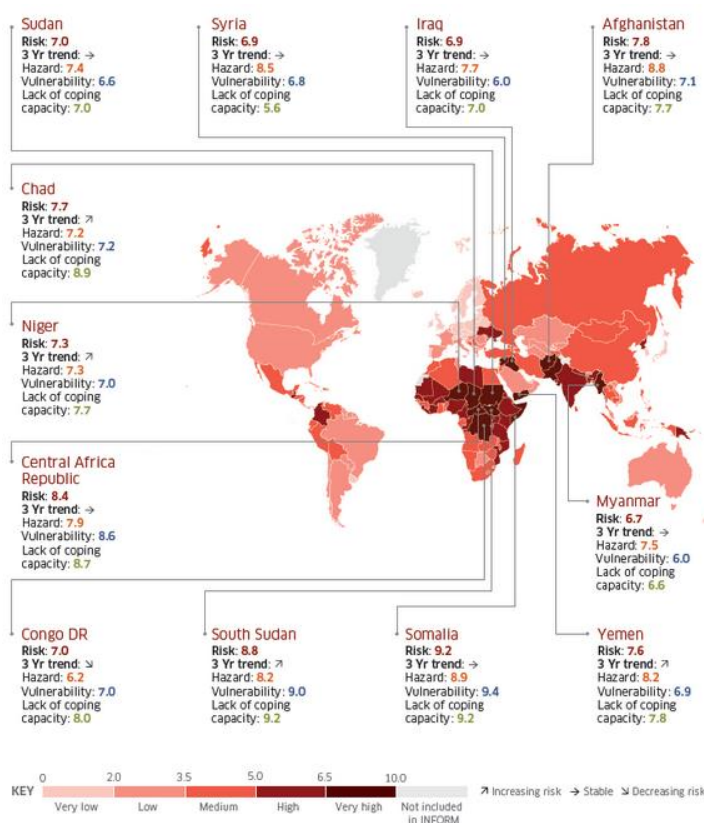
Inspiration: Vulnerability, capacity, resilience, hazard, disaster risk and preparedness

Reviewed initiative: **INFORM**

Featured framework: Bollin C., Cardenas C., Hahn H. and Vatsa K.S. 2003, Conceptual framework to identify disaster risk.



INFORM 2017 Risk index



Background: What happens to a country when exposed to a hazard event is clearly of a multifaceted nature. In scientific literature, there are many different views of how to systematize disaster risk, reflected in various analytical concepts and models. Given the complexity of the phenomena and interactions among different dimensions a unique optimal solution does not exist. The disaster risk community conceptualizes risk as the interaction of hazard, exposure, vulnerability and capacity measures. However carefully the dimensions are defined, the innumerable interactions and overlapping that exist among the dimensions makes it possible to argue both positive or negative effects on the calculated risk. A hazard event represents a load that the country/area of interest will have to handle characterized by severity and frequency. But no matter how severe the hazard is, without exposed assets, population, buildings, infrastructure, or economy, there is no risk.

Risk management frameworks are generally designed to answer the following questions:

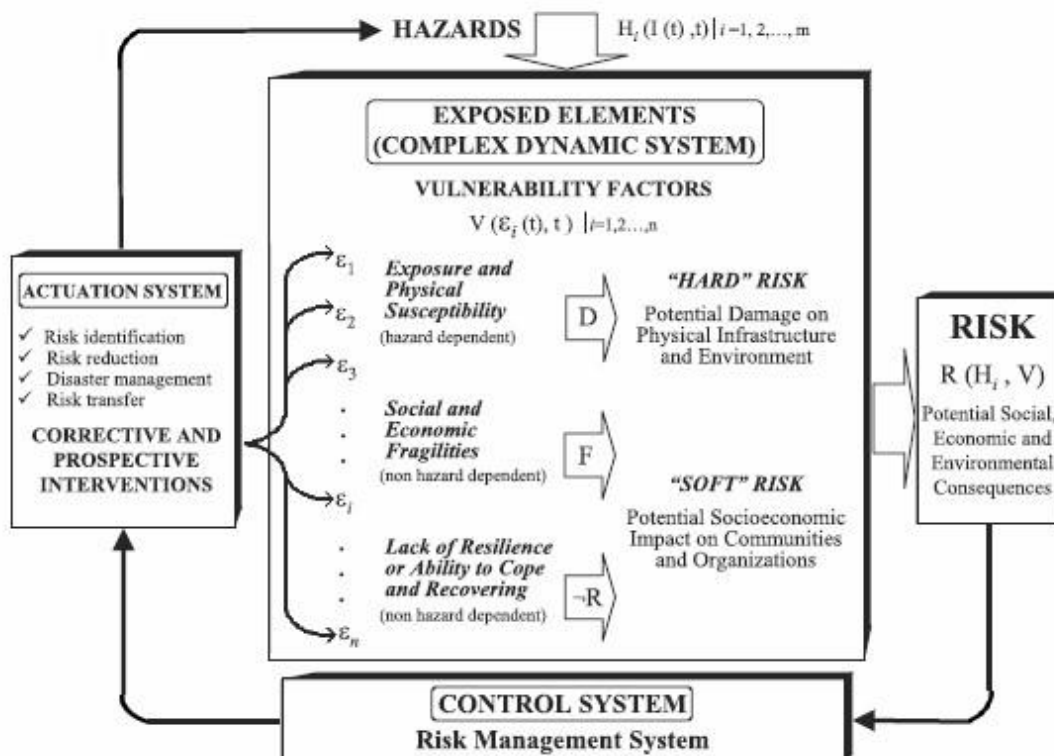
- What are the probable dangers and their magnitude (Danger identification)
- How often do the threats of a given magnitude occur (Hazard assessment)
- What are the elements at risk (Elements at risk identification)
- What is the possible damage to the elements at risk (Vulnerability assessment)
- What is the probability of damage (Risk estimation)
- What is the significance of the estimated risk (Risk evaluation)
- What should be done (Risk management)

Vulnerability describes how easily and how severely exposed assets can be affected. Thus, everything that is exposed must have an associated vulnerability which may be or may not be hazard dependent. Capacity encompasses physical planning, social capacity, economic capacity and management. It is closely related to coping capacity which refers to formal, organized activities and efforts of the country's government that are performed either after or before a hazard event.

The most recent conceptual framework for a holistic approach to evaluating disaster risk is based on the work of Cardona (2011). For Cardona, vulnerability consists of exposed elements on several aspects:

- Physical exposure and physical vulnerability, which is viewed as hard risk and being hazard dependent
- dependent
- Fragility of the socio-economic system, which is viewed as soft risk and being hazard independent
- Lack of resilience to cope and recover, which is also defined as soft risk being hazard independent

Cardona O.M., Carreno M.L. (2011), *Holistic approach*



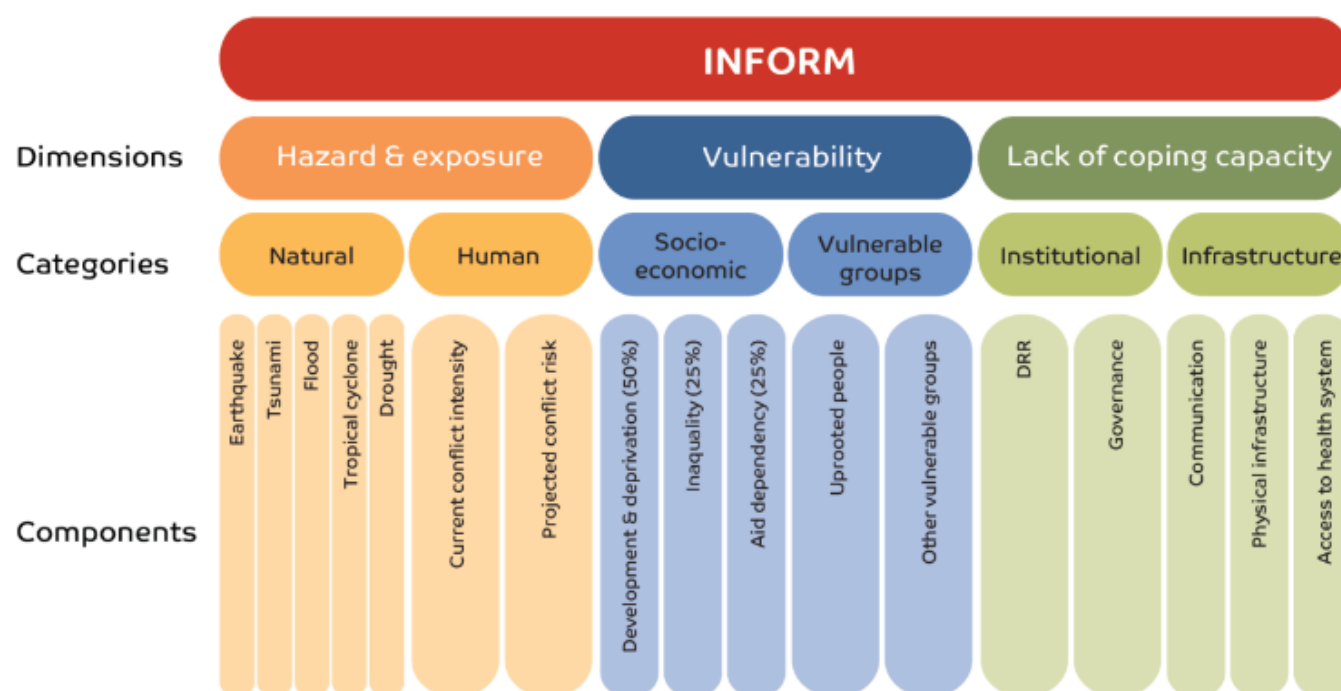
Note: Conceptual debates on vulnerability and capacities or specific vulnerability and capacity frameworks are covered in other sections of this report.

Only INFORM was selected for the review as the most comprehensive, up-to-date and agreed framework in the humanitarian realm.

The Index for Risk Management INFORM (2015, IASC) is a way to understand and measure the risk of humanitarian crises and disasters, and how the conditions that lead to them affect sustainable development. INFORM is designed to be an open-source, easy-to-use risk assessment for crises and disasters that can be used and adapted by anyone. It takes origin in the work done for the Global Focus Model (OCHA/Maplecroft) and the European Commission Global Needs Assessment and Forgotten crisis indices. It is currently developed and managed by and for the IASC Preparedness Working Group.

The INFORM methodology is designed to answer several simple questions: Which countries are at risk of crises that will require humanitarian assistance? What are the underlying factors that could lead to crises in each country? How does the risk change with time?

INFORM Conceptual framework, 2017



INFORM is the first global, objective and transparent methodology for understanding the risk of humanitarian crises and disasters. INFORM:

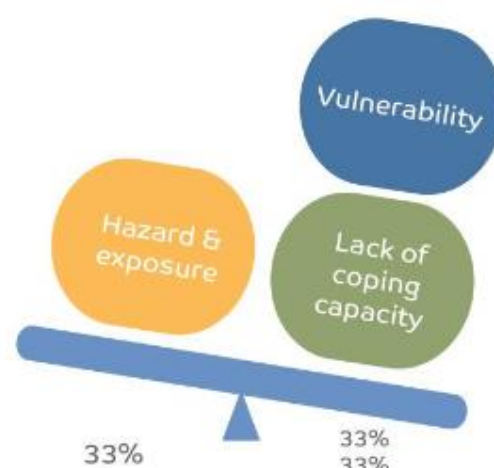
- Covers 191 countries at the national level and is comparable between countries. Detailed regional and national INFORM models can be developed using the same process and methodology and are available for Sahel, Greater Horn of Africa, Central Asia and Caucasus, Latin America and the Caribbean, Lebanon, Colombia and Guatemala.
- All the data used in INFORM is in the public domain and the methodology is completely transparent. The INFORM partnership includes many data source organisations.
- INFORM is based on scientific concepts and methods, and the data used is the best available.

The objective of INFORM is to answer these questions using a relatively simple framework for quantifying humanitarian crisis risk, which is based on concepts published in scientific literature. Essentially, INFORM analyses two forces, which together describe risk. On one side are hazards and the exposure of people to them. On the other side are the vulnerability of people to those hazards and their lack of capacity to cope with them.

INFORM builds up a picture of risk by bringing together around 50 different indicators that measure three Dimensions of risk:

- Hazard and exposure: Events that could occur and the people or assets potentially affected by them
- Vulnerability: The susceptibility of communities to those hazards
- Lack of capacity: Lack of resources available that can help absorb the shock

Each dimension is made up from a number of risk categories—for example natural hazards, socio-economic vulnerability, institutional capacity etc. These are user driven, meaning that they have been chosen to reflect the needs of potential users of INFORM. The final value of INFORM is calculated using a risk equation, which is a geometric average of the three risk dimensions with equal weights.



$$\text{Risk} = \text{Hazard\&Exposure}^{\frac{1}{3}} \times \text{Vulnerability}^{\frac{1}{3}} \times \text{Lackofcoping capacity}^{\frac{1}{3}}$$

The results are a risk profile for every country, which consists of a value between 0-10 for the INFORM Risk Index and all of its underlying dimensions, categories, components and indicators. In the global model, all the results are comparable within and between countries (i.e. risk A in country A can be compared with risk B in country A, risk A in country A can be compared with risk A in country B). Note that results of the global INFORM model are not directly comparable with regional or national models. This is because INFORM measures relative risk, so the results depend on the risk level of other countries or subnational units in the model.

	Threshold (and number of countries per group in INFORM 2016)			
Risk group	RISK	HAZARD & EXPOSURE	Natural	Human
Very high (>=)	6.5 (12)	6.1 (29)	6.9 (14)	9 (12)
High (>=)	5 (22)	4.1 (19)	4.7 (42)	7 (12)
Medium (>=)	3.5 (59)	2.7 (27)	2.8 (66)	3.1 (21)
Low (>=)	2 (67)	1.5 (50)	1.3 (54)	1 (53)
Very low (>=)	0 (31)	0 (46)	0 (15)	0 (93)

At all levels of the INFORM model, a lower value (closer to 0) always represents a lower risk and a higher value (closer to 10) always represents a higher risk. Results are rounded to one decimal place. Differences between countries beyond one decimal place on the INFORM scale are not considered to be significant.

The results of the INFORM Risk Index and its dimensions are divided into five groups (very high, high, medium, low and very low). The threshold of these groups are fixed and are based on cluster analysis of 5 years of INFORM results. Cluster analysis groups the results so that countries in the same group or cluster are more similar to each other than to those in other groups. This method has been used to determine fixed thresholds between risk groups.

Notable in the INFORM is the processing and treatment of uncertainty. A measure of reliability is displayed for each country. It is presented as a Lack of Reliability Index on a scale from 0-10 and takes into account missing data, out-of-date data, and conflict status. Countries with lower Lack of Reliability Index scores have risk scores that are based on more reliable data. The INFORM Lack of Reliability Index includes three dimensions: missing data, out-of-date data and conflict status.

- The first dimension considers how many original indicators were available for calculating the INFORM index for each country. It uses as indicator the number of missing values, which includes also estimated values not present in the original data source. For instance, the HDI value derived from the GDP per capita is considered as missing value for the calculation of the Lack of Reliability Index.

- The second dimension looks to how recent are the data used for a particular country. INFORM methodology allows to use older data as proxy where updated data are not available. The metrics used for the Lack of Reliability Index is the average of the total number of the years older than the reference year for each indicator.
- The last dimension takes into account if a country is in conflict. Normally, collection of data in country affected by conflict is very challenging and therefore their reliability is poor. INFORM defines a country in conflict if the Conflict Barometer of the Heidelberg Institute for International Conflict Research (HIIK) sets a conflict intensity 4 or 5 (highly violent conflict). The first two dimensions are normalized between 0 and 10 as an INFORM indicator, while the conflict dimension counts as an aggravating factor of 30%.

INFORM LACK OF RELIABILITY INDEX

MISSING DATA

The total number of original indicators missing, including any that have been estimated (e.g. HDI derived from GDP per capita).

OUT OF DATE DATA

The average of the total number of years older than the reference year per indicator, to account for any older data used as a proxy for the most recent year.

CONFLICT STATUS

We define a country in conflict if the Conflict Barometer of Heidelberg Institute for International Conflict Research (HIIK) sets a conflict intensity 4 or 5 (highly violent conflict), to account for the challenges of the data collection in a country affected by conflict.

Reference documents

[INFORM Guidance note, 2016](#)

[INFORM Concept and methodology 2017](#)

[INFORM Concept and Methodology 2015](#)

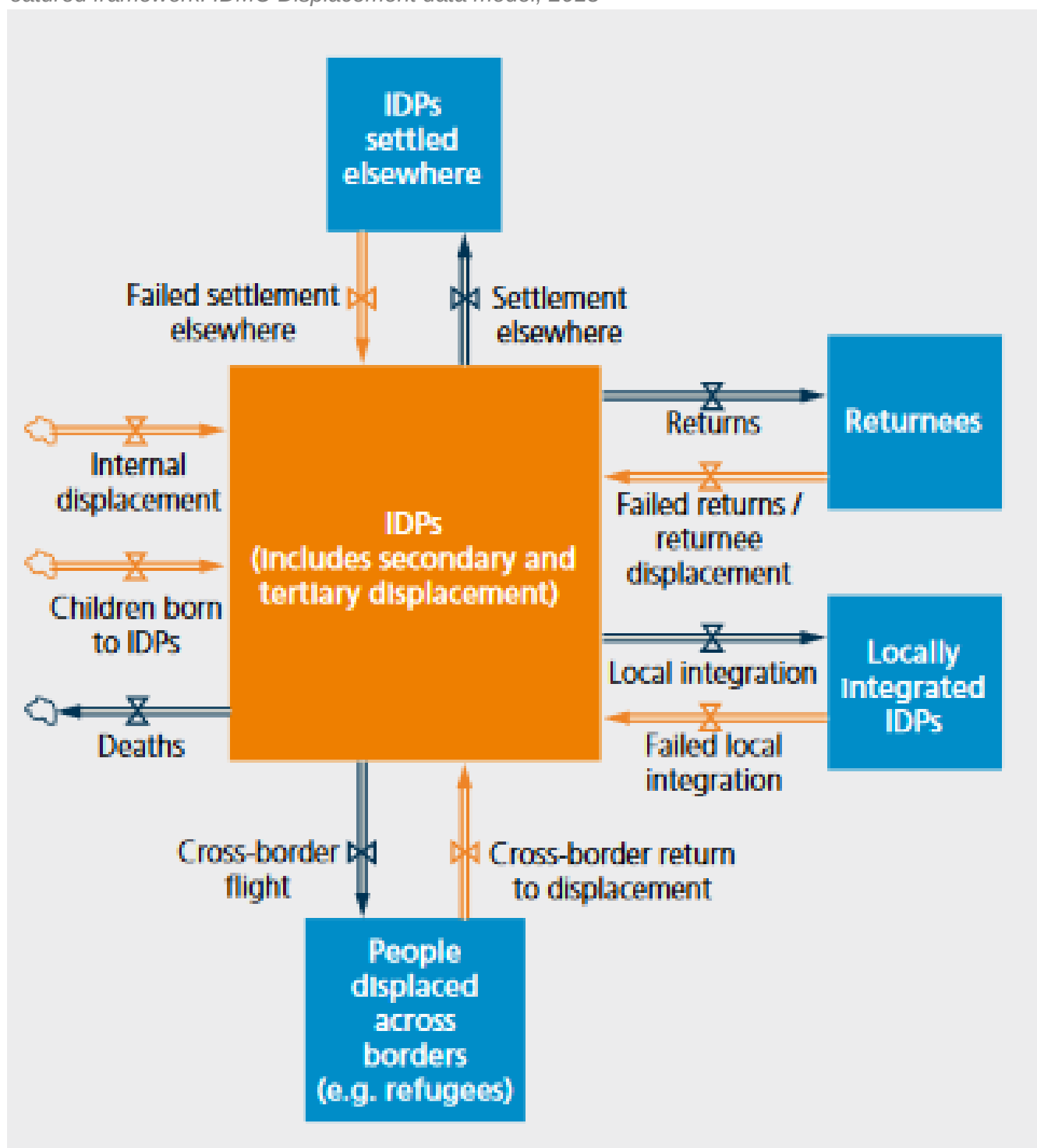
Displacement Frameworks

Date: 2000 - today

By: IOM, JIPS, UNHCR, IDMC, Governments

Reviewed initiatives: IASC framework on Durable solutions for IDPs, Statelessness Framework, Migration governance Index, Integration Evaluation Tool, Refugee Integration

Featured framework: IDMC Displacement data model, 2015



[IDMC GRID report 2017, Methodological annex](#)

Framework on Durable Solutions for Internally Displaced Persons (2010, IASC) aims to provide clarity on the concept of a durable solution and provides general guidance on how to achieve it. This version of the Framework builds on a pilot version released in 2007, which the Inter-Agency Standing Committee welcomed and suggested be field-tested. The Framework was revised and finalized in 2009, taking into account valuable feedback from the field on the pilot version and subsequent drafts.

A durable solution is achieved when IDPs no longer have specific assistance and protection needs that are linked to their displacement and such persons can enjoy their human rights without discrimination resulting from their displacement. A durable solution can be achieved through:

- Sustainable reintegration at the place of origin (hereinafter referred to as “return”);
- Sustainable local integration in areas where internally displaced persons take refuge (local integration);
- Sustainable integration in another part of the country (settlement elsewhere in the country).

Depiction of IASC Framework on Durable Solutions for Internally Displaced Persons, JIPS, 2017



Driven by the demand from governments and international organizations for a systematic approach to measure the progress towards durable solutions, there has been an increasing need to transform the IASC Framework into concrete analysis tools. In 2015 an inter-agency process was set up to operationalize the framework. This process is led by the Mandate of the Special Rapporteur on the Human Rights of IDPs, and coordinated by JIPS in collaboration with a Technical Steering Committee comprising a broad group of partners⁸ engaged in supporting durable solutions to displacement. The project seeks to develop agreed-upon indicators, tools, methodologies and

guidance for comprehensive yet practical approaches to durable solutions analysis and monitoring progress in displacement situations.

In Phase 1 of the project, a comprehensive desk review process was conducted of a wide range of indicator sources pertaining to durable solutions and was endorsed by the Technical Steering Committee. This resulted in an Indicator Library that comprehensively reflects the IASC Framework definition of durable solutions. Currently, the project is at the end of Phase 2, and the Indicator Library is being field-tested by JIPS and Technical Steering Committee members in 9 different contexts in Colombia, Sudan, Myanmar, Kosovo, Georgia, Iraq, Ukraine, Cote d'Ivoire, and Somalia. A final indicator library and guidance and tools will be coming out of the project at the end of the year⁹.

Reference document

[IASC Framework on Durable Solutions for Internally Displaced Persons, 2010](#)

⁸ Members include [DRC](#), [ICRC](#), [IDMC](#), [IOM](#), [FIC/Tufts](#), [NRC](#), [UN Peacebuilding Fund](#), [Solutions Alliance Research](#), Data and Performance Management group members, [UNDP](#), [UNHABITAT](#), [UNOCHA](#), [UNHCR](#), [World Bank](#), [Displacement Solutions Platform](#) and [ReDDs](#)

⁹ <http://www.jips.org/en/profiling/durable-solutions>

Statelessness: An Analytical Framework for Prevention, Reduction and Protection (2008, UNHCR) is designed to identify causes of statelessness, obstacles to acquisition of nationality and the risks faced by stateless persons as well as to highlight the capacities of all concerned stakeholders to minimize those risks. Identifying risks and causes of statelessness as well as gaps in the protection of stateless persons is a necessary first step to prioritizing and developing measures to guarantee enjoyment of the full range of human rights including the right to an effective nationality. The gaps analysis produced using this Framework comprehensively map gaps in citizenship law and practice as well as unmet needs. It serves as a basis for the collaborative development of short and long-term strategies that support States in preventing and reducing statelessness and ensuring the rights of stateless persons.

The Framework does not stop at the identification of gaps however, for it is also intended to bring to light the capacities of national and local authorities, other actors as well as stateless communities themselves to address protection gaps. This then can form the basis for identifying the support that would be needed to prevent and reduce statelessness risks.

The Framework is not intended to be an instrument to gather statistics, nor is it a substitute for existing international standards or guidance provided by UNHCR on the prevention and reduction of statelessness and the protection of stateless persons. Rather, it serves as a tool to draw together available documentary information, such as annual reports, monitoring reports and legal information.

The Framework is based on 6 key dimensions

- Favorable Protection Environment
- Prevention and Reduction of Statelessness
- Fair Protection Processes and Documentation
- Security from Violence and Exploitation
- Basic Needs and Essential Services
- Community Participation, Self-Management and Self-Reliance

Reference document

[Statelessness: An Analytical Framework for Prevention, Reduction and Protection, 2008, UNHCR](#)

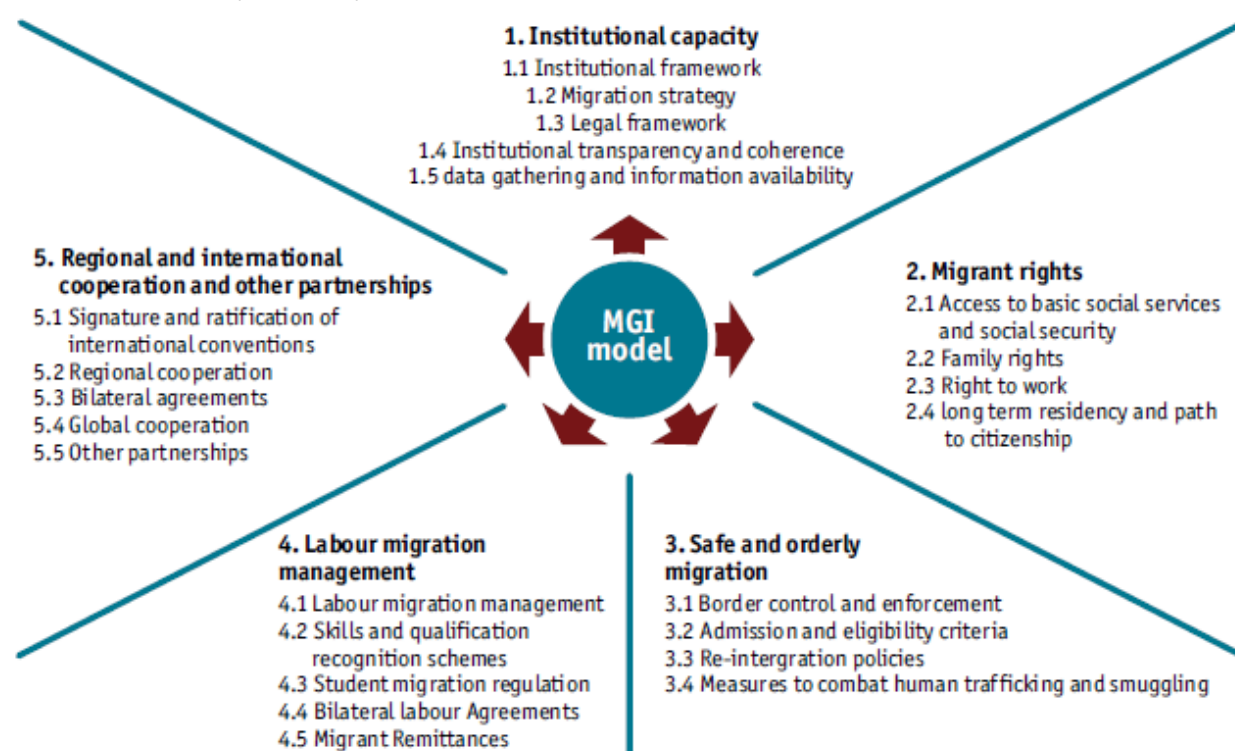
The Migration Governance Index (MGI) (2016, the Economist Intelligence Unit, IOM) is born out of an appreciation for connections between development, migration, governance and metrics. Commissioned by the International Organization for Migration (IOM) and designed by The Economist Intelligence Unit (EIU), the project aims to provide a consolidated framework for evaluating country-specific migration governance structures, and to act as a potential source for informing implementation of the migration-related SDGs.

The MGI looks at 15 countries—selected to provide a broad representation of levels of economic development, type of migration profile (including receiving and sending countries), and geographic scope—and uses 73 qualitative questions to measure performance across five domains identified as the building blocks of effective migration governance:

- **Institutional capacity:** This domain assesses countries' institutional frameworks, the existence of migration strategies, the existence of inward and outward migration governance legislation, and data availability and transparency.
- **Migrant rights:** This domain assesses countries' structures to ensure access to basic social services for migrants, family rights, the right to work, and long-term residency and paths to citizenship.
- **Safe and orderly migration:** This domain assesses countries' border control and enforcement mechanisms, measures to combat human trafficking and smuggling, and re-integration policies.
- **Labour migration management:** This domain assesses countries' policies for managing labour migration, skills and qualification recognition schemes, student migration regulation, bilateral labour agreements and remittance schemes.
- **Regional and international co-operation and other partnerships:** This domain assesses the regional and international dimension of migration through an analysis of international conventions, treaties and laws, regional consultative processes, and bilateral agreements.

These domains are measured through 23 indicators, which in turn are measured through 73 sub-indicators. All sub-indicators are qualitative and are scored through a rigorous process, mostly through binary scoring questions.

The MGI Framework, EIU/IOM, 2016



The MGI makes a unique contribution to the conversation on migration policy metrics because it differs from existing studies (Migrant Integration Policy Index, The Immigration Policies in Comparison (IMPIC) project, International Migration Policy and Law Analysis (IMPALA) Database, Determinants of International Migration (DEMIG) database) in a number of ways. Firstly, while existing studies tend to focus narrowly on one or a few migration policy domains (e.g. the MIPEx looks exclusively at immigrant integration policies), the MGI attempts to measure migration policies in a holistic manner. The framework assesses institutions, regulations and operational structures that inform the quality of migration governance across the board, focusing on a number of key input factors that can determine migration outcomes.

Secondly, the MGI stands apart from other studies in its inclusion of metrics that are specifically relevant for both sending and receiving countries. Countries face different challenges when they send or receive migrants, and the pillars of good migration governance vary in importance depending on which role is played. For sending countries, good migration governance includes the introduction of remittance schemes, bilateral labour agreements and

MGI Key findings, 2016

	Institutional capacity	Migrant rights	Safe and orderly migration	Labour migration management	Regional and international cooperation
Bahrain	Emerging	Emerging	Developed	Emerging	Developed
Bangladesh	Emerging	Emerging	Emerging	Developed	Mature
Canada	Mature	Developed	Developed	Developed	Mature
Costa Rica	Developed	Developed	Developed	Emerging	Mature
Germany	Mature	Developed	Mature	Developed	Mature
Ghana	Developed	Emerging	Mature	Nascent	Mature
Italy	Developed	Developed	Emerging	Developed	Mature
Mexico	Developed	Emerging	Emerging	Developed	Developed
Moldova	Developed	Developed	Mature	Developed	Mature
Morocco	Developed	Emerging	Emerging	Emerging	Developed
Philippines	Mature	Mature	Mature	Developed	Mature
South Africa	Mature	Developed	Developed	Developed	Mature
South Korea	Mature	Developed	Mature	Developed	Mature
Sweden	Developed	Mature	Developed	Developed	Mature
Turkey	Mature	Developed	Emerging	Developed	Developed

additional initiatives to leverage diaspora populations. For receiving countries, good migration governance typically includes protecting migrant rights, supporting migrants' integration into society and managing the flow of migrants. The authors believe that good migration governance should account for the challenges and responsibilities of both of these roles, which are neither static nor mutually exclusive. Historically migrant-sending countries may have sophisticated emigration policies, but can find themselves unprepared when local economic development makes them attractive destinations for migrants from poorer neighbouring countries. Similarly, disasters or other crises can spontaneously cause mass migration, transforming net receiving countries into net sending countries, or vice versa. Such examples underline the importance of developing migration policies across a comprehensive set of domains, so that countries are equipped to respond effectively to the shifting realities of international mobility.

Lastly, the MGI has been designed to capture migration governance structures in countries with different degrees of socioeconomic development. The pilot country sample includes ten emerging economies and five advanced economies from five regions, and the assessment method has been calibrated to account for institutional differences that typically emerge as a consequence of this diversity.

Reference document

[Measuring well-governed migration, The 2016 Migration Governance Index](#)

Integration Evaluation Tool (IET) (2012, UNHCR) was developed as an online Integration Evaluation Tool to help collect reliable information on refugee integration, and measure success rates in Central Europe. Launched in cooperation with Migration Policy Group, this tool contains a survey exploring aspects of a refugee's life. The online survey is filled out by selected experts and stakeholders involved in different areas of refugee integration. The Integration Evaluation Tool pilot was launched in November 2012 in Bulgaria, Poland, Romania and Slovakia, and finished at the end of 2013. The areas evaluated in this phase included refugees' access to education, employment, housing, and family reunification.

The IET aims to develop effective, reliable, and sustainable data collection methods and internal review mechanisms, to identify gaps and good practices as well as to build the capacity of and partnerships among the various actors involved in refugee integration. To this end, it covers four major areas labelled

- General considerations,
- Legal integration,
- Socio-economic integration,
- Socio-cultural integration.

Each of these contains a series of strands and each strand is defined by a list of indicators. Taken together, 231 indicators clarify policy goals and the data that decision-makers need to know in order to evaluate whether policies are working to achieve these goals.

Each IET indicator is a question relating to a different aspect of refugee integration. For most answers, there are three alternatives reflecting different policy options. The first option is based on favorable terms, while the second and third options generally represent less favorable or unfavorable provisions. The selection of the indicators and answer options is informed by a normative framework based on international and European law, UNHCR Executive Committee Conclusions, and other UNHCR guidelines. In order to evaluate and compare the answers across countries, the tool suggests tallying a score for each strand and dimension per country. Therefore, points are assigned to each policy option, with three points being awarded to the most favorable one. For the sake of comparisons, the resulting 1-3 scale is converted to a 0-100 scale with 100 being the top score.

Reference documents,

[Refugee integration and the Use of indicators: Evidence from central Europe, UNHCR, EU, 2013](#)

Refugee integration, Migration and Refugee Services (2016, MRS). The Program Advancement and Evaluation unit has developed an overview of refugee integration metrics, allowing MRS staff and refugee resettlement stakeholders to take a closer look at refugee integration in an international context. This overview includes the integration approaches of the U.S., Canada, Australia, Germany and New Zealand. This review is of interest to our work as it identifies and uses variables of wellbeing that can be reapplied in humanitarian settings. Results are comparative and presented in a table format.

Measuring Refugee Integration—The International Context, Daniel Sturm, USCCB/MRS Oct. 21, 2016 (Draft)

Indicators	The USCCB Migration and Refugee Services	The U.S. Resettlement System	United States – RISE STUDY ¹ & ORR Integration Working Group ²	Germany's National Action Plan on Immigrant Integration ³	Australia – Refugees, Housing and Social Inclusion Survey ⁴	New Zealand Resettlement Strategy ⁵	Canada's Approach to Refugee Integration ⁶
Definition	Integration is a two-way process in which newcomers and receiving communities work together, creating a world where migrants are treated with dignity, respect, welcome and belonging.	In the U.S., refugee integration is primarily measured as <i>economic integration</i> . Resettlement program goals are to "assist refugees in achieving economic self-sufficiency" (PRM) ⁷ or "become economically self-sufficient" (ORR). ⁸	The RISE study analyzed 10 different integration pathways, measuring integration within each pathway and assigning an individual integration score.	Germany considers integration as a long-term process with the aim of including every-one, enabling immigrants to participate fully in all aspects of social, political and economic life. They are expected to learn German and to abide by the constitution.	The Refugees, Housing and Social Inclusion Survey focuses on the housing, homelessness, neighborhood and broader social inclusion experiences of refugees in Perth and Melbourne.	Refugees are participating fully and integrated socially and economically as soon as possible so that they are living independently, undertaking the same responsibilities and exercising the same rights as other New Zealanders and have a strong sense of belonging to their own community and to NZ.	Canada's approach to integration encourages adjustment by both newcomers and the larger society. Newcomers' understanding of and respect for basic Canadian values, coupled with Canadians' understanding of the cultural diversity that newcomers bring to Canada.
Environment	Family Self-Sufficiency	Self-Sufficiency	Economic Sufficiency	Labor Market Outcomes	Labor Force Participation	Self-Sufficiency	Economic Outcomes
				Vocational Training	Job Satisfaction		
	Cultural Orientation	Cultural Orientation	Education & Training	Education	Education	Education	Education
				Income & Social Integration	Income		
	Housing	Housing	Housing	Home Ownership	Home Ownership	Housing	Housing
			Children's Education	Early Childhood Education			2nd Generation & Schools
	Ongoing Social Services	Ongoing Social Services	Health & Wellbeing	Health	Physical Wellbeing	Health and Wellbeing	Health and Mental Health
Networks	Ethnic Community Support		Social Bonding	Sport	Neighborhood Connections		Social Connections
	Parish Support		Social Bridging	Media			Age, Gender, Diversity
	Community Consultations	Community Consultations		Intercultural Openness			Refugees' Satisfaction
Facilitators			Language & Cult. Knowledge	Language	Language	Language	Languages
			Safety & Stability	Crime/Violence/Discrimin.	Discrimination		
			Civic Engagement	Civic & Polit. Participation	Citizenship	Participation	Citizenship
				Equal Opportunities			

What stands out is Canada's attempt to define integration as a two-way process, asking both newcomers and Canadian-born residents to step up, in the sense that refugees are expected to make an effort to understand and respect the new societal values, while the receiving society is expected to get to know and appreciate the socio-cultural contributions refugees bring with them to Canada.

On the opposite end of the spectrum stands the German model, which puts the onus almost entirely on refugees. While the integration goal is to enable newcomers to participate fully in all aspects of German social, political and economic life, there are some strings attached for refugees (but not for the host community). Refugees are expected to learn German and to abide by the constitution. The peculiarity of the German integration model, aside from its obsession with language acquisition, is the idea of utilizing sports as a facilitator of integration. In the United States, refugee integration is primarily measured in the sense of economic integration, with some newly-added requirements for refugee host community consultations. The Australian integration model shares many indicators in common with approaches in the U.S., Canada, Germany and New Zealand. However, it does emphasize the role neighborhood connections and home-ownership play in the integration process.

The most holistic of all four refugee integration models is the Canadian model. It not only emphasizes newcomers' access to employment and educational opportunities, healthcare, language development, social capital and a clear pathway to citizenship. It also stresses refugee's satisfaction with their own resettlement experience.

Reference documents

[Measuring Refugee Integration—The International Context, Daniel Sturm, 2016 \(Draft\)](#)

[How Countries Measure Refugee Integration, 2016, Daniel Sturm](#)

Other relevant resource:

[Indicators of integration, Home office and practice report, 2004](#)

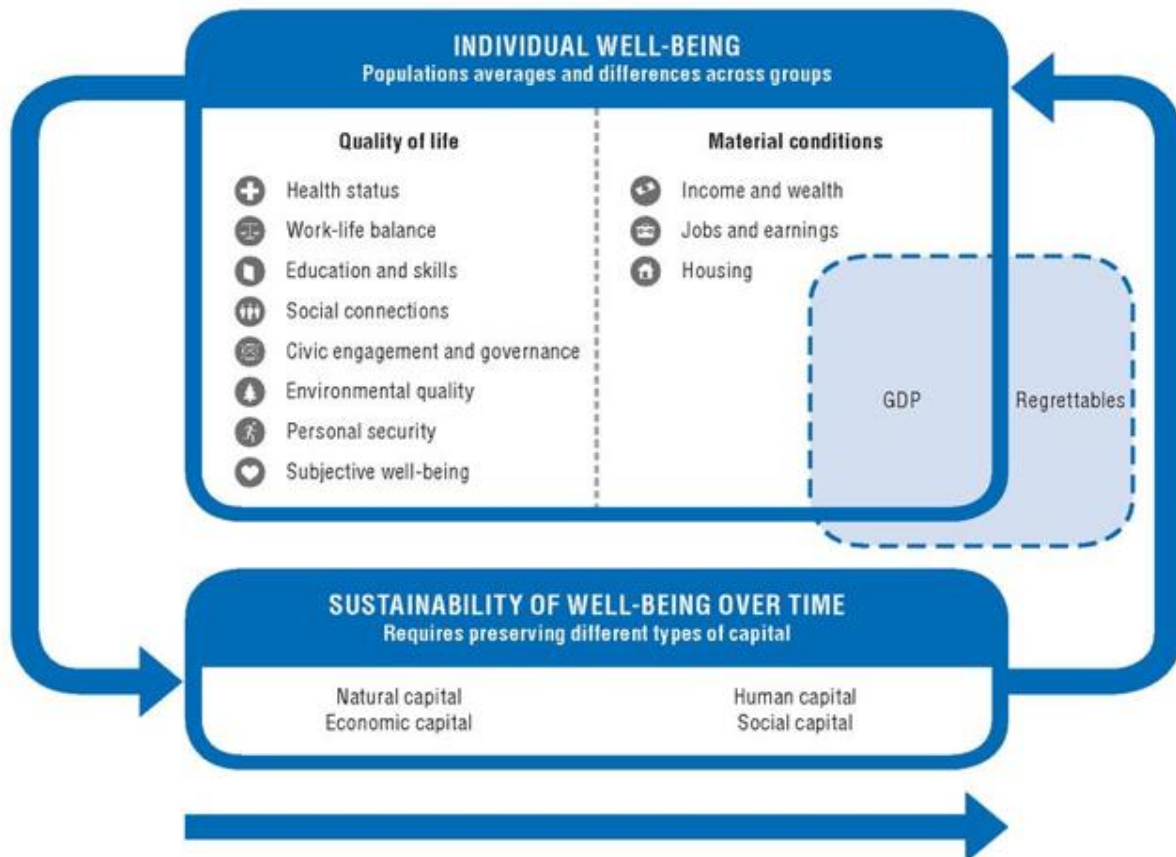
Wellbeing Frameworks

Date: 1940 - today

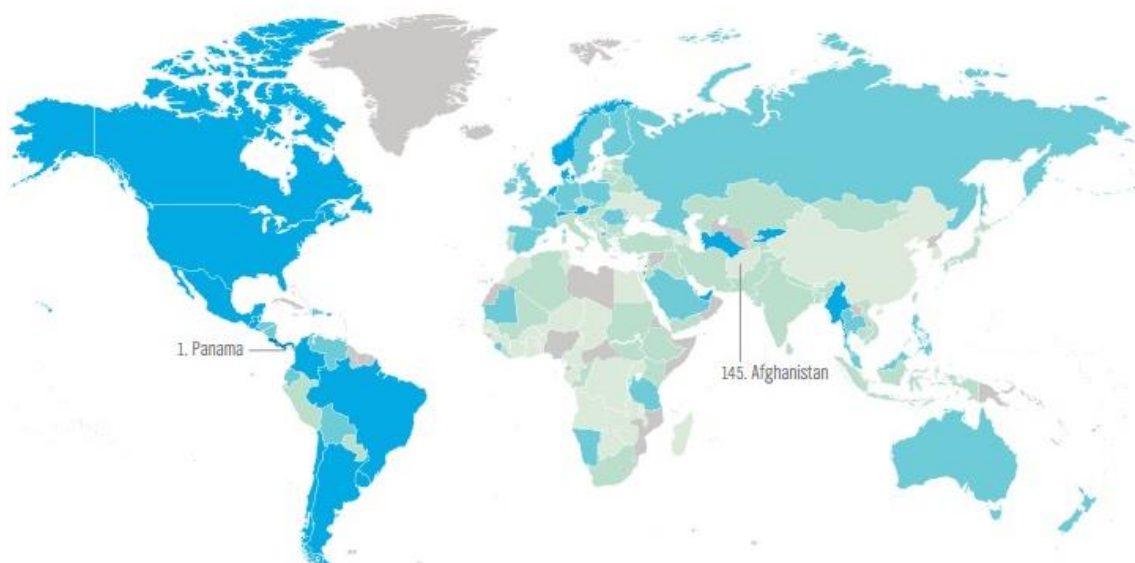
By: Countless organisations and governments

Reviewed initiative: Wellbeing conceptual framework, Hierarchy of needs, Better life initiative, The Humanitarian Emergency Settings Perceived Needs Scale, Global wellbeing index

Featured framework: OECD Wellbeing conceptual model, 2011



Gallup-Healthways Well-being Index, 2014



Percent thriving in 3+ elements:

■ >40.0% ■ 30.1% - 40.0% ■ 20.1% - 30.0% ■ 10.1% - 20.0% ■ ≤10.0% ■ Not surveyed in 2014

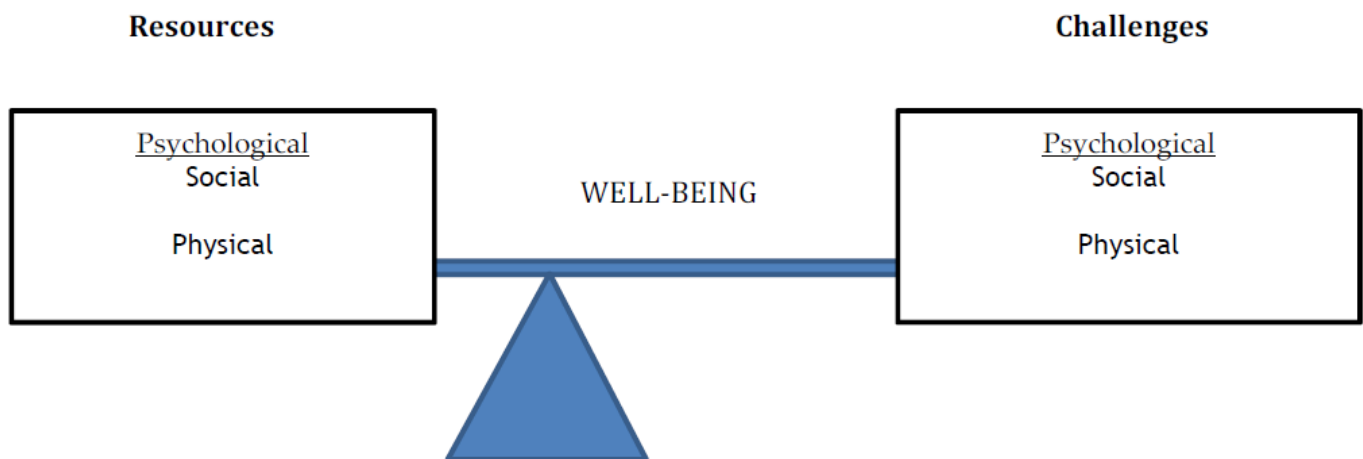
Source: Gallup-Healthways Global Well-Being Index, 2014. This map calls out Panama and Afghanistan as the highest and lowest well-being countries, respectively, based on the 2014 country well-being rankings of 145 countries.

Background. Although the term ‘well-being’ is often used, there is no agreed definition and it is often used as an all-encompassing concept to describe the quality of people’s lives (Dodge et al., 2012). There is considerable ambiguity around the definition of well-being. For example, terms such as happiness, quality of life, and life satisfaction have been used interchangeably to mean well-being (Allin, 2007). Each represents elements of wellbeing but individually do not reflect everything that well-being entails.

Many of those who have attempted to define well-being see it as a dynamic process. For example, the New Economic Foundation (NEF) described well-being as: *the dynamic process that gives people a sense of how their lives are going, through the interaction between their circumstances, activities and psychological resources or ‘mental capital’*. Other definitions emphasize attainment and the ability to achieve one’s potential in the future. For example, the World Health Organization’s working definition of well-being is *the realization of one’s physical, emotional, social, mental and spiritual potential*. Other writers have argued that the preoccupation with definitions is unhelpful, as there is a consensus within society of what constitutes well-being. For example, Ereaut and Whiting (2008) argue that, wellbeing is no less than what a group or groups of people collectively agree makes a ‘good life.’ However, while there may be general agreement about the elements that contribute to a sense of well-being, individuals will vary in the importance they place on each of the elements. For example, one individual may place more importance on being financially secure, whilst another person might prioritise the quality of his or her relationships (Waldron 2010).

Dodge and colleagues (2012) have proposed a different approach envisioning well-being as the balance between resources and challenges. They argued that stable well-being is when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge. They illustrate this approach as a seesaw. When individuals have more challenges than resources, the see-saw dips, along with their wellbeing, and vice versa.

THE WELL-BEING SEESAW (DODGE ET AL. 2012 P230)



One of the benefits of this model is that well-being is not viewed as static, but it is not clear how the model brings an agreed definition closer. The proposed model is very similar to models that examine stress or coping mechanisms. In addition, being able to cope with a challenge does not necessarily mean that the sense of satisfaction gained, imbues other areas of a person’s life. The personal nature of well-being makes measurement complex and consequently comparisons of well-being between groups of people or between countries controversial.

The measurement of well-being can be considered using two broad approaches: objective and subjective measures. There is general agreement that both approaches are necessary.

Objective measures make assumptions about what is required for any individual and then sets out indicators to estimate how far the requirements have been satisfied. Objective indicators usually measure three main areas:

- Economic – e.g. GDP and household income
- Quality of life – e.g. life expectancy, crime rates, educational attainment
- Environment- e.g. air pollution, water quality

Objective measures have been used for many years, but it has been increasingly recognized that objective measures on their own cannot measure a nation's progress and that subjective measures are also needed (Guillén-Royo and Velazco, 2005).

Subjective measures ask people to assess their own well-being. The New Economics Foundation (2011) argues that the only way to know if someone is happy or satisfied is to ask him or her. Subjective measures allow for differences in people's values and preferences and are seen as less paternalistic than objective measures. They are not subjective because they are self-reported, but because the question asks a person to rate, how they feel (Hicks 2011). Unlike objective measures, perceptions are fundamental to understanding subjective well-being. The drive to find subjective measures that are comparable has led countries worldwide to set up programmes to improve the measurement of subjective well-being (e.g. the European Commission project 'GDP and beyond'). There are three broad approaches (the evaluative, experience and eudemonic) to measure subjective well-being.

Evaluative approach requires an individual to assess their overall life satisfaction or satisfaction with a particular aspect of their lives such as satisfaction with their job or health. Likert type scales are often used or a Cantril ladder (e.g. at the bottom of the ladder worst possible health and at the top of the ladder best possible health). The evaluative approach is very common. Studies have found that having an explicit time frame in the question (e.g. health in the last week) improves the response, as otherwise some people find it difficult to answer (ONS 2010; Dolan et al. 2011).

Experience (affect) approach requires an individual to assess the emotional quality of their lives, collecting positive and negative emotions e.g. happiness, sadness, anxiety and energy levels. Questions typically ask about an individual's feelings in the last week or day. Other methods are occasionally used such as diaries to collect the information. Some commentators and academics (Tinkler and Hicks 2011) have argued that negative feelings such as pain, stress and misery should be core questions in any adult survey. The rationale is that negative emotions are those that public policy is most able to influence but there has been reluctance to follow the advice, partly because of uncertainty about the best ways to capture negative emotions and secondly fear of reducing response rates.

Eudemonic approach is sometimes described as the psychological approach- an individual's assessment of their internal world. The approach is intended to measure feelings such as self-efficacy, good relationships, having a sense of purpose, achievement, and autonomy. These measures are sometimes known as measures of 'flourishing' (Tinkler and Hicks 2011).

While there is some agreement about the type of approaches to measure well-being, there is more debate about what should be measured and how.

In 2016, Myles-Jay Linton, Paul Dieppe and Antonieta Medina-Lara published a meta review of self-report measures for assessing wellbeing in adults. A total of 99 measures of well-being were included, and 196 dimensions of well-being were identified within them. Dimensions clustered around 6 key thematic domains: mental well-being, social wellbeing, physical well-being, spiritual well-being, activities and functioning, and personal circumstances.

Features of wellbeing instruments: The majority of measures contained multiple items (95/99), the largest containing 317 items. Most of the instruments used verbal questions (97/99), however two tools were pictorial. The fewest response options were found within simple yes/no questionnaires, while other tools offered up to 11 response options along a bipolar scale. However, the majority of the tools used five-point bipolar Likert scales. Items asked individuals about the frequency; intensity; strength of agreement; or truth of specific and non-specific thoughts, feelings, experiences and statements.

Theoretical influence. The two theoretical influences most commonly reported in the literature were Diener's model of Subjective Well Being (1984) and the WHO definition of health: "a complete state of physical, mental and social well-being". Maslow's hierarchy of needs (1943); Sen's capability approach (1980s); Antonovsky's theory of salutogenesis (1979); Ryff's psychological well-being (1995); Fisher et al's spiritual well-being model (1998) and self-determination theory were also referred to. In many cases, however, authors did not specify the theories that had influenced the design of their instrument.

Development of instruments over time. Although the systematic searches were limited to 1993 and 2014, almost half of the instruments identified during this time had been first developed in the decades prior to this period (44/99). The oldest instruments identified were developed in 1961 while the newest tools were developed in 2015. On average, eight

tools had been designed every 5 years since 1960. The 1990s provided the biggest period for the development of new tools (n=27). Since 2010, 14 new tools and 8 revisions have already been published. Three trends were observed over time. First, many newer measures contain fewer items, or are accompanied by short-form versions. Second, since the 1980s, with measures such as the Spiritual Well-being Scale, spirituality has been incorporated into the assessment of well-being. Finally, over the past 15 years, there have been significant efforts to contrast the many measures of ill health and unhappiness with measures of positive functioning and adaptation to negative circumstances.

Subjective well-being. The subjective component of well-being was consistently divided into an 'affective' component concerned with emotions and a 'cognitive' component concerned with how people evaluate their own lives. The difference between subjective wellbeing (SWB) and terms used synonymously seemed to be unclear. SWB was noted as a synonym of happiness, mental well-being and mental health were acknowledged as being used interchangeably throughout the literature, and psychological well-being was used as an alternative phrasing for mental health. Authors were generally inconsistent on whether happiness should be understood as synonymous with SWB, specifically the affective portion of SWB, or a separate concept in itself. As the instruments were attempting to measure well-being through self-reported means, little explanation was given regarding how objective well-being should be conceptualized.

Dimensions measured. The dimensions clustered around six key themes: 'mental well-being', 'social well-being', 'physical well-being', 'spiritual well-being', 'personal circumstances' and 'activities and functioning'. A seventh set of dimensions were identified that attempted to measure 'well-being overall' in a global sense. The following table contains a brief description of each theme, and the number of dimensions linked to each. The majority of dimensions were linked to 'mental well-being', followed by 'social well-being' and 'activities and functioning'.

Table 2 Descriptions of the themes identified and the reoccurring dimensions within them

Themes	Theme description
Mental well-being	Dimensions linked to the theme of mental well-being assess the psychological, cognitive and emotional quality of a person's life. This includes the thoughts and feelings that individuals have about the state of their life, and a person's experience of happiness.
Social well-being	Social well-being concerns how well an individual is connected to others in their local and wider social community. This includes social interactions, the depth of key relationships and the availability of social support.
Activities and functioning	The focus of this theme is the behaviour and activities that characterise daily life. This involves the specific activities we fill our time with, and our ability to undertake these tasks.
Physical well-being	Physical well-being refers to the quality and performance of bodily functioning. This includes having the energy to live well, the capacity to sense the external environment and our experiences of pain and comfort.
Spiritual well-being	Spiritual well-being is concerned with meaning, a connection to something greater than oneself and in some cases faith in a higher power.
Personal circumstances	These dimensions are related to the conditions and external pressures that an individual faces. This involves numerous environmental and socioeconomic concerns such as financial security.

Reference documents

[2016 Review of 99 self-report measures for assessing well-being in adults](#)

[2015 Measuring Well-Being: A Literature Review](#)

Hierarchy of needs (1943, Maslow) is a theory that was proposed by psychologist Abraham Maslow in a 1943 paper titled “A Theory of Human Motivation”. The theory describes, in five stages, what he believed to be necessary for human subsistence and satisfaction.

Maslow’s hierarchy is intended to track growth and development in human beings, beginning with infants, who aim to have only their most basic needs met. Typically, people reach different stages of the hierarchy throughout life, and at different times they might experience a deficit in a certain stage. When this occurs, a person will often temporarily abandon pursuit of a higher stage in order to have the more fundamental needs met. However, not all adult humans reach the top of the hierarchy, and poverty, illness, and other factors can interfere with a person’s development in Maslow’s hierarchy.

People who have not had their needs met in one area might also have their needs from another stage sufficiently met. For example, a person in poor health who has little financial security may be part of a community, have an intimate partner, and maintain close relationships with family and friends. Thus, the person’s safety needs are not adequately met, but community and belonging needs are. One might also have every fundamental need met but suddenly experience a threat to safety and shelter. In order to maintain this essential of survival, that person may then leave off pursuit of esteem or belonging needs until the threat to safety passes.

Maslow’s hierarchy originally contained five stages:

- **Physiological needs:** These are the needs necessary to maintain life: oxygen, food, and water. These basic needs are required by all animals and are the primary focus of infants.
- **Safety needs:** When an individual’s physiological needs are met, the focus typically shifts to safety needs, which may include health, freedom from war, and financial security.
- **Community and belonging:** If safety and physiological needs are met, a person will focus on the need for a community and love. These needs are typically met by friends, family, and romantic partners.
- **Esteem:** Esteem is necessary for self-actualization, and a person may work to achieve esteem once needs for love and a sense of belonging are met. Self-confidence and acceptance from others are important components of this need.
- **Self-actualization:** Self-actualization is the ability to meet one’s true potential, and the necessary components of self-actualization vary from person to person. A scientist may be self-actualized when able to complete research in a chosen field. A father might be self-actualized when able to competently care for his children.

Abraham Maslow's hierarchy of needs, 1943



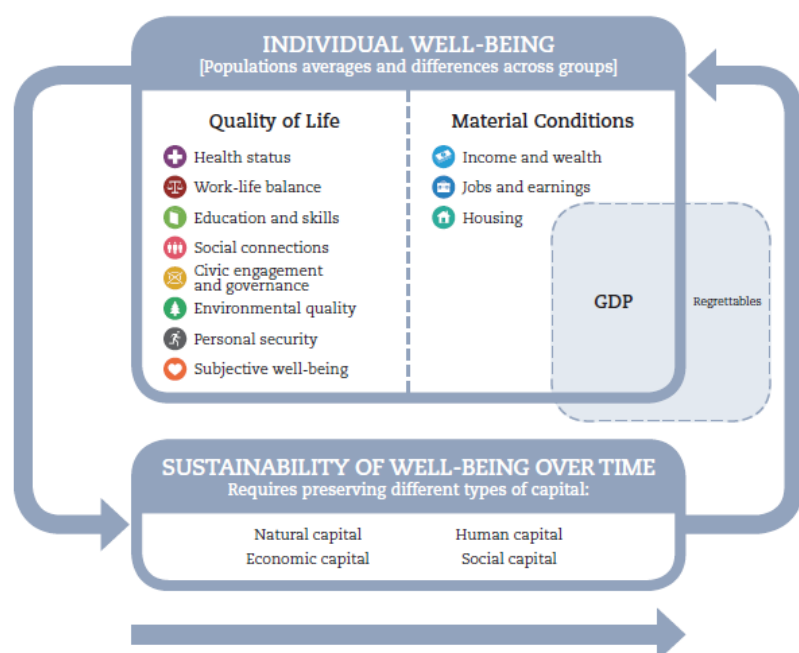
Between esteem and self-actualization, Maslow later added cognitive and aesthetic needs, which refer to what he considered the needs of academics and artists, respectively. Viktor Frankl, a prominent 20th century psychologist and the founder of logotherapy, later added self-transcendence as a final stage in Maslow’s hierarchy, bringing the total number of stages to eight. This level concerns an individual’s ability to experience spirituality and relate to the larger universe.

Maslow argued that the failure to have needs met at various stages of the hierarchy could lead to illness, particularly psychiatric illness or mental health issues. Individuals whose physiological needs are not met may die or become extremely ill. When safety needs are not met, posttraumatic stress may occur. Individuals who do not feel love or belonging may experience depression or anxiety. Lack of esteem or the inability to self-actualize may also contribute to depression and anxiety.

Reference documents

[Maslow's Hierarchy of Needs](#)

The Better Life Initiative (2011, OECD) was launched in May 2011 on the occasion of the OECD's 50th Anniversary, focuses on developing statistics that can capture aspects of life that matter to people and that, taken together, help to shape the quality of their lives. Two important elements of this initiative are the [How's Life?](#) report and the [Better Life Index](#). The OECD Better Life Initiative also encompasses a range of research and methodological projects on measuring well-being. This work can be grouped under the three conceptual pillars of Material conditions, Quality of life, and Sustainability. Though those initiative, OECD intend to measure progress and improvements in the well-being of people and households. Assessing such progress requires looking not only at the functioning of the economic system but also at the diverse experiences and living conditions of people. The OECD Framework for Measuring Well-Being and Progress (see illustration below) is based on the recommendations made in 2009 by the Commission on the Measurement of Economic Performance and Social Progress and also reflects earlier OECD work and various national initiatives in the field.



This Framework is built around three distinct domains: material conditions, quality of life and sustainability. Each of these domains includes a number of relevant dimensions. While the well-being of each person can be described in terms of a number of separate outcomes, the assessment of conditions for society as a whole requires aggregating these outcomes for broader communities, and considering both population averages and inequalities, based on the preferences and value judgments of each community.

- Measuring people's material conditions (i.e. their command over commodities) requires looking not only at their income but also at their assets and consumption, and at how these economic resources are distributed among different people and population groups. It also requires focusing on the economic resources of

households rather than on measures pertaining to the economic system as a whole (e.g. GDP per capita).

- Economic resources, while important, are not all that matters for people's well-being. Health status, human contact, education, jobs, environmental quality, civic engagement, governance, security and free time are all fundamental to our quality of life, as are people's subjective experiences of life – including, for example, their feelings and emotions, and their satisfaction with life as a whole. Measuring quality of life requires looking at all of these elements at the same time: economic and non-economic, subjective and objective, as well as averages and disparities across population groups.
- Assessing the sustainability of well-being over time is challenging: many of the elements that will affect future well-being (ranging from changes in tastes, through to changes in technology) cannot be known and measured in the present. We can, however, assess the stocks of resources that help to shape well-being outcomes, and monitor whether these resources are being sustained for use by future generations. The OECD measurement approach therefore concentrates on four different types of resources (or "capitals") that can be measured today, and that matter for future well-being, i.e. economic, natural, human and social capital. While the stocks of these resources will not be the only determinants of well-being over time, they offer a practical means to examine the link between the present and the future: through the accumulation or depletion of resource stocks, the choices made by one generation can influence the opportunities available to the next.

Reference documents

[2015 OECD Measuring Wellbeing and progress](#)

[2015 OECD How's life?](#)

[OECD Better Life index](#)

I am going to ask you about the **serious problems** that you may **currently** be experiencing. We are interested in finding out what you think – a serious problem is a problem that **you** consider serious. There are no right or wrong answers. I am going to ask you about your own serious problems first.

1. Drinking water Do you have a serious problem because you do not have enough water that is safe for drinking or cooking?	
2. Food Do you have a serious problem with food? For example, because you do not have enough food, or good enough food, or because you are not able to cook food.	
3. Place to live in Do you have a serious problem because you do not have a suitable place to live in?	
4. Toilets Do you have a serious problem because you do not have easy and safe access to a clean toilet?	
5. Keeping clean For men: Do you have a serious problem because in your situation it is difficult to keep clean? For example, because you do not have enough soap, water or a suitable place to wash. For women: Do you have a serious problem because in your situation it is difficult to keep clean? For example, because you do not have enough soap, sanitary materials, water or a suitable place to wash.	
6. Clothes, shoes, bedding or blankets Do you have a serious problem because you do not have enough, or good enough, clothes, shoes, bedding or blankets?	
7. Income or livelihood Do you have a serious problem because you do not have enough income, money or resources to live?	
8. Physical health Do you have a serious problem with your physical health? For example, because you have a physical illness, injury or disability.	
9. Health care For men: Do you have a serious problem because you are not able to get adequate health care for yourself? For example, treatment or medicines. For women: Do you have a serious problem because you are not able to get adequate health care for yourself? For example, treatment or medicines, or health care during pregnancy or childbirth.	
10. Distress Do you have a serious problem because you feel very distressed? For example, very upset, sad, worried, scared, or angry.	
11. Safety Do you have a serious problem because you or your family are not safe or protected where you live now? For example, because of conflict, violence or crime in your community, city or village.	
12. Education for your children Do you have a serious problem because your children are not in school, or are not getting a good enough education?	
13. Care for family members Do you have a serious problem because in your situation it is difficult to care for family members who live with you? For example, young children in your family, or family members who are elderly, physically or mentally ill, or disabled.	
14. Support from others Do you have a serious problem because you are not getting enough support from people in your community? For example, emotional support or practical help.	
15. Separation from family members Do you have a serious problem because you are separated from family members?	
16. Being displaced from home Do you have a serious problem because you have been displaced from your home country, city or village?	
17. Information For displaced people: Do you have a serious problem because you do not have enough information? For example, because you do not have enough information about the aid that is available; or because you do not have enough information about what is happening in your home country or home town. For non-displaced people: Do you have a serious problem because you do not have enough information? For example, because you do not have enough information about the aid that is available.	
18. The way aid is provided Do you have a serious problem because of inadequate aid? For example, because you do not have fair access to the aid that is available, or because aid agencies are working on their own without involvement from people in your community.	
19. Respect Do you have a serious problem because you do not feel respected or you feel humiliated? For example, because of the situation you are living in, or because of the way people treat you.	
20. Moving between places Do you have a serious problem because you are not able to move between places? For example, going to another village or town.	
21. Too much free time Do you have a serious problem because you have too much free time in the day?	

The last few questions refer to people in your community*, so please think about members of your community when answering these questions.

22. Law and justice in your community Is there a serious problem in your community because of an inadequate system for law and justice, or because people do not know enough about their legal rights?	
23. Safety or protection from violence for women in your community Is there a serious problem for women in your community because of physical or sexual violence towards them, either in the community or in their homes?	
24. Alcohol or drug use in your community Is there a serious problem in your community because people drink a lot of alcohol, or use harmful drugs?	
25. Mental illness in your community Is there a serious problem in your community because people have a mental illness?	
26. Care for people in your community who are on their own Is there a serious problem in your community because there is not enough care for people who are on their own? For example, care for unaccompanied children, widows or elderly people, or unaccompanied people who have a physical or mental illness, or disability.	

Other serious problems:

Do you have any other serious problems that I have not yet asked you about? Write down the person's answers.
27.
28.
29.

Priority ratings for serious problems:

Read out the titles of all questions you have rated as '1', as well as any other serious problems listed above. Write down the person's answers (write down the number and title of the questions).
1. Out of these problems, which one is the most serious problem?
2. Which one is the second most serious problem?
3. Which one is the third most serious problem?

The Humanitarian Emergency Settings Perceived Needs Scale (HESPER) (2011, WHO, Kings college London) was a collaborative project between the Department of Mental Health and Substance Abuse at the World Health Organization (WHO) Geneva, and the Institute of Psychiatry at King's College London (KCL).

In the humanitarian field, most needs assessments tend to use either population-based “objective” indicators (for example malnutrition or mortality indicators), or qualitative data based on convenience samples (for example through focus groups or key informant interviews). Whilst the latter method is not able to paint a full population-picture, the former is not able to gather information on people’s subjective perception of needs. The HESPER Scale was developed to fill this gap. It aims to provide a method for assessing perceived needs in representative samples of populations affected by large-scale humanitarian emergencies in a valid and reliable manner. The Humanitarian Emergency Settings Perceived Needs Scale (HESPER) aims to provide a quick, scientifically robust way of assessing the perceived serious needs of people affected by large-scale humanitarian emergencies, such as war, conflict or major natural disaster.

Perceived needs are needs which are felt or expressed by people themselves and are problem areas with which they would like help.

The HESPER Scale was modelled after a mental health instrument, the interviewer-administered, semi-structured Camberwell Assessment of Need Short Appraisal Schedule (CANSAS). The CANSAS measures the perceived needs of people with mental disorders across 22 domains, in terms of met need (rated as ‘1’: a need exists but there are no or moderate problems due to help given), unmet need (rated as ‘2’: a need exists and there are serious problems, whether or not help is given), no need (rated as ‘0’), or unknown/not applicable (rated as ‘9’). Three summary scores can then be calculated either in terms of total number of needs (‘1’ or ‘2’ ratings), total number of met needs (‘1’ ratings), or total number of unmet needs (‘2’ ratings), with all domains carrying equal weights.

Perceived needs in the HESPER scale are assessed across 26 need items, which each include a short item heading, as well as an accompanying question. Ratings are then made for each need item according to unmet need (or serious problem, as perceived by the respondent), no need (or no serious problem, as

perceived by the respondent), or no answer (i.e. not known, not applicable, or answer declined). Respondents are also

asked to name any other unmet needs not already listed. Among items that have been rated as unmet need, respondents are asked to rank their three most serious problems (hereafter referred to as priority ratings).

The first draft of the HESPER Scale was developed through a process of item generation and item reduction. An item pool of 38 items was generated by extracting items from grey and peer-reviewed literature which directly documented emergency-affected people's views of perceived needs, such as previous humanitarian needs assessments, existing assessment reports of non-governmental organisations (NGOs), and published journal articles on perceived needs. Need items were then selected and reduced into the draft scale based on a survey with a wide range of purposively sampled general and psychosocial humanitarian experts across the world. The draft scale was reduced from 38 to 32 items based on the expert survey, primarily by rephrasing and regrouping items. The original list of 38 Items was generously provided by Maya Semrau, author of the HESPER Scale, and is reproduced below.

List of 38 domains as included in the survey.

- 1) Alcohol (problems because of alcohol use by oneself or in one's family)
- 2) Bedding / blankets (problems with access to bedding / blankets)
- 3) Burials / funerals / disposal of bodies (problems with bodies of the deceased not being dealt with appropriately)
- 4) Care of abandoned persons in the community (problems with the care for unaccompanied children, orphans, abandoned widows, abandoned people with physical and mental disabilities, and unaccompanied elderly in the community)
- 5) Care of family members (problems in the ability to look after elderly, disabled or very sick family members)
- 6) Child-care (problems with one's ability to look after one's children)
- 7) Child-friendly spaces (problems in having sufficient safe and clean areas for children to play in)
- 8) Child protection (problems with one's children being unsafe / unprotected in the community)
- 9) Clothing (problems with access to clothing and shoes)
- 10) Cooking items / facilities (problems in the ability to cook)
- 11) Criminal activity (problems with criminal activity in the community)
- 12) Daytime activities for adults (problems due to idleness, or a lack of daytime activities for adults in the community)
- 13) Daytime activities for youth (problems due to idleness, or a lack of daytime activities for youth / adolescents in the community)
- 14) Dignity / respect (problems in feeling disrespected / humiliated)
- 15) Displacement / uprooting (problems with having to live away from home)
- 16) Domestic violence (problems because of violence, whether physical, verbal, or sexual violence, by family members)
- 17) Drugs (problems because of drug use by oneself or in one's family)
- 18) Education for children (problems with educational / learning opportunities for one's children)
- 19) Fair distribution of aid (problems in having fair access to humanitarian goods and services)
- 20) Family tracing (problems with the ability to find missing relatives)
- 21) Food / nutrition (problems in having nutritious and appropriate food)
- 22) Hygiene (problems in being able to wash and bath)
- 23) Information (problems in having information about the emergency situation and emergency aid, and having information on how to access aid)
- 24) Legal rights (problems due to an inability to claim one's legal rights)
- 25) Mental illness (psychiatric problems / mental disorder, as locally defined / perceived)
- 26) Money / livelihood / employment (problems in making a living, problems in the ability to purchase essential goods and services)
- 27) Participation / decision-making (problems in having a say in the aid response)
- 28) Physical health (problems because of physical illness, injury or physical disability)
- 29) Political freedom (problems due to the inability to express one's opinion about political issues)
- 30) Psychological distress (problems with feeling upset, sad, worried, scared, angry, lonely, isolated, or otherwise distressed)
- 31) Religious / cultural / spiritual practices (problems in being able to carry out cultural / spiritual / religious practices)
- 32) Security / safety (problems in being safe and protected in the community / camp)
- 33) Sanitation / toilets (problems with access to clean, safe and accessible toilets and, for women, sanitary materials)
- 34) Shelter / housing (problems with shelter)
- 35) Social support (problems in getting help / support from one's family and community members)
- 36) Transport (problems in one's ability to move around between places)
- 37) Violence against women in the community (problems because of physical or sexual violence against women in the community)
- 38) Water (problems in access to water for drinking, cooking and washing)

Reference Document

[The Humanitarian Emergency Settings Perceived Needs Scale \(HESPER\): Manual with Scale](#)

Perceived Needs and Symptoms of Common Mental Disorder – Development and Use of the Humanitarian Emergency Settings Perceived Needs (HESPER) Scale- Thesis, Maya Semrau, 2013

The Global Well-Being Index (2012, Gallup-Healthways) is a global barometer of individuals' perceptions of their own well-being — those aspects that define how we think about and experience our daily lives. Well-being has been shown to correlate with metrics such as productivity and healthcare costs. The 10 questions that comprise the Global Well-Being Index and were fielded as part of the 2013 Gallup World Poll allow for comparisons of element-level well-being at the individual, social network, organizational (e.g., employer, health plan, patient population), city, state, country, and global levels.

The Global Well-Being Index includes the five elements of well-being:

- Purpose: Liking what you do each day and being motivated to achieve your goals
- Social: Having supportive relationships and love in your life
- Financial: Managing your economic life to reduce stress and increase security
- Community: Liking where you live, feeling safe, and having pride in your community
- Physical: Having good health and enough energy to get things done daily

Gallup-Healthways' definition of Well-Being

Well-being is comprised of five elements – and all five are **interrelated** and **interdependent**.



- **Purpose:** Liking what you do each day and being motivated to achieve goals
- **Social:** Having supportive relationships and love in your life
- **Financial:** Managing your economic life to reduce stress and increase security
- **Community:** Liking where you live, feeling safe, and having pride in your community
- **Physical:** Having good health and enough energy to get things done daily

Well-being results from the Global Well-Being Index are categorized as thriving, struggling, or suffering for each element, based on participants' responses. Thriving is defined as well-being that is strong and consistent in a particular element. Struggling is defined as well-being that is moderate or inconsistent in a particular element. Suffering is defined as well-being that is low and inconsistent in a particular element.

Reference document:

<http://www.well-beingindex.com/>

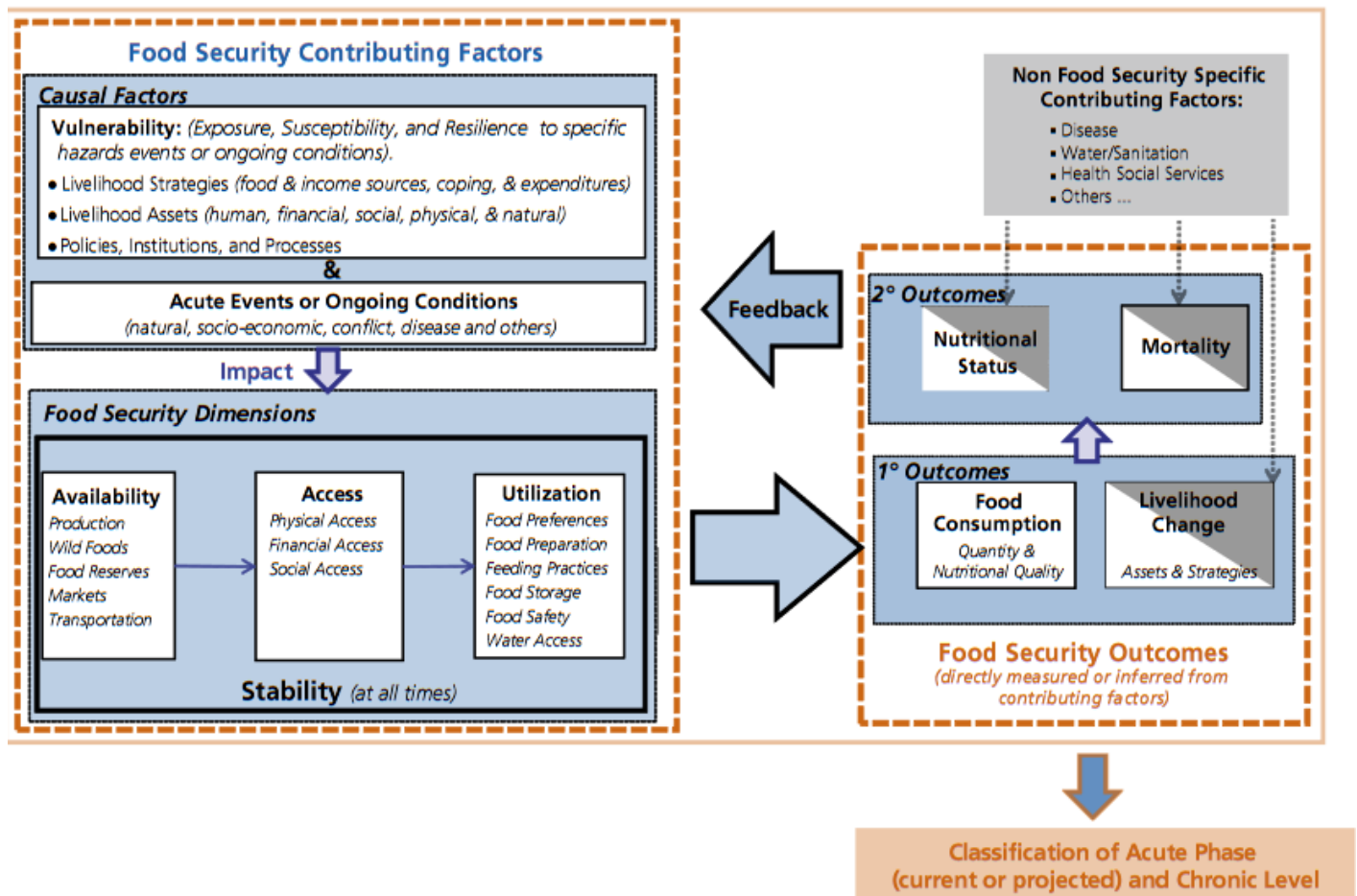
The Integrated Phase classification

Date: 2006 - today

By: AAH, Care, CILSS; FAO, Fews NET, FSC, IGAD; EU, Oxfam, StC, UNICEF, WFP and multiple country partners

Inspiration: Risk = f (Hazard, Vulnerability), Sustainable Livelihoods Approach, Nutrition Conceptual Model, and the four “dimensions” of food security (availability, access, utilization and stability).

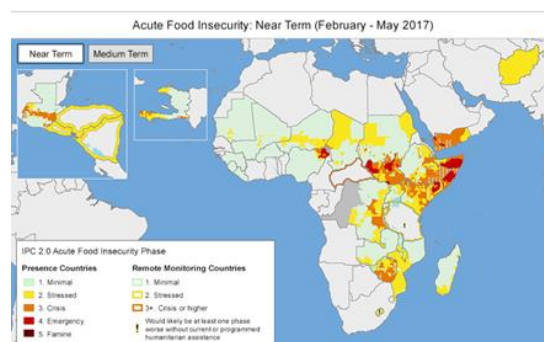
IPC analysis framework, 2012



Guidance & tools

[2012 IPC technical manual 2.0](#)
[2016 IPC Tools and Procedures for Classification of Chronic Food Insecurity](#)
[2016 PC Tools and Procedures for Classification of Acute Malnutrition](#)
[2008 Technical Manual version 1.1](#)

Country use: 42



Languages: English, French

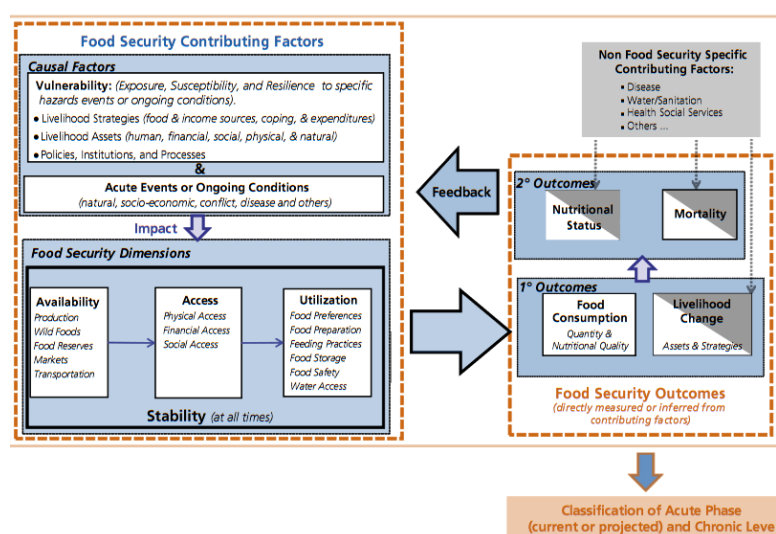
Training packages: 3 (Certification program level 1, 2 and 3), E-learning

Background. The purpose of the IPC is to consolidate complex analysis of food security situations for evidence-based decision support. The IPC contributes to answering questions on where to allocate resources, to whom and to how many people, when, and on what should be done. Together, these questions help inform ‘Situation Analysis’, which is the focus of the IPC. Additional information is needed to conduct Response Analysis, a subsequent stage for effective response. Food security analysis is inherently challenging with respect to data sources, methodologies, varying types of hazards, different livelihood systems and multiple stakeholder institutions. Given these challenges and complexity, the IPC provides a common way to classify the nature and severity of food insecurity. The purpose of Classifying Severity and Causes is to consolidate diverse data and methods into an overall food security statement that is comparable over space and time, answering questions of:

- How severe is the situation? To inform the urgency and strategic objectives of interventions.
- Where are different geographic areas with food-insecure populations? To inform targeting so that interventions are in the right place.
- Who are the food insecure people? To inform targeting so that interventions are for the right social groups.
- How many are food insecure? To inform decisions on the scale of the response.
- Why are people food insecure? To inform Response Analysis and the strategic design of interventions.
- When will people be food insecure? To inform contingency planning, mitigation, and prevention strategies.

At its core, the IPC is a set of tools and procedures to classify the nature and severity of food insecurity for decision support. The IPC classifies areas with Acute Food Insecurity into five Phases: Minimal, Stressed, Crisis, Emergency and Famine. Each of these Phases has different implications for response objectives. The IPC classifies the severity of the situation for two time periods: the current situation and for a future projection (the time period of which is fully flexible according to the situation at hand and the needs of decision-makers). The future projection provides an early warning statement for proactive decision-making. Further, the IPC “package” has four mutually supporting functions: (1) Building Technical Consensus; (2) Classifying Severity and Causes; (3) Communicating for Action; and (4) Quality Assurance. Each of these functions has a set of protocols (tools and procedures).

IPC framework, 2012



With an emphasis on household food security, the IPC Analytical Framework draws together key aspects of four commonly accepted conceptual frameworks for food security, nutrition, and livelihoods analysis:

(1) Risk = f (Hazard, Vulnerability) (White, 1975; Turner et al. 2003).

(2) Sustainable Livelihoods Framework (Sen, 1981; Frankenburger, 1992; Save the Children Fund (SCF)–United Kingdom, 2000; DFID, 2001)

(3) The four dimensions of food security: Availability, Access, Utilization, and Stability (FAO 2006)

(4) The United Nations Children’s Fund Nutrition Conceptual Framework (UNICEF, 1996)

The overall IPC classification of Acute or Chronic food insecurity is based on the entire body of food security evidence, which is divided into food security outcomes and food security contributing factors.

Food Security Outcomes. The IPC enables comparability in the analysis by making the classification with direct reference to actual or inferred outcomes, including primary outcomes (food consumption and livelihood change) and secondary outcomes (nutritional status and mortality rates). Food security outcomes are generally comparable irrespective of livelihood, ethnic, socio-economic and other contexts. IPC analysis is carried out with reference to international standards of these outcomes. The IPC Acute and Chronic Reference Tables specify thresholds for key outcome indicators associated with methods used to measure these outcomes, and associate them with various Phases (for acute food insecurity) and Levels (for chronic food insecurity). It is important to note that of these four outcomes, only food consumption (including both quantity and nutritious quality) is exclusively unique to food security. The others

(livelihood change, nutrition rates, and mortality rates) can all have non-food-security-specific contributing factors (for example, health, disease, water, sanitation, access to social services). This approach is consistent with the UNICEF Nutrition Conceptual Framework (see Annex 6). The IPC classification is a classification of the food security situation, not the overall nutrition situation (which, as stated previously, may have completely different drivers than those of food security, including health, disease and sanitation). Thus, when using evidence of nutrition, mortality and livelihood change, it is essential for analysts to examine carefully whether or not these are the result of food security drivers or non-food security drivers. To better understand the causes and drivers of an overall nutrition situation requires equally thorough analysis of the health and sanitation situations. While this can be a challenging task, IPC analysis that relies on nutrition and mortality evidence needs at the very least to demonstrate food-security-specific drivers of those outcomes.

The Food Security Contributing Factors are divided into two components: Causal Factors and Impact on Food Security Dimensions.

1. **Causal Factors.** Consistent with the Risk= f (Hazard, Vulnerability) framework, causal factors include vulnerability elements and hazard elements. In this framework, Vulnerability is conceptually understood in relation to: exposure (Does the hazard event affect a population, and to what degree?), susceptibility (In what ways does the hazard event affect the livelihood of a population, and to what degree?), and resilience (What is the population's coping capacity?). Consistent with the Sustainable Livelihoods Approach, vulnerability can be analytically understood in terms of:
 - **Livelihood Strategies** – a behavioural analysis of the pattern and amounts of food sources, income sources and expenditure patterns of households;
 - **Livelihood Assets** – a structural analysis of the five capitals required for sustaining a household livelihood: human, financial, social, physical and natural capital;
 - **Policies, Institutions and Processes** – a social, political and economic analysis of how well these aspects support (or do not support) household livelihoods.

The other element of causal factors are acute events or ongoing conditions which can include natural (drought, flood, tsunami, etc.), socio-economic (high or extreme fluctuations in prices), conflict (war, civil unrest, etc.), disease (HIV/AIDS, cholera, malaria, etc.) and other events/conditions that impact the food security dimensions. While the completion of vulnerability/livelihood baselines is not part of the IPC analysis per se, in most situations having a recent livelihood baseline would ensure ready access to important contextual information.

2. **Impact of Food Security Dimensions.** The interactions of Causal Factors (including acute/chronic events and vulnerability) have direct impacts on the four food security dimensions: availability, access, utilization and stability. These dimensions interact in a sequential manner, meaning food must be available, then households must have access to it, then they must utilize it appropriately, and then the whole system must be stable (Barrett, 2010).
 - **Availability** – This dimension addresses whether or not food is actually or potentially physically present, including aspects of production, wild foods, food reserves, markets and transportation.
 - **Access** – If food is actually or potentially physically present, the next question is whether or not households have sufficient access (i.e. entitlement) to that food, including physical (distance, infrastructure, etc.), financial (purchasing power) and social (ethnicity, religion, political affiliation, etc.) aspects.
 - **Utilization** – If food is available and households have adequate access to it, the next question is whether or not households are sufficiently utilizing the food in terms of food preferences, preparation, feeding practices, storage and access to improved water sources. While there are varying understandings of the term “utilization”, the IPC Analytical Framework uses this term to explicitly refer to the physical utilization of food at the household level – i.e. not including the biological utilization of food at the individual level. Biological utilization of food at the individual level, for the IPC at least, is an important factor in understanding nutritional outcomes overall.
 - **Stability** – If the dimensions of availability, access and utilization are sufficiently met such that households have adequate quality and quantity of food, the next question is whether or not the whole system is stable, thus ensuring that the households are food-secure at all times. Stability can refer to short-term instability (which can lead to acute food insecurity) or medium/long-term instability (which can lead to chronic food insecurity). Climatic, economic, social and political factors can all be a source of instability. The interaction among Contributing Factors (including causal factors and impacts on food security dimensions) leads to a risk of deterioration or a positive change in the food security outcomes. The framework explicitly includes a feedback mechanism whereby changes in food security outcomes often lead to subsequent changes in the food security contributing factors such as a worsening or improvement of vulnerability and/ or acute events or chronic conditions, thus leading to changes to the impacts on food security dimensions.

While the Analytical Framework is intentionally comprehensive, it does not mean that evidence is required for each of the elements of the framework to make a classification. On the contrary, IPC classification can be performed with whatever evidence is available. In other words, it makes the best use of available information.

The IPC is a system for “meta-analysis”, or big-picture analysis. It draws together data and information obtained through various methods from a wide range of sources. The IPC does not replace the need for specific methods that collect and analyse various dimensions of food security in any particular way. Rather, the IPC approach incorporates and is strengthened by specific analytical methods. Since the IPC approach is not based on a mathematical model, it requires critical thinking on the part of the food security analysts. While the IPC is designed to structure the analysis process as systematically as possible, it does require the analysts to have strong understanding of the concepts and technical details of conducting food security, nutrition and livelihoods analysis. Further, because the IPC relies on a consensus-based approach, it requires the analysts to be conscious of, and minimize, any potential biases in their analysis.

IPC have two classification systems:

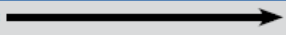
IPC analysis Area-based classification.

A population within a given geographic area is classified as being in Phase 1, 2, 3, 4 or 5. The Area-based classification is what is mapped on the IPC communication template. Ideally, and whenever possible, however, IPC practitioners are encouraged to provide more detailed analysis by also classifying Household Groups. Thus, an area with a single classification can further be broken into Household Group classifications. The IPC Acute Food Insecurity Reference Table for Area Classification (Diagram 4) provides Reference Outcomes and Priority Response Objectives for five Phases of Acute Food Insecurity for the population in a given area: Phase 1–Minimal, Phase 2–Stressed, Phase 3–Crisis, Phase 4–Emergency, and Phase 5–Famine. Unless otherwise stated, the analysis is based on the whole population in the area. Within a given area, there can be multiple groups of households experiencing different Phases of food insecurity. The Reference Outcomes include Food Consumption, Livelihood Change, Nutritional Status, and Mortality.

Diagram 4: IPC Acute Food Insecurity Reference Table for Area Classification

Purpose: To guide short term strategic objectives linked to medium and long-term objectives that address underlying causes and chronic food insecurity.

Usage: Classification is based on convergence of evidence of current or projected most likely conditions, including effects of humanitarian assistance.

		Phase 1 Minimal	Phase 2 Stressed	Phase 3 Crisis	Phase 4 Emergency	Phase 5 Famine
Phase Name and Description		More than four in five households (HHs) are able to meet essential food and non-food needs without engaging in atypical, unsustainable strategies to access food and income, including any reliance on humanitarian assistance	Even with any humanitarian assistance at least one in five HHs in the area have the following or worse: Minimally adequate food consumption but are unable to afford some essential non food expenditures without engaging in irreversible coping strategies.	Even with any humanitarian assistance at least one in five HHs in the area have the following or worse: Food consumption gaps with high or above usual acute malnutrition OR Are marginally able to meet minimum food needs only with accelerated depletion of livelihood assets that will lead to food consumption gaps.	Even with any humanitarian assistance at least one in five HHs in the area have the following or worse: Large food consumption gaps resulting in very high acute malnutrition and excess mortality OR Extreme loss of livelihood assets that will lead to food consumption gaps in the short term.	Even with any humanitarian assistance at least one in five HHs in the area have an extreme lack of food and other basic needs where starvation, death, and destitution are evident. (Evidence for all three criteria of food consumption, wasting, and CDR is required to classify Famine.)
Priority Response Objectives		Action required to Build Resilience and for Disaster Risk Reduction	Action required for Disaster Risk Reduction and to Protect Livelihoods	Urgent Action Required to: 		
				Protect livelihoods, reduce food consumption gaps, and reduce acute malnutrition	Save lives and livelihoods	Prevent widespread mortality and total collapse of livelihoods
Area Outcomes (directly measured or inferred)		Food Consumption and Livelihood Change	More than 80% of households in the area are able to meet basic food needs without engaging in atypical strategies to access food and income, and livelihoods are sustainable	Based on the IPC Household Group Reference Table, at least 20% of the households in the area are in Phase 2 or worse	Based on the IPC Household Group Reference Table, at least 20% of the households in the area are in Phase 3 or worse	Based on the IPC Household Group Reference Table, at least 20% of the households in the area are in Phase 4 or worse
		Nutritional Status*	Acute Malnutrition: <5% BMI <18.5 Prevalence: <10%	Acute Malnutrition: 5–10% BMI <18.5 Prevalence: 10–20%	Acute Malnutrition: 10–15% OR > usual and increasing BMI <18.5 Prevalence: 20–40%, 1.5 x greater than reference	Acute Malnutrition: 15–30%; OR > usual and increasing BMI <18.5 Prevalence: >40%
		Mortality*	CDR: <0.5/10,000/day USDR: <1/10,000/day	CDR: <0.5/10,000/day USDR: <1/10,000/day	CDR: 0.5–1/10,000/day USDR: 1–2/10,000/day	CDR: 1–2/10,000/day OR >2x reference USDR: 2–4/10,000/day
						CDR: >2/10,000/day USDR: >4/10,000/day

*For both nutrition and mortality area outcomes, household food consumption deficits must be an explanatory factor in order for that evidence to be used in support of a Phase classification. For example, elevated malnutrition due to disease outbreak or lack of health access—if it is determined to not be related to food consumption deficits—should not be used as evidence for an IPC classification. Similarly, excess mortality rates due to, murder or conflict—if they are not related to food consumption deficits—should not be used as evidence for a Phase classification. For Acute Malnutrition, the IPC thresholds are based on % of children under 5 years that are below 2 standard deviations of weight for height or presence of oedema. BMI is an acronym for Body Mass Index. CDR is Crude Death Rate. USDR is Under 5 Death Rate.

Diagram 5: Acute Food Insecurity Reference Table for Household Group Classification

Purpose: To guide short-term strategic objectives tailored to the needs of household groups with relatively similar Phase classifications, which should compliment medium- and long-term objectives that address underlying causes and chronic food insecurity.

Usage: Classification is based on convergence of evidence of current or projected most likely conditions, including effects of humanitarian assistance.

		Phase 1 None	Phase 2 Stressed	Phase 3 Crisis	Phase 4 Emergency	Phase 5 Catastrophe	
Phase Name and Description		HH group is able to meet essential food and non-food needs without engaging in atypical, unsustainable strategies to access food and income, including any reliance on humanitarian assistance.	Even with any humanitarian assistance: - HH group has minimally adequate food consumption but is unable to afford some essential non-food expenditures without engaging in irreversible coping strategies	Even with any humanitarian assistance: - HH group has food consumption gaps with high or above usual acute malnutrition; OR - HH group is marginally able to meet minimum food needs only with accelerated depletion of livelihood assets that will lead to food consumption gaps.	Even with any humanitarian assistance: - HH group has large food consumption gaps resulting in very high acute malnutrition and excess mortality; OR - HH group has extreme loss of livelihood assets that will lead to large food consumption gaps in the short term.	Even with any humanitarian assistance: - HH group has an extreme lack of food and/or other basic needs even with full employment of coping strategies. Starvation, death, and destitution are evident.	
Priority Response Objectives		Action required to Build Resilience and for Disaster Risk Reduction	Action required for Disaster Risk Reduction and to Protect Livelihoods	Urgent Action Required to: 			
Household Outcomes (directly measured or inferred)		Food Consumption* (quantity and nutritional quality)	Quantity: minimally adequate (2,100kcal pp/day) HDDS: recent deterioration of HDDS (loss of 1 food group from typical based on 12 food groups) FCS: "acceptable" consumption (but deteriorating) HHS: "slight" (1) CSI = reference, but unstable HEA: "Small or moderate Livelihood Protection Deficit"	Quantity: food gap; below 2,100 kcal pp/day OR 2,100 kcal pp/day via asset stripping HDDS: severe recent deterioration of HDDS (loss of 2 food groups from typical based on 12 food groups) FCS: "borderline" consumption HHS: "moderate" (2-3) CSI = reference and increasing HEA: Substantial "Livelihood Protection Deficit" OR small "Survival Deficit" of <20%	Quantity: large food gap; much below 2,100kcal pp/day HDDS: <4 out of 12 food groups FCS: "poor" consumption HHS: "severe" (4-6) CSI: Significantly > reference HEA: "Survival Deficit" >20% but <50% with reversible coping considered	Quantity: extreme food gap HDDS: 1-2 out of 12 food groups FCS: [below] "poor" consumption HHS: "severe" (6) CSI: far > reference HEA: "Survival Deficit" >50% with reversible coping considered	
		Livelihood Change (assets and strategies)	Sustainable livelihood strategies and assets	Livelihood: Stressed strategies and assets; reduced ability to invest in livelihoods Coping: "Insurance Strategies"	Livelihood: Accelerated depletion/erosion of strategies and assets that will lead to high food consumption gaps Coping: "Crisis Strategies"	Livelihood: Extreme depletion/liquidation of strategies and assets that will lead to very high food consumption gaps Coping: "Distress Strategies"	Livelihood: Near complete collapse of strategies and assets Coping: effectively no ability to cope
For Contributing Factors, specific indicators and thresholds for inferring Phase need to be determined and analysed according to the unique causes and livelihood context of household groups. General descriptions are provided below. See IPC Analytical Framework for further guidance on key aspects of availability, access, utilization, and stability.							
Contributing Factors		Food Availability, Access, Utilization, and Stability	Adequate to meet food consumption requirements and short-term stable; Safe Water ≥15 litres pppd	Borderline adequate to meet food consumption requirements; Safe Water marginally ≥15 litres pppd	Highly inadequate to meet food consumption requirements; Safe Water 7.5 to 15 litres pppd	Very highly inadequate to meet food consumption requirements; Safe Water 4 to 7.5 litres pppd	Extremely inadequate to meet food consumption requirements; Safe Water <4 litres pppd
		Hazards and Vulnerability	None or minimal effects of hazards and vulnerability on livelihoods and food consumption	Effects of hazards and vulnerability stress livelihoods and food consumption	Effects of hazards and vulnerability result in loss of assets and/or significant food consumption deficits	Effects of hazards and vulnerability result in large loss of livelihood assets and/or food consumption deficits	Effects of hazards and vulnerability result in near complete collapse of livelihood assets and/or near complete food consumption deficits

*The acronyms for the commonly used methodologies included in the reference table include: HDDS (Household Dietary Diversity Score), FCS (Food Consumption Score), HHS (Household Hunger Score), CSI (Coping Strategies Index), and HEA (Household Economy Approach).

Notable in the IPC approach is the attention given to the assessment of evidence available. Reliability scores are attached to each source (1=somewhat, 2= reliable, and 3=very reliable. Assigning Reliability Scores requires critical evaluation of the source, method and time relevance of the evidence.

Table 5: Criteria for Assessing Confidence Levels

Confidence Level	Criteria for Corroborating Evidence for Confidence Levels	
	Current	Projected
Acceptable *	At least 1 piece of reliable evidence (direct or indirect) for any of the food security outcomes + At least 4 pieces of reliable evidence from different contributing factors or outcome elements	At least 4 pieces of reliable evidence from different contributing factors or outcome elements
Medium **	At least 1 piece of reliable direct evidence for any of the food security outcomes + At least 5 pieces of reliable evidence from different contributing factors or outcome elements	At least 6 pieces of reliable evidence from different contributing factors or outcome elements
High ***	At least 2 pieces of reliable direct evidence for any of the food security outcomes + At least 6 pieces of reliable evidence from different contributing factors or outcome elements + There is no reliable contradictory evidence	At least 8 pieces of reliable evidence from different contributing factors or outcome elements

An overall confidence level (*=acceptable, **=medium, and ***=high) is also required for the classification.

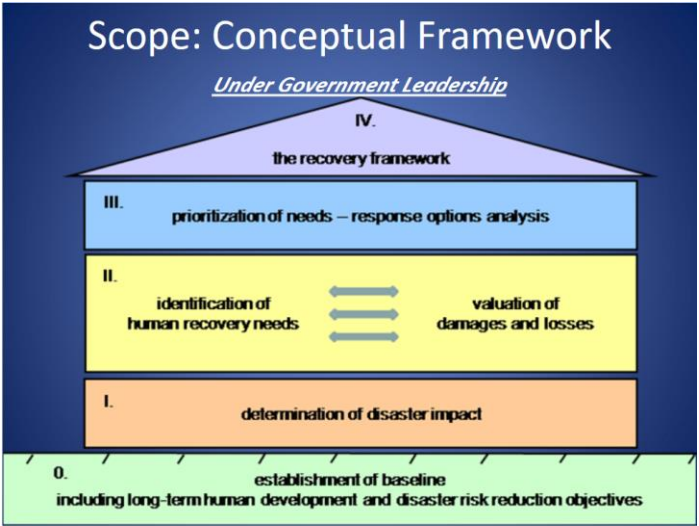
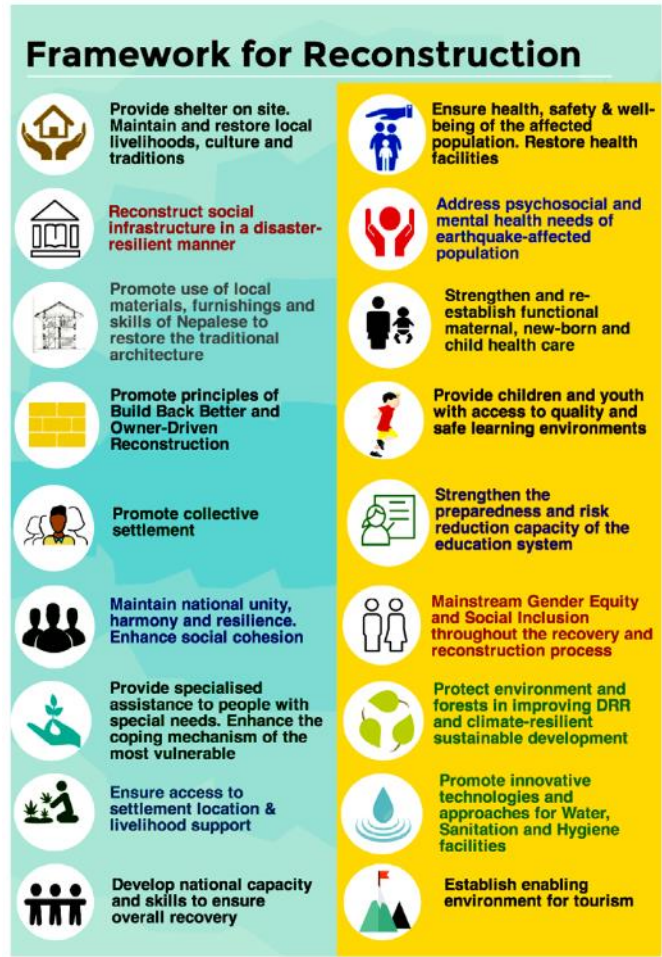
Table 4: Criteria for Assessing Evidence Reliability Ratings

Evidence Reliability Rating	Criteria
1. Somewhat Reliable	Reasonable but questionable source, method or time relevance of data
2. Reliable	From a reliable source, using scientific methods, and data reflecting current or projected conditions
3. Very Reliable	Effectively unquestioned source, method and time relevance of data

Annex 2 They are called framework... but are not always such

This annex present some examples of frameworks extracted from guidance's available in the humanitarian sector, but which do not always fit the general and accepted definition of a conceptual or theoretical framework.

This is not a framework, rather a list of objectives... *This is not a framework, rather a step by step approach*

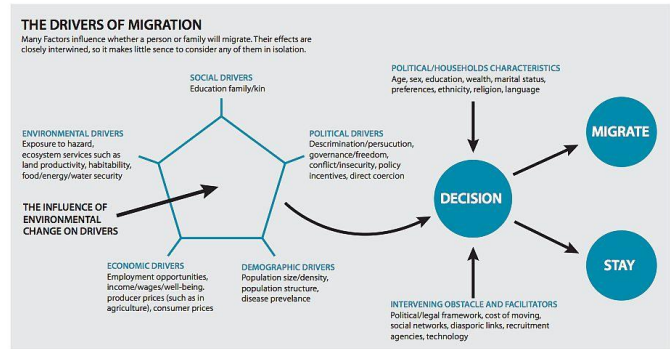


This is a table of content... however with little efforts showing hierarchy of topics and relationships, it could become a theoretical framework

	1. Favourable Protection Environment	2
	2. Prevention and Reduction of Statelessness	8
	3. Fair Protection Processes and Documentation	18
	4. Security from Violence and Exploitation	24
	5. Basic Needs and Essential Services	32
	6. Community Participation, Self-Management and Self-Reliance	38

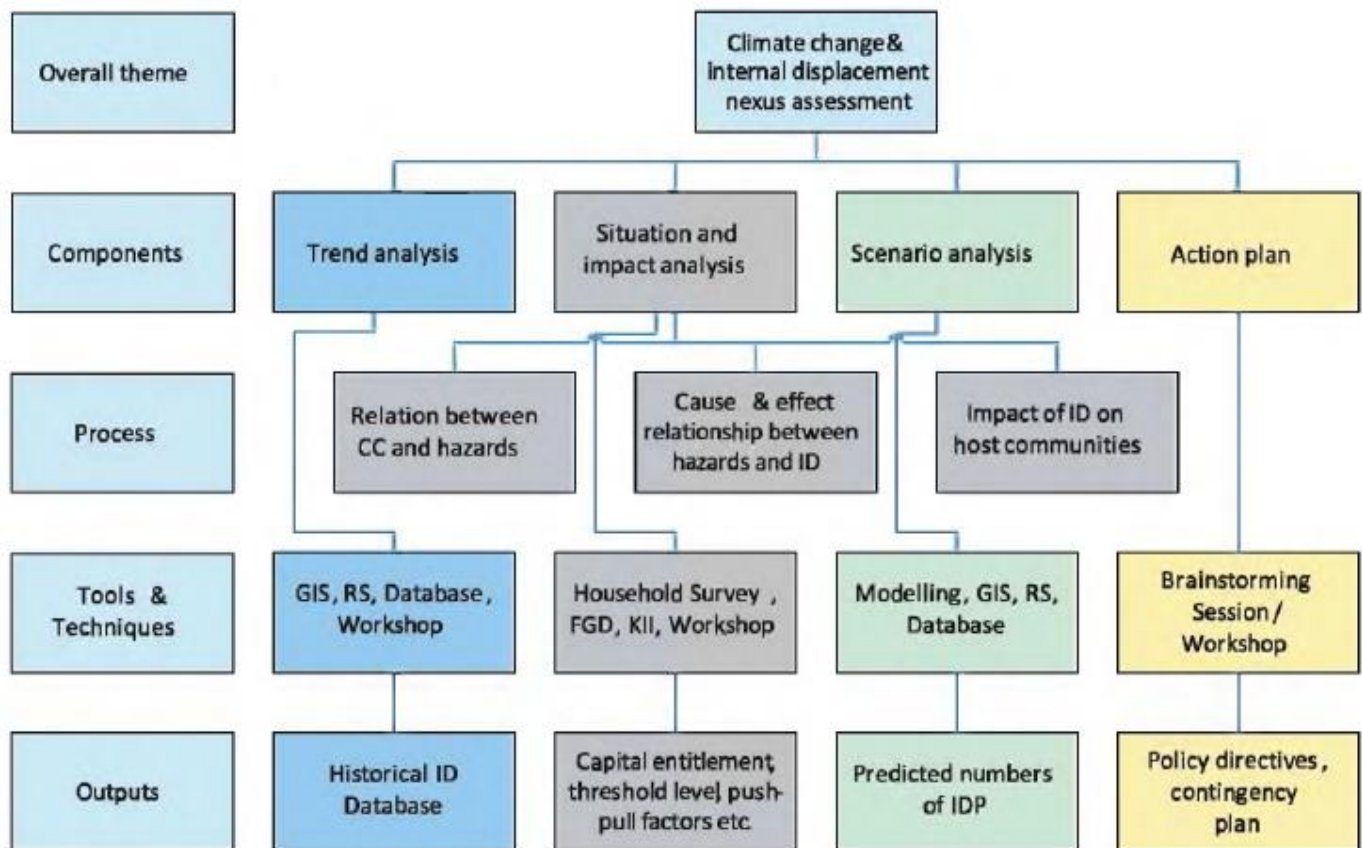
This is not a conceptual framework, rather a theoretical one

Figure 7 A Conceptual Framework for Climate-Induced Migration

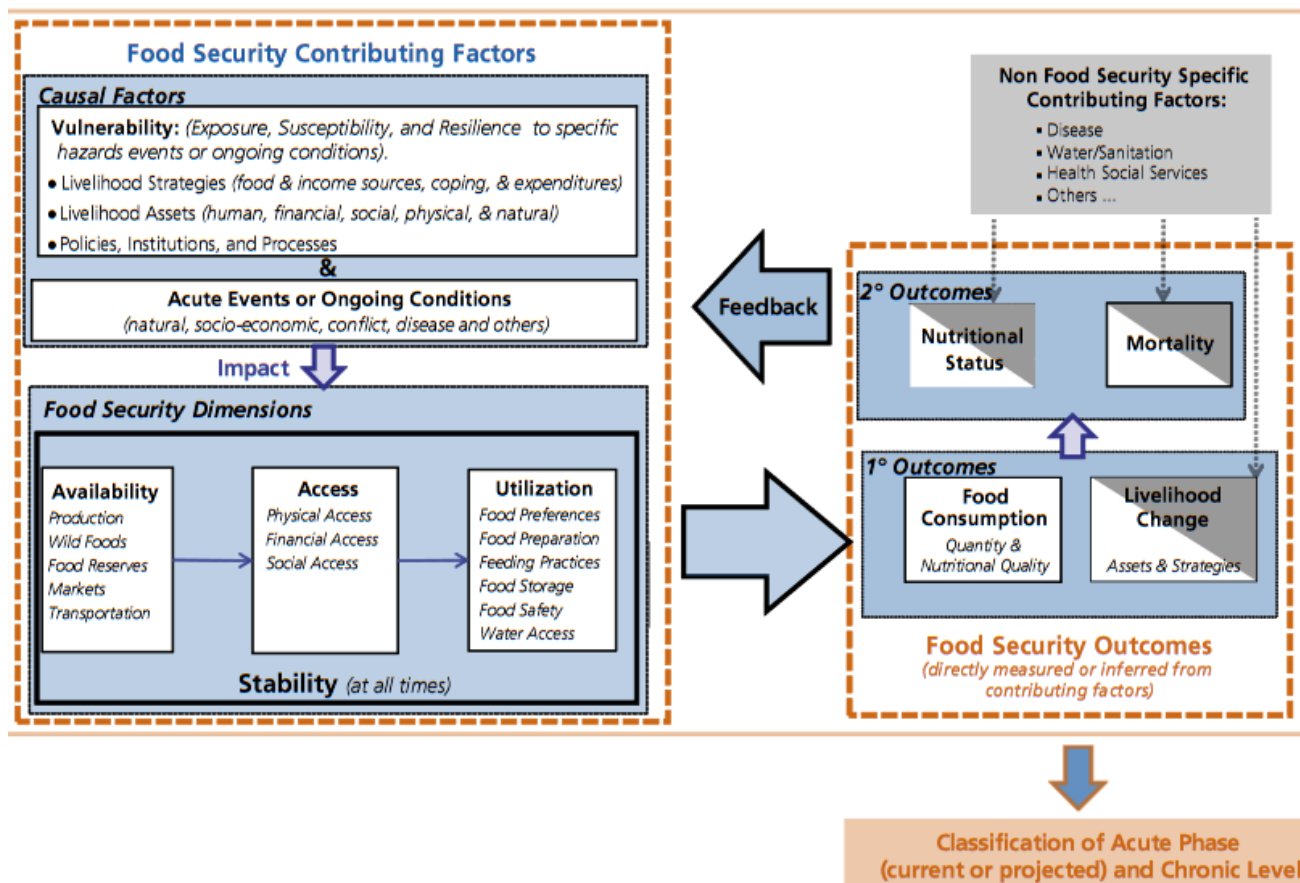


Source: Black et al. 2011.

This is a conceptual framework, however the theoretical framework is missing



This is a (beautiful) theoretical framework



Annex 3 Literature Review Analysis Frameworks

There are no guidance's available in the humanitarian sector on (developing) analysis frameworks. The following literature review was undertaken using social science, intelligence and qualitative data analysis references mostly.

What is an analysis framework?

Sense making theory. Hibbs Pherson and Pherson (2013) define sense making as the “simultaneous automatic process by which our brains fit data into a frame or mental model and fit a frame around the data” (Hibbs Pherson & Pherson, 2013). They indicated that people feel they have made sense of a situation and move on when the results match the mental model. Technically we use “the frame and its routines to guide us in interpreting and taking action until incompatible data again challenges our frame” (Hibbs Pherson & Pherson, 2013). As explained by Gary Klein (2006), people need some framework, some perspective, when trying to make sense of events or situations. Klein, as Hibbs Pherson and Pherson, calls this a “frame” (Klein, Moon, & Hoffman, Making Sense of Sensemaking 2: A Macrocognitive Model, 2006). Weick explained that “sense making can involve elaborating the frame by adding details, and questioning the frame and doubting the explanations it provides” (Weick, 1995). As Moore and Hoffman (2011) pointed out, “elaboration and reframing occur frequently when people are confronted with, or discover, new information from developing situations” (Moore & Hoffman, 2011).

According to Weick's Sense making theory, sense making is “what both allows organizing to take place as well as allows one to understand these processes of organization” (Center for the Study of Organizational Change, 2011). As pointed out by Ferguson, “Sense making Theory consists of both the interpretation of information and generating what is interpreted. In simpler terms, the process by which people give meaning to experiences” (Ferguson, 2011). Basically, sense making is an explanation process, composed of seven attributes including: “identity construction, retrospection, enactive sensible environments, a social nature, ongoing processes, extracted cues, and plausibility” (Center for the Study of Organizational Change, 2011).

Sense making theory is therefore based on the concept of complexity, in which “individuals produce the environment they face through action that in part, affects other individuals of the same environment” (Center for the Study of Organizational Change, 2011). Additionally, as Glatzeder, Goel & von Müller stated: “Thinking and what we refer to as reality shape themselves mutually” (Glatzeder, Goel, & Von Müller, 2010). So, as valid for any complex system, predicting a future event is extremely difficult or even impossible, because everything is connected to a “larger truth” (University of Twente, 2017). For this reason, the “key to success for an estimative or strategic analyst is to imagine and portray the range of realistic scenarios, what decision makers might observe as the future is unveiled, and the implications of alternatives and choices available to them to deal with those futures” (Hibbs Pherson & Pherson, 2013).

Hibbs Pherson and Pherson (2013), talking about sense making, pointed out: “In short, sense making sets largely unconscious parameters for the personal mental models on which we base our analysis. Understanding the precepts leads us to strategies for strengthening our frames by adding rigor, both in terms of the explicit outlining of the frame and alertness to the potential for adjustment to account for changing circumstances. This structured agility takes advantage of and develops our deliberative and intuitive thinking. It enables us to make best use of a full range of structured decision-making and problem-solving techniques without fencing ourselves into rigid models or encouraging us to forge deeper mental ruts.” (Hibbs Pherson & Pherson, 2013)

Definition of analytical, conceptual, and theoretical frameworks. Hibbs Pherson and Pherson (2013) explained that resisting the urge to dive into the research project without taking some time to scope out and develop a structure that will organize existing knowledge and the one that will be collected is a key skill of critical thinking (Hibbs Pherson & Pherson, 2013). They explained that “cognitive psychologists, ranging from Frederic Bartlett in the 1930s to Gary Klein and Daniel Kahneman today, have written extensively about the explanatory structures we naturally create to account for the data, beliefs, and other ‘environmental abstractions’ in our daily lives” (Hibbs Pherson & Pherson, 2013). These structures are called “analytical” or “conceptual” frameworks. According to a definition of the Organisation for Economic Co-operation and Development “an analytical framework describes the conceptual system of definitions and classifications of the related data.” (Organisation for Economic Co-operation and Development, 2004).

This literature review found the conceptual framework to be a similar concept, including ontological, epistemological, and methodological stances. According to Pat Bazeley (2013), “Analysis is laid on the foundation of our understanding about how the world works, what makes it what it is (ontology); and how we, as human beings, can understand and learn about that world and especially about the world of people (epistemology)” (Bazeley, 2013). For what concerns

theoretical frameworks, instead, Regoniel (2016), pointed out that they differ from conceptual frameworks in that “the theoretical framework provides a general representation of relationships between things, in a broader context, in a given phenomenon. The conceptual framework, on the other hand, embodies the specific research direction. [...] a conceptual framework is the researcher’s idea on how to explore the research problem” (Regoniel, 2016). Basically, “the theoretical framework differs from the conceptual framework concerning scope. The theoretical framework broadly describes the relationships between things. [...] The conceptual framework specifies the variables to explore in the investigation” (Regoniel, 2016). Basically, as explained in the Business dictionary, the theoretical framework is “a group of related ideas that provides guidance to a research project or business endeavor” (The Business Dictionary, 2017), while the conceptual framework includes the methodological stance of the study (Regoniel, 2016). As Pearson Casanave and Li (2015) explained, a “theoretical framework” is “more formal and more abstract than a ‘conceptual framework’” (Pearson Casanave & Li, 2015)

As Jabareen indicated in 2009, a conceptual framework can be defined “as a network, or ‘a plane,’ of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena.” (Jabareen, 2009). Fundamentally, “Conceptual frameworks are products of qualitative processes of theorization.” (Jabareen, 2009), which are composed by a coherent set of concepts, beliefs, values, propositions, assumptions, hypotheses, and principles” (City University of Hong Kong, s.d.), basically providing guidance on the possible hypotheses formulated in research, and how these hypotheses are examined empirically (Glatzeder, Goel, & Von Müller, 2010).

As Klein et al. (2006) specified, “even though frames define what count as data, they themselves actually shape the data (for example, a house fire will be perceived differently by the homeowner, the fire- fighters, and the arson investigators). Furthermore, frames change as we acquire data. In other words, this is a two-way street: Frames shape and define the relevant data, and data mandate that frames change in nontrivial ways” (Klein, Moon, & Hoffman, Making Sense of Sensemaking 2: A Macrocognitive Model, 2006). For this reason, Jabareen suggests that grounded theory is the most appropriate for conceptual framework building, because of its iterative characteristics. In fact, grounded theory involves a technique with “continuous interplay between data collection and analysis” (Jabareen, 2009).

However, Timmermans and Tavory (2012), pointed out that several critiques have been moved to grounded theory’s effectiveness in creating new theory: “Although grounded theory precepts seem to guide many researchers in a solid [...] sense, scant theoretical innovation seems to have emerged from these studies. Some researchers explain the lack of theoretical breakthroughs with the lackadaisical, incomplete, or inaccurate application of grounded theory principles. Grounded theory, they argue, has been used to label any research endeavour that involves coding, any form, of qualitative data analysis, and any kind of theory construction” (Timmermans & Tavory, 2012). For this reason, they propose a method based on the concept of abduction, so more focused on the “reflexive character of data analysis” (Timmermans & Tavory, 2012), as an iterative process stemming from grounded theory’s induction. As they argued, “while grounded theory still offers useful tools for the organization of qualitative research, it is only in relation to abduction that theory construction becomes meaningful” (Timmermans & Tavory, 2012).

Difference between analysis and conceptual frameworks and analysis plan. As reported above, the Organisation for Economic Co-operation and Development (OECD), defined the analytical framework as describing “the conceptual system of definitions and classifications of the related data.” (Organisation for Economic Co-operation and Development, 2004). According to Regoniel (2016), an analytical or conceptual framework, basically, “represents the researcher’s synthesis of literature on how to explain a phenomenon. It maps out the actions required in the course of the study given his or her previous knowledge of other researchers’ point of view and his or her observations on the subject of research” (Regoniel, 2016). The analysis plan instead, highlights the research question and the steps to be used in the analysis in great detail (Institute for Health and Care Research [EMGO+], 2010).

Bazeley indicates how the development of a framework is the step preceding the definition of an analysis plan and the following analysis steps: “...consider how theory might inform what you want to do: building a framework that will help to refine your questions and approach. Then, as you plan your methods for generating data, develop a strategy for analysing them, and for checking the trustworthiness of the ideas and conclusions you might come up with, all the while keeping your goals and questions in focus” (Bazeley, 2013). The importance of planning is pointed out by Bazeley, which stated: “Planning helps to ensure the research remains purposeful, and that practical considerations impacting on achieving those purposes have been thought through. Having flexibility in design means that it will be possible to adjust specific questions and methods as required on the basis of field experience, and that the possibility of changes has been considered, with these being allowed for as contingencies in the planning phase” (Bazeley, 2013)

When to use an analysis framework?

Analysis framework and research. An analytical or conceptual framework “helps you to locate yourself in the research process, as well as to attend to various epistemological and ontological considerations and beliefs and how these shape us as researchers, and therefore shape our methodological choices” (Ravitch & Mittenfelner Carl, *Qualitative Research - Bridging the Conceptual, Theoretical, and Methodological*, 2016). It, therefore, plays a central role in the research process because, as Bazeley (2013) indicated, the “foundations for analysis are ultimately laid in the philosophical, methodological, and theoretical perspectives that you adopt. These will be gradually articulated as you continue to reflect on your research experience” (Bazeley, 2013). More specifically, according to Gary Klein (2007), “the purpose of a frame is to define the elements of the situation, describe the significance of these elements, describe their relationship to each other, filter out irrelevant messages, and highlight relevant messages” (Klein, 2007). As Silverman explained, theories provide frameworks for developing a critical understanding of phenomena, and “by provoking ideas about what is presently unknown, theories provide the impetus for research” (Silverman, 2014). As Ravitch and Mittenfelner Carl (2016) explained, the conceptual framework provides the sense of interconnection and interdependence among parts of a research project. The conceptual framework is central to the construction and implementation of research” (Ravitch & Mittenfelner Carl, *Qualitative Research - Bridging the Conceptual, Theoretical, and Methodological*, 2016). Additionally, “a conceptual framework is constructed and continually iterates throughout your research, and it helps to refine the research simultaneously. This notion of active building and refining is central to understanding that a conceptual framework is both guiding to a study and also derived from a study” (Ravitch & Mittenfelner Carl, *Qualitative Research - Bridging the Conceptual, Theoretical, and Methodological*, 2016).

According to Hibbs Pherson and Pherson, several key arguments picture what advantages we take from frames and sensemaking in analysis, including unconscious thinking processes with frame comparison at the unconscious end, formation of initial frames based on very few pieces of data, early articulation of hypothesis and recognition of frames, adjustment of frames in light of new emerging data, the specific role of data and its influence, the influence of individual perspectives on frames and information, and expertise carrying a large number of frames and ways to analyse (Hibbs Pherson & Pherson, 2013). As pointed out by Hibbs Pherson and Pherson (2013) “Research papers or assessments that clump data and reports without a useful judgement or ‘so what’ and without providing the customer an analytic line of argument are descriptive analyses masquerading as higher order products” (Hibbs Pherson & Pherson, 2013).

Practical use of analysis frameworks for situation analysis. According to Miles et al. (2014), “a conceptual framework explains, either graphically or in narrative form, the main things to be studied – the key factors, variables, or constructs – and the presumed interrelationships among them. Frameworks can be simple or elaborate, commonsensical or theory driven, descriptive or casual” (Miles, Huberman, & Saldaña, 2014). As John Latham pointed out, “all the components of the research methodology should be consistent with the variables, relationships, context, and so forth identified in the conceptual framework. Anytime you make a change to the conceptual framework all other components should be reviewed and revised as necessary to maintain an internally congruent design. In addition, any time you make changes to the other components of the methodology you should revisit the conceptual framework to ensure it is consistent and congruent” (Latham).

According to Hibbs Pherson and Pherson (2013), it is very important to have awareness of the categories (strategic, tactical, and operational) in which the analysis to be performed will fit in, so that the most adequate tools and techniques can be used (Hibbs Pherson & Pherson, 2013). They explained that “tactical and operational analysis relies heavily on organizing and sharing critical data. Strategic analysis should look to the future, using techniques such as Multiple Scenarios Generation and High-Impact-Low Probability Analysis” (Hibbs Pherson & Pherson, 2013). For these reasons, Richards pointed out that starting the process of making data too soon, without a pre-existing structure and goals in mind, can be even riskier than delaying the start of the research too much (Richards, 2015).

Design phase. The importance of conceptual frameworks or frames in the design part of the research process is clearly outlined by Richards (2015) as follows: “If you have not organized your project, considered the design, the data needed and the ways they will be handled, you will find yourself swamped by a flood of complex, contradictory accounts of experiences that are only partially relevant to your question. So start by thinking first. The first stage is to *frame* your project – placing it in context, forming it, fitting the parts together, constructing them into a plausible, doable whole, so you can see it before you start” (Richards, 2015). As Bazeley (2013) explained, “the primary criterion in deciding on a design for data gathering, whether you are working within an established methodology or one that is purpose built for this study, will be to consider the implications of your research questions, within the context of your contextual framework: what kind of data will be required to answer them? How will you analyse that kind of data, in order to find

answers? In a sense, you are building a logic model of how you plan to get from data to conclusions – the steps that will be needed on the way, and what you need to do to realise each of those steps and move forward” (Bazeley, 2013).

Richards (2015) explained that mapping out what is already known and what kind of research has been conducted on the topic to be studied is important, because research projects need to be informed by other existing studies. As she pointed out, the research question needs to be informed “by the answers to others’ questions” (Richards, 2015), with a design structured based on the knowledge derived by the design of other studies (Richards, 2015). Research design is particularly important for qualitative research, because, as Richards (2015) pointed out, “when projects ‘just happen’, the researchers will rarely have adequately considered the impacts on those they are studying, and the data will rarely offer an adequate answer to the research question” (Richards, 2015). According to Ravitch and Riggan (2017), “both how you think about doing the work and how you carry it out require careful consideration of your role as researcher, how you see the world (and yourself within it), what to emphasize (and de-emphasize) in your data collection and analysis, and how to represent yourself, your work, and the study’s context(s) and participants to your readers. The ways that you wrestle with these complexities shape your conceptual framework at the same time they are shaped by it” (Ravitch & Riggan, 2017)

Data collection. According to Miles et al. (2017), “a conceptual framework first specifies who and what will (and will not) be studied” (Miles, Huberman, & Saldaña, 2014). As Ravitch and Riggan (2017) explained “the ways in which you argue for a particular topic or focus profoundly influence the range of methodological options available to you. [...] The choices you make about what data you collect are in turn immediately tied to how you are able to analyse those data.” (Ravitch & Riggan, 2017). In particular, for what concerns qualitative data, Richards (2015) explained, “making qualitative data is ridiculously easy. The challenge is not so much making data, but rather making useful, valuable data, relevant to the question being asked, and reflecting usefully on the process of research” (Richards, 2015).

Analysis. When it comes to data analysis, Silverman recommends to “try out different theoretical approaches”. It is important to identify the one that fits best the research and the data (Silverman, 2014). Ravitch and Riggan (2017) explained that “a conceptual framework offers a clear, consistent frame of reference for making methodological decisions, including choices about how to organize, interpret, and ultimately, analyze [...] study data.” (Ravitch & Riggan, 2017). As Richards (2015) pointed out, “to direct your analysis, you [...] need to know what is sought, what is achievable, what will be satisfactory, and how you will be able to tell that it is” (Richards, 2015). According to Ravitch and Riggan (2017), “at its ideal, a conceptual framework informs data analysis in direct, meaningful, and transparent ways. It helps you decide what is most important to emphasize or focus on, provides you with tools for organizing and filtering the data, and helps you make choices about where and when to work inductively or deductively. It also justifies and makes visible your own interpretive processes, which [...] are themselves shaped by your intellectual, ideological, and political commitments” (Ravitch & Riggan, 2017). Additionally, Ravitch and Riggan (2017) pointed out that “data analysis and theory development are ideally in an iterative and dynamic relationship. [...] the arguments that we make inform our choices about what to focus on within the data and how to analyze those data. [...] Articulating the logical connection between the problem identified [...] and the methodological means to address it [...] is a central function of conceptual frameworks” (Ravitch & Riggan, 2017)

Reporting. Even the very process of writing and reporting needs to account for the theoretical and conceptual assumptions made, with analytical writing playing a central role in the development of proper reporting. As Winner (2013) explained, “analytical writing incorporates information to answer specific questions; achieve goals, test hypotheses, decide new approaches, identify relevant information, and explain the importance of the new ideas” (Winner, 2013). According to Winner (2013), “the process of analytical writing should always begin by building an outline as part of the project blueprint. The process of outlining is the first meeting place for analytical writing and thinking. Outlining a document is therefore a complex, iterative process resulting in refinement” (Winner, 2013). More general, the writing process should begin with stating the reason for the research project and the importance of it, it should include a description of the methodology. Then it should present the findings, outline the conclusions, and provide a summary of why the new information is relevant (Winner, 2013).

In the same way in which the analytical framework informs the reporting process, it should be included within the report itself. The importance of including the analytical framework within the body of writing is pointed out in an essay from UK Essays, which reported “if a study does not possess a proposed analytical framework within its main body of writing, it will often be criticised for being overly descriptive and lacking a precise investigation, thus meaning the academic work will lack clear focus and suffer from being vague” (UK Essays, 2013). As explained in guidance from the University of Sydney (2012), “a basic requirement for essays at university level is that they are analytical. Analysis generally involves

reorganizing information from the sources or data you have been given in order to make some kind of relationship between concepts” (University of Sydney, 2012).

How to build an analysis framework?

Step 1 – Literature Review. Helen Aveyard (2010) defined literature review as “the comprehensive study and interpretation of literature that relates to a particular topic.” (Aveyard, 2010) As Petticrew and Roberts (2006) explained, “literature reviews have many purposes. They can examine old theories and propose new ones, consider where the balance of evidence lies in relation to a particular topic and provide a basis for recommendations for interventions [...]. They can provide guidance to researchers planning future studies, and provide convenient summaries of the literature on a particular issue” (Petticrew & Roberts, 2006) Regoniel (2016) explained that researchers need to review the existing literature on the research topic in order to be able to develop theoretical and conceptual frameworks that will guide the research project (Regoniel, 2016).

According to Ravitch and Riggan (2017), literature reviews “are most often defined in one or two ways” (Ravitch & Riggan, 2017), despite a large number of types and forms of reviews exists. A first definition is that literature reviews is “a comprehensive synthesis of all the research literature about a specific topic. [...] The goal of this type of writing is to present to the reader a clear sense of the intellectual contours and fault lines within a given conceptual domain.” (Ravitch & Riggan, 2017). As Bazeley pointed out, “a beginning task in analysing an item of data is to build a sense of the whole, to capture the essential nature of what was being spoken of or observed, before you break down the detail within it.” (Bazeley, 2013). A second definition of literature review provided by Ravitch and Riggan (2017) is that it is “a discussion of research literature related to one’s topic” (Ravitch & Riggan, 2017), and the scope of the review is therefore limited to “those works that are most relevant to the study’s research question” (Ravitch & Riggan, 2017).

Glasziou et al. (2003) explained that “methods for reviewing and evaluating the scientific literature range from highly formal, quantitative information syntheses to subjective summaries of observational data.” (Glasziou, Irwig, Bain, & Colditz, 2003). While a more traditional literature review is usually subjective and not formalized, “the purpose of a systematic literature review is to evaluate and interpret all available research evidence relevant to a particular question.” (Glasziou, Irwig, Bain, & Colditz, 2003). As Glasziou et al. (2003) pointed out, a systematic review has two major advantages: one is the increased strength of the study given by the possibility to study the “consistency of results” (Glasziou, Irwig, Bain, & Colditz, 2003), the second is that systematic reviews make results robust enough so that they have “transferability [...] to other settings” (Glasziou, Irwig, Bain, & Colditz, 2003).

Step 2 - Identification of Gaps. According to Regoniel (2016), within the context of literature review, students should “look for gaps in knowledge and identify what questions need to be answered or what problems need to be given solutions. Thus they can formulate their conceptual framework to serve as a guide in their research venture” (Regoniel, 2016). Systematic reviews, in particular can “identify gaps and direct future research efforts. (Petticrew & Roberts, 2006). As Helen Aveyard (2010) specified, “in order to demonstrate their understanding of both the research and the methods previously used to investigate the area [...] you must systematically search, critique and combine the literature to demonstrate a gap in the existing research base and *justify* your proposed research question.” (Aveyard, 2010). It’s important to point out that, as Diana Ridley (2012) explained, the identification of a gap in pre-existing research is not enough to justify a research project. She pointed out that a researcher should always provide good reasons for why the research is “important and worth doing” (Ridley, 2012).

Step 3 – Identification of key variables. As Regoniel (2016) explained, since the research to be conducted should always address a gap in the knowledge, identifying key variables in the literature reviewed is fundamental to understand how these are connected (Regoniel, 2016). If the variables are not available in the abstracts analysed, the researcher should find the summaries, or the methodology, results, and discussion paragraphs (Regoniel, 2016). As Petticrew and Roberts (2006) explained, “a systematic review will be of particular value when there is uncertainty about what the evidence on a particular topic shows: for example when there is uncertainty about the effectiveness of a particular intervention [...], or debate about the relationship between two variables” (Petticrew & Roberts, 2006). According to Petticrew and Roberts (2006), “Many systematic reviews are not concerned with issues of effectiveness at all, but with

investigating the causal association between some variable (such as a risk factor) and a health, behavioral, or psychological outcome” (Petticrew & Roberts, 2006).

However, despite the identification of variables is an important step in the development of a conceptual framework because “even a list of variables or a simple description includes prototheoretical assumptions regarding relevance” (Timmermans & Tavory, 2012). When it comes to develop a frame the theoretical aims need to be more explicit, “if only because otherwise any form of writing can be read as theory” (Timmermans & Tavory, 2012). For this reason, after the identification of key variables, the definition of a thesis statement is central to the development of a conceptual framework.

Step 4 - Thesis statement. According to Regoniel (2016), “before coming up with your conceptual framework, you should first formulate your thesis statement. A thesis statement is essentially a synthesis of what you have read and observed regarding the phenomenon that you are trying to explain. It is a statement that serves as your anchor in advancing your argument about say, the causality of things. Among other things, the thesis statement serves as the focus of your discussion” (Regoniel, 2016). As Maria Magher explained, the “narrative should summarize the variables influencing your research and explore how they may change your hypothesis. The narrative should also explain the basic methodology for your research. Even if you include a diagram in your conceptual framework, a narrative should also be included explaining these details for those who prefer more in-depth information” (Magher, s.d.). Basically, a thesis statement should be composed reviewing available evidence, it should address “all of the components of the question” (Spring Grove Area School District, s.d.), but it should acknowledge the complexity of the issue, going beyond simply restating the question (Spring Grove Area School District, s.d.).