



SCENARIO BUILDING

How to build scenarios in preparation for
or during humanitarian crises

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Introduction

The humanitarian community often finds itself unprepared for unfolding humanitarian developments or sudden events: the 2010 cholera outbreak in Haiti and the sudden spread of Islamic State areas of control in 2013 in Syria are just two of the many examples. Scenario building, an analysis of how situations might evolve, is an essential part of humanitarian operations as it informs contingency planning and preparedness measures ahead of possible developments. It can also help to ensure programming is sufficiently robust to withstand changes in the operational environment. During a separate contingency planning exercise, appropriate preparedness measures and detailed response plans are developed, based on the existing and possible future capacity to respond to the identified scenarios.

During scenario building the range of plausible developments, their predicted impact on the people affected, and the related needs are identified. Scenario building covers a range of activities including:

- **Risk analysis:** the identification and impact of a probability of damage, injury, or any other negative occurrence. Scenario building covers the interaction between these risks and any other possible developments, including events that have a positive impact on the situation.
- **Forecasting:** prediction of the most likely future, often based on an extrapolation of historic trends. While scenario building includes forecasting, the approach is broader as it examines multiple plausible futures.

This brief provides a step by step approach on how to build scenarios. The methodology can be applied to a range of settings and timeframes, from a protracted conflict to a sudden onset disaster.

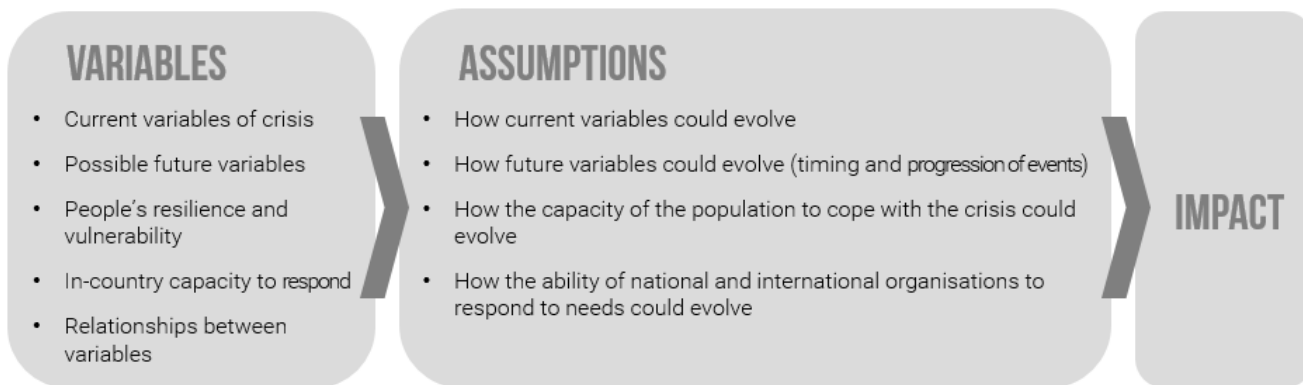
Key Principles

- / Scenario building can quickly turn into a heavy and unwieldy process. Prioritise the scenarios that are needed to move forward with planning instead of trying to develop all possible scenarios. Include just enough detail for every scenario to permit planning and communicate to others the anticipated conditions and needs of the affected population.
- / Scenario building is strongest when undertaken by a group of people with different areas of expertise. Include support and review from key informants and local experts in the scenario building process. While one or two people can drive the process it is recommended that at least one workshop is held to ensure the process is as informed as possible.
- / Acknowledge that the scenarios developed will never be able to predict exactly the future and therefore will never be completely right.

Chain of Plausibility

There are different approaches to examining possible futures. A commonly used method within humanitarian crises is the *back casting approach*. This approach starts with looking at the outcome, e.g., 500,000 people displaced or a dysfunctional government, and afterwards identifies the chain of events that lead to this outcome, e.g., fighting in area X or a coup. The identification of best/most likely/worst case scenarios is a type of back casting. While this approach can be relatively quick and light, the downside is that it is likely to focus on extreme futures and neglect alternative futures which are not currently imagined.

A more comprehensive scenario building approach for humanitarian contexts is the *chain of plausibility* approach, which includes a detailed review of all possible events and developments. Scenario building using this approach starts with identifying variables that are likely to spark a chain of events resulting in a humanitarian impact. Informed assumptions are then made on the most important variables and the direction of these variables. An example of a variable is 'rainfall in the next three months', while the assumption could be 'below average rainfall in the next three months'. Afterwards, the potential humanitarian outcomes are determined: e.g. below average rainfall in the next three months results in a delay in the planting of crops. The resulting damage to crops will lead to increased food insecurity.



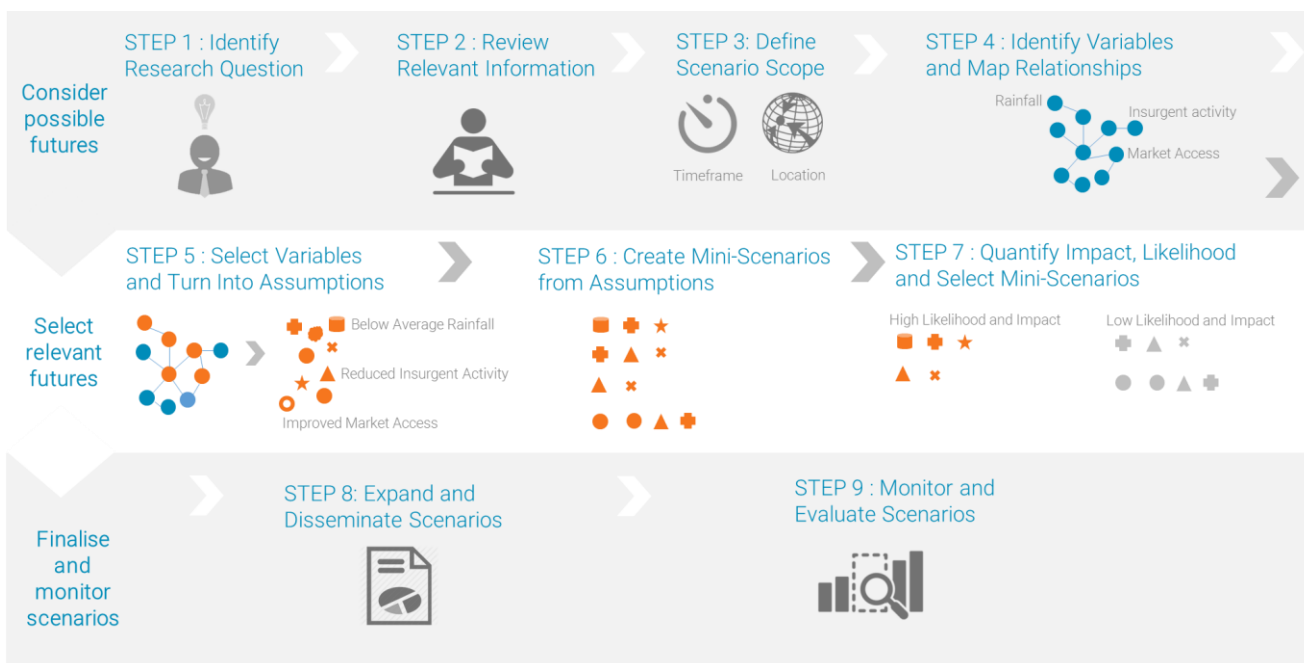
The chain of plausibility approach can be used for short- or long-term timeframes. It suits contexts with a limited number of important events, e.g., flooding, as well as complex protracted crises situations with multiple interlinked variables.

Key Terms

Variable	Development or event that has the potential to cause a change in a humanitarian situation
Assumption	Direction that a variable can take (e.g. increase, decrease)
Mini-scenarios	Set of assumptions or mini-stories that form the foundation of the detailed scenarios.
Contributing factors	Developments that need to occur before each mini-scenario can materialise.

Step-by-Step Approach

Scenario building based on the chain of plausibility involves nine steps.



STEP 1 Identify Research Question

There are two main types of research questions for scenario building:

1. How could the situation in country/region X develop over the next Y weeks or months? *E.g. How could the humanitarian situation in Syria develop in 2016?*
2. Under which circumstances could X occur in the next Y months and what is the expected the impact? *E.g. Which events would lead to large scale displacement, what is the expected impact and likelihood?*

The scenario building process as explained in this guidance note is the same for both type of questions. However, during Step 5 and following, the type of research question determines the selection of the most relevant variables. In case of a type 2 question, the process will focus solely on variables relevant to the selected event, as explained in the blue box on page 6.

STEP 2 Review Relevant Information

Collect the information required to understand the current situation and possible evolution. Look for:

- / Contextual information on the crisis, including description of current impact and pre-crisis conditions.
- / Information on forthcoming important events, including secondary effects of the crisis (lack of access to healthcare and clean water supply resulting in disease outbreaks etc.), and key recurring events (rainy season, winter, elections, harvest period, lean season, etc.) that have the potential to influence the evolution of the situation.
- / Information on the typical effects of similar crises in comparable contexts (appeals for funding, ACAPS Disaster Summary sheets, country contingency plans etc.).
- / Lessons Learned, experiences and studies from previous interventions in similar contexts (after-action review, program evaluations, etc.).
- / Information on the main stakeholders who have an interest or are involved in a given issue or aspect of the crisis and have a significant capacity to influence its development (Government, private companies, armed groups, etc.).

The importance of setting the scene: Erroneous scenario building can often be traced back to an incomplete or incorrect interpretation of the current situation. Ensure that all those involved in building a specific set of scenarios have the same idea of the context, humanitarian needs and priorities. In some settings, large information gaps prevent a clear understanding of the situation. To be able to move ahead, agree on a set of estimates that will be used to fill these gaps. If there is for instance no information regarding the current food security situation, use expert opinion and information from previous years or similar contexts to get an understanding of (and agreement on) the current status.

STEP 3 Define Scenario Scope

- / Define the geographical area and population of interest (scope).
- / Specify the timeframe covered by the scenarios. Take into account upcoming events and trends.
- / Decide on the **maximum number of scenarios**, based on the resources, particularly time, available. The actual number of scenarios is determined in Step 6.

Duration and number: Scenarios, as used in initial and rapid humanitarian needs assessments, usually attempt to cover a period of 4-8 months for conflict situations and 2-4 months for sudden onset disasters. The number of scenarios is highly dependent on the type of crisis, number of variables and the resources available to develop these scenarios. For complex emergencies, 3 to 5 scenarios may be necessary to define the main possible evolutions. For sudden onset disaster, 2 to 3 scenarios are usually sufficient.

STEP 4 Identify Variables and Map Relationships

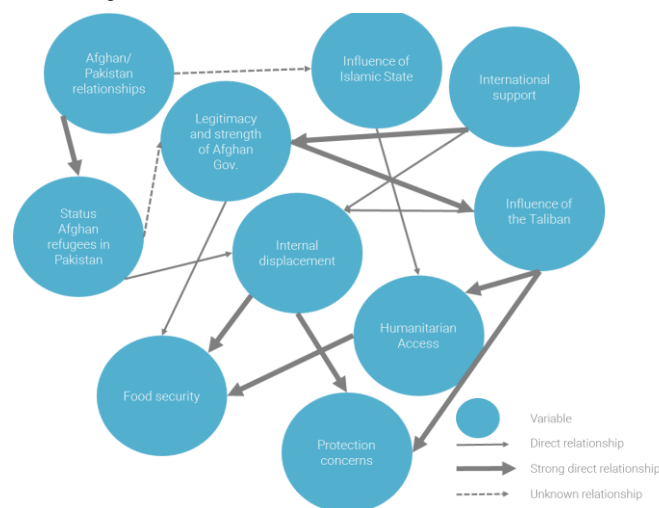
- Identify variables from the information gathered during Step 2. A variable is a factor that is considered to have a determining influence over the direction the future will take. Examples of variables include conflict, humanitarian access and food prices. Variables are 'neutral', meaning that they do not indicate a direction – e.g., humanitarian funding instead of an increase humanitarian funding, rainfall instead of above average rainfall. Variables can be organised in four main categories:

Variables	Examples of variables
Current variables of crisis	Fighting, rainwater precipitation level, aftershocks, price evolution, displacement, malnutrition, food production, activity of armed group
Possible future variables	Epidemics, flooding, winter, spill-over effects, economic sanctions, elections, rise of extremist movements, social unrest, price inflation
Resilience/Vulnerability of affected population	Coping mechanisms, level of remittances, structural vulnerabilities, social protests, competition over resources, purchasing power, livelihood opportunities
National/International response capacity	Number of response actors in relation to the scale of the crisis, humanitarian space and access, government capacity/ willingness to respond, donor funding and issued calls for external assistance.

- After identifying variables, **identify relationships between variables**. A relationship implies that a change in direction of variable A impacts the behaviour of variable B.
- Visualising** the variables and relationships will help to better understand, share and store thought processes. This in turn decreases the risk of omitting key variables.

- Draw lines between the variables to visualise causal relationships**,¹ with the thickness and format of the line indicating the type of relationship. In the example, there is a relationship between the variables Influence of Islamic State and Humanitarian Access – an increase in the strength of the armed group will make it more difficult for humanitarian actors to operate in the areas of concern.

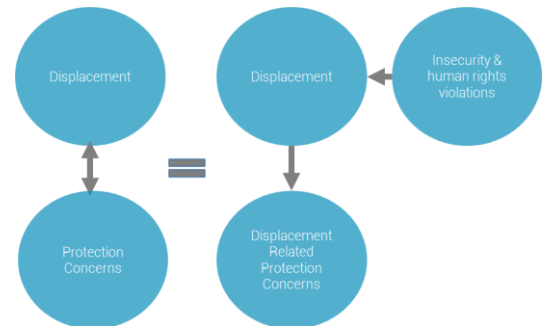
Example: Selection of possible variables in Afghanistan



- Balance the need for detail with the need for a clear and concise overview of the crisis**. The mapping can quickly become complex and unwieldy. To avoid this, group variables as much as possible. In the above example, Influence of the Taliban encompasses separate variables concerning military strength, territory under control, popularity etc.

¹ There is a variety of software available to facilitate the mapping of variables, including yEd graph, GoConqr and Gephi.

- / **Know when to stop.** At this point this is an initial mapping which will be revised and expanded as necessary during following steps.
- / Please note that relationships between variables are causal - a change in variable A results in a change in variable B. Variable A (e.g. displacement) directly influencing B (e.g. protection concerns) and B directly influencing A, cannot occur in the variable mapping. If such a double arrowed line does appear, variables should be detailed, merged, or an additional variable (e.g. insecurity and human rights violations) is required to establish a direct relationship.



- / Afterwards, **re-order the variables** -the variables that have the highest number of relationships with other variables should be placed at the centre of the map to reflect their importance.

Keep your research question in mind: During the next steps, keep in mind the focus of the research question identified during Step 1. If the research question is: *Which events would lead to large scale displacement, what is the expected impact and likelihood?* review only those variables and assumptions relevant to displacement.

STEP 5 Select Variables and Turn into Assumptions

Although all possible outcomes of the identified variables are valuable for developing scenarios, it is important to limit the time spent on highly unlikely or irrelevant ones. Keep the scenario building manageable by selecting only the most pertinent from all the possible situations that could be reviewed:

- / First, **use the information gathered and the views of experts** to select the most relevant variables, including those that
 - o Are likely to change direction during the selected time period
 - o Will have the most significant impact on humanitarian needs or the ability to respond.
 - o Have the potential to impact several other important variables. Use the mapping (Step 4) to identify and select the variables that have a number of relationships with other variables.
- / Afterwards, **define the possible directions** for each of the variables. Every variable has at least three possible directions: increase, decrease or stable. The selection of a set of variables and directions provides the **assumptions**.

Assumption categories	Examples of Assumptions
Evolution of current variables	Increased flooding, severe aftershocks, spread of epidemics, escalating conflict, economic collapse, no significant change in situation
Evolution of possible future variables	Increased influx of refugees, political stalemate, eruption of conflict over resources, successful international intervention
Evolution of the population's capacity to cope with the crisis	Decrease of purchasing power, loss of assets, decreased access to resources, lack of access to humanitarian aid
Evolution of ability of national/international actors to respond to needs	Roads and bridges washed out, conflict preventing access to affected areas, failed negotiation for access with rebels

STEP 6

Create Mini-Scenarios from Assumptions

It is not possible, or even desirable, to build scenarios for all selected variables and directions. 3 variables X 3 directions results in 9 scenarios, 4 variables X 3 directions is 12 scenarios etc. Hence, select directions that are the most relevant to your audience.

- / **Create assumption sets** using related assumptions from one or more variables (e.g. overcrowding/ protection issues, return/ land ownership issues, water pollution/ waterborne diseases, conflict resuming/ new population displacement, etc.). Afterwards, develop **mini-scenarios** by combining different sets of assumptions. Please see Annex A for an example of the process. These mini-scenarios form the basis of the scenarios.

Note that identified mini-scenarios do not have to be mutually exclusive. Different events can unfold simultaneously, e.g. a sudden spike in election violence and a cholera outbreak.

STEP 7

Quantify Impact, Probability and Select Mini-Scenarios

During Step 7, estimate the **impact and probability of the mini scenarios**. The objective of this step is to end up with a selection of mini stories which will be developed into full-fledged scenarios in the following steps:

- / Make a first estimate about the **impact of the mini-scenario**, by comparing the outcome of the scenario to the current humanitarian situation. Please note that the definition of 'significant decrease or increase' depends on the context – for some settings, or audiences, an additional 10,000 people in need could already be identified as significant. The impact estimate will be further refined during Step 7, when the detailed humanitarian impact is considered.

Impact scale

Major Improvement	Significant decrease in the number affected OR large decrease in severity of needs
Slight Improvement	Decrease in the number affected OR slight decrease in severity of needs
Status quo	Number of affected remains the same AND severity of need remains the same
Slight deterioration	Increase in the number affected OR slight increase in severity of needs
Major deterioration	Significant increase in the number affected OR large increase in severity of needs

Afterwards, **define probability**. The process of defining probability starts with **defining contributing factors** - developments that need to occur before each mini-scenario can materialise. The mapping of relationships between variables (Step 4) will help the identification of the causal chain.

Example:

Mini-scenario: A successful peace agreement results in large-scale returns to previously unsafe areas.

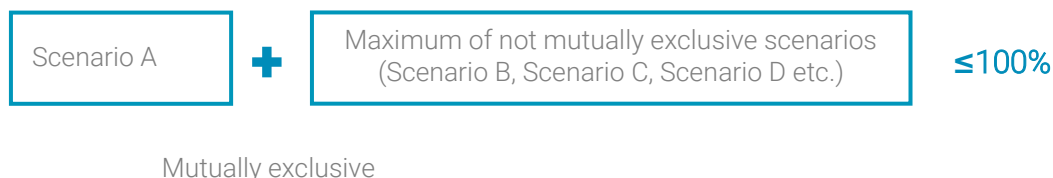
Contributing factors: Political willingness to start peace talks before the deadline, effective negotiations, and successful implementation of the peace agreement terms, IDPs are able and willing to return to place of origin.

Mini-scenario: A significant increase in prices for rice results in increased malnutrition, decrease in household spending on education and healthcare, and displacement in search of livelihood opportunities.

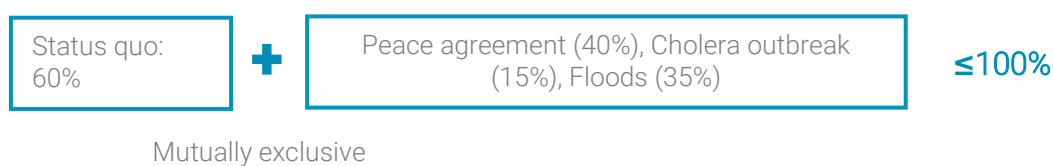
Contributing factors: A significant decrease in the quantity of the national rice harvest, Rice imports come too late or are of insufficient quantity/quality, loss of food stocks, households are unable to find alternative sources of food (e.g., own production).

- / Define the **probability of the different contributing factors**. Based on these estimates, **define the overall probability** by assigning a percentage to capture the probability of each mini-scenario. Do not spend too much time on defining unlikely causal chains. The probability of each mini-scenario should be adjusted by making a series of **direct comparisons** between mini-scenarios. Ask the question, *how much more likely is it that mini-scenario A occurs compared to scenario B?* And scenario C vs D? And scenario D vs A? etc.
- / **Fine-tune the probability by establishing how your scenarios interact**. Some scenarios are largely independent and can occur in parallel, e.g., flooding and an increase in election violence, or at different moments in time (depending on the timeframe of your scenarios) e.g., a drought during the summer followed by flooding during the rainy season. However, several scenarios will be mutually exclusive - if the baseline scenario assumes that there is no major change in the variables, it cannot occur at the same time as a cholera outbreak, as that would constitute a major deviation of the status quo. Note that the position of scenarios as relative to other scenarios (e.g., this scenario is more likely to occur than that) is more important and useful than defining the exact mathematical probability (e.g., there is a 25% chance scenario X will occur).

Estimating probability:



- / **Example:** Imagine a country embroiled in conflict, where there is a risk of floods and cholera. In this example setting, the mini scenarios 'Peace Agreement', 'Cholera outbreak' and 'Floods' could, hypothetically, occur at the same time. Their probability is therefore not related. However, all of these developments are very different from a 'status quo' scenario. The probability of 'status quo' and the maximum of the other scenarios (in this case a 'peace agreement') cannot exceed 100% - the county will either experience a status quo scenario OR one or more other scenarios:



- / Defining the probability of scenarios is one of the most subjective and difficult parts of scenario building. Regular review of your scenarios (Step 8) can improve accuracy over time.
- / Afterwards, select the mini-scenarios that will be developed into full scenarios. This selection depends on the specific interest of your user. Scenarios that rank high with respect to their probability and their estimated expected impact are generally of interest to all types of audiences (as circled in the table below):

Probability of Occurrence	Expected Impact				
	Major Improvement	Slight Improvement	Status quo	Slight deterioration	Major deterioration
Highly likely					
Likely					
Maybe					
Unlikely					
Highly unlikely					

- / Additional mini-scenarios with a low impact and/or probability can be examined if they concern topics or outcomes relevant to the user. Mid-2013, an ACAPS scenario building exercise on the crisis in Syria for instance considered the scenario 'Meaningful negotiations begin and conflict greatly reduces'. This was judged to be a very unlikely development. However, the possible implications of the peace talks planned for end-2013 (later postponed to January 2014) dominated the discussions on humanitarian response planning in Syria at that time and the probability and consequences of successful talks were therefore included.

Black swan events: Once the most plausible scenarios have been identified and developed, and if there are remaining resources, it is worth revisiting Steps 5 and 6 to see if there are black swan events that should be considered. A black swan event is characterised by the fact that it is extremely unlikely to occur, but has a major humanitarian impact. These scenarios will probably not inform current preparedness measures because they are regarded as too improbable. However, identification and monitoring (Step 8) of the unlikely developments is useful to generate a full understanding of the situation.

STEP 8
Expand and Disseminate Scenarios

- / From selected sets of mini-scenarios, develop full scenarios. Each scenario should include as a minimum:
 - o The **probability** of this given scenario happening and its expected **impact** on the affected population
 - o The likely **duration** of a humanitarian crisis
 - o A range giving a quantitative estimate of the expected **number of people that would be affected** e.g., 100-200 (avoid point estimates)
 - o A **narrative** describing the main points of the scenario, including the affected areas and groups
 - o The potential **operational constraints**
 - o The **priority needs** of the affected population and the humanitarian response needs

A specific or memorable **name** catching the core idea of a given scenario

The following template can be used as a guide.

Name of the scenario – E.g. “Heavy Rainfall”

PROBABILITY	
IMPACT	
Affected population: 150,000 – 300,000	
Likely onset of humanitarian crisis: September	
Likely duration of humanitarian crisis if scenario materialises: 3 to 6 months	
Description	<p><i>Short description of context, variables and assumptions:</i></p> <ul style="list-style-type: none"> / After heavy rainfall in the south flood waters do not recede for two months and a large area remains inaccessible for assessment and intervention. Government calls for international assistance to address displacement issues. Very low in-country capacity of humanitarian actors to respond to the disaster.
Context & Impact	<p><i>Overall effects and impact of the event.</i></p> <ul style="list-style-type: none"> / Influx of 150,000 to 300,000 IDPs in overcrowded and inadequate shelter expose the population to public health threats, like during the 2008 floods when outbreaks were reported in camps. Affected urban population is attended to, but rural population has to wait several weeks before receiving first assistance due to road disruption. / <i>Affected areas:</i> southwest provinces of the country are the most affected area. / <i>Affected groups:</i> IDPs in public buildings and camps as well as host populations and their characteristics (number, demographics, and specific vulnerable groups). / Duration of the emergency situation: Period of time during which emergency assistance may be required.
Operational Constraints	<ul style="list-style-type: none"> / Access, security, logistics and communication
Priority Needs	<ul style="list-style-type: none"> / Key needs (including intervention/ assessment, preparedness measures): Food, water and NFI distribution will be required. Surveillance for communicable diseases. Coordinated assessment mechanisms.

STEP 9

Monitor and Evaluate Scenarios

During Step 7, several contributing factors for every scenario have been identified. After development of the scenarios, turn these factors into indicators that can be monitored. Afterwards, define thresholds: the 'tipping points' after which it becomes more likely that a certain scenario materialises.

Examples of contributing factors and thresholds:

Contributing Factor	Indicator	Threshold
Food becomes so expensive that people start to demonstrate	Price of rice by kg	>50% increase in price of rice in market A (baseline price is X by kg)
Armed groups increase their influence	km ² held by armed group	>10% increase in percentage of territory held by armed group (baseline territory is estimated at X km ²) or Provincial capital taken by armed group
It is very difficult for humanitarian organisations to reach the population in need	Number of people in inaccessible areas	>25% increase in number of people that reside in hard to reach/inaccessible areas (baseline number of people is estimated at X)

- / Monitor how the situation evolves compared to indicators. Once the situation has surpassed a set threshold, indicating that a scenario is more likely to occur, this information should be shared with relevant stakeholders.
- / After the set timeframe for the scenarios has passed, undertake a review of the scenarios to see to what extent the identified scenarios materialised.

ANNEX A – Example of Process

At the end of 2015, a team of ACAPS analysts developed scenarios covering possible developments in 18 countries. This annex details how every step of the methodology was applied to develop scenarios for one of these countries – Nigeria.

A rough estimate of the time spent by the analysts on each step is indicated. Please note that the duration of every step can differ significantly between scenario building exercises and is determined by the knowledge/expertise of the participants, the complexity of the crisis, and the available resources.

STEP 1: Identify research question (15 min)

The objective of the information product is to raise awareness on possible developments in specific countries of concern to the humanitarian community. The main research question is: *How will the situation in Nigeria develop over the next six months and what will be the humanitarian impact?*

STEP 2: Review relevant information (3 hours)

ACAPS analysts review secondary data on humanitarian crises on a rolling basis. The analysts therefore have access to over three years of data on the situation in Nigeria.

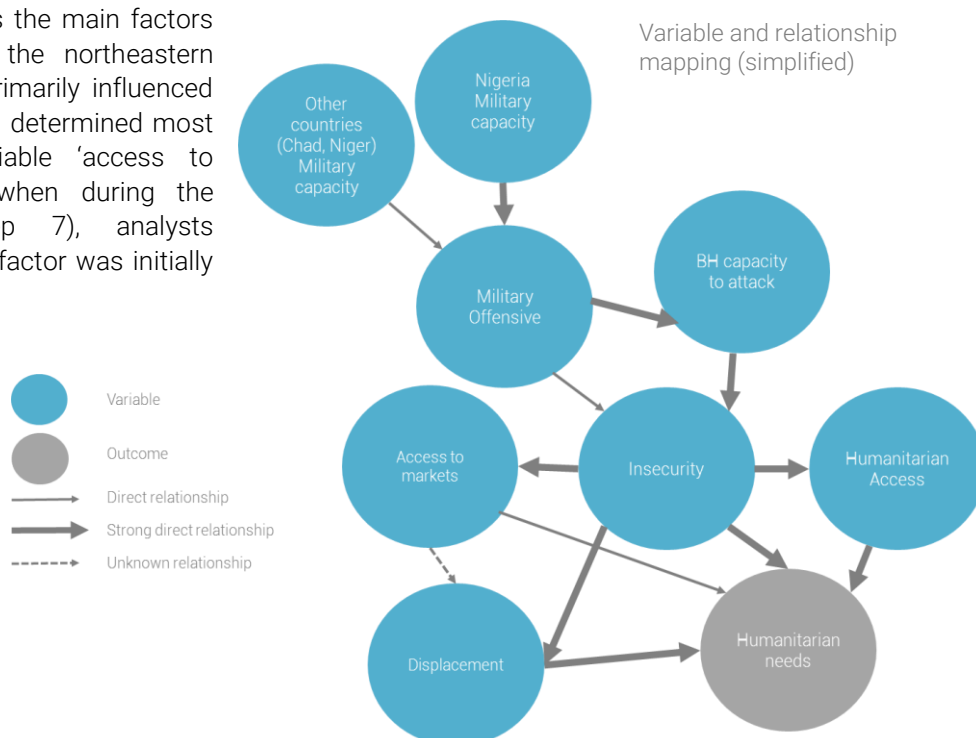
At the time of scenario development (end 2015) an estimated 7 million people were in need of humanitarian aid, primarily due to an insurgency by the armed Islamist group Boko Haram (BH) in the northeast of the country, and a Government military offensive aimed at dislodging the group. An estimated 2.2 million people were displaced as a result. Three consecutive harvests failed in the northeast, and the ongoing conflict prevented agricultural activity, limited food availability and decreased household income. Market activities had been disrupted by a decrease in demand and low production. Access to healthcare and WASH was of major concern. In 2014, a cholera outbreak resulted in more than 4,000 cases among IDPs in Borno state. Schools and communities have often been targets of BH attacks, particularly in 2014. Continued insecurity meant humanitarian presence in the northeast remained limited, particularly in Borno.

STEP 3: Define scenario scope (15 min)

The analysts decided to focus the scenarios on the most affected area of the country – the northeastern states of Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe. It was decided to develop 3 to 5 scenarios. The overall report, and therefore the scenarios for Nigeria, focused on possible developments for the next six months.

STEP 4: Identify variables and map relationships (3 hours)

Six variables were identified as the main factors determining the situation in the northeastern states in Nigeria. Insecurity, primarily influenced by BH's capacity to attack was determined most important variable. The variable 'access to markets' was later added, when during the scenario development (Step 7), analysts discovered that this important factor was initially omitted.



STEPS 5 AND 6: Select variables, turn into assumptions & create mini-scenarios (4 hours)

For each variable, the possible directions were identified (e.g., humanitarian access increases, remains stable or decreases) and assumptions were made to form mini-stories.

Variables	Military offensives	Strength of BH	Insecurity	Humanitarian Access	New Displacement	Access to Markets
Assumptions	Successful northeast Nigeria – BH defeated in Nigeria, but not neighbouring countries (BH flees Nigeria)	Increase	Geographic spread of insecurity – more widespread Adamawa/Yobe	Increase	IDPs start returning	Increase
	Successful – substantial gains but BH still active	Stable	Geographic spread of insecurity – beyond Adamawa/Yobe to also Bauchi, Gombe, Taraba	Stable	No large scale displacement, but also no massive returns	Stable/Limited change
	Stable – continued clashes but no substantial gains	Decrease	Increased intensity (higher frequency)	Decrease	Large scale new displacement	Decrease
	Successful regional – BH defeated in whole Lake Chad region		Stable			
	Fails – military loses ground to BH		Decreased geographic spread (more localised) to areas in Borno only			
			Decreased intensity (lower frequency)			
EXAMPLE MINI-STORY –Towards peace: Regional military offensives are successful and BH is defeated in whole Lake Chad region. As a result, insecurity decreases both in terms of geographic areas affected and the number of attacks, resulting in improved security in whole of northeast and across the border. The decrease in insecurity allows for additional humanitarian access. There will initially be some new displacement due to clashes, followed by large-scale return of IDPs and refugees once the situation has normalised.						

STEP 7: Quantify likelihood, impact and select final set of scenarios (3 hours)

During Step 5, eight mini-scenarios were identified. Afterwards, the impact and probability of the different mini-scenarios was identified. The analysts agreed that a significant change in the main variables, including the effectiveness of the military offensive and BH capacity to attack, was unlikely within the timeframe set. As a result, a status quo scenario was categorised as the most likely option (“Baseline” scenario). Other developments, including a sudden intensification in BH activity or change in BH area of operations was deemed possible but unlikely. After making an initial estimation of the impact of the mini-scenarios, the four most interesting and relevant mini-scenarios were selected. The following selection criteria were used: high probability, high impact and/or relevant to the reader because the development is a topic of discussion.

Probability of Occurrence	Expected Impact				
	Major Improvement	Slight Improvement	Status quo	Slight deterioration	Major deterioration
Highly likely					
Likely			Baseline		
Maybe					
Unlikely					
Highly unlikely	Towards peace			BH flees Nigeria	BH activity increases

Step 8: Expand and disseminate scenarios (3 hours)

Analysts identified the impact of each mini-scenario, including the operational constraints, priority needs and geographic areas of concern. The information collection during Step 2 (secondary data review) and the variable mapping (Step 4) was used to feed into the scenarios.

Shift in focus Boko Haram activity (“BH activity increases”)



Likely onset of humanitarian crisis: April

Likely duration of humanitarian crisis if scenario materialises: 3 to 6 months

Description	In the face of the military offensive, Boko Haram retreats to its stronghold in the Sambisa Forest, and refocuses its activities. It widens the scope of attacks in the northeast, moving further into Adamawa and Yobe, and reaching Gombe, Bauchi, and Taraba states.
Geographic areas of concern	Rural areas in Adamawa and Yobe, Gombe, Bauchi, and Taraba states
Context & Impact	Civilians continue to be targeted in village raids and attacks on public spaces, which triggers new and secondary displacement. Market functionality further decreases. Host communities and IDPs face difficulties generating income, leading to more widespread food insecurity. Poor living conditions, overcrowding, and a lack of access to health services increase the risk of communicable disease outbreaks, particularly cholera and measles.
Operational Constraints	Widespread insecurity results in a larger area being inaccessible to humanitarian actors.
Priority Needs	<ul style="list-style-type: none"> / Shelter for IDPs / Support to health facilities in areas affected by conflict or high concentrations of IDPs / Monitoring of and response to communicable disease outbreaks / Support to affected markets to increase access to livelihoods and basic needs

Step 9: Monitor and evaluate scenarios (2 hours set-up, ongoing monitoring)

For each scenario a set of contributing factors and thresholds was identified, based on the variables and contributing factors identified during Steps 5-7. An evaluation of all scenarios is planned for end 2016.

Examples of contributing factors and thresholds:

Scenario	Contributing factor	Indicator	Threshold
Shift in focus Boko Haram Activity	Attacks in Adamawa, Yobe, Gombe, Bauchi, Taraba	# of attacks recorded	>1 attack per 14 days in one of the geographic areas mentioned
	Effective military offensive in other areas	km ² declared BH- free by military	>10% increase in percentage of territory declared BH free
	Increased support of BH	Level of public support to BH	>1 public endorsement by Islamic State of specific BH attacks

ANNEX B – Workshop Lessons Learned

Scenario building is strongest when it includes support and review from key informants and national experts. This input can come in many shapes and forms, ranging from sharing remotely drafted scenarios with in-country key informants for review to multi-day scenario building workshops. ACAPS has initiated and facilitated several such scenario workshops, including for scenarios regarding the impact of El Niño/La Niña on the food security situation in Indonesia, The Europe Refugee Crisis (2015) and Syria (2014 and 2015). This annex gives an overview of the lessons learned from these, and other, experiences.

BENEFITS

The benefits of holding scenario-building workshops should not be underestimated. The quality of the scenarios produced can be greatly enhanced by the discussions between subject-matter experts. While the final product, outlining the different scenarios and their potential impact can inform a range of audiences, participants in the workshops benefit from:

- / Increased understanding of the possible evolution of the crisis – as discussion among a broad variety of experts improves the collective analysis.
- / Increased buy-in to the scenarios – as participants understand the rationale and validity of the process
- / Increased understanding of the purpose and how to use the scenarios.
- / Increased collaboration between humanitarian actors, technical experts and the government.

PREPARATION

- / **Choose participants wisely:** invite individuals who have the expertise and knowledge to speak to the complexity of the crisis, including all affected sectors and geographic areas. In addition, consider the seniority of the participants – if people are too senior, brainstorming might be constrained by political agendas and institutional mandates. However, if participants are not involved in decision making within their organisation, there will be limited buy-in and follow up of the findings. It is not always possible to influence who takes part in the scenario building workshops; follow-up meetings might be required to ensure all relevant perspectives are captured. It is also useful to include technical experts such as meteorologists (in weather related crisis); conflict and economic analysts.
- / **Size of workshop:** The most useful discussions are held in groups with 5 to 15 participants. If it's necessary to expand the number of participants, for instance to create additional buy-in, divide the group into smaller working groups.
- / **Methodology:** It takes a lot of time and effort to ensure everyone fully understands how to apply a specific scenario building methodology to the context at hand. Participants do not have to fully understand and implement the methodology to be able to provide a useful contribution. Asking targeted questions such as *'What could happen in the next six months which could change the humanitarian situation?'* can already provide useful information. Therefore, only expose participants to the full methodology if there is sufficient time (at least two days) and the objective of the exercise is to create buy-in for the process. Regardless of the approach settings, it is essential to ensure participants understand that the aim is to produce a variety of scenarios and not just to predict the future.
- / **Know where you want to go:** Regardless of the selected set-up, ensure that you have a clear idea of the possible variables, assumptions and mini-scenarios prior to the workshop. Ideally, meet with one or two key people prior to the workshop to 'pre-think' the entire process. This roadmap is essential to:
 - o be able to probe participants if there is insufficient discussion
 - o guide participants to what is important if there is too much discussion
 - o be able to move forward in the process if a specific step turns out to be contentious or specifically challenging.
 - o Consolidate the mini-scenarios in a timely manner mid workshop.
- / **Editorial freedom:** The outcome of the scenario building workshops is complemented with follow up meetings, a review of secondary data and the judgement of those developing the scenarios. Ensure therefore that workshop participants are aware that the final output might differ from the workshop findings.

DURING THE WORKSHOP

- / **Current situation:** It is next to impossible to create a common perspective on the possible futures if there is no common understanding on the current state of play. Therefore, start every workshop with an extensive discussion on the 'baseline' situation. **Distinguish clearly between what is currently known, what is assumed and remaining information gaps.** In some settings, the information gaps prevent a clear understanding of the situation. To be able to move ahead, agree on the set of assumptions that will be used fill these gaps, especially if it relates to:
 - o The current number of people affected and in need
 - o The current needs and vulnerabilities
 - o The current severity of the crisis
- / **Flexibility:** Scenario building is as much an art as it is a science. Although it is important to set a clear agenda and roadmap for the workshop (see 'Know where you want to go'), it is just as important to be able to throw everything out and adjust to what is being discussed. Allow for adding unexpected scenarios, black swan events and the revisiting of previous steps as required.
- / **Training:** Use at least two facilitators who understand and have worked with the methodology. In case of large workshops or workshops in multiple languages, train national facilitators prior to the meeting. The national facilitators can capture the nuances of the discussion, capture key information, and guide working groups towards understanding of the task at hand.
- / **Technical terms:** Ensure that the technical terms used, e.g., variable, assumption, contributing factors, are clearly defined at the start of the workshop. Print out the definitions with examples and provide a copy to the participants. This is particularly important when multiple languages are used.
- / **Creativity:** For many it is difficult to envisage a situation other than the current situation. A commonly heard phrase during scenario building workshops is "*But that will never happen!*" Encourage participants to think outside of the box by highlighting that anything is possible in the universe of scenario building. Launching some extreme scenarios can also facilitate imaginative thinking.

POST-WORKSHOP

- / **Plan sufficient time for drafting:** Plan at least two days for drafting the scenarios after the workshop. Access to the same key people involved in the 'pre-thinking' exercise can also be useful to help clarify any issues left unresolved at the end of the workshop.
- / **Present initial findings:** It is useful to invite participants to a presentation of a summary of the final scenarios a couple of days after the workshop. This helps ensure that the content, language used and final structure of the scenario report is most helpful to the target audience. This is especially relevant when the national government is among the target audience.

REPORTING

- / **Scenarios are just scenarios:** Carefully introduce scenarios that are politically sensitive or have an extreme impact: Readers unfamiliar with the concept of scenario building or the probability scale, might not understand that there is a difference between predicting the future and highlighting plausible extreme developments.
- / **Simplification:** Scenario building is always an extreme simplification of the situation. Make clear in the report that the scenario cannot and does not intend to capture all nuances of an often complex situation.