

### INTRODUCTION

There is no shortage of examples of humanitarian questionnaires that are too long, overly complex or unable to generate useful responses. The art and science of developing an effective questionnaire is the topic of master degrees and doctorates. Generally, it takes time, resources and a detailed understanding of the context to design a good instrument, factors which all are in short supply during a humanitarian emergency.

However, all is not lost. There are some basic procedures and guidelines that, if followed, help to ensure a questionnaire is as good as possible (or at least avoids basic mistakes). Developing the questionnaire and testing it during the preparedness phase also goes a long way in avoiding common mistakes in questionnaire design.

This summary provides an overview of the basic rules to build an effective questionnaire. It is divided into three parts: purpose and principles of questionnaire design, the ten steps of designing a questionnaire and a set of do's.

The complete technical brief on questionnaire design can be found [here](#).

### PURPOSE

The **purpose** of all questionnaires is to:

- Collect accurate, unbiased and relevant information
- Provide a structure to the interview
- Systematise responses to facilitate data processing and analysis

### KEY PRINCIPLES

To meet this purpose, those responsible for designing questionnaires should abide by the following **key principles**:

#### Remember your objectives

Problems encountered during questionnaire development often stem from a lack of clarity on the assessment objectives. Focus on key information needs, supported by an analysis plan.

A questionnaire that is written without feeding into clear analytical outputs is inevitably going to overlook important issues and waste money and participants' time by asking

#### Implement a user centred design

All questionnaires have four types of end users, all having different roles and interests:

- Field enumerators
- Respondents
- Information managers and analysts
- Decision-makers

Avoid the common fallacy to focus solely on the interests and needs of decision makers, at the expense of other users. Focus first on the respondents' capacity to provide accurate information and the enumerators' capacity to obtain accurate information.

#### Minimise the risk of error

Measurement errors stand in the way of obtaining reliable and valid results. The art and science of questionnaire design is especially focused on limiting errors generated directly by enumerators, respondents and faulty instruments.

To mitigate the risk of error, design unambiguous questionnaire with clear instructions, careful wording and flow of questions. Accompany the questionnaire with a thorough training and field testing.

#### Adhere to ethical standards

The main ethical considerations include:

- All respondents have provided informed consent
- All respondents know how the information will be used, why it is being collected, and by whom
- All are guaranteed that their participation will not jeopardise their safety or security

When interviewing children, always seek permission from their parents or other caretakers.

## STEP BY STEP

There are ten different phases in developing a questionnaire. Keep in mind that this is an iterative process – it is necessary to revisit earlier steps if it turns out that something does not work in practice. If the field test (step eight) for instance indicates that the questionnaire only generates garbage, a review of steps one through seven is recommended.

Step	Description
<b>1 Identify assessment objectives and information needs</b>	<p>The first step to questionnaire building is not to think of a list of questions, but to identify the answers that the questions should generate. Establishing these information needs involves, at a minimum:</p> <ul style="list-style-type: none"><li>• Identifying the specific topics of interest</li><li>• Designing an analytical framework</li><li>• Identifying the desired summary metrics (number, percent, etc.) and the degree of precision for each topic.</li></ul>
<b>2 Decide on the source of information, data collection technique and modality</b>	<ul style="list-style-type: none"><li>• Ask the right question to the right person using the right technique:</li><li>• Identify the most appropriate information sources for each information need (e.g. key informant),</li><li>• The best way to obtain the information (e.g. structured interview) and the best modality (e.g. face-to-face)</li></ul>
<b>3 Draft questionnaire</b>	<p>Draft the questions required to meet the information needs. A good place to start is to review questions already used within the country, region or during similar disasters. Review length of questionnaire – a KI/HH questionnaire should not last longer than 50 minutes.</p>
<b>4 Review feasibility</b>	<p>Consider whether the planned exercise is feasible, particularly looking at costs, required speed and quality, and the experience and safety of enumerators. Revise and adapt the questionnaire according to cost, speed and quality requirements.</p>
<b>5 Finalise analysis plan</b>	<p>Finalise the analysis plan, the blueprint of the assessment which captures how a question fits within the analysis framework, where the information will be obtained, which data collection technique and tool will be used, how the data should be processed and the analysis steps that are to be undertaken.</p>
<b>6 Structure and format the questionnaire</b>	<p>Reserve some time to make the questionnaire format functional and pretty. Take into account the order of questions, flow of the interview, space available to report and instructions for the interviewer</p>
<b>7 Translate</b>	<p>Decide at an early stage whether translation of the tools is required. Translation is costly, time-consuming and if done inappropriately, can greatly reduce data quality. Effective translation consists of a preliminary translation followed by reverse translation to test the appropriateness of the wording. Test the translated questionnaire by administering both versions to bilingual and bicultural respondents.</p>
<b>8 Field test</b>	<p>Test the questionnaire to see if the exercise provides the required results. Start with testing the questionnaire with colleagues who have not worked on the project. Revise accordingly. Test the improved version of the questionnaire with three to ten respondents, under conditions close, or identical to, those of the main assessment.</p>
<b>9 Instruct enumerators</b>	<p>Train the enumerators and explain their roles and responsibilities. Explain the interviewer approach, either standardised or conversational, and provide a comprehensive training on the questionnaire and good assessment practices to all staff involved.</p>
<b>10 Review the questionnaire</b>	<p>After the data has been collected and analysed, review the questionnaire, debriefing forms and analysis results to assess the effectiveness of each question. Document and share the lessons learned among all assessment stakeholders to incorporate into future questionnaire design.</p>

# QUESTIONNAIRE FLOW & FORMAT

## Best practice

## Example

Start every questionnaire with a **chapeau**

A1. GPS code:

A2. Enumerator code:

A3. District:

Add the required **classification** questions, to allow for stratification of the sample and further comparisons at the analysis stage:

A4. Characteristics of the site:

A4.1. Urban     A4.2. Rural

A5. Key informant

A5.1. Male     A5.2. Female

Include a clear **introduction** which covers:

- The survey objective
- The estimated duration of the interview (no longer than 50 min)
- What the respondent can expect from the interview (compensation etc.)
- Expression of approval of relevant authorities
- Information on how the survey results will be used and how the respondent can access the findings
- Informed consent

START INTERVIEW: Good afternoon. I am part of an assessment team which is visiting X locations in country X to collect information on the current situation following the earthquake. This survey has been endorsed by the Disaster Management Authority. I would like to invite you to tell us about the situation in your village/community. The survey should take about 50 minutes to complete. There will not be any compensation for participation and we cannot guarantee that additional support will be provided to your community following this interview. However, your perspective is essential in improving our understanding of what the population currently needs. We value your opinion and there are no wrong answers to the questions we will be asking in the interview. Your participation in the survey is voluntary, your responses will be kept confidential. Once the survey is finalised we will send the assessment findings to your office.

B1. Would you like to participate? Yes/No

Ensure questions are **visually distinct** from one another. Clearly highlight **enumerator cues**.

If no, thank the key informant for his/her time and end interview. If yes, continue with question C1.

Start with an **easy, topical and non-sensitive** question

C1. Since the earthquake, has anyone in this village received any support from international organisations or the Government? Yes/No

Start with **general before specific** questions. Ask **important questions** early to avoid possible negative impact of fatigue

D1. Which three specific interventions are currently most urgently required to recover from the earthquake?  
Rank three only: 1=first rank, 2=second rank, 3=third rank

D1.1. Food Assistance

Etc.

Ask **sensitive questions** later in the interview, once rapport between respondent and enumerator has been established.

E1. What are the most common coping mechanisms in the sub-district? Do not read out loud, tick all that apply.

E1.1. Child Labour

Etc.

Leave **space for observations** to be recorded

# DESIGN QUALITY QUESTIONS

## 1) Chose the right question type

Design the question in a way that the resulting **level of measurement** (nominal, ordinal, interval, ratio) suits the information needs.

Measurement level	Definition	Example
Nominal	There are no values attached to the different response options. Used mostly for qualitative information.	What is your gender: male/female for each topic.
Ordinal	The order of values is important but the difference between these is not known. Used mostly for preference questions.	What are you top three needs? (rank 1, 2, 3).
Interval	The order of values and the exact difference between these is known (such as 50 degrees Celsius and 60 degrees Celsius). There is no "true zero" (there is no point at which "no temperature" exists).	How long does it take to reach the closest market by foot? (in minutes)
Ratio	The order of the values and exact difference between these is known. There is a "true zero" (such as weight, length, currency).	How much did you spend on food over the last 7 days? (in national currency)

Choose the **type of question** appropriate for the context, the information need and available resources:

	Closed-ended	Open-ended
Types	<ul style="list-style-type: none"> <li>• Categorical question</li> <li>• Multiple choice</li> <li>• Ranking question</li> <li>• Itemised rating scale (e.g. Likert or differential scale)</li> </ul>	<ul style="list-style-type: none"> <li>• Fill in the blank questions</li> <li>• Supplemental or clarifying question to a closed-ended question</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>• Easier and quicker to answer, code and analyse</li> <li>• Facilitates comparison of answers across respondents</li> <li>• Response choices clarify question for respondent</li> </ul>	<ul style="list-style-type: none"> <li>• Respondents are able to express all perceptions and ideas</li> <li>• Questionnaire is less likely to influence the responses</li> <li>• Can provide unexpected insights into the situation</li> <li>• Respondents have the opportunity to qualify and clarify responses</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>• Can introduce bias, by forcing the respondent to choose between given alternatives</li> <li>• Respondents can feel constrained/frustrated</li> <li>• Discourages responses that were not envisaged at the design stage</li> <li>• Respondents are unable to qualify the chosen response</li> <li>• Design requires skills and in-depth contextual knowledge</li> <li>• Difficult to determine if question was well understood by respondent</li> </ul>	<ul style="list-style-type: none"> <li>• More difficult to administer, answer, recode and analyse</li> <li>• Coding of responses is subjective</li> <li>• Requires effort and time on behalf of the respondent</li> <li>• Answers can be irrelevant</li> <li>• Can intimidate respondents</li> </ul>

In emergencies, close-ended questions or open-ended questions with pre-coded responses should be the default option. Only use open-ended questions when really required, as they are more resource intensive to administer and process.

## 2) Keep the question wording understandable

### Example

<ul style="list-style-type: none"><li>• Keep it as simple as possible</li><li>• Design questions that are interpreted in the same way by all respondents</li></ul>	How many individuals live in this household? Within this survey, a household is everyone that sleeps under the same roof and eats from the same pot most days of the week.
<ul style="list-style-type: none"><li>• Use clear transition statements to introduce new topics, timeframes or units of measurements</li><li>• Clearly define time periods, using for instance 'in the last seven days' instead of 'last week'.</li></ul>	We've talked about sources of income. I would now like to talk about health care. In the past 30 days, have you or anyone in your household visited a health facility?
<ul style="list-style-type: none"><li>• Limit the amount of difficult questions</li></ul>	The following types of questions are often seen as difficult by respondents: <ul style="list-style-type: none"><li>• Open-ended questions</li><li>• Recall questions</li><li>• Questions that require respondents to rate items on a scale</li><li>• A question requesting an explanation of a particular choice, e.g. "why did you select this camp to settle instead of other camps in the region"?</li><li>• Sensitive questions, sexuality, drug usage, personal hygiene, alcohol usage and other emotionally loaded topics</li></ul>

## 3) Keep the question answerable

<ul style="list-style-type: none"><li>• Adapt question to knowledge and language of respondent</li><li>• Facilitate recall of information</li></ul>	In general, last year's harvest of rice was very good because there was a lot of rain. How would you compare your current harvest to last year's?
<ul style="list-style-type: none"><li>• Clearly state the denominator when asking for percentages.</li><li>• Soften questions with phrases such as 'approximately', 'your best estimate', 'as best as you remember' to make these more answerable for respondents.</li></ul>	According to your best estimate, what % of the population in this village is in need of food assistance as a result of the earthquake?
<ul style="list-style-type: none"><li>• Funnel, funnel, funnel: Use skip questions to avoid asking irrelevant questions (and ensure the skip instructions are correct)</li></ul>	Does your household face any difficulties in accessing sufficient income to meet basic needs? <i>If no, skip to question X. If yes: What is the main problem? Availability of jobs, access to income etc.</i>
<ul style="list-style-type: none"><li>• The categories are mutually exclusive, as exhaustive as possible, as precise as necessary and meaningful.</li><li>• Include 'Others' and 'Do not know':</li></ul>	What is the percentage of schools that are functional in this sub-district? <input type="checkbox"/> 0% <input type="checkbox"/> 1- 25 <input type="checkbox"/> 26-50 <input type="checkbox"/> 51-75 <input type="checkbox"/> 76- 99 <input type="checkbox"/> 100 <input type="checkbox"/> Do Not Know

## 4) Minimise bias

<ul style="list-style-type: none"><li>• Avoid leading questions and loaded terms</li></ul>	Change: Why don't your children go more often to school?  Into: What are the reasons that the school-aged children in this household are not able to regularly attend school?
Carefully phrase sensitive questions: <ul style="list-style-type: none"><li>• Disguise the question or collect correlated data</li><li>• Collect data on an aggregate level</li></ul>	In your village, have you seen an increase in children working during school hours since the earthquake?



Minimise bias through social desirability:

- Phrase the question in a way that a less desirable answer is equally possible. Make undesirable behaviour for instance permissible by implying that this is not uncommon.
- Assume behaviour and ask frequency – instead of 'have you ever', ask 'how often'
- Inquiring about recent undesirable behaviour is more threatening than asking about past behaviour. Ask first about a past time period before asking about current behaviour.
- Train enumerators to frequently state that there are no wrong or right answers



A lot of people told us that they have sold their food aid because they had other urgent expenditures. How often have you sold your food aid in the last 6 months? And in the last 7 days?

## 5) Check the integrity of EACH question

