



# THE PITFALLS OF QUESTIONNAIRE SURVEYS

This note is written for the programme staff of Practical Action and the purpose of this document is to generate debate and discussion about the effectiveness of the questionnaire survey and whether it is an appropriate tool to fully understand the realities of the poor people in developing countries. We hope that this note will help us in more appropriate use of questionnaire surveys. The following is a look into what are the common pitfalls when preparing and administering a questionnaire survey and some other effective methods that can be applied.

## **What is a questionnaire survey?**

A questionnaire survey is an extractive process, a tool that is generally considered as a quick and cost-effective method to generate large quantities of data. The purpose of any survey, such as questionnaire depends on what the specific objectives are and what you need to know at the end of the process. Even though subjects may vary widely the tool is often applied in the same standardized way offering little flexibility in application – the questionnaire is prepared, administered through enumerators to a sample group and the data analyzed.

A questionnaire simplifies what are complex situations, relationships and characteristics into statistical data. However are these necessarily “real” or indicative numbers and does this statistical data truly reflect the lives of poor people? These are some important reflective questions, which we need to continuously ask ourselves. There are always gaps between the objective of the survey, the concepts used and understanding of the respondents and enumerators about those.

## **When to use a questionnaire**

The questionnaire is commonly used to ask closed questions to look at the size and distribution of a specific problem; look at the relationship between different variables to see if there is a pattern and collect baseline data to be used for evaluating impact later on. (Save the Children 1995, pp 42-43) However consideration needs to be taken as to what is the most effective method of gaining this information, remembering that the questionnaire is not the only tool out there. As said above, the method applied will depend largely on the purpose of your investigation. Perhaps the project calls for a mixture of appropriate methods cross-checked with qualitative and quantitative tools incorporating participatory elements.

For the purpose of project baseline surveys and evaluations, it is always important to sit back and consider the purpose of the surveys and range of methods available to meet that purpose. A questionnaire should not be your first or only choice and when gathering information for a project it may be a good idea to start by asking “Who, about what and why?” This should be followed up with deciding what is the best method to employ through asking yourself “how?”

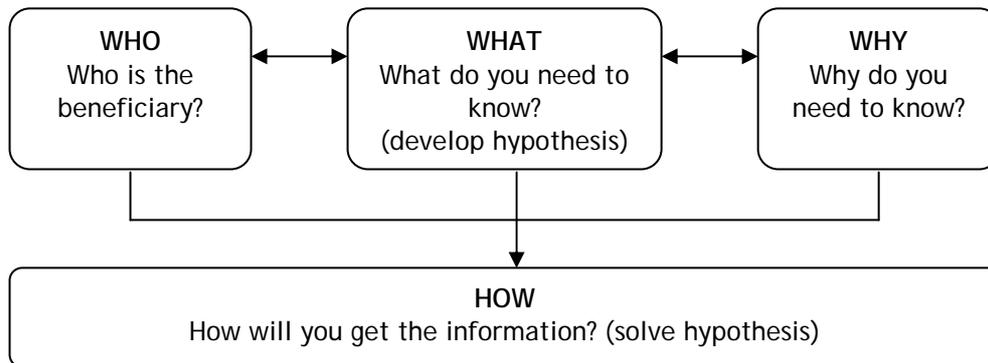


Figure 1: Process to follow before selecting your methods for gaining information

### Common pitfalls

Although, questionnaire surveys are still a common method of data collection, but there are a number of important considerations and potential pitfalls you need to take into account. Some of these pitfalls include:

- **Preparation:** Initial research into the community and their values does not often happen. What may be important to one person may not be a priority to another and without investigation often key observations are not made before the questionnaire is applied. Often there is a lack of engagement with the community from the outset.
- **Sample groups:** What is an appropriate sample size? When large numbers are used then long term monitoring is difficult to achieve. Field tests are crucial and if not trialed it is unknown if the questionnaire is relevant and suitable for the specified sample group. Localized differences between communities can mean that a survey developed for one community may not be an appropriate proxy in another. Not enough thought goes in to who will give you the required outputs - are they young, old, men, women, teenagers, children under 5, mothers, fathers, unemployed, small business owners? There is no point asking the wrong people for information. For example asking the male head of the household “how long it takes to get water” when it is the women and children who collect it.
- **Length:** Often questionnaires are too lengthy. This can lead to confusion, people can get bored, the questions can be invasive and inaccurate information can result.
- **Questions:** Often the questions are not clear and concise or relevant to the topic; there are conceptual gaps when using terminology and no thought of how it will be understood by those receiving it; differences in interpretation; varying levels of consistency between each survey. Below are some examples of inappropriate questions:
  1. Asking those living in urban or rural areas who don't receive a set income and rely on many different ways of making a living “What is your yearly income?”
  2. Asking informal traders in slum areas “Are you a registered business?”
  3. Asking slum dwellers “what is their integrated waste system within their home and how much waste do they generate in a day: 1-2kg, 2-5kg?” This is a question that would be difficult for anyone to answer.
 There are often confusions with translation, for example “what time does it take you to cook dinner” can be easily misinterpreted as “What time did you start cooking”. This will affect your end result therefore careful consideration needs to be taken when designing questions.
- **Qualitative vs quantitative:** Through using only quantitative methods one type of information is gathered without taking into consideration the quality of life of the beneficiaries or their social relationships, aspirations and individual values. Often it

is not an empowering process for those taking part as it is not a participatory process but technical in nature.

- **Administering:** When administering a survey the meaning can be lost in translation; not enough time is put into training; administrators can show bias or ask leading questions therefore influencing the results; there may not be gender equality within your administering team; lack of confidentiality in cases where information is sensitive, especially issues surrounding health. The administering process is also a drain on resources, time and money needed to carry them out.
- **Analyzing:** This can be time consuming and can also be a drain on resources. Often in the beginning thought is not put into what the information is going to be used for and how it is going to be analyzed. How do you identify the most crucial information, how are you going to generate your results and how do you plan to present this data? How much of the data collected will be used?

### Beyond questionnaires

There are many different methods that can be applied as a replacement or in combination with a questionnaire survey. A Participatory Rural Appraisal (PRA) is one such method where the community identifies the issues and is guided by a facilitator. This is a social approach to gathering data which is flexible, informal and performed jointly with the community tapping into local knowledge and experience. A PRA may include and is not limited to the following tools: (Handbook, ILO Assist)

- **Key informant interviews:** The interviewee raises issues and comments within a loose framework. Individuals can directly identify the most important issues faced by the community.
- **Focus group sessions:** Open-ended questions can be asked and discussion amongst community members can occur. The community is given the freedom to contribute.
- **Transect walks:** Mixed groups of professionals and community members walk through an area to observe and discuss.
- **Community mapping:** Members of the community develop their own map of the area and reflect on what is important. This can provide spatial information such as land use and ownership. This can be achieved through mapping on the ground whilst in the field, on paper or using GIS mapping tools.
- **Diagrams and modeling:** Both these tools present information in a simplified form which enables analysis, facilitates communication and stimulates discussion eg timelines, seasonal calendars, linkage diagrams.
- **Preference:** Ranking or scoring by putting in order of preference highlights the priorities of the community. For example wealth ranking is based on a list of indicators set by the community where individuals sort cards of households into piles according to their wealth. An average is then calculated. Other tools include matrix ranking and scoring.

If you have concerns about getting quantitative data from participatory methods you can employ triangulation. Through a participative process, people from various professions, community members with different views and experience can work together and use a combination of visuals and tangibles, for example maps/diagrams and models/counters (stones, beans etc). It is possible however to derive 'participatory numbers' from activities such as counters, calculating, piling, scoring, ranking, estimating and valuing (2007 Chambers: working paper 296, pp 11).

Rapid Rural Appraisal (RRA) is a method still largely researcher based and passive in nature. It is however a quick method that involves semi-structured interviews and informal checklists. PRA seems to have taken its place (even though PRA is mainly sourced from methods of RRA) and is considered to be more empowering instilling a sense of ownership over the process. As with the questionnaire survey the information obtained from a RRA is analyzed back in the office. Participatory processes (PRA) are analyzed by the community whilst you are in the field, once again providing an integrated community approach.

## Conclusion

So when gathering information it seems we must consider our options and the trade-offs of using standardized, rigid and extractive versus diverse, flexible and empowering methods. Robert Chambers has noted the following which is worth considering and hopefully will facilitate further discussion: *A reasonable rule of thumb is that conventional questionnaires should be used only if no participatory alternative can be devised, or should be used in a light and quick manner for confirmation and triangulation with other methods. There is reversal here of mental state and reflex. When numbers are needed, participatory approaches, methods, and behaviours replace questionnaires as the standard approach that first comes to mind.* (Chambers 2008: pp 128)

The following is a table that has been started to spark discussion on what methods can be used when approaching a particular project whether it is in the health, energy, shelter and water and sanitation sectors. Please add to the table with your comments and suggestions adding the methods you might use if you were to embark on a project.

| Information required   | Method  |  |          |
|--|---|--|----------|
|  | Participatory tools   | Questionnaire Survey   | Comments |
| Population   | Participatory measuring, community census, participatory mapping                                | Can be used to get statistical data.   |          |
| Family Size  | Participatory mapping   | Can be used to get statistical data.   |          |
| Literacy   | Pile sorting,   | Not appropriate  |          |
| Health eg. diarrhoea   | Seasonal calendar, time trends, semi-structured interviews, proportional piling, matrix scoring | Not appropriate  |          |
| Water quantity and quality                                   | Participatory measuring   | Not appropriate  |          |
| Income and wealth  | Wealth ranking and wellbeing grouping, flow diagrams, Livelihood analysis diagrams,             | Not appropriate unless wanting to know the extent of the problem. Keep it short and focused and use in conjunction with PRA tools. |          |
| Food security  | Seasonal calendar   | Not appropriate unless wanting to know the extent of the problem. Keep it short and focused and use in conjunction with PRA tools. |          |
| Community profiling (land size, land use, ownership, skills) | Visual, workshops, mapping, transect walks, role play, seasonal calendar,                       | Not appropriate  |          |

|  |                                   |   |  |
|--|-----------------------------------|---|--|
| <p><b>Access to medical services</b></p> | <p>Semi-structured interviews</p> | <p>Not appropriate unless wanting to know the extent of the problem. Keep it short and focused and use in conjunction with PRA tools.</p> |  |
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Figure 2: Methods used to gain project information

**References and resources**

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