Qualitative Research Methodology: A Case Study of the Handicap International Belgium study on Village Demining

Background

Qualitative research seeks to understand a given research problem or topic from the perspective of the local population it involves. It originates from the disciplines of anthropology and ethnology, which examine human behaviour and the interaction of people with their social and cultural contexts. Anthropologists and ethnographers spend a significant amount of time in the field to immerse themselves in the lives of people. While qualitative research can be done in a shorter period, it still requires the researcher to engage with people through conversational interviews and to use careful observation of the context to generate the data. Unlike quantitative methodology, which provides broad, numerical data, the data resulting from in-depth qualitative studies is rich in descriptive information and provides insight into the beliefs, attitudes, values and behaviours of the respondents. It helps to explain why and how things are the way they are.

Qualitative research is useful for small-scale studies focusing on a limited sample and specific issues. The methodology is effective in revealing the stories and experiences of individuals, although individual stories can also provide information which contributes to an overall picture of a household, or a group of people with shared characteristics, or a community. In mine action, qualitative research can be valuable in providing an insight into particular groups of people, for example specific high risk groups or groups that tend to be marginalised from mainstream mine action data collection, such as the poorest people, people with disabilities, or women. The methodology is also often used for policy and programme evaluation as it can better gauge the perceptions of beneficiaries towards mine action interventions, and can provide insight into how and why certain outcomes were achieved, not just what was achieved. Qualitative methodology can be used to generate information to inform the design of quantitative tools such as questionnaires, particularly when the subject matter is relatively unfamiliar or insufficiently researched. Researchers can use qualitative research methods in combination with quantitative tools in studies to provide for triangulation of data and to help provide the explanation behind the statistics.

A good example of qualitative methodology used for mine action research is a study conducted by Handicap International Belgium (HIB) in Cambodia, to investigate the occurrence of village demining. The study, funded by the European Commission Humanitarian Aid Office (ECHO) was carried out in the heavily mine-contaminated region of northwest Cambodia between July 2000 and January 2001. Since the early 1990s, mine action practitioners have noted and documented, to a limited extent, the issue of villagers entering mine-contaminated areas to clear mines in Cambodia. However, there was no real understanding as to the motivations of these villagers, their perceptions of the risk, or knowledge about their tools and methodologies for clearance. In addition, there was a great deal of sensitivity and controversy surrounding the issue of village demining. Mine action operators and the Cambodian government had largely condemned village demining as a dangerous practice and believed that the village deminers would be reticent to talk about their own mine clearance activities. These combined factors were persuasive in orienting the research towards a qualitative approach. This allowed the researchers to build a rapport with the respondents and to obtain more in-depth information about village clearance activities and perceptions of risk. The findings allowed the mine action sector to better understand local level realities and thus consider how best to address the issue.

Implementation

Qualitative research can be undertaken by one researcher working alone, or by a small team of researchers. However, the researchers need to be highly experienced with good interviewing, listening and note-taking skills. During interviews, the researchers need to be able to probe for additional

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information and to explore unexpected topics and ideas as they arise. The researchers also need to be aware of their own role in the research process and to make sure this is clear in the analysis. While the methodology is flexible to allow researchers to capture all relevant data, researchers need to ensure the process of recording the data is done systematically and conscientiously. The village demining research team comprised three experienced researchers and one technical team member seconded from the Cambodian Mine Action Centre. They trained this team member in interviewing skills. His particular role was to look at the more technical aspects of the informal clearance, such as detection and disposal techniques. During the interviews the researchers worked in pairs, with one member responsible for conducting the interviews and the other for note-taking.

Qualitative research is by nature flexible and open-ended. The choice of techniques for data collection depends on the purpose of the study, the nature of the research questions and the skills and resources available to the researcher. However, all qualitative research should begin with a review of secondary data which can provide good background information upon which to design the research study and to formulate the hypothesis or the research questions answered during the study. Meeting with other relevant organisations and individuals with a particular interest, concern or knowledge about the subject can also provide pointers for the study design and what types of information people expect the study to generate.

Qualitative interviews are usually either unstructured or semi-structured. For the village demining research, the research team used semi-structured interviews. These comprise a list of topics and related questions, which the interviewers cover during an interview. Having interview guidelines is particularly useful if there is more than one researcher, as it helps to ensure some level of comparability between the data. However, semi-structured interviews are relatively flexible. The questions are generally open-ended to allow the respondent to elaborate on ideas. The interviewer may ask new questions in response to the information provided by the respondent. The interviewer can encourage the respondent to elaborate through prompts (nodding, smiling, listening actively), and probes (asking for clarification or more details). In this way the interviews, while generally following the agenda of the researcher, also allow the respondents to express their own ideas and points of view.

The research teams systematically combined several types of data, known as triangulation, during the village demining research to strengthen the reliability and validity of findings. They interviewed different groups of informants to cross-check information and perceptions and developed question guidelines for four main groups of informants: village deminers, village authorities, family members of village deminers and other villagers. The research teams conducted semi-structured interviews with single respondents and also used other qualitative research methodologies:

- focus group discussions with small groups of respondents were conducted to provide broader opinions on the topic
- some participatory information collection tools such as historical timelines and daily routine mapping were used to capture information on conflict histories and the day to day activities of respondents
- recorded observations and photographs of village surroundings, the housing conditions of the respondents and village livelihood activities. While the researchers, for safety reasons, did not observe any villagers actually conducting demining, they asked the deminers to demonstrate how they would demine, and observed and documented their tools and methodologies.

Qualitative research typically requires the selection of particular people or groups of people to provide the information. This necessitates the use of non-probability sampling. The researcher carefully chooses the sample according to defined criteria or characteristics. For the village demining study the research team needed to both identify the target areas in which to conduct the research and to find the appropriate informants within those areas. The research team targeted specific provinces, districts and communes for the study based of the degree of mine contamination, the number of mine casualties

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2 This differs from probability sampling which provides for a scientifically drawn, unbiased sample whereby each unit of analysis has an equal chance of being chosen for study.
resulting from tampering with mines and UXO, and direct information on the location of villagers undertaking mine clearance activities. They also checked the extent of mine clearance by organisations, to achieve a balance between target villages that had benefited from mine clearance work and those that had not. They obtained this information through consultation with stakeholders, and from national data on contaminated areas and mine incidents. They developed a short-list of villages based on the criteria and checked the village location on maps to ascertain the geographic situation of the villages and the accessibility. During the study, the team remained flexible in terms of the village visited. Sometimes they discovered new leads that took them to villages not on the short-list. Alternatively, villages were not always accessible and some villages that they had selected proved to have no evidence of village demining. In these cases, the team re-adjusted and other villages on the short-list were visited.

The team selected key informants mainly through a snowballing technique, also known as chain referral sampling, whereby each person interviewed was asked to identify others who belonged to the target population of interest. They asked subsequent respondents to refer other people who could potentially participate in the study, thus leading to a snowball effect. The major advantage of this form of purposive sampling is that it substantially increases the likelihood of locating the desired individuals in the population, particularly if such individuals would otherwise be difficult to locate and contact. Local authorities and village deminers were often able to point the research team to other village deminers, or to other villages where informal clearance was taking place. Observation of living conditions also helped to identify villagers who were clearing mines, particularly if their housing or fields were clearly in suspect areas.

Sample sizes, using purposive sampling, are often dependent on the resources and time available and the idea of “theoretical saturation”, basically the point in the research when the accounts being given by the respondents no longer bring additional insights to the research questions. While not a statistically representative sample, the team interviewed 94 village deminers in 45 villages in three provinces. This was enough to be able to provide a comprehensive picture of these individuals.

The majority of the key informants for the study were adult men, particularly men with former military experience, as this is the common profile of village deminers in Cambodia. Local authorities are also male dominated. However, the research also sought to obtain the opinions of women, both the female family members of village deminers and also other female residents living in villages where informal demining took place. Obtaining female perceptions on the risks either faced by their husbands or by people using informally cleared land was essential in gaining a balanced view on the subject. Because of the sensitivity of the subject, the research team clearly stated the aims to informants before interviews so that they could decide if they wanted to participate. Informants were also guaranteed anonymity and confidentiality, and the names of individuals used in the study reports were changed.

The researchers used tape recorders to record the interviews. As the researchers worked in pairs, one researcher conducted the interview while the other took notes as a back-up measure in case the machines failed to record or the recorded conversation was unclear due to background noise, a common problem in Cambodian villages. This meant that the interviewer was able to fully concentrate on the interview and was not distracted by writing notes. Interviews lasted from 30 minutes to a maximum of two hours. The interviews with villagers and family members were often much shorter than those with the village deminers and village authorities. Some informants were interviewed more than once to collect additional data.

The most time-consuming part of qualitative data collection is writing up the transcripts after the interviews. Transcripts are the written record of the recorded interview, and they are essential for

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1 Where the sample group appears to grow like a rolling snowball.
2 This is another characteristic of qualitative research that differs from quantitative survey methodologies where informants are only interviewed one time.
ensuring that the voice of the respondent is accurately documented. The use of quotes documented from transcripts can provide clear insight into how people view the world. Transcribing data also helps to familiarize the researcher with the data and the transcripts produced are key documents to use in the analysis of qualitative data. During the field-work, the study team set aside time to transcribe the data as the research progressed. This helped to avoid having a large backlog of interviews to transcribe. It also meant that analysis was an ongoing activity, and the researchers were able to document and respond to emerging themes as the research progressed.

Data generated through qualitative research includes field notes, audio recordings, transcripts and sometimes visual records such as photographs. The analysis requires the researchers to identify and interpret recurrent themes, patterns, commonalities and differences within the data. Data can be coded and categorized to document the themes. The findings of the village demining study were also presented at workshops with stakeholders. This further helped to refine the analysis as feedback was gained on the ideas being proposed by the researchers. The presentation of qualitative data to inform policy and strategy can be problematic as it is often in narrative form and fairly dense. It is not easily accessible to decision-makers who have little time to read lengthy reports. This means there is often a requirement to present the findings in more digestible formats such as diagrams, case studies or in short executive summaries outlining the key findings and recommendations.

Analysis
The majority of discussion surrounding the village demining issue prior to the research study had focused on whether village deminers should be trained in demining techniques, or at least be provided with some safety equipment. The study, which provided a more rigorous analysis of the circumstances of village deminers, revealed that the debate on training was only one small part of the equation and had an overly narrow focus on technical expertise and safety. This had prevented mine action from addressing the issue in other ways.

The qualitative research clearly showed that village demining was largely a consequence of the vulnerability of rural people living in contaminated areas to other risk factors such as hunger, sickness, land insecurity and a lack of alternative livelihood options. As many men had former military experience, they felt they could use these existing skills to conduct basic demining and thus reduce the vulnerability to some of these other risk factors. The majority of village deminers did not want training in demining. What they wanted was access to land and livelihood security. While no easy answers emerged, the study highlighted that the mine action sector could address village demining though means other than the transference of technical skills. More participation of affected communities in the mine action planning process was required, alongside a flexible and timely clearance response integrated with broader development initiatives that could begin to address some of the pressing livelihood issues.

The study has since informed the development of some innovative mine action initiatives in Cambodia that have aimed to better address the needs of the affected communities. In particular:

- The locality demining approach developed by the Mines Advisory Group (MAG) recruits vulnerable people living in mine-affected areas and trains them to demine to the same standards and regulations as MAG’s regular teams. The teams of locality deminers work to clear the minefields in their village vicinity for a period of two to three years. During that time they not only contribute to making their villages safer, but they also earn a regular income which helps to improve their livelihoods.

- The Community-Based Mine Risk Reduction (CBMRR) project of the Cambodian Mine Action Centre (CMAC) was established with the support of HIB and UNICEF in response to the study findings that high risk behaviours such as village demining were not being addressed by traditional MRE approaches. CBMRR works to involve local people actively in the mine action prioritisation process and also helps to link them with mine action, victim assistance and development services so that their broader livelihood needs could be better addressed.
• In 2005, the Cambodian Mine Action Authority implemented an area reduction policy. A footnote in the Cambodian National Mine Action Strategy 2010-2019, notes, “village deminers have reduced the level of threat over large areas of land and returned that land to productive use. Such practices have led the RGC\(^5\) to develop national policies, such as the area reduction policy allowing operators to reclaim from suspicion previously suspected land that has been returned into productive use.” This has enabled the better deployment of demining resources to areas that are known still to be contaminated.

References

\(^5\) Royal Government of Cambodia