



Socialization in Zambia. Photo: Bryan/Oxfam

# GOING DIGITAL

## Using and sharing real-time data during fieldwork

Two years on from the **Going Digital: Using digital technology to conduct Oxfam's Effectiveness Reviews** pilots, Oxfam continues to develop its survey techniques through the use of technology. This short paper examines how Oxfam has piloted using and sharing real-time data during fieldwork. It argues that this has the potential to increase engagement and participation in surveyed communities, as well as improving integration between qualitative and quantitative data collection techniques.

# 1 INTRODUCTION

In 2015, Oxfam's team of Impact Evaluation Advisers started using digital devices to conduct household surveys for Oxfam's Effectiveness Reviews (ex-post, quasi-experimental impact evaluations). We documented and shared our experience of making the transition from a paper process to a digital one in 'Going Digital: Using digital technology to conduct Oxfam's Effectiveness Reviews'.<sup>1</sup>

In the last two years, we have conducted individual and household surveys using digital devices in more than 18 countries for the Effectiveness Reviews. In many of these data-collection processes we took advantage of features provided by digital devices to pilot solutions that would help to increase data quality, knowledge dissemination, participation and engagement. One of these features is the ability to process data in real time, while data collection is still underway. Our experience is that using and sharing real-time data during the fieldwork has the potential to increase community participation and engagement with survey respondents. It further supports knowledge sharing, and helps to enable greater integration between qualitative and quantitative data collection techniques for an evaluation perspective.

We would like to share three examples to help illustrate these benefits: the Effectiveness Reviews in Thailand (2015), Armenia (2016) and Zambia (2017); and then discuss some of the challenges we faced and lessons we learned along the way. We presented these findings at the ICT4Eval conference in Rome, 4–5 July 2017. This short document is a summary of our presentation. The full video of the presentation can be found at the following link: [https://youtu.be/xSZBhXAOL\\_Q](https://youtu.be/xSZBhXAOL_Q)

## 2 HOUSEHOLD SURVEYS LIMITATIONS: HOW CAN ICT SUPPORT?

Using digital devices has many clear advantages over paper-based data collection: it reduces cost and the time required to complete the interview and clean the data. It also increases data accuracy and data security. These advantages are well known, but we think that there are other challenges related to how most household surveys are conducted that could be addressed by the use of ICT (information and communications technology).

First, there is the recognition that household surveys can be long and tedious, which may mean respondents feel little connection with their aims and have limited motivation to take part. This is likely to affect the response rate, and consequently the representativeness of the sample and the quality of the data.

Second, there is recognition that in household surveys, respondents dedicate time to provide detailed information which researchers and evaluators will use to answer evaluation and research questions. To close this loop, researchers and evaluators need to return to the same communities to share the results with the individuals who provided the data. This is not standard practice and where it does happen, it is often a long time after the data was originally collected.

Third, research and evaluation exercises, which often rely on extensive household surveys, are not always trying to answer questions that are directly relevant or important to the respondents and their communities. Frequently, research and evaluation questions are formulated and determined by different interests, which may only indirectly reflect community needs.

Using ICT for data collection enables the processing of survey data in real time. This enables summary survey data to be shared with communities almost immediately, even while fieldwork is still being conducted, which has the potential to increase engagement and participation with

surveyed communities. Moreover, processing survey data in real time also has the potential to improve how qualitative and quantitative techniques can be integrated.

### 3 SHOWCASES

In this section, we present three examples of fieldwork conducted as part of an Oxfam's Effectiveness Review, where we piloted sharing and using data while data collection was still ongoing.

#### Thailand (2015)

Thailand was our second attempt to use digital devices, and our first attempt to share data while data collection was taking place. The evaluation aimed to assess the impact of a resilience-related project in northern Thailand.



Socialization in Thailand. Photo: Rungthong Kramanon, Consultant

The objective of the exercise was to increase engagement in the survey and enable information sharing among leaders of agricultural groups. The exercise also served to validate some of the questions and concepts that the questionnaire was trying to answer.

During the questionnaire design phase the evaluation team, programme staff, and a group of agricultural association leaders identified a number of key indicators on farming activities that were considered to be important.

Data were collected using digital devices, and data collection was set up so that every night enumerators in the field connected via WiFi to upload interview data to the server. To mitigate security risks, data were stored on a secure server to which only the leading evaluator had access. When the team of enumerators had concluded all the interviews scheduled in the region, the evaluator was able to download the data and process the information. This processed information was immediately sent back the research team in the field, who then presented the findings to the leaders of the agricultural groups.



Although the process of downloading and generating summary data was all automated, the process was still considered labour intensive as it required close interactions between the evaluator, who was off site, and the research team in the field.

The field research team held four presentations, inviting all leaders of the agricultural groups involved in the survey. This provided the opportunity to increase engagement and highlighted a gap in the collected data on the issue of registering farming certificates, which had not come up during the questionnaire design.

## **Armenia (2016)**

In Armenia, the evaluation aimed to assess the impact of a project working on farming cooperatives and women's economic empowerment. Data collection was designed to integrate the quantitative survey data with qualitative data-collection methods.

The evaluation had two components: an individual quantitative survey given to a random sample of women involved in the project, and a qualitative component of focus group discussions and follow-up qualitative interviews, where randomly selected women from the sample were asked to elaborate on the reasons why they answered in a certain way to the quantitative survey.

Using digital devices allowed the qualitative team to follow-up the quantitative survey with qualitative interviews and focus group discussions using real-time responses collected from the individual surveys. This allowed qualitative and quantitative data-collection processes to take place in parallel and to complement one another.



Interview in Armenia. Photo: AM Partners

While the individual surveys were designed to provide estimates representative of the entire population, focus group discussions and follow-up qualitative interviews were used to investigate the questions 'how' and 'why' participants responded in a certain way, aiding the understanding of women's empowerment itself in this context as well as some of the mechanisms of the project.

## Zambia (2017)

Zambia was our most recent attempt to share and use data during data collection. The objective was two-fold: first, to provide information collected with the Disaster Management Committee (DMC) on water sources, climate change, harvest, agricultural techniques and early warning systems. The second objective was to increase the engagement and participation of project participants.

A research assistant managed the feedback process and conducted three group meetings with the DMCs. Data collected through the survey was also shared with 92 survey participants who attended these meetings, including information on water sources and agricultural techniques employed by survey respondents in neighbouring communities.

The researcher used a standard PowerPoint presentation to feedback findings to the DMCs, but for communities, a communication approach based on using physical objects (cassavas) was used to present statistical and abstract concepts, such as proportions.

The entire process received positive feedback from the participants, with one commenting, for instance, 'it was useful, now we know that in some areas other people are producing better so we can go and learn about that'. Those in attendance reflected on the information given and were surprised by some results, for example, on the use of agricultural techniques employed in neighbouring communities, and were eager to learn more to apply them in their own work. In a session with representatives from two comparison communities, the role of the DMC was debated and participants explored how the role of the DMC could be improved.

## 4 CONSIDERATIONS

Through these experiences, we have found real value in sharing and using real-time survey data during or immediately following fieldwork data collection. It helps in increasing engagement and community participation, enabling knowledge sharing and supporting greater integration between qualitative and quantitative techniques. The design and implementation of these real-time exercises can vary significantly depending on the purpose. Practitioners considering using real-time feedback may find it useful in the first instance to work through some core questions, which can help clarify the objectives and shape the design.

## 5 KEY QUESTIONS

### **What is the objective of using real-time data?**

While the enabling technology was the same, the three examples had different objectives. In Thailand and Zambia, the primary objective was to share information and enhance greater community engagement with respondents and community leaders in order to reduce the feeling of household surveys being a purely extractive process. In Armenia, on the other hand, we aimed to better integrate qualitative and quantitative data-collection methods in order to increase the evaluation's ability to test/establish the project's impact and to nuance our understanding of women's empowerment in that context.

### **Who to communicate with?**

Different objectives will have different target audiences. For example, in Thailand, as the project and the survey made extensive use of agricultural groups, the target audience was identified from among the leaders of local agricultural groups. In Armenia, the target audience was

women who were sampled from project participants and the comparison group. In Zambia, the socialization exercise was conducted with both the Disaster Management Committees and within the surveyed villages.

### **How to communicate effectively?**

It is important to define the style and communication strategies depending on the audience. For example, in Zambia, the presentation to the representatives of the DMC was done using PowerPoint, while presentations to community groups were done using physical objects, in this case cassavas, in order to communicate technical concepts, such as proportions.



Socialization in Zambia. Photo: Bryan (Oxfam)

### **What to present?**

It goes without saying that whatever is presented and shared should be of interest to the group being presented to. For this reason, it is advisable to work on what information will be of use for the people attending these events.

Secondly, it is important to ensure that information shared is not traceable to identifiable individuals and that it does not represent sensitive information. What constitutes sensitive information may vary depending on the context.

## **6 CHALLENGES**

Of course, we also faced a number of challenges that are important to bear in mind.

### **Not all household surveys can or should be conducted with digital devices**

This can be for a number of reasons; for instance, physical or digital security considerations. If, after careful analysis, a context is deemed to be not suitable for using digital tools, then the length of time it takes to receive and analyse the data could prevent the socialization of results back to the community.

## **Data protection risk with sharing data**

When data is shared, evaluators and researchers should consider the data security risks posed to those who participated in the study. Precautions should be taken when sharing household-level and personal data. Figures should be presented in averages, and there should be no mention of outliers so that it is not possible to identify any individuals. In the Zambia example, no information on ownership of livestock, assets or household goods was shared in the socialization session, as it was deemed too sensitive.

## **Inclusivity of feeding back results**

An important part of feeding back the results to the community is to ensure that it is an open group and accessible both to those who did and who did not participate in the research. Data should be presented in a way that can be understood by all, and the session should be open to all demographic groups in the community. It can take time to understand how best to present findings, which also requires a strong understanding of any community dynamics that may lead to exclusion of some groups.

## **Capacity**

The use of digital technology in conducting surveys and research is still not widespread in the sector. Evaluators or researchers involved need to hold the right set of skills. In the first place, they need to be comfortable using digital devices for conducting household surveys. At the same time, they need to have presentation and facilitation skills required to convey technical concepts in an accessible and non-technical way. Finally, if the exercise involves combining mixed methods, then the person responsible for this activity will also need to understand the relative value of all the methods involved and be able to bring these together.

## **Information capturing and action**

During these exercises, participants often provide valuable information from an evaluation prospective. The person facilitating these events should be able to identify what information is relevant, and ensure that is properly captured and documented, in order that it can be used in the evaluation.

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## NOTES

- 1 E. Tomkys and S. Lombardini (2015). *Going Digital: Using digital technology to conduct Oxfam's Effectiveness Reviews*. Oxford: Oxfam GB. <http://policy-practice.oxfam.org.uk/publications/going-digital-using-digital-technology-to-conduct-oxfams-effectiveness-reviews-578816>

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For further information on the issues raised in this paper please email [slombardini@oxfam.org.uk](mailto:slombardini@oxfam.org.uk)

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