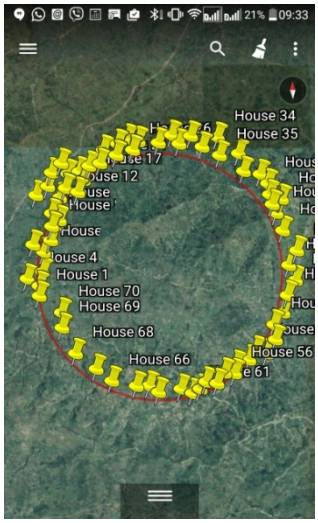
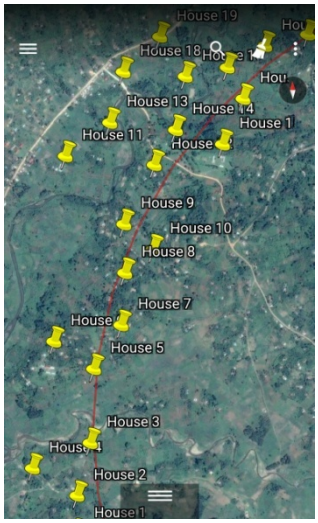
RESEARCH PEARLS | FEDU PEARL #2

In our series "Research Pearls" we are providing first-hand insights into our dynamic and powerful diaries research. Following Pearl #1, where we had a look at the sample selection, in this edition we pay a closer look to implementation of the sample selection, including some obstacles that were encountered.

Sample implementation

In the first Pearl we described a simple sampling method using Google Earth. This method would sample households at a 2km circle around researchers' houses. In practice, things did not quite work out the way we had hoped. In order to get the location of the researchers, we created a survey to get the GPS location of each researcher's place of residence. With this information, we drew a "circle" with a radius of 2km on Google Earth, and marked 70 houses (to-be-respondents for the baseline) along that circle.





The first problem we encountered was that researchers had trouble finding the houses that were assigned to them using the GPS coordinates. Their phones failed. A more accurate GPS device would be needed for this so most of the time this was not practical, due to the device getting stuck.

Secondly and most challengingly, aside from a few researchers, most were not so well rounded with using technology or indeed the concept of north and south. They had trouble using the GPS, as well as reading the maps. It was extremely difficult to guide them via distance through text messages or e-mails.

Thirdly, using Google Earth to calculate distance means "drawing a line" from point A to point B. This is the shortest distance between two points but does not take into regard topography. Hence, the actual distances are either greater or less than 2kms, or not even manageable due to geographical structures.

Given the above obstacles, sample selection proved to be very time intensive and did not work well in practice. As a result, a new approach had to be taken.

Figure 1: Houses are on either side of a river

Consequently, we pre-selected 70 houses using Google Earth, indicating these on the map, which we then sent out to the researchers (see Figure 1 and 2). However, further problems prevailed. It is not possible on maps to see whether the house is actually someone's home, a house holding cattle, a shop, or just empty standing property. Indeed, a mix of those was encountered, making it still difficult to find suitable respondents.

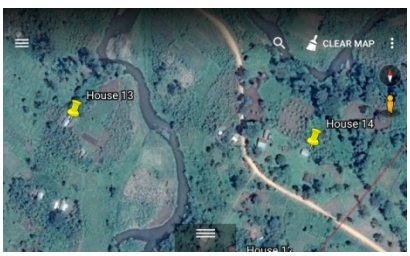


Figure 2: Figure 2: Houses 13 and 14 are just 120mts apart, but it may take 10 km walk

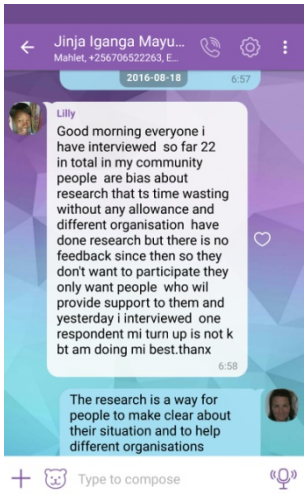
Final sample selection

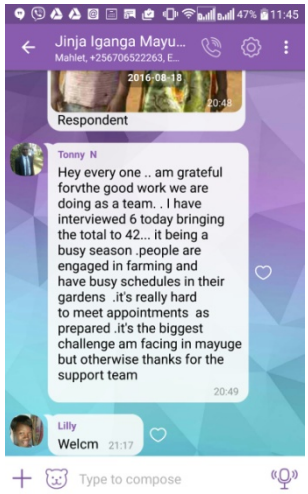
Finally, as none of the above seemed to be working effectively, the researchers were told to just walk a distance of 1 km around their

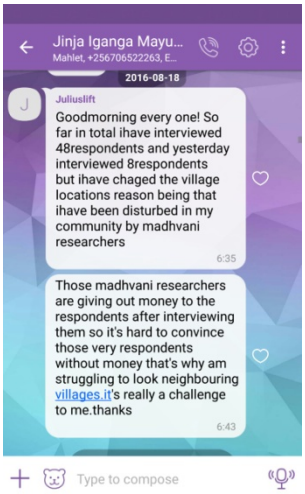
houses and find suitable households. They were told to interview households that were at least 100 meters away from each other to ensure that they would interview a range of respondents, not neighbours. This approach worked the most. Nevertheless, some researchers still had difficulties reading the map, ending up just walking in a straight line away from their house, instead of walking in all directions from their house.

Additionally, some researchers had great trouble convincing people to participate in the research, as they were not compensated in any way for their participation. This was particularly true for urban areas.

Another type of challenge was to get people to give their time, particularly in a busy agricultural season.







Using this approach however, we were managing to reach our respondent target. In the following Pearl we will look at the next step that was undertaken after the sample selection: the implementation of the baseline study.