

## **SOS sampling strategy proposal – version 0.2**

In every country, we have a gate-keeper in order to select our CBS users. In most countries, the gate-keeper is the CBS organisation, but in South Africa it is likely to be a community based organisation. Our proposed sampling strategy is as follows:

- Ask our gate keeper to suggest 150 CBS user households (defined as households with CBS within their property/compound) with a good geographic spread over the study site.
  - From these lists, we randomly select 50 households to become our CBS user sample. In 25 of these households (randomly selected) we approach/survey an adult female member of the household, and in the other 25 we approach/survey an adult male.
- We ask each person in the CBS user sample to identify three nearby households that are similar to them (i.e. similar property/compound [e.g. size, construction material etc] with a similar number of people in the household, and similar presence/absence of children, within the same study site) but do not have CBS within their property/compound.
  - From each list of three, we randomly select one. The gender from the randomly selected nearby household will match that of the CBS user (i.e. so if a female CBS user gave us a list of three households, then we would randomly select one and survey and adult female in that household; and vice versa for males).
- Thus, we end up with a paired list of 50 CBS users and 50 CBS non-users, with an even gender balance.

We are aware that there may be other socioeconomic stratifications missing from this sampling strategy but, on the whole, we are collecting data on these variables and may be able to draw statistical associations ad hoc. For example:

- Age – Our survey captures the age of the respondent, and so we should be able to analyse the impact of age on sanitation choices.
- Religion – Our survey captures the religion of the respondent, and so we should be able to analyse the impact of religion on sanitation choices.
- Ethnicity – Our survey captures the ethnicity of the respondent, and so we should be able to analyse the impact of ethnicity on sanitation choices.
- Early vs late adopter – There is some concern that those households with CBS will be fundamentally different to non-CBS users in the same area (i.e. late adopters of the technology). We might be able to control this if we can understand the reason for non-adoption. To do this, we propose to use the sanitation ladder. For example, our survey captures where the respondent falls on the sanitation ladder: if they fall above CBS on the ladder, then we would hypothesise their behaviour would be different to if they fall below CBS.