

Collecting national data through mobile phones

Sauti za Wananchi Methodology

What is Sauti za Wananchi?

Sauti za Wananchi (Voices of Citizens) is mobile phone initiative designed to regularly collect views and perceptions on issues of public interest from a broad cross-section of Ugandan citizens. Launched in 2013 in Tanzania, in 2016 in Kenya and now, in 2017, in Uganda, the initiative allows survey data to be gathered quickly and efficiently, at low cost. The methodology of the Sauti za Wananchi survey is explained briefly below. The full approach paper, which goes into greater depth on methodology and data collection, is available at twaweza.org/sauti.

How is it done?

The survey has two main phases:

1. Baseline survey (Household Survey)

This stage involves randomly selecting and enlisting participating households and respondents. Household and individual data are then collected to form a baseline. During the baseline data collection, mobile phones and solar chargers are distributed to respondents. Data are collected for the Baseline Survey through a traditional household survey using face-to-face Mobile Data Collection (interviewers recorded responses through a mobile system).

2. Mobile phone survey (CATI)

In this second phase, respondents selected during the baseline are contacted on the mobile phone given to them in monthly call rounds on various topics of public interest. Data are collected during the mobile phone surveys by call centre agents using Computer Aided Telephonic Interviews (CATI). These data are then analysed and synthesized into briefs which are launched to the public and made available on the Twaweza website (twaweza.org/sauti).

Sampling – Making tasty salad

To understand sampling, one can ask: how many bites of a salad does one need to check how it tastes? Do you need to eat the whole salad or just a bite or two? Even though there are lots of different ingredients all mixed in together, we can determine the taste of the whole by tasting a small part of it. In essence that is the meaning of *sampling*.

The target population for Sauti za Wananchi is all adults (18+) living in Uganda. Sauti za Wananchi uses a standard three stage survey sampling design to recruit 2,000 respondents for the call rounds. Although 2,000 might sound like a small sample for a nation of over 40 million, the number of respondents is large enough to ensure a 95% confidence interval and a small margin of error. This rigorous procedure of random sampling ensures that the panel is nationally representative. In comparison, surveys and polls like Afrobarometer, Gallup, and Pew have sample sizes of 1200, 1000-2000, and 1000 respondents respectively¹.

1 <http://www.afrobarometer.org/countries/uganda-0>, <http://www.gallup.com/178667/gallup-world-poll-work.aspx>, <http://www.pewresearch.org/methodology/u-s-survey-research/sampling/>

Sampling for Sauti za Wananchi can be broken down as follows:

Stage one - 200 Enumeration Areas (EAs) are randomly sampled countrywide. EAs are the smallest sampling survey areas in rural and urban settings defined by the Uganda Bureau of Statistics (UBOS), and using this sampling frame allows for a nationally representative split between rural and urban EAs.

Stage two - In each sampled Enumeration Area, all households are listed and 10 are selected randomly.

Stage three - One respondent (18+) is randomly chosen from all adult household members in each selected household.

How can we be sure that what you report represents the country?

The critical element is random sampling; since any Ugandan over 18 years of age has an equal likelihood of being selected as a respondent, the survey can be considered representative. Other types of surveys may have larger sample sizes but be less representative because of the way in which respondents are selected. For example online surveys may gather hundreds of thousands of responses but because only 13% of the country has access to the internet, these types of surveys can never be representative of the whole of Uganda.

In addition Twaweza offers a number of checks and balances on our data.

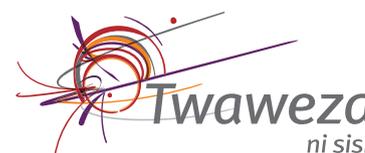
- Data collected are compared, at the point of analysis, with other similar survey data from international or national sources. This can only happen if data on the same topic are available but they help us to identify any anomalous findings.
- The call centre that contacts respondents every month is run independently of Twaweza. That makes it very difficult for Twaweza as an organisation to have influence over the results.
- In order to check that the call centre agents are not influencing responses and are recording data as it is collected, all calls are recorded and occasional spot checks on these recordings are carried out by a Twaweza staff member.

This brief was written and produced by Twaweza East Africa.

Naguru Go down, Suwara Road, Plot 77
P.O Box 40163, Kampala

t: +256 312 112815 | e: info@twaweza.org |
www.twaweza.org/sauti

Sauti za Wananchi



- All raw data in STATA and excel are available online so people can look into the findings one by one.

Who does the information come from?

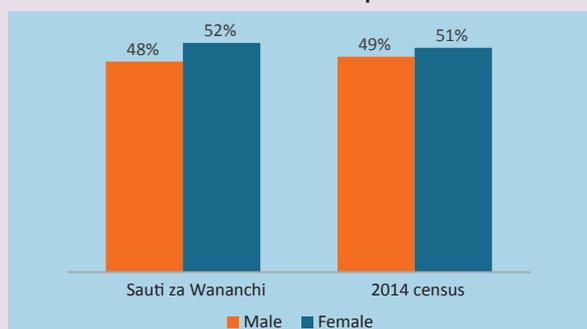
The charts and graphs below profile key characteristics of the people within the *Sauti za Wananchi* sample in comparison to the 2014 national population census. The sample is generally similar to the overall population of Uganda.

But why give the respondents phones and chargers?

Providing respondents with mobile phones and solar chargers is important because omitting this step (just calling people who already have phones) would exclude the poorest individuals from the sample. In addition, only 1 out of 5 of the population have access to electricity. Thus, provision of mobile phones and solar chargers ensures that the sample remains representative.

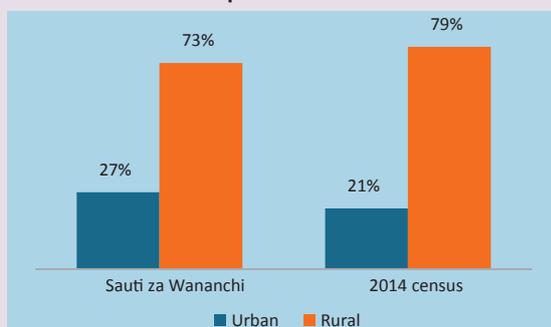
Comparison of Respondents to 2014 Census

Figure 1a: Gender of respondents: Sauti za Wananchi Census and sample



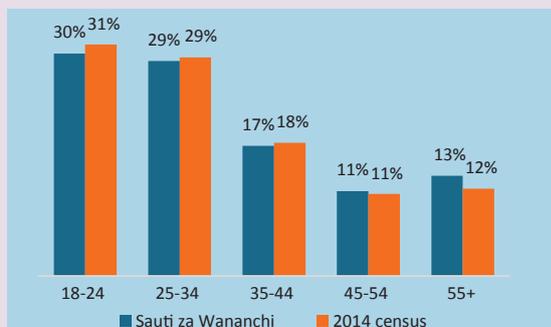
Source of data: *Sauti za Wananchi* Baseline Survey, 2017 and Uganda Census 2014

Figure 1b: Location of respondents: Sauti za Wananchi sample and Census



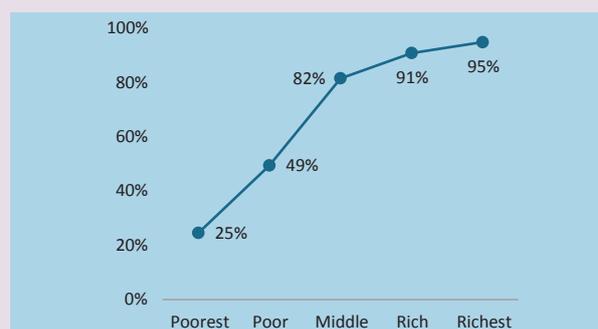
Source of data: *Sauti za Wananchi* Baseline Survey, 2017 and Uganda Census 2014

Figure 1c: Age of respondents: Sauti za Wananchi sample and Census



Source of data: *Sauti za Wananchi* Baseline Survey, 2017 and Uganda Census 2014

Figure 2: Mobile Phone ownership at the household across wealth quintiles



Source of data: *Sauti za Wananchi* Baseline Survey, 2017

Access to Electricity

Figure 3a: Access to electricity - Sauti za Wananchi

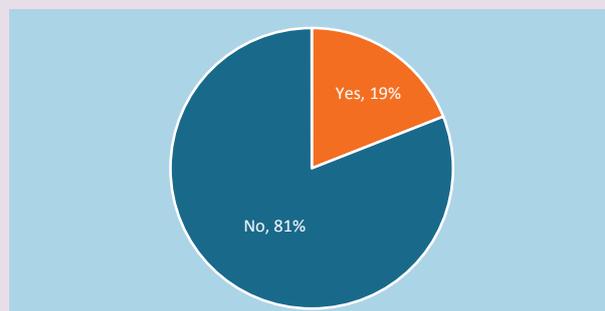
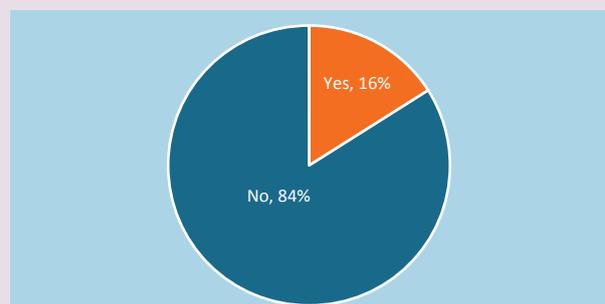


Figure 3b: Access to Electricity-Census



Source of data: (Figures 3a and 3b): *Sauti za Wananchi* Baseline Survey, 2017 and Uganda Census 2014