

GE Effects of Cash Transfers: Pre-analysis plan for Endline 3 Analyses¹

Dennis Egger, Grady Killeen, Edward Miguel, and Michael Walker

January 28th, 2025

Summary: This document updates two earlier pre-analysis plans on the longer-term effects of unconditional cash transfers as part of the General Equilibrium Effects (GE) project in western Kenya. The first concerns impacts on household welfare (Egger et al. 2021a), the second concerns impacts on local economic activity (Egger et al 2021b). We largely replicate earlier approaches, using identical estimation equations and variable definitions, simply extending the timeline to incorporate a new round of household, enterprise, and market data collected as part of Endline 3 between 2023-2025 (8-11 years after transfers). In this document, we describe the additional data collected (and not already contained in previous PAPs), and a limited set of modifications to our approach relative to earlier PAPs.

Appendix A: Endline 3 Household Census Survey Instrument

Appendix B: Endline 3 Enterprise Census Survey Instrument

Appendix C: Endline 3 Household Survey Instrument

Appendix D: Endline 3 Enterprise Survey Instrument

Appendix E: Endline 3 Market Price Survey, list of products

Appendix F: Data management note and attestations

¹ AEA Trial Registry: AEARCTR-0000505, <https://www.socialscienceregistry.org/trials/505>

We thank Layna Lowe, Nachiket Shah, Nick Shankar for excellent research assistance on this pre-analysis plan, which builds on past work by numerous research assistants for previous pre-analysis plans, andCarolyn Nekesa, Andrew Wabwire, Eric Owino, Irene Barasa, and the entire team of Vyxer REMIT Kenya for excellent work in the field.

Egger (Oxford University): dennis.egger@economics.ox.ac.uk

Killeen (UC Berkeley): gkilleen@berkeley.edu

Miguel (UC Berkeley): emiguel@berkeley.edu

Walker (UC Berkeley): mwwalker@berkeley.edu

1. Introduction

This document outlines the analysis plan for the long-run household and local economy survey data collected between 2023 - 2025, as part of the General Equilibrium Effects (GE) project, a randomized controlled trial of an unconditional cash transfer program by the NGO *GiveDirectly* (GD). For details of the design, see the previously filed PAPs, namely Egger et al. (2021a) and Egger et al. (2022).

The analyses outlined in this document will be primarily based on a new round of data collected between 2023 - 2025 (Endline 3), roughly 9 years after the GD cash transfers went out, as highlighted in the approximate timeline below:

- 2014 - 2015: Baseline (pre-intervention)
- 2014 - 2016: Intervention
- 2014 - 2017: Midline
- 2016 - 2017: Endline 1
- 2019 - 2021: Endline 2
- 2023 - 2025: Endline 3

We are interested in two broad types of long-run analyses:

- i. The medium-term welfare impacts of cash transfers on recipient households (and their neighbors) present in our study area at the time of the intervention, and
- ii. the impacts of cash transfers on the local economy more broadly

Our plan is to extend the analysis outlined in the two PAPs focused on medium-run impacts. Egger et al. (2021a) describes the household welfare analysis, and Egger et al. (2022) describes the local economic outcomes. We continue to focus on this outcome, with the same categorizations of primary and secondary measures and outcome families as in Endline 2. Since our plan is to extend the analysis described in these PAPs, we do not duplicate the discussion of outcome construction in this document. This PAP instead describes updates to our methodological approach and slight updates and changes to the primary and secondary outcomes, and we encourage readers to refer back to these earlier PAPs for a list of outcomes and their construction.

1.1. Relation to previous work

This pre-analysis plan builds on a series of eight earlier pre-analysis plans filed for the GE project: One outlining the analyses of Endline 1 household data (Haushofer et al. 2017a), one outlining the analyses of midline data (Haushofer et al. 2016), one relating to the analysis of cash targeting (Haushofer et al. 2017b), one relating to general equilibrium effects at Endline 1 (Haushofer et al. 2018), one outlining analyses relating to local public finance (Walker 2017), one describing medium run welfare analysis (Egger et al. 2021a), one describing medium run local economy analysis (Egger et al. 2021b), and an analysis plan that focuses on child mortality (Egger et al. 2023). Moreover, it builds on analyses in three existing papers: Egger et al. (2022), Walker (2019), and Walker et al. (2024). While the intention is that this PAP can be read and understood by itself, much of the detail and thought development can be traced in these earlier documents, and we will sometimes err on the side of brevity to avoid repetition.

2. Data

The primary data source for this analysis consists of household and enterprise surveys collected in Endline 3, but we will also use data from the Endline 3 household and enterprise censuses and earlier rounds of data collection. In this section, we describe the additional data collection conducted since Endline 2 (2019-2022), which closely mirrors our discussion in an amendment to the child mortality PAP filed in Egger et al. (2024) and is duplicated here for simplicity. We also briefly mention the price data collected as part of Endline 3, which is primarily used for deflating nominal measures.

Endline 3 data collection comprised the following activities:

- | | | |
|----------------------------|------------|-----------------------|
| a) Household census | April 2023 | - November 2023 |
| b) Household survey | June 2024 | - July 2025 (approx.) |
| c) Enterprise census | April 2023 | - November 2023 |
| d) Enterprise survey | June 2024 | - July 2025 (approx.) |
| e) Market census & surveys | April 2024 | - May 2024 |
| f) Market price survey | April 2024 | - July 2025 (approx.) |

Activities for Endline 3 will include a household census, enterprise census, household surveys, enterprise surveys, and price surveys. The household and enterprise censusing activities were conducted at the same time, and lasted from April 2023 to November 2023. The survey activities will also be conducted concurrently with each other. They began in June 2024 and we expect them to conclude in mid-2025. Price surveys occur monthly throughout the project. In addition, we collected market census and surveys as part of Walker et al. (2024). The market census and survey activities were conducted in 54 markets across Siaya county from April 2024 to May 2024. These activities were conducted to capture markets and enterprises in Siaya county / adjacent to our study area that were not (or only partially) captured in the Endline 3 enterprise census and surveys.

2.1. Household Sample

This section replicates the discussion in Egger et al. (2024) and is duplicated here for convenience.

The EL3 household survey reaches a representative sample of households present in the study area as of the EL3 household census and a representative sample of households present in the study area at baseline. Either of these representative samples may be obtained via appropriate inverse probability weights as described below. We consider the following categories of households present in the endline 3 census:

- a) **Baseline households: ~70% of EL3 censused households (N=56,098)**
 - i) Households that were eligible (for transfers) at Baseline
 - Stayers: Still living in the study area
 - Movers: Now living outside the study area. (These are not covered in the census, but will be tracked as part of the survey activity, allowing us to augment our census-based estimates of infant and child mortality effects).
 - Movers since Endline 2: Now living outside the study area, but moved after Endline 2. As with above, they are not covered in the census since they are no longer living locally.

- Endline 2 movers that returned to the study area: Households that moved out of the study area between baseline and Endline 2, but then moved back to the study area between Endline 2 and endline 3.
 - ii) Households that were ineligible (for transfers) at Baseline
 - Stayers: Still living in the study area
 - Movers: Now living outside the study area
 - Movers since Endline 2: Same as for eligibles
 - Endline 2 movers that returned to the study area: Same as for eligibles
- b) **Endline 2 households: ~10% of EL3 censused households (N = 8,162)**
 - i) Endline 2 movers into the study area: Households that lived outside of the study area at baseline, but moved into the study area by the Endline 2 census.
 - ii) Split-off households between BL and EL2: Households where children of baseline households established new households prior to the Endline 2 census, or where the primary male or female established separate / additional households by the Endline 2 census.
 - iii) “Ghost” households captured at Endline 2: These are defined as households that reported being present in the study area at baseline during the Endline 2 census, but they were not surveyed during the Baseline or Endline 1 data we collected. We will use the same “ghost” term below to refer to households that were missed through Endline 2 but reported being present in the study area by Baseline, Endline 1, or Endline 2, and were not surveyed until the Endline 3 census.
- c) **Newly censused Endline 3 households: ~20% of EL3 censused households (N = 15,602)**
 - i) “Ghost” households captured at Endline 3: These are defined as households that reported being present in the study area at Baseline or Endline 2 during the Endline 3 census, but they were not surveyed during Baseline, Endline 1, or Endline 2.
 - ii) Split-off households after EL2: Households that split off from Baseline households *after* Endline 2 (category b part ii captures those that split off *before* Endline 2, whereas this category captures those that split off after). We define any household as split-off where children of Baseline households established new households, or where the primary male and female established separate / additional households. This is separated from category b part ii since households that split off before EL2 are included in the panel sample, but those that split off after EL2 are being targeted for surveys for the first time.
 - iii) New households: Households that moved into our study area after Endline 2 (i.e., were established AFTER Endline 2, but not split off from existing households and are not “ghost” households).

We then consider these categories of households present at Endline 3 plus information from prior rounds to construct the Endline 3 household survey sample. We begin by including all households included in the

targeted sample for the Endline 2 household survey. As detailed in the Endline 2 PAPs, this contains a representative sample of households present in the study area at Baseline and at Endline 2 (including households that moved out of the study area between Baseline and the EL2 household survey). The panel data on Baseline households surveyed in each round is the basis of the majority of the analysis in this PAP, while the other categories ensure that we obtain a representative sample of the 2024 population of the study area.

We then draw a representative sample of household types that were newly captured in the EL3 census: Baseline and EL2 ghost households (i.e., those that were not censused at EL2 but claim that they were resident in the area at Baseline or EL2), split-off households since EL2, and new households since EL2. The current project budget allowed us to include 1,500 households from these household types (ghost, split-off households, and new households) in the EL3 household survey sample. We draw a representative sample of these household types (ghost, split-off or new), stratified by sublocation, by multiplying the share of each household type within the sublocation by the number of additional surveys our budget affords within the sublocation. This ensures that we sample each of the household types that were not included in the EL2 survey with equal probability within a sub-location. The share of ghost, split-off and new households sampled within each sub-location varies since some areas may be more prone to certain types (e.g. migrants), so we wanted to ensure that no types were not undersampled within sublocations where they are prevalent.

We then randomly sort all households of each type (ghost, split-off or new) within the sublocation from the Endline 3 household census and include the first N observations in the sample, where N is the number of households of that type within the sublocation targeted for household surveys. The number of households targeted from each category is listed in the following paragraph.

This approach yields the following overall sampling strategy for the Endline 3 survey:

a) Baseline households: N = 8,409

- i. Households that were eligible at Baseline (stayers & movers): N = 5,663
Households per village (average): 8.67
- ii. Households that were ineligible at Baseline (stayers & movers): N = 2,746
Households per village (average): 4.2

We targeted all Baseline households in the target sample for household surveys at Endline 1, unless they withdrew consent during the Endline 2 survey. This includes all households targeted but not surveyed at Endline 1, and households that moved outside the study area since Baseline (more details can be found in Haushofer et al. 2017a).

If households had both a primary male and female, we randomly selected either the male or female to be the “target” respondent; if we could not reach the target respondent, but the spouse/partner was available, we surveyed the spouse/partner. For households that had previously been surveyed (either at Baseline or Endline), we targeted the respondent last (i.e., most recently) surveyed.

We conducted extensive tracking of moved-away households, sending team members across Kenya. For those moving to other countries, or to a few counties within Kenya where the security situation did not permit travel, we attempted to follow-up over the phone.

b) Endline 2 households: N = 2,098

i. **New households established by Endline 2: N = 629**
Households per village (average): 0.96

We targeted a random sample of max(1, 24%) of households newly established between Baseline and EL2 in each village for the EL2 household survey.

ii. **Split households (eligible & ineligible) censused at Endline 2: N = 894**
Households per village (average): 1.37

We targeted all households split-off from an eligible or ineligible household in our Endline 1 target sample at the time of the Endline 2 survey. Since the Endline 1 target sample is representative of all Baseline households, this yields a representative sample of households that split-off as of Endline 2.

iii. **Ghost households reached at Endline 2: N = 575**
Households per village (average): 0.88

We targeted a random sample of max(1, 24%) of ghost households reached at Endline 2 in each village for the EL2 household survey.

c) Endline 3 households: N = 1,494

i. **Households newly established after EL2: N=373**
Households per village (average): 0.57

See the details of the sampling protocol in the prior section (for this and following groups).

ii. **Endline 3 ghost households: N=599**
Households per village (average): 0.91

iii. **Endline 3 split households: N=522**
Households per village (average): 0.80

We randomly assigned half of households within each village to be visited in wave 1, projected to last from June 2024 through approximately November 2024, or wave 2, projected to last from roughly November 2024 to mid-2025. This ensures that the data from each wave is representative, so we may in the future present initial results using data from wave 1, then add in wave 2 data when data collection is complete.

For each stratum and wave (i.e. village-by-household-category), we will create sampling weights as the inverse sampling probability of this household within each stratum. These weights will make averages representative of households in each category as well as across categories. We will create weights separately for each wave, and pooled across both waves, and will use the corresponding weights in analyses utilizing data from each wave separately or combined.

2.2. Enterprise Data

Concurrently with the Endline 3 household census, we conducted an integrated enterprise census that enlisted all enterprises operating in the study area -- within villages as well as at all weekly market centers. This census was intended to update the enterprise census conducted at Endline 2. During the census, enterprises were matched in real-time to enterprises collected as part of the Endline 2 enterprise census, and to owner households, and we collected basic enterprise characteristics such as location, sector, type, ownership structure, revenues, profits and contact information for all enterprises. This yields a sampling frame comprised of the following enterprise categories:

- a) **Old Enterprises: 48.00%**
Enterprises that already existed at Endline 2.
- b) **Ghost Enterprises: 23.24%**
Enterprises that report operating within the study area at Endline 2, but that were not captured in our Endline 2 enterprise census.
- c) **New Enterprises: 28.77%**
Enterprises that report being newly established in the study area since Endline 2.

We then conducted enterprise surveys with a random subset of enterprises collected during the EL3 enterprise census (but not from the additional market census described in more detail below). We included all “Old Enterprises” that were surveyed at Endline 2 and then randomly sampled from “Ghost” and “New” enterprises to reach our overall target sample of 5,500. Sampling was stratified within these categories, and by enterprise location, and the type of location enterprises were operating from. We classified all enterprises according to their primary location as either operating in a village or in a market center, and as either operating from a homestead or from outside of a homestead. The Endline 3 target sample was determined in the following way:

- a) **Old Enterprises**
All enterprises targeted for enterprise surveys at Endline 2 that were still operating as of the Endline 3 enterprise census remained in the sample. This accounts for 55.14% of the targeted sample.
- b) **Ghost and New Enterprises**
Within each sublocation, we recorded the share of enterprises operating in villages on the respondent’s homestead, within villages outside of the homestead, and within market centers, then randomly sampled firms within these categories within the sublocation. We also calculated the share of “Ghost” versus “New” enterprises within each sublocation and sampled proportionally. “Ghosts” account for 20.16% of the targeted sample and “New” account for 24.71% of the targeted

sample.

c) Large Enterprises

We appended all enterprises with 3 or more employees to the survey sample with probability 1. These account for 2.87% of the targeted sample.

This yielded a total target sample of 5,646 enterprises. Similar to the household data, we then split the full sample into two waves. For enterprises operating in villages, we selected 50% of villages at random, and targeted the first set of villages for Wave 1, and the second set of villages in Wave 2. For enterprises operating in market centers, we selected a random 50% of each enterprise category in each market center for Wave 1, and the remainder for Wave 2. Wave 1 data collection was conducted between June 2024 - December 2024. Wave 2 has not yet started.

Additional Market Census & Surveys

In addition to the enterprise census and surveys described above, we conducted a full enterprise census of 54 rural markets in Siaya county from April-May 2024 as part of the Walker et al. (2024) paper on ‘Slack and Economic Development’. Of these 54 markets, 10 markets were not part of the 61 markets recorded in the study area at baseline (or Endline 2), and the remaining 44 were recorded at baseline (and Endline 2) but we were not confident of having full coverage, as Endline 3 census visits were not necessarily conducted during a market day, and because the enumeration protocol for markets that were not located within any of the 653 experimental villages was somewhat ambiguous. The remaining 17 markets were located completely within the 653 villages, and we were confident we had covered the full extent of enterprises operating there during our EL3 census. The census captured basic enterprise characteristics such as location, sector, type, owner and employee information, revenue and profits for all market enterprises. This census captured 4737 enterprises across all 54 markets. A random subset of 1801 enterprises (drawn with a fixed probability on the spot by the electronic survey tool), were selected for additional enterprise surveys.

Final enterprise analysis samples

We construct two different analysis samples for enterprises, each with their respective advantages and disadvantages, though we consider one of them primary.

1. **Primary.** We rely entirely on EL3 enterprise census and surveys. This approach is more consistent with previous rounds, and has the additional advantage that EL3 census and surveys collected slightly more detailed information on certain outcomes, including enterprise costs, asset values, and investment. The EL3 surveys are also able to match enterprise owners to study area households and collect individual-level data for each employee at an enterprise (e.g. education level, location, earnings etc.), which the market surveys do not do.

This yields a total combined census of 17,311 enterprises (of which 8,117 operated from villages and homesteads, and 9,136 operated from market centers, with the remaining 58 undetermined). Of those, plus enterprises surveyed at Endline 2 and missed in the census, 5,646 enterprises were sampled to be surveyed (of which 2,845 operated from villages and homesteads, and 2,801 operated from market centers).

2. **Secondary:** We combine the EL3 enterprise census and surveys with the additional market census and surveys conducted in early 2024. We keep all enterprises censused and sampled who, at their primary location, operate from the homestead or within villages from the EL3 censuses and surveys, and the 17 markets which we did not revisit for additional market censuses. For the remaining 54 markets (including the 10 markets not captured at Baseline (or EL2), we rely on data (2024 market census and surveys) that we consider to be more complete.

This yields a total combined census of 17,236 enterprises (of which 8,117 operated from villages and homesteads, and 9,061 operated from market centers, with the remaining 58 undetermined). Of those, 6,021 enterprises were sampled to be surveyed (of which 2,845 operated from villages and homesteads, and 3,176 operated from market centers).

2.3. Price Data

At Endline 3, we collect data for the same products and in the same markets as for Endline 2, for 15 months between April 2024 and July 2025 (approx.). We visit all markets each month, except for June 2024 - July 2024, where 50% of markets were visited in June 2024 and the other 50% were visited in July 2024. In each visit, we collect both current prices as well as prices for the same items last month. We assign enumerators randomly to different markets and different products, and collect 3 price quotes from randomly selected sellers for each product at each market on a weekly market day. We record enumerator and seller gender, and follow a consistent protocol for eliciting price offers.

2.4. Analysis and data examined to date

As we submit this pre-analysis plan, data collection for Wave 1 has been completed. While some team members have looked at overall summary statistics to ensure data quality throughout the data collection, no treatment indicators have been merged to the data other than the child mortality measured described in Egger et al. (2024), nor have any data been analyzed in relation to treatment.

3. Empirical Strategy

We typically plan to follow the same empirical strategy as documented in Egger et al. (2021a) and Egger et al. (2021b). For details about the types of households included for different outcomes that are unchanged, we refer readers to these PAPs. In this section, we outline areas where we have refined our methodology and explain the reasons for these updates and the revised approach in detail.

3.1. Empirical specifications

Our analysis largely follows Egger et al. (2019) and updates to the empirical approach documented in Egger et al. (2024). First, we estimate the effects on recipient households, then the effects on non-recipient households present in the study area at the time of transfers (Baseline). We do not plan to make edits to our approach to applying corrections for multiple hypothesis testing or dimensions of heterogeneity considered, so we refer readers to Egger et al. (2021a) for details.

3.1.1. Effects on recipient households

Recipient households experience both direct effects of cash as well as potential within and across-village spillovers. A relatively crude way of capturing these spillovers, but one we consider a useful benchmark is the following specification which we run for eligible households present in the study area at the time of transfers:

$$y_{ivsw} = \alpha_1 Treat_v + \alpha_2 HighSat_s + \delta_1 y_{ivs,t=0} + \delta_2 M_{ivs} + \gamma_w + \varepsilon_{ivsw} \quad (1)$$

where y_{ivsw} is an outcome for household/individual i in village v and sublocation s (at Baseline) surveyed in Wave w , $Treat_v$ is an indicator for village v being treated, and $HighSat$ is an indicator for sublocation s being allocated *high* saturation status (i.e. $\frac{2}{3}$ of villages being treated in s , as opposed to $\frac{1}{3}$ in low-saturation sublocations). We include the baseline value of the outcome variable ($y_{ivs,t=0}$), when available, to improve statistical precision, set to the mean if missing and an indicator for missingness (M_{ivs}). γ_w are wave fixed effects. We cluster standard errors at the village level, and weight observations by inverse sampling probabilities to be representative of the population of eligible households.

Our primary parameter of interest is α_1 which captures the direct effect of treatment on recipients as well as any potential spillovers on treated households within treatment villages. α_2 measures any additional across-village spillovers *within* sublocations (but not across). Since administrative sublocation boundaries in our context are relatively unimportant for economic activity, with substantial interactions across borders, and no meaningful social or ethnic divides, we do not consider α_2 primary. Instead, our main spillover measure will be captured in equation (2).

To better capture the full spatial dimension of spillovers, we estimate the following specification for eligible households present in the study area at Baseline:

$$y_{ivw} = \alpha + \beta Amt_v + \sum_{r=2}^{\bar{R}} \beta_r Amt_{v,r}^{-v} + \delta_1 y_{iv,t=0} + \delta_2 M_{iv} + \gamma_w + \varepsilon_{ivw} \quad (2)$$

where Amt_v is the total per-capita amount transferred to village v , $Amt_{v,r}^{-v}$ is the total per-capita amount transferred to households in a buffer of $r-2$ to r km around the village centroid of village v , and all other variables are defined as above. All other variables defined as above.

The Amt variables depend on both the random assignment of villages to treatment and also on the endogenous share of households in those villages eligible for transfers. To overcome the endogeneity of the share of eligible households within a village, we instrumented for Amt using using the own-village treatment indicator $Treat_v$ and the share $s_{-v,r}^{e,t}$ of eligible households in each band assigned to treatment (at the time of treatment) in Egger et al. (2019). However, if treatment effects are homogeneous with respect to the share of eligible households in an area, then one may obtain more powerful estimates by fully leveraging knowledge of the design of the cash transfers in the first stage.

Let s_v^e denote the share of household eligible in village v and $s_{-v,r}^e$ the share of eligible households in an r kilometer radius excluding v . Under homogeneous treatment effects, the efficient vector of instruments is obtained by controlling for s_v^e and $s_{-v,r}^e$ in equation 2, then instrumenting for the Amt variables using $Treat_v$, $s_{-v,r}^{e,t}$, $Treat_v \cdot s_v^e$ and $s_{-v,r}^{e,t} \cdot s_v^e$. Intuitively, a treated village with almost no eligible households received much less cash than a treated village where very few households were eligible. The interacted terms in the instrument vector capture this heterogeneity, and the inclusion of each of the share of eligible households variables as controls purges endogeneity. We plan to report estimates with both this new set of

instruments, which we will refer to as the “interacted” set and those from Egger et al. (2019), which we will refer to as the “ECMA” instruments in this PAP. The “interacted” instrument is our primary specification due to its better efficiency properties under homogeneous treatment effects.²

In Egger et al. (2019) and the PAP filed for analysis of the endline 2 survey, we accounted for spatial correlation by estimating spatial HAC standard errors with a uniform kernel up to 10 km (Conley 2008). A known limitation is that the uniform kernel is not positive definite, so standard errors are sometimes complex if there is sufficient negative spatial auto-correlation. We found that this occurred a non-trivial share of the time across outcomes in endline 2 data due to the large number of outcomes and large kernel size. To address this limitation, and so that we can use the same kernel in analytic and spatial wild bootstrapped standard errors (Conley et al., 2023), we plan to report estimates using the positive definite kernel

$$K_{ij} = 1(d_{ij} \leq 10) \cdot \left(1 - \frac{d_{ij}}{10}\right)^2 \quad (3)$$

where $1()$ is the indicator function and d_{ij} is the distance in kilometers between observations i and j . We will continue to report estimates using a uniform kernel for robustness.

We select the maximum radii band included in the main specification (\bar{R}) as in Egger et al (2019), by first estimating a series of nested models with the outer limit R varying from 2 to 20 km, and then selecting the model which minimized the Schwarz Bayesian Information Criterion (BIC). In addition to the maximum radius selected by this procedure, we will also analyse effects using R_{SR}^- , where R_{SR}^- is the ‘optimal’ radius selected in the short run, for most outcomes at 2 km with a few exceptions at 4 km (Egger et al. 2019). If effects remain strongly localized as in Egger et al. (2019), we may additionally explore the spatial structure of spillovers, by defining smaller increments between radii bands.

Our main parameter of interest is the average “total effect” (including direct, within-village and across-village spillovers) experienced by recipient households, as in Egger et al. (2019). We calculate these by multiplying the estimated coefficients of Equation (2) by the average values of the regressors, i.e.

$$\hat{\beta} \cdot (Amt_v | i \text{ is an eligible recipient}) + \sum_{r=0}^{\bar{R}} \cdot (Amt_{v,r}^- | i \text{ is an eligible recipient}).$$

3.1.2. Effects on non-recipient households

Non-recipients are composed of eligible households in control villages as well as ineligible households in both treatment and control villages. These households experience indirect effects of cash transfers through both within-village spillovers (ineligibles in treated villages only) and across-village spillovers (both ineligible and eligible in control villages). We concentrate here on households present at the time of transfers (Baseline), since they should have experienced these spillovers over the entire period of transfers and thereafter. Note that New households’ decision to move into the study area may be impacted by cash transfers as well -- another local area spillover effect. We consider these effects part of the impacts of cash on the local area and economy in our second pre-analysis plan as outlined in Section 1. Here, the aim is to compare the effects on recipients to non-recipients living in the study area at Baseline. We estimate:

² If the two instruments produce different point estimates, that suggests heterogeneous treatment effects with respect to the share of households eligible for treatment at baseline, which corresponds to the wealth of the village. We may therefore examine heterogeneity with respect to these dimensions if the instrument estimates differ and consider reporting other LATEs.

$$y_{ivw} = \alpha + \sum_{r=2}^{\bar{R}} \beta_r^1 Amt_{v,r} + \sum_{r=2}^{\bar{R}} \beta_r^2 (Amt_{v,r} \cdot Elig_{iv}) + \gamma Elig_{iv} + y'_{iv,t=0} \cdot \delta + \gamma_w + \varepsilon_{ivw} \quad (4)$$

where $Amt_{v,r}$ is the per-capita amount of cash transferred into the $r-2$ to r km buffer around the centroid of village v , $Elig_{iv}$ is an indicator for household i being eligible at baseline, and $y'_{iv,t=0}$ is a vector of the baseline value of y_{iv} (set to the mean if missing) and an indicator for missiness, both interacted with indicators for eligibility. We again plan to instrument for $Amt_{v,r}$ using the ECMA instrument of the share of eligibles within buffer r around village v allocated to treatment ($s_{v,r}^{e,t}$) and the interacted instruments ($s_{v,r}^{e,t}$ and $s_{v,r}^{e,t} \cdot s_{v,r}^e$, controlling for $s_{v,r}^e$ in (4)). We plan to focus on estimates using Conley (2008) standard errors with the positive definite kernel defined in (3) but will report estimates with a uniform kernel for robustness. The procedure for determining \bar{R} will be the same as noted above for Equation (2).

Our main parameter of interest is the ‘total effect’ on non-recipient households, which is a population-weighted average of the average effects experienced by eligible households in control villages and ineligible households, as in Egger et al. (2019). This is calculated as:

$$s^{e,c} \left(\sum_{r=2}^{\bar{R}} (\hat{\beta}_r^1 + \hat{\beta}_r^2) \cdot \bar{A}mt_{v,r} | i \text{ is an eligible non-recipient} \right) + s^i \left(\sum_{r=2}^{\bar{R}} \hat{\beta}_r^1 \cdot \bar{A}mt_{v,r} | i \text{ is ineligible} \right)$$

where $s^{e,c} = 1 - s^i$ is the population share of eligible non-recipients among all non-recipient households. In supplemental material, we report the effects for these two groups separately, as well as the breakdown between within- and across-village spillovers (see the Appendix of Egger et al. (2019)).

Our main specifications (1), (2) and (3) do not include any covariate adjustments, since Egger et al. (2019) found these to leave main results largely unchanged. We may consider additional specifications with covariate adjustments as described in Haushofer et al. (2017a) if this meaningfully increases the precision of our estimates.

3.1.3. Enterprise impacts

Our empirical approach to estimating reduced form effects is unchanged from Egger et al. (2021b), so we refer readers to that PAP for details. There are refinements to spatial IV estimates, which we discuss in this section. In Egger et al. (2021b), we pre-specified the spatial IV models

$$y_{ivw} = \sum_{r=2}^{\bar{R}} \beta_r Amt_r \cdot X_{ivs} + \delta_1 y_{iv,t=0} \cdot X_{ivs} + \delta_2 M_{iv} \cdot X_{ivs} + \gamma_w \cdot X_{ivs} + \varepsilon_{ivw} \quad (5a)$$

$$y_{ivw} = \beta Amt_v \cdot X_{ivs} + \sum_{r=2}^{\bar{R}} \beta_r Amt_{v,r}^{-v} \cdot X_{ivs} + \delta_1 y_{iv,t=0} \cdot X_{ivs} + \delta_2 M_{iv} \cdot X_{ivs} + \gamma_w \cdot X_{ivs} + \varepsilon_{ivw} \quad (5b)$$

where Amt_r is the total per-capita amount distributed within a buffer of $r-2$ to 2 km, Amt_v is the total per-capita amount transferred to village v , $Amt_{v,r}^{-v}$ is the total per-capita amount transferred in a buffer of $r-2$ to r km around the village centroid of village v (but not to village v itself), and all other variables are defined as above in the household case. We plan to estimate the equations as pre-specified in Egger et al. (2022), but as in the household case using a refined set of instruments for the Amt variables, which depend on both the random assignment of villages to treatment and also on the endogenous share of households in those villages eligible for transfers.

We consider the ‘‘ECMA’’ instrument set which is the share of eligible households within each band assigned to treatment (at the time of treatment), and for (5b) using the own-village treatment indicator $Treat_v$ and the share $s_{-v,r}^{e,t}$ of eligible households in each band assigned to treatment (at the time of treatment). And we consider the ‘‘interacted’’ set which further includes the share of the population that was eligible in each village or radii band, $s_{-v,r}^{e,t} \cdot s_{-v,r}^e$, and include control for the endogenous share eligible variables, $s_{-v,r}^e$. Our reason for this refinement is the same as the household case: the interacted instrument is efficient if heterogeneity in treatment effects is small. For this reason, our primary estimates come from the ‘‘interacted’’ instruments, while we will report the ECMA instrument results for consistency. All other variables are defined as above. To account for spatial correlation, we calculate spatial HAC standard errors using the same kernel defined in (3), which is an update from the earlier PAP, and report the previously used uniform kernel up to 10km for robustness results (Conley 2008).

Our construction of total effects, selection of radii bands, and multiple inference adjustments are unchanged from the previous PAP.

3.2. Dynamic impacts

Where possible, we will pool the data with data collected at Endline 1, 2 and 3 to study dynamic impacts of cash on recipient households (Section 5 outlines which outcomes are available at both Endline 1 and Endline 2). First, we will estimate pooled regressions across both Endline 1, Endline 2 and Endline 3, as well as conduct tests for whether the estimated effects at Endline 3 are different from those at Endline 1 or Endline 2.

Second, we will investigate dynamic treatment effects more flexibly. The onset of cash transfers in each village, as well as survey timing across villages were randomized, thus providing random variation in the time expired between cash flowing into a household’s village (and its surroundings) and the time of outcome measurement (see Egger et al. (2019) for more details). In particular, Endline 1 spans a time period of approximately 0 - 30 months after transfers went out, while Endline 2 covers a period of 48 to 84 months after transfers, and Endline 3 is expected to cover a period from about 90 to 126 months after transfers.

This will allow us to extend ‘Impulse Response Functions’ described and employed in Egger et al. (2019), with the following dynamic versions of specifications (1), (2) and (3):

$$y_{it,vs} = \alpha_t + \sum_{l \in L} \alpha_l Treat_{v(t-l)} + \sum_{l \in L} \gamma_l HighSat_{s(t-l)} + \delta_1 y_{ivs,t=0} + \delta_2 M_{ivs} + \varepsilon_{ivs} \quad (6)$$

$$y_{it,v} = \alpha_t + \sum_{l \in L} \beta_l Amt_{v(t-l)} + \sum_{l \in L} \gamma_l Amt_{v(t-l),\bar{R}}^{-v} + \delta_1 y_{iv,t=0} + \delta_2 M_{iv} + \varepsilon_{iv} \quad (7)$$

$$y_{iv} = \alpha_t + \sum_{l \in L} \beta_l^l Amt_{v,\bar{R}} + \sum_{l \in L} \beta_l^2 (Amt_{v,\bar{R}} \cdot Elig_{iv}) + \gamma Elig_{iv} + y'_{iv,t=0} \cdot \delta + \varepsilon_{iv} \quad (8)$$

where $Treat_{v(t-l)}$ is an indicator for village v ’s experimental treatment start date falling within time period l before time t (and analogously for $HighSat_{s(t-l)}$). $Amt_{v(t-l)}$, $Amt_{v(t-l),\bar{R}}^{-v}$, and $Amt_{v,\bar{R}}$ are transfer amounts flowing into village v at time $t-l$, and into radii bands up to radius \bar{R} around village v at time $t-l$ (excluding or including village v). \bar{R} is determined as described in section 3.1.1 and 3.1.2. α_t are time-fixed effects. L are sets of time periods before measurement. There is a trade-off between estimation precision

and resolution of the impulse response function. We anticipate leading with a yearly frequency as our default, but may explore other periodicities.

Time fixed effects α_t capture any average variation in outcomes across calendar time (separately from time since treatment), including variations due to seasonality, or the COVID-19 pandemic..

A recent econometrics literature, such as Abraham and Sun (2021), has documented the potential for bias in these types of dynamic estimates if treatment effects are heterogeneous, which may be a particular concern when some observations affected by COVID-19 are used as controls for other time periods when the pandemic was non-binding. Examination of data through endline 2 suggests that these concerns may affect estimates, so we will also consider versions of these dynamic estimates that are robust to these concerns. In particular, since the study randomized experimental timing and cash transfers, an unbiased version of the dynamic estimates may be obtained by first restricting the sample to individuals surveyed l periods after the experiment began, then estimating

$$y_{it,vs} = \alpha_t + \alpha_l Treat_v + \gamma_l HighSat_s + \delta_1 y_{ivs,t=0} + \delta_2 M_{ivs} + \varepsilon_{ivs} \quad (6')$$

$$y_{it,v} = \alpha_t + \beta_l Amt_v + \sum_{l \in L} \gamma_l Amt_{v,\bar{R}}^{-v} + \delta_1 y_{iv,t=0} + \delta_2 M_{iv} + \varepsilon_{iv} \quad (7')$$

$$y_{iv} = \alpha_t + \beta_l^l Amt_{v,\bar{R}} + \sum_{l \in L} \beta_l^2 (Amt_{v,\bar{R}} \cdot Elig_{iv}) + \gamma Elig_{iv} + y'_{iv,t=0} \cdot \delta + \varepsilon_{iv} \quad (8')$$

for each l . In words, we simply estimate the primary equations used to estimate overall effects, but restricting the sample to those surveyed a given lag after the experimental start date. Joint estimation of the equations accounts for spatial dependence in the estimates. We currently view this second approach as primary based on evidence from Endline 2 data that the earlier approach may suffer from bias near the COVID-19 pandemic. But since this is a rapidly developing econometrics literature, we may also consider other state of the art estimators to address these concerns.

4. Primary outcomes of interest

We will analyze the same set of primary and secondary outcomes at EL3 as we did for EL2, and follow identical procedures for dealing with outliers, index construction, and for multiple hypothesis corrections.

The only differences are that – relative to EL2 – we will make the following changes to the primary and secondary outcomes of the Household Analyses (Egger et al. 2021a):

1. We added additional measures on birth and child-related outcomes, which we discuss in the previous PAPs (Egger et al. 2023, Egger et al. 2024)
2. We no longer measure primary outcome 5.5 - subjective well-being index, as we remove two subcomponents of the index – happiness and perceived stress. (5.5.2, 5.5.4). We retain the secondary outcomes as individual components, 5.5.1, 5.5.3, 5.5.5, 5.5.6.
3. We drop all COVID-19 related outcomes included at EL2 as secondary analyses (5.6.6 - 5.6.9)
4. We drop the child-environment index, and its subcomponents (5.7.4)
5. We remove secondary outcome 5.7.6 - Adult education.
6. We also discontinued the detailed measurement of social networks (5.15). Instead of asking specific details for each network connection, we now ask these questions in the form of Aggregate Relational

Data (ARD, as in Breza et al. 2020). This allows us to construct all analogous primary and secondary outcomes in family 5.15 as at EL2, except that we have to drop 5.1.5 - Average assets of good and close friends, and 5.1.6 - Average consumption of good and close friends.

The only differences are that – relative to EL2 – we will make the following changes to the primary and secondary outcomes of the Enterprise Analyses which were specified in the PAP specifying local economy analyses (Egger et al. 2021b):

1. Primary outcome 4.1 (capacity utilization index) will be measured slightly differently in EL3. It will remain a weighted standardized average, however it will not include the share of the respondent's time at work spent on enterprise-related activities. This is because we do not capture labor time use in any of the EL3 enterprises surveys. This also means that secondary outcome 4.2.2 (estimated labor utilization) cannot be measured in EL3.
2. Exploratory outcome 4.3.5 (whether the enterprise practiced price discrimination) cannot be measured in EL3, as we no longer ask whether the enterprise charged different prices based on various customer characteristics.

Additionally, for enterprises **only** surveyed as a part of the EL3 2024 market surveys, there are several other EL2 primary and secondary outcomes which we cannot construct:

1. Primary outcome 3.2: annual enterprise cost – because we do not ask these enterprises about rental costs of land, buildings and equipment, interest payments, or monthly taxes and utility costs. However, we can get a value for total enterprise costs in these surveys by subtracting total profits from total revenues (both of which we still ask about).
2. Secondary outcome 3.3.2: calculated annual profits – because we cannot calculate annual enterprise cost directly (as discussed above).
3. Secondary outcomes 3.4.4 and 3.4.5 – because we do not ask about a worker's education level.
4. Primary outcome 3.6: total capital stock of the enterprise excluding land (and all associated secondary outcomes) – because we do not ask about the value of any assets.
5. Primary outcome 3.7: total annual investment by the enterprise excluding land – this is because we only ask the enterprise what their *total* investment was over the past 30 days and 12 months, meaning we cannot exclude the investment in land from this value.

References

Abraham, S. & Sun, L. (2021). Estimating dynamic treatment effects in event studies with heterogeneous treatment effects. *Journal of Econometrics*, 225(2), 175–199.
<https://doi.org/https://doi.org/10.1016/j.jeconom.2020.09.006>

Breza, Emily, Arun G. Chandrasekhar, Tyler H. McCormick, and Mengjie Pan. 2020. "Using Aggregated Relational Data to Feasibly Identify Network Structure without Network Data." *American Economic Review*, 110 (8): 2454–84.

Conley, T. G. (1999). GMM estimation with cross sectional dependence. *Journal of Econometrics*, 92(1), 1–45. [https://doi.org/10.1016/S0304-4076\(98\)00084-0](https://doi.org/10.1016/S0304-4076(98)00084-0)

Conley, T. G. (2016). Spatial Econometrics. In *The New Palgrave Dictionary of Economics* (pp. 1–9). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-349-95121-5_2023-1

Conley, T. G., Gonçalves, S., Kim, M. S., & Perron, B. (2023). Bootstrap inference under cross-sectional dependence. *Quantitative Economics*, 14(2), 511–569. <https://doi.org/10.3982/QE1626>

Egger, D., J. Haushofer, E. Miguel, and M. Walker, 2021a. “GE Effects of Cash Transfers: Pre-analysis plan for Endline 2 Household”, July 2021. <https://www.socialscisceregistry.org/trials/505>

Egger, D., J. Haushofer, E. Miguel, and M. Walker, 2021b. “GE Effects of Cash Transfers: Pre-analysis plan for Endline 2 Local Economy Analyses”, December 2021. AEA Trial Registry: <https://www.socialscisceregistry.org/trials/505>

Egger, D., Haushofer, J., Miguel, E., Niehaus, P., & Walker, M. (2022). General Equilibrium Effects of Cash Transfers: Experimental Evidence From Kenya. *Econometrica*, 90(6), 2603–2643. <https://doi.org/10.3982/ECTA17945>

Egger, D., J. Haushofer, E. Miguel, and M. Walker, 2023. “GE Effects of Cash Transfers: Pre-analysis plan for Endline 3 Child Mortality Analysis”, May 2023. AEA Trial Registry: <https://www.socialscisceregistry.org/trials/505>

Egger, D., J. Haushofer, E. Miguel, and M. Walker, 2023. “Amendment to: GE Effects of Cash Transfers: Pre-analysis plan for Endline 3 Child Mortality Analysis”, Aug 2024. AEA Trial Registry: <https://www.socialscisceregistry.org/trials/505>

Walker, M.. 2019. “Informal Taxation and Cash Transfers: Experimental Evidence from Kenya”, working paper.

Walker, M. W., Shah, N., Miguel, E., Egger, D., Soliman, F. S., & Graff, T. (2024). Slack and Economic Development. *NBER Working Paper*. <https://doi.org/10.3386/W33055>

Appendix A: Endline 3 Household Census Survey Instrument

SECTION 1. Census Information

Greetings! You are about to begin the GE Endline 3 – Household Census. Please fill in the following questions before engaging the respondent.

1. Enumerator Information
 - a. Enumerator Name: _____
 - b. REMIT ID: |_|_|_|_|_|

2. Village Information
 - a. Subcounty: _____
 - b. Location: _____
 - c. Sublocation: _____
 - d. Village: _____

 - e. Please confirm that you have entered the correct information.
Subcounty: [SUBCOUNTY NAME]
Location: [LOCATION NAME]
Sublocation: [SUBLOCATION NAME]
Village: [VILLAGE NAME]

3. Today's date: |_|_|/|_|_|/|_|_|_|_|

You are now ready to begin censusing. Select “Add group” each time you approach another homestead. Sections 2-6 will be repeated for each homestead that you census.

SECTION 2. Identifying a Respondent & Informed Consent

1. FO: Is this homestead occupied?
 Occupied
 Unoccupied
 Cannot determine

2. FO: Who is available to give information on this homestead?
 A household member
 A household worker
 A village elder / guide
 A neighbor
 Other, specify: _____
 No knowledgeable person available

3. **(if unoccupied and there is available respondent)** When was this homestead last occupied?
 Before 2019 **Move to next homestead.**
 2019 or after **Continue.**
 Do not know **Continue.**

If homestead is occupied or unoccupied, and there is an available respondent, continue. Otherwise, move to next homestead.

4. FO: Read informed consent to available respondent.

Do you consent to take part in this research? (1=Yes, 2=No) |__|

If YES, skip to section 3. If NO, continue.

5. FO: Why does the respondent not consent?
 Does not refuse – wants to reschedule **Continue to question 6.**
 Does not refuse – unable to participate **Skip to question 7.**
 Refusal for this round only **Continue to question 6.**
 Refusal for this round and any future rounds **Continue to question 6.**

6. Are you willing to answer just a few questions so I can identify this household on our tracking sheet? (1=Yes, 2=No) |__|
If YES, skip to Section 3. If NO, continue.

FO: It is important that we can account for every household that may be on this village's tracking sheet. Try to ask for the name of the current primary male and/or primary female to see if this household is listed on the tracking sheet.

7. What is the name of the current primary male and/or primary female of this household?
a. Primary male: _____ Nickname: _____
b. Primary female: _____ Nickname: _____
If respondent refuses to provide information, move to next homestead. Otherwise, continue.

8. FO: Using the name of the current primary male and/or primary female, try to match this household to our tracking sheet for this village.
If matched, continue. If not matched, move to next homestead.

9. Is this a full match or a partial match?

Full match (this means both the primary male and primary female name match)

Partial match (this means only the primary male or only the primary female's name matches)

Move to next homestead.

SECTION 3. Household Information

If Section 1 Question 3 = occupied, continue. If Section 1 Question 3 = unoccupied, skip to question 30.

1. What is the name of the *current* primary male and/or primary female of this household?
 - a. Primary male: _____ Nickname: _____
 - b. Primary female: _____ Nickname: _____
2. FO: Using the names of the *current* primary male and/or primary female, try to match this household to our Endline 2 (2019) census database for this village.
If matched, continue. If not matched, skip to question 11.
3.
 - a. Is the *current* PM, [name from question 1a], the same as the PM from the matched household, [matched PM name from 2]? (1=Yes, 2=No)
 - b. Is the *current* PF, [name from question 1b], the same as the PF from the matched household, [matched PF name from 2]? (1=Yes, 2=No)

If either 3a or 3b is No, continue. Otherwise, skip to question 27.

4. Why is the *current* PM/PF different from the Endline 2 (2019) census?
 Deceased
 Separated / divorced
 Marriage
 Other, specify: _____
5. Is the *current* household residing in the same homestead that the matched household of [matched PM/PF name from 2] was living at in [EL2 census date]? (1=Yes, 2=No)
If YES, skip to question 27. If NO, continue.
6. Did [PM name from 1 is 3b is No, PF name from 1 if question 3a is No] start a new household or join an existing household?
 Started new household
 Joined existing household
If started new household continue. If joined existing household, skip to question 10.
7. When was this new household established in this homestead? /
(MM/YYYY)
8. Do any members of the previous household of [matched PM/PF name from 2] still live in that homestead?
 Yes, still lives in that homestead ***Skip to question 27.***
 No, lives in different homestead ***Skip to question 27.***
 No, all deceased ***Skip to question 27.***
 No, all moved outside village ***Continue to question 9.***
 Do not know ***Skip to question 27.***
9. You indicated that the remaining members of the previous household of [matched PM/PF name from 2] moved outside the village.
 - a. When did that household move away? / (MM/YYYY)
 - b. Where did that household move away to?

- i. County: _____
- ii. Subcounty: _____
- iii. Location: _____
- iv. Sublocation: _____
- v. Village: _____

Skip to question 27.

10. FO: Using the names of the primary male and/or primary female of the existing household that [PM name from question 1a is 3b is No, PF name from question 1b if question 3a is No] joined, try to match to that household from our Endline 2 (2019) census database for this village.

Skip to question 27.

11. When was this household established in this homestead?

- 2015 or before **Continue to question 12.**
- 2016 to 2019 **Continue to question 12.**
- 2020 or after **Skip to question 20.**
- Does not know **Skip to question 27.**

12. Did this household, in this specific homestead, previously have a different PM/PF at the Endline 2 (2019) census?

- Yes, previous PM/PF who is now gone/deceased **Skip to question 19.**
- No, always the same PM/PF **Continue to question 13.**

13. FO: Using the names of the *current* primary male and/or primary female, try to match this household to our Baseline (2014) census database for this village.

If matched and EL2 status was moved away, continue to question 14.
If matched and EL2 status was deceased, skip to question 15.
If matched and EL2 status was not found, skip to question 16.
If not matched, skip to question 17.

14. **(if Endline 2 status was moved away)** Our Endline 2 (2019) census database shows that this household moved to [Endline 2 census moved away location] around [Endline 2 census moved away date]. Can you confirm that the household moved back to this village?

- Yes, household moved back **Continue to question 14a.**
- Household never moved away; previous information incorrect **Skip to question 27.**

- a. When did this household move back to this village? /
 (MM/YYYY)

Skip to question 27.

15. **(if Endline 2 was deceased)** Our Endline 2 (2019) census database shows that this household was deceased with no remaining household members. Please provide a brief explanation on why this household is now present: _____

Skip to question 27.

16. **(if Endline 2 status was not found)** Our Endline 2 (2019) census database shows that this household was not found. Has this household always stayed here or did the household move away and come back?

- Household always stayed here. **Skip to question 27.**
- Household moved away and came back. **Continue to question 16a.**

- a. When did this household move back to this village? /
(MM/YYYY)
- b. Where did this household move back from?
- i. County: _____
 - ii. Subcounty: _____
 - iii. Location: _____
 - iv. Sublocation: _____
 - v. Village: _____

Skip to question 27.

17. Is it possible this household is on a different village's tracking sheet due to changes in village boundaries? (1=Yes, 2=No)
- If YES, continue. If NO, skip to question 27.**
- a. Which village?

18. FO: Using the names of this household's *current* primary male and/or primary female, try to match this household to our Endline 2 (2019) census database for the village [village in 17a].

Skip to question 27.

19. FO: Using the names of this household's *previous* primary male and/or primary female, try to match this household to our Endline 2 (2019) census database for this village.

Skip to question 27.

20. Did the PM/PF of this household previously belong to a different household in this village at the Endline 2 (2019) census?
- Yes, previously belonged to a different household within this village **Continue to question 21.**
- No, totally new to this village **Skip to question 24.**

21. FO: Using the names of the previous household's primary male and/or primary female that this household came from, try to match this household to its previous one from our Endline 2 (2019) census database for this village.
- If matched, continue. Otherwise, skip to question 24.**

22. Do any members of the previous household of [matched PM/PF from 19] still live in that homestead?
- Yes, still lives in that homestead **Skip to question 24.**
- No, lives in different homestead **Skip to question 24.**
- No, all deceased **Skip to question 24.**
- No, all moved outside village **Continue to question 23.**
- Do not know **Skip to question 24.**

23. You indicated that the remaining members of previous household of [matched PM/PF name from 19] moved outside of this village.
- a. When did that household move away? / (MM/YYYY)
- b. Where did that household move away to?
- i. County: _____
 - ii. Subcounty: _____

- a. Primary male: _____
- b. Primary female: _____

32. FO: Using the names of the *previous* primary male and/or primary female, try to match this household to our Endline 2 (2019) census database for this village.
If matched, continue. Otherwise, skip to end of section.

33. What happened to the previous household of this homestead?
- Moved elsewhere in this village **Skip to end of section.**
 - Moved outside this village **Continue to question 34.**
 - All members deceased **Skip to end of section.**

- 34.
- a. When did this household move away? |__||__|/|__||__||__||__| (MM/YYYY)
 - b. Where did this household move away to?
 - i. County: _____
 - ii. Subcounty: _____
 - iii. Location: _____
 - iv. Sublocation: _____
 - v. Village: _____

If the respondent is a current member of this household, continue. Otherwise, move to next homestead.

SECTION 4. Birth History & Child Mortality

FO: Read the following introduction to the respondent.

In this study, we are interested in understanding the causes of under-5 child mortality in this region since 2011. To do so, we need to record all births since 2011, and any deaths that may have occurred. This includes stillbirths and neonatal deaths. I understand this may be sensitive to talk about, and I may request to speak privately to the individual closest to a birth/death.

1. Think back to 2011. Since 2011, how many females of age 18 or over have been members of this household? *Please include both current and previous members, as long as the woman lived in this household for at least 4 consecutive months.*
2. You indicated that since 2011, there have been [NUMBER from Q1] adult women members of this household. I will next ask a few questions about each of these women. If the specific woman is available, I would like to ask the questions to her directly.

LOOP through each [NUMBER from Q2] adult female member {

- a. Name: _____
- b. Is [NAME] currently available to answer some questions about herself? (1=Yes, 2=No)
If NO, continue to 2c. If YES, skip to 2d.
- c. Who is providing this information about [NAME]? *Use relationship codes.*
- d. Think back to 2011. From 2011 to now, has [NAME] given birth? *Please consider all births, including stillbirths and neonatal deaths. A stillbirth is any baby born dead after 28 weeks of pregnancy. A neonatal death is any baby who died between 0-27 days after birth. Do not include miscarriages or abortions. (1=Yes, 2=No, -99=DK)*
If YES, continue. Otherwise, skip to end of loop.
- e. From 2011 to now, how many times has [NAME] given birth? *Please consider all births, including stillbirths and neonatal deaths. A stillbirth is any baby born dead after 28 weeks of pregnancy. A neonatal death is any baby who died between 0-27 days after birth. Do not include miscarriages or abortions. Count twins/triplets/quadruplets as separate births. If the respondent is not sure about the total births, include the ones the respondent knows about.*
- f. In what year was [NAME] born? *If respondent does not know exact year, please provide at least an estimate.*
- g. From 2011 to now, has [NAME] always lived in this household? (1=Yes, 2=No)
If YES, skip to end of loop. If NO, continue.
- h. From 2011 to now, has [NAME] lived in another household within Siaya County? (1=Yes, 2=No)
If YES, continue. If NO, skip to question 2l.
- i. How many other households within Siaya County has [NAME] lived in since 2011? *If respondent is not sure about all households, include the ones the respondent knows about.*

You indicated [NAME] has lived in [NUMBER from 2i] other households within Siaya County since 2011. I would like to identify those households in our data from our previous censuses.

LOOP through each [NUMBER from 2i] other households that [NAME] has lived in since 2011 {

- j. In which village was the household that [NAME] lived in?

If GE village, continue. Otherwise, skip to question 2l.

- k. FO: Using the name of the primary male and/or primary female of the household that [NAME] has lived in since 2011, try to match the household to our Baseline (2014) census database.

} end of LOOP through other households

l. In 2014, was [NAME] living in this household? (1=Yes, 2=No)

m. In what village was [NAME] living in in 2014?

If GE village, continue. Otherwise, skip to end of loop.

- n. FO: Using the name of the primary male and/or primary female of the household that [NAME] was living in in 2014, try to match the household to our Baseline (2014) census database.

} end of LOOP through each adult female member

3. Have there been any females under 18 years of age who have been members of this household and have given birth since 2011? *Please include both current and previous members, as long as she lived in this household for at least 4 consecutive months.* (1=Yes, 2=No)

If YES, continue to 3a. If NO, skip to 5.

- a. How many females under 18 years of age who have been members of this household and have given birth since 2011?

4. You indicated there have been [NUMBER from Q3a] females under 18 years of age who have been members of this household and have given birth since 2011. I will next ask a few questions about each of these females.

LOOP through each [NUMBER from Q3] female under 18 years of age {

a. Name: _____

- b. Is [NAME] currently available to answer some questions about herself? (1=Yes, 2=No)

If NO, continue to 4c. If YES, skip to 4d.

c. Who is available to answer some questions about [NAME]? *Use relationship codes.*

d. From 2011 to now, how many times has [NAME] given birth? *Please consider all births, including stillbirths and neonatal deaths. A stillbirth is any baby born dead after 28 weeks of pregnancy. A neonatal death is any baby who died between 0-27 days after birth. Do not include miscarriages or abortions. Count twins/triplets/quadruplets as separate births. If the respondent is not sure about the total births, include the ones the respondent knows about.*

e. In what year was [NAME] born? *If respondent does not know exact year, please provide at least an estimate.*

f. Has [NAME] always lived in this household since 2011? (1=Yes, 2=No)

If YES, skip to end of loop. If NO, continue.

g. Has [NAME] lived in another household within Siaya County since 2011? (1=Yes, 2=No)

If YES, continue. If NO, skip to question 4k.

h. How many other households within Siaya County has [NAME] lived in since 2011? *If respondent does not know about all households, at least include the ones the respondent knows about.*

LOOP through each [NUMBER from 4h] other households that [NAME] has lived in since 2011 {

i. In which village was the household that [NAME] lived in?

If GE village, continue. Otherwise, skip to question 4k.

- j. FO: Using the name of the primary male and/or primary female of the household that [NAME] has lived in since 2011, try to match the household to our Baseline (2014) census database.

} end of LOOP through other households

- k. In 2014, was [NAME] living in this household? (1=Yes, 2=No)
- l. In what village was [NAME] living in in 2014?

If GE village, continue. Otherwise, skip to end of loop.

- m. FO: Using the name of the primary male and/or primary female of the household that [NAME] was living in in 2014, try to match the household to our Baseline (2014) census database.

} end of LOOP through each female under 18 years of age

- 5. You indicated there have been [SUM of 2d + 3a] females in this household who have given birth since 2011, for [SUM of 2e + 4c] births in total. I will now ask a few questions about each of these births.

LOOP through each [SUM of 2e + 4c] births {

Let's discuss the [NAME OF MOTHER] who gave [NUMBER OF BIRTHS] births since 2011. I will ask about each of these [NUMBER OF BIRTHS] births. Please start with the earliest once and proceed sequentially.

- a. What name was given to this baby? _____
- b. Is/was [NAME] a boy or girl? (1=Male, 2=Female)
- c. Do you know the date of birth of [NAME]? (1=Yes, 2=No)
If YES, continue to 5d. If NO, skip to 5e.
- d. Enter the date of birth of [NAME]: / /
Skip to 5f.
- e. In what year was [NAME] born?
- f. Think about [NAME]'s first five years of life. Did [NAME] spend any of his/her first five years of life living in this specific household? (1=Yes, 2=No)

If YES, continue . If NO, skip to 5h.

- g. Which of [NAME]'s first five years of life did he/she live in this household? *Select all that apply, as long as the child lived in this household for at least 4 consecutive months during that year of life.*
 Year 0 (0 to 12 months)
 Year 1 (13 to 24 months)
 Year 2 (25 to 36 months)
 Year 3 (37 to 48 months)
 Year 4 (49 to 60 months)

If selected all years, skip to m. Otherwise, continue.

- h. Did [NAME] spend any of his/her first five years of life living in another household in Siaya County? (1=Yes, 2=No)
If YES, continue. If NO, skip to m.
- i. How many other households in Siaya County did [NAME] live in during his/her first five years of life?

LOOP through each [NUMBER from 5i] other households in Siaya County that [NAME] has lived in during his/her first five years of life {

- j. In which village was the household that [NAME] lived in?
If GE village, continue. Otherwise, skip to question 5l.
- k. FO: Using the name of the primary male and/or primary female of the household that [NAME] has lived in since 2011, try to match the household to our Baseline (2014) census database.

- I. Which of [NAME]'s first five years of life did he/she live in that household?
Select all that apply, as long as the child lived in that village for at least 4 consecutive months during that year of life.

- Year 0 (0 to 12 months)
 Year 1 (13 to 24 months)
 Year 2 (25 to 36 months)
 Year 3 (37 to 48 months)
 Year 4 (49 to 60 months)

} end of LOOP through other households

- m. Is [NAME] still alive? (1=Yes, 2=No)
If YES, skip to 5o. If NO, continue.
- n. How old was the [NAME] when he/she died in years?
If DK continue. Otherwise, skip to next birth.
- o. Was [NAME] less than 5 years of age when he/she died? (1=Yes, 2=No)
Skip to next birth.
- p. How old was [NAME] at his/her last birthday?

} end of LOOP through each birth

6. You indicated there have been [SUM of 5i] births to children who are no longer alive. [SUM of 5m] of these occurred to children who were under 5 years of age. I understand this is difficult to talk about, but I would like to ask about what happened leading up to their deaths, as we are studying the causes of under-5 child mortality in this region.

If you'll allow me, I would like to ask you a detailed set of questions that was developed by the World Health Organization and is commonly used in health research to understand causes of death. These questions may take up to 30 minutes.

LOOP through each [SUM of 5i] death {

- a. Are you willing to proceed with asking these questions regarding the death of [NAME]?
 Yes, willing to proceed
 Wants to reschedule
 No, does not want to proceed
If YES, skip to d. If NO, continue.
- b. May I ask just a few general questions of how [NAME] died? (1=Yes, 2=No)
If YES, continue. If NO, skip to next death.
- c. Was the cause of death due to injury or accident? *For example, road accident, poisoning, drowning, etc.* (1=Yes, 2=No)
If NO, continue. If YES, skip to next death.
- d. Was the cause of death due to a non-communicable disease? *For example, cancer, cardiovascular disease, heart disease, or diabetes?* (1=Yes, 2=No)
If NO, continue. If YES, skip to next death.
- e. Was the cause of death one of the following categories?
 Maternal and neonate causes (stillbirth, congenital malformation, birth asphyxia)
 Communicable disease (AIDS, malaria, diarrhea/dysentery, meningitis, other infectious disease)
 Respiratory disease (pneumonia, tuberculosis)

Skip to next death.

- f. Were you with the deceased when the events leading to his/her death occurred?
(1=Yes, 2=No)
If YES, skip to 6f. If NO, continue.
- g. How did you learn about the details of the events leading to his/her death?
 Told from caregiver of the deceased
 Told from relative of the deceased
 Told from medics/hospital
- h. Complete the following sections from the 2022 WHO Verbal Autopsy Instrument:
- i. Open narrative
 - ii. Medical history associated with final illness
 - iii. History of injuries/accidents
 - iv. Injuries and accidents detail
 - v. Health history
 - vi. Duration of illness
 - vii. General signs and symptoms associated with final illness
 - viii. Duration of breathing difficulty
 - ix. Duration of chest pain
 - x. Abdominal pain
 - xi. Neonatal and child history, signs and symptoms
 - xii. Health service utilization
- } end of LOOP through each death**

Section 5: Enterprise Information

If household is matched and has matched enterprise, continue. Otherwise, skip to question 2.

1. When we visited this household September 2019 – December 2019, members of your household were running [# of matched enterprises] enterprises. I will now ask about each of these enterprises to verify the information we have.

Loop through each matched enterprise {

Enterprise ID:
Owner name(s):
Owner contact(s):
Business name:
Primary business category:
Secondary business category:
Primary operating location:

- a. Are members of your household still operating this enterprise?
 Yes, still operating
 No, closed down
 Owner of this enterprise no longer a member of this household
 Household never ran this enterprise

FO: Be sure to capture this enterprise in the enterprise census using the Enterprise ID.

} end of loop through matched enterprises

2. Other than in farming, is anyone in this household currently self-employed or running a (other) business to earn a living? (1=Yes, 2=No) *Please only include those operating within Siaya, Ukwala, or Ugunja subcounties.*
If YES, continue. If NO, skip to next section.
3. How many (other) businesses are members of this household operating? *Please only include those operating within Siaya, Ukwala, or Ugunja subcounties.*

FO: Please make sure you census each of the enterprises or business activities this household is engaged in.

Section 6: Conclusion

FO: Thank the respondent for their time.

1. Did the respondent terminate the census early? (1=Yes, 2=No)
If YES, continue. If NO, skip to question 3.
2. Why did the respondent terminate the survey early?
 Temporary stop only – wishes to complete at a later time
 Does not want to continue
3. Are you at the physical location of this homestead? (1=Yes, 2=No)
If YES, continue. If NO, skip to question 6.

4. Do not ask the following question on housing materials, simply observe and record your observations:
 - a. Of what material are the floors made? Use floor material codes
 - b. Of what material is the roof made? Use roof material codes
 - c. Of what material are the walls made? Use wall material codes
5. Record GPS coordinates at the front of this homestead.
6. From where are you conducting this census?
 - Other structure/land the household owns other than the main residence
 - At household member's place of work
 - Within the village but none of the above
 - Other (specify)

Record GPS coordinates at the front of this household.

Repeat Sections 2-6 for the next homestead.

Appendix B: Endline 3 Enterprise Census Survey Instrument

SECTION 1. Survey Information

Greetings! You are about to begin "GE Endline 3 – Enterprise Census". Please fill in the following questions before engaging the respondent.

1. Enumerator Information
 - a. Enumerator Name: _____
 - b. REMIT ID: |_|_|_|_|

2. Village Information
 - a. Subcounty: _____
 - b. Location: _____
 - c. Sublocation: _____
 - d. Village: _____

 - e. Please confirm that you have entered the correct information.
Subcounty: [SUBCOUNTY NAME]
Location: [LOCATION NAME]
Sublocation: [SUBLOCATION NAME]
Village: [VILLAGE NAME]

3. Today's date: |_|_|/|_|_|/|_|_|_|_|

You are now ready to begin recording enterprises. Select "Add group" each time you record another enterprise.

The following questions are repeated for each enterprise that you census.

SECTION 2. Verifying Enterprise Record

1. Is this enterprise on the tracking sheet for this village? (1=Yes, 2= No)
If YES, continue. If NO, skip to question 4.
2. Please enter the Enterprise ID from the tracking sheet:

You selected enterprise [ENTERPRISE ID] in [VILLAGE NAME] village. This corresponds to the following information collected as of [ENDLINE 2 DATE]. If some of this information has changed, be sure to verify that this is the same enterprise.

Enterprise name:
Primary enterprise category:
Secondary enterprise category:
Enterprise location:
Owner name:
Owner phone:

3. Does this match the enterprise that you are speaking with? (1=Yes, 2= No) *It is okay if some of this information has changed since [ENDLINE 2 DATE], as long as you are sure this is the same enterprise.*
If YES, continue. If NO, return to question 2 to enter a different enterprise ID or return to question 1 to start an entry for a new enterprise.
4. Who is providing information on this enterprise?
 Enterprise owner
 Employee
 Neighbour
 Neighbouring shop owner
 Village elder / guide
 Family member of enterprise owner (spouse, child, parent, sibling)
 Other, specify: _____
5. **(if matched)** Is this enterprise still operational? (1=Yes, 2= No)
If YES, skip to section 3. If NO, continue.
6. When did this business stop operating? / (MM/YYYY)
7. Why did this enterprise stop operating?
 Closed because of lockdown/curfew
 Closed because of worries about COVID-19/coronavirus
 Seasonal closure / usually closed in this season
 Cannot get inputs
 Cannot travel or transport goods
 Need to take care of an ill relative
 Lack of demand
 Lack of enough capital
 Business running at a loss
 Enterprise owner deceased
 Theft / vandalism
 Government requirements (by-laws, trading licenses)
 Mechanical breakdown

- Dissolution of the business by the partners
- Other: _____
- Don't know

If enterprise is operational and speaking to enterprise owner/employee, continue. Otherwise, move to next enterprise.

SECTION 3. Informed Consent

FO: Read Informed Consent.

1. Do you consent to take part in this research? (1=Yes, 2=No)
If YES, skip to Section 4. If NO, continue.

2. ***Do not ask the following question.*** Describe your impressions of the refusal / inability to participate.
1 = Wants to reschedule
2 = Refusal for this round only
3 = Refusal for this round and any future rounds
4 = Does not refuse but is unable to participate

Move to next enterprise.

SECTION 4: Identity of the Business

Read: Now I'd like to ask you some basic questions about this enterprise.

(if matched) Below is the information we collected about this enterprise at [Endline 2 Census Date]. We will recollect some of this information to make sure it is updated.

Enterprise name:
Primary enterprise category:
Secondary enterprise category:
Primary operating location:
Primary location, operate from:
Secondary operating location:
Tertiary operating location:
Owner names:

1. What is the name of the business? _____
2. Primary business category? *If more than one business category, the primary business category is the category that generates the most revenue for the enterprise.* Select from business category codes.
 - a. **(if retail)** What type of products does this enterprise sell?
 - b. **(if non-food)** What type of products does this enterprise produce/sell?
 - c. **(if matched and different from Endline 2 census)** At [Endline 2 Census Date], you said the primary business category was [Endline 2 Census Primary Business Category]. Why is this different?
 Category did not change since [Endline 2 Census Date], previous information was wrong. **Skip to question 3.**
 Actual change. **Continue to question 2d.**
 - d. Why did the primary category of this business change? _____
3. Any secondary business categories? *Select all that apply.* Select from business category codes.
 - a. **(if retail)** What type of products does this enterprise sell?
 - b. **(if non-food)** What type of products does this enterprise produce/sell?
4. **(if not matched)** When did this enterprise first begin operating? *Please probe to determine when the enterprise first began operating, even if this current location is not the original location. For example, if the enterprise started up in a different location and moved to this location since, we want to know when it started operating in its original location.*
____/____ (MM/YYYY)
5. How many locations does this enterprise operate from? *Consider enterprises with multiple locations (multiple plants / buildings / etc.) or an enterprise with home production as the primary location and a weekly presence at a market. For roaming/moving enterprises, consider the different market centers, etc. that it sells at during the week.*

READ: Now I'd like to ask about the different locations of this enterprise. We want information about the 3 locations most important for this enterprise, starting with the primary location.

LOOP through the number of locations (max 3) {

6. From where does the [PRIMARY/SECONDARY/TERTIARY] location of this enterprise operate?
- Homestead
 - Market stall
 - Own building
 - Shared building
 - No building
 - Other, specify: _____
7. Is the [PRIMARY/SECONDARY/TERTIARY] location of this enterprise in a village or a market center? (1=Village, 2=Market)
If village, continue to question 8. If market center, continue to question 9.
8. Where is the [PRIMARY/SECONDARY/TERTIARY] location of this enterprise?
- a. Subcounty:
 - b. Location:
 - c. Sublocation:
 - d. Village:
- Skip to question 10.***
9. Where is the [PRIMARY/SECONDARY/TERTIARY] location of this enterprise?
- a. Subcounty:
 - b. Location:
 - c. Market center:
10. What were total earnings of this enterprise in the:
- a. Last week: _____
 - b. Last month: _____
11. What were the total profits of this enterprise in the:
- a. Last week: _____
 - b. Last month: _____
12. In the last week, how many hours total was this enterprise operating?
13. How many employees work at this enterprise? (INCLUDE THE OWNER. *Count full and part-time workers.*)
- a. Exact number:
 - b. Range
 - 1
 - 2 to 5
 - 6 to 10
 - 11 to 20
 - 21 to 99
 - 100 or more
 - Don't know

SECTION 5: Other Enterprises Within the Village

Read: Now I'm going to ask you about any other enterprises that have opened nearby.

1. In your village, are there any new enterprises that have opened up in the last 3 years?
(1= Yes, 2= No) ***If YES, continue. If NO, skip to Section 6.***
2. How many new enterprises opened in the last 3 years in your village?
3. How many of these enterprises in your village are still operating?
4. How many of these new enterprises in your village are the same business category?

FO: Capture information on the new enterprises still operating in this village so that you can census them. Make sure you obtain information that allows you to locate those enterprises. Coordinate with your field manager to make sure you, or someone else in your team, visits this enterprise TODAY as part of the census.

SECTION 6: Conclusion

1. Are you at the location of the enterprise? (1=Yes, 2=No)
If YES, continue. If NO, move to next enterprise.
2. Record the GPS coordinates at the front of this enterprise.

Repeat Sections 2-6 for the next enterprise.

Appendix C: Endline 3 Household Survey Instrument

HH-S

**GE EFFECTS
HOUSEHOLD SURVEY MODULE
ENDLINE 3 - WAVE 2**

VERSION: NOV 13, 2024 — ENGLISH

Section 1. Survey Information and Informed Consent

FO: Greetings! You are about to begin the GE Endline 3 Household Survey. Please fill in the following questions before engaging the respondent.

1. Enumerator details
 - a. Name:
 - b. REMIT ID: |_|_|_|_|_|_|_|_|
 - c. Gender: |_| (1=Male, 2=Female)
2. Survey details
 - a. Today's date: |_|_|_|_|/|_|_|_|_|/|_|_|_|_|_|_| (DD/MM/YYYY)
 - b. Time of interview: |_|_|_|:|_|_|_|
 - c. Where are you conducting this survey?
 - i. County:
 - ii. Subcounty:
 - iii. Location:
 - iv. Sublocation:
 - v. Village:
 - d. Household ID: |_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_| - |_|_|_|_|_|_|
 - e. Were you able to locate this household? |_|_| (1=Yes, 2=No)
If yes, continue. If no, skip to Q5.

REPEAT Q3a - Q3g for up to three pre-specified Target Respondents for this household.

3. Target Respondent
 - a. Is [*Target Respondent*] present? |_|_| (1=Yes, 2=No, currently not present, 3=No, no longer a member of this household)
If yes, continue. If no, skip to the next target respondent.
FO: Read informed consent script to respondent.
 - b. Do you consent to take part in this research? |_|_| (1=Yes, 2=No)
 - c. **FO:** Is the [*Target Respondent*] able to proceed with the survey? |_|_| (1=Yes-FR agrees to participate; 2=No-FR refuses to participate; 3=No-FR does not refuse but is unable to participate)
If yes, skip to Section 2. If no, continue.
 - d. **FO:** Describe your impressions of the refusal / inability to participate. |_|_|
 - 1 = Wants to reschedule (*skip to "Rescheduling instructions"*)
 - 2 = Refusal for this round only (*skip to question 3e*)
 - 3 = Refusal for this round and any future rounds (*skip to question 3f*)
 - 4 = Unable to survey – parent or contact refusal (*skip to "Closing Interview Statement"*)
 - 5 = Unable to survey – spouse refusal (*skip to "Closing Interview Statement"*)
 - 6 = Unable to survey - in prison (*skip to "Closing Interview Statement"*)
 - 7 = Unable to survey – mental illness / disability (*end interview*)
 - 77 = Unable to survey – other (*skip to question 3g*)
 - e. **FO:** Record your impressions of why the FR refuses to participate during this survey round. If you feel comfortable doing so, you may ask the FR why: Why don't you want to participate in this survey round?
Select up to 3. |_|_|/|_|_|/|_|_|
 - 1 = Survey is too long
 - 2 = FR has caregiving duties
 - 3 = FR has to work
 - 4 = FR does not want to disclose personal information
 - 5 = FR is suspicious of REMIT
 - 6 = FR hasn't received (further) assistance from REMIT and doesn't want to participate because of that

7 = FR just doesn't want to / no reason given

-77 = Other (specify)

Skip to "Closing Interview Statement".

- f. **FO:** Record your impressions of why the FR refuses to participate during this round and any future rounds. If you feel comfortable doing so, you may ask the FR why: Why don't you want to participate in this round or any future survey rounds? _____

Skip to "Closing Interview Statement".

- g. **FO:** Specify other reason respondent is unable to survey: _____

Skip to "Closing Interview Statement".

4. Alternative Respondent

- a. Is there another adult member of this household we can speak to? (1=Yes, 2=No)

If yes, continue. If no, skip to "Closing Interview Statement".

FO: Read informed consent script to respondent.

- b. Do you consent to take part in this research? (1=Yes, 2=No)

- c. **FO:** Is the [Alternative Respondent] able to proceed with the survey? (1=Yes-FR agrees to participate; 2=No-FR refuses to participate; 3=No-FR does not refuse but is unable to participate)

If yes, skip to Section 2. If no, continue.

- d. **FO:** Describe your impressions of the refusal / inability to participate.

1 = Wants to reschedule (*skip to "Rescheduling instructions"*)

2 = Refusal for this round only (*skip to question 3e*)

3 = Refusal for this round and any future rounds (*skip to question 3f*)

4 = Unable to survey – parent or contact refusal (*skip to "Closing Interview Statement"*)

5 = Unable to survey – spouse refusal (*skip to "Closing Interview Statement"*)

6 = Unable to survey – in prison (*skip to "Closing Interview Statement"*)

7 = Unable to survey – mental illness / disability (*end interview*)

-77 = Unable to survey – other (*skip to question 3g*)

- e. **FO:** Record your impressions of why the FR refuses to participate during this survey round. If you feel comfortable doing so, you may ask the FR why: Why don't you want to participate in this survey round?

Select up to 3. //

1 = Survey is too long

2 = FR has caregiving duties

3 = FR has to work

4 = FR does not want to disclose personal information

5 = FR is suspicious of REMIT

6 = FR hasn't received (further) assistance from REMIT and doesn't want to participate because of that

7 = FR just doesn't want to / no reason given

-77 = Other (specify)

Skip to "Closing Interview Statement".

- f. **FO:** Record your impressions of why the FR refuses to participate during this round and any future rounds. If you feel comfortable doing so, you may ask the FR why: Why don't you want to participate in this round or any future survey rounds? _____

Skip to "Closing Interview Statement".

- g. **FO:** Specify other reason respondent is unable to survey: _____

Skip to "Closing Interview Statement".

5. **FO:** Why were you unable to locate this household? (1=TR deceased and no remaining household members; 2=Entire household moved away; 3=No available info about TR's household)

If 1, ask Q6. If 2, ask Q7. If 3, end interview.

6. I am sorry for the loss. I understand this may be painful to talk about, but what was the cause of death? Use D1 codes.

a. In what year did this person pass away? |_|_|_|_|

7. Where did the Target Respondent move to?

a. Country:

b. County:

c. Subcounty:

d. Location:

e. Sublocation:

f. Village:

g. Please collect any updated contact info for the Target Respondent. _____

Rescheduling instructions: Please ask the FR when they are next available, and then call your team lead to confirm this day and time. If you are unable to confirm this day and time, make a tentative appointment with the FR. Then, let the FR know that you will contact them to confirm when you will return. Record this information on the tracking sheet now. End the interview.

Closing Interview Statement: Thank you very much for your time. If you change your mind and would like to participate in the interview, please contact us at the REMIT office. End the interview.

Section 2. Respondent Identity

1. What is your current full name?
First name: Middle/second name: Last name:
2. Do you use any other names, either in your community or for official documents? (1=Yes, another name for government documents, 2=Yes, a common name/nickname, 3=No)
If 1, ask 2a. If 2, ask 2b. If c, skip to 3.
 - a. What other name do you use on official documents?
Other first name: Other middle/second name: Other last name:
 - b. What other common name do you use?
 - c. **(if FR = TR) FO:** Does this name match the information on your tracking sheet? *Do not count different spellings or different orderings of the same name as different.* (1=Yes, 2=No)
If yes, skip to Q3. If no, ask Q2d and ensure that you are interviewing the same respondent as listed on the tracking sheet.
 - d. Why is this name different from the one in our records from the last time we interviewed you? *List up to 2 responses.* (1= Got married and took spouse's name; 2= Took the name of another family member (not spouse); 3= Took baptismal name; 4= Took a different / additional name (not family or baptismal name); 5= Dropped Family Name; 6= Name previously mistaken / incomplete; -77= Other (specify))
3. **FO:** What is the respondent's gender? (1=Male, 2=Female)
4. What is your date of birth? // (DD/MM/YYYY) *The date of birth information is very important. Please probe the FR if they claim to not know. Every FR should be able to approximate the year of birth at least.*
 - a. **FO:** Is the FR certain of this date? (1=Yes, 2=No)
 - b. What is your age now in years?
 - i. **FO:** From reported year of birth [Q4], the FR indicates that he/she is [2024 - Q4] years old. Reported age is [Q4b]. If age and date of birth information do not make sense together, please probe further with FR until they agree.
 - c. **(if FR = TR) FO:** Does this agree with the date of birth reported on the tracking sheet? (1=Yes, 2=No)
5. What is your place of birth?
 - a. Country:
 - b. County:
 - c. *(if not Siaya County)* Town/city? *Use G3a codes.*
 - d. Subcounty:
 - e. Location:
 - f. Sublocation:
 - g. Village:
6.
 - a. What is your subtribe? *Use subtribe codes. Note: if FR is female, we want her subtribe, not the subtribe of her husband.*
 - b. What is your clan?
7. What is your father's name?
First name: Middle/second name: Last name:
 - a. No question 7a.
 - b. **(if FR = TR) FO:** Does this agree with previous records? (1=Yes, 2=No) *Do not count different spellings or different orderings of the same name as different.*

- c. Why is this not the same name we have in our records? **List up to 2 responses.** (1=Took the name of another family member (not spouse); 2=Took baptismal name; 3=Took a different / additional name (not family or baptismal name); 4=Dropped family name, 5=Name previously missed, -77= Other (specify))
8. What is your mother's name?
 First name: _____ Middle/second name: _____ Last name: _____
- a. No question 8a.
- b. **(if FR = TR) FO:** Does this agree with previous records? (1=Yes, 2=No) *Do not count different spellings or different orderings of the same name as different.*
- c. Why is this not the same name we have in our records? **List up to 2 responses.** (1=Took the name of another family member (not spouse); 2=Took baptismal name; 3=Took a different / additional name (not family or baptismal name); 4=Dropped family name, 5=Name previously missed, -77= Other (specify))
9. What is your marital status? (1=Single, 2=Not married but cohabiting, 3=Married, living with spouse, 4=Married, not living with spouse, 5=Married (polygamous) and living with spouse(s), 6=Married (polygamous) and not living with spouse(s), 7=Divorced, 8=Separated, 9=Widowed)
If married or cohabitating, continue. Otherwise, skip to Q11.
10. **(if married or cohabitating)** What is your spouse's name?
 First name: _____ Middle/second name: _____ Last name: _____
11. No question 11.
12. **FO:** Below are the results of the identity verification questions. Are you suspicious that this respondent does not belong to the household on the tracking sheet? (1=Not at all suspicious, 2=A bit suspicious, 3=Moderately suspicious, 4=Very suspicious)
 TR name: [VERIFIED / DISCREPANCY / N/A]
 TR gender: [VERIFIED / DISCREPANCY / N/A]
 TR age/dob: [VERIFIED / DISCREPANCY / N/A]
 TR father name: [VERIFIED / DISCREPANCY / N/A]
 TR mother name: [VERIFIED / DISCREPANCY / N/A]
If 2, 3, or 4, ask 12a. Otherwise, skip to next section.
- a. Why are you suspicious?

Section 3.1. Contact Information

READ: Now I would like to obtain your contact information. We want to know the place that you usually sleep, not necessarily your ancestral lands or family home.

1. Is your current place of residence in this village, [Section 1 Q2cv]? (1=Yes, 2=No)
If yes, skip to Q4. If no, continue.
2. Where is your current place of residence?
 - a. Country:
 - b. County:
 - c. Subcounty:
 - d. Location:
 - e. Sublocation:
 - f. Village:
3. Please describe the location of the home. *Provide detailed description to home, including landmarks, distance from roads and any other detailed information where relevant. If there is a primary school nearby, please start your directions from that school. If not, pick a location that is well known in the area to be a starting point for your directions. References to specific businesses or homes ("ask for the home of...") should be included where possible.*
4. What primary school is closest to the home? Use E1 codes
5. Is there a phone number where I can reach you, even if you do not have your own phone? (1=Yes, 2=No)
If yes, continue. If no, probe the FR for once again. If the FR insists there is no way to reach them by phone (or they do not know any numbers), skip to Q7.

REPEAT Q5a - Q5d for as many phone numbers as the FR will provide.

- a. Number:
 - b. Re-enter number:
 - c. Whose phone is this? (relation to FR): Use G4 codes.
 - d. Name of phone owner:
6. In the future, we may want to contact you by email. Do you have an email address? (1=Yes, 2=No)
 - a. Enter email address:

READ: In case you are not at your current address, please tell us the name of a friend or a family member who is sure to know where you are, and how to contact you. These should be friends or family that would stay in their current residence if you moved away.

7. **FO:** Does the respondent agree to give information on another contact? (1=Yes, 2=No)
If yes, continue. If no, skip to next section.

FO: Ask first if FR has contact(s) with phones who would know how to locate and contact the FR. If not, contact(s) without phones who know how to locate and contact FR are OK. Contacts should usually not be husbands, wives or children (but other relatives will often make good contacts), since these contacts often move along with the FR. We want contacts that are likely to stay in the same place when the FR moves.

8. Full name of contact:
9. What is the contact's relationship to you? Use G4 codes.

10. Does this person live in this village, [Section 1 Q2cv]? (1=Yes, 2=No)
If yes, skip to Q12. If no, continue.
11. Where does this person live?
- Country:
 - County:
 - Subcounty:
 - Location:
 - Sublocation:
 - Village:
12. Please describe the location of the home: *Provide detailed description to this place, including landmarks, distance from roads and any other detailed information where relevant. If there is a primary school nearby, please start your directions from that school. If not, pick a location that is well known in the area to be a starting point for your directions. References to specific businesses or homes ("ask for the home of...") should be included where possible.*
- 13.
- Is there a phone number where I can reach this contact, even if he / she does not have his / her own phone?
 (1=Yes, 2=No)
If yes, continue. If no, probe the FR for one again. If the FR insists that there is no way to reach the contact by phone (or they do not know any numbers), skip to the next section.
 - Number:
 - Re-enter number:
 - Whose phone is this? (relation to FR): Use G4 codes.
 - Name of phone owner:
- 14.
- Can you give me another phone number to reach this contact? (1=Yes, 2=No)
If yes, continue. If no, skip to next section.
 - Number:
 - Re-enter number:
 - Whose phone is this? (relation to FR): Use G4 codes.
 - Name of phone owner:

Section 3.2. Friend Networks / Additional Contacts

FO: For this section, we will ask the respondent about their friends. We are interested in close friends and good friends. There is no right or wrong number of friends that the respondent should provide. It is important that FOs are consistent in the way in which they define these relationships, the examples they provide, and the way in which they probe with the respondent.

READ: Next, I would like to ask about your closest friends. Think about your close friends that you spend your free time with, you share both good and bad news with, and you go to when you have a problem.

1. Other than the members of your household, do you have any close friends? (1=Yes, 2=No)
If yes, continue. If no, skip to Q3.

READ: Think of your closest friends. What are their names?

FO: Record as many names as respondent provides.

REPEAT Q2 for each close friend.

2. Name of close friend:

READ: Apart from your closest friends, do you have any other good friends? Think about friends that you interact with fairly frequently. These may be friends that you go to for help when your closest friends are not available.

3. Other than the members of your household, do you have any good friends? (1=Yes, 2=No)
If yes, continue. If no, skip to Q5.

READ: Think of your good friends. What are their names?

FO: Record as many names as respondent provides.

REPEAT Q4 for each good friend.

4. Name of good friend:

5. You listed *[SUM of Q2 and Q4]* friends. *[SUM of Q2]* are close friends, who are *[List of close friends' name]*. And *[SUM of Q4]* are good friends, who are *[List of good friends' names]*. Of those *[SUM of Q2 and Q4]* friends, please tell me how many of them have the following characteristics:

- a. Is female: yes no don't know
- b. Is less than 30 years of age: yes no don't know
- c. Is older than 60 years of age: yes no don't know
- d. Lives in a different village than you: yes no don't know
- e. Lives outside of Siaya County: yes no don't know
- f. Completed primary school: yes no don't know
- g. Completed secondary school: yes no don't know
- h. Completed college/university: yes no don't know
- i. Has children below the age of 12: yes no don't know
- j. Has children between the ages of 13-18: yes no don't know
- k. Has a roof made of organic material (e.g. grass, reeds, straw): yes no don't know
- l. Owns a TV: yes no don't know
- m. Owns a smartphone: yes no don't know
- n. Owns a radio/cassette player/CD player: yes no don't know
- o. Runs a non-agricultural enterprise: yes no don't know
- p. Has a formal or government job (e.g. civil servant, health worker, teacher, financial services): yes no don't know

- q. Has a manufacturing job (e.g. welder, carpenter, brickmaker, quarry worker): yes no don't know
- r. Works on someone else's farm for a wage?: yes no don't know
- s. Holds a position of responsibility (e.g. village elder, pastor, politician): yes no don't know

Section 4.1. Household Roster

READ: Now I would like to find out about all of the individuals in your household. By your household, I mean the place where you usually sleep, not necessarily your ancestral lands or family home. By the individuals in your household, I mean those who “eat from the same pot” and spend 4 nights or more in an average week sleeping in your home.

If household has ever been surveyed, continue. If never surveyed, skip to Q11.

READ: Your household has participated in our previous survey activities, so I would like to review some information we have from previous surveys. I will ask about all the individuals of your household that we have collected so far.

REPEAT Q1-Q6 for each prefill individual.

1. Is [PREFILL NAME] currently a member of your household? (1=Yes, 2=No)
If yes, skip to the next individual. If no, continue.
2. Why is [PREFILL NAME] no longer a member of this household? (1=Moved away, 2=Deceased, -98=Never a member of this household/wrong information)
If 1, ask Q3 and Q4. If 2, ask Q5. If -98, skip to next individual.
3. Why did [PREFILL NAME] move away? Use G5 codes.
4. Where did [PREFILL NAME] move to?
 - a. Country:
 - b. County:
 - c. Subcounty:
 - d. Location:
 - e. Sublocation:
 - f. Village:
5. I am sorry for the loss. I understand this may be painful to talk about, but what was the cause of death of [PREFILL NAME]? Use D1 codes.
6. When did [PREFILL NAME] move away/pass away? / (MM/YYYY)
7. No question 7.
8. Here are the individuals we just discussed that are currently members of your household: [Names of those answered Yes to Q1]. Are there any other current members of your household that have not been mentioned? (1=Yes, 2=No)
If yes, continue. If no, skip to Q25.
 - a. How many other individuals are currently members of this household?

REPEAT Q9 through Q10 for each other individual.

9. Name of other current member:
10. When did [Q9] join this household? / (MM/YYYY)

If household has ever been surveyed, skip to Q25. If never surveyed, continue.

11. Currently, how many people in total (including yourself) are in your household, “eat from the same pot” and spend 4 nights or more in an average week sleeping in your home?

READ: We will now collect the names of all current members of your household. Please start with yourself (FR) and then continue from eldest to youngest.

REPEAT Q12 for each individual.

12. Name of household member:

There are no questions 13 - 24.

Read: I will now ask further details about the individuals that are currently members of your household. That includes *[Names of current household members collected in Q1, Q9, and Q12]*.

REPEAT Q25 - Q33 for each current household member.

25. Did *[name]* sleep here last night? (1=Yes, 2=No)

If no, continue. If yes, skip to Q26.

a. Does *[name]* usually sleep here 4 or more nights a week and eat from the same pot? (1=Yes, 2=No)

26. *[name]*'s relationship to the FR? Use G4 codes.

27. *[name]*'s gender? (1=Male, 2=Female)

28. *[name]*'s age? In years.

a. Is the FR certain of this age? (1=Yes, 2=No)

29.

a. Which school system did *[name]* participate in? (1=8-4-4, 2=7-2-2-3, 3=2-6-6-3, -98=No schooling)

b. *[name]*'s highest level of education completed? Use G6 codes.

30. *[name]*'s occupation(s)? Use G9 codes.

If household is from baseline, continue. Otherwise, skip to next individual.

31. Was *[name]* a member of this household at *[BASELINE DATE]*? (1=Yes, 2=No, lived elsewhere, 3=No, not born yet)

If 2, continue. If 1 or 3, skip to next individual.

32. Where was *[name]* living at *[BASELINE DATE]*?

a. Country:

b. County:

c. *(if not Siaya County)* Town/city? Use G3a codes.

d. Subcounty:

e. Location:

f. Sublocation:

g. Village:

33. When did this person join your household? / (MM/YYYY)

FO: Select which roster member is the FR.

Section 4.2. Child Details

If household has children aged 16 and under or children aged 18 and under that report being a student from the roster, continue. Otherwise, skip to next section.

READ: Now I would like to collect some more details about the children in your household.

1. No question 1.

REPEAT Q2-Q14 for each child.

2. Is [name] currently enrolled in school? (1=Yes, 2=No) Note: Include ECD programs. Do NOT include day care programs.

If yes, skip to Q3. If no, continue to Q2a.

a. Why is [name] not enrolled in school? Use child attendance codes.
Skip to Q9.

3. What type of school this [name] enrolled in? (0=ECD, 1=Primary, 2=Secondary, 3=College, 4=University, 5=Vocational, -77=Other)

4. (if primary) What primary school is [name] enrolled in? Use GE school codes.

5. (if secondary) What type of secondary school is [name] enrolled in? (1=National school, 2=Extra county school, 3=County school, 4=Subcounty school)

6. What class/standard/form/year is [name] enrolled in? Use G6 codes.

7.
a. Of the last five days school was IN SESSION, how many days did [name] attend?
b. In the past five days, how many days has [name] attended school?

8. In the last 12 months, was [name] ever sent home because of non-payment of school fees? (1=Yes, 2=No)
If yes, continue. If no, skip to Q9.

a. In the last 12 months, how many days in total of school did [name] miss after being sent home for not paying school fees?

9. Overall, would you say [name]'s health is very good, good, fair, poor, or very poor? (5=Very good, 4=good, 3=fair, 2=poor, 1=very poor, -99=DK)

If age of [name] <= 12, continue. Otherwise, skip to next child.

10. During the past 7 days, has [name] experienced:

- Fever/malaria
- Vomiting
- Cough
- Diarrhea
- Any other infection, specify: _____

11. Last night, did [name] sleep under a bednet? (1=Yes, 2=No)

12. Have any drugs for worm infections or schistosomiasis been given to [name] in the last 12 months? (1=Yes, 2=No)

If age of [name] <= 8, continue. Otherwise, skip to next child.

13. In the past 7 days, did you or any other person over the age of 15 in [name]'s household...
- (if >= 2 years) Read books to or looked at books with [name]? (1=Yes, 2=No, -99=DK)
 - (if yes) Who? (1=Mother, 2=Father, 3=Sibling, 4=Other adult relative, 5=Other adult non-relative)
 - (if >= 2 years) Tell stories to [name]? (1=Yes, 2=No, -99=DK)
 - (if yes) Who? (1=Mother, 2=Father, 3=Sibling, 4=Other adult relative, 5=Other adult non-relative)
 - Sing songs or play musical instrument with [name]? (1=Yes, 2=No, -99=DK)
 - (if yes) Who? (1=Mother, 2=Father, 3=Sibling, 4=Other adult relative, 5=Other adult non-relative)
 - Play with [name]? (1=Yes, 2=No, -99=DK)
 - (if yes) Who? (1=Mother, 2=Father, 3=Sibling, 4=Other adult relative, 5=Other adult non-relative)

14. Is [name] currently enrolled in a daycare? (1=Yes, 2=No)

15. In the past 12 months, how much did your household pay in total for... *Only capture expenses for children in this household, which include [name of children in roster].*

- school/activity fees Ksh
- school-related supplies Ksh
- contributions (for school projects or for school funds) Ksh

If household has any previous member that moved away for schooling/training (according to Section 4.1 Q3), continue. Otherwise, skip to next section.

16. Earlier you mentioned [# of previous members moved for school] individuals who were previously members of your household that moved away for school. These individuals are [names]. I will now ask a few questions about these individuals.

REPEAT Q16a - Q16c for each person.

- What is [name]'s gender? (1=Yes, 2=No)
- What school system does [name] participate in? (1=8-4-4, 2=7-2-2-3, 3=2-6-6-3)
- What grade is [name] currently enrolled in? Use G6 codes.
- Is your household currently supporting [name] financially? (1=Yes, 2=No)

If yes to Q16d, continue. Otherwise, skip to next section.

17. In the past 12 months, how much did your household pay in total for... *Only capture expenses for those we just discussed, which include [name of those said yes to Q16d].*

- school/activity fees Ksh
- school-related supplies Ksh
- contributions (for school projects or for school funds) Ksh

Section 4.3. Baseline Child Details

If household was surveyed at baseline and had children in roster at baseline, continue. Otherwise, skip to next section.

READ: When we previously surveyed this household, we collected information about [# of baseline children] children who were living in this household at [BASELINE DATE]. I will now ask a few questions about each of those children.

REPEAT Q1 - Q11 for each child at baseline.

READ: I will now ask about [NAME, GENDER, CURRENT ESTIMATED AGE].

1. Is [name] one of the following household members? Select from current household roster.
If selected, skip to Q4. Otherwise, continue.
2. Why is [name] no longer a member of this household?
 Moved away
 Deceased
 Never a member of this household / wrong information
If moved, continue. If deceased, skip to question 4. If not a member, skip to next individual.
3. Where does [name] live now? Use aggregated city/town/villages codes.
4. What is your relationship to [name]? (1=Parent, 2=Step-parent, 3=Grandparent, 4=Sibling, 5=Other close relative, 6=Guardian, 7=Family friend, -77=Other (specify))
5. Are/were you a caregiver to [name]? (1=Yes, 2=No)
6. Is [name] currently enrolled in school? (1=Yes, 2=No)
If yes, continue. If no, skip to Q8.
7. What type of school is [name] enrolled in? (0=ECD, 1=Primary, 2=Secondary, 3=College, 4=University, 5=Vocational, -77=Other)
8. What is [name]'s highest level of educational attainment? Use G6 codes.
9. Is/was [name] an average student, better than average, or below average? (1=Above average, 2=average, 3=below average)
10. What is [name]'s most recent job/occupation? Use G9 codes.
11. Has [name] ever been married? (1=Yes, 2=No)
If yes, continue. If no, skip to next individual.
 - a. At what age did [name] first get married?

Section 4.4: Household Birth History and Maternal Care

If household is a baseline household and completed the Endline 3 census, continue. Otherwise, skip to section 5.

1. We previously collected some information from your household on [EL3 census date]. We asked about all adult women who have lived in this household since 2011. For this household, we collected [# of women from EL3 census] women: [list of names of women from EL3 census]. Are there any OTHER females aged 18 or over that have been members of this household since 2011? (1=Yes, 2=No)
If yes, continue. If no, skip to question 4.
2. How many other females aged 18 or over have been members of this household since 2011? *Do not include the women who were already captured during the census.*

READ: I will now ask some questions about each of these [Q2] women.

REPEAT Q2a-Q2f for each woman.

- a. Name:
 - b. Is [name] currently available to answer some questions about herself? (1=Yes, 2=No)
If yes, proceed with speaking to [name] and skip to question Q2d. If no, continue.
 - c. What is the relationship of the person providing information on [name]? Use G4 codes.
 - d. Think back to 2011. From 2011 to now, has [name] given birth? (1=Yes, 2=No, -99=DK) *Please consider all births, including stillbirths and neonatal deaths. A stillbirth is any baby born dead after 28 weeks of pregnancy. A neonatal death is any baby who died between 0-28 days after birth. Do not include miscarriages or abortions.*
If yes, continue. If no, skip to next individual.
 - e. From 2011 to now, how many times has [name] given birth? *Please consider all births, including stillbirths and neonatal deaths. A still birth is any baby born dead after 28 weeks of pregnancy. A neonatal death is any baby who died between 0-27 days after birth. Do NOT include miscarriages or abortions. Count twins/triplets/quadruplets as separate births. If the respondent is not sure about the total births, include the ones the respondent knows about.*
 - f. In what year was [name] born?
3. You indicated that [sum of Q2d] of the females just mentioned have given birth since 2011, for [sum of Q2e] births in total. I will now ask a few questions about each of these births.

REPEAT Q3a-Q3i for each birth .

READ: Let's discuss [name from Q2a] who gave [# from Q2e] births since 2011. I will ask about each of these [# from Q2e] births in turn.

- a. What name was given to this child?
- b. Is/was [name] a male or female? (1=Male, 2=Female)
- c. Do you know the date of birth of [name]? (1=Yes, 2=No)
If yes, continue. If no, skip to Q3e.
- d. When was [name] born?: / / (DD/MM/YYYY)
Skip to Q3f.

- e. In what year was [name] born?
 - f. Is [name] still alive? (1=Yes, 2=No)
If yes, skip to Q3i. If no, continue.
 - g. How old was the [name] when he/she died in years?
If doesn't know, continue. Otherwise, skip to next birth.
 - h. Was [name] less than 5 years of age when he/she died? (1=Yes, 2=No)
Skip to next birth.
 - i. How old was [name] at his/her last birthday?
4. Now think about the years 2011 to 2023. From the information we collected from this household at [EL3 census date] and today, we have collected [# of births] births that occurred between 2011 to 2023 to women who have lived in this household. This includes: [List of mothers with births since 2011]. I would now like to ask a few more questions about these specific births that occurred between 2011 to 2023.x

REPEAT Q4a - Q4nn for each birth.

READ: Let's discuss the birth of [child name] by [mother name].

- a. Is the birth of [child name] by [mother name] known to you? (1=Yes, 2=No)
If yes, continue. If no, skip to next birth.
- b. Is [mother name] one of the following household members? *Select from household roster.*
- c. Is [mother name] currently available to answer some questions about her births? (1=Yes, 2=No)
If yes, proceed with speaking to [mother name] and skip to Q4f. If no, continue.
- d. What is the relationship of the person providing information to [mother name]? *Use G4 codes.*
- e. Did [mother name] pass away during this pregnancy/delivery of [child name] due to pregnancy/delivery related health issues? (1=Yes, 2=No)
- f. Did [mother name] have health insurance coverage while pregnant with [child name]? (1=Yes, 2=No)
*By health insurance coverage, we mean a financial medical cover paid by a company or government.
Examples: Linda Mama, NHIF/SHIF etc.
If yes, continue. If no, skip to Q4h.*
- g. What type of health insurance?
 Linda Mama
 NHIF/SHIF
 UAP Insurance
 Madison Insurance
 Britam Insurance
 Other (specify)

Questions on antenatal care

- h. Did [mother name] receive antenatal care while pregnant with [child name]? *Antenatal care is the care provided by skilled health-care professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy. This includes risk identification; prevention and management of pregnancy-related or concurrent diseases; and health education and health promotion.* (1=Yes, 2=No)
If yes, continue. If no, skip to question Q4s.
- i. How many antenatal visits did [mother name] complete while pregnant with [child name]?

- j. From how many different facilities did [mother name] receive antenatal care? Enter -98 if only received antenatal care at home. If FR is unsure of all facilities, include the ones the FR knows about. If one or more facilities, continue. Otherwise, skip to Q4r.

READ: I would like to know which facilities [mother name] received antenatal care from. I will now ask about each [# from Q4j] facility.

REPEAT Q4k - Q4q for each facility.

- k. In which county was this facility?

- Bungoma
- Busia
- Homa Bay
- Kakamega
- Kisii
- Kisumu
- Migori
- Nandi
- Siaya
- Vihiga
- Other county

If selected listed county, skip to Q4n. Otherwise, continue.

- l. In what county did [mother name] receive antenatal care from?

- m. In what facility did [mother name] receive antenatal care from? _____

Skip to Q4o.

- n. Which facility did [mother name] receive antenatal care from? *Select from dynamic search list.*

If none of the above, continue. Otherwise, skip to next facility.

- o. In what type of facility was antenatal care received? *Select all that apply.*

- Government hospital
- Government dispensary
- Mission hospital
- Mission health centre/clinic
- Mission dispensary
- Private hospital
- Private health centre/clinic
- Private dispensary
- Other (specify)

- p. What was the primary mode of transportation that the mother used to reach this facility? *If the mother used multiple modes of transportation, select the one that they most commonly used.*

- Walking
- Boda boda
- Matatu
- Private motorcycle
- Private automobile
- Other (specify)

- q. How many minutes did it take to reach the facility? *If visited multiple times, enter the average time.*

- r.
- i. What was the total cost of transport for all [# from 4j] antenatal visits made, including transportation to and from health facilities? Ksh
 - ii. What was the total cost of antenatal care for this pregnancy you paid out of the pocket, including drugs bought, registration fee, lab tests, all payments to staff and other personnel (mkunga/midwife), etc.? Do not include costs of transportation. Do not include insurance payments. You may include money received from others to pay for this. Ksh

Questions on delivery

- s. Did [mother name] give birth to [child name] in a health facility, as opposed to at home? (1=Yes, 2=No)
If yes, continue. If no, skip to Q4aa.
- t. In which county did [mother name] give birth to [child name]?
 - Bungoma
 - Busia
 - Homa Bay
 - Kakamega
 - Kisii
 - Kisumu
 - Migori
 - Nandi
 - Siaya
 - Vihiga
 - Other county

If selected listed county, skip to Q4w. Otherwise, continue.
- u. In what county did [mother name] receive antenatal care from?
- v. In what facility did [mother name] receive antenatal care from? _____
Skip to Q4x.
- w. (if selected above listed county) In which facility did [mother name] give birth to [child name]? Select from dynamic search list.
If none of the above, continue. Otherwise, skip to Q4y.
- x. In what type of facility did [mother name] give birth to [child name]? Select all that apply.
 - Government hospital
 - Government dispensary
 - Mission hospital
 - Mission health centre/clinic
 - Mission dispensary
 - Private hospital
 - Private health centre/clinic
 - Private dispensary
 - Other (specify)
- y. What was the primary mode of transportation that the mother used to reach this facility?
If the mother used multiple modes of transportation, select the one that they most commonly used.
 - Walking
 - Boda boda
 - Matatu

- Private motorcycle
- Private automobile
- Other (specify)

- z. How many minutes did it take to reach the facility?
- aa. Did *[mother name]* give birth to *[child name]* via Caesarean section (C-section)? (1=Yes, 2=No)
- bb. Were there any complications during pregnancy or birth? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to 4cc.
- i. Describe the complications experienced:
- cc. For how long was *[mother name]* and *[child name]* present at the hospital/clinic after the birth? days hours
- dd.
- i. What was the total cost of transport for *[child name]*'s delivery, including transportation to and from health facilities? Ksh
- ii. What was the total cost of *[child name]*'s delivery, including cost of delivery, delivery kit, and all payments to staff and other personnel? Do not include costs of transportation. Do not include insurance payments. You may include money received from others to pay for this. Ksh

Questions about postnatal care

- ee. Did *[mother name]* receive postnatal care after giving birth to *[child name]*? (1=Yes, 2=No)
If yes, continue. If no, skip to next birth.
- ff. How many postnatal visits did *[mother name]* and *[child name]* complete within the first six weeks after the birth?
- gg. From how many different facilities did *[mother name]* receive postnatal care? *Enter -98 if only received postnatal care at home. If FR is unsure of all facilities, include the ones the FR knows about. If one of more facilities, continue. Otherwise, skip to Q4oo.*

READ: I would like to know which facilities *[mother name]* received postnatal care from. I will now ask about each *[# from Q4gg]* facility.

REPEAT Q4hh - Q4nn for each facility.

hh. In which county was this facility?

- Bungoma
- Busia
- Homa Bay
- Kakamega
- Kisii
- Kisumu
- Migori
- Nandi
- Siaya
- Vihiga
- Other county

If selected listed county, skip to Q4hh. Otherwise, continue.

- ii. In what county did *[mother name]* receive antenatal care from?

jj. In what facility did [mother name] receive antenatal care from? _____

Skip to Q4ll.

kk. Which facility did [mother name] receive postnatal care from? *Select from dynamic search list.*

If none of the above, continue. Otherwise, skip to Q4mm.

ll. In what type of facility was antenatal care received? *Select all that apply.*

Government hospital

Government dispensary

Mission hospital

Mission health centre/clinic

Mission dispensary

Private hospital

Private health centre/clinic

Private dispensary

Other (specify)

mm. What was the primary mode of transportation that the mother used to reach this facility?

If the mother used multiple modes of transportation, select the one that they most commonly used.

Walking

Boda boda

Matatu

Private motorcycle

Private automobile

Other (specify)

nn. How many minutes did it take to reach the facility? *If visited multiple times, enter the average time.*

oo.

i. What was the total cost of transport for all [# from 4gg] postnatal visits made, including transportation to and from health facilities? Ksh

ii. What was the total cost of postnatal care for [child name] you paid out of pocket, including drugs bought, registration fees, lab tests, all payments to staff and other personnel (mkunga/midwife), etc.? You may include money received from others to pay for this. Do not include insurance payments. Do not include costs of transportation? Ksh

If [child name] was collected from census and born in 2022, continue. Otherwise, skip to next birth.

pp. Is [child name] still alive? (1=Yes, 2=No)

If yes, continue. Otherwise, skip to next birth.

qq. Is the date of death of [child name] known? (1=Yes, 2=No)

i. *(if yes)* What is the date of death of [child name]? / /

ii. *(if no)* What is the year of death of [child name]?

REPEAT 4rr for a randomly selected child born before 2020, if applicable, and a randomly selected child born after 2020, if applicable.

rr. ***We discussed the details of when [mother name] was pregnant and gave birth to [child name].*** We understand that we are asking about events that happened a while ago, and it can sometimes be difficult to remember exact details.

- i. How confident are you about your response regarding whether [child name] was born in a hospital? (1=I feel very certain about the numbers, 2=I feel somewhat certain about the numbers, 3=I don't feel very certain about the numbers)
 - ii. How confident are you about your response regarding the number of antenatal visits [mother name] made while pregnant with [child name]?
 - iii. How confident are you about your response regarding the costs of transportation for visits made to health facilities?
5. (if FR is female) Since 2011, have you had a pregnancy that ended before giving birth? (1=Yes, 2=No) Please consider all pregnancies that ended in miscarriage or abortion. Do not include stillbirths or neonatal deaths. By miscarriage, we mean births that ended before 28 weeks of pregnancy, and by abortion, we mean the deliberate termination of a pregnancy before 28 weeks of pregnancy.
- (if FR is male) Since 2011, has a sexual partner of yours pregnant with your child had a pregnancy that did not end in birth? (1=Yes, 2=No) Please consider all pregnancies that ended in miscarriage or abortion. Do not include stillbirths or neonatal deaths. By miscarriage, we mean births that ended before 28 weeks of pregnancy, and by abortion, we mean the deliberate termination of a pregnancy before 28 weeks of pregnancy. If yes, continue. If no, skip to Q6.
- a. How many pregnancies have you/she/they had since 2011 that did not end in birth?

REPEAT Q5b - Q5f for each pregnancy.

- b. How did this pregnancy end? (1=Miscarriage, 2=Abortion, -99=Don't know, -88=Refuse to answer)
- c. When did this pregnancy end? / (MM/YYYY)
- d. In what week/month of the pregnancy did the pregnancy end? (1=Week, 2=Month)
- e. Did you/she receive antenatal care while pregnant? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to next pregnancy.
- f. How many antenatal visits did you/she complete during this pregnancy?

READ: We discussed [SUM of Q1 and Q2] women who have lived in this household since 2011. I would now like to ask whether any of these women, since 2011, had a pregnancy that ended prior to giving birth. I will ask about each woman in turn.

REPEAT Q6a - Q6g for each woman.

- 6.
 - a. Since 2011, has [name] had a pregnancy that ended before giving birth? (1=Yes 2=No) Please consider all pregnancies that ended in miscarriage or abortion. Do not include stillbirths or neonatal deaths. By miscarriage, we mean births that ended before 28 weeks of pregnancy, and by abortion, we mean the deliberate termination of a pregnancy before 28 weeks of pregnancy. If yes, continue. If no, skip to next woman.
 - b. Since 2011, how many pregnancies has [name] had that ended in giving birth?

REPEAT Q6c - Q6g for each pregnancy.

- c. How did this pregnancy end? (1=Miscarriage, 2=Abortion, -99=Don't know, -88=Refuse to answer)
- d. When did this pregnancy end? / (MM/YYYY)
- e. In what week/month of the pregnancy did the pregnancy end? (1=Week, 2=Month)

- f. Did she receive antenatal care while pregnant? (1=Yes, 2=No)
If yes, continue. If no, skip to next pregnancy.
- g. How many antenatal visits did she complete during this pregnancy?

Section 5.1.

There is no section 5.1 for Endline 3.

Section 5.2. FR Migration History

FO: The following section asks specifically about the FR, not about other household members.

1. Since January 2014, have you lived in any other village (or town/city) than where you live now for more than four months? (1=Yes, 2=No) *If FR moved away and then later moved back to a previous residence, this is still considered a migration and should be captured. If the FR moved within the same city/town/village (e.g. moved within different places in Nairobi), we do not need to capture this. If yes, continue. If no, skip to next section.*

2. I would like to ask about each of the places that you've lived since January 2014, in sequential order. Let's start with where you were living at January 2014. Were you living at this current residence in January 2014? (1=Yes, 2=No)

If yes, skip to Q3. If no, continue.

Where were you living at January 2014?

- a. Country: _____
- b. County: _____
- c. Subcounty: _____
- d. Location: _____
- e. Sublocation: _____
- f. Village: _____

REPEAT Q3 - Q7 for each subsequent move.

3. Where did you move immediately after?

- a. Country: _____
- b. County: _____
- c. Subcounty: _____
- d. Location: _____
- e. Sublocation: _____
- f. Village: _____

4. When did you arrive to this place? / / (MM/YYYY)

5. Why did you move to this place? | | Use G5 codes. Select up to 3 reasons.

6. When you moved, whom did you live with in this place? | | Use G4 codes. Select up to 3 people.

7. After living here, did you live in any other village or town/city for at least four months? (1=Yes, 2=No) *If yes, repeat Q3 - Q7. If no, continue to Q8.*

8. **FO:** Confirm that the last reported residence matches the current residence listed in Section 3 of this survey. If not, probe the FR further about their migration history. Do you confirm that the last reported residence matches the current residence?

Section 5.3. Marital History

READ: Now I would like to ask you some questions about any marriages you might have had. I would like to remind you that all answers you give will be kept as confidential as possible and that the information will be used for research purposes only. Also, I understand it may be difficult or upsetting to talk about, but please remember to include marriages that may now be over.

If the respondent is currently single/not married according to Section 2 Q9, continue. Otherwise, if the respondent is married/divorced/separated/widowed, skip to question 2.

1. Have you ever been married? (1=Yes, 2=No)
If yes, continue. If respondent has never been married, skip to next section.
2. Since January 2014, did you get newly married? (1=Yes, 2=No)
If yes, continue. If not, skip to Q3.
 - a. How many new marriages since January 2014?
 - b. In which years did you get newly married since January 2014? *Select all that apply.*
3. Since January 2014, have you ever been divorced, widowed or separated? *Select all that apply.*
 Yes, widowed
 Yes, separated
 Yes, divorced
 No
 - a. *(if widowed or divorced)* In what year did your last marriage end?

If currently married, continue, otherwise, skip to next section.

FO: The following questions refer to the FR's current spouse. If FR is male and his marital status is polygamous, repeat question 4 for each spouse.

4. Does your spouse reside in this household? (1=Yes, 2=No)
If no, continue. Otherwise skip to Q8.
5. What is your spouse's age in years?
6.
 - a. Which school system did your spouse participate in? (1=8-4-4, 2=7-2-2-3, 3=2-6-6-3, -98=No schooling)
 - b. What is the highest level of education completed by your spouse? *Use G6 codes.*
7. What is your spouse's occupation? *Use G9 codes.*
8. What is your spouse's subtribe? *Use subtribe codes.*
9. What is your spouse's clan?

Section 6.1. Home Characteristics

FO: For the following questions, refer to the main house of the household, not simbas (i.e., sleeping huts for young unmarried men). Also, we are only interested in the current residence, not (necessarily) ancestral land (even if the current residence is a rental). If you are conducting this interview at the respondent's home, do not ask the following question on housing materials. Simply observe and record your observations in the following questions. If you are conducting this interview elsewhere, please ask the respondent the following questions and prompt with the below.

0a. Of what material are the floors made? (1=Cement, 2=Mud, 3=Part mud, part cement, 4=Tiles, -77=Other(specify))

0b. Of what material is the roof made? (1=Iron / tin, 2=Grass thatch (no reeds), 3=Grass thatch (with reeds), 4=Mud/branches, 5=Cement/concrete, 6=Palm leaves, 10=Tiles, 11=Unfinished, -77=Other (specify))

0c. Of what material are the walls made? (1=Iron, 2=Mud, 3=Cement, 4=Cement/mud mixed, 5=Brick, -77=Other)

READ: Now I'd like to ask you some questions about your home and household. Think of your current residence / the building you eat in and sleep in.

1. Do you have electricity, from any source? (1=Yes, 2=No) *Include electricity from any source (power grid, solar, battery, generator, etc.) It can be intermittent (not always on). If only electricity is a solar lamp, select No. If yes, continue. If no, skip to Q2.*
 - a. What is your source of electricity? *Select all that apply.*
 - National electricity service
 - Other wire connection
 - Generator
 - Car battery
 - Solar home system
 - Other (specify)
 - b. Does your household own your wired electricity connection? (1=Yes, 2=No) *Note: for instance, if the household is renting and the landlord paid for the connection, the household would not own its connection.*
2. What kind of toilet facility does your household use most often? (1=None, 2=Latrine, 3=Toilet, 5= Portable toilet, -77=Other (specify))
3. Does your household exist on a shared homestead/compound with other households? (1=Yes, 2=No)
 - a. How many SEPARATE buildings / structures are in your homestead?
 - Residential house
 - Servants quarters
 - Boys house (Simba)
 - Kitchen
 - Animal shed / barn
 - Granary / storage shed
 - Other: _____
 - b. How many separate rooms do you have in your...? *Include those separated by sheets. Do not include store rooms or toilet rooms.*
 - Residential house(s)
 - Servants quarters
 - Boys house(s) (Simba)
 - c. When was the roof of the main residence last installed / replaced? *If after 2010, specify year.*

4. What was your main water source in the last 7 days? (1=Pipe, 2=Well (gather), 3=Protected spring, 4=Unprotected spring, 5=Collected rainwater, 6=Lake/pond, 7=River/stream, 8=Borehole well (high quality water), 9=Borehole well (low quality water), -77=Other)
If pipe, continue. Otherwise, skip to Q5.
- a. Does your household own your piped water connection? (1=Yes, 2=No)
5. Does your household own or rent the house / apartment where you live? (1=Own, 2=Rent, 3=Company housing, 4=Government Housing, -77=Other (specify))
If own, continue. If rent, skip to Q5c. Otherwise, skip to Q6.
- a. If you wanted to build a house like yours in this village, how much would it cost (both for materials and for labor)? Ksh
- b. How much in shillings does your household pay for rent each month for this house / apartment? Ksh
- c. Does the house / apartment rest on land (greater than 0.25 acres) that you use for agricultural purposes? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q6.
- d. How much land was used for agricultural purposes? Acres *Do not include land that was rented exclusively for agricultural purposes, only that which was included with the residential house.*
6. How much land does your household own? Acres *Include any land that is owned and used for agricultural, pastoral or fish pond activities, including agricultural/commercial business activities. Include land both within and outside the study area.*
If zero, skip to Q8. Otherwise, continue.
- a. How much does it cost to buy an acre of land in this village? Ksh
- b. How much of that [Q6] acres of land you own is used for your household's agricultural purposes? Acres
- c. Now think of all of the land that you own that could be used for agriculture, even if it is not currently being used for agriculture. For this land that you own, if you were to rent it out, what would you charge each month to rent all of it out? Ksh
- d. How much of that [Q6] acres of land is located in Siaya County? Acres
7. In the last 12 months, did you rent any of the land owned by your household to people outside of your household? (1=Yes, 2=No)
If yes, continue. If no, skip to Q8.
- a. How much of the [Q6] acres of land you own did you RENT OUT to people outside of your household? Acres
- b. For how many months of the last 12 months did you rent out this land? months
- c. For how much do you rent out this land?
Amount: Ksh
Rent period: (1=Year, 2=Season, 3=Month)
For how many months was the season?
8. In the last 12 months, has your household rented in land from others, or used land you do not own? (1=Yes, 2=No) *If the household rents an apartment / house, but no other land, answer no.*
If yes, continue. Otherwise, skip to Q9.
- a. How much land has your household rented from others in the last 12 months? Acres
- b. How much of this [Q8a] acres was used for agricultural purposes? Acres
- c. How many months did you rent in this land in the last 12 months? Months
For how much did you rent in this land?
Amount: Ksh
Rent period: (1=Year, 2=Season, 3=Month)
For how many months was the season?

READ: Now we would like to talk about household chores. Household chores include activities such as cleaning, dusting, sweeping, washing dishes or clothes, ironing, collecting water, slashing, etc. Do NOT include time spent on

childcare.

9. In the last seven days, how many hours have you (the FR) spent doing household chores for your household?
10. In total, how many people have performed household chores for your household over the last seven days?
*Include both household members (adults and children) and non-household members, and the FR, if applicable.
If Q10 > 0, continue. Otherwise, skip to next section.*
11. In the last seven days, how many hours did members of your household – not including you – spend doing household chores for your household? *Enter 0 if no hours spent doing chores.*
 Other adults (excluding FR)
 Older children 12 - 18
 Younger children 0 - 11
12. In the last seven days, how many hours did workers from outside the household (such as hired maids who do not live with you) spend doing household chores, excluding childcare? hours
If > 0, continue. Otherwise, skip to next section.
13. In the last seven days, how much has your household spent in total (including cash and in-kind payments) on people from outside the household assisting with household chores? Ksh *If payment is in kind, ask to estimate in shillings.*

Section 6.2

There is no section 6.2 for Endline 3.

Section 6.3. Assets

READ: Now I'd like to ask you about some of the things your household owns. I would like to remind you that all answers you give will be kept as confidential as possible, we're an independent Organization and information won't have any effect on other programs.

FO: For each asset, first ask about the number of each asset the household owns. Then, ask for the total value of those. Ask the FR to estimate what the assets would be worth if they sold them today. For agricultural assets and livestock, please include assets used for any agricultural business activity (e.g. poultry farming, crops for sale, etc.) If an asset is connected to a loan/the household is still paying off this asset, still include it.

1. Quantity owned: |__| Total value: |__| Ksh
- a. Bicycles
 - b. Motorcycles
 - c. Cars
 - d. Kerosene stoves
 - e. Radio / cassette player / CD players
 - f. Sewing machines
 - g. Kerosene lanterns
 - h. Beds
 - i. Mattresses
 - j. Bednets
 - k. Tables
 - l. Sofa pieces (all kinds)
 - m. Chairs
 - n. Cupboards / dressers
 - o. Clocks / watches
 - p. Electric irons
 - q. Televisions
 - r. Computers / tablets
 - s. Mobile phones (NOT smart phones)
Smart phones
 - t. Car batteries
 - u. Boats (motorized or other)
 - v. Iron / metal / steel sheets (do NOT include those being used as roof/construction)
 - w. Farming tools (hoes, pangas, etc.)
 - x. Hand carts
 - y. Wheelbarrows
 - z. Ox plows
 - aa. Cattle
 - bb. Goats
 - cc. Sheep
 - dd. Chickens
 - ee. Other birds (ducks, geese, turkey)
 - ff. Pigs
 - gg. Fish
 - hh. Generators
 - ii. Solar panels
 - jj. Solar lanterns

Section 6.4. Savings and Credit

READ: The following questions are about your financial situation, which we want to know for research purposes about living standards in the area. Remember, we will not share this information with anyone. If there are any questions that you do not feel comfortable answering, you may skip those questions.

1. Do you or someone in your household have an M-Pesa or mobile money account? (1=Yes, 2=No)
If yes, continue. If no, skip to Q2.
 - a. Approximately, what is your household's current balance on all mobile money accounts combined? Ksh
2. Do you or someone in your household have any type of account in a bank? (1=Yes, 2=No)
If yes, continue. If no, skip to Q3.
 - a. Do you or someone in your household have a savings account in a bank? (1=Yes, 2=No)
 - b. Approximately, what is your household's current balance on all bank accounts combined (savings + checking, net overdraft)? Ksh
3. Do you or someone in your household participate in a SACCO? (1=Yes, 2=No)
If yes, continue. If no, skip to Q4.
 - a. What was your household's SACCO contribution in the last 30 days? Ksh
4. Do you or your household participate in a merry-go-round or ROSCA? (1=Yes, 2=No)
If yes, continue. If no, skip to Q5.
 - a. In the past 12 months, has your household taken any loans from a merry-go-round or ROSCA? (1=Yes, 2=No)
If yes, continue. If no, skip to Q4g.
 - b. In the last 12 months, what is the total amount of loans your household took from a merry-go-round or ROSCA? Ksh
 - c. What was the purpose of these loans? Use T1 codes. Select up to 3.
 - d. Now think of the most recent loan your household took from a merry-go-round or ROSCA.
What was the original size of that loan? Ksh
What is the remaining balance on that loan? Ksh
How much interest was charged on that loan? *If no interest charged, fill in all three with 99.*
Unit: (1=Ksh, 2=Rate/percent, 3=Flat rate, -98=No interest)
Amount:
Per unit of time: (1=Day, 2=Week, 3=Month, 4=Year, 5=Flat rate)
 - e. By when is/was your household supposed to pay back the loan? / (MM/YYYY)
 - f. Is your household currently in default on this loan? (1=Yes, 2=No)
 - g. In the past 12 months, did you or someone in your household ask for a loan from a merry-go-round or ROSCA but not get it? (1=Yes, 2=No)
5. In the last 12 months, has your household used any mobile installment payment services, such as M-Kopa? (1=Yes, 2=No)
If yes, continue. If NO, skip to question 6.
 - a. What is the total amount (value) of the products that your household has purchased on installment in the last 12 months? Ksh
 - b. What is the total amount your household currently owes all such mobile installments combined? Ksh
 - c. What is the total amount your household has made in payments to these mobile installments in the last 30 days? Ksh
6. Do you or someone in your household currently have any outstanding loans from a commercial bank or commercial lender? (1=Yes, 2=No)
If yes, continue. If NO, skip to question 7.
 - a. What is the total amount your household currently owes all these commercial lenders combined? Ksh

- b. What is the total amount your household made in loan payments to these commercial lenders in the last 30 days? Ksh
7. In the past 12 months, has your household taken any new loans from a commercial bank or commercial lender? (1=Yes, 2=No)
If yes, continue. If no, skip to Q7g.
- a. No question 7a.
- b. In the last 12 months, what is the total amount of loans your household took from commercial banks or commercial lenders? Ksh
- c. What was the purpose of those loans? Use T1 codes. Select up to 3.
- d. Now think of the most recent loan your household took from a commercial bank or commercial lender. What was the original size of that loan? Ksh
 What is the remaining balance on that loan? Ksh
 How much interest was charged on that loan? *If no interest charged, fill in all three with 99.*
 Unit: (1=Ksh, 2=Rate/percent, 3=Flat rate, -98=No interest)
 Amount:
 Per unit of time: (1=Day, 2=Week, 3=Month, 4=Year, 5=Flat rate)
- e. By when is/was your household supposed to pay back the loan? / (MM/YYYY)
- f. Is your household currently in default on this loan? (1=Yes, 2=No)
- g. In the past 12 months, did you or someone in your household apply for a loan from a commercial bank or commercial lender but not get it? (1=Yes, 2=No)
8. Do you or someone in your household currently have any outstanding loans from a shylock (moneylender)? (1=Yes, 2=No)
If yes, continue. If NO, skip to Q9.
- a. What is the total amount your household owes all these shylocks (moneylenders) combined? Ksh
- b. What is the total amount your household made in loan payments to these shylocks (moneylenders) in the last 30 days? Ksh
9. In the past 12 months, have you or someone in your household taken any new loans (i.e. borrowed money) from a shylock (moneylender)? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q9g.
- a. No question 9a.
- b. In the last 12 months, what is the total amount of loans your household took from a shylock (moneylender)? Ksh
- c. What was the purpose of those loans? Use T1 codes. Select up to 3.
- d. Now think of the most recent loan your household took from a shylock (moneylender). What was the original size of that loan? Ksh
 What is the remaining balance on that loan? Ksh
 How much interest was charged on that loan? *If no interest charged, fill in all three with 99.*
 Unit: (1=Ksh, 2=Rate/percent, 3=Flat rate, -98=No interest)
 Amount:
 Per unit of time: (1=Day, 2=Week, 3=Month, 4=Year, 5=Flat rate)
- e. By when is/was your household supposed to pay back the loan? / (MM/YYYY)
- f. Is your household currently in default on this loan? (1=Yes, 2=No)
- g. In the past 12 months, did you or someone in your household apply for a loan from a shylock (moneylender) but not get it? (1=Yes, 2=No)
10. Do you or someone in your household currently have any outstanding loans from a mobile credit product (like M-Shwari or others)? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q11.
- a. What is the total amount your household currently owes all these mobile credit products (like M-Shwari or others)? Ksh

b. What is the total amount your household has made in loan payments to these mobile credit products in the last 30 days? Ksh

11. In the past 12 months, have you or someone in your household taken any new loans (i.e. borrowed money) from a mobile credit product (like M-Shwari or others)? (1=Yes, 2=No)

If yes, continue. If NO, skip to Q11g.

a. No question 11a.

b. In the last 12 months, what is the total amount of loans your household took from a mobile credit product? Ksh

c. What was the purpose of those loans? Use T1 codes. Select up to 3.

d. Now think of the most recent loan your household took from a mobile credit product.

What was the original size of that loan? Ksh

What is the remaining balance on that loan? Ksh

How much interest was charged on that loan? *If no interest charged, fill in all three with 99.*

Unit: (1=Ksh, 2=Rate/percent, 3=Flat rate, -98=No interest)

Amount:

Per unit of time: (1=Day, 2=Week, 3=Month, 4=Year, 5=Flat rate)

e. By when is/was your household supposed to pay back the loan? (MM/YYYY)

f. Is your household currently in default on this loan? (1=Yes, 2=No)

g. In the past 12 months, did you or someone in your household apply for a loan from a mobile credit product but not get it? (1=Yes, 2=No)

12. In the past 12 months, has your household ever borrowed money from someone else outside your household? (1=Yes, 2=No) *By borrowing, we mean that you have received money that you had to repay or will have to repay at some point in the future.*

If yes, continue. If NO, skip to Q12o.

READ: I would like to ask about the different instances you've borrowed money from someone outside your household in the past 12 months. Please tell me about each separate household you have borrowed from.

a. From how many different households have you borrowed money from in the past 12 months?

b. What is the total amount your household borrowed from these [Q12a] households over the past 12 months? Ksh

c. How much does your household currently owe these [Q12a] households?

d. What is the total amount of loan payments your household has made to these [Q12a] households in the last 30 days? Ksh

READ: Now I would like to talk about each of these [Q12a] households you have borrowed from. *Note: If more than 5, please choose the 5 households from which you have borrowed the largest amount in the past 12 months.*

REPEAT Q12e - Q12h for each household borrowed from.

What is the first name of the person you borrowed from?

e. What is the total amount your household borrowed from this person over the last 12 months? Ksh

f. How much does your household currently owe this person? Ksh

g. What is the total amount your household paid in loan payments to this person] in the last 30 days? Ksh

h. What was the purpose of that borrowing? Use T1 codes. Select up to 3.

If [Q12a] > 5, continue. Otherwise, skip to Q12m.

- i. Now think of the most recent loan your household gave to another household.
 What was the original size of that loan? Ksh
 What is the remaining balance on that loan? Ksh
 How much interest was charged on that loan? *If no interest charged, fill in all three with 99.*
 Unit: (1=Ksh, 2=Rate/percent, 3=Flat rate, -98=No interest)
 Amount:
 Per unit of time: (1=Day, 2=Week, 3=Month, 4=Year, 5=Flat rate)
- j. By when is/was your household supposed to pay back the loan? ||||| (MM/YYYY)
- k. In the last 12 months, did someone ask your household for a loan but your household did not give it?
 (1=Yes, 2=No)

The following section 17 was moved to be administered immediately after section 6.4 at Endline 2. We preserve the same order at Endline 3, though we refrain from renumbering so as not to interfere with consistent variable names across survey rounds.

Section 17. Transfers to/from other households

Read: Now, I would like to ask you about relationships your household has with other households, in which your household either receives or gives money or goods. I would like to remind you that all answers you give will be kept as confidential as possible, we're an independent organization and information won't have any effect on other programs.

Transfers Received

1. In the past 12 months, did anyone in this household RECEIVE a gift / assistance of money or goods from another household? *Do not include transfers from the government or employers; also do not include loans or interest payments, or goods that the household purchased. If FR is in boarding school, count gifts from parents as transfers.* (1=Yes, 2= No)
If yes, continue. If NO, skip to Q9
 - a. In the past 12 months, from how many transfer relationships did your household receive a gift / assistance of money or goods?
2. What was the total value of ALL gifts / assistance members of your household received in the last 12 months from these [# from Q1a] households, COMBINED? Ksh

READ: Consider each relationship in which your household received a gift of money or goods from someone outside the household in the past 12 months. Please group together transfers that come from the same sender (or individuals in the same household) in one "transfer relationship". If there are more than 5 transfer relationships, tell me about the ones that provided the largest amount of money or goods.

REPEAT Q3 - Q7 for each transfer relationship {

3. What is the name of the sender? *If unable to give a first name, respondent may provide a common name / nickname.* _____
 - a. Where does this person live? *Use aggregated city/town/village codes.*
 - b. *(if lives in other Siaya village)* In which village does this person live?
4. Was it money or goods that your household received? (1=Money, 2=Goods, 3=Both)
IF MONEY, ask Q4a – 4b. If GOODS, ask Q4c – 4d. If BOTH, ask Q4a – 4d.
 - a. What was the total amount of the most recent cash transfer? *Do not include transport or Mpesa fees.* Ksh
 - b. How were the funds transferred? *Use T2 codes.*
 - c. What was the value of the most recent transfer of goods? *Do not include transport or Mpesa fees.* Ksh
 - d. What goods were given to you? _____
5. What was the main use of the most recent transfer of money or goods? *Use T1 codes. Select up to 3.*
6. What was the total value of all transfers received from this relationship during the last 12 months? Ksh *If goods were sent, think about how much it would cost to buy them.*
7. To your knowledge, have you or anyone in our household ever given this person a transfer in the past? (1=Yes, 2=No, -99=DK) *Only use DK if FR feels they would not be aware of any transfers made. If they would be aware but haven't heard of any transfers, that's a NO.*

}

If [# from Q1a] > 5, continue. Otherwise, skip to Q9.

8. What was the total value of all other gifts members of your household received from those not yet discussed in the last 12 months? Ksh

Transfers Sent

9. Did anyone in this household give or send money or goods to someone outside the household in the last 12 months? (1=Yes, 2= No)

If yes, continue to Q10. If NO, skip to Q17.

a. In the last 12 months, to how many transfer relationships did your household send a gift /assistance of money or goods?

10. What was the total value of ALL gifts / assistance members of your household sent in the last 12 months to these [# from Q9a] households, COMBINED? Ksh

READ: Consider each relationship in which your household sent a gift of money or goods from someone outside the household in the past 12 months. Please group together transfers that were sent to the same receiver (or individuals in the same household) in one "transfer relationship". If there are more than 5 transfer relationships, tell me about the ones your household sent the largest amount of money or goods.

REPEAT Q11 - Q15 for each transfer relationship {

11. What is the name of the receiver? *If unable to give a first name, respondent may provide a common name / nickname.* _____

a. Where does this person live? Use aggregated city/town/village codes.

b. (if lives in other Siaya village) In which village does this person live?

12. Was it money or goods that your household sent? (1=Money, 2=Goods, 3=Both)

If MONEY, ask Q12a. If GOODS, ask Q12b – 12c. If BOTH, ask Q12a – 12c.

a. What was the total amount of the most recent cash transfer? Do not include transport or Mpesa fees. Ksh

b. What was the value of the most recent transfer of goods? Do not include transport or Mpesa fees. Ksh

c. What were the goods that you sent? _____

13. *Question removed*

14. What was the total value of all transfers sent in this relationship during the last 12 months? Ksh If goods were sent, think about how much it would cost to buy them.

15. To your knowledge, have you or anyone in our household ever received a transfer from this person in the past? (1=Yes, 2=No, -99=DK)

}

If [# from Q9a] > 5, continue. Otherwise, skip to Q17.

16. What was the total value of all other gifts members of your household sent to those not yet discussed in the last 12 months? Ksh

17. In the last 7 days, have you shared a meal with another household? *Note: by shared a meal, we mean you prepared food for another person or household.* (1=Yes, 2=No, -99=DK)

If yes, continue. Otherwise, skip to Q18.

a. How many meals have you shared with another household in the past 7 days?

18. In the last 7 days, has another household shared a meal with anyone in your household? *In other words, has another household prepared a meal for you?* (1=Yes, 2=No, -99=DK)

If yes, continue. Otherwise, skip to next section.

a. How many meals have other households shared with your household in the past 7 days?

Section 7. Farming and Agriculture

READ: We would now like to discuss the agricultural or pastoral activities that you and other members of your household perform. This includes crop farming, livestock, poultry, fish pond, or other.

1. Have members of your household performed any agricultural or pastoralist activities for yourselves in the last 12 months? (1=Yes, 2=No)
If yes, proceed. If no, skip to section 8.
 - a. Which of following agricultural or pastoralist activities has your household performed in the last 12 months?
Select all that apply.
 - Agriculture(Crop Farming)
 - Livestock
 - Poultry
 - Fish Pond
 - Other

READ: I will now ask about each of the [# of activities selected in Q2] different agricultural/pastoralist activities performed by your household.

REPEAT Q2 - Q23 for each activity.

2. Who in this household is the main decision maker for this activity? *Select from household roster.*
 - a. **FO:** If the main decision maker is present, please try to get the following information from this person. Otherwise, continue with the FR. Who is providing information on this activity? (1=Main decision maker, 2=Someone else)
3. What is the total size of the land you used for this activity in the last 12 months? Acres *Probe for land within the homestead and land located elsewhere. Only count land that is specifically designated to that purpose. DO NOT count general household land / common land used for grazing.*
 - a. Where does this activity take place? *Select all that apply.*
 - Within this village
 - Outside this village but within this sublocation
 - Outside this sublocation but within Siaya, Ukwala, and Ugunja subcounties
 - Outside of Siaya, Ukwala, and Ugunja subcounties
 - b. What share (%) of this activity takes place in...
 - Within this village
 - Outside this village but within this sublocation
 - Outside this sublocation but within Siaya, Ukwala, and Ugunja subcounties
 - Outside of Siaya, Ukwala, and Ugunja subcounties*FO: The shares should sum to 100.*
4. In the last 12 months, did you purchase any land for this activity? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q4b.
 - a. What is the total size of land you purchased for this activity in the last 12 months? Acres
How much did it cost to purchase that land? Ksh
 - b. In the last 12 months, did you rent in any land for this activity? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q4c.

What is the total size of land you rented in for this activity in the last 12 months? Acres
How many months did you rent in this land in the last 12 months? months
How much did it cost to rent in that land per month? Ksh
 - c. In the last 12 months, did you sell any land you previously used for this activity? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q5.

How much did you sell this land for? Ksh

5. (if activity is agriculture/crop farming) What crops have you grown in the last 12 months? Use F1 codes. Select up to 10. If more than 10, select the most important.

If activity is not agriculture, continue. Otherwise, skip to Q9.

6.

- a. Did your household sell any livestock animals/poultry/birds/fish in the last 12 months? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q6e.
- b. How much did you receive in total in sales of livestock/animals/bird/fish...
in the last 30 days? Ksh
in the last 12 months? Ksh
- c. What share (%) of these sales in the last 12 months were made to...
 trader / wholesaler?
 food processing / butcher / restaurants / etc.?
 other households / final consumer?
FO: The shares should sum to 100.
- d. What share (%) of these sales were made...
 at the farm / in this village?
 at a market center / outside this village?
If % outside this village > 0, continue. Otherwise, skip to Q6e.
Where do members of your household usually sell livestock/animals/bird/fish in the last 12 months?
Select from dynamic village/market center choice list.
- e. Did your household purchase any livestock/animals/bird/fish in the last 12 months? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q7.
- f. How much did your household spend in total on purchasing livestock/animals/bird/fish...
in the last 30 days? Ksh
in the last 12 months? Ksh
- g. What share (%) of purchases of livestock/animals/bird/fish in the last 12 months was made from...
 traders / wholesalers?
 other households?
FO: The shares should sum to 100.
- h. What share (%) of the livestock/animals/bird/fish your household buys is usually purchased from...
 in this village?
 at a market or another village?
FO: The shares should sum to 100.
If % outside this village > 0, continue. Otherwise, skip to Q6i.
Where do members of your household usually buy livestock/animals/bird/fish? Select from dynamic village/market center choice list.
- i. What is the total market value of the livestock/animals/bird/fish your household owned AND consumed...
in the last 30 days? Ksh
in the last 12 months? Ksh

7.

- a. Did your household sell any animal products from this activity in the last 12 months? (1=Yes, 2=No) For example, milk from livestock, eggs from chickens, etc.
If yes, continue. Otherwise, skip to Q8.
- b. How much did your household receive in total sales from animal products from this activity...
in the last 30 days? Ksh
in the last 12 months? Ksh
- c. What share (%) of these sales of animal products were made to...
 trader / wholesaler?
 food processing / butcher / restaurants / etc.?

other households / final consumer?

FO: The shares should sum to 100.

- d. What share (%) of these sales of animal products were made...

in this village?

at a market center / outside this village?

If % outside this village > 0, continue. Otherwise, skip to Q7e.

Where do members of your household usually sell animal products? *Select from dynamic village/market center choice list.*

- e. What is the total market value of the animal products your household produced AND consumed in the...
in the last 30 days? Ksh
in the last 12 months? Ksh

8. How much did your household receive in total profits from this activity...
in the last 30 days? Ksh
in the last 12 months? Ksh

9. No question 9.

10. In total, how many workers from outside the household did you hire to work on this activity... *Count casual workers that worked part-time as well.*
in the last 30 days?
in the last 12 months?

11. How much did you spend on salaries for workers from outside the household in this business or activity... *If payment is in kind, ask to estimate in shillings.*
in the last 30 days? Ksh
in the last 12 months?

12. We are now going to ask about the workers you have mentioned you hired in the last 30 days. If you mentioned more than 5, please just answer about the 5 most important / consistent workers.

Repeat the following questions for each worker.

How many days did this worker work for this activity in the last 30 days?

In a typical day, how many hours did worker work for this activity?

What was this worker's total compensation in the last 30 days? Ksh

13. Think about all the buildings, vehicles, machinery, and tools that your household uses for this activity. (e.g. tractors, specialized tools, etc.)
- What is the total value of all these that your household owns? Ksh
 - What was the total amount spent on purchases and maintenance of these in the last 12 months? Ksh
 - What was the total amount spent on rental fees for renting in these in the last 12 months? Ksh
 - What was the total amount received from rental fees for renting out these out to others in the last 12 months? Ksh

14. During the last 12 months, how much did your household spend on the following items for this activity?

Animal medicine / vet? Ksh

Fertilizer? Ksh

Irrigation? Ksh

Improved / hybrid seeds? Ksh

Formal agricultural insurance? Ksh

Animal feed? Ksh

Other variable input costs not already mentioned (to specify)? Ksh

15. Have you experienced any destruction, or theft or vandalism for this activity in the last 12 months? (1=Yes, destruction; 2=Yes, theft/vandalism; 3=No)

If activity is agriculture / crop farming, continue. Otherwise, skip to end of QX.

READ: Now I want to ask you more specifically about the crops that you mentioned earlier.

REPEAT Q16 - Q22 for each crop selected in Q5.

16. How much of this crop did your household produce harvest... *Guide the respondent to recall the full 12 months past. Think of each growing cycle and harvest.*

in the last 12 months? Amount Unit Use F7 codes.

in the last 30 days? Amount Unit Use F7 codes.

What do you estimate is the value of all of this crop harvested in the last 12 months? Ksh

17. Did you sell any output from this crop in the last 12 months? (1=Yes, 2=No)

If yes, continue. Otherwise, skip to Q21.

18.

a. How much of this crop did you sell in the last 12 months?

Amount Unit Use F7 codes.

Ksh

b. How much of this crop did you sell in the last 30 days?

Amount Unit Use F7 codes.

Ksh

19. What share (%) of your sales of this crop was made to...

traders / wholesalers?

food processing / butcher / restaurant / etc.

other households / final consumers?

FO: The shares should sum to 100.

20. What share (%) of your sales of this crop was made...

in this village?

at a market center / outside this village?

FO: The shares should sum to 100.

If % outside this village > 0, continue. Otherwise, skip to Q21.

Where do members of your household usually sell this crop? *Select from dynamic village/market center choice list.*

21. How much land did you devote to farming this crop in the last 12 months? Acres

22. In the past 12 months, did you plant any other crops on the land devoted to farming this crop? (ie, intercropping or crop rotation)? (1=Yes, 2=No)

23. *(if crop is maize)* Which of the following seed varieties did you plant? *Select all that apply.*

DH01 Series

H614 Series

Pannar 691

DK8031

H511/H512

Other (specify)

24. Who in your household worked on any agricultural/pastoral activities in the last month? | *Select from roster.*
REPEAT Q24a - 24b for each selected household member.
- a. How many days did *[name]* work on all agricultural/pastoral activities in the last month?
 - b. How many hours did *[name]* work on all agricultural/pastoral activities in a typical day?

Section 8. Self-Employment

1. No question 1.
2. No question 2.
3. Other than in farming, have members of your household run any business to earn a living in the last 12 months? *Include businesses that may have closed down in the meantime.* (1=Yes, 2=No)
If yes, continue. Otherwise, skip to section 9.
 - a. How many different businesses or self-employed activities has your household run in the last 12 months?
Note: We are asking for the total number of businesses the household has run. Include all the self-employment the FR or someone else in the household has had. The FR can invite relevant people in to help answer questions for this part.

READ: I will now ask some brief details about these [Q3a] enterprises in turn. If any enterprises are no longer operating, please provide the details as they were at the time of closing.

REPEAT Q4 - Qx for each enterprise.

4. Name of enterprise:
5. Primary enterprise category: *Use business category codes.*
6. Are members of your household still running this enterprise? (1=Yes, 2=No)
7. Who in this household is/was the owner of this enterprise? *Select from household roster.*
 - a. Who is providing information on this enterprise? (1=Owner, 2=Other person)
8.
 - a. *(if retail)* What type of products does/did this enterprise sell?
 - b. *(if nonfood vendor/producer)* What type of products does/did this enterprise produce/sell?
9. Any secondary enterprise categories? *Use business category codes. Select all that apply.*
 - a. *(if retail)* What type of products does/did this enterprise sell?
 - b. *(if nonfood vendor/producer)* What type of products does/did this enterprise produce/sell?
10. When did your household begin running this business? /
11. Is/was this a roaming/moving enterprise? *A roaming/moving enterprise is one that sells at multiple locations each week.* (1=Yes, 2=No)
12. At its primary location, from where does/did this enterprise operate? (1=Homestead, 2=Market stall, 3=Own building, 4=Shared building, 5=No building, -77=Other (specify))
13. How many locations does/did this enterprise operate from?

REPEAT Q14 for each location.

14. Is/was this enterprise location in a village or market center? (1=Village, 2=Market center)
(if market center) In which market center is/was this enterprise location? *Use market codes.*
(if village) In which village is/was this enterprise location? *Use village codes.*

If household is still operating this enterprise, skip to Q. Otherwise, continue.

15. Why is your household no longer running this enterprise? (1=Enterprise is no longer operational, 2=Transferred ownership or sold the business, 3=Owner of the business moved away with the business)
If enterprise no longer operational, continue. If enterprise transferred ownership, skip to Q17. If enterprise moved, skip to Q18.
- 16.
- When did this enterprise stop operating? /
 - Why did this enterprise stop operating? Use business closure codes. Select up to 3.
 Skip to next Q20.
- 17.
- To whom did you transfer or sell this enterprise? Use G4 codes.
 - For what amount did you sell this enterprise? Ksh
 - Why did you choose to sell/transfer control of this business? Use business closure codes. Select up to 3.
 Skip to next Q20.
- 18.
- Where did this enterprise move to? Use aggregated geography codes.
 - Market center:
 - Village:
 - Do you know a phone number we could use to contact the enterprise if we need to follow up in the future?
 (1=Yes, 2=No)
If yes, continue. Otherwise, skip to next Q20.
 - Phone number:
 Name:
19. No question 19.
20. In the last 12 months, what months did your household operate this business? Select relevant months.
21.
(if operational) In the past 7 days, what days was this enterprise open? Select relevant days of the week.
(if not operational) When it still operated, what days was this enterprise usually open in a typical 7-day period?
 Select relevant days of the week.
22. On those days when the enterprise was open, how many hours was the enterprise usually open per day?
23.
(if operational) In total, how many HOURS was this enterprise open for customers in the past 7 days?
(if not operational) In total, how many HOURS was this enterprise open in a typical 7 day period?
24. *(if operational)* In the past 7 days, how many hours did the enterprise owner work in total in this business?
25. What were the total earnings of this enterprise in the:
- (if operational)* Last 7 days? Ksh
 - (if operational)* Last 30 days? Ksh
 - Last 12 months? Ksh
26. What share of your total sales is made to...
- final consumers/private individuals? %
- other enterprises (who will use your products to process/resell)? %

27. What was the total profit of this enterprise over the... *Note: Here we mean the amount you received after paying for expenses for this business, including hired workers, money for household members who helped, purchase of goods for sale or for inputs, such as raw materials, fuel, and electricity, but before purchasing personal items for yourself or your household. If unsure, FR can estimate. Ask in terms of "commission" if the FR runs an M-Pesa shop.*
- (if operational) Last 7 days? Ksh
 - (if operational) Last 30 days? Ksh
 - Last 12 months? Ksh

28. What is/was the ownership structure of this enterprise? (1=Single owner, 2=Joint ownership, 3=Cooperative)
If 2 or 3, continue. Otherwise, skip to Q39.

29. How many other owners does this enterprise have... *Note: Anyone that has claim on the profits of the enterprise and shares in business decisions is considered an owner. For cooperatives, list members of the cooperative*
- from this household?
from outside this household?
 - Who else in this household jointly owns this enterprise? *Select from household roster.*

30. No question 30.

REPEAT Q31 for each Q29a co-owner from this household.

31. How many hours did this co-owner work in this enterprise in the past 7 days?

If [Q29a] > 0 and [Q29b] = 0, continue. If [Q29a] > 0 and [Q29b] > 0, skip to Q33.

32. You said the business generated [Q27b] of profits in the last month. Did the owners in this household receive any other compensation (e.g. wages, food, etc.) not already contained in the total profits in the last month? *Note: additional compensation is any financial or in-kind benefit that the owners of this household received from this enterprise, not already counted under profits above. If this was already subtracted when reporting profits, do not double-count here.* (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q39.
- How much was this additional compensation in total?

- 33.
- You said the business generated [Q27b] of profits in the last 30 days. Of these profits, how much did the owners in this household receive? Ksh
 - You said the business generated [Q27c] of profits in the last 12 months. Of these profits, how much did the owners in this household receive? Ksh

If [Q29b] > 0, continue. Otherwise, skip to Q39.

- 34.
- You said the business generated [Q27b] of profits in the last 30 days. You also said [Q33a] of these profits went to owners in this households, which means that [Q27b - Q33a] Ksh went to owners outside this household. Is this correct? (1=Yes, 2=No)
 - You said the business generated [Q27c] of profits in the last 12 months. You also said [Q33b] of these profits went to owners in this households, which means that [Q27c - Q33b] Ksh went to owners outside this household. Is this correct? (1=Yes, 2=No)

35. No question 35.

36. No question 36.

READ: You stated [Q29b] other co-owners outside of this household. I would now like to ask some details about these co-owners. *If there are more than 5, please tell me about the 5 most important co-owners.*

REPEAT Q37 for each co-owner.

37.

- a. What is this co-owner's name?
- b. What is this co-owner's relationship to enterprise owner? Use G4 codes
- c. What is this co-owner's gender? (1=Male, 2=Female)
- d. What is this co-owner's age?
- e. Which school system did this co-owner participate in?
- f. What is the highest level of education that this co-owner has completed?
- g. What is co-owner's ethnicity (tribe)?
- h. When did this owner start working for this enterprise? / (MM/YYYY)
- i. How many hours did this co-owner work in this enterprise over the past 7 days?

If [Q29b] > 5, continue. Otherwise, skip to Q39.

38.

- a. *(if operational)* What is the total amount of hours all owners outside the household worked in this enterprise over the last 7 days? *Sum across all owners not in this household, and over all 7 days.*
- b. *(if not operational)* What is the total amount of hours all owners outside the household worked in this enterprise over a typical 7-day period? *Sum across all owners not in this household, and over all 7 days.*

39.

- a. *(if operational)* How many paid employees work in this enterprise? *Do not include owner or co-owner(s).*
- b. *(if not operational)* How many paid employees usually worked in this enterprise at a given point in time when the enterprise was operating over the last 12 months? *Do not include owner or co-owner(s).*

If currently operational and [Q39a] > 0, continue. Otherwise, skip to Q43.

READ: You stated there are [Q39a] employees. I would now like to ask some details about these employees. *If there are more than 5, please tell me about the 5 most important employees.*

REPEAT Q40 for each employee.

40.

- a. Does this employee live in this household? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q40c.
- b. Which household member is this employee? *Select from household roster.*
Skip to Q40j.
- c. What is this employee's name?
- d. What is this employee's relationship to enterprise owner? Use G4 codes.
- e. What is this employee's gender? (1=Male, 2=Female)
- f. What is this employee's age?
- g. Which school system did this employee participate in?
- h. What is the highest level of education that this employee has completed?
- i. What is this employee's ethnicity (tribe)?
- j. When did this employee start working for this enterprise? / (MM/YYYY)
- k. How many hours did this employee work in this enterprise over the last 7 days?
- l. What was this employee's total compensation over the last 30 days? *Include salaries and any in-kind remuneration.* Ksh

- 41.
- (if operational)* What is the total amount of hours all employees worked in this enterprise over the last 7 days?
 - (if not operational)* What is the total amount of hours all employees worked in this enterprise in a typical 7-day period?
- 42.
- (if operational)* What was the total compensation of all employees together in the last 30 days? *Include salaries and any in-kind remuneration.* Ksh
 - (if not operational)* What was the total compensation of all employees together in a typical 30-day period? *Include salaries and any in-kind remuneration.* Ksh
43. Do/did any members of this household work as volunteers / unpaid employees in this business? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q44.
- Which members of this household work(ed) as volunteers? *Select from household roster.*

REPEAT Q43b - q43c for each household member selected in Q43a.

- (if operational)* How many hours did this household member work in this enterprise over the last 7 days?
- (if not operational)* How many hours did this household member work in this enterprise over a typical 7-day period?

- 44.
- (if operational)* How many volunteers from outside this household currently work in this enterprise? *Volunteers are unpaid employees.*
 - (if not operational)* How many volunteers from outside this household worked in this enterprise at a given point in time when the enterprise was operating? *Volunteers are unpaid employees.*

If Q44a > 0 or Q44b > 0, continue. Otherwise, skip to Q47.

- 45.
- (if operational)* What is the total amount of hours all volunteers from outside this household worked in this enterprise over the last 7 days?
 - (if not operational)* What is the total amount of hours all volunteers from outside this household worked in this enterprise over a typical 7-day period?

46. No question 46.

47. How much did your household invest in order to start, purchase or gain control of this business? *Include all monetary assistance that others contributed to allow FR to start this business. Enter 0 if business was inherited or transferred for free.* Ksh

48. How did you obtain the resources your household initially invested in this business? *Select all that apply.*

- | | |
|--|--|
| <input type="checkbox"/> Own savings | <input type="checkbox"/> Bank loan |
| <input type="checkbox"/> Loan from relatives | <input type="checkbox"/> Merry-go-round |
| <input type="checkbox"/> Gift from relatives | <input type="checkbox"/> SACCO |
| <input type="checkbox"/> Loan from friends | <input type="checkbox"/> NGO cash transfer |
| <input type="checkbox"/> Gift from friends | <input type="checkbox"/> Other (specify) |

49. Do you currently have any outstanding loans for this business? *If any of these loans were already mentioned in Section 6.4, please include them again here.* (1=Yes, 2=No)

If yes, continue. Otherwise, skip to Q50.

- What is the total amount of outstanding loans? Ksh

- b. What was the total interest this business paid on all loans combined in the last 30 days? *Note: If interest payments are less frequent than monthly, calculate what the interest would have been per month. For example, if they paid 300 Ksh over the last 3 months, put 100 Ksh.* Ksh

50. Which of the previously mentioned household assets do you also use for this enterprise? *Select all that apply.*

- | | |
|---|---|
| a. Bicycles | m. Computers / tablets |
| b. Motorcycles | n. Mobile phones (NOT smart phones) |
| c. Cars | Smart phones |
| d. Kerosene stoves | o. Car batteries |
| e. Radio / cassette player / CD players | p. Boats (motorized or other) |
| f. Sewing machines | q. Iron / metal / steel sheets (do NOT include those being used as roof/construction) |
| g. Kerosene lanterns | r. Hand carts |
| h. Tables | s. Wheelbarrows |
| i. Sofa pieces (all kinds) | t. Generators |
| j. Clocks / watches | u. Solar panels |
| k. Electric irons | v. Solar lanterns |
| l. Televisions | |

READ: Now, I am going to ask about any physical assets that this enterprise owns, such as buildings, vehicles, or equipment. I want to remind you that we are collecting this information only for academic research purposes, and will keep this information as confidential as possible and will not report it to the authorities.

51.

- a. Does this enterprise own / rent any land? (1=Yes owns, 2=Yes rents in, 3=No)
- b. *(if owns)* How many acres of land does this enterprise own?
- c. *(if owns)* How much are all the land owned by this enterprise worth today? Ksh *Include land used by the enterprise and land rented out. For example, if someone came to you today to buy all this land, how much could you sell it for?*
- d. *(if owns)* Has this enterprise rented out any land to others in the last 30 days? (1=Yes, 2=No) *If yes, continue. Otherwise, skip to Q51g.*
- e. How much of the total [Q51c] KSh of land does this enterprise rent out to others (rather than use for its own production)? Ksh *For example, if someone came to you today to buy the part of land that you rent out, how much could you sell it for?*
- f. How much did this enterprise receive in rental fees for renting out land in the last 30 days? Ksh
- g. *(if owns)* What was this enterprise's total expenditure / investment in land over the last 30 days? *Include net purchases / maintenance / repairs.* Ksh
- h. *(if rents in)* Think about all the land this enterprise rents in. Imagine you owned all of that LAND. If someone came to you today to buy all the land that you rent in, how much could you sell it for? Ksh
- i. *(if rents in)* How much did this enterprise pay in rental fees for land in the last 30 days? Ksh
- j. *(if rents in)* What was this enterprise's total expenditure/investment in land that it rented in the last 30 days, excluding rental payments? Ksh

52.

- a. Does this enterprise own / rent any buildings/structures? (1=Yes owns, 2=Yes rents in, 3=No)
- b. *(if owns)* How many buildings/structures does this enterprise own?
- c. *(if owns)* How much are all the buildings/structures owned by this enterprise worth today? Ksh *Include buildings/structures used by the enterprise and buildings/structures rented out. For example, if someone came to you today to buy all this buildings/structures, how much could you sell it for?*
- d. *(if owns)* Has this enterprise rented out any buildings/structures to others in the last 30 days? (1=Yes, 2=No) *If yes, continue. Otherwise, skip to Q52g.*

- e. How much of the total [Q52c] KSh of buildings/structures does this enterprise rent out to others (rather than use for its own production)? Ksh *For example, if someone came to you today to buy the part of buildings/structures that you rent out, how much could you sell it for?*
- f. How much did this enterprise receive in rental fees for renting out buildings/structures in the last 30 days? Ksh
- g. *(if owns)* What was this enterprise's total expenditure / investment in buildings/structures over the last 30 days? *Include net purchases / maintenance / repairs.* Ksh
- h. *(if rents in)* Think about all the buildings/structures this enterprise rents in. Imagine you owned all of that buildings/structures. If someone came to you today to buy all the buildings/structures that you rent in, how much could you sell it for? Ksh
- i. *(if rents in)* How much did this enterprise pay in rental fees for buildings/structures in the last 30 days? Ksh
- j. *(if rents in)* What was this enterprise's total expenditure/investment in buildings/structures that it rented in the last 30 days, excluding rental payments? Ksh

53.

- a. Does this enterprise own / rent any vehicles? *Examples of large vehicles include cars, trucks, and botas. Examples of small vehicles include motorbikes, bicycles, scooters, and carts.* (1=Yes owns, 2=Yes rents in, 3=No)
- b. No question 53b.
- c. *(if owns)* How much are all the vehicles owned by this enterprise worth today? Ksh *Include vehicles used by the enterprise and vehicles rented out. For example, if someone came to you today to buy all this vehicles, how much could you sell it for?*
- d. *(if owns)* Has this enterprise rented out any vehicles to others in the last 30 days? (1=Yes, 2=No) *If yes, continue. Otherwise, skip to Q53g.*
- e. How much of the total [Q53c] KSh of vehicles does this enterprise rent out to others (rather than use for its own production)? Ksh *For example, if someone came to you today to buy the part of vehicles that you rent out, how much could you sell it for?*
- f. How much did this enterprise receive in rental fees for renting out vehicles in the last 30 days? Ksh
- g. *(if owns)* What was this enterprise's total expenditure / investment in vehicles over the last 30 days? *Include net purchases / maintenance / repairs.* Ksh
- h. *(if rents in)* Think about all the vehicles this enterprise rents in. Imagine you owned all of that vehicles. If someone came to you today to buy all the vehicles that you rent in, how much could you sell it for? Ksh
- i. *(if rents in)* How much did this enterprise pay in rental fees for vehicles in the last 30 days? Ksh
- j. *(if rents in)* What was this enterprise's total expenditure/investment in vehicles that it rented in the last 30 days, excluding rental payments? Ksh

54.

- a. Does this enterprise own / rent any machines/tools? *These are generally electrical or fuel-powered and are too large to hold in your hand. Tools are generally NOT electrical or fuel-powered and are small enough to hold and use in your hand.* (1=Yes owns, 2=Yes rents in, 3=No)
- b. No question 54b.
- c. *(if owns)* How much are all the machines/tools owned by this enterprise worth today? Ksh *Include machines/tools used by the enterprise and machines/tools rented out. For example, if someone came to you today to buy all this machines/tools, how much could you sell it for?*
- d. *(if owns)* Has this enterprise rented out any machines/tools to others in the last 30 days? (1=Yes, 2=No) *If yes, continue. Otherwise, skip to Q54g.*
- e. How much of the total [Q54c] KSh of machines/tools does this enterprise rent out to others (rather than use for its own production)? Ksh *For example, if someone came to you today to buy the part of machines/tools that you rent out, how much could you sell it for?*
- f. How much did this enterprise receive in rental fees for renting out machines/tools in the last 30 days? Ksh

- g. *(if owns)* What was this enterprise's total expenditure / investment in machines/tools over the last 30 days? *Include net purchases / maintenance / repairs.* Ksh
- h. *(if rents in)* Think about all the machines/tools this enterprise rents in. Imagine you owned all of that machines/tools. If someone came to you today to buy all the machines/tools that you rent in, how much could you sell it for? Ksh
- i. *(if rents in)* How much did this enterprise pay in rental fees for machines/tools in the last 30 days? Ksh
- j. *(if rents in)* What was this enterprise's total expenditure/investment in machines/tools that it rented in the last 30 days, excluding rental payments? Ksh

55.

- a. Does this enterprise own / rent any furniture/electronics? *These are used for business (and are not for sale to customers). This may include tables, chairs, desks, computers, mobiles, TVs, and radios that you keep in your business, but they are NOT important to the way your business operates.* (1=Yes owns, 2=Yes rents in, 3=No)
- b. No question 55b.
- c. *(if owns)* How much are all the furniture/electronics owned by this enterprise worth today? Ksh *Include furniture/electronics used by the enterprise and furniture/electronics rented out. For example, if someone came to you today to buy all this furniture/electronics, how much could you sell it for?*
- d. *(if owns)* Has this enterprise rented out any furniture/electronics to others in the last 30 days? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q55g.
- e. How much of the total [Q55c] KSh of furniture/electronics does this enterprise rent out to others (rather than use for its own production)? Ksh *For example, if someone came to you today to buy the part of furniture/electronics that you rent out, how much could you sell it for?*
- f. How much did this enterprise receive in rental fees for renting out furniture/electronics in the last 30 days? Ksh
- g. *(if owns)* What was this enterprise's total expenditure / investment in furniture/electronics over the last 30 days? *Include net purchases / maintenance / repairs.* Ksh
- h. *(if rents in)* Think about all the furniture/electronics this enterprise rents in. Imagine you owned all of that furniture/electronics. If someone came to you today to buy all the furniture/electronics that you rent in, how much could you sell it for? Ksh
- i. *(if rents in)* How much did this enterprise pay in rental fees for furniture/electronics in the last 30 days? Ksh
- j. *(if rents in)* What was this enterprise's total expenditure/investment in furniture/electronics that it rented in the last 30 days, excluding rental payments? Ksh

56. Does this enterprise own any stock/inventory for your business? *These are items that you buy from suppliers and resell to customers. Please only include the products available now or finished goods that are ready for sale today.* (1=Yes, 2=No)

If yes, continue. Otherwise, skip to Q57.

- a. How much is all of this enterprise's stock/inventory worth today? *We mean if you had to replace all of it (in the same condition it is in now), how much would that cost? Please give your best guess for the total amount.* Ksh
- b. What was this enterprise's total expenditure on stock/inventory purchased last month? Ksh

57. Does this enterprise own any materials/supplies for your business? *These are items that you buy from suppliers and use to make your final products or services. Please only include the inputs or supplies that have not yet been converted into a finished good.* (1=Yes, 2=No)

If yes, continue. Otherwise, skip to Q58.

- a. How much are all of this enterprise's materials/supplies worth today? *We mean that if you had to replace all of it in the same quality it is in now, how much would that cost? Please give your best guess for the total amount.* Ksh
- b. What was this enterprise's total expenditure on MATERIALS/SUPPLIES purchased in the last 30 days?

58. If you had to buy something for your business tomorrow, approximately what is the most money you could access and spend? *Please include all cash on hand, as well as all money stored offsite (e.g. lock box at home but for business, mobile money account, in a business bank account, etc.).* Ksh

59. *(if operational)* In the last 30 days, how much did you spend for this business on...
(if not operational) In a average 30-day period, how much did you spend for this business on...
a. electricity and water? Ksh
b. insurance? (exclude health insurance) Ksh
c. security? (like guards, maintaining fences, etc.) Ksh

READ: I would like to remind you that all answers you give will be kept as confidential as possible, and will not be reported to the authorities.

60. Is the business licensed with the county government? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q63.
a. How much did this license cost? Ksh
b. How many month in total is/was this licenses valid?

61. Is the business name registered with the government? (1=Yes, 2=No)

62. Is the business registered as a limited company? (1=Yes, 2=No)

63. In the last 30 days, how much did this enterprise spend on...
In a average 30-day period, how much did this enterprise spend on...
a. NSSF / Health insurance? Ksh
b. Market fees? Ksh
c. Taxes or fees to the county government? *Exclude license payments.* Ksh
d. Taxes or fees to the national government? Ksh
e. Taxes, fees or fines to the chiefs/assistant chiefs/village elders? Ksh
f. Additional payments to government officials, police or other authorities in order to do business? *(i.e., bribes - but don't use that word)* Ksh
g. Other operating costs, excluding salaries, wages, and rent (i.e. advertising, transportation) Ksh

64. In the past 12 months, have you experienced any vandalism or theft from your business? (1=Yes, 2=No)

Section 9. Employment

1. In the past 12 months, were any members of your household employed, working for pay? *Probe FR as to whether any members of the household are casual laborers, including casual labor for pay on someone else's farm or casual labor in other industries.* (1=Yes, 2=No)
If yes, skip to question 1b. Otherwise, continue.
 - a. In the past 12 months, were any members of your household working as a volunteer, intern or an attachment, with either no pay or only occasional pay? *This includes working voluntarily for a relative who is not a member of the FR's household.* (1=Yes,2=No, -99=FR is not employed/volunteering and does not know about other household members)
If yes, continue. Otherwise, skip to Q19.

READ: Now I would like to learn about what jobs members of your household currently hold or held over the last 12 months, including both paid and unpaid jobs (and internships and attachments). Please count as a job any work for pay on another person's farm. Please do not include self-employment positions in your answer. I would like to remind you that all answers you give will be kept as confidential as possible, we're an independent organization and the information you provide won't have any effect on other programs.
 - b. Which members of your household currently work for pay or were employed for pay over the last 12 months? *Select from household roster.*

REPEAT Q2 - Q18 for each employed member.

2. Who is providing information on this person? (1=Self, 2=FR)
3. In the last 12 months, how many employed positions did this person have? *If person work(ed) for multiple employers in the same job/occupation (e.g. agricultural laborer on different farms), consider this one position.*

REPEAT Q3 - Q18 for each position of each employed member.

4. In what occupation is this work? *Use G9 codes.*
5. In what industry is this work? *Use F2 codes.*
6. No question 6.
7. No question 7.
8. No question 8.
9. In what month and year did this person start this job? /
10. Is this a current position for this person? (1=Yes, 2=No)
If yes, skip to Q11. Otherwise, continue.

In what month and year did this person end this job? /

11. In the last 12 months, which months did this person work in this position?
12. In this position, what is/was this person's employment status? *Use F6 codes.*
13. This position's working patterns could be best described as: (1=Full-time, 2=Part-time, 3=Seasonal)
14. *If position is current, ask 14a. Otherwise ask 14b.*

- a. In the past 7 days, how many hours did this person work at this job?
- b. In a typical 7-day period, how many hours did this person work at this job?
15. *If position is current, ask 15a. Otherwise ask 15b.*
- a. In the past 7 days, approximately how many employees work/worked at the place/business of this position?
- b. In a typical 7-day period, approximately how many employees worked at the place/business of this position?
16. *If position is current, ask 16a. Otherwise ask 16b.*
- a. In the past 30 days, what was the amount of this person's cash salary? Ksh
- b. In a typical 30-day period, what was the amount of this person's cash salary? Ksh
17. *If position is current, ask 17a. Otherwise ask 17b.*
- a. In the past 30 days, what was the total value of this person's...
- b. In a typical 30-day period, what was the total value of this person's...
- i. payment in kind in food? Ksh
 - ii. NSSF/health insurance? Ksh
 - iii. housing benefits? Ksh
 - iv. uniforms/clothing benefits? Ksh
 - v. training allowance? Ksh
 - vi. other allowances and benefits? Ksh
18. In the last 12 months, did this person pay any income taxes for this position? (1=Yes, 2=No)
If yes and position is current, ask 18a. If yes and position is not current, ask 18b. Otherwise, skip to Q19.
- a. In the past 30 days, what was the amount this person paid in income taxes? Ksh
- b. In a typical 30-day period, what was the amount this person paid in income taxes? Ksh
19. Are you or other members of your household currently looking for a job, or another job? *This includes those who are working but who are trying to find additional work.* (1=Yes, 2=No)
If yes, skip to Q21. Otherwise, continue.
20. Why not? *Use F8 codes. Select all that apply.*
Skip to next section.
21. Who in this household is currently looking for a job, or another job? *Select from household roster.*
If FR selected, continue. Otherwise, skip to next section.
22. During the past 7 days, how many hours did you spend actively searching for jobs, applying for jobs, or in interviews?
If greater than 0, continue. Otherwise, skip to next section.
23. During the last 7 days, what did you do to try to get a job, or another job? *Use F4 codes. Select all that apply.*

Section 10: Consumption/Expenditure

READ: Now I would like to ask you questions about how your household spent money in the past few months, regardless of which person made the purchase. First, I would like to ask you some questions about food consumption that you eat at home. Please exclude from your answer any food purchased for processing, livestock consumption, or resale in a household enterprise.

REPEAT Q1 - Q4a for each food category.

Categories:

- All cereals: *Rice, maize, grains and flours, oats, pasta, biscuits and cakes, bread. Include grains used for food or alcohol.*
 - *Ask Q4-Q5 on grinding of maize, cereals, and any other products. Only include price of grinding service, not of the product itself.*
- All pulses: *Beans, grams, black grams, peas, groundnut, cowpea*
- All vegetables: *Tomatoes, kales, cowpea leaves, Onions, Cabbage, Mrenda, (Local Vegetable), Saka (Local Vegetable)*
- All meat: *Beef, pork, bacon, mutton/lamb, goat, chicken, camel*
- All roots and tubers: *Irish potatoes, sweet potatoes, cassava, cassava flour, yams, arrowroot, crisps, chips*
- All fish: *includes fresh, dried, frozen, smoked, omena*
- All dairy products and eggs: *Milk (fresh, condensed), mala, yoghurt, cream, cheese, eggs*
- All oils and fats: *Cooking fat, butter, Ghee, Margarine, Cooking oil, Lard (Animal fat), Peanut butter*
- All fruits: *Bananas, oranges, pawpaws, avocado, mangos, pineapples, passion fruit, pears, plums, apples, lemons, grapefruit, strawberries, other berries, melons, grapes, coconuts, jackfruit*
- All sugar products: *Sugar, sugar cane, jaggery, icing sugar, honey*
- All non-alcoholic drinks: *Tea leaves, preserved fruit juice, coffee, soda, soya drink, health drink, drinking chocolate, mineral water*
- Alcoholic drinks / tobacco: *Spirits, wine, beer, brews (busaa, changaa), cider; cigarettes, bhang, snuff, khatt, miraa*

Consumption

1. In the past 7 days, how much [CATEGORY] has your household consumed from its purchases? Ksh
2. In the past 7 days, how much [CATEGORY] has your household consumed from your own production? Ksh *Prompt for shillings. Ask FR to estimate how much the total consumption would be worth if sold at the market price.*
3. In the past 7 days, how much [CATEGORY] has your household consumed from its gifts? Ksh

Expenditure

4. In the past 7 days, how much did your household spend on purchasing [CATEGORY]?
 - a. From which village or market center did members of your household purchase [CATEGORY] in the past 30 days? *If multiple markets / villages, pick the main one, where you spent the most.*

READ: Now I will ask about spending in the last 30 days.

REPEAT Q5 - Q6 for each monthly spending category.

Categories:

- Airtime, other phone expenses
- Internet
- Petrol, tolls, transport such as taxi/bus/matatu/boda/piki/train/flight fare, hotel stays (NOT including medical reasons)
- Lottery tickets/gambling

- Clothing and shoes
 - Prepared meals outside the house (including restaurants, kiosks,...)
 - Recreation/entertainment such as books/magazines, music/CDs, videos, tickets to any entertainment
 - Personal items (hair cuts, toiletries, cosmetics, combs)
 - Household items (soap, cleaning agents, toilet paper/tissues, air freshener, shoe polish, insecticide, matches, candles)
 - Firewood, charcoal and kerosene
 - Electricity
 - Water
5. In the past 30 days, how much did your household spend on [CATEGORY] in total?
- Skip Q6 if internet, petrol, lottery tickets, or electricity.*
6. From which village or market center did members of your household purchase [CATEGORY] in the past 30 days? *If multiple markets / villages, pick the main one, where you spent the most.*

READ: Now I will ask about spending in the last 12 months.

REPEAT Q7 - Q8 for each yearly spending category.

Categories:

- House rent/mortgage
 - Fixing home damage or doing essential maintenance (e.g. fixing a leaking roof)
 - Improving or expanding the home (e.g. metal sheets, doors, timber, labor, etc.)
 - Religious expenses or other ceremonies (excluding weddings and funerals)
 - Charitable donations
 - Weddings, Funerals (including outside their household if contributed to their costs)
 - Medical expenses (including consultation fees, medicines, hospital costs, lab test costs, ambulance costs, related transport, and any covid-19 related expenses like face masks)
 - Vehicles (car, boat, bike, motorbike, handcarts, etc.)
 - Furniture (bed, chair, vases, mirror, etc.)
 - Kitchen and other equipment (cutlery, pots, pans, plates, etc.)
 - Electronic equipment, (lamps, mobile phone, television, etc.)
 - Tools
 - Dowry/bride price
7. In the past 12 months, how much did your household spend on [CATEGORY] in total?
- Skip Q8 if house rent, fixing home, religious expenses, charitable donations, weddings, vehicles, electronics, tools, dowry.*
8. From which village or market center did members of your household purchase [CATEGORY] in the past 12 months? *If multiple markets / villages, pick the main one, where you spent the most.*
9. In the past 12 months, did your household spend any money on other expenses greater than KSH 1000? (1=Yes, 2=No)
- If yes, continue and list up to 3 major expenses. Otherwise, skip to next section.*
- a. Expense #1
 - i. Purpose: _____
 - ii. Amount: Ksh
 - b. Expense #2
 - i. Purpose: _____
 - ii. Amount: Ksh
 - c. Expense #3
 - i. Purpose: _____
 - ii. Amount: Ksh

Section 11.1 Community Groups

1. Do you or any member of your household take part in a community group? *Note: community groups include men's/women's groups, table banking groups, youth groups, political groups, self-help groups, etc. If yes, continue. Otherwise, skip to next section.*
 - a. How many community groups are you or any other member of your household currently a member of?

If 1a <= 3, read first statement. If 1a > 3, read second statement.

READ: You said members of this household are currently a member of [# from 1a] groups. I will now ask a few questions about each group.

READ: You said members of this household are currently a member of [# from 1a] groups. Please think of the 3 groups that members of this household are most engaged in. I will now ask a few questions about each of those 3 groups.

REPEAT Q2 - Q12 for each community group.

2. What is this group's name?
3. What is the purpose of this group? *Select all that apply.*
4. Where is this group primarily located? *Select from dynamic village/market center choice list.*
5. Please select all household members who are members of this group. *Select from household roster.*
6. Does any member of this household hold a leadership position in this group? *Select from household roster. If group purpose includes ROSCA, continue. Otherwise, skip to Q9.*
7. No question 7.
8. What is the minimum amount that you are expected to contribute? Ksh
9. What were your household's total contributions to this group in the last 12 months? Ksh *Exclude ROSCA pot/table banking. Include registration fees, membership fees, contributions to group's existing assets such as maintenance of assets, to new purchases or to initiatives. Please includes contributions in cash, or the value of food or goods.*
10. How much have you or anything from your household actually received in income from this group in the last 12 months, other than any loans? Ksh *Include income from renting any assets owned by the group. Include cash, the value of food or goods received, and interest on loans made out by the group.*
11. Did this group think about a joint initiative in the last 12 months? (1=Yes, 2=No)
 - a. No question 11a.
 - b. No question 11b.
 - c. What was the total amount that the group raised for this initiatives? Ksh
12. In the last 12 months, has this group approached any prominent local person for support, either financial support or for obtaining services, and/of received support without asking for it? (1=Group ask for financial support and received it; 2=Group asked for financial support but did not receive it; 3=Group asked for support obtaining a service and received it; 4=Group asked for support obtaining a service but did not receive it; 5=Group did not ask for any support but received some; 0=Group did not ask and did not receive) *By prominent local people, we mean current politicians, any aspirants for local or regional public office. Include approaches made to agents or intermediaries acting on behalf of a prominent person. If received any (options 1, 3, 5), continue. Otherwise, skip to next section.*

- a. No question 12a.
- b. No question 12b.
- c. What was the total value of support received? Ksh *Include both monetary and in-kind support; please estimate value of in-kind support.*

Section 11.2. Public Goods

1. Think about public fundraising events (harambees) in the last 12 months. Which of the following has your household contributed to? *Select all that apply. Use Harambee Purpose codes. FO Note: If respondent is unsure about answering harambee questions, please read: We believe harambees bring people in Kenya together and unite communities. They are great opportunities for communities in Kenya to collect funds for a good purpose like education. They are an integral part of community life and contribute to self-empowerment of local communities in Kenya.*

READ: I will now ask a few further questions about the contributions your household made to each of these harambee purposes.

REPEAT Q2 for each purpose type.

2. How much did you contribute to harambees for [PURPOSE] in total in the past 12 months, both in-kind and in cash? Ksh`
3. In the past 12 months, did you or members of your household provide volunteer or unpaid labor for any community projects or activities? (1=Yes, 2=No) *Examples: clearing bush off roads, slashing community spaces, maintaining water points, projects related to school development. Exclude any work you have discussed during the section on groups.*
If yes, continue. Otherwise, skip to Q4.
 - a. In the last 12 months, how many hours in total have members of your household provided volunteer or unpaid labor for any community projects or activities?
4. In the last 12 months, has your household benefited from a harambee or collection? In other words, your household received money from a harambee or collection. (1=Yes, 2=No)
 - a. In the last 12 months, what was the total value of the contribution (in cash or in kind) you or any members of your household received through harambees or collections? *Please estimate the value of in-kind contributions.*
5. No question 5.
6. In the last 12 months, did you pay any taxes, fees or fines to the village elder, assistant chief or chief? Do not include contributions towards targets that have already been discussed. *Select all that apply. (1=Paid taxes or fees, 2=Paid fines, 3=No, -99=DK)*
If selected 1, continue. If selected 2, skip to Q6b. Otherwise, skip to Q7.
 - a. How much did you pay any taxes or fees in the last 12 months? Ksh *Do not include contributions towards targets that have already been discussed.*
 - b. How much did you pay in fines in the last 12 months? Ksh

READ: Now I would like to ask you some questions about public facilities in your area.

REPEAT Q7 - Q9 for each type of public facility.

Facilities:

- Water point
- Public health clinic/dispensary

7. How many minutes walk is the [FACILITY] from your household? |__|

8. What type of [FACILITY] is this? |__|

9. How would you rate the quality of this [FACILITY]? |__| (1=Very good; 2=Good; 3=Fair; 4=Poor; 5=Very poor)

Section 11.3 Crime and Safety

READ: Now I would like to ask if you have been the victim of a crime or an attempted crime during the past 12 months.

1. During the last 12 months, has someone stolen or attempted to steal any livestock from you? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
2. During the last 12 months, has someone stolen or attempted to steal any household items? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
3. During the last 12 months, has someone stolen or attempted to steal any cash from you? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
4. During the last 12 months, has someone assaulted you without a weapon? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
5. During the last 12 months, has someone assaulted you using a weapon (such as a club, machete or gun)? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
6. During the last 12 months, have you been the victim of arson? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
7. During the last 12 months, have you been the victim of witchcraft? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
8. During the last 12 months, have you been the victim of any other crime or attempted crime? (1=Yes, 2=No)
 - a. How many times in the last 12 months?
 - b. Did you report the crime to the police or local administration (liguru, chief, assistant chief)? (1=Yes, 2=No)
9. In the last 12 months, have you been somewhat worried about, very worried about, or not very worried about crime and safety in your neighbourhood? (1=Very worried about; 2=Somewhat worried about; 3=Not very worried; 4=Not worried)

Section 12.1 Health and Nutrition

FO: The questions in this section are asking about the FR specifically, not other household members, unless noted otherwise.

READ: Now I would like to ask you some questions about your health and nutrition. Please remember that you do not have to answer any questions you do not want to.

1. How many meals did you eat yesterday? *Note: Chai (tea) by itself is not considered as a meal.*
2. How many of these [# from Q1a] meals included meat or fish?
3. How many of these [# from Q1a] meals included eggs?
4. During the past 30 days, how many days of work or housework or school did you miss due to poor health?
5. Would you describe your general health as very good, somewhat good, or not good? (1=Very Good, 2=Somewhat good, 3=Not good)
If 2 or 3, continue. Otherwise, skip to Q7.
6. Would you describe your general health as good, fair, poor, or very poor? (1= Good, 2=Fair, 3=Poor, 4=Very poor)
7.
 - a. In the last 7 days, how many days have adults in your household gone to bed hungry?
 - b. In the last 7 days, how many days have children in your household gone to bed hungry?
8.
 - a. In the last 7 days, how many days have adults in your household skipped meals or cut the amount of meals?
 - b. In the last 7 days, how many days have children in your household skipped meals or cut the amount of meals?
9.
 - a. In the last 7 days, how many days have adults in your household gone entire days without food?
 - b. In the last 7 days, how many days have children in your household gone entire days without food?
10. Now I'm going to ask you some questions on your health that in some way may touch your private life. You may have experienced some of these illnesses or not. Please let me know if you have experienced any of these illnesses or symptoms in the past 3 months.

- Fever
- Persistent cough
- Always feeling tired
- Stomach pain
- Worms
- Blood in stool
- Rapid weight loss
- Frequent diarrhea
- Skin rash or irritation
- Open sores / boils
- Difficulty Swallowing
- Serious wound or injury

- Malaria
- Typhoid
- Tuberculosis
- Sores or ulcers on the genitals
- Cholera
- Yellow fever
- Asthma / breathlessness at night
- Frequent and excessive urination
- Constant thirst / increased drinking of fluids
- Depression or anxiety/tension/sleep problem
- Chronic pain in your joints/arthritis/rheumatism/osteoporosis (joints,

back, neck)
 Diabetes
 Men only: Unusual discharge from the tip of

the penis
 High blood pressure/hypertension
 Anything else I have not mentione

11. During the past 3 months, how many visits to a hospital or clinic did you make? *Only include visits for the FR's own medical care, not that of a family member.*
- a. What was the reason for this/these visit(s)? *Select all that apply. Use major health problem codes.*
 - b. Were your visits to private hospitals/clinics or public? (1=Private, 2=Public, 3=Both)
If both, continue. Otherwise, skip to Q11d.
 - c. How many of these [# from Q11] visits were made to public hospitals/clinics?
 - d. In how many of these [# from Q11] visits were you admitted to the hospital?
 - e. Was the hospital/clinic able to address your needs? (1=No, they had insufficient supplies and staff;
2=There were staff, but they had limited supplies; 3=There were some supplies, but limited staff to help me;
4=There were sufficient staff and supplies to help me)
12. During the last 12 months, have you taken any drugs for worm infections or schistosomiasis? (1=Yes, 2=No)
13. Did you sleep under a bednet last night? (1=Yes, 2=No)
14. Have you experienced any major health problems that seriously affected your life or work in the last 12 months?
 (1=Yes, 2=No)
If yes, continue. Otherwise, skip to next section.
15. Which of the following health problems did you experience that seriously affected your work or life in the last 12 months? *Select all that apply. Use major health problem codes.*
16. What impact have these health problems had on your life? // *Select up to 3. Use health impact codes.*

Section 13.1: Redistributive Attitudes

FO: The questions in this section are asking about the FR's views and feelings, not other household members, unless noted otherwise.

FO: For this section, read the questions exactly as written. You may repeat any question as many times as you'd like, but do not rephrase any question or add additional comments or explanations. If the FR has trouble understanding the statement, please re-read but do not try to explain the question in a different manner.

READ: I am now going to ask you about your opinions on a few statements, and I'd like you to tell me whether you agree or disagree with them.

1. The government should take measures to reduce differences in income levels. (1=Completely agree, 2=Agree somewhat, 3=Disagree somewhat, 4=Completely disagree, 5=Neutral)

READ: For the following pairs of statements, tell me which statement is closest to your view. Choose Statement A or Statement B.

2. A. All households in a community should pay equal amounts for items that benefit the whole community.
B. Households that are able to pay more should pay more for goods that benefit the whole community.
 (1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)
3. No question 3.
4. No question 4.
5. No question 5.
6. A: People can only get rich at the expense of others,
B: Wealth can grow so that there is enough for everyone.
 (1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)

Section 13.2 Social Capital and Religious Attitudes

READ: Now, I would like to ask you about your social activities and your views on society.

1. We have spoken to many people and they have all described themselves in different ways. Some people describe themselves in terms of their language, religion, race, gender, and others describe themselves in economic terms, such as working class, middle class, or a farmer. Besides being a Kenyan, which specific group do you feel you belong to first and foremost? (1=Ethnicity / Language, 2=Religion, 3=Class / Occupation, 4=Gender, 5=Other (specify)) *Do not read responses aloud. Simply allow FR to respond and code response according to which category it fits into.*
 2. Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? (1=Most people can be trusted, 2=Need to be careful)
 3. In general, can you trust members of your tribe? (1=Yes, 2=No)
 4. In general, can you trust people of other tribes? (1=Yes, 2=No)
 5. In general, can you trust people of your church / mosque? (1=Yes, 2=No)
 6. In general, can you trust people of other churches / mosques? (1=Yes, 2=No)
 7. In general, can you trust people of your own village? (1=Yes, 2=No)
 8. In general, can you trust people of other villages? (1=Yes, 2=No)
 9. What is your religion of denomination? *Use G11 codes.*
 10. Was your religion / denomination [Q9] at [BASELINE DATE]? (1=Yes, 2=No)
If no, continue. Otherwise, skip to Q11.
 - a. What religion or denomination were you in [BASELINE DATE]? *Use G11 codes.*
 - b. Why did you change your religion or denomination? // *Select up to 3.*
- If no religion selected in Q9, skip to question 22.*
11. Is your religion very important, somewhat important or not very important to your life? (1=Very important, 2=Somewhat important, 3=Not very important)
 12. Do you attend church/mosque regularly? (1=Yes, 2=No)
 13. Did you attend church/mosque in the past 7 days? (1=Yes, 2=No)
 14. In the past 30 days, what is the value of cash or goods you donated to your church / mosque? Ksh *Note: Include personal donations, and donations made collectively as a household. This should include any donations to the church coffer, for a church event, or to any church leadership, but should not include gifts to non-leadership members of the church.*
 15. In the past 30 days, how many hours of time, outside of regular worship or bible study, have you donated to working for, helping or organizing in your church / mosque?
 16. In the last 12 months, would you say you've become more religious, stayed the same, or become less religious? (1=More religious, 2=Same, 3=Less religious)

If religion selected in Q9 is Christian, skip to question 22.

17. In the past 12 months, have you served in any of the following roles? *Select all that apply.*

- Pastor
- Priest
- Overseer
- Deacon / elder
- Service volunteer
- Choir / musician
- Other: _____

18. When you attend religious services, how often do they include people speaking in tongues, prophesying, praying for miraculous or divine healings, or displaying physical signs of the spirit such as laughing and shaking? (1=Always, 2=Frequently, 3=Occasionally, 4=Never)

READ: Please tell me if you completely agree, mostly agree, mostly disagree or completely disagree with the following statements.

19. God will grant material prosperity to all believers who have enough faith. (1=Agree completely, 2=Mostly agree, 3=Mostly disagree, 4=Completely disagree)

20. God will grant good health and relief from sickness to believers who have enough faith. (1=Agree completely, 2=Mostly agree, 3=Mostly disagree, 4=Completely disagree)

21. Are you saved? (1=Yes, 2=No)

22. What is your tribe (or mother tongue)? Use G10 codes.

23. Is your ethnic or tribal origin somewhat important, very important or not very important to your life? (1=Very important, 2=Somewhat important, 3=Not very important)

24. If you had to say only one, what is more important, your tribe or your nationality (i.e., Kenyan)? (1=Tribe, 2=Nationality)

Section 13.5 Personal Attitudes and Traits

READ: I will now read to you statements concerning personal attitudes and traits. Please tell me if the statement is *true* or *false* as it pertains to you personally.

(1=True, 2=False, -88=Refuse to answer)

1. It is sometimes hard for me to go on with my work if I am not encouraged.
2. I sometimes feel resentful when I don't get my way.
3. On a few occasions, I have given up doing something because I thought too little of my ability.
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
5. No matter who I'm talking to, I'm always a good listener.
6. There have been occasions when I took advantage of someone.
7. I'm always willing to admit it when I make a mistake.
8. I sometimes try to get even rather than forgive and forget.
9. I am always courteous, even to people who are disagreeable.
10. I have never been irked when people expressed ideas very different from my own.
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favors of me.
13. I have never deliberately said something that hurt someone's feelings.

Section 13.3 Civic and Political Attitudes and Behavior

1.
 - a. In the last 12 months, have you attended any of the following?
 Assistant chief or village elder barazas to discuss construction or repair of public facilities
 Any other assistant chief or village elder baraza
 Public consultation meeting for use of ward or constituency development fund, or other county government meeting
 School management committee or parent teacher association meeting, or other school meeting
 Other public meeting: _____

REPEAT Q1b - Q1c for each meeting type selected above.

- b. In the last 12 months, how many times have you attended [MEETING TYPE]?
 - c. In how many of these meetings did you speak publicly on the topic of the meeting?
2. Since [BASELINE DATE], has any current member of your household held a position of responsibility or leadership within the village? (1=Yes, 2=No) *Note: Examples are assistant chief, village elder, miji kumi, clan elder, community health worker, School management committee/parent teacher association, Do not include religious leaders as we have already discussed these. If yes, continue. Otherwise, skip to Q3.*
 - a. How many current members of your household have held a leadership position since [BASELINE DATE]?

REPEAT Q2b for each member.

- b. Name of household member:
Which position(s) did/does this person serve as? *Select all that apply.*
3. In the past 7 days, how many days did you...

- a. listen to the radio?
- b. read the newspaper?
- c. watch television?
- d. use a smartphone?
- e. use the internet?
- f. read a news source on the internet or a smartphone?

- 4.
- a. Please name the current Deputy President of Kenya for me. *Note: Correct answer is RIGATHI GACHAGUA. "RIGATHI," "GACHAGUA," or "RIGGY G" are all ok.*
 - b. Who is the Member of the County Assembly for your ward?
5. No question 5.
6. I'd like to read you a few statements about public life. I'll read them one at a time. Please tell me how strongly you agree or disagree with each of them.
- a. No question 6a.
 - b. No question 6b.
 - c. No question 6c.
 - d. It takes too much time and effort to be active in politics and public affairs. (1=Disagree strongly, 2=Disagree a little, 3=Agree a little, 4=Agree strongly)
 - e. I am interested in public affairs. (1=Disagree strongly, 2=Disagree a little, 3=Agree a little, 4=Agree strongly)
 - f. I would like to be more involved in politics and community issues but I am more worried about issues in my own life. (1=Disagree strongly, 2=Disagree a little, 3=Agree a little, 4=Agree strongly)
7. In the last 12 months, how many times have you participated in...
- a. attended political rallies or public meetings with a politician (in support of a particular candidate or position)
 - b. participated in demonstrations, mass actions or protests
 - c. participated in discussions with friends or family about political issues
 - d. contacted a government official to request assistance or make a complaint
8. Now I would like to ask you a few questions about the 2022 election. Remember that participation is entirely voluntary and you may refuse to answer any question. We will keep your responses as confidential as possible.
- a. Did you vote in the general election in August 2022? (1=Yes, 2=No)
 - b. Why not? (1=Did not have ID card with me at the time (but does own an ID card); 2=Was not near registered voting location at the time; 3=Was sick; 4=Was afraid; 5=Was not interested in voting; 7=Did not own an ID card; 8=Was not registered; -77=Other (specify))
 - c. During the last national election in 2022, did a candidate or someone from a political party offer you or anyone in your household something in exchange for your vote, like food or a gift or money? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to Q9.
 - d. When did you received these offers? *Select all that apply.* (1=In door-to-door collections, 2=During campaign rallies and gatherings, 3=During aspirant visits to the village/local area, 4=During a meeting with the community to which household member was invited, -77=Other (specify))
 - e. From how many different candidates did you or any household member receive an offer of a gift or cash?

REPEAT Q8f - Q8h for each candidate.

f. What was the total monetary value of what you were offered in exchange for your vote (including those you accepted and those you did not accept) from this candidate? Ksh

What was the total monetary value of the gifts and offers you received from this candidate? Ksh

g. Did you vote for this candidate? (1=Yes, 2=No)

h. Did this candidate run for the ODM, another party or as an independent in the general election?
(1=ODM, 2=Another party, 3=Independent)

i. What was the total monetary value of the gifts you actually received from all candidates that made an offer?
 Ksh

READ: Now I would like to ask you some more questions about your opinions and feelings.

9. Which of these three statements is closest to your opinion?

1 = Democracy is preferable to any other kind of government.

2 = In some circumstances, a non-democratic government can be preferable.

3 = For someone like me, it doesn't matter what kind of government we have.

READ: For the following pairs of statements, tell me which statement is closest to your view. Choose Statement A or Statement B.

10. A. The use of violence is never justified in politics.

B. In our country, it is sometimes necessary to use violence in support of a just cause.

(1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)

11. A. In our country, it's okay to pay a bribe to a government official to encourage them.

B. It's wrong to pay a bribe to any government official.

(1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)

12. A. As citizens, we should be more active in questioning the actions of our leaders.

B. In our country these days, we should show more respect for authority.

(1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)

13. A. It is more important to have a government that can get things done, even if we have no influence over what it does.

B. It is more important for citizens to be able to hold government accountable, even if that means it makes decisions more slowly

(1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)

14. A. It is important to obey the government in power, no matter who you voted for.

B. It is not necessary to obey the laws of a government that you did not vote for

(1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)

15. A. In electing a local leader, I prefer to vote for a candidate who was generous with gifts to people in my community during their campaign.
 B. In electing a local leader, I prefer to vote for a candidate whose campaign promises I like the most.
 (1=Agree very strongly with A, 2=Agree with A, 3=Agree with B, 4=Agree very strongly with B, 5=Agree with neither)
16. I'd like to get your feelings about the performance of the different levels of government and how well they are doing their job. I'd like you to rate the performance on a scale from 1 to 10. 1 is the worst feeling and 10 is the best.
- The Member of County Assembly in your ward
 The former Member of County Assembly in your ward, before the 2022 general election
 - Performance of county government
 - Performance of national government

READ: I would like to remind you that all answers you give will be kept as confidential as possible and that the information will be used for research purposes only.

FO: Ensure the FR's privacy for the following question.

- 17.
- Have you ever been arrested? (1=Yes, 2=No)
If yes, continue. Otherwise, skip to next section.
 - Have you ever been imprisoned? (1=Yes, 2=No)

Section 13.4: Gender Attitudes

FO: Check for presence of others. Do not continue unless privacy is ensured.

READ: Now I would like to ask you questions about some other important aspects of a man and woman's life. I know that these questions are very personal. However, your answers are crucial for helping to understand the conditions of women in Kenya. Let me assure you that your answers will be kept as confidential as possible and will not be told to anyone. When two people live together and have a relationship, they generally share good times and bad times...

READ: Now I would like to get your opinion on some aspects of family life. Please tell me if you agree or disagree with each statement. (1=Agree, 2=Disagree)

- The important decisions in the family should be made only by the men of the family.
 - A wife should tolerate being beaten by her husband in order to keep the family together.
 - A husband has the right to beat his wife.
 - If a woman earns more money than her husband it is almost certain to cause problems.
 - If a husband and wife both work full-time, they should share housework tasks equally.
6. In your opinion, is a husband justified in hitting, beating, insulting or yelling at his wife in the following situations: (1=Yes, 2=No)
- If she goes out without telling him?
 - If she neglects the children?
 - If she argues with him?
 - If she refuses to have sex with him?
 - If she burns the food?

Section 14. Mental Health and Well-being

FO: For the questions in this section, read the questions exactly as written. You may repeat any question as many times as you'd like, but do not rephrase any question or add additional comments or explanations. If the FR has trouble understanding the statement, please re-read but do not try to explain the question in a different manner.

READ: I will read out a list of some of the ways you may feel or behave. Please indicate how often you have felt this way during the past week, using the following scale: (1=Rarely or none of the time, 2=Some or a little of the time, 3=Occasionally or a moderate amount of time, 4=All of the time)

1. In the past week, I was bothered by things that usually don't bother me.
2. In the past week, I had a problem in concentration on what I was doing.
3. In the past week, I felt depressed and troubled in my mind.
4. In the past week, I felt that everything that I did took up all my energy.
5. In the past week, I felt hopeful about the future.
6. In the past week, I felt afraid.
7. In the past week, I had difficulty in sleeping peacefully.
8. In the past week, I was happy.
9. In the past week, I felt lonely.
10. In the past week, I lacked the motivation to do anything.

READ: Now I will ask some more questions about your feelings and opinions.

11. All things considered, how satisfied are you with your life as a whole these days on a scale of 1 to 10?
(1=very dissatisfied ... 10=very satisfied)

Section 15.1 Cantril Ladder

FO: For the rest of the questions in this section, read the questions exactly as written. You may repeat any question as many times as you'd like, but do not rephrase any question or add additional comments or explanations.

1. Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?

Section 15.2 Hedonic Wellbeing Questions from Gallup World Poll

1. Did you smile or laugh a lot yesterday? (1=Yes, 2=No)
2. Did you experience the following feelings during a lot of the day yesterday? (1=Yes, 2=No)
 - a. enjoyment
 - b. happiness
 - c. worry
 - d. sadness
 - e. stress
 - f. anger

Section 16. Other Sources of Support

READ: We would now like to learn if you or members of your household have recently requested or benefitted from any assistance for your needs. We are interested in support from four sources:

1. government assistance programs;
2. from community, church/mosque, or other non-governmental organization assistance programs;
3. from a current politician, such as the MCA;
4. from any other prominent local person.

Specifically, we want to learn about instances where you have asked for OR you have received a good or service directly. By assistance program, I mean any program, including things like receiving food, medication, bednets, condoms, fertilizer, chlorine, education or training, agricultural extension services, healthcare, a job, or money for a specific purpose.

FO: Here we want programs in which the FR asked for or received something directly, such as money, food, extension services, or a job. We do not want to include Free Primary Education, or education subsidies that go directly to the school and not to the individual.

REPEAT Q1 - Q2 for each source.

- a government assistance program? *Examples: secondary school bursary programmes, government extension services, orphan and vulnerable children grants, pensions.*
- an NGO, church/mosque, CBO, or other assistance not from the government? *Examples: receiving food, medication, bednets*
- the current MCA or other politician? *Other politicians include MP, governor, senator*
- any other prominent local person? *Include any aspirants for any public office who campaigned during the 2022 election or is preparing to campaign for the 2027 election, or their agents or intermediaries.*

1. In the past 12 months, have you or members of your household asked or applied for any assistance (in cash, in kind, or in form of a job) from this source? *Include both successful and unsuccessful requests.*

- in cash
 in kind, not including a job
 a job
 did not ask/receive this

2. In the past 12 months, have you or members of your household received (in cash, in kind, or in form of a job) from any of the following? Include support you received without asking for it..

- in cash
 in kind, not including a job
 a job
 did not ask/receive this

REPEAT Q3 - Q10 if source is government program or NGO, an if Q1 or Q2 is yes.

3. Did you ask or receive assistance from anyone outside your household in making your request for or obtaining any assistance? (1=Yes, 2=No)

If yes, continue. Otherwise, skip to Q7.

4. Who did you ask for this help / who provided this help? (1 =The current MCA, 2 =The current MP, 3 =The current governor, 4 =Other current politician, 5 = Any past politician, 6 = a community group household is part of, 7 = Family member outside the household, -77 = other local leader(specify))

5. No question 5.

6. No question 6.

7. *(if Q2 is in cash or in kind)* What was the total monetary value of the cash or in-kind assistance you received from the program? Ksh
8. *(if Q2 is a job)* Was this assistance received in form of a job for self or another household member? (1=Self (FR), 2=Another household member, 3=Both self and household member)
9. *(if Q2 is any)* How satisfied were you with the support you received? (5=Very satisfied, 4=Satisfied, 3=Neither satisfied nor dissatisfied, 2=Dissatisfied, 1=Very dissatisfied)
10. How long did it take to obtain support from the first contact attempt? Amount Unit

If source is politician and if Q1 is yes.

4. Which of the following current politicians did you request support from? (1 =The current MCA, 2 =The current MP, 3 =The current governor, 4 =Other current politician, 5 = Any past politician)
 - a. How many times for you ask for support from these current politicians?

If source is politician and if Q2 is yes

6. Which of the following current politicians did you receive support from? (1 =The current MCA, 2 =The current MP, 3 =The current governor, 4 =Other current politician, 5 = Any past politician)
7. *(if Q2 is in cash or in kind)* What was the total monetary value of the cash or in-kind assistance you received from these current politicians? Ksh
8. *(if Q2 is a job)* Was this assistance received from these current politicians in form of a job for self or another household member?

If source is other prominent local person and if Q1 is yes.

4. Which of the following current politicians did you request support from? (1=A previous politician (such as MCA, MP, Governor), 2=An aspirant in the 2022 election, 3=A successful local business man/woman, 4=A local religious/spiritual leader, 5=A local community leader, such as a Village Elder or group leader, -77=Any other prominent local person)
 - a. How many times for you ask for support from these current politicians?

If source is other prominent local person and if Q2 is yes

6. Which of the following current politicians did you receive support from? (1=A previous politician (such as MCA, MP, Governor), 2=An aspirant in the 2022 election, 3=A successful local business man/woman, 4=A local religious/spiritual leader, 5=A local community leader, such as a Village Elder or group leader, -77=Any other prominent local person)
7. *(if Q2 is in cash or in kind)* What was the total monetary value of the cash or in-kind assistance you received from these current politicians? Ksh
8. *(if Q2 is a job)* Was this assistance received from these current politicians in form of a job for self or another household member?

Section 18: Private Behavior Module

Continue if FO gender = female and FR gender = female and FR marital status = married/cohabitating. Otherwise, skip to next section.

FO: Check for the presence of others. Do not continue unless the respondent's privacy is ensured.

READ: Now if you will permit me, I need to ask some more questions about your relationship with your husband/partner. I know that these questions are very personal. However, your answers are crucial for helping to understand the conditions of women in Kenya. I would like to remind you that all answers you give will be kept as confidential as possible and will not be told to anyone. If we should come to any question that you do not want to answer, just let me know and we will go on to the next question.

(1=Never, 2=Sometimes, 3=Often)

1. In the last 6 months, did your husband/partner ever say or do something to humiliate you in front of others?
2. In the last 6 months, did your husband/partner ever threaten to hurt or harm you or someone you care about?
3. In the last 6 months, did your husband/partner ever insult you or make you feel bad about yourself?
4. In the last 6 months, did your husband/partner ever do any of the following things to you:
 - a. push you, shake you, or throw something at you?
 - b. slap you?
 - c. twist your arm or pull your hair?
 - d. punch you with his fist or with something that could hurt you?
 - e. kick you, drag you, or beat you up?
 - f. try to choke you or burn you on purpose?
 - g. attack you with a knife, gun, or other weapon?
5. In the last 6 months, did your husband/partner ever physically force you to have sexual intercourse with him even when you did not want to?
6. During the last six months, did your husband/partner ever force you to perform any sexual acts you did not want to?
7. (if household has children <= 12 years) During the last six months, did your husband/partner ever beat any of the children under the age of 12 living in this household?

If answered sometimes or often to any of the above, continue. Otherwise, skip to next section.

8. Have you ever told anyone about this? (1=Yes, 2=No)

Section 19. Conclusion

READ: Thank you for your time.

FO: Be sure to fill in the remaining information. Do not read the questions allowed. Simply record your own impressions.

A. Did the respondent terminate the survey early? (1=Yes, 2=No)

If yes, continue. Otherwise, skip to Q1.

B. Why did the respondent terminate the survey early? (1=Temporary stop only – Wishes to continue survey at a later time, 2=Tired, 3=Too busy, does not have time, 4=Offended at question, 5=Suspicious of FO/survey intent/REMIT, 6=Does not feel like continuing survey, 7=Other (specify))

Temporary Stop Instructions: You have indicated that the FR wishes to continue the survey in the future. Please ask the FR when they are next available, and then call your team lead (or other senior team member) to confirm this day and time. If you are unable to confirm this day and time, make a tentative appointment with the FR. Then, let the FR know that you will contact them to confirm when you will return. Record this information and the current time on the tracking sheet now.

1. Time end interview: :

2. In what language was the survey administered? *Select all that apply.* (1=English, 2=Kiswahili, 3=Luo)

a. How was the respondent's skill in speaking and understanding the survey language? (1=Displayed *no problems* speaking or understanding language, 2=Displayed *a little difficulty* speaking or understanding language, 3=Displayed *moderate* difficulty speaking or understanding language, 4=Displayed *serious* problems speaking or understanding language)

3. Were any people present during all or part of this interview (other than the respondent and REMIT staff)? (1=Yes, 2=No)

If yes, continue. Otherwise, skip to Q4.

a. What is their relationship to the respondent? Use G4 codes. *Select up to 4.*

4. Are you very confident, somewhat confident, or not very confident in the overall quality and truthfulness of this respondent's responses? (1=Very confident, 2=Somewhat confident, 3=Not confident)

If somewhat or not confident, continue. Otherwise, skip to Q5.

a. Why?

5. What was the condition of the road in the last 5 km before reaching the house? (1=Excellent or good condition and easy to traverse, 2=Poor or very poor condition, that is, difficult to traverse due to potholes, waterlogging or other issues, 3=Impassable at any point e.g., due to a collapsed bridge, fallen tree, flooding, etc.)

6. Is this interview being performed at the respondent's current residence, place of work, or school? (1=Yes, 2=No)

If yes, continue. If no, skip to end.

a. Are you taking GPS coordinates within SurveyCTO or another application? (1=SurveyCTO, 2=Other application, -98=Cannot collect GPS coordinates)

If SurveyCTO, continue. If other, skip to Q6c. Otherwise, skip to Q7.

b. Please record a GPS reading now.

c. Please record a GPS reading now. Ensure that you are at the doorstep to the house or business for best accuracy. Please try to obtain an accuracy of 8 meters.

i. Latitude:

ii. Longitude:

- iii. Elevation:
 - iv. Accuracy:
 - d. From where is the GPS being recorded? (1=In/ in front of main residence, 2=In / in front of another structure the household owns other than the main residence, 3=In the middle of the household/family's compound, 4=at place of work, 5=on farmland household owns, 6=outside the gate to the homestead, 7=other (specify))
7. Why are you unable to record GPS information? (1=Interview conducted via phone, 2=Interview conducted at a different location, 3=Technical issues with GPS device, -77=Other (specify))

Appendix D: Endline 3 Enterprise Survey Instrument

E-S

**GE EFFECTS
ENTERPRISE SURVEY MODULE
ENDLINE 3**

VERSION: MAR 2024 — ENGLISH

Section 1: Introduction

FO: Greetings! You are about to begin the GE Endline 3 Enterprise Survey. Please fill in the following questions before engaging the respondent.

1. Enumerator details

- a. Name:
- b. REMIT ID: |_|_|_|_|_|_|_|_|

2. Survey details

- a. Today's date: |_|_|_|/|_|_|_|/|_|_|_|_|_|_|_| (DD/MM/YYYY)
- b. Time of interview: |_|_|_|:|_|_|_|
- c. Where are you conducting this survey?
 - i. County:
 - ii. Subcounty:
 - iii. Location:
 - iv. Sublocation:
 - v. Village: or Market Center:
- d. Enterprise ID: |_|_|_|_|_|_|_|_|
- e. You are trying to survey Enterprise ID: *[Enterprise ID]*. Here is some information about this enterprise:
 - Owner names: *[EL3 Census Owner Names]*
 - Employee names: *[EL3 Census Employee Names]*
 - Enterprise name: *[EL3 Census Business Name]*
 - Primary enterprise category: *[EL3 Census Primary Business Category]*
 - Secondary enterprise category: *[EL3 Census Secondary Business Category]*
 - Primary operating location: *[EL3 Census Enterprise Village or Market Center 1]*

Were you able to track this enterprise?

- Yes, located enterprise and reached a respondent *Continue.*
- Located enterprise but no available respondent *Skip to Q4.*
- No, no available info about this enterprise *End survey here.*

3. Who is providing information on this enterprise?

- Owner: *[EL3 Census Owner Name 1]*
 - Other owner
 - Employee: *[EL3 Census Employee Name 1]*
 - Other employee
 - Direct family member of enterprise owner (husband/wife, son/daughter, father/mother, brother/sister)
 - Extended family member of enterprise owner (aunt/uncle, cousin, etc)
 - Neighbour of enterprise owner
 - Neighbouring shop
 - Village elder / guide
 - Other (specify)
- If owner or employee, skip to Q5. Otherwise, continue.*

4. Please try to find an owner or employee of this enterprise to survey. Below are the phone numbers we've collected for the owners/employees. Try all available phone numbers before determining all owners/employees are unreachable. Which phone number did you use to reach an owner/employee?

- [Owner Phone 1]
- [Owner Phone 2]
- [Employee Phone 1]
- Other phone number provided by someone: _____
- Attempted all phone numbers and could not reach
- No phone number listed above

5. Is this enterprise currently operational? *By operational, we mean the enterprise was operating for at least 1 day in the last 30 days.* (1=Yes, 2=No temporarily close, 3=No permanently closed, -99=Don't know)
If yes, continue. Otherwise, skip to Q7.
6. Is this enterprise currently open? *By open, we mean currently open for business / customers / engaged in activity.* (1=Yes, 2=No)
7. In the past 12 months, what months was this enterprise operational for at least 1 day? *Select all that apply.*
 Jan Feb Mar Apr May Jun Jul Aug
 Sep Oct Nov Dec All of the last 12 months

If FR is NOT owner/employee, survey ends here. Otherwise, proceed to consent statement.

FO: Read informed consent script to respondent.

8. Do you consent to take part in this research? (1=Yes, 2=No)
9. **FO:** Is the respondent able to proceed with the survey? (1=Yes-FR agrees to participate; 2=No-FR refuses to participate; 3=No-FR does not refuse but is unable to participate)
If yes, skip to section 2. If no, continue.
10. **FO:** Describe your impressions of the refusal / inability to participate.
 1 = Wants to reschedule (*skip to "Rescheduling instructions"*)
 2 = Refusal for this round only (*skip to question 11*)
 3 = Refusal for this round and any future rounds (*skip to question 12*)
 4 = Unable to survey – parent or contact refusal (*skip to "Closing Interview Statement"*)
 5 = Unable to survey – spouse refusal (*skip to "Closing Interview Statement"*)
 6 = Unable to survey – in prison (*skip to "Closing Interview Statement"*)
 7 = Unable to survey – mental illness / disability (*end interview*)
 -77 = Unable to survey – other (*skip to question 13*)
11. **FO:** Record your impressions of why the FR refuses to participate during this survey round. If you feel comfortable doing so, you may ask the FR why: Why don't you want to participate in this survey round? *Select up to 3.* //
 1 = Survey is too long
 2 = FR has caregiving duties
 3 = FR has to work
 4 = FR does not want to disclose personal information
 5 = FR is suspicious of REMIT
 6 = FR hasn't received (further) assistance from REMIT and doesn't want to participate because of that
 7 = FR just doesn't want to / no reason given
 -77 = Other (specify)
Skip to "Closing Interview Statement".
12. **FO:** Record your impressions of why the FR refuses to participate during this round and any future rounds. If you feel comfortable doing so, you may ask the FR why: Why don't you want to participate in this round or any future survey rounds? _____
Skip to "Closing Interview Statement".
13. **FO:** Specify other reason respondent is unable to survey: _____
Skip to "Closing Interview Statement".

Rescheduling instructions: Please ask the FR when they are next available, and then call your team lead to confirm this day and time. If you are unable to confirm this day and time, make a tentative appointment with the FR. Then, let the FR know that you will contact them to confirm when you will return. Record this information on the tracking sheet now. End the interview.

Closing Interview Statement: Thank you very much for your time. If you change your mind and would like to participate in the interview, please contact us at the REMIT office. End the interview.

If permanently or temporarily closed, continue. Otherwise, skip to end of section.

14. What year and month did this enterprise stop operating? ||||| (MM/YYYY)

15. Why did this enterprise stop operating? **Do not read, simply record the FRs response. Select all that apply.**

- | | |
|--|---|
| <input type="checkbox"/> Closed because of worries about COVID-19/coronavirus season | <input type="checkbox"/> Seasonal closure / usually closed in this season |
| <input type="checkbox"/> Cannot get inputs | <input type="checkbox"/> Cannot travel or transport goods |
| <input type="checkbox"/> Need to take care of an ill relative | <input type="checkbox"/> Lack of demand |
| <input type="checkbox"/> Lack of enough capital | <input type="checkbox"/> Business running at a loss |
| <input type="checkbox"/> Enterprise owner deceased | <input type="checkbox"/> Theft / vandalism |
| <input type="checkbox"/> Government requirements (by-laws, trading licenses) | <input type="checkbox"/> Mechanical breakdown |
| <input type="checkbox"/> Dissolution of the business by the partners | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Don't know | |

16. (if FR is owner / employee) Are you planning to re-open this business? (1=Yes, 2=No)

If yes, continue. If no, skip to Q18.

17. Do you know when you will re-open this business? (1=Yes, 2=No)

a. (if yes) When will you re-open this business? ||||| (MM/YYYY)

18. Why not? **Do not read, simply record the FRs response. Select all that apply.**

- | | |
|--|---|
| <input type="checkbox"/> I was not making a profit | <input type="checkbox"/> I do not have enough capital to start again |
| <input type="checkbox"/> I don't think I will find the workers | <input type="checkbox"/> I would like to start a new / different business |
| <input type="checkbox"/> I would like to take up paid employment | <input type="checkbox"/> I would like to focus on farming |
| <input type="checkbox"/> I would like to focus on childcare | <input type="checkbox"/> I would like to get more education |
| <input type="checkbox"/> I am retiring | <input type="checkbox"/> Other (specify) |

If permanently closed and has NOT operated at least 1 day in the last 12 months, thank the respondent for their time and end interview here.

If respondent is NOT an owner / employee of the enterprise: Thank the respondent for their time. END interview here.

Section 2: Confirming Identity of the Business

READ: Now I'd like to ask you some basic questions about this enterprise.

READ (if not operational): If the enterprise is no longer operating, or temporarily closed, we want to get the following information about the enterprise at the time that it closed.

Below is the information we collected about this enterprise at [EL3 Census Date]. We will recollect some of this information to make sure it is updated.

Enterprise name: [EL3 Census Business Name]

Primary enterprise category: [EL3 Census Primary Business Category]

Secondary enterprise category: [EL3 Census Secondary Business Category]

Primary operating location: [EL3 Census Enterprise Village or Market Center 1]

Secondary operating location: [EL3 Census Enterprise Village or Market Center 2]

Tertiary operating location: [EL3 Census Enterprise Village or Market Center 3]

Owner names: [EL3 Census Owner Name]

1. What is/was the name of the business? _____
2. Primary business category? *Note: If more than one business category, the primary business category is the category that generates the most revenue for the enterprise.* Select from business category codes.
 - a. **(if retail)** What type of products does/did this enterprise sell?
 - b. **(if non-food)** What type of products does/did this enterprise produce/sell?
 - c. **(if different from EL3 Census)** At [EL3 Census Date], you said the primary business category was [EL3 Census Primary Business Category]. Why is this different?
 Category did not change since [EL3 Census Date], previous information was wrong. Skip to Q3.
 Actual change Continue to Q2d.
 - d. Why did the primary category of this business change from [EL3 Census Primary Business Category] to [Updated Primary Business Category]?
3. Any secondary business categories? *Select all that apply.* Select from business category codes.
 - a. **(if retail)** What type of products does/did this enterprise sell?
 - b. **(if non-food)** What type of products does/did this enterprise produce/sell?
4. Is/was the primary location of this enterprise still [EL3 Census Enterprise Village or Market Center 1]? *Note: For non-roaming enterprises that have multiple locations, the primary location is where most of the enterprise's assets are located. For roaming enterprises, the primary location is where the enterprise does business most often (for example, the market where they most frequently sell goods).* (1=Yes, 2=No)
If yes, skip to Q5. If no, continue to question 4a.
 - a. At [EL3 Census Date], we recorded the primary location of this business as [EL3 Census Enterprise Village or Market Center 1]. Why is this different?
 Category did not change since [EL3 Census Date], previous information was wrong. Skip to Q4c.
 Actual change Continue to Q4b.
 - b. Why did the primary location of this business change?
 - c. Where is/was the primary location of this enterprise? Village: _____ OR Market center: _____
 - d. Please describe the location of the enterprise (*Hint: Provide detailed description to the (primary) enterprise location, including landmarks, distance from roads and any other detailed information where relevant. If there is a primary school nearby, please start your directions from that school. If not, pick a location that is well known in the area to be a starting point for your directions. References to specific businesses or homes ("ask for the home of...") should be included where possible. If the enterprise operates from multiple locations, please get directions to the place the enterprise is most likely to operate from*): _____
 - e. When did the primary enterprise location change from [EL3 Census Enterprise Village or Market Center 1]?
 (MM/YYYY)
 - f. At the primary enterprise location, where does/did this enterprise operate?
 Homestead Market stall Own building
 Share building No building Other (specify)

g. Which days of the week is/was this business usually operating at this primary location?

- Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday Open every day

5. Below is a list of other enterprise locations we know about. Please select which locations the enterprise still uses/was using as other operating locations:

- [EL3 Census Enterprise Village or Market Center 2]
 [EL3 Census Enterprise Village or Market Center 3]
 None of the above

6. How many other locations does/did this enterprise operate from, besides those already mentioned? *Note: Here, we want to make sure we capture enterprises with multiple locations (for example: multiple plants / buildings / etc.) or moving enterprises (for example: home production as the primary location, but weekly presence at a market)* Enter 0 if no other locations.

REPEAT Q6a - Q6d for each other enterprise location.

- a. Where is/was the additional location of this enterprise?
b. Where is/was the additional location of this enterprise? Village: _____ OR Market center: _____
c. When did this enterprise start operating at this location? / (MM/YYYY)
d. Which days of the week is/was this business usually operating at this location?
 Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday Open every day

Section 3: Enterprise Owners, Employees, and Contact Information

READ: Now, I would like to ask you about the owners and paid employees of this business.

READ (if not operational): If the enterprise is no longer operational, I would like to know this information for the period within the last 12 months when this enterprise was operational.

Section 3A: Owners

1. What is/was the ownership structure of this enterprise? *Note: an enterprise has a single owner if all of its assets are owned by one individual person. If more than one person has a claim to the enterprise's assets (such as the original owner plus their spouse), it is considered joint ownership. If an enterprise is owned by everyone involved with or working for it, it is considered a Cooperative.*

Single Owner Joint Ownership Cooperative

2. From the last time we collected information about this enterprise at [EL3 Census Date], we collected the names of [# of owners from EL3 census] owners. This includes the following people: [List of owners from EL3 census]. I will now ask about each of these people in turn to confirm whether they are still owners of this enterprise (or were owners of this enterprise at the time it closed).

REPEAT Q2a - Q2c for each owner.

- a. Does [Name] still own this business / did [Name] still own this business at the time it closed?

Yes, still an owner *Skip to the next owner.*

No, no longer an owner *Continue to Q2b.*

Was never an owner / previous information is incorrect *Skip to the next prefill owner.*

- b. Why did/does [Name] no longer own the business?

Deceased Divorced Moved away Retired Sold the enterprise / bought out

Other (specify)

- c. (if non-deceased) For what amount was [Name] compensated for transferring ownership of the business?

Enter 0 if not compensated. KSh

3. Besides the owners mentioned above, how many other owners does/did this enterprise have? Enter 0 if none.

If more owners, continue. Otherwise, skip to Q5.

READ: You stated there are/were [Q3a] other owners of this enterprise. Please tell me the names of these other owners. If there are more than 5, please tell me about the 5 most important co-owners. *Note: The "importance" of a co-owner is defined by their ownership share of the enterprise's assets or their decision-making power.*

REPEAT Q4 for each other owner.

4. Name: _____

5. (if operational) There are [# of all current owners] owners of this enterprise / there were [# of owners at time of closing] owners of this enterprise. Please rank the owners in order of importance to the enterprise. *Note: 'Importance' of a co-owner is defined by their ownership share of the enterprise's assets or their decision-making power.*

[Owner 1]

[Owner 2]

...

READ: I will now ask a few further questions about each owner in turn.

REPEAT Q6a - Q6j for each owner.

- 6.

a. What is this [Name]'s relationship to the [Primary owner]? Use G4 codes

b. What is this [Name]'s gender? (1=Male, 2=Female)

c. What is this [Name]'s age (in years)?

i. Is this an estimated age? (1=Yes, 2=No)

- d. Which school system did [Name] participate in? (1=8-4-4, 2=7-2-2-3, 3=2-6-6-3, -98=No schooling)
- e. What is the highest level of education that [Name] has completed?
- f. What is [Name]'s ethnicity (tribe)?
- g. When did [Name] start working for this enterprise? / (MM/YYYY)
- h. Does [Name] live in [Primary operating location]? (1=Yes, 2=No)
If yes, continue. If no, skip to Q6i.
 - i. In what village does [Name] live in?
If selected other, continue. Otherwise, skip to Q6i.
 - ii. Does [Name] live outside of Siaya County? (1=Yes, 2=No)
- i. Is there a phone number where I can reach [Name], even if he/she does not have his/her own phone? (1=Yes, 2=No)
 - i. Please provide me with this number:
 - ii. Whose phone is this? Write name:
 - iii. What is this person's relationship to [Name]? Use G4 codes.
- j. (if primary owner) Can you give me another phone number to reach [Name]? (1=Yes, 2=No)
 - i. Please provide me with this number:
 - ii. Whose phone is this? Write name:
 - iii. What is this person's relationship to [Name]? Use G4 codes.

Section 3B: Paid employees

- 7. (if operational) How many paid employees work in this enterprise? Do not include owner or co-owner(s).
- (if not operational) How many paid employees usually worked in this enterprise at a given point in time when the enterprise was operating over the last 12 months? Do not include owner or co-owner(s).

If operational, continue. Otherwise, skip to section 4.

READ: You stated there are [Q7a] employees. I will now ask a few further details about each employee. If there are more than 5, please tell me about the 5 most important employees.

REPEAT Q8a - Q8j for each employee.

- 8.
 - a. Name:
 - b. Aside from being an employee, what is [Name]'s relationship to [Primary owner]? Use G4 codes.
 - c. What is this [Name]'s gender? (1=Male, 2=Female)
 - d. What is this [Name]'s age (in years)?
 - i. Is this an estimated age? (1=Yes, 2=No)
 - e. Which school system did [Name] participate in? (1=8-4-4, 2=7-2-2-3, 3=2-6-6-3, -98=No schooling)
 - f. What is the highest level of education that [Name] has completed?
 - g. What is [Name]'s ethnicity (tribe)?
 - h. When did [Name] start working for this enterprise? / (MM/YYYY)
 - i. Does [Name] live in [Primary operating location]? (1=Yes, 2=No)
If yes, continue. If no, skip to Q8j.
 - i. In what village does [Name] live in?
If selected other, continue. Otherwise, skip to Q8j.
 - ii. Does [Name] live outside of Siaya County? (1=Yes, 2=No)
 - j. Is there a phone number where I can reach [Name], even if he/she does not have his/her own phone? (1=Yes, 2=No)
 - i. Please provide me with this number:
 - ii. Whose phone is this? Write name:
 - iii. What is this person's relationship to [Name]? Use G4 codes.

Section 4: Business Operations / Profits / Revenue

READ: Now, I would like to ask you about the operations of the business.

READ (if not operational): If the enterprise is no longer operational, I would like to know this information for the period within the last 12 months when this enterprise was operational.

1. No question 1.
2. *(if operational)* In the past 7 days, what days was this enterprise open? *Select all that apply.*
(if not operational) When it still operated, what days was this enterprise usually open in a typical 7-day period? *Select all that apply.*
 Monday Tuesday Wednesday Thursday
 Friday Saturday Sunday Open every day None
If none, go to Q3.
3. On those days when the enterprise was open, how many hours was the enterprise usually open per day?
4. *(if operational)* In total, how many HOURS was this enterprise open for customers in the last 7 days?
(if not operational) In total, how many HOURS was this enterprise open in a typical 7 day period when it was still operational?
5. What were the total earnings of this enterprise in the: *Note: in this instance, "earnings" refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.*
 - a. *(if operational)* Last 7 days? KSh
 - b. *(if operational)* In the last 30 days? KSh
 - c. *(if not operational)* Last 12 months KSh
6. What was the total profit of this enterprise over the: *Note: Here we mean the amount the business received AFTER paying for expenses for this business, including hired workers, money for household members who helped, purchase of goods for sale or for inputs, such as raw materials, fuel, and electricity, but before purchasing personal items for yourself or your household. If unsure, FR can estimate. Ask in terms of ""commission"" if the FR runs an M-Pesa shop. If the business is co-owned, please report the TOTAL profit of the business, not only your share.)*
 - a. *(if operational)* Last 7 days? KSh
 - b. *(if operational)* In the last 30 days? KSh
 - c. *(if not operational)* Last 12 months? KSh

If the enterprise is operational, continue. Otherwise, skip to section 5.

Section 4A: Customers

7. Does this enterprise accept mobile money for payment? (1=Yes, 2=No)
 - a. *(if yes)* In the last 30 days, what share of sales was done via mobile money? %
8. What share of your total sales is made to... *(Probe: Out of 100 KSh you earned in the last 30 days, how many of those were earned from...)*
 - a. final consumers/private individuals who purchase for consumption? %
 - b. other enterprises/individuals (who will use your products / services to process or resell)? %
9. How many customers did this enterprise have:
 - a. Yesterday *Please count all customers that visited your business, regardless of whether or not they made a purchase.*
 - i. How many of those customers yesterday made a purchase?
 - b. In a typical day *Consider a typical day this business is open for customers. Please count all customers that visited your business, regardless of whether or not they made a purchase.*
 - i. How many of those customers on a typical day make a purchase?

10. In the last 30 days, what share of your total revenue came from...*(Probe: Out of 100 KSh you earned in the last 30 days, how many of those were earned from...)* The shares should equal to 100.

- a. within this village?
- b. within this sublocation but outside of this village?
- c. within this location but outside of this sublocation?
- d. from towns in Siaya County (Siaya, Ugunja, Ukwala, Segwa, etc.)?
- e. from other places in Kenya?
- f. from Uganda?
- g. from other places outside of Kenya and Uganda?

Section 4B: Refining Revenue

READ: Now, we are going to ask you a few detailed questions about this business' finances. We would like you to think about all the money that CAME IN to this business IN THE LAST 30 DAYS. Please remember to focus on all of the money this business collected from customers BEFORE paying any expenses or salaries.

I would like to remind you that we are collecting this information only for academic research purposes, and will not share this information with anyone else. A few questions ago, you stated that this business' sales in the last 30 days were: *[Section 4 Q4b revenue]* KSh. Through the next questions, we will calculate MULTIPLE ESTIMATES for this business' sales. At the end of this section, we will ask your "FINAL BEST ESTIMATE" for this business' sales in the last 30 days.

1. Which of the following types of business do you consider this business to be? *Select all that apply.*

Contracts: You work on a contract for a certain amount of time and receive a certain amount of money that is decided ahead of time in the contract. You do not collect money every day from customers.

Frequent: You have at least 10 sales transactions every week to individual customers only. That is customers buy a product/service from you 10 or more times per week.

Infrequent: You have less than 10 sales transactions every week to individual customers.

M-PESA or other mobile money agent: You provide deposits and withdrawals to allow M-PESA or other mobile money users to transfer between hard cash and float.

If business is a contract business, continue. If business is a frequent sales business, skip to Q4. If business is an infrequent sales business, skip to Q7. If business is a mobile money agent, skip to Q14.

READ: You stated that this business makes earnings through CONTRACTS. Please think about all that contract work completed in the last 30 days.

2. Now, we will collect your **first estimate** on sales in the last 30 days from contract work. What were the total sales/earnings in the last 30 days from contract work? This is the total amount of money that the business received through contracts. It includes all the money brought into the business before paying any bills, expenses, or salaries. KSh

3. To get us closer to your **second estimate**, we are now going to ask you some questions about your sales on a PER CONTRACT BASIS. In the last 30 days, HOW MANY CONTRACTS was this business working on or is it still currently working on? *Please include contracts that were completed in the last 30 days, those that have been ongoing for the last 30 days, and those that are new in the last 30 days.*

REPEAT Q3a - Q3k for each contract.

a. Briefly describe the work involved in this contract: _____

b. There is no question 3b.

c. There is no question 3c.

d. There is no question 3d.

e. There is no question 3e.

f. What date did this business START this contract? // (DD/MM/YYYY)

g. What date did this business END (or will end) this contract? // (DD/MM/YYYY)

- h. The contract started on [START DATE] and ends on [END DATE]. So, the total days (entire length) of this contract is [# OF DAYS BETWEEN START AND END DATE] days. Is this correct? (1= Yes, 2= No)
- i. And that means there [# OF CONTRACT DAYS WITHIN LAST 30 DAYS] days worked on this contract in the last 30 days. Is this correct? (1= Yes, 2= No)
- j. What was the TOTAL VALUE of this contract? *We mean what amount of money did (or will) your business receive for all of the work in this contract BEFORE any bills, expenses or salaries are paid?* KSh
- k. Below is a summary of the information you've provided about this contract:
 Start date: [START DATE]
 End date: [END DATE]
 Total duration of contract: [# OF DAYS BETWEEN START AND END DATE] days
 Days worked on this contract in the last 30 days: [# OF CONTRACTS DAYS WITHIN LAST 30 DAYS] days
 The total value of this contract over [# OF DAYS BETWEEN START AND END DATE] days is [TOTAL CONTRACT VALUE].
 In the last 30 days, this business worked on this contract for [# OF CONTRACT DAYS WITHIN LAST 30 DAYS] days.
 So, the portion of this contract that can be included in this business' sales in the last days is [TOTAL CONTRACT VALUE * SHARE OF CONTRACT DAYS WITHIN LAST 30 DAYS]. This is the amount of money from this contract that corresponds to the work this business completed on it during the last 30 days. Is this correct? (1= Yes, 2= No)
- l. From what you have told us about this business' [# OF CONTRACTS] contracts, we calculate that the total sales collected in the last 30 days from these contracts is [SUM OF ALL CONTRACT VALUES WITHIN LAST 30 DAYS]. This total includes:
 Contract #1: [CONTRACT VALUE WITHIN LAST 30 DAYS]
 Contract #2: [CONTRACT VALUE WITHIN LAST 30 DAYS]
 Contract #3: [CONTRACT VALUE WITHIN LAST 30 DAYS]
 Now, let's review your estimates for sales in the last 30 days from CONTRACT WORK.
 Estimate #1: FIRST GUESS = [FIRST ESTIMATE FROM QUESTION 2]
 Estimate #2: SUM OF INDIVIDUAL CONTRACTS = [SUM OF ALL CONTRACT VALUES WITHIN LAST 30 DAYS]
 Using these numbers to guide you, what is your FINAL BEST ESTIMATE for total sales from CONTRACT WORK in the last 30 days? *We mean how much money did you get from contract services in the past 30 days before you paid any bills, expenses, or salaries.* KSh
- m. So, this business' TOTAL SALES IN THE LAST 30 DAYS from contract work is: [CONTRACTS FINAL BEST GUESS] Does this amount seem correct to you? (1= Yes, 2= No)

Skip to Q16.

READ: You stated that this business makes earnings through FREQUENT SALES to customers. Please think about all the sales made to individual customers in the last 30 days.

4. Now, we will collect your **first estimate** on sales in the last 30 days from customer sales. What were the total sales/earnings in the last 30 days from customer sales? KSh
5. To get us closer to your **second estimate**, we are now going to ask you some questions about this business' sales on a WEEKLY BASIS.
- a. Think of the **BEST WEEK** for this business in the last 30 days. This is the week where the business sold the MOST. What were the total earnings of this enterprise in **THAT BEST WEEK**? *Note: in this instance, "earnings" refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.* KSh
- b. Think of the **WORST WEEK** for this business in the last 30 days. This is the week where you sold the LEAST. What were the total earnings of this enterprise in **THAT WORST WEEK**? *Note: in this instance, "earnings" refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.* KSh

- c. Based on what you just told me about the total sales in the BEST WEEK and in the WORST WEEK, we can estimate this business' sales in the last 30 days to be approximately: $[AVERAGE\ WEEK * 4.25\ weeks]$ We calculated this **second estimate** by taking the average of the best and worst weeks, then multiplying it by the number of weeks in a month. Does this amount seem correct to you? (1= Yes, 2= No)
6. To get us closer to your **third estimate**, we are now going to ask you some questions about this business' sales on a DAILY BASIS.
- a. In a TYPICAL WEEK, how many days is this business open? *This is the number of days that the business is operational. Emphasize to the respondent that it is not the number of days the respondent works at the business, but the total number of days the business is open to customers.*
- b. What were the business' total sales YESTERDAY (or the most recent day this business was open)? *Note: in this instance, "earnings" refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.* KSh
- c. Think of the BEST DAY in this business in the last 30 days. This is the day where it sold the MOST. What were the total earnings of this enterprise in THAT BEST DAY? *Note: in this instance, "earnings" refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.* KSh
- d. Think of the WORST DAY in this business in the last 30 days. This is the day where it sold the LEAST. What were the total earnings of this enterprise in THAT WORST DAY? *Note: in this instance, "earnings" refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.*
- e. Let's confirm what you have told me about the business' daily sales in the last 30 days.
 Sales on BEST DAY = $[SALES\ FROM\ Q7B]$
 Yesterday's total sales = $[SALES\ FROM\ Q7C]$
 Sales on WORST DAY = $[SALES\ FROM\ Q7D]$
 Now think about a TYPICAL DAY for your business in the last 30 days. Using these 3 numbers to guide you, what is your best estimate of how much money you usually get from selling your products/services to customers on an AVERAGE OR TYPICAL DAY? KSh
- f. Based on what you just told me about the total sales on your TYPICAL DAY, we can estimate your sales in the last 30 days to be approximately $[TYPICAL\ DAY\ EARNINGS * DAYS\ WORKED\ IN\ A\ TYPICAL\ WEEK * 4.25\ WEEKS\ IN\ A\ MONTH]$. Does this amount seem correct to you? (1= Yes, 2= No)
- g. Next, let's review your estimates for sales in the last 30 days from FREQUENT CUSTOMER SALES.
 Estimate #1: FIRST GUESS = $[FIRST\ ESTIMATE\ FROM\ QUESTION\ 5]$
 Estimate #2: AVERAGE OF BEST AND WORST WEEKS (MULTIPLIED BY 4.25) = $[AVERAGE\ WEEK\ SALES * 4.25]$
 Estimate #3: SUM OF TYPICAL DAILY SALES (OVER LAST 30 DAYS) = $[TYPICAL\ DAY\ SALES * TYPICAL\ DAYS\ OPEN\ IN\ A\ WEEK * 4.25]$
 Using these numbers to guide you, what is your FINAL 'BEST' ESTIMATE for the total sales in the last 30 days? KSh
- h. So, this business' total sales in the last 30 days from CUSTOMER SALES is $[FREQUENT\ SALES\ FINAL\ BEST\ GUESS]$. Does this amount seem correct to you? (1= Yes, 2= No)

Skip to Q16.

READ: You stated that this business makes earnings through INFREQUENT SALES to customers. Please think about all the sales made to customers in the last 30 days.

7. Now, we will collect your **first estimate** on sales in the last 30 days from customer sales. What were the total sales/earnings in the last 30 days? *Note: in this instance, "earnings" refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.* KSh
8. To get us closer to your **second estimate**, we are now going to ask you some questions about this business' sales on a WEEKLY BASIS.
- a. Think of the BEST WEEK for this business in the last 30 days. This is the week where the business sold the MOST. What were the total earnings of this enterprise in THAT BEST WEEK? *Note: in this instance,*

“earnings” refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number. KSh

- b. Think of the WORST WEEK for this business in the last 30 days. This is the week where you sold the LEAST. What were the total earnings of this enterprise in THAT WORST WEEK? *Note: in this instance, “earnings” refers only to revenue, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number.* KSh
- c. Based on what you just told me about the total sales in the BEST WEEK and in the WORST WEEK, we can estimate this business’ sales in the last 30 days to be approximately: [AVERAGE WEEK * 4.25 weeks] We calculated this **second estimate** by taking the average of the best and worst weeks, then multiplying it by the number of weeks in a month. Does this amount seem correct to you? (1= Yes, 2= No)
9. To get us closer to your **third estimate**, we are now going to ask you some questions about your sales on a PER TRANSACTION BASIS. How many sales transactions did you have in the past 7 days?
REPEAT Q9a for each transaction.
- a. Please enter the amount of money you collected for this transaction: Ksh
- b. From what you have told us about your transactions, we can calculate the business’ TOTAL SALES IN THE LAST 7 DAYS as [SUM OF ALL TRANSACTIONS IN LAST 7 DAYS]. This total sales estimate is obtained by summing up the value of all your individual transactions just discussed. Does this amount seem correct to you? (1= Yes, 2= No)
- c. In the last 7 days, you told us you collected: [SUM OF ALL TRANSACTIONS IN LAST 7 DAYS]. What kind of week was last week for this business? Slow week Normal week Busy week
- d. In the last 30 days, how much money did this business usually collect in sales during a NORMAL WEEK? KSh
- e. Based on what you told us about your normal week, we can estimate your sales for the past 30 days to be [SALES IN NORMAL WEEK * 4.25] KSh. We got this **third estimate** for your monthly sales by taking your normal week sales and multiplying it by 4.25 weeks in a month. Does this amount seem correct to you? (1= Yes, 2= No)
- f. Next, we are going to review your estimates for sales in the last 30 days.
Estimate #1: FIRST GUESS = [FIRST ESTIMATE FROM QUESTION 9]
Estimate #2: AVERAGE OF BEST AND WORST WEEKS (MULTIPLIED BY 4.25) = [AVERAGE WEEK SALES * 4.25]
Estimate #3: SUM OF TYPICAL WEEK SALES ((MULTIPLIED BY 4.25) = [TYPICAL WEEK SALES * 4.25]
Using these numbers to guide you, what is your FINAL 'BEST' ESTIMATE for the total sales in the last 30 days? KSh
- g. So, this business’ total sales in the last 30 days from INFREQUENT CUSTOMER SALES is [INFREQUENT SALES FINAL BEST GUESS]. Does this amount seem correct to you? (1= Yes, 2= No)

Skip to Q16.

READ: You stated that this business makes earnings through M-PESA or other mobile money services. Please think about all of the transactions you made in the last 30 days.

10. Which mobile money services are you an agent for?
 M-PESA
 Airtel
 Other, specify
11. Now, we will collect your **first estimate** on earnings in the last 30 days of work as a **mobile money agent**. What were the total earnings in the last 30 days from M-PESA work? We want to know all of your earnings/revenues from commissions and fees, not the value of all of the transactions that you completed. It includes all the money brought into the business before paying any bills, expenses, or salaries. KSh
12. To get us closer to your **second estimate**, we are now going to ask you some questions about this business’ earnings on a WEEKLY BASIS.
- a. Think of the **BEST WEEK** for this business in the last 30 days. This is the week where the business earned the MOST. What were the total earnings of this enterprise in **THAT BEST WEEK**? *Note: in this instance, “earnings” refers only to revenue from commissions and fees, not profit. Only count money in, do not*

subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number. KSh

- b. Think of the **WORST WEEK** for this business in the last 30 days. This is the week where you sold the LEAST. What were the total earnings of this enterprise in **THAT WORST WEEK**? Note: in this instance, "earnings" refers only to revenue from commissions and fees, not profit. Only count money in, do not subtract any expenses. Therefore, even if a business is not profitable / loses money, their revenue must be a positive number. KSh
- c. Based on what you just told me about the total sales in the BEST WEEK and in the WORST WEEK, we can estimate this business' earnings in the last 30 days to be approximately: [AVERAGE WEEK * 4.25 weeks] We calculated this **second estimate** by taking the average of the best and worst weeks, then multiplying it by the number of weeks in a month. Does this amount seem correct to you? (1= Yes, 2= No)
13. To get to a **third estimate** we want to ask you about earnings from each type of transaction in the **last week**.
- a. What is the total value of all **deposits** processed in the last week? Ksh
Deposits refer to customers exchanging hard money for float.
- b. (If deposits > 0): How many customers completed **deposits** in the past week?
- c. (If deposits > 0): How much did your enterprise earn from **deposits** in the last week? Ksh
Enter 0 if the enterprise does not earn revenue for deposits. Make sure to include commissions earned from Safaricom/Airtel as well as fees charged to users.
- d. What is the total value of all **withdrawals** processed in the last week? Ksh
Withdrawals refer to customers exchanging float for hard money.
- e. (If withdrawals > 0): How many customers completed withdrawals in the past week?
- f. (If withdrawals > 0): How much did your enterprise earn from **withdrawals** in the past week? Ksh
Enter 0 if the enterprise does not earn revenue for withdrawals. Make sure to include commissions earned from Safaricom/Airtel as well as fees charged to users.
- g. How much float/soft cash did your business have 7 days ago? Ksh
- h. How much float/soft cash does your business have now? Ksh
- i. How much hard cash did your business have 7 days ago? Ksh
- j. How much hard cash does your business have now? Ksh
- k. Did the enterprise earn money from any other mobile money services in the past week?
- l. (If yes) How much money did the enterprise earn from other mobile money services in the past week? Ksh
- m. Describe the services completed.
14. Based on what you just told me about the transactions in the LAST WEEK, we can estimate your earnings LAST WEEK were $(17a*17b + 17e + 17h + 17n)$. We estimate your earnings in the last 30 days to be approximately [(EARNINGS LAST WEEK)* 4.25 WEEKS IN A MONTH]. Does this amount seem correct to you? (1= Yes, 2= No)
15. Next, let's review your estimates for sales in the last 30 days from MOBILE MONEY SERVICES.
Estimate #1: FIRST GUESS = [FIRST ESTIMATE FROM QUESTION 14]
Estimate #2: AVERAGE OF BEST AND WORST WEEKS (MULTIPLIED BY 4.25) = [AVERAGE WEEK SALES * 4.25]
Estimate #3: SUM OF TRANSACTIONS IN THE PAST WEEK (MULTIPLIED BY 4.15) = [LAST WEEK EARNINGS * 4.25]
Using these numbers to guide you, what is your FINAL 'BEST' ESTIMATE for revenue/earnings from MOBILE MONEY SERVICES the last 30 days? KSh
So, this business' total sales in the last 30 days from MOBILE MONEY SERVICES is [MOBILE MONEY SERVICES FINAL BEST GUESS]. Does this amount seem correct to you? (1= Yes, 2= No)
16. So, this business' total sales for last 30 days is: [SUM OF BEST GUESS SALES FROM ALL BUSINESS TYPES (contract + frequent sales + infrequent sales)] Do you agree with this number? (1= Yes, 2= No)

Section 4C: Capacity Utilization

1. Assume this business was operating at FULL PRODUCTION CAPABILITY for 30 days. What would be the total earnings of this business at full production capability over 30 days? KSh

Assume the following conditions:

- existing machinery and equipment in place and ready to operate.
- normal downtime
- labor, materials, utilities, etc. are fully available
- the number of shifts, hours of operation and overtime pay that can be sustained under normal conditions and a realistic work schedule in the long run.
- the same product mix as the actual production.

2. In the previous section, you stated your best guess of this business' total earnings over the last 30 days as *[TOTAL REVENUE BEST GUESS]* KSh. If this business could earn *[ESTIMATED EARNINGS OVER 30 DAYS AT FULL PRODUCTION CAPABILITY]* KSh over 30 days if operating at full production capability, that means this enterprise was operating at *[BEST GUESS / FULL CAPACITY * 100]* % of full capacity over the past 30 days. Does that sound right?

Yes

No, a better value would be: %

Section 5A: Labor - Owners

READ: Earlier we discussed [# of owners from section 3a] owners of this business. I would now like to ask you a few questions about the work these owners did for the business, and compensation they received.

1. *(if operational)* How many hours did each of these owners work in this enterprise over the last 7 days? *Note: If more than 5, just list the 5 most important owners collected above.*
 - a. Owner #1 hours:
 - b. Owner #2 hours:
 - c. Owner #3 hours:
 - d. Owner #4 hours:
 - e. Owner #5 hours:
 - f. *(if total number of owners > 5)* What is the total amount of hours all other owners (excluding those just discussed) worked in this enterprise over the last 7 days? *Sum across all other owners, and over all 7 days.*

2. *(if not operational)* What is the total amount of hours all owners worked in this enterprise over a typical 7-day period during the last 12 months when the enterprise was operational? *Sum across all owners, and over all 7 days.*

3. *(if operational and number of owners > 1)* You said the business generated [Section 4 Q5B profits] KSh of profits in the last 30 days. Of these [Section 4 Q5B profits] KSh how much did each of the owners receive?
 Equal share
 Unequal share, specify (up to the 5 most important owners):
 - a. Owner #1 compensation: KSh
 - b. Owner #2 compensation: KSh
 - c. Owner #3 compensation: KSh
 - d. Owner #4 compensation: KSh
 - e. Owner #5 compensation: KSh

4. *(if operational)* Did the owners of this enterprise receive any other compensation (e.g. wages, food, transport, etc.) not already contained in the [Section 4 QUESTION 6B PROFITS] KSh of profits they received in the last 30 days? *Note: additional compensation is any financial or in-kind benefit that the owners of this household received from this enterprise, not already counted under profits above.* (1= Yes, 2= No)
If yes, continue. If no, skip to next section.
 - a. How much additional compensation (other than profits) did each owner received in the last 30 days:
 - i. Owner #1 compensation: KSh
 - ii. Owner #2 compensation: KSh
 - iii. Owner #3 compensation: KSh
 - iv. Owner #4 compensation: KSh
 - v. Owner #5 compensation: KSh
 - b. ***(if number of owners > 5)*** What is the total amount of additional compensation (other than profits) that all other owners received in the last 30 days (including the 5 owners just mentioned above)? *Sum across all owners, and over all 30 days.* KSh

5. *(if not operational)* Did the owners of this enterprise receive any other compensation (e.g. wages, food, etc.) not already contained in the [Section 4 QUESTION 6C PROFITS] KSh of profits they received in the last 12 months? *Note: additional compensation is any financial or in-kind benefit that the owners of this household received from this enterprise, not already counted under profits above.* (1= Yes, 2= No)
If yes, continue. If no, skip to next section.
 - a. What is the total amount of additional compensation (other than profits) that all owners received in the last 12 months? *Sum across all owners, and over all 12 months.* KSh

Section 5B: Labor - Employees

If number of employees from section 3a > 0, continue. Otherwise, skip to next section.

READ: Earlier we discussed [# of paid employees from section 3b] paid employees of this business. I would now like to ask you a few questions about the work these employees did for the business, and compensation they received.

REPEAT Q6 for each employee.

6. *(if operational)*
 - a. How many hours did each of this employee work in this enterprise over the last 7 days?
 - b. What was the total compensation this employee received over the last 30 days? *Include salaries and any in-kind remuneration.* KSh

7.
 - a. *(if total number of employees > 5)* What is the total amount of hours all other employees (excluding those just discussed) worked in this enterprise over the last 7 days? *Sum across all other owners, and over all 7 days.*
 - b. *(if not operational)* What is the total amount of hours all employees worked in this enterprise in a typical 7-day period?

8.
 - a. *(if total number of employees > 5)* What is the total compensation of all other employees (excluding those just discussed) in the last 30 days? KSh
 - b. *(if not operational)* What was the total compensation of all employees together over the [# of MONTHS from Section 1 Q7] months when this enterprise was operational?

9.
 - a. *(if operational)* How many volunteers / unpaid workers currently work in this enterprise? *Volunteers are unpaid employees.*
 - b. *(if not operational)* How many volunteers worked in this enterprise at a given point in time when the enterprise was operating? *Volunteers are unpaid employees.*
If # of volunteers > 0, continue. Otherwise, skip to next section.

10.
 - a. *(if operational)* What is the total amount of hours all volunteers worked in this enterprise over the last 7 days?
 - b. *(if not operational)* What is the total amount of hours all volunteers from outside this household worked in this enterprise over a typical 7-day period?

Section 6A: Capital

READ: Now, I'd like to ask you a few questions about the physical and financial assets of this enterprise and its recent investments into such assets.

1. *(if FR is an owner)* How much did you invest in order to start, purchase or gain control of this business? *Include all monetary assistance that others contributed to allow FR to start this business. (0 = Business was inherited or transferred for free (gift))* KSh

2. *(if FR is an owner)* How did you obtain the resources you initially invested in this business? *Select all that apply.*
 Own savings Loan from relatives Gift from relatives Loan from friends
 Gift from friends Bank loan Merry-go-round SACCO
 Shylock / moneylender Mobile credit NGO cash transfer Other (specify)

3. *(if operational)* Does this enterprise currently have any outstanding loans? (1= Yes, 2= No)
If yes, continue. If no, skip to Q4.
 - a. What is the total amount of outstanding loans? *If any of these loans were already mentioned above, please include them again here.* KSh
 - b. What are the source(s) of these loans? *Select all that apply.*
 Loan from relatives or friends
 Bank loan
 Merry-go-round
 SACCO
 Shylock / moneylender
 Mobile credit
 Other (specify)
 - c. What was the total interest or fees this business paid on all loans combined in the last 30 days? *If interest payments are less frequent than monthly, calculate what the interest would have been per month. For example, if they paid 300 KSh over the last 3 months, put 100Ksh.* KSh

4. If you had to buy something large for your business tomorrow, what is the most money you could access and spend? *Please include all cash on hand, as well as all money stored offsite (e.g. lock box at home but for business, mobile money account, in a business bank account, etc.). Do NOT count credit lines, calling in favors from friends, additional loans, liquidating assets, etc.* KSh

5. What was this business' total investment in the:
 - a. Last 30 days? KSh
 - b. Last 12 months? KSh

READ: Now, I am going to ask about any physical assets that this enterprise uses, such as buildings, vehicles, or equipment. I want to remind you that we are collecting this information only for academic research purposes, and will keep this information as confidential as possible and will not report it to the authorities.

REPEAT Q6a - Q6j for each category of physical assets

Categories include:

- **Land:** Please count land primarily used for this activity. Do not count land that is used by your household purely for private or agricultural use.
- **Buildings and structures:** Please count buildings and structures primarily used for this activity. Do not count buildings and structures that are used by your household purely for private use.
- **Vehicles:** Examples of large vehicles include cars, trucks, and boats. Examples of small vehicles include motorbikes, bicycles, scooters, and carts.
- **Machines and tools:** Machines are generally electrical or fuel-powered and are too large to hold in your hand. Tools are generally NOT electrical or fuel-powered and are small enough to hold and use in your hand.

- **Furniture or electronics:** These are used for business (and are not for sale to customers). This may include tables, chairs, desks, computers, mobiles, TVs, and radios that you keep in your business, but they are NOT important to the way your business operates.
- **Any other fixed asset:** (exclude stock, supplies, inventories, materials)

6. Asset category: [ASSET CATEGORY]

- Does this enterprise own or rent in any [ASSET CATEGORY]? *Select all that apply.*
 Yes, owns this asset
 Yes, rents in this asset
 No
- (if asset category is land or buildings, and owns that asset)* How much land (acres) / how many buildings and structures (numbers) does this own?
- (if owns)* How much is all the [ASSET CATEGORY] owned by this enterprise, worth today? Include [ASSET CATEGORY] used by the enterprise and [ASSET CATEGORY] that the enterprise rents out. For example, if someone came to you today to buy all [ASSET CATEGORY], how much could you sell it for? KSh
- (if owns)* Has this enterprise rented out any [ASSET CATEGORY] to others in the last 30 days? (1= Yes, 2= No)
- (if owns and rents out)* You stated that all of the [ASSET CATEGORY] owned by this enterprise is worth [Q6c] KSh, and that the enterprise rents out part of this [ASSET CATEGORY] to others. How much of the total [Q6c] KSh of [ASSET CATEGORY] does this business RENT OUT (rather than use for its own production)? For example, if someone came to you today to buy the part of [ASSET CATEGORY] that you rent out, how much could you sell it for? KSh
- (if owns and rents out)* How much did this enterprise receive in rental fees for renting out [ASSET CATEGORY] in the last 30 days? KSh
- (if owns)* What was this enterprise's total expenditure / investment in [ASSET CATEGORY] in the last 30 days? *Include net purchases / maintenance / repairs.* KSh
- (if rents in)* Think about all the [ASSET CATEGORY] this enterprise rents in. Imagine you owned all of that [ASSET CATEGORY]. If someone came to you today to buy all the [ASSET CATEGORY] that you rent in, how much could you sell it for? KSh
- (if rents in)* How much did this enterprise pay in rental fees for renting in [ASSET CATEGORY] in the last 30 days? KSh
- (if rents in)* What was this enterprise's total expenditure / investment in the [ASSET CATEGORY] you rented in the last 30 days, excl. rental payments? *Include maintenance / repairs.* KSh
- Has this enterprise sold any [ASSET CATEGORY] in the last 30 days? (1=Yes, 2=No)
If yes, continue. If no, skip to next asset category.
- How much did this enterprise receive in sales of [ASSET CATEGORY] in the last 30 days? KSh

12. Previously, you said this business' total investment in the last 30 days was [TOTAL INVESTMENT FROM Q5A] KSh. I will now show you a **second estimate** of the business' total investment, by summing up the total value of investment you mentioned was made in each of the asset categories we just talked about. After I show you these numbers, I will ask for your FINAL 'BEST' ESTIMATE of the business' total investment in the last 30 days.

YOUR FIRST ESTIMATE

[TOTAL INVESTMENT FROM Q5A] KSh

From going through each of the asset categories, we estimate your investment as:

- Land: [Q6G + Q6J] KSh
- Buildings [Q6G + Q6J] KSh
- Vehicles [Q6G + Q6J] KSh
- Machines and tools [Q6G + Q6J] KSh
- Furniture and electronics [Q6G + Q6J] KSh

SECOND ESTIMATE

[SUM OF Q6G + Q6J FOR ALL ASSET CATEGORIES] KSh

Using these numbers to guide you, what is your FINAL 'BEST' ESTIMATE for the total investment in the last 30 days? KSh

13. Does this business have electricity, from any source (including a car battery or generator)? *(Include electricity from any source (power grid, solar, battery, etc). It can be intermittent (not always on). Note that handheld solar*

lights/lanterns do not count as an electricity source) (1= Yes, 2= No)

If yes, then continue. If no, then skip to next section.

a. What is the source of your electricity? *Select all that apply.*

National electricity service (KPLC)

Generator

Car battery

Solar home system

If selected "National electricity service," then continue. Otherwise skip to section 6B.

b. Is this a single-phase or triple-phase connection? *(Note: As discussed in training, count the number of wires coming to the building from the power lines and subtract one. Triple phase is needed to operate energy-intensive machinery such as posho mills or welding. Select one from list)*

Single-Phase Connection

Triple-Phase Connection

Don't know

c. Was this enterprise connected to the national grid before or after 2014?

Before 2014

During or after 2014

d. In what year was this enterprise connected to the national grid?

Section 6B: Capital Utilization

1. *(if owns / rents in vehicles)* You said that this business owns or rents-in vehicles (including larger vehicles like trucks and cars, or smaller vehicles like bicycles and carts). I would now like to know more about each of these vehicles. List up to 3, in order of their importance to your business.

REPEAT Q1a - Q1e for each vehicle (up to 3).

- a. What kind of vehicle is this vehicle:
- | | | | | |
|--------------------------------|---------------------------------------|-------------------------------|--|----------------------------------|
| <input type="checkbox"/> Truck | <input type="checkbox"/> Bus / Matatu | <input type="checkbox"/> Car | <input type="checkbox"/> Motorcycle | <input type="checkbox"/> Bicycle |
| <input type="checkbox"/> Boat | <input type="checkbox"/> Scooter | <input type="checkbox"/> Cart | <input type="checkbox"/> Other (specify) | |
- b. Do you own or rent in this vehicle?
- Owns and uses for this business
 Owns and rents out to others
 Rents in for business use
- c. *(if owns and uses for this business)* How many hours was this vehicle in use the last day you worked for this enterprise? By 'in use', we mean that an owner or employee was using this vehicle, actively doing work that is directly related to this enterprise, for example using the vehicle in production, customer outreach, deliveries, purchases of inputs, etc. Do not include use primarily for private purposes such as commuting, personal travel, dropping of children at school, etc. Consider when the vehicle was in use for that whole day, not just when the FR was present.
- d. *(if owns and rents out to others)* For how many hours was this vehicle rented out to others the last day you worked for this enterprise?
- e. *(if rents in)* For how many hours did this business rent in this vehicle the last day you worked for this enterprise?

2. *(if owns or rents in machines/tools or electronics)* You said that this business owns or rents-in machines or tools or electronics. I would now like to know more about each of these machines or tools or electronics. List up to 3, in order of their importance to your business.

REPEAT Q2a - Q2e for each machine/tool/electronic (up to 3).

- a. Describe this machine/tool/electronic: _____
- b. Do you own or rent in this machine?
- Owns and uses for this business
 Owns and rents out to others
 Rents in for business use
- c. *(if owns and uses for this business)* How many hours was this machine in use the last day you worked for this enterprise? By 'in use', we mean that an owner or employee was using this machine, actively doing work that is directly related to this enterprise, for example using the machine in production, customer outreach, deliveries, purchases of inputs, etc. Do not include use primarily for private purposes such as commuting, personal travel, dropping of children at school, etc. Consider when the machine was in use for that whole day, not just when the FR was present.
- d. *(if owns and rents out to others)* For how many hours was this machine rented out to others the last day you worked for this enterprise?
- e. *(if rents in)* For how many hours did this business rent in this machine the last day you worked for this enterprise?

Section 7: Intermediate Goods / Suppliers

READ: Now, I'd like to talk in more detail about some of the costs and spending that you engage in during the operation of this enterprise. I want to remind you that we are collecting this information only for academic research purposes, and will not share this information with anyone else.

1. Does/did this business own any STOCK/INVENTORY? These are items that you buy from suppliers and resell to customers. Please only include the products available now or finished goods that are ready for sale today. (1=Yes, 2=No)
If yes, continue. If no, skip to Q2.
 - a. *(if operational)* How much is ALL of this business' stock/inventory worth today? We mean if you had to replace all of it (in the same condition it is in now), how much would that cost? *FR may estimate.* KSh
 - b. *(if operational)* What was this business' total expenditure on STOCK/INVENTORY purchased in the last 90 days? KSh
 - c. *(if not operational)* What was this business' total expenditure on STOCK/INVENTORY purchased in the last 12 months? KSh
2. Does/did this business own any MATERIALS/SUPPLIES? These are items that you buy from suppliers and use to make your final products or services. Please only include the inputs or supplies that have not yet been converted into a finished good. (1=Yes, 2=No)
If yes, continue. If no, skip to Q3.
 - a. *(if operational)* How much is ALL of this business' materials/supplies worth today? We mean that if you had to replace all of it in the same quality it is in now, how much would that cost? *FR may estimate.* KSh
 - b. *(if operational)* What was this business' total expenditure on MATERIALS/SUPPLIES purchased in the last 30 days? KSh
 - c. *(if not operational)* What was this business' total expenditure on MATERIALS/SUPPLIES purchased in the last 12 months? KSh

If operational, continue. If not operational, skip to next section.
3. You said this business spent a total of *[SUM OF Q2A and Q2B]* KSh on STOCK/INVENTORY and SUPPLIES/MATERIALS in the last 30 days. Now, we'd like to know where those purchases were made. What share (%) of those purchases were made in... *The shares should equal to 100.*
 - a. Within this village? %
 - b. Within this sublocation but outside of this village? %
 - c. Within this location but outside of this sublocation? %
 - d. Towns in Siaya county (Siaya, Ugunja, Ukwala, Segwa, etc)? %
 - e. Other parts of Kenya? %
 - f. Uganda? %
 - g. Places outside of Kenya and Uganda? %

Section 8. Other Costs

1. *(if operational)* In the last 30 days, how much did this business spend on:

- a. Electricity and water? (from all sources) KSh
- b. Insurance? (exclude health insurance). KSh
- c. Security? (like guards, maintaining fences, etc.) KSh

(if not operational) In the last 12 months, how much did this business spend on:

- a. Electricity and water? (from all sources) KSh
- b. Insurance? (exclude health insurance). KSh
- c. Security? (like guards, maintaining fences, etc.) KSh

READ: I would like to remind you that the data we collect here will be kept as confidential as possible, and will not be reported to the authorities.

2. Is/was the business name registered with the government? (1=Yes, 2=No)

3. Is/was the business registered as a limited company? (1=Yes, 2=No)

4. Is/was the business licensed with the county government? (1=Yes, 2=No)

If yes and operational, continue. If no, skip to Q5

- a. How much did this license cost? KSh
- b. How many months in total is this license valid? *Include the entire duration of the license, including months in the past and in the future.* Months

5. *(if operational)* In the last 30 days, how much did this business spend on:

(if not operational) In the last 12 months, how much did this business spend on:

- a. NSSF / Health insurance? KSh
- b. Market fees? KSh
- c. Taxes or fees to the county government? Exclude license payments KSh
- d. Taxes or fees to the national government? KSh
- e. Taxes, fees or fines to the Chiefs/assistant chiefs/village elders? KSh
- f. Additional payments to government officials, police or other authorities in order to do business? (i.e., bribes - but don't use that word) KSh
- g. Business services, e.g. advertising, accounting, tax advisory, legal services, consultants, etc... KSh
- h. Other operating costs, not already mentioned (excluding salaries, wages, investment, interest, business services etc..) KSh

6. In the last 12 months, has the business experienced any vandalism or theft? (1=Yes, 2=No)

- a. *(if yes)* What was the estimated value of destruction and theft in the last 12 months? We mean, if you had to replace / rebuild everything that was stolen or damaged, how much would it cost today? KSh

Section 8.1: Refining Profits

If operational, continue. If not operational, skip to next section.

1. Earlier, you said your total profits in the last 30 days were [Section 4a Q5b] KSh. I will now show you a SECOND estimate of your profit, by taking your best guess revenue, and subtracting all the costs you have mentioned. After I show you these numbers, I will ask for your FINAL 'BEST' ESTIMATE of profits in the last 30 days.

Total Revenue: [Section 4c BEST GUESS] KSh

Subtract the following:

Wage bill: [section 5.2 sum of wages [paid]

Rent for land / building / equipment: (Section 6.1 SUM OF RENTAL FEES PAID ON CAPITAL, 6I)

Interest payments (Section 6.1 QUESTION 3C)

Supplies and Materials (Section 7 SUM OF EXPENDITURE)_ KSh

-- Utilities (electricity, water, etc.) - [Section 8 QUESTION 1A] KSh

-- Taxes and fees - [Section 8 QUESTION 5A-5E] KSh

-- Other costs (insurance, security, transport, advertising.etc.) - [Section 8 QUESTION 1B-C + 5F-5H] KSh

SECOND ESTIMATE

[DIFFERENCE CALCULATED ABOVE] KSh

It is not clear which of these is more accurate. These are purely two different ways of estimating your profits. Using these numbers to guide you, what is your FINAL 'BEST' ESTIMATE for the total profit earned by this enterprise in the last 30 days? [__] Ksh

Section 9: Prices, Quality and Markups

READ: Now, I would like to ask you some questions about this business' most common products/services and prices.

1. How many different products/services do you sell in your business today? *FR may estimate. Do NOT include products that are currently out of stock. Only include what can be bought today. Be thorough with retailers who sell many different products.*
2. What are the THREE most common products or services that this business currently sells? *Use Product codes.*

READ: I will now ask some further questions about the most common products or services that this business currently sells.

REPEAT Q3 - Q8 through each product.

3. What is the most common quantity that this business sells of *[product]*? *For example, if it most commonly sells 1/4 kilo of sugar, indicate .25 for 'quantity' and kilo for 'unit'.*
 - a. Quantity:
 - b. Unit: *Use qtyunit codes.*
4. How many *[Q3a]* of *[product]* did this business sell in the last 7 days? units
5. What was the price of one *[Q3a]* of *[product]* in the last 7 days? KSh
If asking about the FIRST most common product, continue. Otherwise, skip to Q7.

REPEAT Q6a - Q6d for 10% factor and 100% factor.

6. You said that this business sold *[Q4]* units of *[Q3a]* of *[product]* in the last 7 days. Suppose that next week, you wanted the business to sell more, specifically *[FACTOR]* more of *[product]*. That would mean selling *[FACTOR * Q4]* more units of *[Q3a]* of *[product]*. Think carefully about what that would entail, what you would need to procure, and where/who you might be able to sell those additional *[FACTOR * Q4]* more units to.
 - a. How much could this business sell each *[FACTOR * Q4]* additional units of *[Q3a]* of *[product]* for? KSh
 - b. What would be the additional cost involved in producing / procuring *[FACTOR * Q4]* additional units of *[Q3a]* of *[product]*? *Please do not consider costs this business already incurs. For example, if you could produce those additional units on your existing premises, with existing workers, DO NOT include rent / wages you are already paying. If, on the other hand, you would need to rent a new building or machine, hire more workers, or hire existing workers for more hours, make more trips to the market, etc. then DO include such costs.*
 KSh
 - c. No question 6c.
 - d. What do you think is the additional profit you would make from selling *[FACTOR * Q4]* additional units of *[Q3a]* of *[product]*? KSh
7. Is there another seller of *[product]* in this *[primary operating location]*? (1=Yes, 2=No)
If yes, skip to next product. Otherwise continue.
8. Where is the closest other seller of *[product]*? *Use geography cascade.*

Section 10: Conclusion

READ: Thank you for your time.

FO: Be sure to fill in the remaining information. Do not read the questions allowed. Simply record your own impressions.

1. Did the respondent refuse or terminate the survey early? (1=Yes, 2=No)
If yes, continue. If no, skip to Q3.
2. Why did the respondent terminate the survey early? (1=Temporary stop only - wishes to continue survey at a later time, 2=Tired, 3=Too busy, does not have time, 4=Offended at question, 5=Suspicious of FO / survey intent / REMIT, 5=Does not feel like continuing survey, 6= Other (specify))
3. Time end interview: :
4. In what language was the survey conducted? *Select all that apply.* (1=English, 2=Kiswahili, 3=Luo, 4=Luhya)
5. How was the respondent's skill in speaking and understanding the survey language?
1= Displayed no problems speaking or understanding survey language
2= Displayed a little difficulty speaking or understanding survey language
3= Displayed moderate difficulty speaking or understanding survey language
4= Displayed serious problems speaking or understanding survey language
6. Were any people present during all or part of this interview (other than the respondent and REMIT staff)
(1=Yes, 2=No)
If yes, continue. If no, skip to Q7.
 - a. What is their relationship to the respondent? *Use G4 codes. Select up to 4.*
7. Are you very confident, somewhat confident or not very confident in the overall quality and truthfulness of this respondent's responses? (1=Very confident, 2=Somewhat confident, 3=Not confident)
 - a. *(If 2 or 3): Why?*
8. *(if survey conducted at operating location of enterprise)* Record the GPS coordinates:
 - a. Latitude:
 - b. Longitude:
 - c. Elevation:
 - d. Accuracy:

Appendix E: Endline 3 Market Price Survey, list of products

Location of Market:

Subcounty: _____

Location: _____

Sublocation: _____

Name of Market Center: _____

Market ID: _____

Please record GPS coordinates at the center of the market here (write every digit down):

Latitude: _____ Longitude: _____

Elevation: _____

Accuracy (m): _____

Survey Information:

Date of Survey: (DD/MM/YYYY) ____/____/____ Time of day: _____

FO name: _____

Other FOs present: _____

Instructions: For the items below, record the purchase prices for the item for the first three vendors you encounter that are selling the item.

For goods that come in different brands, please follow the following instructions:

(i) If there is only one brand, enter only a high price;

(ii) If there are multiple brands and they have the same price, enter the price both as a "high" and a "low" price;

(iii) If there are multiple brands at different prices, then enter the "high" and "low" prices.

-888 for not sold in market, -666 for out of stock, -777 for biz closed for the day, -555 for biz closed indefinitely, -999 for refuse to answer.

Read consent to each seller:

Hello, I am [name] from REMIT, an organization that works on research projects in Kenya. REMIT would like to interview you, to ask some questions about products you sell. If you wish to end the interview at any time, you may do so. If you have any concerns, or problems arising from any of the questions, please contact the REMIT Office in Ugunja. May we have your permission to ask you some questions about the goods you sell?

3. Hardware

Item		Unit	Seller #1				Seller #2				Seller #3			
			Seller Gender	Alt unit	Price today	Price 30 days ago	Seller Gender	Alt unit	Price today	Price 30 days ago	Seller Gender	Alt unit	Price today	Price 30 days ago
1 corrugated iron sheet (32 gauge)	high low	10 FT												
Water Paint	high low	4 liters												
Large Padlock	high low	1												
Cement	high low	50 kg												
Roofing nails		1/2 Kg												
Timber (2x2)		1 FT												
Nails (3 inch)		1/2 Kg												

STOP and take a look around the market. Please count the number of vendors at the market point who are selling CONSTRUCTION

3.a. What is the total number of carpenters at the market point? |_____|

3.b. What is the total number of carpenters operating at the market point on the visit day? |_____|

3.c. What is the total number of furniture vendors at the market point? (NOTE: Exclude carpenters) |_____|

3.d. What is the total number of furniture vendors operating at the market point on the visit day? (NOTE: Exclude carpenters) |_____|

3.e. What is the total number of hardware shops at the market point? |_____|

3.f. What is the total number of hardware shops operating at the market point on the visit day? |_____|

3.g. What is the total number of construction material vendors at the market point? (NOTE: Exclude hardware shops) |_____|

3.h. What is the total number of construction material vendors operating at the market point on the visit day? (NOTE: Exclude hardware

6. Services

Business Type	Service	Qty	Seller #1				Seller #2				Seller #3			
			Seller Gender	Alt unit	Price today	Price 30 days ago	Seller Gender	Alt unit	Price today	Price 30 days ago	Seller Gender	Alt unit	Price today	Price 30 days ago
Barber shop	Adult head shave	1												
Beauty Salon	Full blow dry	1												
Bicycle repair/mechanic shop	Puncture repair for bicycle	Per puncture												
Bicycle repair/mechanic shop	Pressure filling for bicycle	Pair of tyre												
Carpenter	Single size bed frame	1												
Cyber cafe	Photocopying	Per page												
Cyber cafe	Internet service	Per minute												
Cyber cafe	Printing	Per page												
Video room	Premier League match w/ one of the big 6 teams:	Per match												
Video room	Movie	Per movie												
Motorcycle mechanic shop	Puncture repair	Per puncture												
Motor vehicle mechanic shop	Puncture repair	Per puncture												
Mobile charging	Phone charging	1												
Tailor	Fixing a small patch / hole	1												
Tailor	Hemming trousers	1												
Car wash	Motorcycle wash	1												
Car wash	Full car cleaning	1												
Shoe repair shop	Shoe polish, one pair	Per pair												

Appendix F: Data management note and attestations

GE Project Endline 3 Data Management Plan: Household, Enterprise and Market Price Surveys

Date: January 13, 2025

On June 13, 2024, we launched the GE Effects Endline 3 Household and Enterprise Survey to survey a representative sample of households and enterprises living/operating in our study area of 653 villages in Siaya County, Kenya. This third round of surveys builds closely on the first and second rounds, described in Egger et al. (2019) and Egger et al. (2021).

For the third endline, we randomly divide the sample into two representative waves, to be conducted sequentially. As of January 13, 2025, we have fully completed Wave 1 and have surveyed 105 villages as part of Wave 2.

As of January 13, 2025, we have not filed pre-analysis plans for this longer-term round of data collection, though many of the outcomes of interest and specifications will be the same or very similar to those described in Egger et al. (2019) and Egger et al. (2021). The pre-analysis plan will be prepared by Dennis Egger, Johannes Haushofer, Edward Miguel, and Michael Walker, henceforth the “PAP writing team”, and will be uploaded to the AEA RCT Registry at a future point in time.

In general, survey data will be compiled, organized and stored by the field management team based in Siaya, Kenya, and research assistants in Berkeley, CA and Nairobi, Kenya. This team consists of Andrew Wabwire, Eric Owino, Irene Barasa, Layna Lowe, Prince Muraguri, henceforth the “field and data team”. During the initial weeks of the data collection, the field and data team has shared some data (without treatment assignment) with the PAP writing team for the following purposes: (1) identifying and correcting any coding errors in the survey instrument that are causing certain questions to be skipped; (2) making improvements to the choice sets for multiple-choice questions, to better reflect the types of answers that are being provided by the respondents; (3) identifying and amending questions that are taking too much time and, as a result, are causing delays; (4) identifying and addressing any other technical issues with the survey instrument; (5) making any final additions/edits to the survey instrument to address minor questions and/or survey length concerns; (6) aiding in the development of high frequency and consistency checks, in order to ensure good data quality.

Throughout data collection, the field and data team will prepare and provide the PAP writing team only summary statistics on survey data collection quality and respondent tracking rates. These statistics will be used to maintain high data quality and reduce attrition. No treatment effects on any outcomes of interest will be estimated in advance of filing the pre-analysis plan. Any village or respondent-level data shared with the research team will be for the purposes of improving data quality, and will be de-identified and stripped of variables that may expose treatment status.

Full access to the dataset will be provided to all research team members once the pre-analysis plan has been filed on the AEA RCT registry.

[quick] GE EL3 Survey Data Management Note

7 messages

Layna S Lowe <lslowe@berkeley.edu>

Mon, Jan 13, 2025 at 11:28 PM

To: Edward Miguel <emiguel@berkeley.edu>, Michael Walker <mwwalker@berkeley.edu>, Dennis Egger <dennis.egger@economics.ox.ac.uk>, Johannes Haushofer <haushofer@gmail.com>, ANDREW WABWIRE <wabwireandrew79@gmail.com>, Justin Owino <justinowino80@gmail.com>, irene barasa <barasairene36@gmail.com>, Prince Muraguri <pmuraguri@berkeley.edu>

Hi all,

The attached data management note outlines our plan for handling data in advance of filing pre-analysis plans covering data collected as part of the GE EL 3 survey modules. Please respond to me with the following statement as your e-signature:

I confirm that I have read the GE EL 3 survey data management plan, dated January 13, 2025, and agree to follow the specified plan.

Best,
Michael

**Layna Lowe**

Research Manager

[Center for Effective Global Action](#)**c:** 619-288-3011 **skype:** layna.lowe

207 Giannini Hall
Berkeley, CA 94720



 **GE Project Endline 3 Data Access Note_2025-01-13.pdf**
121K**Edward Miguel** <emiguel@berkeley.edu>

Tue, Jan 14, 2025 at 12:00 AM

To: Layna S Lowe <lslowe@berkeley.edu>

Cc: Michael Walker <mwwalker@berkeley.edu>, Dennis Egger <dennis.egger@economics.ox.ac.uk>, Johannes Haushofer <haushofer@gmail.com>, ANDREW WABWIRE <wabwireandrew79@gmail.com>, Justin Owino <justinowino80@gmail.com>, irene barasa <barasairene36@gmail.com>, Prince Muraguri <pmuraguri@berkeley.edu>

Dear Layna,

I confirm that I have read the GE EL 3 survey data management plan, dated January 13, 2025, and agree to follow the specified plan.

Sincerely,
Ted Miguel

[Quoted text hidden]

--

Edward Miguel
University of California, Berkeley
<http://emiguel.econ.berkeley.edu/>

Dennis Egger <dennis.egger@economics.ox.ac.uk> Tue, Jan 14, 2025 at 12:17 AM
To: Edward Miguel <emiguel@berkeley.edu>, Layna S Lowe <lslowe@berkeley.edu>
Cc: Michael Walker <mwwalker@berkeley.edu>, Johannes Haushofer <haushofer@gmail.com>, ANDREW WABWIRE <wabwireandrew79@gmail.com>, Justin Owino <justinowino80@gmail.com>, irene barasa <barasairene36@gmail.com>, Prince Muraguri <pmuraguri@berkeley.edu>

Dear Layna,
I confirm that I have read the GE EL 3 survey data management plan, dated January 13, 2025, and agree to follow the specified plan.
Sincerely,
Dennis Egger

From: Edward Miguel <emiguel@berkeley.edu>
Sent: Monday, January 13, 2025 9:00:41 PM
To: Layna S Lowe <lslowe@berkeley.edu>
Cc: Michael Walker <mwwalker@berkeley.edu>; Dennis Egger <dennis.egger@economics.ox.ac.uk>; Johannes Haushofer <haushofer@gmail.com>; ANDREW WABWIRE <wabwireandrew79@gmail.com>; Justin Owino <justinowino80@gmail.com>; irene barasa <barasairene36@gmail.com>; Prince Muraguri <pmuraguri@berkeley.edu>
Subject: Re: [quick] GE EL3 Survey Data Management Note

[Quoted text hidden]

Andrew Wabwire <wabwireandrew79@gmail.com> Tue, Jan 14, 2025 at 2:55 AM
To: Dennis Egger <dennis.egger@economics.ox.ac.uk>
Cc: Edward Miguel <emiguel@berkeley.edu>, Layna S Lowe <lslowe@berkeley.edu>, Michael Walker <mwwalker@berkeley.edu>, Johannes Haushofer <haushofer@gmail.com>, Justin Owino <justinowino80@gmail.com>, irene barasa <barasairene36@gmail.com>, Prince Muraguri <pmuraguri@berkeley.edu>

Dear Layna,

I confirm that I have read the GE EL 3 survey data management plan, dated January 13, 2025, and agree to follow the specified plan.

Sincerely,
Andrew Wabwire

[Quoted text hidden]

Justin Owino <justinowino80@gmail.com> Thu, Jan 16, 2025 at 10:16 PM
To: Andrew Wabwire <wabwireandrew79@gmail.com>
Cc: Dennis Egger <dennis.egger@economics.ox.ac.uk>, Edward Miguel <emiguel@berkeley.edu>, Layna S Lowe <lslowe@berkeley.edu>, Michael Walker <mwwalker@berkeley.edu>, Johannes Haushofer <haushofer@gmail.com>, irene barasa <barasairene36@gmail.com>, Prince Muraguri <pmuraguri@berkeley.edu>

Hi Layna,
I confirm that I have read the GE EL 3 survey data management plan, dated January 13, 2025, and agree to follow the specified plan.

Best regards
[Quoted text hidden]

--

Owino Justin Eric
GE Effects Project

Michael Walker <mwwalker@berkeley.edu>
To: Layna S Lowe <lslowe@berkeley.edu>

Fri, Jan 17, 2025 at 3:01 AM

Hi Layna,
I confirm that I have read the GE EL 3 survey data management plan, dated January 13, 2025, and agree to follow the specified plan.

Best,
Michael Walker

On Mon, Jan 13, 2025 at 12:28 PM Layna S Lowe <lslowe@berkeley.edu> wrote:
[Quoted text hidden]

--

Michael Walker
mwwalker@berkeley.edu

IRENE BARASA <barasairene36@gmail.com>

Fri, Jan 17, 2025 at 7:20 AM

To: Justin Owino <justinowino80@gmail.com>

Cc: Andrew Wabwire <wabwireandrew79@gmail.com>, Dennis Egger <dennis.egger@economics.ox.ac.uk>, Edward Miguel <emiguel@berkeley.edu>, Layna S Lowe <lslowe@berkeley.edu>, Michael Walker <mwwalker@berkeley.edu>, Johannes Haushofer <haushofer@gmail.com>, Prince Muraguri <pmuraguri@berkeley.edu>

Hi Layna,

I confirm that I have read the GE EL 3 survey data management plan, dated January 13, 2025, and agree to follow the specified plan.

Sincerely,
Irene Barasa

[Quoted text hidden]