

GE Effects of Cash Transfers: Pre-analysis plan for Social and Economic Network Effects¹

Dennis Egger, Edward Miguel, Gwyneth Miner, and Michael Walker

28 November, 2022

Summary: This document outlines outcomes and regression specifications for estimating a) the effects of unconditional cash transfers on social and economic networks, and b) the extent to which spatial spillovers of such transfers (as documented in Egger et al. 2022) are mediated through existing social and economic connections. We specify our broad thinking and specific hypotheses, as well as regression equations and the primary outcomes that we intend to study. The project – a part of the General Equilibrium Effects (GE) project in Western Kenya – is a two-level randomized controlled trial of the NGO *GiveDirectly*'s unconditional cash transfer program. This document is part of a series of pre-analysis plans that will be filed as part of the broader second endline activity, and we also discuss how these plans fit together. We anticipate conducting analyses beyond those pre-specified here, and this document is not meant to preclude additional analyses.

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

We thank Vivian Aluoch, Tilman Graff, Grady Killeen, Magdalena Larreboire, Layna Lowe, Anya Marchenko, Charlie McMurray, Gwyneth Miner, and Leila Njee Bugha for excellent research assistance as part of this project, and Carolyn Nekesa, Andrew Wabwire, Eric Owino and the entire team of Vyxer REMIT Kenya for excellent work in the field.

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

Miguel (University of California, Berkeley): emiguel@berkeley.edu

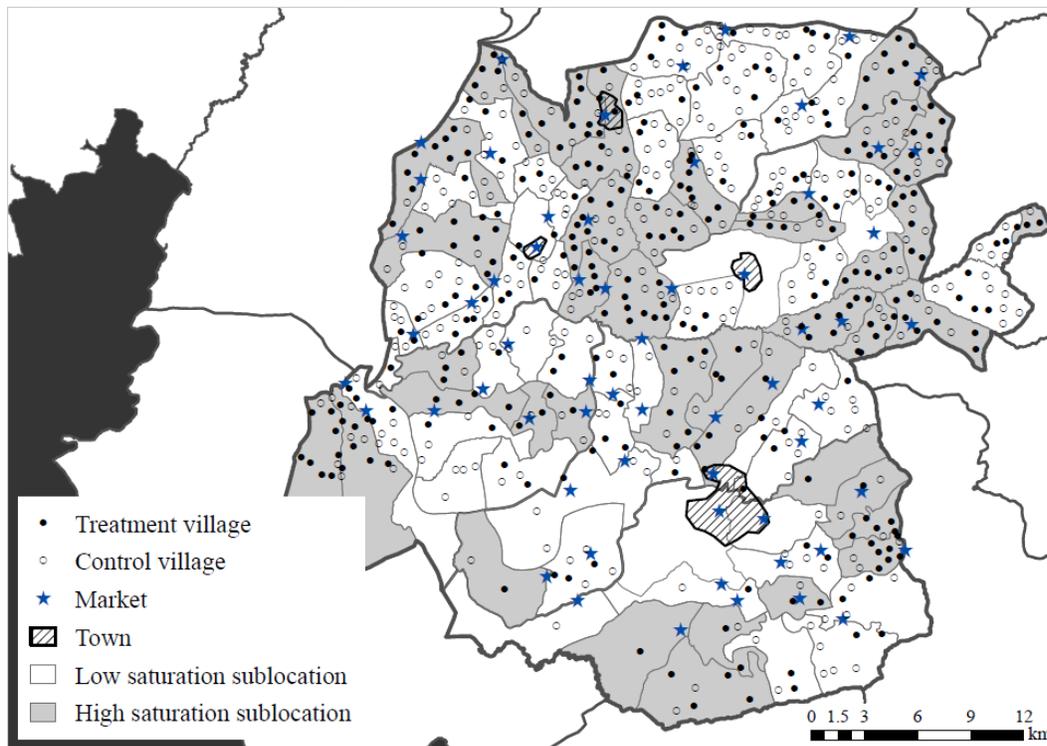
Miner (University of California, Berkeley): gwyneth_miner@berkeley.edu

Walker (University of California, Berkeley): mwwalker@berkeley.edu

1. Introduction

This document outlines the analysis plan for social and economic networks data collected between 2019 - 2022, as part of the General Equilibrium Effects (GE) project, a randomized controlled trial of an unconditional cash transfer program by the NGO *GiveDirectly* (GD). In villages selected for treatment, GD transferred around USD 1,000 (nominal) to all eligible households in the village, about 75% of annual expenditure for recipient households. Our transfers constituted a shock of about 15% of local GDP at the time that they were distributed. Only households with grass-thatched roofs were eligible to receive transfers, a basic means-test for poverty; we find 33% of households eligible in our study area. The intervention involved over USD 11 million in transfers and 653 villages in Siaya County, Western Kenya. Treatment assignment was randomized at the village level, and within treatment villages, all households meeting GD’s eligibility requirement received the unconditional cash transfer. A second level of randomization provided variation in treatment intensity: sublocations, an administrative unit directly above the village including about ten villages on average, were randomly assigned to high or low saturation status. In high saturation sublocations, two-thirds of villages were treated, while in low saturation sublocations, only one-third of villages were treated. Figure 1 gives an overview of the study area and experimental design².

Figure 1: Study area and experimental design



² Additional details on the experimental design and implementation can be found in Egger et al. (2022) and Haushofer et al. (2017a).

This analysis is primarily focused on data relating to social and economic networks collected as part of Endline 2 (about 5-7 years after the transfer), although where appropriate, we will make use of earlier rounds of data as well. As such, this document draws heavily on previously filed pre-analysis plans and existing working papers, updating earlier specifications and outcomes. These earlier plans are described in section 1.1 below.

This type of data, collected for such a large sample, is still relatively scarce. In particular, we elicit relationships in a variety of dimensions, including kinship, friendship, monetary transfers and risk sharing, information diffusion, co-working and ownership as well as participation in community groups (economic and political). Moreover, we do so not only within, but also across village boundaries. Documenting the characteristics of these kinds of networks, as well as how they vary across demographics such as gender and age, or socioeconomic characteristics such as income, wealth or remoteness will in itself be valuable.

In addition, we are interested in two broad types of *causal* analyses:

- i. The impact of cash transfers on social and economic networks of recipients (and their neighbors) as well as the structure of social and economic networks as a whole.

Included in this are questions such as whether cash leads recipients to associate with more, or different, individuals (does money buy friends?), whether such association leads to larger influence of recipients socially and economically (including through their ability to diffuse information or influence within the network, or by holding positions of responsibility), and whether, at the aggregate level, cash crowds out informal risk sharing arrangements or alters the risk-sharing and information diffusion ability of networks more generally.

- ii. The extent to which existing social and economic networks are channels through which the large spatial spillovers of cash transfers from recipients to nearby households and enterprises – documented in Egger et al. 2022 – operate.

This includes the question of whether participation in the same market facing the same prices is sufficient for predicting spillovers, or whether social connections at the micro-level structure of networks additionally predicts economic interactions.

The first set of questions (i) will occupy the majority of this PAP. We will pre-specify both reduced-form procedures estimating the impact of cash on the network connections of recipients (directly + spillovers) and non-recipients (spillovers) as well as more structural approaches estimating the impacts of cash on higher-order network characteristics following the recent literature of the econometrics of networks. As this literature is fast evolving, and because it is difficult to ex-ante pre-specify the full decision tree for deciding on a structural network model (which will depend on how any particular model is able to fit the empirical patterns we see in the data), we will here primarily outline our current thinking on which methods and models we will use, and how we intend to select among them, rather than fully pre-specifying a specific approach. We will, however, aim to pre-specify the eventual primary outcomes, the regressions we intend to run, and the research questions we are interested in.

In answering the second question (ii), we face two main empirical challenges: First, we did not collect detailed network data at baseline. Yet, cash may affect both the network itself and change the outcomes for network members as a function of the treatment status of the other network members. To disentangle this latter effect, we need to ‘shut off’ or control for the selection channel by focusing on networks that were either already present at baseline, or unlikely to be selected in response to treatment. To construct such ‘existing’ networks at the time of transfer, we rely on a) retrospective information of connections at baseline and/or b) kinship relations which are less likely to change as a result of cash transfers. Both of those may suffer from biased or selective recall. Second, networks and treatment are highly clustered across space – e.g. treatment is clustered at the village level, as are many of the social relationships we observe in the data. Thus, the variation in treatment status of a respondent’s network connections conditional on their geography, as well as the respondent’s own treatment status may be limited in practice. Because of these limitations, we consider this second question secondary to the first, and our analyses therefore more exploratory relative to the first question.

1.1. Relation to previous work

This pre-analysis plan builds on a series of six earlier pre-analysis plans filed for the GE project: One outlining the analyses relating to Endline 1 household data (Haushofer et al. 2017a), 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 outlining analysis of household outcomes from Endline 2 (Egger et al. (2021a)), one outlining the effects on the local economy more broadly from Endline 2 (Egger et al. (2021b)) and one outlining longer-term effects on community and civic engagement (Orkin and Walker 2021). Moreover, it builds on analyses in two existing working papers: Egger et al. (2022) and Walker (2018). In this PAP we err on the side of brevity to avoid repetition, as much of the detail and thought development can be traced in these earlier documents.

2. Data

The analyses outlined in this document will be primarily based on a new round of data collected between 2019 - 2022 (Endline 2), roughly 4-7 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 - 2022: Endline 2

We will use data from two full censuses of households (2014, 2019), 3 full censuses of enterprises (2014, 2017, 2019) as well as three rounds of representative surveys of households and non-household enterprises (2014-15, 2016-17, 2020-2021), and two rounds of representative phone surveys (2020). The core module for constructing social networks of households was added in the Endline 2 surveys, and

collects data on close relatives and close and good friends of all surveyed respondents (without truncation, and both within and across respondent villages). For each connection, we ask the respondent to self-report the following dimensions:

- Gender and age of the connection
- How they know this connection, and how long they've known them for
- Whether their connection has completed primary/secondary/college education
- Whether they own a *mobile phone, television, radio*. These assets were chosen because they were both highly predictive of wealth at Endline 1, and plausibly observable by friends and relatives.
- The strength / closeness of their connection at survey date and at baseline (1 very close, 2 close, 3, good, 4 distant, 5 no relationship)
- The frequency of interactions with this person now (in person, on the phone, by text) (1 daily, 2 weekly, 3 monthly, 4 few times a year, 5 less than yearly)
- The location of their connection (down to the village level)
- (If they live in the study area) which household the connection lives in (matched to the Endline 2 census in real time)

If connections live in the study area, field enumerators attempt to match to a particular household from our census in real time together with the respondent. For each relation, we therefore know not only the self-reported information from the network module listed above, i.e. their demographic information, the type, strength, and duration of the connection as well as any changes since baseline, but we also have information collected during the census (e.g. location, eligibility, household composition, etc.), for those connections matched to our census (i.e. those living in the study area). In addition, a random subset of households' connections will – by design of the activity – be surveyed themselves, allowing us to construct higher-order network connections as well as obtain much more detailed information about connected households from surveys (including demographics, economic activities, consumption, wealth, health, psychological well-being, socio-political engagement and attitudes, etc.).

For direct impacts of cash transfers on recipients and their neighbors as well as for studying networks as a channel for the propagation of spatial spillovers of cash, our sampling frame will primarily consist of the households (and enterprises) present in the study area at baseline (recipients AND non-recipients). When studying village- or area-wide changes to social networks (i.e. their density, path length, etc.) we will also consider households (and enterprises) that were established in the study area since baseline. (And, naturally, new households as well as households outside the study area that are connections of existing households will be incorporated as part of their network.)

Importantly, a connection could either be mentioned by only one of the connected parties, or both. In our primary specifications, we will consider the network to be undirected, that is, we will consider both types of relationships as equal. This is the standard in this literature. For example, when calculating the number of connections for a respondent, we not only consider connections mentioned by the respondent, but additionally add connections mentioned only by the corresponding party (e.g. the respondent's friend). To do so, we will use inverse sampling probabilities to consistently recover the additional connections that we may have missed (e.g. if our sampling probability is $x\%$, and there are n people that we sampled who mention respondent A as their friend, but whom A does not mention, then we impute that there should be

100/x * n additional non-sampled individuals that would have mentioned A.)

In secondary analysis for outcomes relating to a respondent's network – e.g. their number of friends, and the average wealth of their nth order connections – we will additionally compute statistics that rely solely on the respondent's own mentions.

In addition to kinship and friendship networks, we also collect data on a variety of other economic, social and political networks:

1. Transfer relationships: We directly ask households about any other households with whom they engaged in financial transfers or gifts in kind. If these households live within the study area, they are again matched to the census as above.
2. Co-working and co-ownership relations: For each household engaged in self-employment, we know their 5 most important co-owners and employees, which are matched to households in the census where possible. For those engaged in wage employment, we search their employer in our enterprise census – and, with some sampling probability, this employer is in turn sampled, which will allow us to identify this person's co-workers.
3. Community groups: We also collect information on participation in various community groups (e.g. churches, ROSCAs, etc.), as well as whether respondents hold any positions of responsibility in these groups. For sampled households, we are therefore able to construct common membership of such groups.
4. Health communication: As part of a two-round rapid phone survey during the early months of the COVID-19 pandemic (March - September 2020), we also collected data on which other households respondents visited or shared meals with, and – for a subset – which other households they talked to about health-related matters including COVID-19 and mask use.

3. Empirical Strategy

First, we intend to descriptively characterize the various types of economic and social relationships in our context, including kinship, friendship, monetary transfers and risk sharing, information diffusion, co-working and ownership as well as participation in community groups (economic and political). The primary and secondary outcomes in Section 4 provide guidance in the kind of descriptive statistics that we are interested in. Importantly, these might vary substantially across different groups – and in particular across gender, age, geography, economic activity, socio-economic status, and health / mental health status. Documenting these patterns, and their heterogeneity will be important in its own right.

One important dimension is geography – in part of the analyses that follow, we consider the village as a key unit of observation for networks. This is partly because the existing literature has focused on village networks, partly because our treatment varies at the village level, and partly because we think *a priori* that social and economic connections are much more likely within villages than across. In our descriptive

exercises, we aim to verify that claim by estimating the extent of border effects across villages (and other administrative boundaries such as sublocations) conditional on geographic distance.

Second, we outline below our strategy to tackle our two main *causal* research questions: The first seeks to answer how an influx of cash for recipient households changes the size and structure of their social network; the second how a household’s outcomes change when network members receive cash transfers. As mentioned above, we focus here mainly on the first, and provide a rough guide to our current thinking around the second and other additional analyses in Section 5.

3.1. Reduced-form impacts of cash on recipient and village networks

First, we wish to understand the reduced form changes in recipients’ and non-recipient’s networks as a result of the cash transfer. This analysis follows broadly the analysis in Egger et al. (2022). The key point to bear in mind is that cash may affect both a) the network relationship itself (selection), and b) the outcomes of network members as a result of the treatment assignment to some of its members (treatment). Moreover, since treatment as well as social networks are spatially clustered, the treatment status of network members are likely correlated. Thus, for any network outcomes involving characteristics of a respondent’s network connections (e.g. their average wealth), we will use *baseline* measures to isolate the selection component that is the object of this strand of analysis. We will specify below, for each outcome, how we handle missing baseline values – though in general we will intend to use as much data as is possible, and rely on imputations in certain cases where we believe this is beneficial.

We are interested both in the effect of cash on individuals’ social networks, as well as the structure of social networks in the local area where cash was distributed. This matters in the way in which we deal with migrants into and out of the local economy. When we are interested in treatment effects on individuals’ networks, we will primarily rely on a sample of individuals present in the study area at baseline – and include out-migrants’ social networks. In fact, migration may be a key mechanism through which a recipients’ social network changes (and if so, we will likely separately estimate this effect for migrants and non-migrants). When we are interested in the local economic and social networks on the other hand (and for the estimation of our structural network models), we will include all individuals present in the study area at EL2, the time of measurement. This approach follows our thinking in Egger et al. (2021a) and (2021b).

3.1.1. Recipients

We run the following specification for *eligible* households:

$$y_{ivsw} = \alpha_0 + \alpha_1 treat_v + \alpha_2 highsat_s + \gamma_w + e_{ivsw} \quad (1)$$

where y_{ivsw} is a social network outcome for a given individual i in village v and sublocation s , surveyed in Wave w of Endline 2, $treat_v$ is an indicator for whether a village was treated, and $highsat_s$ is an indicator for whether the sublocation s is designated as high saturation (i.e. $\frac{2}{3}$ of villages in s received treatment, compared to $\frac{1}{3}$ of villages in low saturation sublocations). 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 present at baseline. When available, we will additionally condition on the baseline values of the outcome y to improve statistical power.

The primary parameter of interest α_1 captures the direct effect of treatment on recipients and any potential spillovers from within treated villages on recipient households. α_2 allows for *across* village spillovers *within* sublocations. 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.

We will run two additional specifications to capture more nuanced spillovers. The first is analogous to Egger et al. (2022):

$$y_{ivw} = \alpha + \beta Amt_v + \sum_{r=2}^{\bar{R}} \beta_r Amt_{vr}^{-v} + \gamma_w + e_{ivw} \quad (2a)$$

where Amt_{vr} is the total per-capita amount transferred to village v and for each village in a buffer of $r - 2$ to r km around the village centroid of village v . 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, so we instrument for them 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). All other variables are defined as above. In some cases and where available, we may additionally add baseline values of the outcome – and if so we will specify this below. To account for spatial correlation, we calculate standard errors using a uniform kernel up to 10 km (Conley 2008).

The second specification additionally controls for the population share that eligible in each buffer ($s_{-v,r}^e$):

$$y_{ivw} = \alpha + \beta Amt_v + \sum_{r=2}^{\bar{R}} \beta_r Amt_{vr}^{-v} + \delta s_{-v,r}^e + \gamma_w + e_{ivw} \quad (2b)$$

where we use the own-village treatment dummy $Treat_v$ and the share of the total population in each buffer that is treated ($s_{-v,r}^e \cdot s_{-v,r}^{e,t}$) as instruments for the Amt variables. The advantage of this approach is that it is the most efficient (i.e. asymptotically lowest standard error) instrument when treatment effects are homogeneous for each dollar injected into the economy.³ However, when treatment effects are heterogenous – in particular, if they vary by the population share that is eligible – this approach estimates a slightly different LATE and Equation (2a). Namely, its weights are increasing with the square of the population share that is eligible ($s_{-v,r}^e$)² – because OLS maximizes the variance of the RHS – while weights in the previous approach increase linearly in the population share that is eligible ($s_{-v,r}^e$). As a result, the LATE obtained from estimating Equation 2b may be closer or further from the ATE than that

³ In fact, it converges to a first-stage R2 of 1, and thus to the OLS regression of outcomes on per capita transfers, controlling for the share of eligibles per capita in each buffer. This is the approach taken by Miguel & Kremer (2004).

estimated from 2a. Because we think that presenting results consistent with Egger et al. (2022) is useful for consistency, and because of this potential trade off between a lower variance and a different weighting implied in the estimated LATEs, we will present results using both specifications, and highlight our reasoning when presenting one over the other as primary.

We select the maximum radii band included in the both specifications (\bar{R}) as in Egger et al. (2022), by first estimating a series of nested models with the outer limit R varying from 2 to 20km, 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 analyze effects using \bar{R}_{SR} , where \bar{R}_{SR} is the ‘optimal’ radius selected in the short run, for most outcomes at 2km with a few exceptions at 4km (Egger et al. 2022). If effects remain strongly localized as in Egger et al. (2022), 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. (2022). We calculate these by multiplying the estimated coefficients of Equation (2) by the average values of the regressors, i.e.

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

3.1.2. Non-Recipients

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 eligibles in control villages). We estimate:

$$y_{i_{vw}} = \alpha + \sum_{r=2}^{\bar{R}} \beta_r^1 Amt_{v,r} + \sum_{r=2}^{\bar{R}} \beta_r^2 (Amt_{v,r} \cdot Elig_{iv}) + \gamma Elig_{iv} + \gamma_w + \varepsilon_{i_{vw}} \quad (3a)$$

$$y_{i_{vw}} = \alpha + \sum_{r=2}^{\bar{R}} \beta_r^1 Amt_{v,r} + \sum_{r=2}^{\bar{R}} \beta_r^2 (Amt_{v,r} \cdot Elig_{iv}) + \gamma Elig_{iv} + \delta_1 s_{v,r}^e + \delta_1 s_{v,r}^e \cdot Elig_{iv} + \gamma_w + \varepsilon_{i_{vw}} \quad (3b)$$

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. We again instrument for $Amt_{v,r}$ using the share of eligibles within buffer r around village v allocated to treatment ($s_{v,r}^{e,t}$) in Equation 3a, and with the population share within buffer r around village v that is treated ($s_{v,r}^e \cdot s_{v,r}^{e,t}$) in Equation 3b. We again use Conley (2008) standard errors with a uniform Kernel up to 10km. The procedure for determining \bar{R} will be the same as noted above for Equations (2a/2b).

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. (2022). This is calculated as:

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

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. (2022)).

Our main specifications (1), (2a/2b) and (3a/3b) do not include any covariate adjustments, since Egger et al. (2022) 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.

We follow Egger et al. (2021a) for exact tests of treatment effects using randomization inference as well as heterogeneous impacts on different types of households along the dimensions specified therein. We may also use some of the centrality/network measures in Section 4 as dimensions along which we look at heterogeneous treatment effects of cash.

3.2. Network Graph Reconstruction

The nature of our sampling procedure gives us consistent estimates of a) the number of different types of network relationships as well as b) the average characteristics of a respondent's network connections of n-th order. For example – since we sample a random subset of a respondent's first-order connections, their average wealth, as well as the average wealth of their connections (i.e. our respondent's second-order connection) can be consistently estimated in our data.

However, because we do not observe the full network, we cannot directly get consistent estimates of higher-order node characteristics that depend on the entire realization of the network (e.g. the eigenvector centrality of a node) or global network-level characteristics such as average path length of the village network, since this typically requires the full network. Chandrasekhar & Lewis (2016) show that when these statistics are computed only on the observed network graph, they tend to be biased even if observed nodes are sampled randomly. To consistently estimate these higher order network characteristics, we therefore draw on recent advances in the econometrics of sampled networks to reconstruct the unobserved links in our network (graph reconstruction). In particular, we are thinking about employing the approach using Aggregate Relational Data and a Latent Space Model described in Breza et al. (2020), as well as other graph reconstruction methods described in Chandrasekhar & Lewis (2016).

Graph reconstruction requires additional assumptions on the underlying network formation model. It is difficult ex-ante to commit to one particular model, or even a class of network formation models because a) the network literature is fast moving, and b) whether a particular model can generate patterns that are consistent with those found in our empirical setting can only be tested ex-post. In addition, any particular method for estimating the chosen model, or reconstructing networks based on such a reconstruction may turn out to work well or poorly in our empirical context depending on how exactly the network is structured, and which nodes we end up observing by chance.

To be clear upfront: We therefore view this section as more of a guideline that outlines our current thinking around how to tackle the question of reconstructing village networks along missing / non-sampled nodes. In our empirical analyses, we will try to remain within the guidelines set out here, but may deviate if circumstances require it, or new models, methods, or estimation approaches are developed in the meantime. We will, however, outline how we intend to adjudicate between the different models, as well as pre-specify the network characteristics that will serve as our primary outcomes, and that we will be estimating using the reconstructed network in Section 4.

We envisage taking several related approaches. As our primary approach, we intend to follow Breza et al. (2020), using their proposed network formation model (a latent distance model), their assumptions on the prior distributions of model parameters as well as their methods and code for network reconstruction and inference. A benefit of this approach is that it has been validated and tested against fully observed network data in a similar development setting. In addition, we may follow the graphical reconstruction method outlined in Chandrasekhar & Lewis, employing not only the Latent Distance Model (LDM), but potentially also Conditional Edge Independence Models (CEIM) and Subgraph Generated Models (SUGM).

Graph reconstruction (whether from ARD, or based on estimated CEIM or SUGM) yields a distribution of potential graphs drawn from the underlying network formation model. Concretely, it yields a matrix of linking probabilities. However, for the subset of nodes that are part of our sample, we know not only their probability of linking, but the actual realization of each link. We therefore intend to use those actual links for our observed nodes, and complete only the unobserved nodes from the reconstruction method.⁴

A strength of our setting and rich network data is that we can test (and therefore adjudicate between) different reconstruction methods and network models. Our current thinking is that we will employ a split-sample approach, where we will estimate the underlying network formation models and predict linking probabilities for all methods using only a random 50% subsample of our observed nodes (or village networks). We can then test how well each model performs in predicting the remaining links out of sample, and choose the method that yields the best out-of-sample prediction. The exact measure of predictiveness may depend on the model (e.g. we might test based only on the share of links that are correctly predicted, or additionally also test models based on the share of triples that are correctly predicted to see whether the models get clustering properties right).

Below, we briefly outline our current thinking relating to each approach.

3.2.1. **Aggregate Relational Data (ARD), Breza et al. (2020)**

The methodology in Breza et al. (2020) has the following components – which we here adapt to our particular context. In our case, we will consider as part of the network only households that are WITHIN the study area. When estimating the impact of treatment on network-level aggregates, we will do so at the village level, and consider each village to be a separate network.

⁴ We thank Emily Breza for suggesting this approach.

- **STEP 1 - Conduct ARD Survey:** As outlined in Section 2, we have conducted a survey with a sample of households who elicit their network links. For each network link, we can construct ARD based on the information we know from this elicitation (see Section 2), and for which we know the population distribution. Appendix A.2 in Breza et al. (2020) advised that ARD characteristics should be ‘single-peaked’, i.e. informative for identifying different subgroups within a network:
 - Dummy for completing secondary school *
 - Dummy for owning a TV*
 - Dummy for having only female household heads**
 - Dummy for living in a different village* / **
 - Dummy for eligibility**
 - Dummy for being a new household**
 - Dummy for running a non-ag business from the homestead**
 - Dummy for running a non-ag business outside the homestead***
 - Dummy for running a non-ag retail business ***
 - Dummy for running a non-ag manufacturing business ***
 - Dummy for young household heads: age < 30 ****
 - Dummy for old household heads: age > 60 ****
 - Dummy for household having children below the age of 12 ****
 - Dummy for household having children aged 13-18 ****

We will then construct ARD responses as the number of an individual’s connections with a particular trait. Where we match only to a particular village, but not to a particular household, we will impute the trait by drawing with a probability equal to the average among the remaining connections mentioned by the same household.

Outcomes marked by * were collected as part of the network module, but not in the household census. Outcomes marked by ** were collected in the census, but not reported by the respondent as part of the network module. Outcomes marked by *** were collected for enterprises in the census that were matched to their owning household. Outcomes marked by **** will only be collected in the household census at Endline 3. However, ARD for these characteristics can be constructed based on the match of respondent’s connections to the household census in real time. For non-matching connections that we nonetheless know to live in the study area, we will impute those values based on all the information we do know (i.e. by predicting the dummy based on a nearest neighbor matching on all non-missing variables).

- **STEP 2 - Conduct Census Exercise:** From the census, we know the above ARD statistics. In addition, we also have the following household characteristics X (which will later be used to predict latent locations of out-of-sample individuals):
 - GPS coordinates
 - Type of household: Eligible, Ineligible, New, Ghost
 - Whether the household has primary males, females or both
 - Whether the household has a phone number
 - Roof, wall and floor materials

- **STEP 3 - Estimate Network Formation Model with ARD:** Here, we intend to follow Breza et al. (2020) exactly in their specification of the latent distance model, the distribution of priors, and their estimation method outlined in Appendix B. As mentioned above, should newer methods become available, or should other network models fit our data better, we may deviate and use a different model in this step.
 - At this point, our rich data allows us to test the predictiveness of the estimated model. We intend to do so by estimating STEP 3 many times based only on a random subset of sampled nodes, and then predict out-of-sample the observed links in our data using the draws from the estimated model. Once the model is validated, we will then estimate the final version based on all of our data.
- **STEP 4 - Compute Network Statistics of Interest:** Once the model is validated, we keep our observed links, and fill in all other links using the estimated model. In doing so, we intend to follow Breza et al. (2020) exactly as in Appendix B.8. The specific characteristics that we are primarily interested in (at the node level, and the village network level) are outlined in Section 4.
- **STEP 5 - Estimate Economic Parameter of Interest:** We will then use the statistics computed in STEP 4 for estimation as outlined in Section 3.1. In addition to the node-level analysis, we will also run analogous regressions at the village level, for village-level network characteristics.

3.2.2. Graph reconstruction beyond ARD

ARD can be thought of as a method of graph reconstruction as outlined in Chandrasekhar & Lewis (2016), but employing a particularly limited set of data as well as a particular choice of network model. Chandrasekhar & Lewis (2016) however show that graph reconstruction yields consistent estimates of expected network statistics for a range of other models as well. Below, we give a rough outline of the steps involved and our current thinking for each without fully pre-specifying every single model choice at this point:

- **STEP 1 - Fit network model using the observed data (need to define the model)**
 First, we posit a network model governing the probability that two nodes i and j are connected, where the probability of that connection depends on covariates and a parameter vector θ_0 , and has a link function: $P(A_{ij} = 1 | z_{ij}, \delta_0) = \Phi(z'_{ij}\theta_0)$.
 The model parameter θ_0 is then estimated on the sampled households. We will likely estimate θ_0 parameters separately for eligible and ineligible households, as well as for treatment vs. control villages to allow overall link functions to be affected by treatment. (It may be possible to let θ_0 vary across each village, though with only about 15 sampled individuals per village this may lead to substantial imprecision.)

At this point, we are considering models of the latent distance type (the same we will use for our ARD approach), but additionally are also thinking of ‘Conditional Edge Independence Models’ where edges form independently based on i and j characteristics (including the difference between

them). When fitting such a model, we are likely going to use the same/similar set of characteristics as in Section 3.2.2., since we will need the same characteristics in the census to predict the probability. A third class of models that we are currently considering are ‘Subgraph generated models’. Chandrasekhar & Jackson (2021) provide a characterization of such models as well as estimation strategies, which will guide us in this approach.

- **STEP 2 - Model validation**

As above, we can estimate each model based on a random subset of links only, and use the remaining sample to validate its out-of-sample prediction properties.

- **STEP 3 - Estimate missing links based on fitted model**

With the estimated link function relating observed characteristics z_i to the probability of a link, we can then draw many potential networks from the estimated distribution of network realizations implied by the model, and calculate node- and network-level characteristics as the expected realization over these iterations.

- **STEP 3 - Estimating Economic Parameters of Interest**

We then use these expected network parameters in our node-level analyses as outlined in Section 3.1, as well as corresponding network- (village-) level analyses.

4. Primary Outcomes of Interest

The variables detailed in this section are our primary outcomes of interest. We consider these outcomes important a priori, but we may investigate evolving machine learning approaches to identify outcomes that were affected by treatment from a wider list, such as the one proposed by Ludwig et al. (2019).

We have grouped the outcomes into different “families”, where each group relates to a key research question or theme we plan to speak to. We will apply multiple inference corrections via FDR among primary outcomes within each family.⁵ Secondary outcomes are listed as additional outcomes we are interested in, and we may consider FDR adjustments among them as well. We will follow closely the evolving literature on procedures that improve power when testing many hypotheses, and may follow such approaches (e.g. Romano & Wolf (2005 a,b; 2016) and Anderson & Magruder (2022)).

Unless otherwise specified: Our primary network is that of close & good friends. ‘Connection’ will refer to a friendship relation. Moreover, we will consider the network to be undirected – that is we will treat connections mentioned by the respondent, another person mentioning the respondent as a connection, or both symmetrically.

Outcomes in **blue text** are *node-level* characteristics derived from the network reconstruction process. While for most measures, we consider the entire network within our study area as one large network and run regressions at the node level, we are also interested in network-level global statistics. For outcomes in

⁵ Primary outcomes are labeled as 4.X.X while secondary outcomes take the form 4.X.X.X

red, we consider each village to be its own network (dropping all non-village nodes), and run regressions at the village level.

When defining outcomes below, variables refer to question numbers in the Endline 2 household survey unless otherwise indicated, a copy of which is included in the appendix.

4.1. Network size

Research Question: Do cash transfers increase respondent's friendship networks?

4.1.1. **Degree - Number of connections (close friends + good friends):** Variables 3.2.4 and 3.2.6. PLUS the expected number of connections mentioned only by the other party, multiplied by their inverse sampling weight.

4.1.1.1. **Number of connections, directly mentioned (close friends + good friends):** Variables 3.2.4 and 3.2.6 only (without any additional connections not mentioned by the respondent).

4.1.1.2. **Number of “in-directed” connections:** Number of connections where the respondent's name is listed as a close or good friend from another individual, but that relationship is not listed in by the respondent personally.

4.1.1.3. **Number of ‘new’ connections (close friends + good friends):** Variables 3.2.4 and 3.2.6, but filtered to include only connections that were *not* connections at Baseline. (Whether someone is a connection at Baseline is inferred from Variable 3.2.15)

4.1.1.4. **Number of ‘old’ connections (close friends + good friends):** Variables 3.2.4 and 3.2.6, but filtered to include only connections that were *already* connections at Baseline.

4.1.1.5. **Average degree for a village network:** The average number of links for a node in the village $\frac{1}{N} \sum_i deg(i)$ where N is the number of nodes in a village.

4.1.2. **Second-order degree - Number of second-order connections (friends of friends, good + close):** Using the inverse-sampling weight weighted average of the number of friends surveyed among a respondent's friends. Where none of a respondent's friends are surveyed, we use the village-by-eligibility cell average for the number of friends' friends.

4.1.3. **Weighted network size:** Size of a respondent's network, where connections are weighted by intensity of relationship. Intensity of the relationship is measured as self-reported closeness of the relationship (on a likert scale)⁶. We include primary and secondary connections, where second order connections j are weighted by $\delta = \frac{d(1)}{d(2)}$ where $d(\bar{n})$ is the average n -th order degree across our sample, and the intensity of the relationship is measured as the average intensity along

⁶In secondary analysis, we will measure the intensity of the relationship also as the self-reported frequency of interactions, as well as the principal component of closeness and interaction frequency.

all paths of length 2 between the respondent and j .

4.1.3.1. **Average tie strength among relatives, close and good friends:** Tie strength is the principal component of interaction frequency (Variable 3.2.16) and self-reported closeness. (Variable 3.2.14)

4.1.3.2. **Intensity of old friendships:** Average change in the interaction frequency among relatives, close and good friends since baseline. (Comparing Variable 3.2.14 to Variable 3.2.15)

4.1.4. **Network Density:** The ratio of the number of existing edges to the total number of possible edges within a village network.

4.1.4.1. **Conductance:** describes how ‘well-knit’ or conductive a graph is, measured by the ratio of connections that link out from a village network to the total number of connections within the village network.

4.1.4.2. **Cohesion:** the minimum connectivity (the minimum number of edges or nodes that would need to be removed to isolate node i and j from the network) between all sets of nodes in the network.

4.2. Position of the respondent in the network

Research Question: Are cash transfer recipients more central or important in their network?

4.2.1. **Average path length (node level):** The average (shortest) path length for node i to all other nodes in the network.

4.2.1.1. **Average path length (network level):** Average geodesic path length, minimizing the number of edges, between any two nodes in the network.

4.2.2. **Eigenvector centrality of i :** Measures the importance of node i in the network by weighting the importance of node i 's connections. The eigenvector centrality of node i is the i th entry of the eigenvector (\mathbf{x}) corresponding to the maximal eigenvalue (λ) of the adjacency matrix (\mathbf{A}).

4.2.2.1. **Betweenness centrality of i :** A measure of the extent that node i lies on the paths between other nodes. It is calculated as the share of shortest paths between all pairs j

and k that pass through i :
$$g(i) = \sum_{j \neq i \neq k} \frac{\sigma_{jk}(i)}{\sigma_{jk}}$$

4.2.2.2. **Closeness centrality of i :** The average, (normalized) inverse distance between node i and all other nodes: $C_i = \frac{N-1}{\sum_j d(j,i)}$ where N is the number of nodes in the graph, $d(j,i)$ is the distance between node i and j , calculated as the number of edges in the shortest path connecting i and j (the geodesic path).

4.2.2.3. **Degree centrality:** The proportion of edges touching node *i* out of all possible edges in the network.

4.2.3. **Number of positions of responsibility held in the household:** Variable 13.3.2a, position ever held since Baseline.

4.2.3.1. **Positions of responsibility held by close and good friends:** Variable 13.3.2 captures if a member of the respondents' household holds a community leadership position, Variable 13.3.2a lists which household members those are (excludes church leaders), and Variables 13.3.2b details the positions.

4.2.3.2. **Average path length between respondent and community leaders (village elder, CHW, church leaders, etc.):** Variable 13.3.2 captures if a member of the respondents' household holds a community leadership position, Variable 13.3.2a lists which household members those are (excludes church leaders), and Variable 13.3.2b details the positions. We then calculate the average path length of respondents to these community leaders. (Note: Since we only know the community leader status of a node if that node itself is sampled, we will randomly miss such information for certain nodes. Average path lengths will therefore be longer than in reality, and we will follow the evolving network literature to correct for such bias if possible.)

4.3. Wealth of network members

Research Question: Does an influx of cash make you friends with richer people?

Here, we are interested in whether the experiment alters the wealth/status of individuals' social and economic connections. First, we check whether treatment affects the average wealth/consumption/income of social connections at Endline 2 of individuals exposed to treatment (Outcomes 4.3.1 and 4.3.1.1-3). These overall effects may be driven by either a) correlated treatment within networks (e.g. because networks as well as treatments are geographically clustered), b) the transmission of cash transfers through existing social networks (e.g. if cash transfers are shared among friends), and c) the selection of friends based on treatment. To address c), Outcomes 4.3.2, 4.3.2.1-3 and 4.3.3 focus on *Baseline* (or permanent) outcomes of respondents' friends which are unaffected by treatment, and therefore isolate the selection component. Section 5 further outlines an empirical strategy that tests for spillovers within social networks *after controlling for* geographically correlated treatment. Eventually, our aim will be to decompose the overall effect into its three components.

4.3.1. **Average assets (5.1 in GE EL2 Household PAP) of good and close friends at Endline 2:** We have this data for all network relations that were matched to our household census, and who were also surveyed as part of Baseline household surveys.

4.3.1.1. **Predicted wealth of good and close friends:** For households not surveyed at EL2, but matched to the EL2 census, we predict their baseline asset score based on census

variables, in particular household membership, wall, floor and roof material, and business ownership, as well as self-reported dummies for TV/radio/mobile phone ownership and education from the friendship model where variables included in the predictions are based on LASSO.

- 4.3.1.2. **Average consumption (5.2 in GE EL2 Household PAP) of good and close friends at Endline 2:** We have this data for all network relations that were matched to our household census, and who were also surveyed as part of Baseline household surveys.
- 4.3.1.3. **Average income (5.3 in GE EL2 Household PAP) of good and close friends at Endline 2:** We have this data for all network relations that were matched to our household census, and who were also surveyed as part of Baseline household surveys.
- 4.3.2. **Average assets (5.1 in GE EL2 Household PAP) of good and close friends at Baseline:** We have this data for all network relations that were matched to our household census, and who were also surveyed as part of Baseline household surveys.
 - 4.3.2.1. **Predicted baseline wealth of good and close friends:** For households not surveyed at Baseline but matched to the baseline census, we predict their baseline asset score based on baseline census variables, in particular household membership, wall, floor and roof material, and business ownership from the Baseline census, and self-reported education from the friendship model where variables included in the predictions are based on LASSO.
 - 4.3.2.2. **Average income (5.3 in GE EL2 Household PAP) of good and close friends at Baseline:** We have this data for all network relations that were matched to our household census, and who were also surveyed as part of Baseline household surveys.
 - 4.3.2.3. **Share of close and good friends that are ineligible:** We have this data for all network relations that were matched to our household census (Variable 3.2.18), and captured in our Baseline census. Eligibility is a proxy for household wealth at baseline.
- 4.3.3. **Average years of education of good and close friends:** We have this data for all network relations that were matched to our household census, and who were also surveyed as part of Baseline household surveys (Variable 4.1.7b).

4.4. Homophily / similarity of network members

Research Question: How does a cash transfer affect the homophily or segregation (similarity of connections with respect to demographics and socio-economic characteristics) of networks?

4.4.1. **Share of good and close friends living outside respondent village:** This captures the geographic breadth of respondents' social networks (Variable 3.2.17).⁷

4.4.1.1. **Geographic proximity of close and good friends:** Mean geographic distance between respondent node i , and their connections (Variable 3.2.17)

4.4.2. **Homophily / similarity of close and good friends:** Euclidean distance on standardized measures of gender, age, education, and eligibility between respondents and their listed connections (Variables 3.2.7, 3.2.8, 3.2.10-12).

4.4.2.1. **Share of friends with the same gender, age, education, and eligibility separately**

4.4.2.2. **Homophily / similarity with the network:** Euclidean distance on standardized measures of gender, age, subtribe, education between respondent and connections. We include primary and secondary connections, where secondary connections are weighted by $\delta = \frac{d(\bar{1})}{d(\bar{2})}$ where $d(\bar{n})$ is the average n -th order degree across our sample.

4.4.2.3. **Homophily test for a network:** For binary characteristics (e.g. gender), a graph exhibits homophily if the fraction of cross-gender edges is significantly less than $2pq$ (where p is the probability of male, q the probability of female). For characteristics that take on more than two values, we consider whether an edge is heterogeneous (the two nodes have different values for the characteristic). To test for homophily, we measure the number of cross-group edges in the network and compare it to the expected number of cross-group edges in a randomly assigned network.

4.4.2.4. **Assortativity coefficient:** The correlation measure between degrees of nodes in the network, with $-1 < r < 1$. A highly assortative network is one where high degree nodes are on average connected to other high degree nodes, and low degree nodes to other low degree nodes (see Newman 2002 for details).

4.4.2.5. **Cosine Similarity:** the average cosine similarity among members in a village network: The similarity σ_{ij} of nodes i and j is measured as the cosine of the angle between the vectors A_i and A_j

$$\sigma_{ij} = \frac{\sum_k A_{i,k} A_{j,k}}{\sqrt{\sum_k A_{i,k}^2} \sqrt{\sum_k A_{j,k}^2}}$$

Which can also be written as the the number of shared connections between i and j divided by the geometric mean distance of their degrees

⁷ Note: We think *a priori* that the village is the relevant boundary here. But if our descriptive statistics find that other boundaries are more appropriate (e.g. groups of villages or sublocations), we may also use those here.

$$\sigma_{i,j} = \frac{n_{ij}}{\sqrt{\text{deg}(i)\text{deg}(j)}}$$

4.4.3. **Local clustering coefficient of i:** The share of first-order connections of node i that are themselves connected. For an undirected graph: $Clus_i = \frac{2M_i}{k_i(k_i-1)}$ where k_i is the degree for node i, and M_i is the number of edges between the k neighbors (first-order connections) of i.

4.4.3.1. **Average clustering:** Average, over all nodes in the network, of the share of a node's neighbors that are themselves linked.

4.5. Other social and economic networks

Research Question: Do cash transfers change social and economic networks beyond friendships?

4.5.1. **Number of transfer relationships:** Variable 17.1a (number of transfer relationships in the last 12 months, where household received a gift or assistance of money or goods)

4.5.2. **Number of households shared meals with:** Variable 17.17.b (respondent household sharing a meal with another household) and Variable 17.18.b (list of other households sharing meals with respondent household)

4.5.2.1. **Number of households visited during COVID-19:** Over a 14 day span, Variable 3.6.a (number of households visited by respondent), Variable 3.7.a (number of households that visit respondent household) from COVID Phone survey

4.5.3. **Total membership of community groups that respondent is a part of:** calculated by summing the number of other respondents in those community groups (Variable 11.1.1a), scaled by sampling probability. (Note: group membership may lead to a more or less intense social interaction depending on group type or size. We therefore additionally consider the *number* of groups respondents are members of, as well as membership of different group types below.)

4.5.3.1. **Number of community groups:** Variable 11.1.1 (whether the household is part of a community group) and Variable 11.1.1a (how many community groups)

4.5.4. **Number of colleagues** (co-workers + co-owners in any business):

Agricultural: Variable 7.10 (number of workers hired outside the household for agricultural activity)

Non-agricultural: Variable 8.28 (number of co-owners for business, split by inside vs outside the household), Variable 8.37 links co-owners to network choices, Variable 8.39 (number of paid employees for the enterprise, excluding co-owner). Here, we exclude non-operational businesses.

4.6. Risk Sharing within Networks

Research Question: Does cash crowd out informal risk-sharing relationships?

There has been a long-standing interest in risk-sharing within informal networks, particularly in development economics. Our experiment provides random income shocks to a subset of individuals within each network, and we are therefore well-positioned to study how such income shocks are shared within the network. Section 5 outlines our strategy for doing so. Additionally, we want to test whether cash transfers alter the network structure in such a way that the network becomes more conducive to risk sharing. We take two different approaches: First, we test whether cash alters the covariance of income and consumption within friendship networks (4.6.1(.1)) – a key measure of risk sharing in the literature. However, because both cash transfers and social networks are correlated across space, such covariance may stem from either correlated treatment effects, or risk sharing within networks. We thus focus on income covariance only between EL1 and EL2 where such correlated effects are less likely. In a second step (4.6.2(.1)), we will then use our estimates, from Section 5, of the effect of friends' treatment on respondents' income and consumption respectively (β from Equation (4) separately estimated in each village), and then test if this risk sharing parameter responds to village treatment (i.e. running regressions at the village level). Note, since the first step is estimated with noise, we will primarily rely on randomization inference.

- 4.6.1. **Covariance of consumption between respondent and their network members:** This is the covariance in changes in consumption between Endline 1 and Endline 2 between the respondent and their network members. We only use nodes that were surveyed in both rounds and use inverse sampling weights. (Variables in 5.2 in GE EL2 Household PAP)
 - 4.6.1.1. **Covariance of income between respondent and their network members:** Same as above for income. (Variables in 5.3 in GE EL2 Household PAP)
- 4.6.2. **Effect of friends treatment on respondent's consumption:** β from Equation (4), estimated separately for each village, with y being respondent's consumption. This is a measure of the extent to which connections' cash transfer shock rippled through to other network members.
 - 4.6.2.1. **Covariance of income between respondent and their network members:** Same as above for income.
- 4.6.3. **Total amount of debt household owes to friends and relatives + total amount it lent out to friends and relatives:** Amount of outstanding loans to anyone outside of the household as a share of total household consumption.
 - 4.6.3.1. **Total amount borrowed + lent to (from friends / relatives) in last 12 months:** Sum of borrowing money from anyone outside of the household as a share of total household consumption [We only have this for Wave 2, see hh PAP]

4.6.3.2. **Total amount received + given as gifts in the last 12 months:** Total amount of money received or given as gifts from anyone outside of the household as a share of total household consumption (Variable 17.14a, 17.16a)

In secondary analysis, we will also restrict these outcomes to credit, debit and gifts among connections outside the respondent's own village, as flows are bi-directional, and outside-village connections' treatment status is not related to respondents' status.

4.6.4. **Share of community groups that are primarily political/economic vs. primarily support:** We classify churches, ROSCAS, women's, men's, and youth groups as support groups, and groups where individuals run a business or collaborate on business ventures as economic groups.

4.6.4.1. **Number of economic / productive community groups:** Variable 11.1.3 (group purpose)

4.6.4.2. **Number of support groups:** Variable 11.1.3

4.7. Information Diffusion within Networks

Research Question: Does cash lead to village networks that are more diffusive / efficient at diffusing information?

4.7.1. **First eigenvalue of the adjacency matrix:** This is a measure of the diffusiveness of a network under a percolation process (Chandrasekhar & Jackson (2021))

4.7.2. **Second eigenvalue of the adjacency matrix:** Measure of convergence time in an information sharing network (Golub & Jackson (2010))

In a related project in a subset of villages, we also seed different information about a) COVID-19 severity and b) mask effectiveness to a random subset of individuals within each village, and measure knowledge of COVID-19 transmission mechanisms as well as social norms and attitudes around mask wearing. See Jakubowski et al. (2021) for a related pre-analysis plan. Using specifications as described in 5, we intend to analyze whether information provided to neighbors in the network, as well as changes in social norms around mask use diffuse through existing social networks within each village. Having obtained diffusivity estimates (i.e. the increase in a respondent's probability of correctly answering to COVID-19/mask related knowledge questions as a result of their connections' treatment) from this first step, we can test whether the diffusion of seeded COVID-19 and mask information was affected by cash.

5. Further Analyses

As a secondary analysis, we will investigate to what extent the geographic spillovers documented in Egger et al. (2022) are mediated by existing social networks. We specify our current thinking of this question in Section 5.1 below. In addition we may explore other, related empirical strategies and research questions. For example, we are interested in whether cash transfers may have crowded out informal risk sharing (and, for example, whether this led to higher income or consumption volatility, or lower

covariance of incomes and consumption among network members), and how cash transfers affected participation and leadership positions in churches, community groups and political groups.

5.1. Are spatial spillovers mediated by existing networks?

Egger et al. (2022) documented substantial spatial spillovers of cash to other members of the local economy. The focus and interpretation was on spillovers that occurred through common participation in economic institutions (such as through purchases of goods as well as prices and wages in local markets). Here, we are interested in whether spillovers may have been shaped locally not only by shared market institutions, but also by social and economic connections between individual households and economic agents. Do recipients' friends benefit more or less than other households – even conditional on participating in the same markets? What about their business competitors? In essence, this is a test for whether expenditure and prices are sufficient for characterizing spillovers, and whether markets are 'blind' to the social structure of the local community.

Our strategy will be to see if outcomes vary by the intensity of treatment among a respondent's social and economic connections. In doing so, we face three empirical challenges:

First, social connections as well as participation in common markets are both clustered geographically, and treatment itself is spatially clustered. Thus, since households tend to be socially connected to nearby households, more intense treatment of friends also implies more intense treatment of participants in local markets. To disentangle the impact of space vs. social connections, we therefore exploit variation in the intensity of treatment of social connections among geographic neighbors only. A caveat to this approach is that – by virtue of treatment being clustered at the village level, neighbors living in the same village will be assigned to the same treatment condition (treatment vs. control, and high vs. low saturation), as will all their friends within the same village. Variation will thus be coming entirely from social connections outside respondents' own villages. It is not a priori obvious how much variation will remain, and thus how powered such an analysis will be.

Second, and relatedly, since treatment is clustered among eligibles, and at the village level, a respondent's average exposure to connections' treatment will depend on their propensity to form connections with eligibles, as well as their own treatment status (which will be correlated with their within-village connections' treatment status). To address this partial endogeneity, we follow the method proposed by Borusyak & Hull (2021) and recenter treatment exposure around the expected exposure of the respondent across many iterations of the experiment. This yields an instrument that varies only due to exogenous treatment allocation, not endogenous formation of connections.

Third, we did not collect information on social networks at baseline. Instead, we will rely on connections elicited roughly 5-7 years after treatment, and retrospective information on whether respondents were already connected at baseline. Retrospective information may suffer from selective recall, which might lead to connections being endogenous to treatment: Respondents with a higher share of treated connections may be different for reasons other than spillovers of treatment through these connections (e.g. if treated individuals associate more with richer individuals, and are more likely to mention these connections at endline). We address this concern by focusing in our primary specification only on reported friends and relatives at baseline. In a robustness exercise, we restrict peers to relatives only (who

should not change in response to treatment). Next, we test whether *baseline* observables are correlated with our intensity measure of treatment among connections. If not, this suggests that such strategic befriending and selective recall are unlikely, at least on observables. If so, we will control for baseline outcomes and switch to a differences-in-differences design. Moreover, we can use the exposure of individual i to treatment of their second-order connections (or n th order connections) and test for coefficient stability, since those are increasingly less likely to be strategically chosen.

We run the following specification:

$$y_{ievt} = \alpha_{ve} + \beta w(G)Treat_{j(i)} + y_{iv,t-1} + \varepsilon_{ivt} \quad (4)$$

where α_{ve} are a set of village-by-eligibility fixed effects that control for individual i 's own treatment status as well as restrict analysis to (in-)eligible households within the same village, thus controlling for nearby treatment, geography and common participation in markets. To strengthen the geographic identification, we may employ nearest-neighbor matching (by geography and eligibility) in secondary analysis instead of considering neighbors as all (in)eligible households living in the same village.

$w(G)Treat_{j(i)}$ is a possibly weighted function of the treatment status of i 's connections j , depending on the network graph G . In our primary analysis, we use the share of first-order connections that are treated. Because the share of connections that are eligible may be endogenous, we recenter $w(G)Treat_{j(i)}$ around its expected value across many iterations of treatment assignment, i.e. $w(G)\bar{Treat}_{j(i)} = w(G)Treat_{j(i)} - E(w(G)Treat_{j(i)})$. In secondary analysis, we may also consider weighting treatment by the intensity of interactions with each connection (as measured by respondents' self-reported closeness of the relationship, the frequency of their interaction, or the principal component of those two variables as above). Moreover, in our exposure treatment, we may additionally consider connections of higher order, where connections of n th order are down-weighted by $\delta^n = \frac{d(\bar{1})}{d(\bar{n})}$.

y_{ievt} are individual outcomes that may be affected by connections' treatment. We refer here to the primary and secondary outcomes specified in Egger et al. (2021a). One particularly important outcome is consumption (and income). In that particular case, we interpret β – the extent to which network connections' random cash income shock affects other network members – as a measure of risk sharing within networks. See Section 4.6 for more detail.

Beyond shedding light on how social and economic structures at the micro level shape aggregate economic outcomes, and spillovers in particular, this analysis will also help us directly test the hypothesis that networks serve as risk sharing mechanisms in this context. If exogenous income shocks to network members propagate within the network, this suggests they do. By looking at heterogeneity of this propagation by type of connection, but also by the structure of the network as a whole, we will also be able to speak to the mechanisms and socioeconomic institutions through which this risk sharing occurs.

Previous pre-analysis plans

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

Egger, D., J. Haushofer, E. Miguel, and M. Walker, 2021b. “Pre-analysis Plan for Endline 2 Local Economy Analyses”, 2021. <https://www.socialsciceregistry.org/trials/505>

Egger, D., J. Haushofer, E. Miguel and M. Walker, 2020. “COVID-19: Understanding Effects and Resilience in Kenya from a Cash Transfer Experiment: Pre-analysis Plan”, May 2020. OSF Registries: osf.io/62xhk

Haushofer, J., E. Miguel, P. Niehaus and M. Walker, 2016. “Pre-analysis Plan for Midline data: General Equilibrium Effects of Cash Transfers”, 2016. AEA Trial Registry: <https://www.socialsciceregistry.org/trials/505>.

Haushofer, J., E. Miguel, P. Niehaus and M. Walker. 2017a. “General Equilibrium Effects of Cash Transfers: Pre-analysis Plan for household welfare analysis”, July 2017. AEA Trial Registry: <https://www.socialsciceregistry.org/trials/505>

Haushofer, J., E. Miguel, P. Niehaus and M. Walker. 2017b. “General Equilibrium Effects of Cash Transfers: Pre-analysis Plan for Targeting Analysis”, July 2017. AEA Trial Registry: <https://www.socialsciceregistry.org/trials/505>

Haushofer, J., E. Miguel, P. Niehaus and M. Walker. 2018. “General Equilibrium Effects of Cash Transfers: Pre-analysis Plan”, June 2018. AEA Trial Registry: <https://www.socialsciceregistry.org/trials/505>

Jakubowski, Aleksandra and Egger, Dennis and Walker, Michael .2021. Mask Up! Testing strategies to increase mask use in Kenya: Pre-Analysis Plan.

Orkin, Kate and Michael Walker. 2021. “Cash Transfers and Community Participation in Public Affairs: A Village-Level Randomised Controlled Trial in Kenya: Pre-analysis plan for longer-term household outcomes,” December. AEA Trial Registry: <https://www.socialsciceregistry.org/trials/2918>

Walker, M. 2017. “Pre-analysis plan: Local public finance and unconditional cash transfers,” February. AEA Trial Registry: <https://www.socialsciceregistry.org/trials/505>

References

- Anderson, Michael L. & Magruder, Jeremy (2022) “Highly Powered Analysis Plans”, March 2022, *NBER WP 29843*
- Bloch, Francis and Bloch, Francis and Jackson, Matthew O. and Tebaldi, Pietro, Centrality Measures in Networks (June 1, 2019). Available at SSRN: <https://ssrn.com/abstract=2749124> or <http://dx.doi.org/10.2139/ssrn.2749124>
- Breza, Emily and Chandrasekhar, Arun and McCormick, Tyler and Pan, Mengjie. (2020a). “[Consistently estimating graph statistics using Aggregated Relational Data.](#)”. Working Paper
- 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.
- Chandrasekhar, Arun and Lewis, Randall (2016), “[Econometrics of Sampled Networks](#)”. Working Paper
- Chandrasekhar, Arun and Jackson, Matthew O. (2021) “[A network formation model based on subgraphs](#)”. Working Paper
- Egger, D., J. Haushofer, E. Miguel, P. Niehaus and M. Walker, 2022. “General equilibrium effects of cash transfers: Experimental evidence from Kenya”, *Econometrica*, forthcoming
- Golub, Benjamin, and Matthew O. Jackson. 2010. “[Naïve Learning in Social Networks and the Wisdom of Crowds.](#)” *American Economic Journal: Microeconomics*, 2 (1): 112-49.
- Jackson, Matthew O. “[A survey of network formation models: stability and efficiency.](#)” *Group formation in economics: Networks, clubs, and coalitions* 664 (2005): 11-49.
- Newman, Mark EJ. “[Assortative mixing in networks.](#)” *Physical review letters* 89.20 (2002): 208701.
- Romano, J. P., and M. Wolf. 2005a. “Exact and Approximate Stepdown Methods for Multiple Hypothesis Testing.” *Journal of the American Statistical Association* 100(469): 94–108.
- Romano, J. P., and M. Wolf. 2005b. “Stepwise Multiple Testing as Formalized Data Snooping.” *Econometrica* 73(4): 1237–1282.
- Romano, J. P., and M. Wolf. 2016. “Efficient computation of adjusted p-values for resampling-based stepdown multiple testing.” *Statistics and Probability Letters* 113: 38–40.
- Walker, M. 2018. “Informal Taxation and Cash Transfers: Experimental Evidence from Kenya,” Working paper.

Appendix A: Endline 2 Household Survey Instrument

SECTION 1. Survey Information and Informed Consent

Greetings! You are about to begin the GE Endline 2 Household Survey. Please fill in the following questions before engaging the respondent.

1. a. FO Name: _____
b. FO REMIT ID: |_|_|_|_|_|_|_|_|_|_|

2. Where are you conducting this survey?:
a. County: _____
b. Sub County: _____
c. Location: _____
d. Sublocation: _____
e. Village: _____

3. HouseholdID:
|_|_|_|_|_|_|_|_|_|_| - |_|_|_|_|_|

4. a. What type of respondent are you speaking with? |_|_| (1=Target Respondent, 2=Alternative Respondent)
If TR, skip to question 5. If AR, continue.
b. Why is the target respondent not available? |_|_| *Use target codes.*

bi. ***(if TR joined other household)*** I would like to match the new household of [TARGET RESPONDENT] to our study's village census. I will start by asking where [TARGET RESPONDENT] lives.

- County: _____
Sub County: _____
Location: _____
Sublocation: _____
Village: _____
HHID: _____ (done in SurveyCTO)

- c. What is the respondent's relations to the Target Respondent? |_|_| *Use g4 codes.*

5. Date of interview: (DD/MM/YYYY) |_|_|_|_|/|_|_|_|_|/|_|_|_|_|_|_|

6. Time start interview: (24 hr clock) |_|_|_|_| : |_|_|_|_|

Informed Consent: Read consent script to the respondent.

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

8. **Do not ask the following question. Simply record your impressions.** 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, 4=No-FR refuses to wear a mask)

a. Was the FR wearing a mask when you approached the homestead? Yes / No

b. Are they wearing it now? Yes / No

i. (if no) Why not?

Respondent doesn't own a mask

Respondent refuses to wear a mask

Provide a mask to the FR, then continue.

If FR refuses to wear a mask, do not continue with the survey. Return to question 8 and indicate "No, FR refuses to wear a mask".

If YES, skip to Section 2. If NO, continue.

8a. **Do not ask the following question. Describe your impressions of the refusal / inability to participate.**

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

2 = Refusal for this round only (**skip to question 8b**)

3 = Refusal for this round and any future rounds (**skip to question 8c**)

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 (**end interview**)

7 = Unable to survey – mental illness / disability (**skip to question 9**)

8 = Unable to survey – deceased (**skip to question 10**)

10 = Unable to survey – other (**skip to question 8d**)

Rescheduling instructions: 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. End the interview.

8b. **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? **Choose up to 3 reasons.**

// Other: _____

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
- 10 = Other (specify)

Skip to "Closing Interview Statement".

8c. **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".

8d. Specify other reason respondent is unable to survey: _____
Skip to "Closing Interview Statement".

9. **Record your impressions of the FR's disability. If you feel comfortable doing so, ask the FR or the FR's caretaker:** What is his/her disability? _____
The following questions collect some basic information for a FR who is mentally ill or disabled. Ask these questions of the FR or the FR's caretaker.

9a. What is the highest level of education he/she attended? *Use G6 codes.* |__|

9b. What is his/her occupation? *Use G9 codes.* |__| _____

Read: Thank you very much for your time. **End interview here.**

10. **Read:** 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.* |__|
If 77/Other: If the FR is comfortable, please specify the other cause of death. _____

10a. In what year did this person pass away? |__|_|_|_|_|_|

10b. Who is providing this information about the respondent?

i. Name: _____

ii. Phone number: |__|_|_|_|_|_|_|_|_|_|_|

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 interview here.

SECTION 2. Defining the Household

1. What is your current full name?

|_____| / |_____| / |_____|
(First name) (Middle/Second Name) (Last Name)

1a. (if FR = TR) **Do not ask the following question. Simply record your impressions.** Does this name match the information on your tracking sheet? *Note: Do not count different spellings or different orderings of the same name as different.* (1=Yes, 2=No) |_____|
If YES, skip to question 2. If NO, continue, and ensure that you are interviewing the same respondent as listed on the tracking sheet.

1a. (if FR != TR) Our previous records indicate the Target Respondent's name is [PREFILL TR NAME]. Can you confirm this name matches someone in your household? *Note: Do not count different spellings or different orderings of the same name as different.* (1=Yes, 2=No) |_____|
If YES, skip to question 2. If NO, continue, and ensure that you are interviewing someone from the same household as the respondent as listed on the tracking sheet.

1b. 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) |_____|/|_____| Other: _____

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

2a. What other name do you go by for official documents? *Probe to get names in the same order as given on official documents.*

|_____| / |_____| / |_____|
(Other First name) (Other Middle/Second Name) (Other Last Name)

2b. What is your common name/nickname? _____

3. **Do not ask the following question. Simply record your impressions.** What is the respondent's gender? (1=Male, 2=Female)
|_____|

3a. (if FR = TR) **Do not ask the following question. Simply record your impressions.** Does this agree with the gender reported on the tracking sheet? (1=Yes, 2=No) |_____|

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. (-99=DK day or month, -9999=DK year)
- 4a. **Do not ask the following question:** Is this an estimated year of birth? Note: A response of yes means the respondent is unsure of their year of birth. (1=Yes, 2=No)
- 4b. What is your age now in years? years
If age and date of birth information do not make sense together, please probe further with FR until they agree. Note in the FO Comments if you are unable to make them agree.
- 4c. **(if FR = TR) Do not ask the following question. Simply record your impressions.** Does this agree with the date of birth reported on the tracking sheet? (1=Yes, 2=No)
If NO, please confirm the date of birth with the FR. If FR is confident that this date of birth is correct, please update the tracking sheet.
- 4c. **(if FR != TR)** Our previous records indicate the Target Respondent's age/year of birth as [PREFILL TR YOB/AGE]. Can you confirm this info is correct for [PREFILL TR NAME]? (1=Yes, 2=No)
5. What is your place of birth?
- 5a. Country? Use G1 codes. Other: _____
- 5b. County? If FR does not know county, 1992 district and county are equivalent. Use G2a codes. Other: _____
If FR doesn't know COUNTY, continue. OTHERWISE, skip to question 5d.
- 5c. 2010 District? If FR doesn't know 2010 district, but does know an earlier district name, write old district name and make a remark in FO Comments below. Use G2b codes. Other: _____
- 5d. Town / city? Use G3a codes. Other: _____
If LIVES IN A RURAL AREA, continue. OTHERWISE, skip to question 5g.
- 5e. Subcounty?
 5e. Location?
 5f. Sub-location?
 5g. Village / Neighborhood?
- 5h. **Do not ask the following question. Simply record your impressions.** Does this match the information provided on the tracking sheet? (1=Yes, 2=No)
If NO, please confirm the place of birth with the FR. If FR is confident that this date of birth is correct, please update the tracking sheet.

6. What is your subtribe? *Note: if respondent is female, we want her subtribe, not the subtribe of her husband. Use subtribe codes.* Other: _____

6a. What is your clan? (-99=DK) _____

7. What is your father's name?

_____/_____/_____
(First name) (Middle/Second Name) (Last Name)

7a. **(if FR = TR) Do not ask the following question. Simply record your impressions.** Is the name listed in question 7 the same as that listed in the Identity Section of the Tracking Sheet? **Do not count different spellings or different orderings of the same name as different.** (1=Yes, 2=No, 3=Not listed on Tracking Sheet)
If YES or NOT LISTED ON TRACKING SHEET, skip to question 8. If NO, continue.

7a. **(if FR != TR)** Our previous records indicates [PREFILL TR NAME]'s father's name is [PREFILL TR FATHER NAME]. Can you confirm this is the name of the father of [PREFILL TR NAME]? (1=Yes, 2=No, -99=DK)
If YES, skip to question 8. If NO, continue.

7b. 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) / Other: _____

8. What is your mother's name?

_____/_____/_____
(First name) (Middle/Second Name) (Last Name)

8a. **(if FR = TR) Do not ask the following question. Simply record your impressions.** Is the name listed in question 8 the same as that listed in the Identity Section of the Tracking Sheet? **Do not count different spellings or different orderings of the same name as different.** (1=Yes, 2=No, 3=Not listed on Tracking Sheet)
If YES or NOT LISTED ON TRACKING SHEET, skip to question 9. If NO, continue.

8a. **(if FR != TR)** Our previous records indicate [PREFILL TR NAME]'s mother's name is [PREFILL TR MOTHER NAME]. Can you confirm this is the name of the mother of [PREFILL TR NAME]? (1=Yes, 2=No, -99=DK)
If YES, skip to question 9. If NO, continue.

8b. Why is this not the same name we have in our records? **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 missed) |__|/|__| Other: _____

9. What is your marital status? (1=Single, 2=Not married but co-habiting, 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) |_____|

10. **(if married or cohabiting)** What is your spouse's name?

|_____| / |_____| / |_____|
(First name) (Middle/Second Name) (Last Name)

11. **FO:** Below are the results of the identity verification questions:

- 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]

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) |__|

5b. Whose phone is this? **Write name.** _____

5c. What is this person's relationship to you? **Use G4 codes.** |__| Other: _____

6. In the future, we may want to contact you by email. Do you have an email address?
(1=Yes, 2=No) |__|

6a. **If yes:** What is it? **Write.** _____

Section 3.2. Family and Friend Networks / Additional Contacts

FO Note (do not read): For this section, we will ask the respondent about their friends and family. We are interested in relatives that the respondent feels close to, close friends, and good friends. There is no right or wrong number of relatives or 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.

Part 1: Close relatives

1. Other than the members of your household, do you have other relatives that you feel close to? *Close relatives are individuals related to the respondent (kin) that the respondent shares an emotional relationship with.* (1=Yes, 2=No) |____|

If YES, continue. If NO, skip to part 2.

2. Think of the relatives you feel close to. What are their full names?

Relative #1: _____
Relative #2: _____
Relative #3: _____
Relative #4: _____
Relative #5: _____
Relative #6: _____
Relative #7: _____
Relative #8: _____
Relative #9: _____
Relative #10: _____

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.

3. Other than the members of your household, do you have any close friends? (1=Yes, 2=No) |____|

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

4. Think of your closest friends. What are their full names? **FO Note:** *There is no right or wrong number here, let respondents name as many as they think of.*

Close Friend #1: _____
Close Friend #2: _____
Close Friend #3: _____
Close Friend #4: _____
Close Friend #5: _____

Close Friend #6: _____
Close Friend #7: _____
Close Friend #8: _____
Close Friend #9: _____
Close Friend #10: _____

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.

5. Other than the members of your household, do you have any good friends? (1=Yes, 2=No) |_____|
If YES, continue. If NO, skip to Section 4.

6. Think of your good friends. What are their full names? **FO Note:** *There is no right or wrong number here, let respondents name as many as they think of.*

Good Friend #1: _____
Good Friend #2: _____
Good Friend #3: _____
Good Friend #4: _____
Good Friend #5: _____
Good Friend #6: _____
Good Friend #7: _____
Good Friend #8: _____
Good Friend #9: _____
Good Friend #10: _____

For the following information, LOOP THROUGH all non-empty relatives, close friends and good friends..

Read: I would like to ask about the household(s) your close relatives, close friends and good friends live in and match the household(s) to our study's village census.

		Relation #1	Relation #2	Relation #3	Relation #4	Relation #5
7. Gender of [name]?	1=Male, 2=Female	<input type="checkbox"/>				
8. Age of [name]?	Age bins	<input type="checkbox"/>				
9. How do you know [name]?	Use G4 Codes	<input type="checkbox"/>				
9a. How long have you known [name]?	in years	<input type="checkbox"/>				
10. Has [name] completed primary school? If NO, go to question 9.	(1=Yes, 2=No, -99=DK)	<input type="checkbox"/>				
11. Has [name] completed secondary school? If NO, go to question 9.	(1=Yes, 2=No, -99=DK)	<input type="checkbox"/>				
12. Has [name] completed college/university?	(1=Yes, 2=No, -99=DK)	<input type="checkbox"/>				
13. Does [name] own... a. a mobile phone? b. a television? c. a radio? Show all on one screen. Tick.	(1=Yes, 2=No, -99=DK)	<input type="checkbox"/>				
14. How would you describe your relationship to this person now?	1= very close 2 = close 3 = good 4 = distant 5 = no relationship	<input type="checkbox"/>				
15. How would you describe your relationship to this person 5 years ago, in 2015?	1= very close 2 = close 3 = good 4 = distant	<input type="checkbox"/>				

	5 = no relationship					
16. How frequently do you interact with this person now (in person, on the phone, by text, etc.)	1 = daily 2 = weekly 3 = monthly 4 = few times a year 5 = less than yearly	<input type="text"/>				
17. Where does [name] live? <i>If this village, go to question 15. If other village in Siaya County, proceed to question 14b. If outside Siaya County, go to the next network.</i>	Use network location choice list	<input type="text"/>				
17a. Which village does this [name] live in?	Use village codes	<input type="text"/>				
18. What is the household ID of [name] from our village census?	-99=DK	<input type="text"/>				
18a. Please confirm the details of your selection. <i>If incorrect, please go back and search for the proper household.</i>	(1=Yes, 2=No, -99=DK)	<input type="text"/>				

Part 4: Network Contacts

If no network contacts, provided, skip to question 21. Otherwise, continue.

19. You have provided us with the following people. If we needed to get in touch with you and could not reach you, which of these people would be the best way to reach you? **Use list of network contacts.**

20. a. Is there a phone number where I can reach [selected contact name], even if he/she does not have his/her own phone? (1=Yes, 2=No, -99=DK)

If YES: 20b. Please provide me with this number:

If YES: 20c. Whose phone is this? **Write name.** _____

If YES: 20d. What is this person's relationship to [selected contact name #1]? **Use G4 codes.** Other: _____

e. Can you give me another phone number to reach [selected contact name #1]? (1=Yes, 2=No, -99=DK)

If YES: 17f. Please provide me with this number:

If YES: 17g. Whose phone is this? **Write name.** _____

If YES: 17h. What is this person's relationship to [selected contact name #1]? **Use G4 codes.** |___| Other: _____

GO TO section 4.

Additional Contact

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.

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.

21. **Do not read the following question. Simply record your impressions.** Does the respondent agree to give information on another contact? (1=Yes, 2=No) |___|
If NO, skip to Section 4. If YES, continue.

22. Name of contact? |_____|| / |_____|| / |_____||
(First name) (Second/Middle Name) (Last name)

23. What is the contact's relationship to you? **Use G4 codes.** |___| Other: _____

24. Does this person live in this village, [S1_Q2_village]?
If YES, skip to question 26. If NO, continue.

25. Where does this person live?

- a. Country? **Use G1 codes.** |___| Other: _____
- b. County? **Use G2a codes. If -99=FR DK COUNTY, continue. OTHERWISE, skip to question 1e.** |___|
Other: _____
- c. 2010 District? **Use G2b codes. Refer to "2010 district" if FR does not know county (2010 district and county are equivalent). If -99 = FR DK 2010 district, but does know an earlier district name, write old district name.**
|___| Other: _____
- d. Town / city? **Use G3a codes. If FR resides in Siaya County and not in Siaya Township location, please select "Lives in a rural area" and continue. Otherwise, skip to question 1h.** |___| Other: _____
- e. Sub-County? |___| Other: _____
- f. Location? |___| Other: _____

g. Sub-location? Other: _____

h. Village / Neighborhood? **Write.** (-99=DK) _____

26. 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.** (-99=DK)

27. a. 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 / Do not know a number)

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.

b. Number: 0

If non-Kenyan phone number, enter 77 and provide question number, country and phone number in FO comments.

c. Whose phone is this? **Write name.** _____

d. What is this person's relationship to the contact? **Use G4 codes.** Other: _____

28. a. Can you give me another phone number to reach this contact? (1=Yes, 2=No)

Probe FR for a second phone number. If YES, continue. If NO, skip to the next section.

b. Number: 0

If non-Kenyan phone number, enter 77 and provide question number, country and phone number in FO comments.

c. Whose phone is this? **Write name.** _____

d. What is this person's relationship to the contact? **Use G4 codes.** Other: _____

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 ever surveyed and has a prefill roster, start here. If never surveyed, SKIP to question 11.

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.

Loop through all prefill individuals {

1. Is [PREFILL NAME] currently a member of your household? Yes / No
If YES, skip to next individual. If NO, continue.

2. Why is [PREFILL NAME] no longer a member of this household?
 Moved away **Continue to question 3.**
 Deceased **SKIP to question 5.**
 Never a member of this household / wrong information **Skip to next individual.**

3. Why did [PREFILL NAME] move away?
 Use G5 codes.

4. Where did [PREFILL NAME] move to?

SKIP to question 6.

5. What was the cause of death of [PREFILL NAME]?
 Use D1 codes.

6. When did [PREFILL NAME] move away/pass away?

7. a. What is/was [PREFILL NAME]s' gender?
b. What is/was [PREFILL NAME]'s highest level of education?
Loop through next prefill individual, if applicable.

}

8. Here are the individuals we just discussed that are currently members of your household. [READ LIST OF THOSE STILL HERE]. Are there any other current members of your household that have not been mentioned? Yes/No
If YES, continue. If NO, skip to question 15.

8a. How many other individuals?

Loop through [NUMBER OF OTHER CURRENT INDIVIDUALS] {

9. Full name: _____
10. When did [NAME] join this household?
Month:
Year:

}

If ever surveyed and has a prefill roster, SKIP to question 25.

If never surveyed:

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? **If the FR is live-in house help or a live-in guard and has a spouse or adult dependent(s) staying with them at the employer’s house, only include these spouse/dependent(s) on the household roster (do not count their employer or the employer’s family as part of the FR’s household).**

Read: We will not collect the names of all current members of your household. Please start with yourself (FR) and then continue from eldest to youngest.

Loop through [NUMBER OF CURRENT MEMBERS] times {

12. Name of current member 1/2/3/etc.: _____

}

13. **(if never surveyed OR newly targeted as of Endline 2 AND established date before 2014)** Were there any other individuals not already mentioned that were part of this household at [BASELINE DATE]? Yes/No
If YES, continue. If NO, skip to question 25.

13a. How many other individuals?

Read: I will now ask some details about these previous individuals from [BASELINE DATE].

Loop through [NUMBER OF OTHER BASELINE INDIVIDUALS] {

14. Name: _____

15. Why is [NAME] no longer a member of this household?
 Moved away **Continue.**
 Deceased **SKIP to question 20.**

16. Why did [NAME] move away?
 Use G5 codes.

17. Where did [NAME] move to?
 Other village in Siaya County
 Eldoret
 Kisumu
 Mombasa
 Nairobi
 Nakuru
 Kampala
 Other town/city
 Other rural village (NOT in Siaya)

SKIP to question 19.

18. What was the cause of death of [NAME]?
 Use D1 codes.

19. When did [NAME] move away/pass away?

20. a. What is/was [PREFILL NAME]'s gender?
b. What is/was [PREFILL NAME]'s highest level of education?

}

Read: I will now ask further details about the individuals that are currently members of your household. That includes [LIST OF CURRENT MEMBERS OF HOUSEHOLD].

For the following information, LOOP THROUGH those still a member of this household.

	25. Did [NAME] sleep here last night? (1=Yes, 2=No) If NO, probe: "Does this person usually stay here for 4 or more days a week, and eat from the same pot?" If NO, go back and consider this person a migration.	26. Relationship to respondent? Use G4 codes. For example, if individual is FR's father, select code for "father". If individual is FR, choose "self" If "Self", skip to question XX. Otherwise, continue.	27. Gender? (1=Male, 2=Female)	28. Age in years? Prompt FR to estimate if unsure. (-99=DK) 28a. Is this an estimated age? Remember, an estimated age means the respondent is unsure. (1=Yes, 2=No)	29a. Which school system did [NAME] participate in? 29b. Highest level of education completed? Use G6 codes. (-99=DK) For those still in school, this is <u>not</u> current year. Prompt to estimate if unsure.	30. Occupation(s)? Use G9 codes. (-99=DK) Babies are likely code "60". Kids in ECD are "50".	31. (if never surveyed and/or newly targeted at Endline 2) Was this person a member of this household at [BASELINE DATE]? (1 = Yes, 2 = No, lived elsewhere, 3 = No, not born yet) If 1 or 3, skip to next individual. If 2, continue.	32. Where was this person living at [BASELINE DATE]?	33. When did this person join this household? Month/Year
A1		_____ _____	_____	_____	_____	_____ _____			_____ _____
A2		_____ _____	_____	_____	_____	_____ _____			_____ _____

A3		<u> </u>			<u> </u>				
A4		<u> </u>			<u> </u>				
A5		<u> </u>			<u> </u>				
A6		<u> </u>			<u> </u>				
A7		<u> </u>			<u> </u>				
A8		<u> </u>			<u> </u>				
A9		<u> </u>			<u> </u>				
A10		<u> </u>			<u> </u>				
A11		<u> </u>			<u> </u>				
A12		<u> </u>			<u> </u>				
A13		<u> </u>			<u> </u>				

Section 4.2. Child Details

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

FO: Fill in the following table for children 16 and under, as well as those that report occupation of being a student from the roster.

Questions	Codes	A: Child #1	B: Child #2	C: Child #3	D: Child #4	E: Child #5
1. Household roster number of child: If [age] of [Name] <= 4: SKIP to XX.	-88=Not present on roster	__ [Name]	__	__	__	__
2. Is [name] currently enrolled in school? Note: Include ECD programs, do not include day care programs. Include if child was enrolled before schools closed, unless officially withdrew enrollment. If NO, continue. If YES, skip to question 2. continue.	(1=Yes, 2=No)	__	__	__	__	__
2a. Why is this child not enrolled in school? Continue to question 12.	Use child attendance codes					
2b. Do you plan to enroll this child in school in January 2021?	(1=Yes, 2=No)	__	__	__	__	__
3. What type of school is this child enrolled in If child attending primary, continue. If secondary, skip to 5. Otherwise skip to question 6.	0=ECD 1=Primary 2=Secondary 3=College 4=University 5=Vocational 6=Other	__ Other:_____				
4. What primary school is this child enrolled in?	E1 codes	__ __ __ Other:_____				
5. What secondary school is this child enrolled in?		_____	_____	_____	_____	_____
6. What class/standard/form/year is this child enrolled in?	G6_ext codes	__ Other:_____				

7. Of the last five days school was IN SESSION, how many days did this person attend?	(-99=DK)					
7a. In the past five days, how many days did this child attend school?						
8. In the last 12 months, was this child ever sent home because of non-payment of school fees?	(1=Yes, 2=No)	<input type="checkbox"/>				
8a. In the last 12 months, how many days in total of school did this child miss after being sent home for not paying school fees?		<input type="checkbox"/>				
9. Overall, would you say [child]'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)	<input type="checkbox"/>				
Continue if child is 12 or under.						
10. During the past seven days, has [child] experienced any of the following: a. Fever / malaria? b. Vomiting? c. Cough? d. Diarrhea? e. Any other infection? Specify:	(1=Yes, 2=No,-99=DK)					
11. Last night, did [child] sleep under a bed net?						
12. Have any drugs for worm infections or schistosomiasis been given to [child] in the last 12 months?						
Continue if child is 8 or under:						

13. In the past 7 days, did you or any other person over the age of 15 in the child's household: If yes, ask who performed this activity with child. SELECT ALL THAT APPLY.	1=mother; 2=father, 3=sibling, 4=other adult relative, 5=other adult non-relative					
13a. If [age] of [Name] >= 2: Read books to or look at books with [child]?	1=Yes, 2=No,-99=DK	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>			
13b. If [age] of [Name] >= 2: Tell stories to [child]?	1=Yes, 2=No,-99=DK	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>
13c. Sing songs or play musical instrument with [child]?	1=Yes, 2=No,-99=DK	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>
13d. Play with [child]?	1=Yes, 2=No,-99=DK	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>	<input type="checkbox"/> Relation: <input type="checkbox"/> / <input type="checkbox"/>
14. Is [child] currently enrolled in a daycare? If YES, continue. If NO, go to question 20.	1=Yes, 2=No,-99=DK					

15. In the past 12 months, how much did your household pay in total for...
- a. school/activity fees KSh
 - b. school-related supplies KSh
 - c. contributions (for school projects or for school funds) KSh

Section 5: FR Background Details

FO: The following questions in Section 5 are asking about the FR specifically, not other household members, unless noted otherwise.

Determine the relevant date from which we need FR information:

- a) FR was surveyed at EL1: FR_history_date = EL1_date
- b) HH was targeted at EL1, but FR was not surveyed (replacement FR, or missed at EL1): FR_history_date = BL_date
- c) New/split/ghost HH:
 - i) Established_date < EL1_DATE: FR_history_date = BL_date
 - ii) Established_date > EL1_DATE: FR_history_date = BL_date

Section 5.1. FR Education

1. Since [FR_history_date], have you undertaken any new form of education or training? (1=Yes, 2=No)
If YES, continue. If NO, skip to Section 5.2.

2. What type of education / training? *Select all that apply.*
 - College
 - University
 - Vocational training school
 - Bible/Religious school
 - Other education

Please fill in the following table for each type of education / training selected.

	3. How many courses of study/disciplines did/do you study?	4. In what course(s)/discipline(s) was this training? Use E7 codes. If other, describe in FO comments.	5. In what year did you start these courses? If more than one, course, take earliest.	6. For how long did you attend this education/training at [A/B/C/D] since [date of last survey]? For completed courses, include full length of course (even if more than 1 year). For courses currently underway, include time so far (even if more than 1 year). Units: 1=Day, 2=Week, 3=Month, 4=Year If FR was in school for full number of terms per year, count that as a full year of training (even though they get holidays throughout the year).	7. Did you obtain a diploma, degree, or certificate from this training? Consider entire course, even if it lasted more than 1 yr. 1=Yes, 2=No 3=Currently enrolled If NO, skip to next discipline or year. If YES, continue. Note: Count a driver's license as certificate.	8. What type of diploma, degree or certificate was it? Probe for examination body if it is not institutional Use E6 codes.
(A) College		i. <input type="text"/> ii. <input type="text"/> iii. <input type="text"/>		Num: <input type="text"/> Unit: <input type="text"/>	<input type="text"/>	<input type="text"/>
(B) Bible school		i. <input type="text"/> ii. <input type="text"/> iii. <input type="text"/>		Num: <input type="text"/> Unit: <input type="text"/>	<input type="text"/>	<input type="text"/>
(C) Voc-Ed		i. <input type="text"/> ii. <input type="text"/> iii. <input type="text"/>		Num: <input type="text"/> Unit: <input type="text"/>	<input type="text"/>	<input type="text"/>
(D) University		i. <input type="text"/> ii. <input type="text"/> iii. <input type="text"/>		Num: <input type="text"/> Unit: <input type="text"/>	<input type="text"/>	<input type="text"/>
(E) Other Education		i. <input type="text"/> ii. <input type="text"/> iii. <input type="text"/>		Num: <input type="text"/> Unit: <input type="text"/>	<input type="text"/>	<input type="text"/>

Section 5.2. FR Migration History

1. Since [FR_history_date], have you lived in any other village (or town/city) than where you live now for more than four months? *Note: here we are interested in the FR personally, not other members of the household* (1=Yes, 2=No)
If YES, continue. If NO, skip to question 7.

For the following table: Fill down each column, then across. If the FR moved away and then later moved back to a previous residence, this is still considered a migration and should be recorded in the table. NOTE: If the FR moved within a city / town / village (e.g. moved within different places in Nairobi), we do not need to capture this.

			Residence #1	Residence #2	Residence #3	Residence #4	Residence #5
2. Where did you move immediately after living in [-]? Start with the [FR_history_date] location.	a) Country? Use G1 codes		<input type="checkbox"/>				
	b) County? Use G2a codes	Refer to "1992 district" if FR DK county (they are equivalent). (Uganda =district)	<input type="checkbox"/> _____				
	c) If 77=DK county, ask: 2010 District? Use G2b codes	If FR DK 2010 District but knows an earlier district, write here and comment below.	<input type="checkbox"/> _____				
	d) Town / City Use G3a codes	If NOT 20 (lives in rural area), skip to (g).	<input type="checkbox"/> _____				
	e) Location? Use G3b codes		<input type="checkbox"/> _____				
	f) Sub-location? Use G3c codes		<input type="checkbox"/> _____				
	g) Village / Neighborhood		_____	_____	_____	_____	_____
3. When did you arrive	(MM/YYYY)		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

at this place?							
4. Why did you move to this place?	Use G5 codes List up to 3 reasons.		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____				
5. When you moved, whom did you live with in this place?	Use G4 codes	List up to 3 persons.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____				
6. After living here, did you live in any other village or town/city for at least four months?	(1=Yes, 2=No)	If YES, continue to next column. If NO, go to next section.	<input type="checkbox"/>				

Confirm that the last reported residence listed in this table matches the current residence listed in Section 3 of this survey. If not, probe the FR further about their migration history.

Section 5.3. Marital History

Do not read: Record the FR's marital status from Section 2 below.

0. FR marital status: |_____|
 (1=Single, 2=Not married but co-habiting, 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)

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.

FO: If the respondent is currently single/not married, 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 [FR_history_date], did you get newly married? (-99=DK)

2a. **(if yes)** How many new marriages since [FR_history_date]?

2b. **(if yes)** In which years did you get newly married since [FR_history_date]? *Select all that apply.* |

3. Since [FR_history_date], have you ever been divorced, widowed or separated? *Select all that apply.*

Yes, widowed

Yes, separated

Yes, divorced

No

3a. **(if widowed or divorced)** In what year did your last marriage end? Year

If currently married, continue, otherwise, skip to section 5.4. **The following questions refer to the FR's current spouse.**

4. Does your spouse reside in this household? (1=Yes, 2=No)

If NO, continue. Otherwise skip to question 8.

5. a. Is your spouse any of the following: **Use network choice codes. List all network members collected so far. If No, continue, if Yes, skip to question 6.**

b. Does your spouse live within this village? **If yes, SKIP to question 4e. If no, continue**

c. Where does your spouse live?

d. Which village is this household located in?

e. What is the household ID of [receiver name] from our village census?

6. What is your spouse's age in years?

7. What is the highest level of education completed by your spouse? **Use G6 codes.** (-99=DK)

8. What is your spouse's occupation? **Use G9 codes.** (-99=DK)

9. **(if currently married/cohabiting):** Does your spouse own:

a. A mobile phone? Yes / No

b. A television? Yes / No

c. A radio? Yes / No

10. What is / was your spouse's subtribe? **Use subtribe codes.**

11. What is / was your spouse's clan? **Use clan codes.** _____

Section 5.4 Recent Fertility

1. Think of all the females currently living in this household. In 2020, have any of these female household members been pregnant?
 Yes / No

1a. (if yes) Who?

HH female 1

HH female 2

.....

2. Think of all the females currently living in this household. In 2019, were any of these female household members pregnant? Yes / No

2a. (if yes) Who?

HH female 1

HH female 2

.....

If FR is male, OR FR is female and aged 50 or under, continue. Otherwise skip to the next section.

3. **For male FRs:** Since January **2014**, how many times has a sexual partner of yours been pregnant with your child (including pregnancies that ended in live birth or non-live birth)? (-99=DK)

For female FRs: Since January **2014**, how many times have you been pregnant (including pregnancies that ended in live birth or non-live birth)? (-99=DK)

If FR claims to DK, try to prompt them for how many pregnancies they do know about. If they insist that they do not know, skip to the next section.

Read: Let's discuss these recent pregnancies, starting with the first one since January **2014**.

Note: Enter twins as two separate pregnancies.	(A)	(B)	(C)	(D)
---	-----	-----	-----	-----

5. What was/is your relationship to the father / mother during the time of the pregnancy? (1= Legally married, 2= Living together but not legally married, 3= Engaged to be married, 4= Regular boyfriend or girlfriend, 5= Casual sexual partner, 6= Other (specify),-99=DK)	_____ _____	_____ _____	_____ _____	_____ _____
6. If male respondent: Did/does the mother of the baby seek antenatal care during the pregnancy? (1=Yes, 2=No,-99=DK) If female respondent: Did/do you seek antenatal care during the pregnancy? (1=Yes, 2=No,-99=DK) If YES, continue. OTHERWISE, skip to question 8.	_____ _____	_____ _____	_____ _____	_____ _____
7. Where was/is antenatal care sought? (1= Govt hospital / health center / dispensary, 2= Mission hospital / health center / dispensary, 3= Private hospital / clinic, 4= Traditional birth attendant, 5= Other (specify) 99= DK) If care sought at multiple locations, list the most frequent location.	_____ _____	_____ _____	_____ _____	_____ _____
8. Is this a current pregnancy? (1=Yes, 2=No,-99=DK) If YES or DK, skip to next pregnancy/next section. OTHERWISE, continue.	_____ _____	_____ _____	_____ _____	_____ _____
9. How did the pregnancy end? (1=Live birth, 2=Non-live birth -99=DK) If “1”, skip to q.11 If “2”, continue. If “-99”, skip to next pregnancy/next section.	_____ _____	_____ _____	_____ _____	_____ _____
10. In what month and year did the pregnancy end? (-99=DK) Try to get at least year. Then, skip to next pregnancy/next section.	____ _____ MM/YYYY	____ _____ MM/YYYY	____ _____ MM/YYYY	____ _____ ____ _____ MM/YYYY
11. Was the baby born in a hospital or clinic (as opposed to at a home)? (1=Yes, 2=No,-99=DK)	_____ _____	_____ _____	_____ _____	_____ _____
12. Was the baby a boy or girl? (1=Boy, 2=Girl,-99=DK)	_____ _____	_____ _____	_____ _____	_____ _____
13a. Was the child born pre-term? (1=Yes, 2=No,-99=DK) If YES, continue. If NO, skip to question 14.	_____ _____	_____ _____	_____ _____	_____ _____
13b. What month of the pregnancy was the child born?	_____ _____	_____ _____	_____ _____	_____ _____
14. Is this child still living? (1=Yes, 2=No,-99=DK) If NO, continue. If YES, skip to question 16.	_____ _____	_____ _____	_____ _____	_____ _____

15. How old in years and months was [name] when he / she died? (-99=DK) If less than one year, enter "0" in year blank and continue to months. If less than one month, enter "0" in month blank. Then, go to next pregnancy/next section.	____ ____ YY/MM	____ ____ YY/MM	____ ____ YY/MM	____ ____ YY/MM
16a. Is the child from this pregnancy one of the following household members? If YES, skip to question 19 . If NO, continue.				
16b. What is this child's name?				
17. Does the child live with one of the following? Use network options. If none, continue. Else, skip to question 18.	____ _____	____ _____	____ _____	____ _____
17a. With whom does [name] live? Use g4 codes. Record person's relationship to FR.				
18. How old is this child now? Record age in years. Use 0 if <1 year. Compare year of birth to child age, and probe if they do not make sense together.	____ years	____ years	____ years	____ years
19. Is the primary caregiver for this child during the week one of the following household members? List HH members. If none, continue to question 19a. Otherwise, skip to question 20.	____ ____	____ ____	____ ____	____ ____
19a. Who is the primary caregiver for this child during the week? List up to 2 individuals. Use G4 codes. Code based on relationship with FR, not with child.	____ ____ Other: _____	____ ____ Other: _____	____ ____ Other: _____	____ ____ Other: _____
20. I would like to see the child's health card in order to record his/her birthdate and weight at birth. Would it be possible to see this card right now? (1=Yes, 2=No) Record NO if card is not available or does not exist.	____	____	____	____
20a. Record child's birth month and year from health card. If not available or does not contain birthdate, ask "In what month and year was the baby born?" Try to get at least year. (-99=DK)	____ ____ MM/YYYY	____ ____ MM/YYYY	____ ____ MM/YYYY	____ ____ ____ MM/YYYY
20b. Was birthdate information obtained from health card? (1=Yes, 2=No)	____	____	____	____
20c. Record the birthweight of the child, according to the health card. If not available, ask "What was [name]'s weight at birth?" (Code 9.9 =	____ .____ kg	____ .____ kg	____ .____ kg	____ .____ kg

Weight not measured at birth, 99.0 = Weight measured but FR doesn't know / cannot discern it from health card)				
20d. Was birthweight obtained from health card? (1=Yes, 2=No)				

SECTION 6. Home Characteristics and Assets

Section 6.1. Home Characteristics

FO: 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.

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.

0a. Of what material are the floors made?

(1=Cement, 2=Mud, 3=Part mud, part cement, 4=Tiles, 5= Other(specify) |___| Other:_____

0b. Of what material is the roof made? |___|

1=Iron / tin,

5=Cement / concrete

2=Grass thatch (no reeds)

6=Palm leaves

3=Grass with reeds

7=Other, describe: _____

4=Mud, branches

10=Tiles

11=Unfinished / incomplete roof

0c. Of what material are the walls made? (1=Iron, 2=Mud, 3=Cement, 4=Cement/mud mixed, 5=Brick, 6= Other) |___| Other:_____

1. Do you 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).** (1=Yes, 2=No) |___|

If YES, continue. If NO, skip to question 2.

1a. What is the source of your electricity? **Prompt FR with each source. Indicate all that apply.**

1= National electricity service (i.e., Kenya – KPLC) |___|

6=Other wired connection

2= Generator |___|

3= Car battery |___|

4= Solar home system |___|

5= Other (specify) |___| Other: _____

If 1 or 6, continue. Otherwise skip to question 2.

1b. Does your household own your wired electricity connection? *Note: for instance, if the household is renting and the landlord paid for the connection, the household would not own its connection.* (1=Yes, 2=No,-99=DK)

2. What kind of toilet facility does your household use most often?
(1=None, 2=Latrine, 3=Toilet, 4=Other (specify), 5= Portable toilet) Other: _____

3. 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? *Tick appropriate box.*

2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010 or earlier
 DK

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)
Other: _

If "pipe", continue. Otherwise, skip to question 5.

4a. Does your household own your piped water connection? (1=Yes, 2=No,-99=DK)

5. Does your household own or rent the house / apartment where you live? (1=Own, 2=Rent, 3=Company housing, 4=Government Housing, 5=Other (specify)) _____

If OWN, continue. If RENT, skip to question 5b. OTHERWISE, skip to question 7.

5a. If you wanted to build a house like yours in this village, how much would it cost (both for materials and for labor)?

|_____| (KSh)

Skip to question 6.

5b. How much in shillings does your household pay for rent each month for this house / apartment? Amount (-99=DK): |_____|
Currency if NOT Kenyan shillings (use G12 codes): |_____| Other: _____

5c. Does the house / apartment rest on land (greater than 0.25 acres) that you use for agricultural purposes? (1=Yes, 2=No)

|_____|

If NO, skip to question 6. If YES, continue.

5d. How much of this land was used for agricultural purposes (in acres)? (-99=DK) **Do not include land in this count that was rented exclusively for agricultural purposes, only that which was included with the rental house / apartment.**

1 Hectare ≈ 2.5 Acres |_____| Acres

6. How much land does your household own (in acres)? Include any land that is owned and used for agricultural, pastoral or fish pond activities, including agricultural/commercial business activities. **1 Hectare ≈ 2.5 Acres** (-99=DK) |_____| Acres
If ZERO, skip to question 8. If DK, skip to question 7. OTHERWISE, continue.

6a. How much does it cost to buy an acre of land in this village? (-99=DK) **Prompt for land of similar quality to the land the FR owns. Take the most recent cost of land in the area.** (-99=DK) |_____| (KSh)

6b. How much of the land you own is used for agricultural, pastoral or fish pond purposes (in acres)? (-99=DK) **1 Hectare ≈ 2.5 Acres** |_____| Acres

6c. 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? **If not sure, ask for best estimate.**

Amount (-99=DK): |_____|

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 NO, skip to question 8. If YES, continue.

7a. How much of this land did you rent to people outside of your household (in acres)?

1 Hectare ≈ 2.5 Acres (-99=DK) |_____| Acres

7b. For how many months of the last 12 months did you rent out this land? |__| months

7c. For how much do you rent out this land? ***If paid in kind, ask FR to estimate value of payment in shillings.***

i. Amount (-99=DK): |_____|

ii. Unit (1=Year, 2=Season, 3=Month) |__|

iii. ***If unit = 2:*** For how many months was the season that you rented the land? (months) |_____|

8. In the last 12 months, has your household rented land from others, or used land you do not own? ***If the household rents an apartment / house, but no other land, answer "NO".*** (1=Yes, 2=No) |__|
If NO, skip to question 9. If YES, continue.

8a. How much land has your household rented from others in the last 12 months (in acres)?

(-99=DK) ***1 Hectare ≈ 2.5 Acres*** |_____| Acres

If DK, skip to question 8c. OTHERWISE, continue.

8b. How much of this land was used for agricultural purposes (in acres)? (-99=DK)

1 Hectare ≈ 2.5 Acres |_____| Acres

8c. For how many months did you rent this land in the last 12 months? ***For familial land that the FR's household does not own, enter 12.*** |__| months

8d. For how much did you rent this land? ***If paid in kind, ask FR to estimate value of payment in shillings. For familial land, if the FR did not pay any rent, enter 0 for the amount, and year for the unit.*** Amount (-99=DK): |_____|

i. Unit (1=Year, 2=Season, 3=Month) |__|

ii. ***If unit = 2:*** For how many months was the season that you rented the land? (months) |_____|

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 the responses to questions 9 and 10 are BOTH ZERO, skip to Section 6.2. Otherwise, continue.

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.*

Adults

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 ZERO, skip to Section 6.2. Otherwise, continue.

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? ***If payment is in kind, ask to estimate in shillings.*** Amount (-99=DK):

14. ***Do not ask:*** If the monetary values in this section were reported in a currency other than Kenyan shillings, please record the currency here. ***(use G12 codes)***: Other: _____

Section 6.2. Home Environment for Children

Proceed if there is a child aged 12 or under living in the household, according to the household roster. Otherwise, skip to Section 6.3

Read: Now I would like to ask you some questions about materials in your home for children.

1a. Is there a music player or radio that children can listen to at home?

(1=Yes, 2=No,-99=DK)

1b. About how many books does this household own in total that are here in the home (including the Bible or other religious book, dictionary, textbooks, children's books and picture books)? (-99=DK)

1c. (if 1b > 0) About how many of these books are for children, including storybooks, picture books or children's textbooks? (-99=DK)

1d. (if 1c > 0) What language(s) are these children's books in? **Please select all that apply**

(1=English, 2=Kiswahili, 3=Luo, 4=Luhya, 5=Other (specify), -99=DK) Specify: _____

Number of children's books and number of textbooks should not exceed total number of books (question 1b).

1e. Do children have paper and pencil, pen or art supplies (such as crayons or paints) to write or draw with at home?

(1=Yes, 2=No,-99=DK)

1f. Do children play any games of strategy such as ludo game, draught (checkers), chess, or strategy video/phone games?

(1=Yes, 2=No,-99=DK)

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.

1. How many of the following items does your household own?

FO instruction: For this section, if the FR has migrated to a new household, we want to capture the assets of the FR's current household. This includes all the assets of the current household and any assets the FR owns. Do not count assets from the previous household that the FR does not own. If the FR is unsure about the assets of the current household, he/she may consult with other household members. Please leave a comment if the FR consults with other household members. For the Total Value, ask FRs to estimate what the assets would be worth if they sold them today.

For AGRICULTURAL assets and LIVESTOCK, please include assets used for the household AND 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.

ITEM	QTY OWN (-99=DK)	Total Value (KSH)	ITEM	QTY OWN (-99=DK)	Total Value (KSH)
(A) Bicycle	<input type="text"/>	<input type="text"/>	(R) Computer/tablet	<input type="text"/>	<input type="text"/>
(B) Motorcycle / scooter	<input type="text"/>	<input type="text"/>	(S1) Mobile phone (not smart)	<input type="text"/>	<input type="text"/>
(C) Car / truck	<input type="text"/>	<input type="text"/>	(S2) Smart phone	<input type="text"/>	<input type="text"/>
(D) Kerosene stove	<input type="text"/>	<input type="text"/>	(T) Car battery Note: Do not include batteries that are in a car.	<input type="text"/>	<input type="text"/>
(E) Radio / cassette player / CD player	<input type="text"/>	<input type="text"/>	(U) Boats (motorized or other)	<input type="text"/>	<input type="text"/>
(F) Sewing machine	<input type="text"/>	<input type="text"/>	(V) Iron/Metal/Steel sheets Note: do not include those being used as roofs/other construction	<input type="text"/>	<input type="text"/>
(G) Kerosene lantern	<input type="text"/>	<input type="text"/>	(W) Farming tools (hoes, pangas, etc)	<input type="text"/>	<input type="text"/>
(H) Bed	<input type="text"/>	<input type="text"/>	(X) Hand carts	<input type="text"/>	<input type="text"/>
(I) Mattress	<input type="text"/>	<input type="text"/>	(Y) Wheelbarrows	<input type="text"/>	<input type="text"/>
(J) Bednet	<input type="text"/>	<input type="text"/>	(Z) Ox plow	<input type="text"/>	<input type="text"/>
(K) Tables	<input type="text"/>	<input type="text"/>	(AA) Cattle	<input type="text"/>	<input type="text"/>
(L) Sofa pieces (all kinds)	<input type="text"/>	<input type="text"/>	(BB) Goat	<input type="text"/>	<input type="text"/>
(M) Chairs	<input type="text"/>	<input type="text"/>	(CC) Sheep	<input type="text"/>	<input type="text"/>
(N) Cupboards/Dressers	<input type="text"/>	<input type="text"/>	(DD) Chicken	<input type="text"/>	<input type="text"/>
(O) Clock or watch	<input type="text"/>	<input type="text"/>	(EE) Other birds (ducks, geese, turkeys)	<input type="text"/>	<input type="text"/>

(P)	Electric iron	_	_	(FF) Pig	_	_
(Q)	Television	_	_	(GG) Fish		_
				(HH) Generator	_	_
				(II) Solar panel	_	_
				(JJ) Solar lantern		

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 question 2.

1a. When did you or someone in your household first obtain an M-Pesa or mobile money account? *Note: M-Pesa began in 2007.*

(YYYY) |_|_|_|_|_| **DK=--9999**

1b. What is your household's current balance on all mobile money accounts combined, approximately? *Remember, we will not share this information with anyone. You may give a rounded / approximate answer if you prefer.*

|_|_| KES

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 question 3.

2a. Do you or someone in your household have a savings account in a bank? (1=Yes, 2=No) |_|

2b. What is your household's current balance on all bank accounts combined (savings + checking, net overdraft), approximately? *Remember, we will not share this information with anyone. You may give a rounded / approximate answer if you prefer.*

|_|_| KES

3. Do you or someone in your household participate in a SACCO? (1=Yes, 2=No) |_|

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

3a. What was your household's SACCO contribution in the last 30 days?

|__| KES

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 question 5.

4a. 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 question 4g.

4b. What is the total amount of loans your household took from a merry-go-round or ROSCA in the past 12 months?
|__| KES

4c. What was the purpose of those loans? **Use T1 codes. Select up to 3.** |__| |__| |__| Other(specify): _____

4d. How much interest was charged on the most recent loan your household took from a Merry-go-round or ROSCA?
1=Ksh, 2=Rate / percent, 3=Other (specify), 4=Ush; Units of time: 1=Day; 2=Week; 3=Month; 4=Year; 88=Flat rate)
If no interest charged, fill in all three blanks with 99, -99=DK.
Unit |__| _____ Amount: |__| per unit of time: |__|

4e. By when is/was your household supposed to pay back the loan? (MM/YYYY) **If no specific date is given, fill in "01/1900".**
|__|_|__|/|__|_|__|_|__|_|__|

4f. Is your household currently in default on this loan? (1=Yes, 2=No) |__|

4g. 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. Has your household used any mobile installment payment services, such as M-Kopa, in the last 12 months? (1=Yes, 2=No) |__|
If YES, continue. If NO, skip to question 6.

5a. What is the total amount (value) of the products that your household has purchased on installment? |_____| KSh

5b. What is the total amount your household currently owes all such mobile installments combined? |_____| KSh

5c. 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.

6a. What is the total amount your household currently owes all these commercial lenders combined? _____ KSh

6b. 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 to question 7b. If NO, skip to question 7g.

7b. What is the total amount of loans your household took from commercial banks or commercial lenders in the past 12 months?
Amount: _____

7c. What was the purpose of those loans? **Use T1 codes. List all that apply.**
_____|_____|_____| Other: _____

7d. How much interest was charged on the most recent loan your household took from a commercial bank or commercial lender?
(Units: 1=Ksh, 2=Rate / percent, 3=Other (specify), 4=Ush; Units of time: 1=Day; 2=Week; 3=Month; 4=Year; 88=Flat rate)
If no interest charged, fill in all three blanks with 99, -99=DK.
Unit _____ Amount: _____ per unit of time: _____

7e. By when is/was your household supposed to pay back the loan? (MM/YYYY) **If no specific date is given, fill in "01/1900".**
____|____|/____|____|____|____|

7f. Is your household currently in default on this loan? (1=Yes, 2=No) _____

7g. 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 to Question 8a. If NO, skip to question 9.

8a. What is the total amount your household owes all these shylocks (moneylenders) combined? _____ KSh

8b. 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 to question 9b. If NO, skip to question 9g.

9b. What is the total amount of loans your household took from shylocks (moneylenders) in the past 12 months? Amount:
Currency if NOT Ksh (use G12 codes) Other: _____

9c. What was the purpose of those loans? **Use T1 codes. List all that apply.**
 Other: _____

9d. How much interest was charged on the most recent loan your household took from a shylock (moneylender)? (Units: 1=Ksh, 2=Rate / percent, 3=Other (specify), 4=Ush;
Units of time: 1=Day; 2=Week; 3=Month; 4=Year; 88=Flat rate)
If no interest charged, fill in all three blanks with 99, -99=DK.
Unit _____ Number: per unit of time:

9e. By when is/was your household supposed to pay back the loan? (MM/YYYY) **If no specific date is given, fill in "01/1900".**
 /

9f. Is your household currently in default of this loan?

9g. Did you ask for a loan from a shylock (moneylender) in the past 12 months 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. If NO, skip to question 11.

10a. What is the total amount your household currently owes all these mobile credit products (like M-Shwari or others)? KSh

10b. 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 new any loans (i.e. borrowed money) from a mobile credit product (like M-Shwari or others)? (1=Yes, 2=No)
If YES, continue to question 11b. If NO, skip to question 11g.

11b. What is the total amount of loans your household took from mobile credit products (like M-Shwari) in the past 12 months?
Amount:

11c. What was the purpose of those loans? **Use T1 codes. List all that apply.**
 Other: _____

11d. How much interest was charged on the most recent loan your household took from a mobile credit product (like M-Shwari)?
 (Units: 1=Ksh, 2=Rate / percent, 3=Other (specify), 4=Ush; Units of time: 1=Day; 2=Week; 3=Month; 4=Year; 88=Flat rate)

If no interest charged, fill in all three blanks with 99, -99=DK.

Unit _____ Amount: per unit of time:

11e. By when is/was your household supposed to pay back the loan? (MM/YYYY) **If no specific date is given, fill in "01/1900".**

/ /

11f. Is your household currently in default on this loan? (1=Yes, 2=No)

11g. Did you ask for a (another) loan from a mobile credit product in the past 12 months 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? *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.*

(1=Yes, 2=No)

If YES, continue to question 12a. If NO, skip to question 12m.

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.

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

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

		Borrowing Relationship #1	Borrowing Relationship #2	Borrowing Relationship #3	Borrowing Relationship #4	Borrowing Relationship #5
12b. Whose household did you borrow from? If not one of the network choices already captured, continue. Otherwise go to question 8d.	Use list of network choices	_____	_____	_____	_____	_____
12ci. What is the first name of the person you borrowed from? <i>Note: If unable to give a first name,</i>		_____	_____	_____	_____	_____

respondent may provide a common name / nickname.						
12cii. Does [lender name] live in this village? If yes, SKIP to question 8cv. If no, continue.	(1=Yes, 2=No)	__	__	__	__	__
12ciii. Where does [lender name] live? If Siaya County, proceed to question 8civ. If not, go to question 8d.	Use network location choice list	__	__	__	__	__
12civ. Which village does this [lender name] live in?						
12cv. What is the household ID of [lender name] from our village census?	-99=DK					
12di. How do you know [lender name]? Use G4 codes. 12dii. What is [lender name]'s gender? 12diii. How old is [lender name]? If don't know, please estimate. (-99=DK) 12div. Has [lender name] completed primary school? If NO, go to question 3vii 12dv. Has [lender name] completed secondary school?? If NO, go to question 3vii 12dvi. Has [lender name] completed college/university? 12dvii. (Show on same screen) Does [lender name] own: __ a mobile phone?						

<input type="checkbox"/> a television? <input type="checkbox"/> a radio?						
12e. What is the total amount your household borrowed from [borrowing name] over the last 12 months?		_ _	_ _	_ _	_ _	_ _
12f. How much does your household currently owe [borrowing name]?		_ _	_ _	_ _	_ _	_ _
12g. What is the total amount your household paid in loan payments to [borrowing name] in the last 30 days?		_ _	_ _	_ _	_ _	_ _
12h. What was the purpose of that borrowing? List all that apply.	Use T1 codes.	_ _ Other: _____				

If borrowed from more than 5 households, continue. Otherwise, go to question 12m.

Read: The questions below refer to those households this household has borrowed from that we have not yet discussed.

12i. What is the total amount you borrowed from those households in the past 12 months?

Amount: |_|_|_| Currency if NOT Ksh (use G12 codes) |_|_| Other: _____

12j. How much does your household currently owe those households? |_|_|_| KSh

12k. What is the total amount your household has paid in loan payments to those households in the last 30 days?

12l. What was the purpose of that borrowing? **Use T1 codes. List all that apply.** |_|_| |_|_| |_|_| Other: _____

Read: Now I'd like to ask you about the most recent loan you took from someone outside your household.

12m. How much interest was charged on the most recent loan you took from someone else outside your household? (Units: 1=Ksh,

2=Rate / percent, 3=Other (specify), 4=Ush; Units of time: 1=Day; 2=Week; 3=Month; 4=Year; 88=Flat rate)

If no interest charged, fill in all three blanks with 99, -99=DK.

Unit |_|_| _____ Number: |_|_| per unit of time: |_|_|

12n. By when are/were you supposed to pay back the loan? (MM/YYYY) **If no specific date is given, fill in "01/1900".**

____/____

12o. Did you ask for a (another) loan from someone else outside your household in the past 12 months but not get it?

(1=Yes, 2=No) ____

13. In the past 12 months, have you ever lent money to someone outside your household? By lending, I mean that you gave money to someone that you have received back or are expecting to receive back at some point in the future.

(1=Yes, 2=No) ____

If YES, continue to questions 13a. If NO, skip to question 13j.

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

13a. To how many different households have you lent to in the past 12 months? ____

Read: Now I would like to talk about each of these. *Note: If more than 5, please choose the 5 households which you have lent to the most in the past 12 months.*

		Lending Relationship #1	Lending Relationship #2	Lending Relationship #3	Lending Relationship #4	Lending Relationship #5
13b. Whose household did you lend to? If not one of the network choices already captured, continue. Otherwise go to question 13e.	Use list of network choices	_____	_____	_____	_____	_____
13ci. What is the first name of the person you lent to? <i>Note: If unable to give a first name, respondent may provide a common name / nickname.</i>		_____	_____	_____	_____	_____
13cii. Does [lendeo name] live in this village? If yes, SKIP to question 13cv. If no, continue.	(1=Yes, 2=No)	____	____	____	____	____
13ciii. Where does [lendeo name] live? If Siaya County, proceed to	Use network	____	____	____	____	____

question 13civ. If not, go to question 13d.	location choice list					
13civ. Which village does this [lende name] live in?						
13cv. What is the household ID of [lende name] from our village census?	-99=DK					
13di. How do you know [lende name]? Use G4 codes. 13dii. What is [lende name]'s gender? 13diii. How old is [lende name]? If don't know, please estimate. (-99=DK) 13div. Has [lende name] completed primary school? If NO, go to question 9vii 13dv. Has [lende name] completed secondary school?? If NO, go to question 9vii 13dvi. Has [lende name] completed college/university? 13dvii. (Show on same screen) Does [lende name] own: <input type="checkbox"/> a mobile phone? <input type="checkbox"/> a television? <input type="checkbox"/> a radio?						
13e. What is the total amount you lent to [lende name] over the past 12 months?		<input type="text"/>				

13f. How much does [lendee name] currently owe your household?		_ _	_ _	_ _	_ _	_ _
--	--	-----	-----	-----	-----	-----

If more than 5 households that FR has lent to, continue. Otherwise go to question 13i.

Read: The questions below refer to those other households this household has lent money to that we have not yet discussed.

13g. What is the total amount your household lent to those households over the past 12 months?

Amount: |_|_|_| Currency if NOT Ksh (use G12 codes) |_|_| Other: _____

13h. How much do those households currently owe your household? |_|_|_|_| KSh

Read: Now I'd like to ask you about the most recent loan you gave to someone outside of your household.

13i. How much interest did you charge on the most recent loan you gave to someone outside your household? (Units: 1=Ksh, 2=Rate / percent, 3=Other (specify), 4=Ush; Units of time: 1=Day; 2=Week; 3=Month; 4=Year; 88=Flat rate)

If no interest charged, fill in all three blanks with 99.

Unit |_|_| _____ Number: |_|_| per unit of time: |_|_|

13j. By when is / was this person supposed to pay back the loan? (MM/YYYY) **If no specific date given, fill in "77/7777".**

|_|_|_|/|_|_|_|_|_|_|_|

13k. Did someone ask your household for a loan in the last 12 months but your household did not give it? |_|_|_| Yes / No

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.

1. Have members of your household performed any agricultural or pastoralist activities for yourselves in the last 12 months? (1=Yes, 2=No)
 The following activities are considered agricultural/ pastoral: Agriculture; Livestock farming; Poultry; Fish pond; Other. Probe FR to ensue all agricultural activities are captured.

IF YES, proceed to question 1a. IF NO, skip to Section 8.

1a. Which of the following agricultural or pastoralist activities has your household performed in the last 12 months? *Select all that apply.*

Agriculture Livestock Poultry Fish Pond Other

Read: I will now ask about each of the [# of AG ACTIVITIES] different agricultural/pastoralist activities performed by your household.

Fill in the table by proceeding across for question 2, then down each column.

Questions	Codes	A: Current Activity #1	B: Current Activity #2	C: Current Activity #3	D: Current Activity #4
<p>2. Who in this household is the main decision maker for this activity?</p> <p><i>FO. If the main decision maker is present in the household at the time of the interview, please try to get the following information from this person. Otherwise, continue with the FR.</i></p> <p>a. (Don't read, just tick) Who is providing information on this activity?</p>		<input type="checkbox"/> (select from roster) <input type="checkbox"/> main decision maker <input type="checkbox"/> FR is not the main decision maker	<input type="checkbox"/> (select from roster) <input type="checkbox"/> main decision maker <input type="checkbox"/> FR is not the main decision maker	<input type="checkbox"/> (select from roster) <input type="checkbox"/> main decision maker <input type="checkbox"/> FR is not the main decision maker	<input type="checkbox"/> (select from roster) <input type="checkbox"/> main decision maker <input type="checkbox"/> FR is not the main decision maker

<p>3. What is the total size of the land you used for this activity in the last 12 months?</p> <p>For livestock/ poultry: Only count land that is specifically designated to that purpose. DO NOT count general household land / common land used for grazing.</p>	<p>1 Hectare ≈ 2.5 Acres</p>	<p> _____ . _____ Acres</p>	<p>--</p>	<p>--</p>	<p>--</p>
<p>4. a. In the last 12 months, did you purchase any land for this activity?</p> <p>b. In the last 12 months, did you rent any land for this activity?</p> <p>c. In the last 12 months, did you sell any land you previously used for this activity?</p>	<p>1 Hectare ≈ 2.5 Acres</p>	<p> _____ Acres _____ KES</p> <p> _____ Acres _____ # months _____ KES</p> <p> _____ . _____ Acres _____ .KES</p>	<p>--</p>	<p>--</p>	<p>--</p>

<p>5. (if agriculture) What crops have you grown in the last 12 months?</p> <p><i>List the ten most important crops if there are more than 10 total. Include both fruit bearing and non-fruit bearing trees as long as they are not planted solely for shade purposes.</i></p> <p>GO TO QUESTION 8.</p>	<p>Use F1 codes</p>	<p> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Other: _____ _____ _____ </p>	<p>--</p>	<p>--</p>	<p>--</p>
<p>6a. Did your household sell any livestock animals/poultry birds/fish in the last 12 months?</p> <p>If YES, continue, otherwise SKIP to 8f.</p>	<p>1=Yes, 2=No, 99=DK</p>	<p><input type="text"/> </p>	<p><input type="text"/> </p>	<p><input type="text"/> </p>	<p><input type="text"/> </p>
<p>6b. How much did you receive in total in sales of livestock animals/poultry birds/fish during the last...? (KSH)</p>	<p>99=DK For currency, use G12 codes.</p>	<p>month: <input type="text"/> 12 months: <input type="text"/> </p>	<p>month: <input type="text"/> 12 months: <input type="text"/> </p>	<p>month: <input type="text"/> 12 months: <input type="text"/> </p>	<p>month: <input type="text"/> 12 months: <input type="text"/> </p>
<p>6c. What share of sales in the last 12 months was made to:</p>	<p>Show all options on one screen, Use %, and have a check summing up to 100.</p>	<p> <input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households / final consumers </p>	<p> <input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households/ final consumers </p>	<p> <input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households/ final consumers </p>	<p> <input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households/ final consumers </p>

6d. What share of these sales was made at...		<input type="text"/> % at the farm / in the same village <input type="text"/> % at a market other village <input type="text"/> (if market other village) identify the market/village	<input type="text"/> % at the farm / in the same village <input type="text"/> % at a market other village <input type="text"/> (if market other village) identify the market/village	<input type="text"/> % at the farm / in the same village <input type="text"/> % at a market other village <input type="text"/> (if market other village) identify the market/village	<input type="text"/> % at the farm / in the same village <input type="text"/> % at a market other village <input type="text"/> (if market other village) identify the market/village
6e. Did your household purchase any livestock animals/poultry birds/fish in the last 12 months? If YES, continue, o/w GO to question 8	1=Yes, 2=No, 99=DK	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6f. How much did you spend in total on purchasing livestock animals/poultry birds/fish during the last... ? (KSH)	99=DK <i>For currency, use G12 codes.</i>	month: <input type="text"/> 12 months: <input type="text"/>			
6g. What share of purchases in the last 12 months was made from:	Show all options on one screen, Use %, and have a check summing up to 100.	<input type="text"/> % trader / wholesaler <input type="text"/> % other households	<input type="text"/> % trader / wholesaler <input type="text"/> % other households	<input type="text"/> % trader / wholesaler <input type="text"/> % other households	<input type="text"/> % trader / wholesaler <input type="text"/> % other households

<p>6h. What share of purchases does your household usually make from...</p>		<p>____% in this village ____% at a market other village</p> <p>____ (if market other village) identify the market/village</p>	<p>____% / in this village ____% at a market other village</p> <p>____ (if market other village) identify the market/village</p>	<p>____% in this village ____% at a market other village</p> <p>____ (if market other village) identify the market/village</p>	<p>____% in this village ____% at a market other village</p> <p>____ (if market other village) identify the market/village</p>
<p>6i. What is the total market value of the livestock animals/poultry/fish your household owned AND consumed in the last...?</p> <p><i>FOs should ask them to estimate the market value. For example, if they ate a calf, what would that calf have been worth on the market.</i></p>		<p>month: _____</p> <p>12 months: _____</p>	<p>month: _____</p> <p>12 months: _____</p>	<p>month: _____</p> <p>12 months: _____</p>	<p>month: _____</p> <p>12 months: _____</p>
<p>7a. Did you sell any animal products from this activity in the last 12 months? (e.g milk for livestock, eggs for chicken)</p> <p>If YES, continue. If NO, go to question 8.</p>	<p>1=Yes, 2=No, 99=DK</p>	<p>____</p>	<p>____</p>	<p>____</p>	<p>____</p>
<p>7b. How much did you receive in total in sales from animal products in the...?</p>	<p>99=DK For currency, use G12 codes.</p>	<p>i. ... month: _____</p> <p>ii. ... 12 months _____</p>	<p>i. ... month: _____</p> <p>ii. ... 12 months _____</p>	<p>i. ... month: _____</p> <p>ii. ... 12 months _____</p>	<p>i. ... month: _____</p> <p>ii. ... 12 months _____</p>

		Currency if NOT Ksh: <input type="text"/> Other: _____			
7c. What share of those sales was made to:	Show all options on one screen, Use %, and have a check summing up to 100.	<input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households / final consumers	<input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households / final consumers	<input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households / final consumers	<input type="text"/> % trader / wholesaler <input type="text"/> % food processing / butcher / restaurants / etc. <input type="text"/> % other households / final consumers
7d. Where do you usually sell the animal products of this activity?	Show all options on one screen, Use %, and have a check summing up to 100.	<input type="text"/> % at the farm / in thisvillage <input type="text"/> % at a market / other village <input type="text"/> (if % market other village > 0) identify the most important market/village	<input type="text"/> % at the farm / in thisvillage <input type="text"/> % at a market / other village <input type="text"/> (if % market other village > 0) identify the most important market/village	<input type="text"/> % at the farm / in thisvillage <input type="text"/> % at a market / other village <input type="text"/> (if % market other village > 0) identify the most important market/village	<input type="text"/> % at the farm / in thisvillage <input type="text"/> % at a market / other village <input type="text"/> (if % market other village > 0) identify the most important market/village
7e. What is the total market value of the animal products your household produced AND consumed...? <i>FOs ask them to estimate the market value. For example, if they ate 12 eggs, what would those have been worth on the market.</i>		i. ...month: <input type="text"/> ii. 12 months <input type="text"/> Currency if NOT Ksh: <input type="text"/> Other: _____	i. ...month <input type="text"/> ii. 12 months <input type="text"/> Currency if NOT Ksh: <input type="text"/> Other: _____	i. ...month <input type="text"/> ii. 12 months <input type="text"/> Currency if NOT Ksh: <input type="text"/> Other: _____	i. ...month <input type="text"/> ii. 12 months <input type="text"/> Currency if NOT Ksh: <input type="text"/> Other: _____

<p>8. How much did your household receive in total profits from this activity in the last...</p> <p><i>If agriculture, include all crops, fruits and vegetables sold.</i></p> <p><i>If livestock/poultry/fish, include net profit from the purchase/sale of livestock/poultry/fish as well as from other animal products</i></p> <p><i>READ: Profits are your total sales net of total costs for labor, land, machines, tools.</i></p> <p><i>FOs should guide the respondent to recall the full 12 months past. Think of each growing cycle and harvest.</i></p>	<p>-99=DK</p> <p><i>For currency, use G12 codes.</i></p>	<p>a. month: [__]</p> <p>b. 12 months: [__]</p> <p>Currency if NOT Ksh: [__] Other: _____</p>	<p>c. month: [__]</p> <p>d. 12 months: [__]</p> <p>Currency if NOT Ksh: [__] Other: _____</p>	<p>e. month: [__]</p> <p>f. 12 months: [__]</p> <p>Currency if NOT Ksh: [__] Other: _____</p>	<p>g. month: [__]</p> <p>h. 12 months: [__]</p> <p>Currency if NOT Ksh: [__] Other: _____</p>
<p>9. Who in your household worked on this activity in the last month?</p>		<p>a. Show roster names. Click on one name.</p> <p>b. How many days did [name] work on this activity in the last month?</p> <p>c. How many hours did [name] work in this activity on a typical day?</p>	<p>a. Show roster names. Click on one name.</p> <p>b. How many days did [name] work on this activity in the last month?</p> <p>c. How many hours did [name] work in this activity on a typical day?</p>	<p>a. Show roster names. Click on one name.</p> <p>b. How many days did [name] work on this activity in the last month?</p> <p>c. How many hours did [name] work in this activity on a typical day?</p>	<p>a. Show roster names. Click on one name.</p> <p>b. How many days did [name] work on this activity in the last month?</p> <p>c. How many hours did [name] work in this activity on a typical day?</p>

<p>10. In total, how many workers from outside the household did you hire to work on this activity last ...? <i>Count casual workers that worked part-time as well.</i></p> <p>If ZERO, skip to question 12.</p>	<p>99=DK</p>	<p>a. month: [__] b. 12 months: [__]</p>	<p>a. month: [__] b. 12 months: [__]</p>	<p>a. month: [__] b. 12 months: [__]</p>	<p>a. month: [__] b. 12 months: [__]</p>
<p>11. How much did you spend on salaries for workers from outside the household in this business or activity during the last ...? <i>If payment is in kind, ask to estimate in shillings.</i></p>	<p>99=DK <i>For currency, use G12 codes.</i></p>	<p>a. month: [__] b. 12 months: [__] Currency if NOT Ksh: [__] Other: _____</p>	<p>a. month: [__] b. 12 months: [__] Currency if NOT Ksh: [__] Other: _____</p>	<p>a. month: [__] b. 12 months: [__] Currency if NOT Ksh: [__] Other: _____</p>	<p>a. month: [__] b. 12 months: [__] Currency if NOT Ksh: [__] Other: _____</p>
<p>12. b. Loop through the number of outside workers last month</p> <p>If [number of workers last month] > 5: Loop through the 5 most important / consistent workers.</p>		<p>a. Where does worker [n] live? Cascade to find HH b. How many days did [name] work on this activity last month? c. How many hours did [name] work in this activity on a typical day? d. What was this person's total</p>	<p>a. Where does worker [n] live? Cascade to find HH b. How many days did [name] work on this activity last month? c. How many hours did [name] work in this activity on a typical day? d. What was this person's</p>	<p>a. Where does worker [n] live? Cascade to find HH b. How many days did [name] work on this activity last month? c. How many hours did [name] work in this activity on a typical day? d. What was this person's</p>	<p>a. Where does worker [n] live? Cascade to find HH b. How many days did [name] work on this activity last month? c. How many hours did [name] work in this activity on a typical day? d. What was this person's</p>

		compensation in the last month?	total compensation in the last month?	total compensation in the last month?	total compensation in the last month?
13. Think of all the buildings, vehicles, machinery, and tools that your household uses for this activity.	Include 0 as an option for no purchases / rentals	Amount: _____	Amount: _____	Amount: _____	Amount: _____
a. What is the total value of all these that your household owns?		Amount: _____	Amount: _____	Amount: _____	Amount: _____
b. What was the total amount spent on purchases and maintenance of these in the past 12 months?		Amount: _____	Amount: _____	Amount: _____	Amount: _____
c. What was the total amount spent on rental fees for renting these in the past 12 months?		Amount: _____	Amount: _____	Amount: _____	Amount: _____
d. What was the total amount received in rental fees from renting these to others in the past 12 months?		Amount: _____	Amount: _____	Amount: _____	Amount: _____

<p>14. How much did you spend on the following items for this activity during the last 12 months?</p> <p>a. (if livestock/poultry/fish/other) Animal medicine / vet</p> <p>b. (if agriculture) Fertilizer</p> <p>c. (if agriculture) Irrigation</p> <p>d. (if agriculture) Improved/hybrid seeds</p> <p>e. (if agriculture / other) Formal agricultural insurance</p> <p>f. (if livestock/poultry/fish/other) Animal feed</p> <p>g. Other variable input costs NOT ALREADY MENTIONED, please specify: _____</p> <p><i>If unsure, FR can estimate.</i></p>	<p>99=DK; For currency, use G12 codes.</p>	<p>a. Amount: <input type="text"/></p> <p>b. Amount: <input type="text"/></p> <p>c. Amount: <input type="text"/></p> <p>d. Amount: <input type="text"/></p> <p>e. Amount: <input type="text"/></p> <p>f. Amount: <input type="text"/></p> <p>g. Amount: <input type="text"/></p>	<p>a. Amount: <input type="text"/></p> <p>b. Amount: <input type="text"/></p> <p>c. Amount: <input type="text"/></p> <p>d. Amount: <input type="text"/></p> <p>e. Amount: <input type="text"/></p> <p>f. Amount: <input type="text"/></p> <p>g. Amount: <input type="text"/></p>	<p>a. Amount: <input type="text"/></p> <p>b. Amount: <input type="text"/></p> <p>c. Amount: <input type="text"/></p> <p>d. Amount: <input type="text"/></p> <p>e. Amount: <input type="text"/></p> <p>f. Amount: <input type="text"/></p> <p>g. Amount: <input type="text"/></p>	<p>a. Amount: <input type="text"/></p> <p>b. Amount: <input type="text"/></p> <p>c. Amount: <input type="text"/></p> <p>d. Amount: <input type="text"/></p> <p>e. Amount: <input type="text"/></p> <p>f. Amount: <input type="text"/></p> <p>g. Amount: <input type="text"/></p>
<p>15. Have you experienced any destruction, or theft or vandalism for this activity in the last 12 months?</p>		<p><input type="checkbox"/> Yes, destruction</p> <p><input type="checkbox"/> Yes, theft / vandalism</p> <p><input type="checkbox"/> No</p>	<p><input type="checkbox"/> Yes, destruction</p> <p><input type="checkbox"/> Yes, theft / vandalism</p> <p><input type="checkbox"/> No</p>	<p><input type="checkbox"/> Yes, destruction</p> <p><input type="checkbox"/> Yes, theft / vandalism</p> <p><input type="checkbox"/> No</p>	<p><input type="checkbox"/> Yes, destruction</p> <p><input type="checkbox"/> Yes, theft / vandalism</p> <p><input type="checkbox"/> No</p>

If ANOTHER ACTIVITY was entered, return to question 2 and fill in the next column. If NOT, continue to section 8.

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

Fill in the table by filling in any crop listed for question 4. Start with the crop most produced. If no crops listed, skip to Section 8.

Questions	Codes	Crop #1	Crop #2	Crop #3	Crop #4
<p>16. How much [crop] did you produce/harvest in the last...</p> <p>Ask for physical amounts (kg, gorogoro, etc.)</p> <p><i>READ: FOs should guide the respondent to recall the full 12 months past. Think of each growing cycle and harvest.</i></p> <p>If 0, skip to question 21.</p>	<p>Use f7 codes for units.</p> <p>DK = -99</p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/></p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/></p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/></p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/></p>
<p>17. Did you sell any of the output from [crop] in the past 12 months?</p> <p>If YES, continue. If NO, skip to question 21.</p>	<p>1 = Yes, 2 = No</p>	<p><input type="text"/></p>	<p><input type="text"/></p>	<p><input type="text"/></p>	<p><input type="text"/></p>
<p>18. How much [crop] did you sell in the last...</p> <p>Try to get valuation BOTH in amount of crop, and in Ksh.</p>	<p>Use f7 codes for units.</p> <p>DK = -99</p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p>	<p>a. 12 month Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p> <p>b. 30 days Amount: <input type="text"/> Unit: <input type="text"/> KES: <input type="text"/></p>

19. What share of those [crop] sales was made to:	Show all options on one screen, Use %, and have a check summing up to 100.	_ _ % trader / wholesaler _ _ % food processing / butcher / restaurants / etc. _ _ % other households / final consumers	_ _ % trader / wholesaler _ _ % food processing / butcher / restaurants / etc. _ _ % other households / final consumers	_ _ % trader / wholesaler _ _ % food processing / butcher / restaurants / etc. _ _ % other households / final consumers	_ _ % trader / wholesaler _ _ % food processing / butcher / restaurants / etc. _ _ % other households / final consumers
20. What share of these [crop] sales was made at...	Show all options on one screen, Use %, and have a check summing up to 100.	_ _ % at the farm / in the same village _ _ % at a market other village _ _ (if market other village) identify the market/village	_ _ % at the farm / in the same village _ _ % at a market other village _ _ (if market other village) identify the market/village	_ _ % at the farm / in the same village _ _ % at a market other village _ _ (if market other village) identify the market/village	_ _ % at the farm / in the same village _ _ % at a market other village _ _ (if market other village) identify the market/village
21. How much land (in acres) did you devote to farming this crop in the past 12 months? <i>For tree crops, count the trunks plus the area between them. If it is too difficult to estimate, enter DK.</i>	1 Hectare ≈ 2.5 Acres	_ _ Acres	_ _ Acres	_ _ Acres	_ _ 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)	_ _	_ _	_ _	_ _

<i>Skip to next crop. If last, go to question 9.</i>					
---	--	--	--	--	--

SECTION 8. Self-Employment

PART A: Confirming list of businesses

If HH does NOT have any matched enterprises from EL2 census, SKIP to question 3.

If HH does have matched enterprises from EL2 census, continue.

Read: When we visited this household between September - December 2019, you said members of your household were running the following enterprises. I will ask about each of these in turn to verify the information we have.

REPEAT THROUGH EACH ENTERPRISE THAT HAS BEEN MATCHED TO THIS HH AT EL2 CENSUS AND WAS OPERATIONAL {

Read: I will now ask about the following enterprise.

Enterprise name: [EL2 Census Business Name]

Primary enterprise category: [EL2 Census Primary Business Category]

Secondary enterprise category: [EL2 Census Secondary Business Category]

Locations:

- a. Primary: [EL2 Census Enterprise Village or Market Center 1]
- b. Secondary: [EL2 Census Enterprise Village or Market Center 2]
- c. Tertiary: [EL2 Census Enterprise Village or Market Center 3]

Primary location, operate from: [EL2 Census operate from]

Owner name: [EL2 Census Owner Name (Nickname)]

Owner phone: [EL2 Census Owner Contact]

1. Are members of your household still running this enterprise? *(It is okay if some of this information has changed since [EL2 Census Date], as long as you are sure this is the same enterprise.)* (1=Yes, currently running, 2=No, no longer running, -98=No, never ran this enterprise)

(if never ran enterprise) 1a. Explain: _____

} END REPEAT THROUGH EACH PREFILL ENTERPRISE

2. How many other enterprises have members of your household ran in the last 12 months (besides those already mentioned)? *Include businesses that may have closed down in the meantime. Enter 0 if no other enterprises.*
If >0, loop through each other enterprise starting at question 4. Otherwise, skip to loop through each mentioned enterprise starting at question 7.

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. If NO, skip to section 9.

3a. 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 person in to help answer questions for this part.*

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

REPEAT THROUGH EACH ENTERPRISE NOT PREVIOUSLY MENTIONED (EITHER Q2 OR Q3A TIMES) {

4. Name of the enterprise:

5. Primary enterprise category:

6. Are members of your household still running this enterprise? *(1=Yes, currently running, 2=No, no longer running)*

} END REPEAT THROUGH EACH ENTERPRISE NOT PREVIOUSLY MENTIONED

FO: At this point, we have the full list of all enterprises the household has run in the past 12 months and whether each is currently operating or not. We will ask more detailed questions about each enterprise in turn.

PART B: Business details

Read: Your household has run X number of enterprises in the past 12 months. I will now ask more detailed questions about each of these enterprises in turn.

REPEAT THROUGH EACH ENTERPRISE THAT WAS OPEN AT ANY POINT DURING THE LAST 12 MONTHS {

Read: We are now discussing the following enterprise:

Enterprise name: [ENTERPRISE NAME]

Primary enterprise category: [PRIMARY CATEGORY]

Operating status: [OPERATIONAL/CLOSED]

7. Who in this household is/was the owner of this business? **Select from HH roster**

FO: If the primary decision maker for this enterprise is present, please try to collect further details on this enterprise from that person.

7a. Who is providing information on this business? (1=Owner/primary decision maker/ 2=Other person)

Note: *If the business closed down, we want this information at the time of closing.*

If this enterprise is a prefilled one and still operating, SKIP to question 19.

If this enterprise is a prefill one and no longer operating, SKIP to question 15.

If this enterprise is a not previously mentioned one, continue.

8. Primary enterprise category: [PRIMARY ENTERPRISE CATEGORY]

8a. (if retail): What type of products does/did this enterprise sell?

8b. (if non-food): What type of products does/did this enterprise produce/sell?

9. Any secondary business categories? _____

9a. (if retail): What type of products does/did this enterprise sell?

9b. (if non-food): What type of products does/did this enterprise produce/sell?

10. When did this enterprise first begin operating / when did your household gain control of the business?

Year (Is this an estimated enterprise start year: (1=Yes, 2=No))
 Month (Is this an estimated enterprise start month: (1=Yes, 2=No))

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 location operate?

Homestead Market stall Own building
 Share building No building Other Specify: _____

13. How many locations does/did this enterprise operate from?

REPEAT THROUGH EACH ENTERPRISE LOCATION {

14. Is this location in a village or a market center? (1=Village, 2=Market center)

(if village) Search village: _____

(if market center) Search market center: _____

} END REPEAT THROUGH ENTERPRISE LOCATION

19a. Specify the new name of the business: _____

19b. Specify the new primary business category: |

19bi. (if retail): What type of products does this enterprise sell?

19bii. (if non-food): What type of products does this enterprise produce/sell?

19c. Specify the new secondary business category: *(Select all that apply)* |

19ci. (if retail): What type of products does this enterprise sell?

19cii. (if non-food): What type of products does this enterprise produce/sell?

19di. Is the new primary location of this enterprise in a village or a market center?

| Village | Market Center

If village, search village. If market, search market

19dii. When did the primary enterprise location change from [EL2 Census Enterprise Village or Market Center 1]?

Month: _____

Year: _____

19e. Where is the new secondary location of this enterprise?

| Village | Market Center

If village, search village. If market, search market

| Doesn't have a secondary location anymore

19f. Where is the new tertiary location of this enterprise?

| Village | Market Center

If village, search village. If market, search market

| Doesn't have a tertiary location anymore

19g. At the primary enterprise location, where does this enterprise operate?

| Homestead

| Market stall

| Own building

| Share building

| No building

| Other Specify: _____

19h. Which household member is the new owner of this business? *Please prompt for the primary owner, if multiple household members run the business together.* | **Select from Section 4 HH roster**

19i. What is the owner's new phone number: _____

PART B. Financial information on each business

20. In the past 12 months, what months did your household operate this business?

Jan Feb Mar Apr May Jun Jul Aug
 Sep Oct Nov Dec Did not operate in the past 12 months

Continue if enterprise is currently operating or not operating but operated in the past 12 months. Otherwise, skip to next enterprise/to section 9.

21. a. **(If CURRENTLY OPERATIONAL)** In the past 7 days, what days was this enterprise open? *(Tick all that apply)*

b. **(If NOT OPERATIONAL)** When it still operated, what days was this enterprise usually open in a typical 7-day period? *(Tick all that apply)*

Open every day
 Monday Tuesday Wednesday Thursday Don't know
 Friday Saturday Sunday None

If none, go to question 23.

22. On those days when the enterprise was open, how many hours was the enterprise usually open per day? |___|

23. a. **(If CURRENTLY OPERATIONAL)** In total, how many HOURS was this enterprise open for customers in the last 7 days? |___|

b. **(If NOT OPERATIONAL)** In total, how many HOURS was this enterprise open in a typical 7 day period? |___|

24. **(If CURRENTLY OPERATIONAL)** In the past 7 days, how many hours did [Owner Name] work in total in this business? |___| hours

25. What were the total earnings (money in only - do not subtract any expenses) of this enterprise in the:

- a. **(If CURRENTLY OPERATIONAL)** Last week? |___|Ksh
- b. **(If CURRENTLY OPERATIONAL)** Last month? |___|Ksh
- c. Last 12 months |___|Ksh

26. What share of your total sales is made to ...

- a. final consumers/private individuals? |___|%
- b. other enterprises (who will use your products to process/resell)? |___|%

If [26a + 26b != 100] Warning: The shares should equal to 100.

27. What was the total profit of this enterprise over the: *(Note: In Ksh. 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 the business is co-owned, please report the TOTAL profit of the business, not only your share.)*
- a. **(If CURRENTLY OPERATIONAL)** Last week? KSh
 - b. **(If CURRENTLY OPERATIONAL)** Last month? KSh
 - c. Last 12 months? KSh

Co-Owners

28. What is/was the ownership structure of this enterprise?
- Single Owner
 - Joint Ownership
 - Cooperative

If Joint/Cooperative, continue. If Single Owner, skip to question X.

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.)*
- Co-owners from this household
 - Co-owners outside the household

b. **(if co-owners from the same household > 0):** Who in this household jointly owns this enterprise? **Select from HH roster.**

LOOP through each co-owner FROM THE HH {

30. No question here

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

} END LOOP

32. **(If # of co-owners outside the household = 0)**

(If CURRENTLY OPERATIONAL) You said the business generated [monthly profits] KSh 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.*

No

Yes **(if yes)** How much was this additional compensation in total? Ksh

33. **(If # of co-owners outside the household > 0)**
(If CURRENTLY OPERATIONAL) You said the business generated **[monthly profits] KSh** of profits in the last 30 days. Of these **[monthly profits] KSh**, how much did the owners in this household receive? KSh
- (If NOT OPERATIONAL)** You said the business generated **[yearly profits] KSh** of profits in the last 12 months. Of these **[yearly profits] KSh**, how much did the owners in this household receive? KSh
34. **(If # of co-owners outside the household > 0)**
(If CURRENTLY OPERATIONAL) You said the business generated **[monthly profits] KSh** of profits in the last 30 days:
[monthly profits of HH owners] KSh went to owners in this household
[total profits - monthly profits of HH owners] KSh went to owners outside this household
 Is this correct? Yes / No
- (If NOT OPERATIONAL)** You said the business generated **[yearly profits] KSh** of profits in the last 12 months:
[yearly profits of HH owners] KSh went to owners in this household
[total profits - yearly profits of HH owners] KSh went to owners outside this household
 Is this correct? Yes / No
35. **(If # of co-owners outside the household > 0)**
(If CURRENTLY OPERATIONAL) Did the owners in this household receive any other compensation (e.g. wages, food, etc.) not already contained in the **[monthly profits of HH owners] 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.*
 No
 Yes **(if yes)** How much was this additional compensation in total? KSh
36. **(If # of co-owners outside the household > 5)**
(If CURRENTLY OPERATIONAL) Did all the owners outside this household together receive any other compensation (e.g. wages, food, etc.) not already contained in the **[total profits - monthly profits of HH owners] KSh** of profits in the last month? *Note: additional compensation is any financial or in-kind benefit that the owners outside this household received from this enterprise, not already counted under profits above. Sum ACROSS ALL OWNERS OUTSIDE THE HH.*
 No
 Yes **(if yes)** How much was this additional compensation in total? KSh

READ: (If CURRENTLY OPERATIONAL) You stated there are [# of CO-OWNERS] 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.

LOOP through each co-owner OUTSIDE THE HH if CURRENTLY OPERATIONAL {

37. Is the co-owner one of the following? **Use network choices.**
If one of network choices, skip to h. Otherwise, continue.
- a. What is this co-owner's name? _____
 - b. Identify the co-owner village and HH ID (**search or cascade**)
 - c. What is this co-owner's relationship to [Owner Name]? **Use G4 codes**
 - d. What is this co-owner's gender? Male Female
 - e. What is this co-owner's age? (is this an estimated age? (1=Yes, 2=No))
 - f. Which school system did this co-owner participate in? _____
 - g. What is the highest level of education that this co-owner has completed? _____
 - h. What is co-owner's ethnicity (tribe)? _____
 - i. When did this owner start working for this enterprise?
 Year
 Month
 - j. How many hours did this co-owner work in this enterprise over the last 7 days?

} END LOOP

38. **(If CURRENTLY OPERATIONAL and if # of co-owners outside the household > 5)** 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.*
(If NOT OPERATIONAL and if # of co-owners outside the household > 0) 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.*

Labor / Employment

39. **(If CURRENTLY 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).*

READ: (If CURRENTLY OPERATIONAL) You stated there are [# of EMPLOYEES] 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 THROUGH EACH PAID EMPLOYEE if CURRENTLY OPERATIONAL {

40. Does this employee live in this household? (1=Yes, 2=No)
if YES, continue, if NO, SKIP TO b

- a. Select the employee from the HH roster: (SKIP to j)
- b. What is this employee's name? _____
- c. Identify the employee HH / village _____
- d. What is this employee's relationship to [Owner Name]? **Use G4 codes**
- e. What is this employee's gender? Male Female
- f. What is this employee's age? (is this an estimated age? (1=Yes, 2=No))
- 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?
 Year
 Month
- 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.*
 KES:

} END REPEAT THROUGH EACH PAID EMPLOYEE

41. **(If CURRENTLY OPERATIONAL and if # of employees > 5)** What is the total amount of hours all employees worked in this enterprise over the last 7 days?
(If NOT OPERATIONAL and # of employees > 0) What is the total amount of hours all employees worked in this enterprise in a typical 7-day period?
42. **(If CURRENTLY OPERATIONAL and if # of employees > 5)** What was the total compensation of all employees together in the last 30 days? *Include salaries and any in-kind remuneration.*
 KES:
(If NOT OPERATIONAL and # of employees > 0) What was the total compensation of all employees together in a typical 30-day period? *Include salaries and any in-kind remuneration.*
 KES:
43. Do/did any members of this household work as volunteers / unpaid employees in this business? Yes / No
- 43a. **(if yes)** Which members of this household?
 [HH Member 1]
 [HH Member 2]

- 43b. **(if any and CURRENTLY OPERATIONAL)** How many hours did each HH member work over the last 7 days?

[HH Member 1]
 [HH Member 2]

43c. (if any and NOT OPERATIONAL) How many hours did each HH member work in a typical 7-day period?

[HH Member 1]
 [HH Member 2]

44. (If CURRENTLY 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.*

45. (if # of volunteers > 0 and CURRENTLY OPERATIONAL) What is the total amount of hours all volunteers from outside this household worked in this enterprise over the last 7 days?
(if # of volunteers > 0 and 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 here

Capital / Investment

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. (0 = Business was inherited or transferred for free (gift))
Amount:

48. How did you obtain the resources your household 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
 NGO cash transfer Other (specify)

49. a. Do you currently have any outstanding loans for this business? *If any of these loans were already mentioned above, please include them again here.* Yes / No **If Yes, CONTINUE. If No, SKIP to question 13.**

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 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 100Ksh.

_____ KSh

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.

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

- Bicycle
- Motorcycle / scooter
- Car / truck
- Kerosene stove
- Radio / cassette player / CD player
- Sewing machine
- Kerosene lantern
- Tables
- Sofa pieces (all kinds)
- Clock or watch
- Electric iron
- Television
- Computer/tablet
- Mobile phone (non-smart)
- Smartphone
- Car battery
- Boats (motorized or other)
- Iron/Metal/Steel sheets
- Hand carts
- Wheelbarrows
- Solar panel
- Generator

	a. Does this enterprise own or rent any [ASSET]? <i>Include any</i>		c. (if own) How much are ALL the [ASSET] owned by this enterprise,	d. (if own) Has this enterprise rented out any [ASSET] in	e. (if own) How much of the total [XXX] KSh of [ASSET] does this business	f. (if own) How much did this enterprise receive in rental fees for	g. (if own) What was this enterprise's total expenditure /	h. (if rent) Think about all the [ASSET] this enterprise	i. (if rent) How much did this enterprise pay in rental fees for	j. (if rent) What was this enterprise's total expenditure /

	<p><i>assets used for production in this business, even if already mentioned above as part of household assets.</i></p> <p>If owns, continue. If rents, skip to g. If no, skip to next item.</p>		<p>whether or not you use or rent them out, worth today? For example, if someone came to you today to buy ALL [ASSET], how much could you sell it for?</p>	<p>the last 30 days?</p>	<p>RENT OUT (rather than use for its own production ? For example, if someone came to you today to buy the part of [ASSET] that you rent out, how much could you sell it for?</p> <p>If YES, continue. If NO, skip to g.</p>	<p>[ASSET] in the last 30 days?</p>	<p>investment in [ASSET] in the last 30 days? <i>Include net purchases / maintenance / repairs.</i></p>	<p>rents in. Imagine you owned all of that [ASSET]. If someone came to you today to buy all the [ASSET] that you rent in, how much could you sell it for?</p>	<p>[ASSET] in the last 30 days? Skip to next asset.</p>	<p>investment in the [ASSET] you rented in the last 30 days, excl. rental payments? Include maintenance / repairs.</p>
51. Land	<p>Please count only land used for this activity. Do not count land that is used by your household purely for private or</p>	<p>b. How much land does this enterprise own? <i>Include land used for this business, even if it was already mentioned above.</i></p>	<p>Please do not count land that is used by your household purely for agricultural or non-business use.</p>							

	agricultural use.	<i>Enter 0 if all land used is rented.</i>								
52. Buildings and structures	Please do not count buildings and structures that are used by your household purely for private use.	b. How many buildings and structures does this enterprise own? <i>Include buildings, even if they are part of the homestead.</i>	Please do not count buildings that are used by your household purely for private use.							
53. Vehicles Examples of large vehicles include cars, trucks, and boats. Examples of small vehicles include motorbikes, bicycles, scooters, and carts.										
54. Machines and tools These are generally electrical or fuel-powered and are too large to hold in your										

<p>hand. Tools are generally NOT electrical or fuel-powered and are small enough to hold and use in your hand.</p>										
<p>55. Furniture or electronics</p> <p>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.</p>										

56. Do you 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. If NO, skip to question 57.

56a. How much is ALL of your 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.

56b. What was your total expenditure on STOCK/INVENTORY purchased last month?

57. Do you 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. If NO, skip to question 58.

57a. How much is ALL of your 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.

57b. What was your 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

Costs

59. In the last 30 days, how much did you spend, in this business, on:

- a. Electricity and water? (from all sources)
- b. Insurance? (exclude health insurance).
- c. Security? (like guards, maintaining fences, etc.)

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. If NO, skip to question 60.

60a. How much did this license cost?

60b. How many months in total is this license 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. Last month, how much did you spend on:

- a. NSSF / Health insurance?
- b. Market fees?
- c. Taxes or fees to the county government? Exclude license payments
- d. Taxes or fees to the national government?
- e. Taxes, fees or fines to the Chiefs/assistant chiefs/village elders?

- f. Additional payments to government officials, police or other authorities in order to do business? (i.e., bribes - but don't use that word)
- g. Other operating costs, excluding salaries, wages, and rent (i.e. advertising, transportation)

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, -99=FR is not employed/volunteering and does not know about other household members)

If YES, skip to question 1b. If NO, continue.

1a. 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. If NO, skip to question 19.

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), starting with your household's most important position. Please count as a job any work for pay on another person's farm. Please do not include self-employment positions in your answer. If you work(ed) for multiple employers in the same job / occupation (e.g. agricultural laborer on different farms), consider this ONE position.

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.

1b. Which members of your household currently work for pay or were employed for pay over the last 12 months? *Select all that apply from section 4 current household roster.*

FO: Ask about each household member in turn. If the relevant household member is present, proceed directly with that HH member. Otherwise, try to get information from the FR. {

2. Who is providing information on this person? Self / FR

3. **Read:** *Think of all the employed positions of this person in the last 12 months.* In the last 12 months, how many employed positions did this person have?

If [number of employed positions] > 5: LOOP through the 5 most important positions

LOOP through each employed position of this person. Begin with the most important one. {

Read: I will now ask about each of these positions for [HH Member Name] in turn.

Questions	Codes	A: Employed position #1	B : Employed Position #2	C : Employed Position #3
4. In what occupation is this work?	Use G9 codes (-99=DK)	__ Other:_____	__ Other:_____	__ Other:_____
5. In what industry is your employer?	Use New F2 codes	__ Other:_____	__ Other:_____	__ Other:_____
6. (If industry = ag_large, animal, ag_small, domestic) Which household is your employer? If employer is in study area, match to ID and GO to question 9. If NOT, GO to question 8.	Use HH network codes to find employer HH			
7. (If industry != ag_large, animal, ag_small, domestic) Which enterprise is your employer? If employer is in study area, match to ID and GO to question 9. If NOT, GO to question 8.	Use ENT network codes to find employer HH			
8. Provide information about the employer. a. Name: b. Phone number:				
9. In what month and year did [HH Member Name] start this job?	(MM/YYYY)	__/__/____	__/__/____	__/__/____
10. In what month and year did [HH Member Name] end this job?	(MM/YYYY)	__ current job __/__/____	__ current job __/__/____	__ current job __/__/____

<p>11. In the last 12 months, which months did this person work in this position? Include all months for which this person worked during some part of the month.</p>		<input type="checkbox"/> Jan <input type="checkbox"/> Feb <input type="checkbox"/> Mar <input type="checkbox"/> Apr <input type="checkbox"/> May <input type="checkbox"/> Jun <input type="checkbox"/> Jul <input type="checkbox"/> Aug <input type="checkbox"/> Sep <input type="checkbox"/> Oct <input type="checkbox"/> Nov <input type="checkbox"/> Dec	<input type="checkbox"/> Jan <input type="checkbox"/> Feb <input type="checkbox"/> Mar <input type="checkbox"/> Apr <input type="checkbox"/> May <input type="checkbox"/> Jun <input type="checkbox"/> Jul <input type="checkbox"/> Aug <input type="checkbox"/> Sep <input type="checkbox"/> Oct <input type="checkbox"/> Nov <input type="checkbox"/> Dec	<input type="checkbox"/> Jan <input type="checkbox"/> Feb <input type="checkbox"/> Mar <input type="checkbox"/> Apr <input type="checkbox"/> May <input type="checkbox"/> Jun <input type="checkbox"/> Jul <input type="checkbox"/> Aug <input type="checkbox"/> Sep <input type="checkbox"/> Oct <input type="checkbox"/> Nov <input type="checkbox"/> Dec
<p>12. In this position, what is or was your employment status? If had different statuses at different points in time, use most recent.</p>	<p>Use F6 codes</p>	<input type="text"/> Other: _____	<input type="text"/> Other: _____	<input type="text"/> Other: _____
<p>13. This position's working patterns could be best described as:</p>	<p>1 = Full time 2 = Part time 3 = Seasonal 4 = Other (specify)</p>	<input type="text"/> Other: _____	<input type="text"/> Other: _____	<input type="text"/> Other: _____
<p>14. (if current job) How many hours did this person work at this job during the last 7 days? (if past job) How many hours did this person work at this job in a typical 7-day period?</p>		<input type="text"/> hours	<input type="text"/> hours	<input type="text"/> hours
<p>15. (if current job) In the past 7 days, approximately how many employees work / worked at the place / business of this position? Include this person in this count. (if past job) In a typical 7-day period, approximately how many employees work / worked at the place / business of this position? Include this person in this count.</p>	<p>1=1, 2=2-5; 3=6-10; 4=11-20; 5=21-99; 6=100 or more; -99=DK</p>	<input type="text"/> Exact number (if known) <input type="text"/> Category	<input type="text"/> Exact number (if known) <input type="text"/> Category	<input type="text"/> Exact number (if known) <input type="text"/> Category

<p>16. (if current job) What was the amount of this person's <u>cash salary</u> in the past 30 days? Ask for pre-tax salary, where applicable.</p> <p>(if past job) What was the amount of this person's cash salary in a typical 30 day period?</p>	<p>For currency, use G12 codes</p>	<p>Amount: ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>	<p>Amount: ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>	<p>Amount: ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>
<p>17. For the past 30 days at this job (or in a typical 30 day period), what was the total value of this person's:</p> <ul style="list-style-type: none"> a. payment in kind in food? b. NSSF / health insurance? c. housing benefits? d. uniforms / clothing benefits? e. training allowance? f. other allowances and benefits? <p>FR can estimate if unsure.</p>	<p>For currency, use G12 codes</p>	<p>a. Ksh ____ </p> <p>b. Ksh ____ </p> <p>c. Ksh ____ </p> <p>d. Ksh ____ </p> <p>e. Ksh ____ </p> <p>f. Ksh ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>	<p>a. Ksh ____ </p> <p>b. Ksh ____ </p> <p>c. Ksh ____ </p> <p>d. Ksh ____ </p> <p>e. Ksh ____ </p> <p>f. Ksh ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>	<p>a. Ksh ____ </p> <p>b. Ksh ____ </p> <p>c. Ksh ____ </p> <p>d. Ksh ____ </p> <p>e. Ksh ____ </p> <p>f. Ksh ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>
<p>18. a. In the last 12 months, did this person pay any income taxes for this job?</p> <p>b. (if yes and current job) What is the amount this person paid in income taxes for the last 30 days?</p> <p>b. (if yes and past job) What was the amount this person paid in income taxes in a typical 30 day period?</p> <p>FR may estimate if they pay annually.</p>	<p>For currency, use G12 codes</p>	<p> __ (1=Yes,2=No)</p> <p>Amount: ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>	<p> __ (1=Yes,2=No)</p> <p>Amount: ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>	<p> __ (1=Yes,2=No)</p> <p>Amount: ____ </p> <p>Currency if NOT Ksh: __ Other: _____</p>

} END LOOP through selected household members.

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 question 21. If NO, continue.

20. Why not? Use F8 codes.
SKIP TO SECTION 10.

21. Who in this household is currently looking for a job, or another job? *Select all that apply from section 4 current household roster.*

22. **(if respondent selected)** During the last 7 days, how many hours did you spend actively searching for jobs, applying for jobs, or in interviews?
If 0, skip to Section 10. Otherwise, continue.

23. **(if respondent selected)** During the last 7 days, what did you try to get a job, or another job? *Select all that apply.*
Use F4 codes

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. Please exclude from your answer any food purchased for processing, livestock consumption, or resale in a household enterprise.

First, I would like to ask you some questions about food consumption that you eat at home.

	PURCHASES IN LAST 7 DAYS	HOME PRODUCTION	GIFTS	SHOPPING PATTERNS
	<p>Q1: In the past 7 days, how much [CATEGORY] have the members of your household purchased?</p> <p>Prompt for shillings.</p>	<p>Q2: In the past 7 days, how much [FOOD] did your household consume from your own production?</p> <p>Prompt for shillings. Ask FR to estimate how much the total consumption would be worth if SOLD AT THE MARKET PRICE IN THE LAST 7 DAYS.</p>	<p>Q3: In the past 7 days, how much [FOOD] did your household receive as a gift from someone outside of the household?</p>	<p>Q4. From which village or market center did members of your household purchase [FOOD] in the last 30 days?</p> <p><i>If multiple markets / villages, pick the main one, where you spent the most.</i></p> <p>Include “never purchased in the last 30 days” option</p>
[FOOD]	KSH	KSH		VILLAGE or MARKET CENTER
<p>All cereals <i>Rice, maize, grains and flours, oats, pasta, biscuits and cakes, bread. Include grains used for food or alcohol.</i></p>				
<p>Spent on grinding of maize, cereals, and any other products (Only include price of GRINDING service, not of the product itself. If</p>				

purchased already ground, (e.g. maize flour), include in the product category (e.g. maize).				
All pulses <i>Beans, grams, black grams, peas, groundnut, cowpea</i>				
All vegetables <i>Tomatoes, kales, cowpea leaves, Onions, Cabbage, Mrenda, (Local Vegetable), Saka (Local Vegetable)</i>				
All meat <i>Beef, pork, bacon, mutton/lamb, goat, chicken, camel</i>				
All roots and tubers <i>Irish potatoes, sweet potatoes, cassava, cassava flour, yams, arrow root, crisps, chips.</i>				
All fish <i>includes fresh, dried, frozen, smoked, omena</i>				
All dairy products and eggs <i>Milk (fresh, condensed), mala, yoghurt, cream, cheese, eggs</i>				
All oils and fats <i>Cooking fat, butter, Ghee, Margarine, Cooking oil, Lard (Animal fat, Peanut butter</i>				
All fruits <i>Bananas, oranges, pawpaws, avocado, mangos, pineapples, passion fruit, pears, plums, apples, lemons, grapefruit, strawberries, other berries, melons, grapes, coconuts, jackfruit</i>				
All sugar products <i>Sugar, sugar cane, jaggery, icing sugar, honey</i>				
All non-alcoholic drinks				

<i>Tea leaves, preserved fruit juice, coffee, soda, soya drink, health drink, drinking chocolate, mineral water</i>				
Alcoholic drinks / tobacco? <i>Spirits, wine, beer, brews (busaa, changaa), cider; cigarettes, bhang, snuff, khatt, miraa</i>				

FO NOTE: The following questions ask about spending in the past one month.

ITEM	<p>Q5. In the past 30 days, how much did your household spend on [ITEM] in total? (KSH)</p> <p><i>Enter zero if none are consumed. DK=-99</i></p>	<p>Q6. (If non-zero purchases) From which village or market center did members of your household purchase [ITEM] in the past 30 days?</p> <p><i>If multiple markets / villages, pick the main one, where you spent the most.</i></p> <p>Include "DK"</p>
a. Airtime, other phone expenses		
b. Internet		
c. Petrol, tolls, transport such as taxi/bus/matatu/boda/piki/train/flight fare, hotel stays (NOT including medical reasons)		
d. Lottery tickets/gambling		
e. Clothing and shoes		
f. Prepared meals outside the house (including restaurants, kiosks,...)		
g. Recreation/entertainment such as books/magazines, music/CDs, videos, tickets to any entertainment		
h. Personal items (hair cuts, toiletries, cosmetics, combs)		
i. Household items (soap, cleaning agents, toilet paper/tissues, air freshener, shoe polish, insecticide, matches, candles)		
j. Firewood, charcoal and kerosene		
k. Electricity		
l. Water		

FO NOTE: The following questions ask about spending in the past 12 months.

ITEM	Q7. In the past 12 months, how much did your household spend on [ITEM] in total (KSH)?	Q8. (if Q7 > 0) From which village or market center did members of your household usually purchase [ITEM] in the last 12 months?
a. House rent/mortgage		
b. Fixing home damage or doing essential maintenance (e.g. fixing a leaking roof)		
c. Improving or expanding the home (e.g. metal sheets, doors, timber, labor, etc.		
d. Religious expenses or other ceremonies (excluding weddings and funerals)		
e. Charitable donations		
f. Weddings, Funerals (including outside their household if contributed to their costs)		
g. Medical expenses related to covid-19, including face masks, soap, hand sanitizer, etc.		
h. All other medical expenses (including consultation fees, medicines, hospital costs, lab test costs, ambulance costs, and related transport)		
i. Household durables FO: Read list below, calculate total 1 Vehicles (car, boat, bike, motorbike, handcarts, etc.) 2 Furniture (bed, chair, vases, mirror, etc.) 3 Kitchen and other equipment (cutlery, pots, pans, plates, etc.) 4 Electronic equipment, (lamps, mobile phone, television, etc.) 5 Tools We ask about livestock in ag section.		
j. Dowry/bride price		

Q9. 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. If NO, skip to section 11.1

LOOP THROUGH UP TO 3 EXPENSES {

a. Please specify this other expense: _____

b. How much did you spend on these other expenses in total in the last 12 months? (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 NO, skip to next section. If YES, continue.

1a. How many community groups are you or any other member of your household currently a member of?

If 1a > 3, read: The respondent reported that members of the household are currently a member of [1A] groups. We are only interested in the 3 groups they are most engaged in. Please ask the respondent to think about these 3 groups, then ask the following questions one-by-one about each group.

If 1a < 3, read: The respondent reported that members of the household are currently a member of [1A] groups. Please ask the respondent the following questions one-by-one about each group.

		Group #1	Group #2	Group #3
2. Group name. <i>Please probe to get the group name, not just the purpose.</i>	Use group name preload, or enter other			
3. Group purpose (select all that apply)	Use Group Purpose codes.	<input type="text"/> Other: <input type="text"/>	<input type="text"/> Other: <input type="text"/>	<input type="text"/> Other: <input type="text"/>
4. Where is this group primarily located?	Go through village / market cascade. Allow for no location.	<input type="text"/>	<input type="text"/>	<input type="text"/>
5. Please select all members of the household that are members of this group	Use household roster information	<input type="text"/>	<input type="text"/>	<input type="text"/>
6. Does any member of this household hold a leadership position in this group? Select all household members that do.	Use household roster information, or none	<input type="text"/>	<input type="text"/>	<input type="text"/>
7. How desirable is it for people in your village to belong to this group?	1 = very desirable 2 = somewhat desirable 3 = not very desirable -99=DK	<input type="text"/>	<input type="text"/>	<input type="text"/>

<p>IF group purpose includes ROCSA/table banking, continue to 8. Else skip to question 9.</p> <p>8. What is the minimum amount that you are expected to contribute?</p>	<p>(KES) Enter 0 if there is no minimum contribution.</p>	<p> _ _ </p>	<p> _ _ </p>	<p> _ _ </p>
<p>9. What were your household's total contributions to this group in the last 12 months?</p>	<p>Hint: Exclude ROCSA <i>pot/table banking</i>. Include registration fees, membership fees, contributions to group's existing assets such as maintenance of assets, to new purchases or to initiatives. Please include contributions in cash, or the value of food or goods. Include 0 for no contributions</p>			
<p>10. How much have you or anyone from your household actually received in income from this group in the last 12 months, other than any loans? Include income from renting any assets owned by the group.</p>	<p>Include cash, the value of food or goods received, and interest on loans made out by the group. [KSH] [0: No income]</p>	<p> _ _ </p>	<p> _ _ </p>	<p> _ _ </p>
<p>11. Did this group think about a joint initiative in the past 12 months? If YES, continue. If NO, skip to question 13</p>	<p>(1=Yes, 2=No, -99=DK)</p>	<p> _ _ </p>	<p> _ _ </p>	<p> _ _ </p>
<p>11a. How many initiatives did this group think about?</p>		<p> _ _ </p>	<p> _ _ </p>	<p> _ _ </p>
<p>11b. What were the purposes of the group's initiatives? Please select all that apply.</p>	<p>1. For assets or equipment for the group to rent, e.g. plastic chairs 2. For equipment or tools for members to share on their farms/business, e.g. a plough 3. For inputs for members' farms or businesses, e.g. seeds</p>	<p> _ / _ / _ Other: _____</p>	<p> _ / _ / _ Other: _____</p>	<p> _ / _ / _ Other: _____</p>

	<p>4. To provide infrastructure for the community, e.g. a new school building</p> <p>5. To provide infrastructure for the group members only, e.g. a building members can use</p> <p>-77. Other (specify)</p>			
11c. What was the total amount raised for these initiatives combined?		_ _	_ _	_ _
11d. How many initiatives have been completed successfully (e.g. the intended purchase has been made)?				
11e. How many initiatives have been completed partially (e.g. part of the intended purchase has been made)?				
<p>12. In the last 12 months, has the group approached any prominent local person for support, either financial support or for obtaining services, and/or received support, even without asking for it? We are asking about support for the group or the community, not on behalf of an individual member.</p> <p><i>Hint: 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.</i></p> <p>Select all that apply</p> <p>If 1-4 continue. If 5, skip to 12b. If NO, skip to the next section.</p>	<p>1 Group asked for financial support, and received it</p> <p>2 Group asked for financial support, but did not receive it</p> <p>3 Group asked for support obtaining a service, and received it</p> <p>4 Group asked for support obtaining a service, but did not receive it</p> <p>5 Group did not ask for any support, but received some</p> <p>0 None of the above</p> <p>-88 DON'T READ: Refuse to answer</p>	_ _	_ _	_ _
12a. Who did this group ask for support from? <i>Select all that apply</i>	Use Group Request codes:	_ _ _ _ _ _	_ _ _ _ _ _	_ _ _ _ _ _

If q10 = 1, continue. Else go to the next group/Section.	1=Current MCA, 2=Current MP, 3=Current Governor, 4=Other current politician, 5=Past politician, 6=Other prominent person (don't specify)			
12b. From whom did this group receive support? <i>Select all that apply.</i>	Use Group Request codes	_ _	_ _	_ _
If 12 = 1, 3 or 5, continue. Else go to the next group/Section. 12c. What was the total value of support received? <i>Include both monetary and in-kind support; please estimate value of in-kind support.</i>		_____	_____	_____

Section 11.2. Public Goods

1. Thinking 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.*

|_|/|_|/|_|/|_|/|_| Other: _____

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

LOOP through each purpose type {

2a. How many times did you contribute to harambee for [PURPOSE] over the past 12 months? |_|_|

2b. How much did you contribute to harambees for [PURPOSE] in total in the past 12 months, both in-kind and in cash? |_|_|_| KSh

2c. How satisfied were you with how the collected money was spent? |_|_| (1=very dissatisfied to 5= very satisfied)

IF Harambee Purpose codes = School facilities OR Health clinic/dispensary OR Water points OR Road construction/maintenance OR Market center OR Other community development project, then 2d:

2d. What is the stage of the [PURPOSE] facility you contributed to? (1. Still in planning; 2. Under construction or renovation, but not likely to be completed; 3. Under construction or renovation, likely to be completed; 4. Completed)

} end LOOP through harambee purpose types

3. In the past 12 months, did you or members of your household provide volunteer or unpaid labor for any community projects or activities? *E.g., clearing brush off roads, slashing community spaces, maintaining water points, projects related to school development. Exclude any work you have discussed during the section on groups.* (1=Yes, 2=No, 99=DK)

3a. (if YES): In the past 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 past 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, 99=DK)

4a. (if YES): 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*
Amount:

Read: *We know that sometimes households have targets or expectations for contributions, and that sometimes households are able to meet these targets and other times they are not.*

5. In the past 12 months, how many times has your household been given any targets or expectations for contributions that you did not meet for harambees or any other collections, both in-kind and in cash?
If > 0, continue. If not, skip to question 6.

5a. For what purpose were these targets or expectations? *Select all that apply. Use harambee purpose codes*
 / /

5b. What was the main reason you did not make these contributions? *Select one:*
1 = I believe the people running the event(s) would not deliver on the project
2 = The cause or project for which the fundraising event(s) was run was not important to m

- 3= I had no personal connections to the people running the event(s)
- 4 =I didn't think the project would benefit me directly
- 5 = I couldn't contribute as I had contributed to other projects already
- 6= I did not have cash on hand at the time of the project
- 7 = Other (specify) _____
- 88= Refuse to answer
- 99 = Don't know

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 1 selected, go to question 6a. If only 2 selected, go to question 6b. If no, skip to question 7.

6a. How much did you pay any taxes or fees in the past 12 months? *Do not include contributions towards targets that have already been discussed.* |_____|

6b. How much did you pay in fines in the past 12 months? |_____|

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

	<p>7. Think about the [FACILITY] you most use. How many minutes walk is it from your homestead?</p>	<p>8. What type of [FACILITY] is this?</p> <p>Water points: 1=Piped water, 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)</p>	<p>9. How would you rate the quality of this [FACILITY]?</p> <p>(5=very good, 4=good, 3=fair, 2=poor, 1=very poor, (DON'T READ): -99=DK, -88=Refuse</p>
--	---	---	---

		Health clinic/dispensary: 1=Public health clinic, 2=Dispensary	
i. Water point	__	__ Other: _____	__
ii. Public health clinic/dispensary	__	__ Other: _____	__

10. What would you say is the area of greatest need for more development spending in your area? (1=Primary schools, 2=Secondary schools, 3=Water points, 4=Roads, 5=Market centers, 6=Electrification, 7=Other, 8=No need for more development spending)

|__|

	<p>11. In the last 12 months, have you had contact with, or tried to get any contact with, the following services:</p> <p>(1=Yes, 2=No)</p> <p>If YES, skip to 13. If NO, continue to 12..</p>	<p>12. In the past 12 months, would you have liked to get any of the following services, but didn't? Why? Select the main reason.</p> <p>(0=No, this was not relevant to me, 1=Yes, but I didn't have time, 2=Yes, but I couldn't afford the costs or travel/airtime, 3=Yes, but it was too much hard work, 4=Yes, but I didn't think I would obtain it, 5=Yes, but I couldn't afford the gift or favour expected by the official in return)</p> <p>SKIP to next row.</p>	<p>13. Did you obtain this service?</p> <p>(1=Yes, 2=No)</p> <p>If YES, continue to 14. If NO, continue to 15.</p>	<p>14. How long did it take to obtain the service from first contact attempt?</p> <p>Amount: ____ Unit (1=Day; 2=Week; 3=Month; 4=Year): __ </p>	<p>15. Did you ask a prominent local person to intercede on your behalf, to help you obtain the services?</p> <p>(1=Yes, and they interceded; 2=Yes, but they did not intercede, 3=No, -88=Refuse to answer)</p> <p>If 13 = yes, continue; otherwise skip to next row.</p>	<p>16. Did you have to give a gift to an official, or do a favour for an official to get this service?</p> <p>(1=Yes, 2=No, -88= Refuse to answer)</p>	<p>17. How satisfied were you with what you received?</p> <p>(1=very dissatisfied, 2= dissatisfied, 3=Neutral, 4=satisfied, 5 = very satisfied, -99=Don't know, -88=Refuse).</p>
a. Teachers or school officials from a public school?	____		____		____		__

b. A public clinic, hospital or dispensary?	<input type="checkbox"/>		<input type="checkbox"/>	Amount: <input type="checkbox"/> Unit (1=Day; 2=Week; 3=Month; 4=Year): <input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
c. Obtaining an official personal document from a Huduma Center, such as birth certificate, driver's license, passport or voter's card?	<input type="checkbox"/>		<input type="checkbox"/>	Amount: <input type="checkbox"/> Unit (1=Day; 2=Week; 3=Month; 4=Year): <input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
d. Obtaining an official permit, such as a permit to start a group or a business?	<input type="checkbox"/>		<input type="checkbox"/>	Amount: <input type="checkbox"/> Unit (1=Day; 2=Week; 3=Month; 4=Year): <input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
e. Obtaining an electricity connection	<input type="checkbox"/>		<input type="checkbox"/>	Amount: <input type="checkbox"/> Unit (1=Day; 2=Week; 3=Month; 4=Year): <input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

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.

	Q: During the last 12 months... (1=Yes, 2=No) If YES, continue. If NO, go to next row	(a) How many times?	(b) Did you report the crime to the police or the local administration (chief, assistant chief, liguru)? (1=Yes, 2=No)
1. ... has someone stolen or attempted to steal any livestock from you?	_____	_____	_____
2. ... has someone stolen or attempted to steal any household items?	_____	_____	_____
3. ... has someone stolen or attempted to steal any cash from you?	_____	_____	_____
4. has someone assaulted you without a weapon?	_____	_____	_____
5. ... has someone assaulted you using a weapon (such as a club, machete or gun)?	_____	_____	_____
6. ... have you been the victim of arson?	_____	_____	_____
7. ... have you been the victim of witchcraft?	_____	_____	_____
8. ... have you been the victim of any other crime or attempted crime? If YES: Describe other crime:	_____	_____	_____

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=somewhat worried, 2=very worried, 0=not very worried) _____

SECTION 12.1 Health and Nutrition

The questions in this section and the next section are more personal. Please try to ensure the privacy of the FR.

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? Chai (tea) by itself is not considered as a meal.
If ZERO, skip to question 4.

2. How many of these meals included meat or fish? Omena (small fish) should be included, but eggs should not. (77=Refuse to answer)

3. How many of these meals included eggs? (-88=Refuse to answer, -99= DK)

4. During the past 30 days, how many days of work or housework or school did you miss due to poor health? (0=None, -98=N/A)

5. Would you describe your general health as very good, somewhat good, or not good? (1=Very Good, 2=Somewhat good, 3=Not good, DON'T READ: -88=Refuse to answer)
If 2 or 3, continue. OTHERWISE, skip to question 7.

6. Would you describe your general health as good, fair, poor, or very poor? (1= Good, 2=Fair, 3=Poor, 4=Very poor, DON'T READ: -88=Refuse to answer)

	In the last 7 DAYS, how many days have ADULTS in your household...	In the last 7 DAYS, how many days have CHILDREN (<16) in your household...
7. ...gone to bed hungry?	a. <input type="text"/>	b. <input type="text"/>
8.skipped meals or cut the amount of meals?	a. <input type="text"/>	b. <input type="text"/>
9.gone entire days without food?	a. <input type="text"/>	b. <input type="text"/>

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 last three months

Read options. Indicate all that apply. (1=Yes, 2=No, 3=DK what that symptom / illness is)

(A) Fever	<input type="text"/>	(M) Malaria	<input type="text"/>
-----------	----------------------	-------------	----------------------

(B) Persistent cough	<input type="checkbox"/>	(N) Typhoid	<input type="checkbox"/>
(C) Always feeling tired	<input type="checkbox"/>	(O) Tuberculosis	<input type="checkbox"/>
(D) Stomach pain	<input type="checkbox"/>	(P) Sores or ulcers on the genitals	<input type="checkbox"/>
(E) Worms	<input type="checkbox"/>	(Q) Cholera	<input type="checkbox"/>
(F) Blood in stool	<input type="checkbox"/>	(R) Yellow fever	<input type="checkbox"/>
(G) Rapid weight loss	<input type="checkbox"/>	(S) Asthma / breathlessness at night	<input type="checkbox"/>
(H) Frequent diarrhea	<input type="checkbox"/>	(T) Frequent and excessive urination	<input type="checkbox"/>
(I) Skin rash or irritation	<input type="checkbox"/>	(U) Constant thirst / increased drinking of fluids	<input type="checkbox"/>
(J) Open sores / boils	<input type="checkbox"/>	(V) Diabetes	<input type="checkbox"/>
(K) Difficulty Swallowing	<input type="checkbox"/>	(W) Men only: Unusual discharge from the tip of the penis.	<input type="checkbox"/>
(L) Serious wound or injury	<input type="checkbox"/>	(X) High blood pressure / hypertension	<input type="checkbox"/>
		(Y) Other (specify): _____	<input type="checkbox"/>

11. During the last <u>three months</u> , 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 or friend. If ZERO, skip to question 15b.	<input type="checkbox"/>
11a. What was the reason for this/these visits? <i>Select all that apply. Use major health problem codes.</i>	<input type="checkbox"/>
11b. Were your visits to 1=private hospitals / clinics, 2=public hospitals / clinics, 3=both?	<input type="checkbox"/>
IF BOTH: 11c. How many of these visits were to public hospitals / clinics?	<input type="checkbox"/>
11d. In how many of these visits were you admitted to the hospital?	<input type="checkbox"/>
11e. Was the hospital or clinic able to address your needs? (DO NOT READ, simply code the FR's response) <input type="checkbox"/> No, they had insufficient supplies and staff <input type="checkbox"/> There were staff, but they had limited supplies <input type="checkbox"/> There were some supplies, but limited staff to help us <input type="checkbox"/> There were sufficient staff and supplies to help us <input type="checkbox"/> Other:	
12. During the last <u>12 months</u> , have you taken any drugs for worm infections or schistosomiasis? (1=Yes, 2=No)	<input type="checkbox"/>
13. Did you sleep under a bednet last night? (1=Yes, 2=No)	<input type="checkbox"/>

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. If No, SKIP to section 12.2.

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 H1 codes*

16. What impact has these health problems had on your life? *Use H2 codes. List up to 3.*

Section 12.2 Current Public Health Events

1. How many different people from outside this household have you interacted with in-person? *By interact, we mean talk, touch, hug, etc. Do not count people you only crossed on the street and had no interaction with.*

Yesterday
In the past 7 days:

2. How many different people have you talked with on the phone or exchanged text messages with?

Yesterday
In the past 7 days:

Read: I would like to remind you that this information is only used for research purposes, and that we will not share this information with anyone.

3. Do you own a mask? (1=Yes, 2=No)

If YES, continue. If NO, skip to X.

4. In the past 7 days, did you wear a mask ... (1=Yes, every time; 2=Yes, some of the time; 3=No; -98=Did not visit in last 7 days)

- i. ... when you went to a market center?
- ii. ... when you attended a religious gathering?
- iii. ... when you used public transport?
- iv. ... when you visited a store in the village?
- v. ... when you visited another household? *We mean, when you reached that household, indoors or while talking to member of that household.*
- vi. ... at work?

5. a. Out of 10 other households in your village, how many do you think wear a mask or face covering... *Prompt for number out of 10.*

- i. ... when they go to a market center 1 - 10
- ii. ... when they attend a religious gathering? 1 - 10
- iii. ... when they use public transport? 1 - 10
- iv. ... when they visit a store in your village? 1 - 10
- v. ... when they visit another household in your village? 1 - 10
- vi. ... at work? 1 - 10

b. Out of 10 other people wearing a face mask in your village, how many do you think wear it correctl (completely covering their mouth and nose)...? *For example, wearing a mask around the neck or chin would be considered incorrect.*

- i. Within the village: 1 - 10
- ii. Outside the village: 1 - 10

6. a. How many members of your household have been tested for COVID-19?
- b. *(if none)* Did anyone in your household try to get tested but was unable to? (1=Yes, 2=No)
- c. Has anyone in this household ever tested positive for COVID-19? (1=Yes, 2=No)

7. Do you know anyone outside this household that has, or has had, COVID-19/coronavirus? *By knowing someone, we mean someone you could identify by name, and that you have interacted with before.* (1=Yes, 2=No) **If YES, continue. If NO skip to section 13.**

- a. Who are these persons? Select all that apply.
- Family members living in this village
 - Family members living in this sublocation, but outside the village
 - Family members living in Siaya county, but outside the sublocation
 - Family members living outside Siaya county
 - Someone from workplace
 - Friends living in this village
 - Friends living in this sublocation, but outside the village
 - Friends living in Siaya county, but outside the sublocation
 - Friends living outside Siaya county
 - Neighbors
 - Other: _____

SECTION 13.1: Redistributive Attitudes

FO NOTE: For this section (13.1), 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.

<p>Possible responses for the following questions are: 1=Completely agree; 2=Agree somewhat; 3=Disagree somewhat; 4=Completely disagree. Do not read: 5=Neutral, -99=DK</p>	
<p>1. The government should take measures to reduce differences in income levels.</p>	<input type="text"/>

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

Possible responses:

1=Agree very strongly with A

2=Agree with A

3=Agree with B

4=Agree very strongly with B

DO NOT READ Option 5 or DK:

5=Agree with neither

-99=DK

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.

Probe: Do you agree very strongly?

3. A: People's incomes should be made more equal,
 B: Income differences are needed as an incentive for individual effort.

Probe: Do you agree very strongly?

4. A: The government should take more responsibility to ensure that everyone is provided for
 B: Individuals should take more responsibility themselves to ensure that everyone is provided for.

Probe: Do you agree very strongly?

5. A: Communities should take more responsibility to ensure that everyone is provided for

B: Individuals should take more responsibility themselves to ensure that everyone is provided for.

Probe: Do you agree very strongly? |__|

6. A: People can only get rich at the expense of others,

B: Wealth can grow so that there is enough for everyone.

Probe: Do you agree very strongly? |__|

7. A: It is most important to guard the health of groups that are especially vulnerable to COVID-19.

B: It is most important to support livelihoods by keeping businesses and schools open despite COVID-19 risks

Probe: Do you agree very strongly? |__|

8. Imagine that someone from outside comes into this community, and wants to do a development project. They give the community the choice between two projects. What do you think is the best thing to do? *Read out options to the respondent and let them choose one.*

1 = discuss together as a community until a decision is reached

2 = allow all community members to have a vote

3 = allow the village authorities to decide |__|

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? **Do not read responses aloud. Simply allow FR to respond and code response according to which category it fits into.**

|__| (1=Ethnicity / Language, 2=Religion, 3=Class / Occupation, 4=Gender, 5=Other (specify): _____)

	Codes	Answer
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 -99=DK	__
3. In general, can you trust members of your tribe?	1=Yes, 2=No, -99=DK	__
4. In general, can you trust people of other tribes?	1=Yes, 2=No, -99=DK	__
5. In general, can you trust people of your church / mosque? If -98, skip to question 7.	1=Yes, 2=No, -99=DK, -98=Doesn't belong to a church / mosque	__
6. In general, can you trust people of other churches / mosques?	1=Yes, 2=No, -99=DK	__
7. In general, can you trust people of your own village?	1=Yes, 2=No, -99=DK	__
8. In general, can you trust people of other villages?	1=Yes, 2=No, -99=DK	__

9. What is your religion or denomination? **Use G11 codes** |__| Other: _____

10. Was your religion / denomination [religion name] at [BASELINE DATE]? |__| Yes / No

a. **(if no)**What religion or denomination were you in [baseline date]? **Use G11 codes** |__| Other: _____

b. **(if no)** Why did you change your religion or denomination? *List up to 3.*

If no religion, 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)

If YES: 12a. Where do you attend church / mosque regularly? *Please select the village in which your place of worship is located:*

If YES: 12b. What is the name of your place of worship? _____

If YES: 13. Did you attend church/ mosque last week? *Select all that apply.* (1=Yes, in person, 2=Yes, remotely, 3=No) | ____ |

14. In the past 30 days, what is the value of cash or goods you donated to your church / mosque? **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.*** (-88=Refuses to answer)

| ____ |

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, -99=DK) | ____ |

If respondent is currently Christian, continue. Otherwise, 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? Would you say always, frequently, occasionally, or never? (1=Always, 2=Frequently, 3=Occasionally, 4=Never, -88=Refuses to answer, -99=DK) | ____ |

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, -88=Refuses to answer, -99=DK)

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, -88=Refuses to answer, -99=DK)

21. Are you saved? (1=Yes, 2=No, -88=Refuses to answer, -99=DK)

22. What is your tribe (or mother tongue)? **Use G10 codes. Female respondents should NOT give the tribe of their husband.**

23. Is your ethnic or tribal origin somewhat important, very important or not very important to your life? **Probe FR to think about this and choose. Try not to use -99=DK.** (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)? **Probe FR to think about this and choose. Try not to use -99=DK.** (1=tribe, 2=nationality)

Section 13.3 Civic and Political Attitudes and Behavior

	1a. In the last 12 months, have you attended any of the following? (1=Yes, 2=No) <i>If YES, continue. If NO, go to next line.</i>	1b. In the last 12 months, how many times have you attended [MEETING TYPE]?	1c. In how many of these meetings did you speak publicly on the topic of the meeting ?
i. Assistant chief or village elder barazas to discuss construction or repair of public facilities			
ii. Any other assistant chief or village elder baraza			
iii. Public consultation meeting for use of ward or constituency development fund, or other county government meeting			
iv. School management committee or parent teacher association meeting, or other school meeting			
v. Other public meeting (specify) _____			

2. Since [BL date / January 2014], has any member of your household held a position of responsibility or leadership within the village?
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.(1=Yes, 2=No, -88=Refuse)
If YES, continue. If NO, go to question 3.

2a. Which household member(s)? *Select all that apply. Use choice list from household roster.* / / /

Loop through selected individuals {

2b. Which position(s)? *Select all that apply.* (1=Assistant chief, 2=Village elder, 3= Miji kumi, 4= Clan Elder, 5=Community health worker, 6=School management committee/parent teacher association, 7=Other (specify)) / /

} End loop.

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?

5. a. Please name the current Deputy President of Kenya for me. *DO NOT READ: Correct answer is WILLIAM RUTO. "RUTO" is ok. DK: -99*

b. Who is the Member of the County Assembly for your ward?

If respondent is outside of Siaya County, record response. Write DK if respondent does not know.

If respondent is living in Siaya County: (DO NOT READ): The correct answer is [MCA name]. (1=Correct, 2=Incorrect, 99=Don't Know)

6. Read: 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. Do you: disagree strongly, disagree a little, agree a little, agree strongly with the following statements? <i>Note: Use scale. Please read out and explain the scale to the respondent. (1=Disagree strongly, 2=Disagree a little, 3=Agree a little, 4=Agree strongly, Do not read: 5=Neutral, -88=Refuse, -99=DK)</i>	
a. People like us don't have any say about what the MCA does	<input type="checkbox"/>
b. MCA's don't care much about what people like us think	<input type="checkbox"/>
c. Sometimes, ward politics and government seem so complicated that people like us can't really understand what's going on	<input type="checkbox"/>
d. It takes too much time and effort to be active in politics and public affairs.	<input type="checkbox"/>
e. I am interested in public affairs.	<input type="checkbox"/>
f. I would like to be more involved in politics and community issues but I am more worried about issues in my own life	<input type="checkbox"/>

7. In the last 12 months, have you participated in any of these activities? (1=Yes, 2=No, -99=DK, -88=Refuse)

a. political rallies or meetings with a politician (in support of a particular candidate or position)	<input type="checkbox"/>
b. demonstrations, mass actions or protests	<input type="checkbox"/>

c. discussions with friends or family about political issues	<input type="checkbox"/>
d. Contacted a government official to ask for help or make a complaint	<input type="checkbox"/>

8. Read: Now I would like to ask you a few questions about the 2017 election. Remember that participation is entirely voluntary and you may refuse to answer any question. We will keep your responses as confidential as possible.

8a. Did you vote in the general election in August 2017? Note we are interested in general election, not presidential runoff election in October 2017 (1=Yes, 2=No, -88=Refuse, -99=DK)

IF NO: 8b. 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;
- 9= Other (specify)

8c. During the last national election in 2017, 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, -99=DK)

If Yes, CONTINUE. If No, SKIP TO question 9.

8d. When did you receive these offers? Select all that apply

- a) In door-to-door collections
- b) During campaign rallies and gatherings
- c) During aspirant visits to the village/local area
- d) During a meeting with the community to which household member was invited
- e) Other, please specify _____

8e. From how many candidates did you or any household member receive an offer of a gift or cash?

LOOP through number of candidates received an offer from {

8f. What was the total monetary value of the gifts and offers you received from the [1st/2nd] candidate that made an offer?
 KSh

8g. Did you vote for this candidate? (1=Yes, 2=No, -88=Refuse, -99=DK)

8h. Did the candidate run for the ODM, another party or as an independent in the general election? (1=ODM, 2=Another party, 3=Independent)

} end of LOOP through

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

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

Read statements aloud. Only one option should be chosen.

- 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 each of the following pairs of statements, tell me which of the following statements is closest to your view about Kenyan politics? Choose Statement A or Statement B.

	Probe: Do you agree very strongly?	
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	<input type="text"/>
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.	2 = Agree with A	<input type="text"/>
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.	3 = Agree with B	<input type="text"/>
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	4 = Agree very strongly with B	<input type="text"/>
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	DO NOT READ Option 5 5 = Agree with neither -99 = Don't know	<input type="text"/>
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		<input type="text"/>

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. FO: Show the respondent scale #4.

- a. The Member of County Assembly in your ward Worst=1 2 3 4 5 6 7 8 9 10=Best
- b. Performance of county government Worst=1 2 3 4 5 6 7 8 9 10=Best
- c. Performance of national government Worst=1 2 3 4 5 6 7 8 9 10=Best

17. **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. Ensure the FR's privacy for the following question.

- a. Have you ever been arrested? (1=Yes, 2=No) **If YES, continue. If NO, skip to next section**
- b. Have you ever been imprisoned? (1=Yes, 2=No)

Section 13.4: Gender Attitudes

FO NOTE: 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:
Codes: 1=Agree, 2=Disagree, -88=Refuse to answer, -99=Don't Know

- 1. The important decisions in the family should be made only by the men of the family
- 2. A wife should tolerate being beaten by her husband in order to keep the family together.
- 3. A husband has the right to beat his wife
- 4. If a woman earns more money than her husband it is almost certain to cause problems
- 5. 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, -88=Refused, -99=DK)
 - a. If she goes out without telling him?
 - b. If she neglects the children?
 - c. If she argues with him?
 - d. If she refuses to have sex with him?
 - e. If she burns the food?

If FR is married / cohabitation, continue. Else skip to next section.

7. Who in your family has a say on the following decisions:
(1=Respondent, 2=Spouse, 3=Resp and spouse jointly, 4=Someone else, -98=Not applicable)
- a. Whether or not to use a method to avoid having children.
 - b. Any decisions about childrens' schooling.
 - c. How children should be disciplined.
 - d. Whether to have another child.
 - e. How much of the household's income to save.

SECTION 14. Mental Health and Well-being

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
- Don't read: -88=Refuse to answer

FO NOTE: 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.

CES-D Scale/Codes	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 Don't read: -88=Refuse to answer	
1. In the past week, I was bothered by things that usually don't bother me		<input type="text"/>
2. In the past week, I had a problem in concentration on what I was doing		<input type="text"/>
3. In the past week, I felt depressed and troubled in my mind		<input type="text"/>
4. In the past week, I felt that everything that I did took up all my energy		<input type="text"/>
5. In the past week, I felt hopeful about the future		<input type="text"/>
6. In the past week, I felt afraid		<input type="text"/>
7. In the past week, I had difficulty in sleeping peacefully		<input type="text"/>
8. In the past week, I was happy		<input type="text"/>
9. In the past week, I felt lonely		<input type="text"/>
10. In the past week, I lacked the motivation to do anything		<input type="text"/>

Read: Now I will ask some more questions about your feelings and opinions. Don't read: -88=Refuse to answer

- 11. Taking all things together, would you say you are "very happy" (1), "quite happy" (2), "not very happy" (3), or "not at all happy" (4)?
- 12. 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)

Perceived Stress Scale

Read: "Next, I would like to ask you about your feelings and thoughts during the last month."

Refer to the following scale for the rest of this section.

1= Never

2 = Almost never

3 = Sometimes

4 = Fairly often

5 = Very often

-88 = Refuse to answer

- 13. In the last 30 days, how often have you felt that you were unable to control the important things in your life?
- 14. In the last 30 days, how often have you felt certain in your ability to overcome your own personal problems?
- 15. In the last 30 days, how often have you felt that things were going your way?
- 16. In the last 30 days, how often did you feel that the problems were too much for you to manage?

SECTION 15.1 Cantril Ladder

FO Note: 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.

Take out the ladder and show to the respondent.

Read: 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?

Note: Ask the respondent to POINT to the rung he/she chooses. Record the number of this rung, counting carefully from the bottom rung (number 1). Note that the top rung is number 10.

1. Where would you place yourself on this ladder? |_____| (number from 1 to 10)
DO NOT READ THE FOLLOWING OPTIONS: -99=DK, -88=Refuse, -98=Don't understand

SECTION 15.2 Hedonic Wellbeing Questions from Gallup World Poll

Read: Now, please think about yesterday, from the morning until the end of the day. Think about where you were, what you were doing, who you were with, and how you felt.

1. Did you smile or laugh a lot yesterday? |___| (1=Yes, 2=No, -99=Don't know, -88=Refuse to answer)
2. Did you experience the following feelings during a lot of the day yesterday? (1=Yes, 2=No, -99=Don't know, -88=Refuse to answer)
- 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.

		Ask for everyone		Ask for (A) and (B) If 1 or 2= 1, 2 or 3	Ask for (A) and (B) If 3 = 1:			Ask for everyone if 2 = 1 or 2	Ask for everyone if 2 = 3
		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 any of the following? <i>Include both successful and</i>	2. In the past 12 months, have you or members of your household received any assistanc e in cash, in kind, or in form of a job, from any of the following? Include support you received	3. Did you ask or receive assistance from anyone outside your household in making your REQUEST for or OBTAINING any assistance from ... ?? (1 =Yes 2 =No -88 = Refuse to answer -99 = Do not know)	4. Who did you ask / 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			7. What was the total monetary value of the cash or in-kind assistance you received from ... ? <i>Please estimate if you are unsure. If assistance from more than one program, add monetary</i>	8. Was this assistance received from in form of a job for self or another household member? (1=Self, 2=Another household member 3=Both self and household member)

		<i>unsuccessful requests.</i> <i>(1 = in cash 2 = in kind, not including a job 3 = a job 4 = Did not ask/receive this)</i>	<i>without asking for it.</i> <i>(1 = in cash 2 = in kind, not including a job 3 = a job 4 = Did not ask/receive this)</i>		<i>household is part of</i> <i>7 = Family member outside the household</i> <i>-77 = other local leader(specify))</i>			<i>value to get total.</i>	
(A)	A government program Examples include: secondary school bursary programmes, government extension services, orphan and vulnerable children grants, pensions.	_	_	_	_ / _ / _ Other: _____			_ Currency if NOT Ksh: _	_

(B)	An NGO, church/mosque, CBO or other assistance not from the government? Examples include receiving food, medication, bednets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> Other: _____			<input type="checkbox"/> Currency if NOT Ksh: <input type="checkbox"/>	<input type="checkbox"/>
					For (C) and (D), if 1 = 1, 2 or 3	For (C) and (D), if 1 = 1, 2 or 3	For (C) and (D), if 2 = 1, 2 or 3		
					4. Which of the following did you request support from? <i>Select all that apply, even if the request was unsuccessful</i>	4a. How many times did you ask for support from ...? <i>Add up the number of requests if reached out to multiple people</i>	6. Which of the following did you receive support from? <i>Select all that apply, even if support was received without requesting</i>		

(C)	<p>the current MCA or other politician? Other politicians include MP, governor, senator</p>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> The current MCA <input type="checkbox"/> The current MP <input type="checkbox"/> The current governor <input type="checkbox"/> Other current politician	<input type="checkbox"/>	<input type="checkbox"/> The current MCA <input type="checkbox"/> The current MP <input type="checkbox"/> The current governor <input type="checkbox"/> Other current politician	<input type="checkbox"/> Currency if NOT Ksh: <input type="checkbox"/>	<input type="checkbox"/>
(D)	<p>any other prominent local person? Include any aspirants for any public office who campaigned during the 2017 election or is preparing to campaign for the 2022 election, or their agents or intermediaries.</p>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> A previous politician (such as MCA, MP, Governor) <input type="checkbox"/> An aspirant in the 2022 election <input type="checkbox"/> A successful local business man/woman <input type="checkbox"/> A local religious/spiritual leader <input type="checkbox"/> A local community leader, such as a Village Elder or group leader <input type="checkbox"/> Any other prominent local person	<input type="checkbox"/>	<input type="checkbox"/> A previous politician (such as MCA, MP, Governor) <input type="checkbox"/> An aspirant in the 2022 election <input type="checkbox"/> A successful local business man/woman <input type="checkbox"/> A local religious/spiritual leader <input type="checkbox"/> A local community leader, such as a Village Elder or group leader <input type="checkbox"/> Any other	<input type="checkbox"/> Currency if NOT Ksh: <input type="checkbox"/>	<input type="checkbox"/>

							prominent local person		
--	--	--	--	--	--	--	---------------------------	--	--

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

Please probe well on this next question. We want ALL transfers, not just gifts.

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 question 9

For the next set of questions, please group together transfers that come from the same sender (or individuals in the same household) and are meant for the same receiver, in one "transfer relationship." If there are more than 5 transfer relationships, list only the ones that provided the largest amount of money or goods.

- 1a. In the past 12 months, from how many transfer relationships did your household receive a gift / assistance of money or goods?

Read: Consider the [1st / 2nd / 3rd / ...] relationship in which your household received a gift of money or goods from someone outside the household in the past 12 months. **Fill in the table by proceeding across for question 2 and then down each column.**

	Transfer relation #1	Transfer relation #2	Transfer relation #3	Transfer relation #4	Transfer relation #5
2. Whose household did you receive a gift from? Use network choice codes. If not one of the network choices already captured, continue. Otherwise go to question 4.	<input type="checkbox"/>				
3a. What is the full name of the sender? <i>Note: If unable to give a first name, respondent may provide a common name / nickname.</i>	_____	_____	_____	_____	_____

3b. Where does [sender name] live? Use network location choice list. If this village, go to question 3d. If Siaya County, proceed to question 3c. If neither, go to question 3e.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3c. Which village does this [sender name] live in?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3d. What is the household ID of [sender name] from our village census?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3e. How do you know [sender name]? Use G4 codes 3f. What is [sender name]'s gender? 3g. How old is [sender name]? If don't know, please estimate. (-99=DK) 3h. Has [sender name] completed primary school? If NO, go to question 3k 3i. Has [sender name] completed secondary school?? If NO, go to question 3k 3j. Has [sender name] completed college/university? 3k. Does [sender name] own: <input type="checkbox"/> a mobile phone? <input type="checkbox"/> a television? <input type="checkbox"/> a radio?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Was it money or goods that your household received? (1=Money,2=Goods,3=Both) If MONEY, ask questions 4a – 4b. If GOODS, ask questions 4c – 4d. If BOTH, ask questions 4a – 4d. Do not include transport or Mpesa fees. 4a. What was the amount of the most recent <u>cash</u> transfer? (-99=DK) 4b. How were the funds transferred? Use T2 codes 4c. What was the value of most recent transfer of <u>goods</u> ? 4d. What goods were given to you? List. 4e. List currency of responses if not Ksh. Use G12 codes.	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____ e. <input type="checkbox"/> Other: ____	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____ e. <input type="checkbox"/> Other: _	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____ e. <input type="checkbox"/> Other: _	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____ e. <input type="checkbox"/> Other: _	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____ e. <input type="checkbox"/> Other: _
5. What was the main use of the most recent transfer of <u>money or goods</u> ? List all that apply, up to 3 selections. Use T1 codes.	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____
6a. What was the <u>total value</u> of all transfers in this relationship during the last 12 months? (If goods were sent, think how much it would cost to buy them.) Do not include transport or Mpesa fees.	a.Ksh <input type="checkbox"/> b. <input type="checkbox"/> Other: __	a.Ksh <input type="checkbox"/> b. <input type="checkbox"/> Other: __	a.Ksh <input type="checkbox"/> b. <input type="checkbox"/> Other: __	a.Ksh <input type="checkbox"/> b. <input type="checkbox"/> Other: __	a.Ksh <input type="checkbox"/> b. <input type="checkbox"/> Other: __

6b. List currency if not Ksh. Use G12 codes.					
7. To your knowledge, have you or anyone in your household <u>ever</u> given this person a transfer in the past? (1=Yes, 2=No) Only use -99=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.	<input type="checkbox"/>				

If ANOTHER TRANSFER was entered, return to question 3 and fill in the next column. If NOT, continue.

8. BESIDES THOSE ALREADY MENTIONED, did anyone in this household receive any OTHER gift / assistance of money or goods from someone outside the household in the last 12 months? **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.** Yes / No

(if Yes) 8a. What was the total value of ALL OTHER other gifts / assistance members of your household received in the last 12 months, COMBINED?
 KSh

Transfers Sent

FO: Please probe well on this question. We want ALL transfers, not just gifts.

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 question 10. If NO, skip to question 17.**

For the next set of questions, please group together transfers that come from the same sender and are meant for the same receiver (or individuals in the same household), in one "transfer relationship." If there are more than 5 transfer relationships, list only the ones that provided the largest amount of money or goods.

Read: Consider the [1st / 2nd / 3rd / ...] relationship in which your household sent a gift of money or goods to someone outside the household in the past 12 months. **Fill in the table by proceeding across for Question 11 and then down each column.**

	Transfer relation #1	Transfer relation #2	Transfer relation #3	Transfer relation #4	Transfer relation #5
10. Whose household did you send a gift to? Use network choice codes. Also use codes from the sending households just captured above! If not one of the network choices already captured, continue. Otherwise go to question 13.	<input type="checkbox"/>				

11a. What is the first name of the receiver? <i>Note: If unable to give a first name, respondent may provide a common name / nickname.</i>	_____	_____	_____	_____	_____
11b. Does [receiver name] live in this village? If yes, SKIP to question 11e. If no, continue	<input type="checkbox"/>				
11c. Where does [receiver name] live? Use network location choice list. If Siaya County, proceed to question 11d. If not, go to question 11f.	<input type="checkbox"/>				
11d. Which village does this [receiver name] live in?	<input type="checkbox"/>				
11e. What is the household ID of [receiver name] from our village census?	<input type="checkbox"/>				
11g. How do you know [sender name]? Use G4 codes 11h. What is [sender name]'s gender? 11i. How old is [sender name]? If don't know, please estimate. (-99=DK) 11j. Has [sender name] completed primary school? If NO, go to question 11m 11k. Has [sender name] completed secondary school?? If NO, go to question 11m 11l. Has [sender name] completed college/university? 11m. Show on one screen: Does [sender name] own: <input type="checkbox"/> a mobile phone? <input type="checkbox"/> a television? <input type="checkbox"/> a radio?	<input type="checkbox"/>				
12. Was it money or goods that your household sent? (1=Money, 2=Goods, 3=Both) If MONEY, ask questions 11a – 11b. If GOODS, ask questions 11c – 11d. If BOTH, ask questions 11a – 11d. Do not include here transport or Mpesa fees. 11a. What was the amount of the most recent <u>cash</u> transfer? (88=N/A)	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____	<input type="checkbox"/> a. KSh: __ b. <input type="checkbox"/> <input type="checkbox"/> c. KSh: __ d. _____

11b. What was the value of most recent transfer of <u>goods</u> ?	e. <input type="text"/>				
11c. What were the goods that you sent? List all.	Other: <input type="text"/>				
11d. List currency if not Ksh. Use G10 codes.					
14a. What was the <u>total value</u> of all transfers in this relationship during the last 12 months? (if goods were sent, think how much it would cost to buy them). Do not include here transport or MPESA fees.	a.Ksh <input type="text"/> b. <input type="text"/> Other: <input type="text"/>				
14b. List currency if not Ksh. Use G12 codes.					
15. Have you ever received a transfer from this person in the past? (1=Yes, 2=No)	<input type="text"/>				

If ANOTHER TRANSFER was entered, return to question 12 and fill in the next column. If NOT, continue.

16. BESIDES THOSE ALREADY MENTIONED, did anyone in this household give or send money or goods to someone outside the household in the last 12 months?? **Do not include loans or interest payments, or goods that other households purchased from this household.** Yes / No

(if Yes) 16a. What was the total value of ALL OTHER other gifts / assistance members of your household sent in the last 12 months, COMBINED?
 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. If NO, skip to question 18.

17a. How many meals have you shared with another household? (-99=DK)

17b. Whom did you share these meals with? *Select all that apply. Use network choice list.* / /

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. If NO, skip to next section.

18a. How many meals have other households shared with your household? (-99=DK)

18b. Who shared these meals with you? *Select all that apply. Use network choice list.* / /

Section 18: Private Behavior Module

Only proceed if FO gender = female and FR gender = female and FR is married/cohabitating.

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. In the last 6 months, have any of your partners ever insulted you, made you feel bad about yourself, or said or done something to humiliate you in front of others?

(1=Never, 2=Sometimes, 3=Often, -88=Refuse) |____|

2. In the last 6 months, have any of your partners ever threatened to harm you or someone else close to you?

(1=Never, 2=Sometimes, 3=Often, -88=Refuse) |____|

3. During the last six months, did your husband/partner ever hit, slapped, kicked, or physically hurt you?

(1=Never, 2=Sometimes, 3=Often, -88=Refuse) |____|

4. During the last six months, did your husband/partner ever physically force you to have sexual intercourse with him even when you did not want to? (1=Yes, 2=No, -88=Refuse) |____|

5. During the last six months, did your husband/partner ever force you to perform any sexual acts you did not want to? (1=Never, 2=Sometimes, 3=Often, -88=Refuse) |____|

6. During the last six months, did your husband/partner ever beat any of the children under the age of 12 living in this household? (1=Never, 2=Sometimes, 3=Often, -88=Refuse) |____|

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. If NO, skip to question 1.

B. Why did the respondent terminate the survey early? _____

1 = Temporary stop only – Wishes to continue survey at a later time. **See “Temporary Stop Instructions” below.**

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: (24 hr clock) :

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

2a. 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)

3a. **If YES:** What is their relationship to the respondent? **Use G4 codes, list up to 4.** Other: _____

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)

4a. **If SOMEWHAT or NOT CONFIDENT:** 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 question 7.

6a. Are you taking GPS coordinates within SurveyCTO or from another application?

SurveyCTO

Other Application

Cannot collect GPS coordinates **If this option, skip to question 7**

6b. **(if SurveyCTO):** 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.

6c. **(if other application):** Ensure that you are at the doorstep to the house or business for best accuracy. Please try to obtain an accuracy of 8 meters. Enter ALL DIGITS provided by your application. DO NOT ROUND.

(i) Latitude:

(ii) Longitude:

(iii) Elevation:

(iv) Accuracy:

6d. 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. (if cannot collect GPS): Why are you unable to record GPS information for this household?

Interview conducted via phone

Interview conducted at a different location

Technical issues with GPS device

Other: _____

Appendix B: Relevant COVID-19 Phone Survey Questions

Here we include the relevant section (Section 3) the COVID-19 phone survey for outcome 4.5.2.1 - Number of households visited during COVID-19 pandemic.

Section 3: Travel Patterns & Interactions

1. In the past 14 days, which ADULT household members visited a market center/village for purchasing goods? *Tick all that apply*

- None
- FR
- HH member 2
- HH member 3
- ...

2. a. **(if FR selected)** How many times have you personally visited a market center or a village for purchasing or selling goods or services... *Count each visit separately. Include trips to a shop WITHIN the same village.*

- In the past 7 days?
- In the 7 days before that (between 14 to 7 days ago)?

b. **(if ANY selected)** Which villages / market center(s) did you, or other adult members of the household, visit in the past 14 days? *Options according to location of current residence.*

- | | |
|--|--|
| <input type="checkbox"/> This village | <input type="checkbox"/> Market center 1 |
| <input type="checkbox"/> Nearby village 1 | <input type="checkbox"/> Market center 2 |
| <input type="checkbox"/> Nearby village 2 | <input type="checkbox"/> Market center 3 |
| <input type="checkbox"/> Nearby village 3 | <input type="checkbox"/> Other market center |
| <input type="checkbox"/> Nearby village 4 | <input type="checkbox"/> None of the above |
| <input type="checkbox"/> Nearby village 5 | <input type="checkbox"/> Do not know |
| <input type="checkbox"/> Other village in Siaya County | |

There is no question 3.

4. a. In the past 14 days, has any member of your household attended religious services in person?

- Yes, this week (in the past 7 days)
- Yes, last week (between 14 to 7 days ago)
- No

b. **(if any selected)** Which denomination(s)? *Select all that apply.* **Use g11 codes**

c. **(if any selected)** In which villages did you, or other adult members of your household, attend these services in the past 14 days? *Options according to location of current residence.*

- Own village
- Village 1
- Village 2
- Village 3

Other: _____

5. a. In the past 14 days, which ADULTS (>=18) in your household traveled to (and returned from) another town or city?

- None
 FR
 HH member 2
 HH member 3
 ...

b. (if any) Which city/town(s)? _____

6. In the past 14 days, did anyone from your household visit someone else's house for more than 15 minutes? *E.g. joint meals, working together, etc.* Yes / No

6a. (if yes) How many other households did you, or members of your household, visit in the past 14 days?

- Within the village
 Outside the village, but within the sublocation
 Outside the sublocation

6b. (if yes) Whose house did you visit? **FO Note:** *There is no right or wrong number here, let respondents name as many as they think of.*

- a. Name 1: _____
b. Name 2: _____
c. Name 3: _____
d.

6c. **Loop through the names above**

		Relation #1	Relation #2	Relation #3
i. Where does [name] live? If this village, go to question iii. If other village in Siaya County, proceed to question ii. If outside Siaya County, go to the next network.	Use network location choice list	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Which village does this [name] live in?	Use village codes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. What is the household ID from our census data of [name]?	-99=DK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Please confirm the details of your selection. If incorrect, please go back and search for the proper household.	(1=Yes, 2=No, -99=DK)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. In the past 14 days, did anyone from outside this household visit your house for more than 15 minutes? *E.g. joint meals, working together, etc.* Yes / No

7a. **(if yes)** How many people visited your household in the past 14 days?

from within the village

from outside the village, but within the sublocation

from outside the sublocation

7b. **(if yes)** Who visited this house? **FO Note:** *There is no right or wrong number here, let respondents name as many as they think of.*

a. *Select one of the households from 6b.*

b. *Other household 1:* _____

c. *Other household 2:* _____

d. *Other household 3:* _____

e.

7c. **Loop through the names above if “Other household”**

		Relation #1	Relation #2	Relation #3
i. Where does [name] live? <i>If this village, go to question iii. If other village in Siaya County, proceed to question ii. If outside Siaya County, go to the next network.</i>	Use network location choice list	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Which village does this [name] live in?	Use village codes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. What is the household ID from our census data of [name]?	-99=DK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Please confirm the details of your selection. <i>If incorrect, please go back and search for the proper household.</i>	(1=Yes, 2=No, -99=DK)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Taken together, how many people outside this household have you interacted with in-person? *By interact, we mean talk, touch, hug, etc. Do not count people you only crossed on the street and had no interaction with.*

Today

In the past 7 days:

In the 7 days before that (between 14 to 7 days ago):

9. How many people have you talked with on the phone or exchanged text messages with?

Today

In the past 7 days:

In the 7 days before that (between 14 to 7 days ago):

If school-aged children in the household, continue. Else SKIP to section 4.

Read: Now we'd like to ask about the [NUMBER OF SCHOOL-AGED CHILDREN] school-aged children in this household.

10. Are these children usually going to public school, private school or both public and private school? *Do not read.*

Don't attend school usually

Public

Private

Both

Don't know

Refused

11. How many of these [NUMBER OF SCHOOL-AGED CHILDREN] school-aged children attended school in the past 14 days?

11a. **(if ANY)** How many days, in total, did those [NUMBER OF SCHOOL ATTENDING KIDS] children attend school in the past 14 days? *Sum across the total school days of all children combined.*

11b. **(if ANY)** Where did those children attend school? *Select all that apply. Use network location choices.*

This village

Village 1

Village 2

Village 3

12. **(If any not attending school)** Where are your children that are not going to school staying during the day? *Select all that apply.*

(1=At home with a parent, 2=At home with another adult relative/friend, 3=At home by themselves, 4=Outside the home with a friend/relative, 5=Coming with family member to work, 6=Daycare / other childcare, 7=Other (specify) _____)

Ask about a random school aged child (5 or older and under 18) in the household. Read:

You said you have [NUMBER OF SCHOOL-AGED CHILDREN] school aged children. Among those [NUMBER OF SCHOOL-AGED CHILDREN], I'd now like to ask you about the [1st, 2nd, 3rd] born child.

13. What is this child's name? Age:

14. Now I'd like you to think about **[child]**. Right now, over the last 15 minutes, what is **[child]** doing? *If more than one, select the main activity.*

(1=Sleeping, 2=Eating, 3=Playing outside, within compound/homestead, 4=Playing outside, outside compound/homestead, 5=Playing games on smartphone/tablet/computer, 6=Other playing inside, 7=Watching TV, 8=Reading/homework/schoolwork, 9=Household chores, 10 = Resting/Sitting, 11 = Not at Home / Don't Know, 12 = Doing pastoral/agricultural activity or helping a parent with work, -77=Other (specify))

|___| Other: _____

15. In the last 24 hours, has **[child]** done any learning-related activities? *Select all that apply.*

- a. None
- b. Went to school
- c. Use self-prepared materials
- d. Homework / teaching materials prepared / assigned by the school
- e. E-learning modules prepared by the school
- f. Free online / mobile educational videos
- g. Educational radio programs
- h. Reading school textbooks
- i. Reading for pleasure
- j. Other: _____
