Impact Evaluation Report

Benchmarking a Child Nutrition Program Against Cash: Experimental Evidence from an Evaluation in Rwanda


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Abstract

We present the results of a study designed to ‘benchmark’ a major USAID-funded child malnutrition program against what would have occurred if the cost of the program had simply been disbursed directly to beneficiaries to spend as they see fit. Using a three-armed trial from 248 villages in Rwanda, the study measures impacts on households containing poor or malnourished children, or pregnant or lactating women, as well as the broader population of study villages. We find that the bundled health program delivers benefits in an outcome directly targeted by specific sub-components of the intervention (savings), but does not improve dietary diversity, child anthropometrics, or anemia within the year of the study. A cost-equivalent cash transfer boosts productive asset investment and allows households to pay down debt. The bundled program is significantly better in cost-equivalent terms at generating savings and worse for debt reduction. A much larger cash transfer of more than $500 per household improves a wide range of consumption measures including dietary diversity, as well as higher savings, assets, and housing values. Only the large cash transfer shows evidence of moving child outcomes, with modest effects on anthropometrics (significant at or just below the 10% level). The results indicate that programs targeted towards driving specific outcomes can do so at lower cost than cash, but large cash transfers drive substantial benefits across a wide range of impacts, including many of those targeted by the more tailored program.

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Executive Summary

Purpose and Background

This document reports the results from “Benchmarking a Child Nutrition Program Against Cash: Experimental Evidence from Rwanda”, a Development Impact Lab evaluation conducted by Craig McIntosh and Andrew Zeitlin. The evaluation was funded and supported by USAID’s Development Innovation Ventures and the USAID Rwanda Mission, and was designed to ‘benchmark’ a major USAID-funded child malnutrition program against what would have occurred if the cost of the program had simply been disbursed directly to beneficiaries to spend as they see fit. The study evaluated the relative cost-effectiveness of alternative programs to improve the nutritional status of vulnerable households. In order to do this, the research team pursued a cluster-randomized trial across 248 Rwandan villages to understand how a ‘standard’ package of nutritional, informational, and savings interventions compares not only to an experimental control group but to an additional arm that receives household grants (i.e. unconditional household grants) of equal cost to the donor—a cash benchmark.

The first 1,000 days of life comprise a critical period of physical and cognitive development. Children who experience normal physical growth and development during this period complete more schooling, have better cognitive ability, and earn higher wages as adults. On the other hand, inadequate nutrition during this period can cause stunting and contribute to long-term developmental consequences that affect future productivity and well-being. In many, particularly rural, areas of low-income countries, many children do not receive adequate nutrition, and diarrheal disease from unsafe water and inadequate hygiene is common. According to UNICEF, nearly half of all deaths in children under 5 are attributable to undernutrition, translating into the loss of about 3 million young lives a year. Rwanda has seen improvements in child nutrition in recent years, but significant challenges remain: 37 percent of children are anemic and 38 percent of children under age 5 are stunted, according to a 2014-2015 national report. Malnutrition rates are much higher in rural areas than in urban areas. To combat these challenges, the Government of Rwanda set ambitious targets for reducing malnutrition among children and women of childbearing age by 2018.

But what is the most effective and scalable way to address these challenges? Existing standards of practice suggest that intensive multi-faceted programming can be effective by addressing multiple challenges at once, on the supply and demand side, with nutrition and water, sanitation, and hygiene (WASH) interventions. Another possible way may be through household grants. Recent research has found that providing household grants to the poor, without conditions on how the money can be spent, can have important welfare benefits for recipients, including significant increases in income, assets, psychological wellbeing, and women’s empowerment, and overhead on household grants is relatively low. However, little research exists on the relative impact and cost-effectiveness of unconditional household grants compared to the standard approach of offering services, goods and/or training, especially in improving nutrition and health outcomes among vulnerable populations. This study set household grants as a “benchmark” for a nutrition and WASH program in Rwanda and was designed to provide evidence on the relative cost-effectiveness of these approaches. The purpose of this evaluation is

1 This work was supported by the Development Impact Lab (USAID Cooperative Agreement AID-OAA-A-13-00002), part of the USAID Higher Education Solutions Network. The Development Impact Lab was launched at the University of California, Berkeley in 2012 with support from the Global Development Lab within USAID with the explicit goal of better harnessing the ingenuity and expertise in universities to advance international development.
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to provide rigorous information to USAID staff to allow them to improve the cost-effectiveness of future programming.

The Integrated Nutrition and WASH program evaluated in this report, Gikuriro—meaning ‘well-growing child’ in Kinyarwanda—is an integrated nutrition and WASH program implemented over five years (with the majority of program benefits rolled out in the first year), administered by Catholic Relief Services, in consortium with the Netherlands Development Organization, SNV, and funded by USAID.4 The program aims to promote better nutrition and health in communities through a variety of behavior change activities, including village nutrition schools, community health clubs, growth monitoring and promotion by trained community health workers, and access to improved latrines and hand-washing facilities. In addition, it aims to build livelihoods through Farmer Field Schools and the distribution of seeds and livestock, as well as Savings and Internal Lending Communities. Finally it provides nutrition--and WASH--related capacity development and training to Government of Rwanda district employees and health workers.

The unconditional household grants program evaluated in this report was implemented by GiveDirectly. GiveDirectly delivers grants to eligible households via mobile money, typically with no conditions on how the money can be spent. In this case, some households received a household grant sized to the anticipated cost of the Gikuriro program, which was substantially lower than the transfer size used by GiveDirectly in other programs. Other households received a larger transfer, which was sized to be as cost-effective as possible given the costs of administering household grants. The household grants were funded by USAID and Google.org.5 Because of the nutritional focus of the Gikuriro intervention, GiveDirectly incorporated a ‘nudge’ into the way the program was introduced, providing recipients of the transfers with a low-cost flyer with information on infant nutrition and its importance.

Both programs were administered to nutritionally vulnerable households, specifically to families with at least one child under five who was malnourished (determined using the Rwandan Ministry of Health standards for malnutrition), and to poor households with children or pregnant or nursing mothers.

Evaluation Questions and Methods

The principle investigators worked with Innovations for Poverty Action - Rwanda to conduct a randomized evaluation of the GiveDirectly household grants and Gikuriro WASH program described above. The research team designed the evaluation to answer the question of how cost effective each program is in addressing five main outcomes of interest to USAID:

1. household dietary diversity
2. child and maternal anemia
3. child growth (height-for-age, weight-for-age, and mid-upper arm circumference)
4. value of household wealth (not including land), and
5. household consumption.

4 This program was supported through Cooperative Agreement No. AID-696-A-16-00001, with a performance period of Nov 10, 2015 – November 9, 2020. The implementing partner of this award was Catholic Relief Services. The program, which only a subset of which was evaluated, had a budget of $19,000,001.

5 The GiveDirectly program was supported through Cooperative Agreement No. AID-696-F-15-00001, with a performance period of Aug 13, 2015 to the submission of the final milestone. The program had a budget of $1,998,453 of from USAID.
Two hundred and forty-eight villages were randomly assigned to one of three groups:

1. Gikuriro group: Eligible households in these 74 villages received the full Gikuriro Program.

2. Household grants group: Eligible households in these villages received unconditional household grants via mobile money. Within this group of 100 villages, researchers further randomly assigned villages to four groups. Three groups (of 22 villages each) either received transfers that cost USAID $66, $111 or $145 (after administrative costs, beneficiaries received $41, $84, or $117). The 34 remaining villages were assigned to a ‘large’ GiveDirectly transfer, costing USAID $567 ($532 received by beneficiaries). (For reference, average Gross National Income in Rwanda is about $700.) While the exact cost of Gikuriro ($142) was not known prior to implementation, this Experimental allocation of different cash amounts enabled researchers to use regression adjustment of costs after the fact to make an exact cost-equivalent comparison of impacts.

3. Comparison group: Eligible households in these villages received neither intervention during the study period. (74 villages) In addition to the main outcomes described above, researchers also measured impacts on borrowing and savings, fertility, health knowledge, sanitation practices, diseases and mortality, household assets, and quality of Housing.

The study timeline was 13 months long, from Aug. 2016-Sept. 2017. GiveDirectly began implementation of the household grants shortly after baseline, and at endline individuals in that group had experienced about 12 months of that program. The nutrition and WASH program was rolled out more slowly in the first months; in that group, households typically experienced 8-9 months of full implementation during the study period. Baseline and endline survey data on the outcomes of interest were then analyzed to answer the research question of how cost-equivalent household grants compare to this integrated WASH and nutrition program in impacting the USAID outcomes of interest.

Findings

Overall, after approximately one year, neither Gikuriro nor the cost-equivalent household grant had an impact on any of the primary outcomes (child growth, household dietary diversity, maternal or child anemia, household consumption, or wealth) within the period of the study. Gikuriro did have a positive impact on savings among eligibles, a secondary outcome, and cost-equivalent cash had a positive impact on productive assets and consumption assets, also secondary outcomes. The much larger household grant led to improvements in consumption, dietary diversity, height-for-age, child mortality, savings, assets and house values. Impacts on the primary outcomes of interest are described below.

- **Child Growth**: Neither Gikuriro or the cost-equivalent household grant impacted child growth outcomes (height-for-age, weight-for-age, or mid-upper arm circumference). The large household grant led to a small increase in height-for-age. Marginally statistically significant improvements in weight-for-age and mid-upper arm circumference were also detected among the large household grant group. All of these anthropometric impacts were small in absolute magnitude (~0.1 standard deviation).

- **Dietary Diversity**: Neither Gikuriro or the cost-equivalent transfer impacted dietary diversity. The large transfer increased dietary diversity (0.52 food groups increase).
• **Maternal and Child Anemia:** None of the interventions affected child or maternal anemia.

• **Consumption:** Neither Gikuriro or the cost-equivalent transfer impacted consumption. The large transfer increased consumption by 32 percent.

• **Wealth:** None of the interventions impacted household wealth.

The study also found a number of secondary outcome findings. These included:

• **Savings:** The nutrition and WASH program led to a 109-percent increase in savings (consistent with the creation of savings groups). The large transfer increased savings by 60%.

• **Productive Assets:** Recipients of the cost-equivalent household grant had a 30 percent increase in the value of productive assets, while the large household grant recipients had a 76 percent increase in the value of productive assets.

• **Consumption Assets:** The cost-equivalent household grant led to a 40 percent increase in the value of consumption assets, while the large household grant led to a 92 percent increase in value of consumption assets.

• **Debt:** Recipients of the cost-equivalent household grants used some funds to pay down debt; households reduced debt by 73 percent.

• **Child Mortality:** The large household grant led to a 70 percent decrease in child mortality (1 percentage point).

• **House value:** The large household grant led to a 20 percent increase in house value.

None of the programs were found to impact any of the following secondary outcomes among eligible households:

• Births in facilities
• Diarrheal disease or disease burden
• Health knowledge
• House quality
• Live births
• Pregnancy rates
• Sanitation practices

When comparing the Gikuriro program recipients with the recipients of the cost-equivalent program (rather than to the comparison group), there were significant differences in the use of savings and borrowing; when given free choice, the individuals in the cash group paid down debt, while the nutrition and WASH program induced households to save more (a focus of the savings groups). The cost-equivalent cash was significantly more effective at driving the stock of consumption assets and productive assets.

In the villages where some individuals received large household grants there was a small reduction in savings and an increase in vaccination rates overall (not only among beneficiaries). Gikuriro improved health knowledge in the overall village population, but not among eligible households. All three interventions improved village-level vaccination rates.
Conclusions

These results add nuance to the body of evidence on household grants and on programs aimed at improving child health, and also contribute some of the first rigorous results on how cash compares to standard development programming. First, the findings suggest when a program targets its interventions at a certain set of behaviors, it can, at relatively low cost, shift key indicators tied to these behaviors (the strong impact of Gikuriro’s savings groups). If such a program is built on a solid theory of change connecting outcomes such as savings to long-term outcomes, this can be a well-justified use of development assistance. Second, it supports the notion that the size of a cash grant matters. While cost-equivalent cash had an impact on some economic outcomes, it was transformative when the transfer amount rose. The large household grant even delivered benefits on outcomes specifically targeted by the other program. In addition, these results are in line with recent evidence suggesting that WASH programs, which are common through the developing world, are less effective at improving child growth than observational studies have suggested. Finally, the results contribute to a growing body of evidence suggesting that large household grants can lead to rapid improvements in diet and children’s physical growth. Particularly in places where families’ inability to afford a nutritious diet is a major factor in malnutrition, unconditional household grants may play a quick and effective role in improving children’s nutritional status during a critical window of development.
Benchmarking a Child Nutrition Program against Cash: Experimental Evidence from Rwanda*

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Abstract

We present the results of a study designed to ‘benchmark’ a major USAID-funded child malnutrition program against what would have occurred if the cost of the program had simply been disbursed directly to beneficiaries to spend as they see fit. Using a three-armed trial from 248 villages in Rwanda, the study measures impacts on households containing poor or underweight children, or pregnant or lactating women, as well as the broader population of study villages. We find that the bundled health program delivers benefits in an outcome directly targeted by specific sub-components of the intervention (savings), but does not improve household dietary diversity, child anthropometrics, or anemia within the year of the study. A cost-equivalent cash transfer boosts productive asset investment and allows households to pay down debt. The bundled program is significantly better in cost-equivalent terms at generating savings and worse for debt reduction, while cost-equivalent cash drives more asset investment. A much larger cash transfer of more than $500 per household improves a wide range of consumption measures including dietary diversity, as well as savings, assets, and housing values. Only the large cash transfer shows evidence of moving child outcomes, with significant but modest improvements in child height-for-age, weight-for-age, and mid upper-arm circumference (about 0.1 SD). The results indicate that programs targeted towards driving specific outcomes can do so at lower cost than cash, but large cash transfers drive substantial benefits across a wide range of impacts, including many of those targeted by the more tailored program.

Keywords: Experimental Design, Cash Transfers, Malnutrition

JEL Codes: O12, C93, I15

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1 Introduction

This study experimentally evaluates the relative cost-effectiveness of alternative programs to improve the nutritional status of vulnerable households. We pursue a cluster-randomized trial across 248 Rwandan villages to understand how a ‘standard’ package of nutritional, informational, and savings interventions compares not only to an experimental control group but to an additional arm that receives household grants of equal cost to the donor—a cash benchmark. The study follows households with children under the age of five or women of reproductive age, with an emphasis on the 1,000 day window of opportunity from pregnancy until a child’s second birthday (Currie and Almond, 2011). The core program is called Gikuriro, which means ‘well-growing child’ in Kinyarwanda; it follows USAID’s strategy on multi-dimensional approaches to malnutrition, and is implemented by Catholic Relief Services. The benchmarking household grant program was implemented by GiveDirectly, a US-based nonprofit that specializes in making unconditional household grants via mobile money. These two treatments are compared to a control group, namely, a set of villages that receive neither program.

This study conducts a type of cost-effectiveness benchmarking increasingly called for in recent years: the comparison of a standard and widespread development intervention with the outcome that would occur if the cost of the intervention were simply given away to the beneficiaries. Proponents of cash transfers have suggested that they should be considered the ‘index funds’ of international development, meaning a benchmark against which other programs are compared (Blattman and Niehaus, 2014). Just as index funds have helped to provide a reference rate of return against which fee-charging financial managers can be compared, cash transfers of equal cost to the implementer provide an important counterfactual, and establish a hurdle rate that places the burden of proof on complex, overhead-heavy development programs to show that they can justify their costs by generating benefits superior to simply disbursing the cost of the program directly to beneficiaries. The appeal of cash transfer programs as a benchmark lies in their simplicity and scaleability, their low overhead costs, and the extent to which they put aid beneficiaries in control of how resources are allocated.

The momentum for benchmarking has built as numerous studies have shown meaningful impacts

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1 For a discussion of the political economy and public finance dimensions of the tradeoffs between cash and in-kind programs, see Currie and Gahvari (2008) and Jones et al. (2016).
of cash transfers on important life outcomes in the short term, such as child nutrition (Aguero et al., 2006; Seidenfeld et al., 2014), schooling (Skoufias et al., 2001), mental health (Baird et al., 2013; Samuels and Stavropoulou, 2016), teen pregnancy and HIV (Baird et al., 2011), microenterprise outcomes (De Mel et al., 2012), consumer durables (Haushofer and Shapiro, 2016), and productive assets (Gertler et al., 2012). The evidence on the long-term impacts of cash transfers is more mixed, but some studies have found substantial impacts (Aizer et al., 2016; Barham et al., 2014; Fernald et al., 2009; Hoynes et al., 2016). The largest extant literature on benchmarking is based on the comparison of cash aid to food aid (Ahmed et al., 2016; Cunha et al., forthcoming; Hidrobo et al., 2014; Hoddinott et al., 2014; Leroy et al., 2010; Schwab et al., 2013), which has uncovered a fairly consistent result that food aid leads to a larger change in total calories while cash aid leads to an improvement in the diversity of foods consumed. Efforts to benchmark more complex, multidimensional programs against cash include BRAC’s Targeting the Ultra-Poor program (Chowdhury et al., 2016), microfranchising (Brudevold-Newman et al., 2017), agricultural inputs (Brudevold-Newman et al., 2017), and sustainable livelihoods (Sedlmayr et al., 2017). These studies have typically struggled with the question of how to anticipate costs and compliance well enough to realize an exact cost-equivalent comparison after the fact. Our study provides a methodology incorporating randomization of transfer amounts and ex-post, regression-based cost adjustment that can achieve this objective in a general way.

Using a village-level randomization across 248 villages, we compare the Gikuriro program to cash transfers. Gikuriro deploys the type of multi-pronged approach advocated by Ruel et al. (2013), in which the program aims to improve child nutrition through superior information, direct transfer of productive assets, and improvements in household diet and sanitation. A similar program in adjacent Burundi was found to decrease child and maternal anemia (Leroy et al., 2016). Gikuriro consists of four components targeted directly at beneficiary households: a Village Nutritional School, Farmer Field Learning Schools, Savings and Internal Lending Communities (SILCs), and a Water, Sanitation, and Hygiene (WASH) intervention), as well as Behavior Change Communication

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2 For examples of studies that find dissipating long-term benefits, see Baird et al. (2016) and Araujo et al. (2017). Evidence from systematic reviews of cash transfers on schooling (Molina-Millan et al., 2016) and child health (Manley et al., 2013; Pega et al., 2014) has been similarly uneven.

3 The village-level study design was motivated both by the clustered nature of the Gikuriro intervention, and helps to allay concerns about the potential for negative spillovers of cash transfers on adjacent controls observed in Haushofer et al. (2015).
intervention implemented at the village level. This combination has been developed by CRS over the course of many years implementing anti-malnutrition programs across the world. The cash transfer arm, implemented by GiveDirectly, provided unconditional household grants via mobile money, an intervention that has been found to improve consumption and/or dietary diversity in many contexts across Sub-Saharan Africa (Aker et al., 2016; Haushofer and Shapiro, 2016). Transfer amounts were randomized across villages, and within GiveDirectly villages we implemented a household-level experiment whereby beneficiary households were randomized to receive one-time, lump-sum transfers, a monthly flow of cash transfers over the duration of the study, or a choice between these two alternatives.

The study takes place in Kayonza and Nyabihu, two districts that span the range of economic and health outcomes observed in Rwanda. The endline survey took place 13 months after baseline, and we measure impacts on five primary outcomes: (a) household consumption, (b) household dietary diversity; (c) child and maternal anemia; (d) child growth; (e) value of household non-land net wealth. These are outcomes chosen to balance the theories of change of the two implementers, as well as being well documented in the literature as core drivers of improved long-run outcomes for children (Hoddinott et al., 2013; Maluccio et al., 2009). In addition, we report impacts on a set of secondary outcomes including borrowing and savings, fertility, health knowledge and sanitation practices, diseases and mortality, household assets, and the quality of housing stock. Prior to randomization the survey firm classified households as ‘eligible’ (identifiable using administrative data sources as containing underweight children, or households in the bottom two income categories with children 5 years old or younger or with pregnant or lactating women), or ‘ineligible’ (everyone else). We can therefore measure impacts both on the mutually agreed-upon intended target population as well as on the study villages as a whole, even in the presence of potential differences in actual targeting across implementers. We can use the eligible sample to estimate experimental intention-to-treat

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4 Kayonza is a relatively prosperous district in the far East of the country, with a poverty rate of 24 percent that ranks it behind only the three districts of Kigali NISR (2017). The relative prosperity of the Eastern Province is further reflected in child health measures: outside of Kigali Province, the Eastern Province had in the 2015 Demographic and Health Surveys rates of stunting and underweight, at shares of under-five children with HAZ and WAZ below -2 standard deviations of 34.8 and 9.2 percent, respectively. However, this district was hit by a severe drought around the time of the baseline. Nyabihu is in the Northwest and is a relatively poor, mountainous, and remote area, with a poverty rate of nearly 40 percent placing it 16th in the country NISR (2017). The Western Province, in which Nyabihu is situated, ranks worst in the country on rates of children stunted and underweight, at 44.9 and 10.1 percent, respectively (DHS, 2016).

5 All primary and secondary outcomes were registered prior to receipt of endline data no the American Economic Association RCT Registry, with ID AEARCTR-0002559.
effects, and the full sample (population weighted) to estimate total causal effects on the average household in study villages.

Both implementers made contact with the study subjects and began enrollment immediately after baseline. GD began implementation shortly after the baseline meaning that at endline individuals in that arm had experienced about 12 months of the household grants treatment (running up through the month before endline). Gikuriro was slower than the cash program to begin implementation on the ground; in that arm households had typically experienced 8-9 months of household-level implementation at the time of the endline. The duration of the RCT component of the study was limited by the fact that local governments wanted to hit targets for the broader, national rollout of nutritional and WASH programming, of which the eight districts covered by the Gikuriro programming were a part, and hence we were not able to maintain the control groups for more than one year.

To permit a rigorous comparison of cost-effectiveness, we costed both programs in detail prior to, and after, the intervention period, following Levin and McEwan (2001). The ex-ante costing exercise was used to identify the approximate total cost of the Gikuriro intervention, as well as the estimated overhead costs to GiveDirectly of providing household grants in this context. It arrived at an ex-ante cost of $119 per eligible household. We then randomized transfer amounts at the village level in the cash arm across four possible transfer amounts. These amounts were chosen to provide informative benefit/cost comparisons across two different margins: Gikuriro vs cash, and small versus large cash transfer amounts. Three smaller cash transfer amounts bracket the anticipated cost of Gikuriro per household (ex-ante costs of $77, $119, and $152, with beneficiaries actually receiving $41, $84, and $117, respectively); these arms are provide a straightforward window on cost-equivalent impacts. The fourth and much larger transfer arm transferred $532, the amount chosen by GiveDirectly as likely to maximize their own cost-effectiveness given the fixed costs in providing cash transfers via mobile money. The inclusion of this arm provides a statistically high-powered way of examining how benefit/cost ratios shift as the transfer amount rises. The final, ex-post costing exercise arrived a cost for Gikuriro of $141.84, and actual GD costs of $66, $111, and $145, meaning realized Gikuriro costs were within the range over which we randomized but

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6Since both programs had six months of notice that they would be implementing in the study sample in these two districts and began national-level implementation at the same time, this differential delay likely reflects a real difference in the relative ramp-up speeds of cash versus more complex programming.
28 percent higher than the ex-ante number. We present a method to adjust for the randomized GD cost differentials using linear regression, and hence can provide comparative impacts at exactly equivalent costs to the donor, USAID.

Our results provide quite a nuanced view of the relative impact of a highly tailored child malnutrition program and the cost of the program in cash. The Gikuriro bundle of interventions, costing USAID $142 and delivering $73 in direct benefits per household, was successful at delivering gains in savings, a domain that was the target of the SILC intervention (the remaining costs were split between training/capacity building and overhead). It did not lead to improvements in consumption, dietary diversity, wealth, child anthropometrics, or anemia within the thirteen-month period of the study. A cash transfer of exactly the same cost to USAID could, because of lower overheads, deliver $113 in direct benefits. Such a transfer allows households to pay down debt, and generates increased investment in productive and consumption assets. A much larger cash transfer costing $567, and transferring $532 per beneficiary household, led to across-the-board improvements in consumption-based welfare measures, a substantial improvement in dietary diversity, a drop in child mortality, and modest improvements of about 0.1 standard deviation in the anthropometric indicators of height-for-age, weight-for-age, and mid-upper arm circumference (all significant at 10 percent or above). Despite 90.9 and 96.9 percent of the eligible households in treatment villages receiving Gikuriro and GiveDirectly, respectively (for the villages as a whole the treatment rates were 19 and 18.3 percent, respectively), neither treatment resulted in sufficiently widespread benefits as to be detectable in the general population, with the exception of an improvement in health knowledge and vaccination rates in Gikuriro villages and vaccination rates in GD large villages.

These results are intuitive in many ways. When a program uses targeted interventions, it can at relatively low cost shift a specific set of welfare indicators tied to these behaviors (for example, the strong impacts of Gikuriro’s savings groups). If such a program is built on a solid theory of change connecting outcomes such as savings stocks to long-term outcomes, this can be a well-justified use of development assistance. Unconditional cash is spent on many different things in terms of sample averages, and hence is hard to detect when the transfer amount is small but improves outcomes almost across the board as the transfer amount increases. The large cash transfer delivers benefits even on outcomes specifically targeted by the other program. While it is unsurprising that very large amounts of money show up in consumption and productive assets, the improvements in diet
and particularly child anthropometrics over such a short period of time are impressive. Further, while it may be unsurprising that the impact of cash transfers scales with amount spent in the way found here, the same may not be true of other types of development intervention that would quickly hit diminishing marginal returns once certain core objectives were achieved.

This points to an inherently different way of thinking about cash-transfer programs as a ‘benchmark’. While transfer programs maximize scope for choice and therefore provide an important window on beneficiary priorities, a comparison to other more targeted programs will inevitably require policymakers to explicitly make tradeoffs across outcome dimensions, across beneficiary populations, and between large benefits for concentrated subgroups or small benefits that are diffuse over a broader target population. By contrast with the index fund analogy, part of the value of cash transfer programs as a benchmark is that they may require donors to be explicit about their preferences, and to justify interventions that constrain beneficiary choices.

The rest of the paper is organized as follows. The next section of the paper lays out the study design, including a detailed description of the interventions, sampling routine, costing principles, the experimental structure, as well as primary and secondary outcomes. Section 3 presents the core empirical results of the benchmarking exercise, as well as the results of sub-experiments on cash transfer modalities. Section 4 presents the pre-specified analysis of heterogeneity, including by child age and by baseline malnutrition. The final section concludes, and provides specific examples of how the results of the study can be used to bound the preferences over benefit/cost ratios required to justify each program.

2 Study Design

2.1 Description of Interventions

The Gikuriro program was developed by USAID, Catholic Relief Services (CRS), and the Netherlands Development Organization (SNV) to combat food insecurity among pregnant women and children, particularly during the critical first 1,000 days of life that play such a dominant role in later-life outcomes and cognition (Figlio et al., 2014). The resulting multi-faceted program brings together several components in order to attack this problem from multiple directions at once, and is a central pillar of the Government of Rwanda’s approach to combating malnutrition in rural
Rwanda. Gikuriro combines an integrated nutrition program with a standard WASH curriculum (water, sanitation, and hygiene), and seeks to build the capacity of the health infrastructure providing services to mothers and newborns, particularly Community Health Workers (CHWs). The program also seeks to build livelihoods by providing additional assistance to eligible households, including (a) Village Nutrition Schools (VNS); (b) Farmer field learning schools (FFLS), which potentially includes distribution of small livestock, fortified seed, etc.; (c) Savings and Internal Lending Communities (SILCs); and (d) the Government of Rwanda’s Community-Based Environmental Health Promotion Program (CBEHPP). In addition, Gikuriro provided a program of Behavioral Change Communication (BCC), supporting participation in all components of the program including savings, agriculture, and nutrition, as well as hygiene. This comprehensive approach seeks to build supply and demand for child health services simultaneously, and is fairly typical of the kinds of multi-sectoral child health programs implemented by USAID in many parts of the developing world.

To benchmark the impact of this program against cash we worked with GiveDirectly, a US-based 501(c)3 Non-Profit organization. GiveDirectly specializes in sending mobile money transfers directly to the mobile phones of beneficiary households to provide large-scale household grants in developing countries including Kenya, Uganda, and Rwanda. GiveDirectly’s typical model has involved targeting households using mass-scale proxy targeting criteria such as roof quality. GiveDirectly builds an in-country infrastructure that allows them to enroll and make transfers to households while simultaneously validating via calls from a phone bank that transfers have been received by the correct people and in a timely manner. Their typical transfers are large and lump-sum, on the order of $1,000, and the organization provides a programatically relevant counterfactual to standard development aid programs because it has a scalable business model that would in fact be capable of providing transfers to the tens of thousands of households that are served by the Gikuriro program. Because of the nutritional focus of the Gikuriro intervention, GiveDirectly incorporated a ‘nudge’ into the way the program was introduced (Benhassine et al., 2015), utilizing a low-cost

7 USAID’s Global Health and Nutrition Strategy explicitly calls for multi-sectoral interventions that incorporate agriculture, WASH, education, and outreach to mothers in the first 1,000 days through the public health system. The agency reports reaching 27 million children worldwide under the age of 5 in 2016 alone through such programs, which represent the prescribed USAID modality for Scaling up Nutrition (SUN) countries.

8 Examples of similar integrated WASH/agriculture/child nutrition programs funded by USAID include SPRING in Bangladesh, RING in Ghana, Yaajende in Senegal, and ENGINE in Ethiopia.
flyer emphasizing the importance of child nutrition that was given to households at the time of the intervention. An English translation of this flyer is included in Appendix A. Given observed impacts of cash transfers on other goods, e.g., productive assets and housing value, it is evident that households felt at liberty to spend the grants on items not directly related to child nutrition.

Rwanda may be a particularly interesting environment in which to pose the benchmarking question for several reasons. First, child malnutrition rates overall are high—the prevalence of stunting among children under age five in the 2014-15 Demographic and Health Survey was 37.9 percent, underweight 9.3 percent and wasted 2.2 percent—though this represents an improvement in recent years (DHS, 2016). Second, Rwanda is a country notable in Africa for its bureaucratic competence and the public health infrastructure has been successful in delivering substantial improvements in child and maternal health outcomes (NISR, 2015) through schemes such as Pay-for-Performance (Basinga et al., 2011). Hence, it may provide a relatively strong case in terms of interventions such as Gikuriro that are led through the public health system and lean heavily on Community Health Workers (CHWs). Third, the Government of Rwanda has been experimenting extensively with cash transfer programs over the past few years, such as the inclusion of cash in the flagship Umurenge poverty reduction program (Gahamanyi and Kettlewell, 2015), the $50 million ‘Cash-to-poor’ program supported by the World Bank, as well as a number of efforts to transition the support systems for the country’s large population of refugees to cash transfers (such as a World Food Programme (WFP) program that is now supporting 15,000 refugees in Gihembe Camp using cash rather than traditional in-kind aid mechanisms (Taylor et al., 2016)). Hence there should be the bureaucratic capacity to implement Gikuriro well, and there is both experience with and interest in cash transfers as a safety net modality in the country.9

Gikuriro is in the midst of a full-scale rollout in 8 districts, and the randomized study design was based on delaying implementation of the program in a number of eligible villages for one year. For this reason the study is only able to measure impacts over the course of the 13 months from baseline to endline, which capture 12 months of on-the-ground implementation for GD and 8-9 months for Gikuriro. We cannot therefore speak to the long-term impacts of the interventions. Anticipating this issue, we took two approaches to measurement. One of them was to try capture the stocks

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9Given the framing provided by GiveDirectly and the unusually strong degree of social control exerted by local officials in the Rwandan context, it is certainly possible that our ‘unconditional’ transfers have been more forcibly devoted to child consumption than they would have been in a different context.
of intertemporal assets that would be the obvious conduits to future consumption benefits for the households. The second was to emphasize outcomes such as dietary diversity and anemia that have the potential to respond quickly to changes in consumption patterns, while also retaining the more standard metrics of child malnutrition such as height for age (HAZ), weight for age (WAZ), and mid-upper arm circumference (MUAC). Further, a number of recent RCTs have shown that programs can have meaningful impacts on biometric outcomes over timeframes similar to that analyzed in this study, such as Desai et al. (2015), Leroy et al. (2016), Fink et al. (2017), and Null et al. (2018).

2.2 Eligibility for the Study

The study aims to compare nutrition and health gains among poor households with young children across the two programs and a control. We therefore used a definition of eligibility tailored to Gikuriro’s stated target population: namely, households that contained malnourished children, or pregnant and lactating mothers. A core challenge of the benchmarking endeavor is the need to use a measure of eligibility in a manner that can be defined identically across arms. As a result, we established a set of ‘hard’ eligibility criteria on the basis of which beneficiaries would be selected and the survey would be stratified. Households meeting these criteria would be identified by the survey firm, Innovations for Poverty Action (IPA), prior to sampling for the baseline study, to establish a comparable population of eligible households in all arms—including control—of the study.

CRS and USAID agreed that the following criteria represent the target population for Gikuriro:

- Criteria 1. All households in a village with a malnourished child (defined by a threshold value of weight/age) were enrolled.
  - Weight/age is used because it is believed that this data is more consistently available than data on middle-upper arm circumference (MUAC) and height/age, and because it is used by CHWs as a basis for referring children to their local Health Centers.
  - The threshold weight/age value for inclusion was determined using the Rwandan Ministry of Health standards for malnutrition. The data used to identify eligibles was based on

\[10\] Dietary diversity is an immediate indicator of improvements in consumption, and the clinical literature has shown that anemia tests respond within 3 months of improvements in diet (Habicht and Pelletier, 1990).

\[11\] We did not intend the scope of the benchmarking exercise to include the implementers’ (potentially different) ability to cost-effectively identify this target population, so as to maintain the interpretation of impacts as being differential impacts on a consistently defined beneficiary group.
the Community Health Worker data from Growth Monitoring and Promotion visits.

- Criteria 2. All households in Ubudehe 1 or 2 with children under the age of 5 (Ubudehe is the Rwandan government household-level poverty classification, with 1 being the poorest, 3 being non-poor, and rural areas containing very few of the wealthiest Ubudehe 4 households).

- Criteria 3. All households in Ubudehe 1 or 2 with a pregnant or lactating mother.

Both implementers agreed to attempt to treat all eligible households that were identified as meeting any of these criteria. CRS anticipated an average of 30 eligible households per village, and in principle had established a rationing rule in case that number was exceeded. As will be described below, the number of households per village that could be identified by the survey firm as meeting these targets turned out to be substantially lower. We did not try to impose restrictions on how Gikuriro would target outside of the households identified by the survey firm to be eligible.

We asked IPA to identify the universe of households that they could locate who met these criteria, using three sources. First, CHW records from the national ‘Growth Monitoring and Promotion’ exercise, which is intended to provide monthly height and weight measurements for all children under two and annual measurements for all children under five; second, government (census) records of household Ubudehe classifications; and finally local health facility information, which provides an alternative data point on children’s nutritional status. Children were defined as malnourished if they had at least one measurement that met government thresholds for malnourishment definitions in the past year, and households were defined as eligible if they had any individual meeting the criteria above. In each village we recorded the number of households in each stratum and sampled up to eight eligibles and four ineligibles for inclusion in the study. Throughout this document we use the words ‘eligible’ and ‘ineligible’ to refer to the classification made by the survey firm at baseline.

While the primary analysis focuses on outcomes in the eligible group, we randomly sampled ineligibles into the survey so as to be able to consider broader Total Causal Effects (TCEs). Impacts among ineligibles may arise either because the implementers treated some households outside of the IPA-defined eligible group, or because of spillovers from beneficiary to non-beneficiary households.

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11 In practice, most children attending local clinics are referred by a CHW and so are also recorded as malnourished in the Growth Monitoring process.
The primary analysis is weighted to be representative of all eligible households in study villages, and the analysis including ineligibles is weighted to be representative of all households in study villages. Eligibility lists were shared with both implementers at the same time in the same way, but the sampling of eligible and eligible households for the survey was not revealed to implementers, so as to avoid the possibility that the implementers would specifically target the research sample. Our sample of ineligible households lets us understand both how treatment across the implementers may have varied in this ineligible sample, as well as the nature of the impacts observed in this group. Both implementers concurred closely with our definition of treatment on the ground, and compliance was high: we have 90.9 percent of the survey-defined eligibles treated by Gikuriro, and 96.9 percent of the survey-defined eligibles treated by GiveDirectly. This means that the Intention-to-Treat effects estimated on the eligibles should be well powered and are close to providing the Average Treatment Effect within this group.

We did not however encounter the number of eligible households anticipated; despite having expanded the eligibility criteria beyond what was originally envisioned, we nonetheless found an average of only 13.9 eligible households per village using the hard targeting information. Some villages did not even contain the 8 eligible households we intended to sample and hence we ended up with fewer eligibles than 8 in smaller or wealthier villages. On average we have 7.23 eligible households and 4.01 ineligible households sampled per village.

When Gikuriro began their actual program implementation, they continued their standard consultative process for beneficiary identification, which included the use of soft targeting information not available to IPA. Using this additional, richer information set to target, they identified and treated an average of 25.8 households in study villages in Kayonza district, and 26.97 in Nyabihu. Since our first tranche of GiveDirectly treatments were only among IPA-defined eligible households, we found ourselves with a substantial discrepancy in the intensity of treatment across implementers. We responded to this asymmetry by drawing in an additional sample of the poorest ineligible households in GiveDirectly villages to receive household grants so as to maintain parity in village-level

\[13\] Because eligible was determined from records rather than from face-to-face visits, it was possible that some identified households were not in fact resident in the village, or that the individuals whose presence made a household eligible had moved out. These were the only reasons that GiveDirectly did not treat a household, and it should be noted that households rejected for the former reason would also not appear in the study sample. In addition, CRS implemented a ‘consultative’ process with community members and determined that official Ubudehe status was incorrect or outdated for some IPA-determined eligible households.
treatment intensity. One month after baseline we sampled from within the broader set of ineligible Ubudehe 1 and 2 households (e.g. without young children) and passed this additional list to GiveDirectly to be treated with household grants. We already knew the realized treatment intensity from CRS at the time we drew in this additional ‘top-up’ sample, and so we selected the fraction of ineligibles to be treated by GD such that the realized fraction of households treated per village was identical for Gikuriro and CRS within each district. Given the treatment of the entire eligible stratum by GD, we gave them top-up lists that brought in an additional 11.26 households in Kayonza and 12.56 households in Nyabihu during tranche 2. The top-up lists were presented in a randomized order with instructions that GD should replace any non-complying households with the next one on the list to get as close as possible to the assigned number of treated households in Tranche 2. In the end, although the targeting of ineligibles will differ across implementers, the treatment intensities across the two arms are therefore identical by construction.

2.3 Design of the Experiment

Randomization occurred at the village level across 248 villages, using a blocked randomization where the blocks were formed by the combination of districts and village-level poverty scores within district, creating a total of 22 blocks with between 10 and 13 villages per block. Fixed effects for these blocks are included in all analysis. A computer was used by the researchers to conduct the randomization based on a frame of villages agreed to by CRS and government officials.

Table 1 presents a schematic of the design of the study. 74 villages were assigned to the Gikuriro intervention, 74 were assigned to the control group (no intervention), and 100 were assigned to GiveDirectly household grants. The GiveDirectly villages were further split into four transfer amounts, randomized at the village level. Three treatment amount arms, with 22 villages in each, received transfer amounts in a range around the anticipated cost of Gikuriro. A final 34 villages were assigned to the ‘large’ GiveDirectly transfer amount which was selected by GiveDirectly as the amount anticipated to maximize the cost effectiveness of cash. The transfers actually received by households in the GD ‘small’ arms (not inclusive of overhead) were $41.32, $83.63, and $116.91. Then, the large transfer amount selected to optimize GiveDirectly’s benefit/cost ratio was $532 actually transferred to households. All transfer amounts were translated into Rwandan Francs at an exchange rate of 790 RwF per US dollar, and were rounded to the nearest hundred.
Subject to the constraint of maintaining the assigned average household transfer value at the village level, GiveDirectly believed that most cost-effective use of these funds would be to attempt to equalize the amount transferred per household member, rather than to have households of very different sizes receiving the same transfer amount. To accomplish this, we scaled the transfer amounts within a village by household size, such that larger households received larger transfers, but leaving the mean transfer amount at the village level unaffected. This formula first calculated the per-capita transfer for a village using household sizes and the desired average household transfer value. Second, it scaled household-level transfer amounts with household size, applying a minimum of 3 members and a maximum of 8 members, so as to achieve the intended mean transfer amount per household per village. Household sizes for scaling transfer amounts were derived from administrative data (Community Health Worker reports), and not from baseline surveys. Figure 1 provides a box and whisker plot of the randomly assigned mean transfer amount per village relative to the actual amount received per household observed in the GD institutional data, and shows that the two correspond closely.

Within the GD arm we conducted a number of additional, individual-level experiments.

1. Transfer Timing. Evidence from other contexts suggests that a regular, monthly flow of transfers is likely to be a more effective way of delivering the kinds of nutrition and health outcomes that are the target of Gikuriro, rather than large lump-sum transfers (Haushofer and Shapiro, 2016). We randomized eligible beneficiaries in the household grants arm of the study to three groups designed to measure the effect of frequency: flow transfers divided into a sequence of monthly transfers; lump-sum transfers given all up front; and a choice arm that could decide which of these two modalities they wanted.

2. Choice experiment. The modality for the choice experiment, conducted only in the GD arm, is as follows:

   (a) First, all respondents were given a menu illustrating the choice between a single lump-sum transfer delivered in any of the 12 months from August 2016 to July 2017 and a flow of monthly payments totaling the same amount. The choice was recorded for each month for each household.

   (b) Then, the household was randomized to one of three conditions:
i. with 5/8 probability, they were assigned to the monthly flow treatment.

ii. with 1/4th probability, they were assigned to the lump sum treatment.

iii. with 1/8th probability, they were assigned to the choice arm.

(c) The large majority of the choice arm were given whichever they chose of the Lump Sum versus Flow treatment in the first month. 1 out of 20 individuals in the choice arm were given their choice in a randomly selected month so as to preserve the incentivization of the monthly choice questions.

2.4 Study Outcomes

Primary Outcomes. The study focuses on five dimensions. Here we briefly summarize each; details of the construction of these outcomes are included in Appendix A.

1. Household monthly consumption per capita (inverse hyperbolic sine—henceforth IHS—to deal with skewness).

2. Household Dietary Diversity, measured using the WHO standard Household Dietary Diversity Score.

3. Anemia: measured with a biomarker test following DHS protocols at endline only.

4. Child growth and development: measured using height-for-age, weight-for-age and Mid Upper Arm Circumference at baseline and endline for children under the age of 6 in eligible households.

5. Value of household non-land net wealth. This outcome is the sum of productive and consumption assets; the value of the household’s dwelling, if owned; and the value of the stock of net savings, less the stock of debt (IHS).

Secondary Outcomes. Three types of outcomes are selected to be secondary: proximate outcomes of one or both interventions that do not have an intrinsic welfare interpretation (such as borrowing and saving stocks); outcomes that have welfare weight but are not within the causal chain of both programs (such as investments in health-seeking behavior, which Gikuriro seeks to impact, or housing quality, which has been identified as a dimension of benefit in prior evaluations...
of GiveDirectly (Haushofer and Shapiro, 2016)); or outcomes of common interest on which power is limited (such as disease burden and mortality).

1. Stock of borrowing and stock of savings (IHS).

2. Birth outcomes: the likelihood of pregnancy and likelihood of live birth within 12 months prior to endline.

3. Health knowledge and sanitation practices.

4. Disease burden and mortality. Mortality is measured as the likelihood that an individual member of the household from baseline has died prior to endline. Disease burden is measured as the prevalence of fever, fever with diarrhea or vomiting, or coughing with blood at endline.

5. Health-seeking behavior/preventative care. We focus on the share of pregnancies resulting in births in medical facilities, the share of children under two years of age with at least one vaccination in the prior year, and the share of children under two years of age with a complete dose of vaccines.

6. Household productive assets (IHS).

7. Housing quality. Two measures are used: the self-reported replacement cost of the current dwelling (irrespective of ownership status, IHS), and an index of housing construction quality, constructed from measures of wall and roof materials and from the number of rooms in the dwelling.

The inverse hyperbolic sine is commonly used in analysis of outcomes such as consumption, savings, and asset values that tend to be highly right-skewed and also to contain zeros. The IHS transformation preserves the interpretation of a log (meaning that impacts can be interpreted as percent changes) but does not drop zeros. Only outcomes that we expected to be skewed were pre-registered to be analyzed using IHS. All non-binary outcomes are also Winsorized at the 1 percent and 99 percent level (values above the 99th percentile are overwritten with the value at the 99th percentile to reduce skewness and increase statistical power). Because we restrict the analysis in this paper to the pre-specified primary and secondary outcomes only, we do not correct the results for multiple inference (Anderson, 2008).
2.5 Regression Specifications

The data from the study are analyzed following our pre-analysis plan, consistent with the design being a three-armed, cluster randomized trial. Let the subscript $i$ indicate the individual, $c$ the cluster (village), and $b$ the randomization block. $E_{icb}$ is an indicator for eligibility status, defined at the household level. For outcomes observed both at baseline ($Y_{icb1}$) and at endline ($Y_{icb2}$), we conduct ANCOVA analysis including the baseline outcome; otherwise we omit the baseline outcome and run a simple post-treatment cross-sectional regression. Fixed effects for the village-level assignment blocks within which the randomization was conducted $\alpha_b$ are included, as well as a set of baseline control variables selected from the baseline data on the basis of their ability to predict the primary outcomes, denoted by $X_{icb1}$. In our simple experimental analysis we include two distinct dummies for GD treatment; one for the three smaller amounts $T_{c}^{GDS}$ chosen to be close to the cost of Gikuriro, and one for the ‘large’ transfer amount $T_{c}^{GDL}$, whose impact is not cost comparable to any of the other treatments. Thus the regressions to estimate the Intention to Treat Effect among eligibles are:

$$Y_{icb2} = \alpha_b + \delta^{GK} T_{c}^{GK} + \delta^{GDS} T_{c}^{GDS} + \delta^{GDL} T_{c}^{GDL} + \beta X_{icb1} + \rho Y_{icb1} + \epsilon_{icb2} \quad \forall \quad i : E_{icb} = 1 \quad (1)$$

Standard errors are clustered at the village level to reflect the design effect in the study (Athey and Imbens, 2017). The block-level fixed effects are be included to account for the block-randomization of the study (blocks are defined by district/sector and village-level poverty rankings, there are 22 blocks in the study). Following the ‘post-double-LASSO’ procedure of Belloni et al. (2014b), a set of covariates were selected using a LASSO algorithm on the control data as described in our pre-analysis plan; this model selection procedure is detailed, together with the resulting set of baseline covariates for each primary and secondary outcome, in Appendix Section B. This regression includes sample weights equal to the number of eligible households in the village divided by the number of eligible households in the study in that village, so as to make the results representative of all eligible households in study villages. For outcomes such as anemia that are collected at endline only, we cannot include the lagged outcome to run the ANCOVA regression, and so use the simple cross-sectional analog to Equation (1).
The Total Causal Effect of the program on the average household in study villages can be estimated by running Equation (1) on the entire sample, ineligible and eligible alike. For this regression, the weights on the ineligible households equal the number of ineligible households in the village divided by the number of ineligible households in the sample in that village, so as to make the results representative of all households in study villages.

Following our pre-analysis plan, we have a regression adjustment strategy for analyzing the programs at an exactly cost-equivalent level using the ex-post costing data from both programs. First, begin with the total GD donor cost per eligible within each transfer amount arm, denoted by $t_c$. Subtract from this number the benchmarked Gikuriro cost per eligible household $C$ described above, and denote the difference $t_c - C = \tau_c$; this is the deviation (positive or negative) of each GD arm from the benchmarked Gikuriro cost. Set $\tau_c$ to zero in the control and Gikuriro arms. We can then re-run regression (1) above controlling for a linear term in $\tau_c$, a dummy for either treatment, and a dummy for receiving Gikuriro. Because $\tau$ absorbs the deviation of the GD arm from the benchmarked Gikuriro cost, the dummy coefficient on Gikuriro treatment will serve as an intercept measuring the impact of Gikuriro benchmarked an exactly donor cost-equivalent cash transfer. So, we have:

$$Y_{icb2} = \alpha_b + \delta^T T_c + \delta^{GK} T_c^{GK} + \beta X_{icb1} + \rho Y_{icb1} + \gamma_1 \tau_c + \epsilon_{icb2} \quad \forall \quad I : E_{icb} = 1$$

(2)

In this specification $T_c$ is a dummy variable indicating any treatment (Gikuriro or GD). Subject to the assumption of linear transfer amount effects, the slope coefficient $\tau_c$ captures impacts arising from deviations in GD cost from Gikuriro cost, the coefficient $\delta^T$ effectively gives the impact of GD at the cost of Gikuriro), and the dummy variable $\delta^{GK}$ provides a direct benchmarking test: the differential impact of Gikuriro over GD at the same cost per eligible. Per the pre-analysis plan, we impose the simple linear functional form to preserve as much statistical power as possible for the core cost-equivalent benchmarking comparison, although it is straightforward to make this more flexible.\(^{14}\)

The Total Causal Effect can also be benchmarked at a cost-equivalent level. The methodology is very similar; we redefine $\tau_c$ as the deviation of GD spending per household in the overall village,\(^{14}\)

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\(^{14}\)Because in this study we have three very similar small transfer amounts and one much larger amount we have little ability to measure non-linear impacts of the transfer amount.
relative to the Gikuriro cost defined in the same way. By then cost-adjusting an estimate of the TCE weighted to be representative of all households in the village, we can measure how the overall village-level average impact of each program differs when spending per household is the same.

2.6 Cost Equivalence, Before and After the Fact

The costing exercise in the study utilized the ‘ingredients method’ which specifies all the ingredients (resources and inputs) used in performing the activities that produce the key outcomes of interest. In this costing, cost is defined as opportunity cost: the value of a good or service in its best alternative use. When a good or service is used for a specific purpose, the user "gives up" the possibility of employing it in another application (see Dhaliwal and Tulloch, 2012; Levin and McEwan, 2001, for more discussion).

The policy question is asked from the perspective of the donor (in this case, USAID): the policy objective is to achieve the highest benefit-cost ratio per intended beneficiary for each dollar that is spent on a program. Overhead expenditures in the implementation chain are an inherent part of these costs, and so the lower transactions costs in getting mobile money to the beneficiary play an important role in their potential attractiveness. We conducted two different costing exercises at two moments in time. The ex-ante exercise, which was based on projected budgets and staffing costs, was used to predict the cost at the time of the study design, and to choose the ranges over which the lower GiveDirectly transfer amounts would be randomized. Then, a rigorous ex-post costing exercise was conducted for both programs after the fact using actual expenditures.

Since the Gikuriro program covers eight districts (e.g. much larger than the study population only) we attempt to cost the full national program (not just the study sample), inclusive of all direct costs, all indirect in-country management costs including transport, real estate, utilities, and the staffing required to manage the program, and all international overhead costs entailed in managing the Gikuriro program. Beneficiary identification costs, incurred by the survey firm and identical across all arms of the study, are excluded from the cost-benefit calculation. Monitoring and Evaluation costs, similarly, were excluded so as to be costing only the implementation component. All administrative costs, including the appropriate share of the costs of maintaining international headquarters infrastructure, were included in the costing. Because we do not want differences in scale to drive differential costs per beneficiary, we asked GiveDirectly to artificially scale up their
operations and provide us with numbers reflecting the costs per beneficiary if they were running a national-scale program across eight districts, including 56,127 beneficiary households like Gikuriro. This is the relevant question for a USAID program officer contemplating commissioning a program to move the outcomes studied at comparable scale.

We costed each GD arm separately, asking what the overhead rate would have been if GD had run a national program at the scale of Gikuriro giving only transfers of that amount. Overhead costs as a percentage of the amount transferred decline sharply with transfer amount for GD because fixed costs represent a large share of their total overhead. This allows us to conduct the benefit/cost comparisons 'at scale', rather than having the artificial, multi-amount environment of the study contaminate the costing exercise across arms.

Another important issue in costing is compliance. Our study impacts focus on the ITT, and the costing number that matches this estimand is the amount spent per eligible household, rather than per beneficiary household. We can incorporate non-compliance into the effective amount spent by each implementer per study household by differentiating costs of two types: first there are 'averted' costs, which are not spent on a household if they do not comply with treatment; second there are 'non-averted' costs which will be expended whether or not the household complies. For GiveDirectly all variable costs are averted, for Gikuriro all variable costs except for the village-level behavior change component are averted. Using this approach we can recover a cost-equivalent comparison even if the compliance rates are different across arms. To do this, we match institutional data from Gikuriro and GiveDirectly to the study village and study sample, and calculate compliance rates in both the eligible sample and the overall village population.¹⁵

Gikuriro can be broken into two kinds of costs which have different numbers of beneficiaries. First is the village-level treatments (WASH and BCC) which are applied very broadly to the village population. These costs drive 40 percent of the total cost of the program, and are applied to households whether or not they comply with Gikuriro treatment directly (non-averted). The second are costs that pertain only to households that directly participate in the program; these costs are

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¹⁵Several details require further description here. First, our pre-analysis plan indicated that we would cost each sub-ingredient of Gikuriro and use survey data to calculate compliance with each ingredient. Costing every ingredient of that program proved infeasible, and in the event households that benefit from any one of the direct interventions in Gikuriro are likely to receive them all. So, with the exception of the Behavior Change component (which was provided to the entire village and is costed as such) we cost the two implementers in the same way: the product of cost per beneficiary and the compliance rate calculated from institutional data in the relevant population.
incurred only if the household complies with treatment and averted otherwise, hence we hit these costs with the compliance rates among eligibles and overall to calculate the cost per eligible and cost per household overall. As described in the Introduction, we designed the study around an anticipated Gikuriro cost of $119 per beneficiary household, which given the ex-ante costing of GD led us to transfer $41, $84, and $117 dollars to households in those arms.

Table 2 provides the exact costing numbers arrived at by the ex-post exercise. Gikuriro treatment rates are 90.9 percent among eligibles and 19 percent in the population as a whole. Given an actual cost to USAID of $141.84 per beneficiary, this gives a cost of $134.13 per eligible household and $72.94 per household in the village. GD faced few refusals for eligible individuals they attempted to treat (0.3 percent), but due to a remit from the government only to treat households in Ubudehe 1 and 2, they declined to treat specific households that IPA defined as eligible if they found the Community Health Worker-provided listing information to be incorrect when they approached them for enrollment (1.6 percent). They were also unable to locate 3.0 percent of surveyed eligible households. Total treatment rates in the GiveDirectly arm among eligibles are therefore 96.9 percent, and within the whole population 18.3 percent. Given costs to USAID of $66, $111, $145, and $567 across the GD arms, this implies costs per eligible of $64, $111, $136, and $555 (compliance rates are calculated separately for each GD arm), and costs per household in the village of $12, $21, $27, and $100.

3 Analysis

3.1 Attrition and Balance of the Experiment

Endline outcome measurement is subject to a number of distinct forms of attrition; we start our empirical analysis by considering each of these in turn. The most straightforward of these is standard household-level attrition, meaning that a household sampled into the baseline survey attrited from the endline survey. In Table 3, we see that overall rates of attrition at the household level were low, around 3.3 percent in the control. We see the pattern typical in RCT studies where attrition is somewhat lower in the treatment groups (where both ongoing contact and a sense of reciprocity may keep individuals in the endline), but these differentials are small, from 0.89 percentage point in the GD ‘small’ arm to 1.7 percentage point in the GD ‘large’ arm; only the latter is significant, and
only at the 10 percent level. Looking at the other covariates of attrition in column 2 we see that attriters and non-attriting households are similar. Hence we conclude that household-level attrition is unlikely to be a source of bias in the study.

When we turn to the analysis of individual-level outcomes in Panel B the picture is more complex, because many of the primary and secondary outcomes are only measured for certain types of individuals (anthropometrics for children, birth outcomes only for those pregnant). Each of these forms of missingness may be driven by the treatments, so attrition for each type of outcome must be taken in turn. We present a basic analysis of attrition here, and return to a discussion of this issue when we show treatment effects on fertility and mortality.

We analyze in Panel B four types of differential missingness that may occur. First, we compare the attrition of all household members from the roster in the household survey; both the rates and the differentials here are very similar to the household attrition problem suggesting that there has been little additional differential attrition of individuals. Next we examine the anthropometric panel, whereby all children under 6 at baseline who were given anthropometrics at the baseline should have been followed up with at endline. Here the absolute rates of attrition are a little more than double what they are for individuals overall, presumably because of the greater difficulty of finding and measuring children for this exercise. More concerning, the decline in attrition in the treatment groups now becomes strongly significant, particularly for Gikuriro villages (perhaps evidence of the superior monitoring of malnourished children taking place in those villages). Given this significance, we follow our Pre-Analysis Plan in also presenting results for the anthropometric impacts that are corrected by inverse propensity weights to correct for the observable determinants of selection. Third, we examine whether individuals who should have been anemia tested in the followup were; here we see no evidence of differential attrition across arms. Finally, we examine the likelihood that a new household member appears (typically due to births subsequent to baseline), and find no significant differences. Overall, then, differential selection across treatment arms is not a major problem for study outcomes other than anthropometrics. We return to the issue of unequal attrition in anthropometrics in the following section.

In Table 4 we present the comparison of baseline outcomes and control variables for eligibles at both the individual and household level, using the unattrited panel sample that will be the basis of the evaluation. The regressions used here mimic as closely as possible the impact regressions, using
fixed effects for randomization blocks, including a battery of baseline control variables, weighting to make the sample representative of all eligibles, and clustering standard errors at the village level to account for the design effect. At the household level the experiment is generally well balanced; we present 33 comparisons in this table and find four of them to be significant at the 10 percent level, much as we would expect. In Panel B we present all of the individual-level primary and secondary outcomes that are observed at baseline, and again find the experiment to be very well-balanced with only two outcomes of 27 significant at the 10 percent level. Unfortunately the only individual imbalance significant at the 5 percent level is in one of the core study outcomes; weight for age. The anthropometric indicators generally appear superior at baseline in the GD Large arm, an issue to which we return in the discussion of our results where we focus on the ANCOVA analysis to deal with this issue. Overall, the experiment is well-balanced at baseline.

3.2 Basic Experimental Results on Eligibles

Table 5 presents the core results of the study on the eligible population. Panel A shows household-level impacts on the panel sample, and Panel B presents impacts on the individual-level primary and secondary outcomes, where the relevant sample is outcome-specific and follows the Pre-Analysis Plan.

Taking the Gikuriro treatment first, we see impacts on a set of proximate and directly targeted outcomes of the program components. Household savings increases by a massive 109 percent (consistent with the creation of SILCs). Dietary diversity, anthropometrics, and maternal anemia all move in the right direction but none of these changes is significant. No consistent impacts appear for consumption and wealth outcomes, or for health knowledge and sanitation practices. Hence the program has been successful in moving an indicator closely related to one of its sub-components, but at least within the timeframe of the study these changes in savings have not yet translated into significant improvements in the anthropometric child outcomes.

We turn next to the impact of the three smaller GiveDirectly arms whose average cost is $111, 78 percent of the cost of Gikuriro. Here, we see quite a different set of outcomes move. Instead of increasing savings, small GD transfers lead to a 76 percent paydown of debt, and an increase in the value of productive and consumption assets, by 26 percent and 37 percent respectively. A number of surprising negative results also emerge; we find a small deterioration in household wealth
and home values, and some of the child biometric measures move in the wrong direction.\textsuperscript{16} Thus far, then, the comparison of Gikuriro to cash breaks down into two distinct dimensions of improvement, each of which has a different and entirely plausible pathway to long-term improvements: savings (Gikuriro), or debt reduction and asset investment (GiveDirectly).

When we examine the third row, however, a more transformative impact arising from of the ‘large’ cash transfer is clearly apparent. Not only do omnibus measures of consumption and wealth go up across the board, but metrics of consumption closely linked to child health improve. The dietary diversity score increases by 15 percent off a base of 4.16. Productive assets increase by 76 percent, consumer assets almost double in value, and home value increases substantially. In the individual outcomes the benefits of this surge in consumption are evident as well; within the course of one year we see a 0.091 SD improvement in HAZ, a 0.067 SD improvement in WAZ, and a 0.13 SD improvement in MUAC, all significant at least at the 10 percent level.\textsuperscript{17} The ANCOVA specification should be particularly important in the analysis of the anthropometric indicators that showed signs of imbalance at baseline; indeed if we examine these outcomes in post-treatment levels we see substantially stronger apparent treatment effects. Anemia falls slightly (not significant), and there is a substantial decrease in child mortality of almost 1 percentage point (or 70 percent off of the baseline value). To contextualize these effects using unweighted numbers, the control group eligibles saw 13 cases of child mortality out of 2,596 children (0.5 percent) while the GD Large arm saw 2 cases out of 1,200 children (0.16 percent). Hence the GD Large arm saw meaningful improvements in consumption and child health. At the bottom of this table we provide the t-statistics on an F-test that the ratio of the benefits across the GD large and small arm differs from the ratio of their costs (5.01 to 1). This statistic asks whether we can say that the impact scale in a manner different to the costs; only in the case of debt reduction (where small transfers have a big effect and big transfers do not) and house quality (where small transfers have a negative and large transfers a positive effect) can we reject cost-symmetric benefit scaling for cash transfers.

Before taking the individual-level impacts at face value, it is important to recognize that most of

\textsuperscript{16}The pattern here would be consistent with the theoretical insight presented in (Duflo et al., 2013), where a new opportunity to invest in productive assets can cause a ‘piling in’ of other sources of liquidity in the household, meaning that individuals may choose to consume less or buy fewer consumer durables during the investment phase.

\textsuperscript{17}These improvements should be viewed against the backdrop of a sharp deterioration in anthropometrics subsequent to birth that typically occurs in LDCs, leaving rural African children often two full SDs below the international norm by age 3 (Shrimpton et al., 2001), (Victora et al., 2010).
the endline outcomes are only observed for in potentially endogenously selected (surviving children, women who had children during the study, etc.). If the treatments led to substantial changes in fertility or mortality patterns, then the average outcome among surviving children or mothers is subject to both extensive and an intensive margin drivers, and cannot be interpreted simply as a ceteris paribus impact on a given baseline individual (see Baird et al. (2016) for more discussion of this issue). In this sense the lack of impacts on pregnancy rates, and the small absolute value of the impacts on live births and mortality, suggest that shifts in the composition of living children are unlikely to be large drivers of the treatment/control differentials. It therefore appears very unlikely that differential patterns of fertility or mortality in response to the treatments are leading to large shifts in the composition of surviving children or mothers across arms, and hence we can interpret these impacts in a standard way.

One of the most fundamental results in theoretical development economics is that poor households should have a single ‘shadow value’ of cash which pulls down investment in all capital-hungry endeavors in a symmetric way. The above findings are generally consistent with this view of the world, as an intervention that relaxes credit constraints leads to shifts in consumption patterns that are very broadly spread across domains. This property means that small cash transfers are hard to detect because they move too many outcomes by too small an amount to be significant, while large cash transfers result in a broad-based increase in consumption in many dimensions.

Our pre-analysis plan states that for any outcomes where we find differential attrition, we would estimate a propensity to remain in the sample incorporating covariates, dummies for treatments, and their interactions on the right-hand side, and then re-weight the analysis by the product of the inverse of this probability and the standard sampling weight. This procedure corrects the impacts for the observable determinants of attrition, and uses regression weighting to attempt to make the treatment and control samples comparable on important covariates even after attrition. Because we primarily found significantly differential attrition for the anthropometric outcomes, in Table IPW we present the results of this correction. We interact with each treatment dummy the same right-hand side covariates we use the same controls in the anthropometric regressions: gender, a linear, quadratic, and cubic for age in months, baseline household wealth, and a dummy for membership in Ubudehe poverty category 1. The first three columns show the standard results, as in the previous table, and the next three show the corrected estimates. The results are virtually identical, indicating
that the types of children who attrited from the study are similar across arms and hence differential attrition is unlikely to be driving our impacts.

### 3.3 Cost-Equivalent Benchmarking

The core purpose of the comparative experiment conducted is to exploit the randomized variation in transfer amounts to conduct an exact cost-equivalent benchmarking exercise. Using the costing numbers emerging from the ex-post exercise, we use the observed costs, overhead rates, and compliance rates to calculate the donor cost per eligible household in each arm of the study. Using Equation 3 from Section 3.1, we can control for ‘any treatment’, for the monetary deviation of the cash transfer arm amount from the ex-post Gikuriro cost, and then the inclusion of a dummy for ‘Gikuriro treatment’ will test the differential impact of Gikuriro over GD at precisely the same ex-post donor cost (subject to the assumption of linearity implicit in this formulation). A graphical representation of our strategy is provided in Figure 2, which plots the IHS of savings on the y-axis for all four GD treatment amounts (black circles), for GK (gray diamond), and the control (white circle). The line represents the fitted average savings by GD transfer amount, and by predicting the outcome on this line at the exact cost of Gikuriro (gray triangle), the benchmarked differential is then the vertical difference between the Gikuriro impact and the projected cost-equivalent GD impact.

The results of this analysis are presented in Table 7. Starting with the third row first, we have a direct estimate of the marginal effect of an additional 100 dollars in donor cost via cash transfers the primary and secondary outcomes. As could be inferred from previous tables, this coefficient is strongly significant across a wide range of outcomes, particularly those most related to household consumption. An extra 100 dollars leads to a 5.6 percent increase in consumption, a 7.7 percent increase in dietary diversity, a 17 percent increase in savings, an 11 percent and 12 percent increase in productive and consumption assets, respectively, and leads housing value to improve by 4.6 percent and the index of housing quality to increase by 0.1 SD. In terms of anthropometrics, the change in value of transfer is significant only for height-for-age (where small transfers had a slight depressive effect). An extra $100 per beneficiary household—with eligible households containing an average

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18 While GiveDirectly does of course have fixed costs, nearly all of the marginal increase in transfer value to a fixed population of recipients is received by the beneficiary: of the USD 421 increase from the upper cost-equivalent transfer and the GD-large transfer, USD 415.09 was received by beneficiaries themselves.
of 2.7 children under the age of six—increases HAZ by 0.022 standard deviations. Comparing a positive and insignificant effect of small transfers and a negative and insignificant effect of large transfers on the rate of live births, the transfer amount slope turns out to be significantly negative. Beyond this, none of the other individual outcomes respond to transfer amount in a manner that we can reject at 95 percent significance.

With the third row estimating the linear heterogeneity in impacts by transfer size around the cost-equivalent transfer, the second row (dummy for ‘any treatment’) becomes an intercept term that estimates the impact of cash transfers at a cost equivalent to Gikuriro, although this exact amount was not included in the experiment. Given that the mean transfer amount in the ‘small’ arm is only slightly lower than the GK cost, this estimate looks generally similar to the second row of table 5 (the simple average experimental effect across the ‘small’ transfer amounts). At the exact cost of Gikuriro, we estimate that cash transfers would have led to a significant 73 percent decrease in the stock of debt, and a 30 percent and 40 percent increase in productive and consumption assets, respectively.

The first row of this table contains the heart of the comparative benchmarking exercise. Looking first at the household outcomes, we see that Gikuriro is superior at driving up savings balances, while cash generates more debt reduction, a greater increase in consumption, and a larger accumulation of assets. The differential effect of the programs on savings and borrowing is interesting, and suggests that while both interventions serve to improve the net stock of liquid wealth (savings net of borrowing), the focused push on SILC groups in Gikuriro drives this more strongly through the vehicle of new savings while households making their own choices are more strongly disposed to reduce debt instead. Which of these strategies makes more sense? A simple comparison of interest rates is revealing. Gikuriro SILCs were free to set their own interest rates, but typically paid about 5 percent per annum nominal. Credit interest rates, by comparison, vary from an average of 22 percent in the MFI sector to upwards of 60 percent in informal credit markets. Given that 32 percent of eligible households reported having both borrowing and savings at baseline (and 79 percent had either borrowing or saving) it seems that the desire to pay down debt might be warranted.

Virtually none of the individual-level outcomes are significantly different across the interventions, arising from the fact that both of the inexpensive interventions in this study were ineffective at moving child outcomes, and only large cash transfers did this. There are two outcomes significant
in the differential comparisons that are not significant in either intervention in Table 5, namely sanitation practices and births in facilities (both of which somewhat surprisingly favor GD). We do not emphasize these results because in absolute comparison to the control group both arms are ineffective.

### 3.4 Total Causal Effects

Because of the random sampling of ineligibles, we can conduct an analysis representative of the population of study villages by pooling the strata together and using population sampling weights. The average weight in the ineligible sample is 24.4 and in the eligible sample it is 2, meaning that while the unweighted eligible sample is larger, it is the ineligibles who will dominate the weighted sample. Recall that the treatment effects on ineligible households may arise either from the treatment and targeting of the two interventions among ineligible households (with saturations set to be the same at just over 18 percent on average in both arms, but with targeting differing), or from spillovers between eligible and ineligible households. With 11.4 percent of all households being defined as eligible, the treatment rate in the ineligible sample is 8.4 percent. This means that the large majority of the additional sample included in the TCE analysis only receive impacts through spillover effects to untreated households.

These impacts, using (1) but including the ineligible sample and using weights to reflect the whole village population, are presented in Table 8. Here, the overall picture is very different from the impact among eligibles. For Gikuriro, we see improvements at the 99 percent significance level in the index of health knowledge, a core component of the program and one which was broadly targeted at the village population by the program (as reflected by our accounting of these costs as ‘non-averted’). Vaccinations, presumably provided by government health facilities but not a central focus of Gikuriro, also improve significantly. So there is some real evidence of holistic benefits in health-related domains for the population of Gikuriro villages. These changes, it is true, do not translate into observable improvements in health outcomes for children or adults within the timeframe of the study, but still suggest that Gikuriro implementers have been successful in driving community-level health knowledge.

With cash transfers, on the other hand, improvements appear to be more narrowly limited to the beneficiaries of the transfers. The ‘small’ transfers do not change any village-level outcome at
the 10 percent level. The ‘large’ transfers, so positive among beneficiaries, in general see negative
signs across the consumption indicators, lead to a significant drop in savings at the village level, and
are only positively associated with vaccination rates. These results are consistent with GD ‘large’
transfers having some negative spillover effects on non-beneficiaries, such as might be generated
by an increase in local consumer prices (consistent with Cunha et al. (forthcoming)) or a decrease
in interest rates as transfers are consumed and saved. On net there is little evidence that the
widespread benefits observed in the eligibles carry over to the broader population of the village
when the transfers are targeted at a relatively small fraction of the households.

3.5 Benchmark Total Causal Effects

We can perform a similar cost-equivalent benchmarking exercise for the TCEs, adjusting now by
cost per household in the overall village. This allows us to ask how the two programs differ in their
impact on households in the village as a whole when the same amount is spent by each program
on average. This analysis is presented in table 9. Again beginning with the third row, we see that
an increase in transfers of $100 (now to the average household in the village) increases the value of
productive assets by a half of a percent. Health knowledge appears to deteriorate with the amount
transferred. The cost benchmarked cash transfer in the second row has no impact on household-level
variables at the village level, but does improve vaccinations. The core comparative benchmarking
exercise in the first row shows Gikuriro strongly superior at improving health knowledge at the
village level. A significantly larger improvement in dietary diversity under Gikuriro is based on a
comparison between two insignificant effects and so again is not emphasized.

3.6 Lump Sum versus Flow Transfers

GiveDirectly households were further randomized to Lump Sum, Flow, and Choice treatments.
We can set aside the (random) group assigned to choice and begin our analysis of the GD sub-
experiments by comparing how receiving money as a lump sum drives differential impact relative
to the same amount of money assigned as a flow. We include separate dummy variables for the
impact of the lump sum transfer in the ‘small’ and ‘large’ arms, using the flow transfers as the base
category in both arms. Our hypothesis for this analysis was that lump sum transfers would be less
good at improving outcomes such as nutrition, anthropometrics, and anemia that are based on a
cumulate flow of consumption over the duration of the study, while the lump sum transfers would be superior in driving large one-time investments such as productive assets and consumer durables.

Table 10 shows the results of this analysis. In the ‘large’ arm we see results that are largely in line with expectations, in that lump sum transfers generate weakly better household wealth and strongly superior value of consumption assets, leading to a doubling of value relative to flow transfers. In the ‘small’ arm we see a weakly larger pay-down of debt for lump sum transfers, but contrary to expectations housing values are somewhat lower. Overall, we see some confirmation at the superiority of lump-sum transfers in driving fixed investment. In the individual outcomes, we also see some confirmation of expectations in that 5 out of 6 estimates of anthropometrics have negative signs on the lump sum interactions, and improvements in MUAC for the ‘large’ arm were limited to the flow transfers.

3.7 Analysis of Transfer Timing Choice within the GD Arm

An intriguing benefit of offering a choice of treatment modalities is that individuals might be able to use private information to select a welfare-optimizing treatment in a way that a central targeter could not. While we have relatively low power to examine this question, we can attempt to shed light on the direct benefits of choice using our experimental variation. To do this, we evaluate the outcome in the choice arm relative to a counterfactual that would be generated if individuals had no ability to select according to treatment effects and so choose effectively at random, generating an outcome that would be the weighted average of the outcomes of those assigned to lump sum and flow (where weights come from the fraction of the choice arm choosing each alternative).

We define dummy variables for the flow transfer, the lump-sum transfer, and the choice treatment. We can run the ANCOVA impact regression as follows:

\[
Y_{ic} = \beta_0 + \delta^F T^F_c + \delta^{LS} T^{LS}_c + \delta^C T^C_c + \beta X_{ic1} + \rho Y_{ic1} + \epsilon_{ic2} \quad \forall \ E_i = 1, T^{GK} = 0
\]

The benefit of choice than then be tested via an F-test of the hypothesis that \( \delta^C = \mu \delta^F + (1 - \mu) \delta^{LS} \), where \( \mu \) is the fraction of the choice arm that chooses the Flow arm. This tests for the domains in which individuals are able to obtain superior outcomes via choice than would be
expected given the average outcome that would be expected if they had been assigned to those arms.

The results of this exercise are presented in Table 11. This test is based on only 89 eligible panel households assigned to the choice arm, but it nonetheless provides some surprisingly strong evidence in favor of flexibility in cash transfer modality. Dietary diversity, maternal anemia, live births, and births in facilities all not only improve significantly in the choice arm, but improve significantly more than would be expected based on the proportionately weighted averages of the lump sum and flow arms. Only health knowledge looks worse with choice. While these results are more speculative due to the small sample size, this suggests that choice itself is generating superior health outcomes relative to an external assignment mechanism.

4 Analysis of Heterogeneity

4.1 Anthropometric effects by baseline malnourishment

We hypothesized in the Pre-Analysis Plan that the benefits of the treatments in terms of child anthropometrics would be largest for those who began the study most malnourished. To test this, we run a regression with child anthropometrics (HAZ, WAZ, and MUAC) as the outcomes, using the structure of Equation 1 above and controlling for our battery of baseline covariates, a dummy for all three treatments (GK, GD, and GD large), the baseline biometric outcome, and the interaction between the treatments and baseline biometrics. The hypothesis is that the interaction terms will be negative, meaning that the programs are most effective for those who had the worst baseline biometric outcomes. Table 12 the results of this analysis. The interpretation of the impacts in this table are as follows: rows 4-6 give the simple impact of the programs when the interacted term is zero (which, in this case, is at the mean). Rows 1-3 provide a test of the differential impact of the program across baseline anthropometric measures, so the lack of significance in these rows means that the impacts are not heterogeneous by nutrition status at baseline. The implication is that the improvement in anthropometrics induced by the GD large treatment were experienced broadly across the baseline distribution of HAZ and WAZ, and were not concentrated among those who began the study most malnourished.
4.2 Anthropometric impacts by child age

We can use a similar approach to examine heterogeneity by child age. Given that we have children who start the study outside of the first 1,000 days (those 2-5 years old at baseline), we might expect that the impact of the program on these more fully developed children would be smaller. Similarly, we can examine the relative impacts of the program for children born during the study to examine the relative benefits of newborn/in utero exposure relative to children who were eating solid foods when the program began. Given the impacts on household dietary diversity this latter outcome may be particularly relevant.

In Table 13 we run regressions on the eligible sample, allowing treatment interactions with an indicator for child age at endline (we do not use the ANCOVA specification in this regression so as to be able to include children born subsequent to the baseline survey). We include two different interactions; one using a dummy for ‘first 1,000 days at baseline’, and a second more stringent dummy for ‘born since baseline’. The results are presented in Table 13, and are in many ways surprising. Again, rows 4-6 provide the simple effect of the program in the older group (where the interaction term is set to zero) and the first three rows provide a test of whether the impact is differential for those in their first 1000 days (columns 1-3) or for newborns (columns 4-6). The small GD treatment is less successful for HAZ among children in the first 1,000 days, and the Gikuriro and large GD treatment effects display no consistent relationship to age.

Because of the strong overall impacts of the large GD arm on HAZ, we delve deeper into the heterogeneity of this result. Figure 3 uses a Fan regression to present a non-parametric picture of the GD large treatment effects across the age distribution for HAZ, and Figure 4 presents the same graphic using anemia as the outcome. Both of these figures provide suggestive evidence that larger treatment effects are emerging among the very youngest children who were exposed to the program in utero. This pattern is similar to the medium-term results in Baird et al. (2016), who find unconditional transfers in Malawi to have the largest effect on children exposed in utero. More speculatively, for both outcomes effects are also significant again for children in the 2-4 year age range when the program began, who would have been eating solid food, and hence the impacts appear least significant among children of age to be being breastfed at the time of the intervention.

To summarize, treatment effects prove to be relatively homogeneous across both age and base-
line malnutrition status, although there is a suggestion that children exposed in utero may have benefitted the most from the consumption increases seen in the GD Large arm. Given the relatively short-term nature of our followup survey, we consider this analysis to illustrate the speed at which the dramatic improvements in consumption and dietary diversity at the household level seen under the GD Large treatment translate into improved biometric outcomes. The longer-term literature has typically found impacts of large cash transfer programs on HAZ in the range of 0.2–0.45 standard deviations (Aguero et al., 2006; Barham et al., 2014); our results suggest that these measures improve roughly 0.1 standard deviation within a year of the inception of treatment, are all significant at 10 percent level or above, and are relatively invariant to baseline age or malnutrition. Comparison to the broader literature suggests that these impacts may grow over time.

5 Conclusion

This study compares a multi-pronged child nutrition program against cash transfers that have been benchmarked to have equal cost to the donor. We find that this integrated program was able within 8-9 months to move an important outcome directly generated by a component of its intervention, namely SILC-driven savings, and also to significantly improve health knowledge at the village level, a core component of the WASH and BCC interventions. The program appears to have improved the trackability of malnourished children in treatment villages. Nonetheless, it did not significantly shift the core child anthropometric outcomes that these interventions are intended to target, nor child or maternal anemia. An equivalent amount of money provided in the form of a cash transfer led to small increases across many consumption outcomes, and significantly increased the paydown of debt, as well as production and consumption assets. A much larger cash transfer of over $500 per household delivered comprehensive consumption benefits and also moved key health outcomes such as dietary diversity, height and weight for age, and mortality. The results are nuanced in terms of the modality of delivery, the choice of outcome, and the magnitude of transfers.

In concluding on the impact of Gikuriro, it is certainly possible that investments in behavior change (such as the substantial village-level improvement in health knowledge) as well as improvements in the Community Health Worker system will have longer term impacts that may do more for the population’s nutrition over time than even a large cash transfer to a single cohort today. If
an increasingly capable local health infrastructure can deliver nutrition interventions over the next ten years, then a huge number of future children could benefit and their well-being certainly should be part of the policy calculation. However a recent RCT evaluation of the Government of Rwanda’s CBEHPP, which is the WASH program implemented under Gikuriro, found that it was not effective at decreasing diarrheal disease (Sinharoy et al., 2017). Given that the Gikuriro bundle which also included direct in-kind transfers of livestock and seed was not found here to improve short-term consumption, these broader institutional impacts would need to be substantial and improving over time if they are lead to large long-term impacts. Therefore while Gikuriro did shift some outcomes closely related to pieces of the intervention, we uncover little evidence that directly confirms the program’s theory of change in driving primary child outcomes.

Our study design places some limitations on what can be learned. First, the cross-village experiment lets us measure the impact of those parts of the Gikuro intervention that are implemented at the village or household level only. Further, the relatively short time frame of the study means that we are measuring impacts over a shorter timeframe than would be ideal, particularly for outcomes such as malnutrition and anthropometrics that may respond slowly to improvements in nutrition. Gikuriro made substantial investments in local capacity around health and sanitation, and this infrastructure may drive future benefits in a way not captured in our study. We do however cost both interventions in a manner that reflects only the ingredients to the spatial and temporal scales over which we can measure impacts (cross-village, one year) and hence can cleanly benchmark the benefit/cost ratios of these two very different interventions over their first year of operation.

We can use our results to make concrete two types of tradeoffs that policymakers considering counterfactual uses of funds are forced to confront. First, tradeoffs across outcomes—for a given set of beneficiaries—and second, tradeoffs between larger impacts concentrated among a smaller number of beneficiaries and more diffuse impacts in a broader swathe of the target population.

To illustrate the first of these margins, consider the a policymaker who values impacts on savings and productive assets; for simplicity of exposition we ignore other dimensions of impact.¹⁹ Both of these represent investments in the future consumption of the household. When compared with a cost-equivalent cash transfer, Gikuriro has relatively larger effects on savings: a differential impact

¹⁹In general, it is appropriate to ignore dimensions of impact only when either the policymaker places no weight on them, or when there is no differential impact of available interventions on these dimensions.
of 118 percent as shown in Table 7. On the other hand, GiveDirectly’s cost-equivalent transfer delivers an impact on the value of productive assets of approximately 30 percent relative to control, and our estimates suggest the impact of Gikuriro is 29 percent smaller. Then, a policy preference for Gikuriro is equivalent to asserting that it is worth foregoing the increase in productive assets in order to obtain the improvement in savings, or that the relative benefit from percent increases in savings versus productive assets exceeds 4.06, the ratio of the differential treatment effects. This kind of precision can help policymakers be much more exact as to the types of tradeoffs required to justify one type of intervention over another.

Our design further reveals tradeoffs on the second, interpersonal margin. Within the cash arm, variation in the transfer amount provides one simple way of posing this question. The ratio of consumption impacts between the GD Small and Large treatment effects, for example, is 5.2, very close to the ratio of transfer amounts. This suggests that consumption impacts will scale linearly with transfer amounts. Other outcomes, such as savings or height-for-age, actually deteriorate slightly (and statistically insignificantly) under small transfers and are only improved with large transfers, suggesting that more resources must be concentrated on fewer households in order to drive these outcomes. We can also compare Gikuriro to cash in this respect. While at cost-equivalent values, Gikuriro demonstrates larger impacts on savings than a household grant, the results in Table 7 demonstrate that this is specific to the relatively small value of the cash transfer involved. We can use the slope term on the transfer amount to calculate the smallest transfer at which the benefit of cash would exceed Gikuriro; for savings this number is $694, and for HAZ it is $277. Obviously, on a fixed budget large cash transfers can only be given to a smaller number of households. So we can use our estimates to parameterize tradeoffs between cash transfer and Gikuriro in terms of the types of outcomes we would be able to drive as we concentrate more resources on fewer households. The elasticity of cash’s impacts as amounts are varied illustrates that programmatic choices hinge not only on preferences for equality across beneficiaries, but the specific outcomes being targeted. The strong consumption benefits that have quite consistently been found in large cash transfer programs may well tip the scales in favor of concentrated programs, even for inequality-averse planners.

20 More generally, one might characterize funders as having, e.g., CES preferences of the form $W = \sum_i \left( \sum_k \alpha_k x_{ik}^\rho \right)^{\phi/p}$, where $i$ indexes beneficiaries and $k$ indexes dimensions of program objectives $x_{ik}$. Here, $\alpha_k$ captures the relative weight of outcome $k$ in funder preferences, $\rho$ captures the extent of substitutability across these outcomes, and $\phi > 0$ captures the degree of substitutability across individuals (with a low value of $\phi$ implying a strong preference for equality across beneficiaries).
Given the nuance of our results, it is hard to square these results with any simple idea of cash transfers as a kind of uni-dimensional ‘index fund’. While business investment has a single, cardinal objective (financial profit), humanitarian investment is undertaken with many goals in mind, and a perfect reconciling of these competing benefits would require a clear statement of tradeoffs in this multi-dimensional space. Perhaps a clearer way of stating the counterfactual provided by unconditional cash is that it gives us a statement of the priorities that the beneficiaries themselves hold when credit constraints are relaxed, and thereby motivates us to be clearer about the logic underlying paternalistic development programs. While beneficiary decisions may not be ‘optimal’ in terms of long-term social welfare (due high discount rates, to self- or other-control problem, or to resource and information constraints for example), the impact of unconditional money is nonetheless a powerful statement of the outcomes that the beneficiaries themselves want changed. For us to argue that a program is justified in using resources to drive outcomes different from the ones the beneficiaries would choose, we should have a clear reason why they fail to arrive at the right decision themselves. This is a view of benchmarking that is not about picking a winner but rather about quantifying tradeoffs.
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Table 1: Research Design

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<th>Control</th>
<th>Gikurio</th>
<th>Give Directly</th>
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Table 3: Attrition

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Regressions are baseline cross-sections, standard errors are clustered at the village level to *** p<0.01, ** p<0.05, * p<0.1

### Panel B: Individual-Level Attrition

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Regressions are baseline cross-sections, standard errors are clustered at the village level to reflect the design effect, and analysis is weighted to be *** p<0.01, ** p<0.05, * p<0.1

Outcome:
- Household Attrition
- Individual Attrition
- R2: Anemia is observed
- New individual appears in survey data
Table 4: Balance

Panel A: Baseline Household-level Outcomes:

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<th>VARIABLES</th>
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<th>Total Household Wealth†</th>
<th>Borrowing‡</th>
<th>Saving‡</th>
<th>Health Knowledge</th>
<th>Sanitation Practices</th>
<th>Productive Assets†</th>
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<td>(0.099)</td>
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</tr>
<tr>
<td>Control Group Mean</td>
<td>10.4</td>
<td>4.16</td>
<td>12.7</td>
<td>5.96</td>
<td>5.18</td>
<td>0.19</td>
<td>-0.23</td>
<td>11.2</td>
<td>8.72</td>
<td>13.6</td>
<td>0.018</td>
</tr>
<tr>
<td>Observations</td>
<td>1744</td>
<td>1744</td>
<td>1745</td>
<td>1745</td>
<td>1744</td>
<td>1745</td>
<td>1745</td>
<td>1744</td>
<td>1744</td>
<td>1638</td>
<td>1750</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.053</td>
<td>0.098</td>
<td>0.055</td>
<td>0.040</td>
<td>0.016</td>
<td>0.029</td>
<td>0.042</td>
<td>0.012</td>
<td>0.078</td>
<td>0.098</td>
<td>0.040</td>
</tr>
</tbody>
</table>

Regressions are baseline cross-sections, standard errors are clustered at the village level to reflect the design effect, and analysis is weighted to be representative of all eligible households in study villages. Outcomes marked with a † are analyzed in Inverse Hyperbolic Sines, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1

Panel B: Baseline Individual-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid Upper Arm Circumference</th>
<th>Pregnancy</th>
<th>Live Birth</th>
<th>Births in Facilities</th>
<th>Vaccinations (any in past year)</th>
<th>Vaccinations complete</th>
<th>Diarrheal Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
</tr>
<tr>
<td>Gikuriro Treatment</td>
<td>-0.021</td>
<td>0.029</td>
<td>0.000099</td>
<td>-0.011</td>
<td>-0.0065</td>
<td>0.010</td>
<td>0.0044</td>
<td>-0.0018</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.086)</td>
<td>(0.067)</td>
<td>(0.068)</td>
<td>(0.026)</td>
<td>(0.042)</td>
<td>(0.038)</td>
<td>(0.019)</td>
<td>(0.036)</td>
<td>(0.039)</td>
</tr>
<tr>
<td>GiveDirectly Small transfers</td>
<td>0.064</td>
<td>0.031</td>
<td>0.058</td>
<td>-0.026</td>
<td>0.0065</td>
<td>-0.076</td>
<td>-0.0092</td>
<td>-0.0090</td>
<td>0.0042</td>
</tr>
<tr>
<td></td>
<td>(0.093)</td>
<td>(0.065)</td>
<td>(0.067)</td>
<td>(0.024)</td>
<td>(0.044)</td>
<td>(0.047)</td>
<td>(0.022)</td>
<td>(0.041)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>0.15</td>
<td>0.15*</td>
<td>0.065</td>
<td>-0.043</td>
<td>0.091*</td>
<td>-0.032</td>
<td>0.0071</td>
<td>0.040</td>
<td>0.0076</td>
</tr>
<tr>
<td></td>
<td>(0.097)</td>
<td>(0.070)</td>
<td>(0.006)</td>
<td>(0.028)</td>
<td>(0.035)</td>
<td>(0.046)</td>
<td>(0.025)</td>
<td>(0.040)</td>
<td>(0.042)</td>
</tr>
<tr>
<td>Control Group Mean</td>
<td>-1.92</td>
<td>-1.04</td>
<td>-0.65</td>
<td>0.32</td>
<td>0.83</td>
<td>0.95</td>
<td>0.93</td>
<td>0.72</td>
<td>0.43</td>
</tr>
<tr>
<td>Observations</td>
<td>2125</td>
<td>2104</td>
<td>1629</td>
<td>2099</td>
<td>663</td>
<td>561</td>
<td>1386</td>
<td>1384</td>
<td>1163</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.16</td>
<td>0.076</td>
<td>0.094</td>
<td>0.053</td>
<td>0.16</td>
<td>0.15</td>
<td>0.071</td>
<td>0.087</td>
<td>0.047</td>
</tr>
</tbody>
</table>

Regressions are baseline cross-sections, standard errors are clustered at the village level to reflect the design effect, and analysis is weighted to be representative of all eligible households in study villages. *** p<0.01, ** p<0.05, * p<0.1
### Table 5: Impacts among Eligible Households

#### Panel A: Household-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Per Capita Monthly Consumption†</th>
<th>Dietary Diversity</th>
<th>Total Household Wealth†</th>
<th>Borrowing†</th>
<th>Saving†</th>
<th>Health Knowledge</th>
<th>Sanitation Practices</th>
<th>Productive Assets†</th>
<th>Consumption Assets†</th>
<th>House Value†</th>
<th>House Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gikuriro Treatment</td>
<td>-0.097 (0.099)</td>
<td>0.17 (0.13)</td>
<td>-0.028 (0.19)</td>
<td>0.075 (0.35)</td>
<td>-0.086 (0.37)</td>
<td>-0.27 (0.22)</td>
<td>0.0082 (0.24)</td>
<td>-0.38 (0.057)</td>
<td>-0.019 (0.15)</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>GiveDirectly Small transfers</td>
<td>0.062 (0.092)</td>
<td>0.16 (0.15)</td>
<td>-0.017 (0.21)</td>
<td>-0.76** (0.34)</td>
<td>0.15 (0.32)</td>
<td>0.17 (0.23)</td>
<td>0.26** (0.20)</td>
<td>0.37* (0.24)</td>
<td>-0.025 (0.13)</td>
<td>0.22*</td>
<td></td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>0.32*** (0.11)</td>
<td>0.52*** (0.13)</td>
<td>0.34 (0.28)</td>
<td>-0.33 (0.47)</td>
<td>0.059 (0.29)</td>
<td>0.074 (0.11)</td>
<td>0.76*** (0.25)</td>
<td>0.92*** (0.20)</td>
<td>0.20*** (0.18)</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>10.7 (0.10)</td>
<td>4.77 (0.14)</td>
<td>13.0 (1.30)</td>
<td>7.39 (0.88)</td>
<td>5.88 (0.79)</td>
<td>2.89 (0.25)</td>
<td>11.2 (0.68)</td>
<td>8.70 (1.38)</td>
<td>13.8 (0.17)</td>
<td>0.17</td>
<td></td>
</tr>
</tbody>
</table>

#### Panel B: Individual-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid-Upper Arm Circumference</th>
<th>Anaemia, Children</th>
<th>Anaemia, Mothers</th>
<th>Child Mortality</th>
<th>Pregnancy</th>
<th>Live Birth</th>
<th>Births in Facilities</th>
<th>Vaccinations any in past year</th>
<th>Vaccinations complete</th>
<th>Disease Burden</th>
<th>Diarrhoeal Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gikuriro Treatment</td>
<td>0.052 (0.045)</td>
<td>0.030 (0.031)</td>
<td>0.022 (0.065)</td>
<td>0.0041 (0.033)</td>
<td>-0.0061 (0.0066)</td>
<td>-0.061 (0.002)</td>
<td>0.11 (0.001)</td>
<td>-0.0010 (0.001)</td>
<td>0.011 (0.012)</td>
<td>0.010 (0.005)</td>
<td>0.005 (0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GiveDirectly Small transfers</td>
<td>-0.019 (0.039)</td>
<td>0.091 (0.033)</td>
<td>-0.0065 (0.025)</td>
<td>-0.0021 (0.025)</td>
<td>-0.0036 (0.0031)</td>
<td>-0.005 (0.002)</td>
<td>0.067 (0.001)</td>
<td>-0.0031 (0.002)</td>
<td>0.013 (0.005)</td>
<td>0.005 (0.000)</td>
<td>0.002 (0.000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>0.094** (0.045)</td>
<td>0.067* (0.036)</td>
<td>0.016* (0.038)</td>
<td>-0.0078 (0.0088)</td>
<td>-0.0090** (0.0044)</td>
<td>-0.0065 (0.0027)</td>
<td>0.067 (0.001)</td>
<td>-0.0061 (0.0061)</td>
<td>0.0050 (0.0099)</td>
<td>0.005 (0.003)</td>
<td>0.003 (0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>-1.92 (0.30)</td>
<td>-1.06 (0.93)</td>
<td>-0.72 (0.60)</td>
<td>-0.18 (0.30)</td>
<td>0.013 (0.76)</td>
<td>-0.20 (0.24)</td>
<td>0.08 (0.10)</td>
<td>-0.68 (0.15)</td>
<td>0.075 (0.33)</td>
<td>0.33 (0.094)</td>
<td>0.33 (0.04)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. Regressions are weighted so as to be representative of all eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect. Outcomes marked with a † are analysed as inverse hyperbolic sine, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1
Table 6: Anthropometric Impacts using Attrition IPWs

### Analysis using Attrition IPWs for Anthropometric Outcomes:

#### Individual-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Normal Survey Weights</th>
<th>Survey * Attrition Propensity Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Height-for-Age</td>
<td>Weight-for-Age</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Gikuriro Treatment</td>
<td>0.052</td>
<td>0.039</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.040)</td>
</tr>
<tr>
<td>GiveDirectly Small transfers</td>
<td>-0.019</td>
<td>0.011</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.033)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>0.091**</td>
<td>0.067*</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
<td>(0.036)</td>
</tr>
<tr>
<td>Endline Control Mean</td>
<td>-1.92</td>
<td>-1.06</td>
</tr>
<tr>
<td>F-test: GD benefit ratio = cost ratio</td>
<td>0.30</td>
<td>0.93</td>
</tr>
<tr>
<td>Observations</td>
<td>2125</td>
<td>2104</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.71</td>
<td>0.68</td>
</tr>
<tr>
<td>ANCOVA</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Sample</td>
<td>Under 6 Anthro panel</td>
<td></td>
</tr>
</tbody>
</table>

Regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. Regressions are weighted so as to be representative of all eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect. *** p<0.01, ** p<0.05, * p<0.1
### Table 7: Cost Equivalent Benchmarking

#### Panel A: Household-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Per Capita Monthly Consumption†</th>
<th>Dietary Diversity</th>
<th>Total Household Wealth†</th>
<th>Borrowing</th>
<th>Saving</th>
<th>Health Knowledge</th>
<th>Sanitation Practices</th>
<th>Productive Assets†</th>
<th>Consumption Assets†</th>
<th>House Value†</th>
<th>House Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
<td>(11)</td>
</tr>
<tr>
<td>Differential effect of Gikuriro at benchmarked cost</td>
<td>-0.18***</td>
<td>-0.016</td>
<td>-0.040</td>
<td>0.80***</td>
<td>1.18***</td>
<td>-0.23</td>
<td>-0.41**</td>
<td>-0.29***</td>
<td>-0.79***</td>
<td>-0.04</td>
<td>-0.085</td>
</tr>
<tr>
<td>GD cost equivalent impact (dummy for either treatment)</td>
<td>(0.02)</td>
<td>(0.13)</td>
<td>(0.20)</td>
<td>(0.26)</td>
<td>(0.34)</td>
<td>(0.33)</td>
<td>(0.22)</td>
<td>(0.099)</td>
<td>(0.36)</td>
<td>(0.052)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>Additional effect of each $100 from GD</td>
<td>(0.02)</td>
<td>(0.01)</td>
<td>(0.06)</td>
<td>(0.14)</td>
<td>(0.21)</td>
<td>(0.31)</td>
<td>(0.13)</td>
<td>(0.18)</td>
<td>(0.06)</td>
<td>(0.21)</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>10.4</td>
<td>4.16</td>
<td>12.7</td>
<td>5.96</td>
<td>5.18</td>
<td>-0.23</td>
<td>11.2</td>
<td>2.39</td>
<td>8.73</td>
<td>1.36</td>
<td>0.18</td>
</tr>
<tr>
<td>Observations</td>
<td>1744</td>
<td>1744</td>
<td>1745</td>
<td>1745</td>
<td>1744</td>
<td>1744</td>
<td>1744</td>
<td>1744</td>
<td>1744</td>
<td>1750</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.12</td>
<td>0.14</td>
<td>0.23</td>
<td>0.14</td>
<td>0.16</td>
<td>0.04</td>
<td>0.30</td>
<td>0.04</td>
<td>0.33</td>
<td>0.099</td>
<td></td>
</tr>
</tbody>
</table>

All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. First row is a dummy for Gikuriro treatment and reflects the differential effect of Gikuriro treatment over GD at equivalent cost. Second row is a dummy for either treatment. The third row includes the dollar-value donation (in hundreds of dollars) of the GD village-level transfer amount from the cost of Gikuriro, meaning that the first row serves as an intercept and measures impact at equivalent cost. Regressions weighted so as to be representative of eligible households in study villages. Standard errors clustered at the village level to reflect the design effect. Outcomes marked with a † are analyzed as inverse hyperbolic sine, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1

#### Panel B: Individual-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid-Upper Arm Circumference</th>
<th>Anemia, Children</th>
<th>Anemia, Mothers</th>
<th>Child Mortality</th>
<th>Pregnancy</th>
<th>Live Birth</th>
<th>Births in Facilities</th>
<th>Vaccinations (any in past year)</th>
<th>Vaccinations complete</th>
<th>Disease Burden</th>
<th>Diarrheal Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
<td>(11)</td>
<td>(12)</td>
<td>(13)</td>
</tr>
<tr>
<td>Differential effect of Gikuriro at benchmarked cost</td>
<td>0.061</td>
<td>0.024</td>
<td>0.019</td>
<td>-0.088</td>
<td>-0.099</td>
<td>0.023</td>
<td>0.024</td>
<td>-0.11**</td>
<td>0.002</td>
<td>0.018</td>
<td>0.022</td>
<td>-0.034</td>
<td>0.005</td>
</tr>
<tr>
<td>GD cost equivalent impact (dummy for either treatment)</td>
<td>(0.046)</td>
<td>(0.039)</td>
<td>(0.062)</td>
<td>(0.056)</td>
<td>(0.021)</td>
<td>(0.078)</td>
<td>0.004</td>
<td>0.019</td>
<td>0.024</td>
<td>0.001</td>
<td>0.031</td>
<td>0.033</td>
<td>0.014</td>
</tr>
<tr>
<td>Additional effect of each $100 from GD</td>
<td>(0.02**</td>
<td>0.006**</td>
<td>0.006</td>
<td>(0.038)</td>
<td>(0.056)</td>
<td>(0.014)</td>
<td>0.016</td>
<td>0.015</td>
<td>0.028</td>
<td>0.003</td>
<td>0.042</td>
<td>-0.019</td>
<td>0.000**</td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>-1.92</td>
<td>-1.06</td>
<td>-0.72</td>
<td>0.22</td>
<td>0.12</td>
<td>0.0036</td>
<td>0.20</td>
<td>0.08</td>
<td>0.84</td>
<td>0.72</td>
<td>0.38</td>
<td>0.34</td>
<td>0.090</td>
</tr>
<tr>
<td>Observations</td>
<td>2125</td>
<td>2104</td>
<td>1629</td>
<td>237.2</td>
<td>130.1</td>
<td>26.67</td>
<td>25.32</td>
<td>411</td>
<td>293</td>
<td>1.291</td>
<td>1.291</td>
<td>2.60</td>
<td>2.60</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.12</td>
<td>0.13</td>
<td>0.13</td>
<td>0.11</td>
<td>0.11</td>
<td>0.098</td>
<td>0.082</td>
<td>0.13</td>
<td>0.16</td>
<td>0.26</td>
<td>0.17</td>
<td>0.053</td>
<td>0.043</td>
</tr>
</tbody>
</table>

All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. Anemia data was only collected at endline, and regressions on pregnancy outcomes and mortality are endline cross-sectional regressions. Regressions weighted so as to be representative of eligible households in study villages. Standard errors clustered at the village level to reflect the design effect. Outcomes marked with a † are analyzed as inverse hyperbolic sine, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1
Table 8: Total Causal Effects on Whole Village

Panel A: Household-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Per Capita Monthly Consumption†</th>
<th>Dietary Diversity</th>
<th>Total Household Wealth†</th>
<th>Borrowing‡</th>
<th>Saving‡</th>
<th>Health Knowledge</th>
<th>Sanitation Practices</th>
<th>Productive Assets†</th>
<th>Consumption Assets†</th>
<th>House Value‡</th>
<th>House Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gikuriro Treatment</td>
<td>-0.14 (0.10)</td>
<td>0.12 (0.15)</td>
<td>-0.19 (0.24)</td>
<td>0.14 (0.41)</td>
<td>-0.21 (0.37)</td>
<td>1.44***</td>
<td>0.17 (0.20)</td>
<td>0.14 (0.23)</td>
<td>0.10 (0.37)</td>
<td>0.065 (0.074)</td>
<td>0.17 (0.17)</td>
</tr>
<tr>
<td>GiveDirectly Small transfers</td>
<td>-0.13 (0.11)</td>
<td>0.00 (0.15)</td>
<td>-0.52 (0.28)</td>
<td>-0.39 (0.39)</td>
<td>-0.40 (0.41)</td>
<td>0.68*</td>
<td>-0.27 (0.23)</td>
<td>-0.15 (0.14)</td>
<td>0.021 (0.24)</td>
<td>0.031 (0.066)</td>
<td>0.008 (0.16)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>-0.09 (0.18)</td>
<td>-0.24 (0.36)</td>
<td>-0.47 (0.30)</td>
<td>-0.26 (0.43)</td>
<td>-0.75** (0.38)</td>
<td>-0.40</td>
<td>0.30 (0.35)</td>
<td>0.25 (0.17)</td>
<td>0.83 (0.37)</td>
<td>0.019 (0.077)</td>
<td>0.19 (0.19)</td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>10.6 (0.18)</td>
<td>4.29 (0.18)</td>
<td>13.9 (0.30)</td>
<td>5.35 (0.43)</td>
<td>6.03 (0.38)</td>
<td>-0.12</td>
<td>0.29 (0.35)</td>
<td>12.0 (0.35)</td>
<td>9.85 (0.17)</td>
<td>14.0 (0.19)</td>
<td>0.20 (0.98)</td>
</tr>
<tr>
<td>F-test: GD benefit ratio = cost ratio</td>
<td>0.26 (0.26)</td>
<td>0.68 (0.00)</td>
<td>0.40 (0.00)</td>
<td>0.35 (0.03)</td>
<td>0.50 (0.04)</td>
<td>0.048</td>
<td>0.14 (0.01)</td>
<td>0.14 (0.01)</td>
<td>0.85 (0.08)</td>
<td>0.82 (0.98)</td>
<td>0.98 (0.98)</td>
</tr>
<tr>
<td>Observations</td>
<td>2710 (2710)</td>
<td>2710 (2710)</td>
<td>2710 (2710)</td>
<td>2708 (2708)</td>
<td>2710 (2710)</td>
<td>2718 (2718)</td>
<td>2718 (2718)</td>
<td>2710 (2710)</td>
<td>2709 (2709)</td>
<td>2494 (2716)</td>
<td>2716 (2716)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.11 (0.05)</td>
<td>0.22 (0.05)</td>
<td>0.28 (0.05)</td>
<td>0.11 (0.05)</td>
<td>0.13 (0.05)</td>
<td>0.055</td>
<td>0.068 (0.31)</td>
<td>0.31 (0.31)</td>
<td>0.31 (0.31)</td>
<td>0.40 (0.16)</td>
<td>0.16 (0.16)</td>
</tr>
</tbody>
</table>

All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. Regressions include both ‘eligible’ and ‘ineligible’ households and are weighted so as to be representative of all households in study villages. Standard errors are clustered at the village level to reflect the design effect. Outcomes marked with a ‡ are analyzed as inverse hyperbolic sine, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1.

Panel B: Individual-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid-Upper Arm Circumference</th>
<th>Child Mortality</th>
<th>Pregnancy</th>
<th>Live Birth</th>
<th>Births in Facilities</th>
<th>Vaccinations (any in past year)</th>
<th>Vaccinations complete</th>
<th>Disease Burden</th>
<th>Diarrheal Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gikuriro Treatment</td>
<td>-0.015 (0.054)</td>
<td>-0.066 (0.049)</td>
<td>-0.072 (0.069)</td>
<td>0.0042 (0.005)</td>
<td>0.20 (0.07)</td>
<td>0.0070</td>
<td>-0.027</td>
<td>0.11*</td>
<td>0.20***</td>
<td>0.018 (0.018)</td>
<td>0.0070 (0.033)</td>
</tr>
<tr>
<td>GiveDirectly Small transfers</td>
<td>-0.012 (0.054)</td>
<td>-0.015 (0.039)</td>
<td>-0.024 (0.069)</td>
<td>-0.0014 (0.0021)</td>
<td>0.0017</td>
<td>-0.043</td>
<td>0.0048</td>
<td>0.074</td>
<td>0.079</td>
<td>-0.028 (0.033)</td>
<td>0.047 (0.022)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>0.049 (0.058)</td>
<td>0.020 (0.051)</td>
<td>0.062 (0.086)</td>
<td>0.0030 (0.023)</td>
<td>-0.0072</td>
<td>-0.044</td>
<td>-0.0000</td>
<td>0.16**</td>
<td>0.21***</td>
<td>-0.0026 (0.030)</td>
<td>0.05 (0.025)</td>
</tr>
<tr>
<td>Endline Control Mean</td>
<td>-1.75 (2.68)</td>
<td>-0.87 (2.59)</td>
<td>-0.61 (1.98)</td>
<td>0.0059 (3.73)</td>
<td>0.12 (4.37)</td>
<td>0.70</td>
<td>0.35</td>
<td>0.13</td>
<td>0.17</td>
<td>0.064 (0.053)</td>
<td>0.068 (3.366)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.74 (0.74)</td>
<td>0.74 (0.37)</td>
<td>0.57 (0.46)</td>
<td>0.020 (0.020)</td>
<td>0.11 (0.31)</td>
<td>0.13</td>
<td>0.16</td>
<td>0.31</td>
<td>0.17</td>
<td>0.064 (0.053)</td>
<td>0.068 (3.366)</td>
</tr>
</tbody>
</table>

All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. Regressions include both ‘eligible’ and ‘ineligible’ households and are weighted so as to be representative of all households in study villages. *** p<0.01, ** p<0.05, * p<0.1.
## Table 9: Cost Benchmarked Total Causal Effects

### Panel A: Household-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Per Capita Monthly Consumption†</th>
<th>Dietary Diversity</th>
<th>Total Household Wealth†</th>
<th>Borrowing†</th>
<th>Saving†</th>
<th>Health Knowledge</th>
<th>Sanitation Practices</th>
<th>Productive Assets†</th>
<th>Consumption Assets†</th>
<th>House Value†</th>
<th>House Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
<td>(11)</td>
</tr>
<tr>
<td>Differential effect of Gikuriro at benchmarked cost</td>
<td>-0.033</td>
<td>0.27*</td>
<td>0.22</td>
<td>0.48</td>
<td>0.43</td>
<td>1.48***</td>
<td>0.057</td>
<td>-0.18</td>
<td>-0.13</td>
<td>-0.057</td>
<td>-0.13</td>
</tr>
<tr>
<td>GD-cost equivalent impact (dummy for 'either treatment')</td>
<td>(0.13)</td>
<td>(0.15)</td>
<td>(0.24)</td>
<td>(0.37)</td>
<td>(0.35)</td>
<td>(0.43)</td>
<td>(0.25)</td>
<td>(0.14)</td>
<td>(0.28)</td>
<td>(0.074)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>Additional effect of each $100 from GD</td>
<td>0.0046</td>
<td>-0.0283</td>
<td>-0.0011</td>
<td>0.00947</td>
<td>-0.0046</td>
<td>-0.044**</td>
<td>0.0070</td>
<td>0.0522**</td>
<td>0.0038</td>
<td>0.00588</td>
<td>-0.00015</td>
</tr>
<tr>
<td></td>
<td>(0.0023)</td>
<td>(0.0032)</td>
<td>(0.0024)</td>
<td>(0.0035)</td>
<td>(0.0021)</td>
<td>(0.0026)</td>
<td>(0.003)</td>
<td>(0.00045)</td>
<td>(0.0045)</td>
<td>(0.00099)</td>
<td>(0.0021)</td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>10.6</td>
<td>4.29</td>
<td>13.9</td>
<td>5.35</td>
<td>6.03</td>
<td>0.12</td>
<td>0.29</td>
<td>12.0</td>
<td>9.83</td>
<td>14.0</td>
<td>0.30</td>
</tr>
<tr>
<td>Observations</td>
<td>2710</td>
<td>2710</td>
<td>2710</td>
<td>2708</td>
<td>2710</td>
<td>2718</td>
<td>2718</td>
<td>2710</td>
<td>2709</td>
<td>2494</td>
<td>2716</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.11</td>
<td>0.21</td>
<td>0.28</td>
<td>0.11</td>
<td>0.15</td>
<td>0.056</td>
<td>0.088</td>
<td>0.31</td>
<td>0.31</td>
<td>0.40</td>
<td>0.16</td>
</tr>
</tbody>
</table>

All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. First row is a dummy for Gikuriro treatment, and reflects the differential effect of Gikuriro treatment over GD at equivalent cost. Second row is a dummy for either treatment. The third row includes the dollar-value-deviation (in hundreds of dollars) of the GD-village-level transfer amount from the cost of Gikuriro, meaning that the first row serves as an intercept and measures impact at equivalent cost. Regressions weighted so as to be representative of eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect. Outcomes marked with a † are analyzed as inverse hyperbolic sine, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1

### Panel B: Individual-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid-Upper Arm Circumference</th>
<th>Anemia, Children</th>
<th>Anemia, Mothers</th>
<th>Child Mortality</th>
<th>Pregnancy</th>
<th>Low Birth</th>
<th>births in Facilities</th>
<th>Vaccinations per 1 year</th>
<th>Vaccinations complete</th>
<th>Disease Burden</th>
<th>Diarrheal Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
<td>(9)</td>
<td>(10)</td>
<td>(11)</td>
<td>(12)</td>
<td>(13)</td>
</tr>
<tr>
<td>Differential effect of Gikuriro at benchmarked cost</td>
<td>-0.043</td>
<td>-0.094</td>
<td>-0.098</td>
<td>0.0032</td>
<td>-0.0073</td>
<td>0.0068</td>
<td>0.013</td>
<td>0.031</td>
<td>0.031</td>
<td>0.053</td>
<td>0.031</td>
<td>0.024</td>
<td>0.029</td>
</tr>
<tr>
<td>Village receives either Treatment (GD effect)</td>
<td>0.027</td>
<td>0.0076</td>
<td>0.026</td>
<td>0.0019</td>
<td>-0.016</td>
<td>-0.0024</td>
<td>-0.0046</td>
<td>-0.042</td>
<td>-0.012</td>
<td>0.012</td>
<td>0.013</td>
<td>0.016**</td>
<td>0.015</td>
</tr>
<tr>
<td>Additional effect of each $100 from GD</td>
<td>0.00073</td>
<td>0.00041</td>
<td>0.00004</td>
<td>-0.00043</td>
<td>-0.00023</td>
<td>-0.00023</td>
<td>0.00013</td>
<td>0.00077</td>
<td>0.00001</td>
<td>0.00077</td>
<td>0.00002</td>
<td>0.0000067</td>
<td>0.0000067</td>
</tr>
<tr>
<td>Endline Control Mean</td>
<td>-1.75</td>
<td>-0.087</td>
<td>-0.61</td>
<td>0.22</td>
<td>0.12</td>
<td>0.0059</td>
<td>0.12</td>
<td>0.70</td>
<td>0.090</td>
<td>0.073</td>
<td>0.040</td>
<td>0.30</td>
<td>0.068</td>
</tr>
<tr>
<td>Observations</td>
<td>2668</td>
<td>2944</td>
<td>1981</td>
<td>2372</td>
<td>1581</td>
<td>3373</td>
<td>417</td>
<td>594</td>
<td>4.6</td>
<td>1479</td>
<td>1479</td>
<td>3366</td>
<td>3.66</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.74</td>
<td>0.74</td>
<td>0.57</td>
<td>0.071</td>
<td>0.11</td>
<td>0.019</td>
<td>0.11</td>
<td>0.13</td>
<td>0.16</td>
<td>0.31</td>
<td>0.17</td>
<td>0.064</td>
<td>0.053</td>
</tr>
</tbody>
</table>

All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. Anemia data was only collected at endline, and regressions on pregnancy outcomes and mortality are endline cross-sectional regressions. Regressions are weighted so as to be representative of all eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect. *** p<0.01, ** p<0.05, * p<0.1
Table 10: Comparison of Lump Sum and Flow Transfers

**Panel A: Household-level Outcomes**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Per Capita Monthly Consumption†</th>
<th>Dietary Diversity</th>
<th>Total Household Wealth†</th>
<th>Borrowing†</th>
<th>Saving†</th>
<th>Health Knowledge</th>
<th>Sanitation Practices</th>
<th>Productive Assets†</th>
<th>Consumption Assets†</th>
<th>House Value†</th>
<th>House Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow GD Treatment in Small GD arm</td>
<td>0.082</td>
<td>(0.097)</td>
<td>-0.036</td>
<td>-0.13***</td>
<td>-0.47</td>
<td>-0.25</td>
<td>0.035</td>
<td>0.17</td>
<td>0.33</td>
<td>-0.036</td>
<td>-0.38</td>
</tr>
<tr>
<td>Additional Impact of Lump Sum in Small</td>
<td>0.036</td>
<td>(0.13)</td>
<td>-0.21</td>
<td>0.85*</td>
<td>0.30</td>
<td>-0.041</td>
<td>0.46</td>
<td>0.12</td>
<td>0.47</td>
<td>-0.16**</td>
<td>0.26</td>
</tr>
<tr>
<td>Flow GD Treatment in Large GD arm</td>
<td>0.30***</td>
<td>(0.90)</td>
<td>0.12</td>
<td>-0.026</td>
<td>0.065</td>
<td>0.19</td>
<td>-0.20</td>
<td>0.85*</td>
<td>0.50</td>
<td>-0.15</td>
<td>0.22</td>
</tr>
<tr>
<td>Additional Impact of Lump Sum in Large</td>
<td>0.077</td>
<td>(0.12)</td>
<td>-0.08*</td>
<td>-0.021</td>
<td>0.19</td>
<td>-0.089</td>
<td>0.18</td>
<td>1.03**</td>
<td>0.022</td>
<td>0.22</td>
<td>0.26</td>
</tr>
<tr>
<td>Control Outcome</td>
<td>10.4</td>
<td>11.3</td>
<td>13.7</td>
<td>5.96</td>
<td>5.18</td>
<td>0.19</td>
<td>-0.23</td>
<td>11.2</td>
<td>8.72</td>
<td>13.6</td>
<td>0.08</td>
</tr>
<tr>
<td>Observations</td>
<td>11.3</td>
<td>11.3</td>
<td>11.3</td>
<td>11.33</td>
<td>11.33</td>
<td>11.32</td>
<td>11.32</td>
<td>11.31</td>
<td>11.30</td>
<td>10.64</td>
<td>11.38</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.13</td>
<td>0.19</td>
<td>0.26</td>
<td>0.13</td>
<td>0.17</td>
<td>0.049</td>
<td>0.073</td>
<td>0.29</td>
<td>0.38</td>
<td>0.34</td>
<td>0.11</td>
</tr>
</tbody>
</table>

All regressions are **ANCOVA** with lagged dependent variables as controls, run on the panel sample. Regressions use only the GD (non-choice) arm and control, and analyze the individual-level experiment in which households were randomly assigned to receive Flow transfers (18% of sample), Lump-sum transfers (28% of sample), or the Choice between the two (35% of sample). We also include a dummy for the village-level experiment in giving Large GD transfer amounts. The F-test at the bottom of the table computes the outcome in the Choice arm to the average of the outcome in the IS and Flow arms, weighted by the fraction of the choice group that chose each. Regressions weighted so as to be representative of eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect. Outcomes marked with a † are analyzed as inverse hyperbolic sine, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1

**Panel B: Individual-level Outcomes**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid-Upper Arm Circumference</th>
<th>Anemia, Children</th>
<th>Anemia, Mother</th>
<th>Child Mortality</th>
<th>Prepregnancy</th>
<th>Live Birth</th>
<th>Births in Facilities</th>
<th>Vaccinations (any in past year)</th>
<th>Vaccinations complete</th>
<th>Disease Burden</th>
<th>Diarrhea Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow GD Treatment in Small GD arm</td>
<td>0.018</td>
<td>0.0086</td>
<td>-0.0085</td>
<td>0.027</td>
<td>0.000084</td>
<td>-0.0031</td>
<td>0.033</td>
<td>0.075</td>
<td>0.084</td>
<td>0.0017</td>
<td>0.015</td>
<td>0.028</td>
<td>0.0032</td>
</tr>
<tr>
<td>Additional Impact of Lump Sum in Small</td>
<td>0.022</td>
<td>0.033</td>
<td>-0.065</td>
<td>0.025</td>
<td>0.0002</td>
<td>-0.0046</td>
<td>0.032</td>
<td>0.071</td>
<td>0.051</td>
<td>0.0032</td>
<td>0.034</td>
<td>0.029</td>
<td>0.016</td>
</tr>
<tr>
<td>Flow GD Treatment in Large GD arm</td>
<td>0.088**</td>
<td>0.064</td>
<td>0.16**</td>
<td>0.0021</td>
<td>0.021</td>
<td>-0.0074</td>
<td>0.040</td>
<td>0.078</td>
<td>0.008</td>
<td>0.009</td>
<td>0.021</td>
<td>0.0073</td>
<td>0.0093</td>
</tr>
<tr>
<td>Additional Impact of Lump Sum in Large</td>
<td>0.075</td>
<td>0.0984</td>
<td>0.40**</td>
<td>-0.0091</td>
<td>0.022</td>
<td>-0.0066</td>
<td>0.0088</td>
<td>0.180</td>
<td>-0.010</td>
<td>-0.79**</td>
<td>-0.11</td>
<td>-0.071</td>
<td>-0.0071</td>
</tr>
<tr>
<td>Control Outcome</td>
<td>1.52</td>
<td>1.06</td>
<td>0.72</td>
<td>0.22</td>
<td>0.12</td>
<td>0.0056</td>
<td>0.20</td>
<td>0.68</td>
<td>0.84</td>
<td>0.72</td>
<td>0.54</td>
<td>0.49</td>
<td>0.90</td>
</tr>
<tr>
<td>Observations</td>
<td>1474</td>
<td>1461</td>
<td>1132</td>
<td>0.64</td>
<td>1.103</td>
<td>1.877</td>
<td>1.767</td>
<td>2.99</td>
<td>3.05</td>
<td>9.07</td>
<td>9.07</td>
<td>1.861</td>
<td>1.861</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.74</td>
<td>0.70</td>
<td>0.52</td>
<td>0.073</td>
<td>0.12</td>
<td>0.018</td>
<td>0.094</td>
<td>0.30</td>
<td>0.26</td>
<td>0.47</td>
<td>0.30</td>
<td>0.060</td>
<td>0.032</td>
</tr>
</tbody>
</table>

 ANCOVA: Y Y Y N N N N N N N N N


Regressions with both baseline and endline outcome measurement are **ANCOVA** with lagged dependent variables as controls, run on panel sample. Regressions are weighted so as to be representative of all eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect. *** p<0.01, ** p<0.05, * p<0.1
### Panel A: Household-level Outcomes:

#### Table 11: Analysis of Choice in Transfer Modality

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Primary Outcomes:</th>
<th>Secondary Outcomes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Capita Monthly Consumption†</td>
<td>Decay Diversity</td>
</tr>
<tr>
<td>LumpSum GD Treatment</td>
<td>0.082 (0.097)</td>
<td>0.17 (0.15)</td>
</tr>
<tr>
<td>Flow GD Treatment</td>
<td>0.075 (0.095)</td>
<td>0.28 (0.14)</td>
</tr>
<tr>
<td>Choice between Lump Sum &amp; Flow GD</td>
<td>-0.044 (0.17)</td>
<td>0.54 (0.23)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer amount</td>
<td>0.24 (0.086)</td>
<td>0.27 (0.12)</td>
</tr>
</tbody>
</table>

#### Panel B: Individual-level Outcomes:

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Primary Outcomes:</th>
<th>Secondary Outcomes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Height-for-Age</td>
<td>Weight-for-Age</td>
</tr>
<tr>
<td>LumpSum GD Treatment</td>
<td>-0.053 (0.11)</td>
<td>-0.068 (0.084)</td>
</tr>
<tr>
<td>Flow GD Treatment</td>
<td>-0.071 (0.13)</td>
<td>-0.15 (0.084)</td>
</tr>
<tr>
<td>Choice between Lump Sum &amp; Flow GD</td>
<td>-0.20 (0.16)</td>
<td>0.015 (0.017)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer amount</td>
<td>0.098 (0.089)</td>
<td>0.061 (0.032)</td>
</tr>
</tbody>
</table>

### Notes:

- All regressions are ANCOVA with lagged dependent variables as controls, run on the panel sample. Regressions use only the GD arm and control arm, and analyze the individual-level experiment in which households were randomly assigned to receive Flow transfers (56% of sample), Lump Sum transfers (29% of sample), or the Choice between the two (15% of sample). We also include a dummy for the village-level experiment in giving huge GD transfer amounts. The F-test at the bottom of the table compares the outcome in the Choice arm to the average of the outcome in the LS and Flow arms, weighted by the fraction of the choice group that chose each. Regressions weighted so as to be representative of eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect. Outcomes marked with a † are analyzed as inverse hyperbolic sine, meaning that impacts should be interpreted as percent changes in the outcome. *** p<0.01, ** p<0.05, * p<0.1

- Primary Outcomes: Secondary Outcomes:

- ANCOVA Y Y Y NNNNNNNNNN

- Sample Under 6 Moms Under 6 Women Pregnancies Births   Under 6 Anthro panel Under 3 Under 6

- Regressions with both baseline and endline outcome measurements are ANCOVA with lagged dependent variables as controls, run on the panel sample. Anemia data was only collected at endline, and regressions on pregnancy outcomes and mortality are endline cross-sectional regressions. Regressions are weighted so as to be representative of eligible households in study villages. Standard errors are clustered at the village level to reflect the design effect.
Table 12: Heterogeneity by Baseline Malnutrition

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Mid-Upper Arm Circumference</th>
<th>Weight-for-Age (2)</th>
<th>Height-for-Age (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Outcome * Gikuriro Treatment</td>
<td>0.085</td>
<td>-0.035</td>
<td>-0.041</td>
</tr>
<tr>
<td></td>
<td>(0.056)</td>
<td>(0.062)</td>
<td>(0.044)</td>
</tr>
<tr>
<td>Baseline Outcome * GiveDirectly Treatment</td>
<td>0.077</td>
<td>-0.066</td>
<td>-0.025</td>
</tr>
<tr>
<td></td>
<td>(0.065)</td>
<td>(0.044)</td>
<td>(0.046)</td>
</tr>
<tr>
<td>Baseline Outcome * GiveDirectly Large transfer</td>
<td>0.081</td>
<td>0.007</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.060)</td>
<td>(0.046)</td>
<td>(0.043)</td>
</tr>
<tr>
<td>Gikuriro Treatment</td>
<td>0.025</td>
<td>0.032</td>
<td>0.043</td>
</tr>
<tr>
<td></td>
<td>(0.056)</td>
<td>(0.036)</td>
<td>(0.043)</td>
</tr>
<tr>
<td>GiveDirectly Treatment</td>
<td>-0.005</td>
<td>0.002</td>
<td>-0.025</td>
</tr>
<tr>
<td></td>
<td>(0.065)</td>
<td>(0.036)</td>
<td>(0.040)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>0.135*</td>
<td>0.063</td>
<td>0.093*</td>
</tr>
<tr>
<td></td>
<td>(0.079)</td>
<td>(0.039)</td>
<td>(0.052)</td>
</tr>
<tr>
<td>Baseline Outcome</td>
<td>0.600***</td>
<td>0.749***</td>
<td>0.768***</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td>(0.035)</td>
<td>(0.034)</td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>-0.72</td>
<td>-1.06</td>
<td>-1.92</td>
</tr>
<tr>
<td>Observations</td>
<td>1629</td>
<td>2104</td>
<td>2125</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.507</td>
<td>0.673</td>
<td>0.696</td>
</tr>
</tbody>
</table>

Regressions with both baseline and endline outcome measurement are ANCOVA with lagged dependent variables as controls, run on the panel sample. Regressions include fixed effects for the randomization blocks, and are weighted to be representative of all households in study villages. Anthropometric outcomes are demeaned prior to interaction so that the uninteracted treatment terms provide impact at average level of baseline anthropometric measure.

*** p<0.01, ** p<0.05, * p<0.1
Table 13: Heterogeneity by Child Age

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid-Upper Arm Circumference</th>
<th>Height-for-Age</th>
<th>Weight-for-Age</th>
<th>Mid-Upper Arm Circumference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>Indicator * Gikuriro Treatment</td>
<td>-0.014</td>
<td>-0.026</td>
<td>0.112</td>
<td>0.395</td>
<td>0.249</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>(0.138)</td>
<td>(0.113)</td>
<td>(0.109)</td>
<td>(0.644)</td>
<td>(0.505)</td>
<td>(0.489)</td>
</tr>
<tr>
<td>Indicator * GiveDirectly Treatment</td>
<td>-0.307***</td>
<td>-0.158</td>
<td>0.156</td>
<td>0.38</td>
<td>0.592</td>
<td>0.666</td>
</tr>
<tr>
<td></td>
<td>(0.138)</td>
<td>(0.115)</td>
<td>(0.104)</td>
<td>(0.525)</td>
<td>(0.498)</td>
<td>(0.506)</td>
</tr>
<tr>
<td>Indicator * GiveDirectly Large transfer</td>
<td>-0.125</td>
<td>-0.025</td>
<td>0.157</td>
<td>0.408</td>
<td>0.73</td>
<td>0.307</td>
</tr>
<tr>
<td></td>
<td>(0.139)</td>
<td>(0.123)</td>
<td>(0.145)</td>
<td>(0.399)</td>
<td>(0.472)</td>
<td>(0.280)</td>
</tr>
<tr>
<td>Gikuriro Treatment</td>
<td>0.012</td>
<td>0.013</td>
<td>-0.08</td>
<td>0.004</td>
<td>0.002</td>
<td>-0.027</td>
</tr>
<tr>
<td></td>
<td>(0.106)</td>
<td>(0.080)</td>
<td>(0.082)</td>
<td>(0.083)</td>
<td>(0.063)</td>
<td>(0.069)</td>
</tr>
<tr>
<td>GiveDirectly Treatment</td>
<td>0.117</td>
<td>0.08</td>
<td>-0.107</td>
<td>-0.018</td>
<td>0.009</td>
<td>-0.035</td>
</tr>
<tr>
<td></td>
<td>(0.119)</td>
<td>(0.083)</td>
<td>(0.091)</td>
<td>(0.099)</td>
<td>(0.068)</td>
<td>(0.073)</td>
</tr>
<tr>
<td>GiveDirectly Large transfer</td>
<td>0.248**</td>
<td>0.194**</td>
<td>0.076</td>
<td>0.193**</td>
<td>0.183****</td>
<td>0.156**</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.081)</td>
<td>(0.111)</td>
<td>(0.085)</td>
<td>(0.066)</td>
<td>(0.078)</td>
</tr>
<tr>
<td>Indicator uninteracted</td>
<td>0.147</td>
<td>0.13</td>
<td>-0.007</td>
<td>-0.01</td>
<td>0.023</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td>(0.149)</td>
<td>(0.118)</td>
<td>(0.141)</td>
<td>(0.255)</td>
<td>(0.298)</td>
<td>(0.270)</td>
</tr>
<tr>
<td>Baseline Control Mean</td>
<td>-1.92</td>
<td>-1.06</td>
<td>-0.72</td>
<td>-1.92</td>
<td>-1.06</td>
<td>-0.72</td>
</tr>
<tr>
<td>Observations</td>
<td>2360</td>
<td>2347</td>
<td>2020</td>
<td>2360</td>
<td>2347</td>
<td>2020</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.071</td>
<td>0.035</td>
<td>0.072</td>
<td>0.068</td>
<td>0.035</td>
<td>0.073</td>
</tr>
</tbody>
</table>

Regressions are endline cross-sections, run on the panel sample, and do not include the lagged outcome variable so as to be able to consider children who are newborns in R2. Regressions include fixed effects for the randomization blocks, and are weighted to be representative of eligible households in study villages. *** p<0.01, ** p<0.05, * p<0.1
Figures

Figure 1: Actual and Assigned Treatment Amounts

Comparing Assigned and Actual GD Transfer Amounts

Horizontal lines represent intended transfer amounts
Figure 2: Plotting Outcomes by Program Cost

Average Savings by Treatment Cost

- Fitted in GD treatment
- Gikuriro Actual
- Estimated GD impact at Gikuriro cost

Area of shapes proportional to weighted sample size in each cell.

Figure 3: Fan Regression Impacts by Age

The GD Large treatment effect on Height for Age
With 95% Confidence Intervals

Fan Regression for impact of the GD Large treatment, smoothed over age at endline
Figure 4: Fan Regression Impacts by Age

The GD Large treatment effect on Child Anemia
With 95% Confidence Intervals

Fan Regression for impact of the GD Large treatment, smoothed over age at endline
Appendix A  GiveDirectly Nutritional Handout

GiveDirectly’s program is supported by the generous support of the American people through USAID. The information below is approved by the Rwanda Ministry of Health.

- **Infant Nutrition**
  - Infants less than 6 months old should be fed by breast only. During this period an infant receives only breast milk and no other liquids or solids, not even water, unless medically indicated. A non-breastfed baby is 14 times more likely to die than an exclusively breastfed baby in the first 6 months.
  - Infants 6 to 24 months old should continue to be fed by breast, but should also receive complementary feeding that includes animal-source foods (meats, fish, milk products, eggs) and fruits and vegetables that are rich in vitamin A (such as mango, papaya, oranges, yellow sweet potato and carrots). Guidelines are for kids 6-24 months to eat at least 4 food groups: fruits, vegetables and legumes, grains, meats, dairy.
    - Infants 6 to 8 months old should be fed complementary foods 2-3 times daily;
    - Infants 9 to 24 months old should be fed complementary foods 3-4 times daily, plus 1-2 snacks.

- **Reducing Illness**
  - If you or your children get diarrhoea, use Oral Rehydration Salts (ORS) to replace the nutrients being lost. Typical symptoms of diarrhoea include frequent, loose, watery stools, abdominal cramps, and/or abdominal pain. If ORS is not available, a simple solution can be prepared for drinking by mixing one liter of clean drinking water and mix it with ½ teaspoon of salt and 6 teaspoons of sugar.
  - The government has a 6-monthly deworming program and Vitamin A supplementation program. Ask your Community Health Worker for more information.

- **Dietary Diversity**
  - Anemia
    - Anemia is a health condition, commonly caused by nutritional deficiency of iron and other nutrients (folate or vitamin B12). Around 72% of 6-8 months-olds in Rwanda have Anemia. Anemia can be an underlying cause for maternal death and prenatal and perinatal infant loss. Anemia among children is associated with low mental performance and physical development.
    - Examples of iron-rich food: fish, meat, milk products, oranges, lemons, grapefruits, guavas, papayas, and green leafy vegetables. Breast milk for your child is an important source of iron, too.
    - Here are some other examples of food you can produce/buy/eat to cheaply increase nutrition:
Breeding small, inexpensive animals such as hens, rabbits and guinea pigs can provide you and your children with important body building protein and other important nutrients.

Grow kitchen gardens if you have time. You can grow different vegetables for your family throughout the year, like amaranths, carrots, and dark-green leaves such as spinach and dodo, all of which are important sources of body protecting nutrients.

Consume soya beans, yogurt, avocados and dodo (which you could grow)

Eat orange-flesh rather than white-flesh sweet potatoes

**Hygiene**
- Handwashing with soap or wood ash can kill bacteria/viruses and prevents the spread of disease. Handwashing with soap at critical times is estimated to reduce diarrhoea by 47%. The most important times that hands should be washed with soap and water are:
  - After defecating
  - After cleaning a child who has defecated
  - Before eating or handling food

  Recommended practices for personal hygiene further include:
  - Washing hair every week with shampoo
  - Washing the face every day after sleeping
  - Brushing teeth twice every day, in the morning and the night after eating

- Safe disposal of waste means defecating into a latrine, disposing into a latrine, or burial. Inappropriate disposal of human feces, such as open defecation, facilitates the transmission of pathogens and disease.

**Birth preparedness for delivery**
- Early initiation of antenatal care (ANC) can reduce common maternal complications and maternal and perinatal mortality. Visit your nearest health facility early during pregnancy for medical tests and more information. The World Health Organization promotes four antenatal clinic visits, one in each trimester, during each pregnancy.
Appendix B  Selection of control variables

In our pre-analysis plan, we state that control variables for the primary specification “will be selected on the basis of their ability to predict the primary outcomes”. In doing so, we seek to build on recent developments that balance the challenge of using baseline data to select variables that will reduce residual variance in equation (1) with the danger that researcher freedom in the selection of control variables can lead to \( p \)-hacking, in which right-hand-side variables are selected specifically on the basis of the statistical significance of the coefficient of interest (Card and Krueger, 1995; Casey et al., 2012), thereby invalidating inference.

To balance these concerns, we follow the post-double-selection approach set forth in Belloni et al. (2014b). Those authors advocate a two-step procedure in which, first, Lasso is used to automate the selection of control variables, and second, the post-Lasso estimator (Belloni et al., 2012) is used to estimate the coefficients of primary interest in Equation (1), effectively using Lasso as a model selection device but not imposing the shrunken coefficients that results from the Lasso estimates directly. Belloni et al. (2014b) demonstrate that this approach not only reduces bias in estimated treatment effects better than alternative approaches—less a concern given the successful randomization in our experiment—but that it may improve power while retaining uniformly valid inference.

In the first stage, model selection is undertaken by retaining control variables from the union of those chosen either as predictive of the treatment assignment or of the outcome. This model selection stage can be undertaken after residualizing to account for a set of control variables that the authors have a priori determined belonw in the model, as in Belloni et al. (2014a); in our case, we retain block fixed effects, lagged values of the outcome, and lagged values of (the inverse hyperbolic sine of) household wealth in all specifications, per our pre-analysis plan. We modify the heteroskedasticity-robust Lasso estimator of Belloni et al. (2012) to incorporate sampling weights consistent with our design, using the Lasso penalty is chosen as a function of the sample size and the number of potential covariates, as in Belloni et al. (2014a).

Resulting covariates selected for each of the primary and secondary outcomes, at household and individual level, are presented in Tables B.1 and B.2, respectively.

Table B.1: Covariates selected in Belloni et al. (2014) post-double-lasso selection procedure for household outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Control set</th>
</tr>
</thead>
<tbody>
<tr>
<td>consumption</td>
<td>Baseline value of consumption, present in both rounds</td>
</tr>
<tr>
<td>asinh</td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td>Household</td>
<td>Baseline value of dietarydiversity, present in both rounds</td>
</tr>
<tr>
<td>dietary</td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td>diversity</td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td>score</td>
<td>L_savingsstock_asinh3</td>
</tr>
<tr>
<td></td>
<td>L_consumerpti_x_Ldietarydiv</td>
</tr>
<tr>
<td></td>
<td>L_consumerpti_x_Lproductiv</td>
</tr>
<tr>
<td></td>
<td>L_dietarydiv_x_Lassetscon</td>
</tr>
<tr>
<td>wealth</td>
<td>Baseline value of wealth, present in both rounds</td>
</tr>
<tr>
<td>asinh</td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td>borrowingstock</td>
<td>Baseline value of borrowingstock, present in both rounds</td>
</tr>
<tr>
<td>asinh</td>
<td>L.Own dwelling</td>
</tr>
</tbody>
</table>

Continued on next page
Table B.1 (continued)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Control set</th>
</tr>
</thead>
<tbody>
<tr>
<td>savingsstock_asinh</td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td></td>
<td>Baseline value of savingsstock_asinh, present in both rounds</td>
</tr>
<tr>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td></td>
<td>L.consumpti_x_L.productiv</td>
</tr>
<tr>
<td></td>
<td>L.consumpti_x_Lassetscon</td>
</tr>
<tr>
<td>Health Knowledge Index</td>
<td>Baseline value of health_knowledge, present in both rounds</td>
</tr>
<tr>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td>Sanitation Practices Index</td>
<td>Baseline value of sanitation_practices, present in both rounds</td>
</tr>
<tr>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td></td>
<td>L.productiv_x_Lassetscon</td>
</tr>
<tr>
<td>productiveassets_asinh</td>
<td>Baseline value of productiveassets_asinh, present in both rounds</td>
</tr>
<tr>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td></td>
<td>L.consumpti_x_Lassetscon</td>
</tr>
<tr>
<td>assetsconsumption_asinh</td>
<td>Baseline value of assetsconsumption_asinh, present in both rounds</td>
</tr>
<tr>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td></td>
<td>L.Number of rooms</td>
</tr>
<tr>
<td></td>
<td>L.Durables expenditure (12-month recall)</td>
</tr>
<tr>
<td></td>
<td>L.dietarydi_x_Lassetscon</td>
</tr>
<tr>
<td></td>
<td>L.productiv_x_Lassetscon</td>
</tr>
<tr>
<td>selfcostdwell_asinh</td>
<td>Baseline value of selfcostdwell_asinh, present in both rounds</td>
</tr>
<tr>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td></td>
<td>L.Number of rooms</td>
</tr>
<tr>
<td></td>
<td>L.Durables expenditure (12-month recall)</td>
</tr>
<tr>
<td>Housing Quality Index</td>
<td>Baseline value of housing_quality, present in both rounds</td>
</tr>
<tr>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td>L.Fraction of village defined eligible by IPA</td>
</tr>
<tr>
<td></td>
<td>L.Number of rooms</td>
</tr>
</tbody>
</table>

Note: block fixed effects and lag of the relevant outcome included in all specifications. Specifications that include both eligible and ineligible households include an indicator for eligibility status.
Table B.2: Covariates selected in Belloni et al. (2014) post-double-lasso selection procedure for individual outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Sample</th>
<th>Control set</th>
</tr>
</thead>
<tbody>
<tr>
<td>haz06, Winsorized fraction .005, high only</td>
<td>Under 5s</td>
<td>L.haz06, Winsorized fraction .005, high only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
</tr>
<tr>
<td></td>
<td></td>
<td>agemonths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>agemonths_sq</td>
</tr>
<tr>
<td></td>
<td></td>
<td>agemonths_cu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L.Lhh_wealth_asinh</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L.Food expenditure (weekly recall)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L.Food consumption-value own production (weekly recall)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L.waz06, Winsorized fraction .005, high only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>L.consumpti_x_Lselfcostd</td>
</tr>
<tr>
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<tr>
<td>Any fever, diarrhea, or coughing blood at individual/round level</td>
<td>Under 5s female</td>
<td>age-months, age-months_sq, age-months_cu, L.Lhh_wealth_asinh, L.Food consumption-value own production (weekly recall)</td>
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<tr>
<td>Individual reported with diarrhea/vomiting/fever now</td>
<td>Under 5s female</td>
<td>age-months, age-months_sq, age-months_cu, L.Lhh_wealth_asinh</td>
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Note: block fixed effects and lag of the relevant outcome included in all specifications. Specifications that include both eligible and ineligible households include an indicator for eligibility status.
Annex A. Development Impact Lab Evaluation
Scope of Work

Objective

The Development Impact Lab at UC Berkeley seeks to partner with USAID (Development Innovation Ventures, Rwanda mission, and Higher Education Solutions Network) to design and conduct a randomized controlled trial that rigorously evaluates household grants as a benchmark for development assistance.

Relevance to Cooperative Agreement

This evaluation will be supported via a buy-in from the USAID/LAB/Development Innovations Ventures (DIV) team into the Higher Education Solutions Network (HESN) Cooperative Agreement currently in place between USAID/LAB/HESN and UC Berkeley’s Development Impact Lab (DIL). The project will be added to the DIL portfolio of “demonstration projects” (defined as “Pillar 1” in the HESN Cooperative Agreement). The project will help to articulate a new field of research, called Development Engineering, which integrates insights from economics and behavioral science into the design of pro-poor technologies. For this particular effort, the researchers will use surveys and mobile data to measure the impact of electronic payments on low-income households in Rwanda.

Background

Household grant programs are widely used by governments and NGOs to improve social and economic outcomes for those living in poverty. Typically the grants are made directly to individuals or households, accompanied by conditions or limits on spending. While substantial evidence exists regarding the overall benefits of these transfers, there is limited evidence to inform their optimal design, particularly when the grants are delivered at scale. There is also less evidence on the impacts of large unconditional cash transfers.

Further, most experience with household grants has been in wealthy nations and in middle-income countries like South Africa, Mexico, Brazil, and Ecuador. There has been relatively little evidence of their effectiveness in low-income countries across Sub-Saharan Africa—where rural livelihoods, access to markets, and household consumption patterns are considerably different. In this context, household grants may be used to meet basic consumption needs of the poorest households, or they may serve as a pathway out of poverty for households that are severely capital constrained.

There is also potential for household grants to serve as a benchmark for the cost-effectiveness of more structured anti-poverty programs. Cash is universal and easily transferrable—especially with the aid of mobile money—providing an opportunity to credibly compare the impacts of classic development interventions (e.g. livestock transfers, teacher training, or school inputs) against the value provided by grants. An emerging question is how to compare targeted transfers to other meaningful approaches to poverty alleviation: what are the appropriate indicators? What is the most appropriate counterfactual?

To begin addressing these knowledge gaps, the DIL proposes to partner with USAID, GiveDirectly, and Google.org in an independent evaluation of a novel household grants program in Rwanda. The study will inform the future design of grant programs both as an anti-poverty
tool and as a benchmark for gauging the relative cost-effectiveness of other development programs.

DIL is a global research initiative sponsored by USAID’s Higher Education Solutions Network (HESN) and headquartered at the University of California, Berkeley. It is an international network of universities and researchers that design and evaluate technologies used in the fight against poverty. DIL investigators use insights from economics to build scale into the design of new devices and services.

The evaluation of household grants in Rwanda will be led by a team of DIL faculty researchers with unique expertise in the rigorous evaluation of technology-driven development programs, including mobile money and digital financial inclusion interventions. As the independent evaluator, the DIL team will design and implement a randomized controlled trial (RCT) that measures a broad range of impacts generated by household grants (see Figure 1). The study will be designed in coordination with USAID, to track outcome indicators identified as important by each of the project partners. The evaluators may assess the impacts of household grants in conjunction with other USAID programming, as additional treatment arms.

![Design of a randomized controlled trial (RCT) testing a household grant program.](image)

The intervention itself (i.e., the delivery of household grants) is to be funded through a Global Development Alliance (GDA) between USAID/Rwanda and Google.org. GiveDirectly (a U.S.-based non-profit organization) will serve as the implementing partner in Rwanda. By serving as an independent research partner, DIL will bring credibility to the program evaluation and ensure that results are not manipulated. Given the novelty of household grants as an anti-poverty tool, it
is important that the evaluator not misrepresent the impacts of this intervention (or any other
development programs against which grants are compared).

We expect to generate specific benefits for the USAID Rwanda mission through this study. By tracking the development returns to simple household grants, the Mission will generate a tailored “benchmark” against which to judge the impact of its current activities. The study’s results will also provide a very specific, contextual reference point for estimating the cost-effectiveness of proposed future activities. In addition, the study may help improve targeting of mission resources by elucidating the variation in impact across sub-populations.

More broadly, the innovation and evaluation described here will poise USAID/Rwanda as a leader in rigorous, evidence-driven development. The DIL team will work with USAID, Google.org, and Give Directly to disseminate results to the broader development community, to ensure that our insights and lessons become a public good—something that is available to, and used by, a range of development stakeholders.

**Proposed Scope of Work**

1. **Design evaluation and pilot survey instruments:** Work in close collaboration with USAID, Google.org, and GiveDirectly to identify evaluation priorities. Define research questions; select target populations, treatment arms and variables; file pre-analysis plan; develop measurement instruments.
2. **Pilot:** As appropriate, a pilot may be conducted to finalize the evaluation design and measurement instruments.
3. **Conduct baseline:** The DIL evaluation team will contract a survey firm to implement a baseline survey of both treatment and control groups. The firm will be selected by the DIL research team, subject to approval by USAID. Survey data will be cleaned, annotated, and de-identified for release to USAID.
4. **Full-rollout:** As GiveDirectly delivers household grants to recipients in Rwanda, the evaluation team will ensure appropriate process evaluations and monitoring activities are implemented.
5. **Endline:** The DIL team will contract the survey firm to implement an endline survey of both treatment and control groups. Pending available funds, a second endline may be conducted to capture longer-term effects.
6. **Analysis and Dissemination:** All data will be cleaned, analyzed, and de-identified/commented for publication in a publicly available data repository. Deliverables will include de-identified data sets, code, peer-reviewed publications, presentations of results, and open access reports on research findings.

**Timeline**

The evaluation activities will span from September 1, 2015 through August 31, 2018. The HESN USAID AOR will work with USAID OAA colleagues as we process this buy-in to modify the period of the performance (PoP) of the UC-B/DIL Award to accommodate the proposed project end date (since it is one year beyond the current PoP for the Cooperative Agreement.)
Phase I: Setup and Design. During this phase, the evaluators will finalize all aspects of research design and planning. This will involve intensive collaboration with GiveDirectly and USAID to establish implementation protocols. The final evaluation design will be subject to approval by USAID. In tandem, the evaluators will recruit a survey team in Rwanda, establish relationships with local academics and policy-makers, and hire local field staff.

Design questions to be resolved by the end of this stage include:
- Which exact programs within USAID’s portfolio will be benchmarked using the household grants intervention?
- What are the most important outcomes of those programs? How are they being documented? Are they outcomes we can measure in a household grant program?
- Who are the target beneficiaries of these programs? Where within Rwanda can we find comparable target beneficiaries for a household grant benchmark? What are the targeting and eligibility criteria that will generate the most comparable outcomes?
- What are the ideal grant sizes and timing to generate comparable outcomes?

At the end of this phase, when research design is finalized, the budget and timeline will be updated in consultation with USAID as needed.

Phase II: Pilot. During this phase, it is understood that GiveDirectly will enroll an initial 250 households using protocols established earlier. This will be a pilot of GiveDirectly’s systems, rather than a full evaluation (and so it will not involve impact or outcome measurement). However, the pilot results may be used by the evaluators to identify aspects of the evaluation protocol that require modification for the full rollout. The DIL team will work with USAID and GiveDirectly to modify survey instruments or research design as required.

Phase III: Full rollout. During this phase, it is understood that GiveDirectly will enroll the rest of the recipient households in the program (at least 3,000 depending upon the design), using the approved protocol. Households will be selected by lottery, potentially in community blocs, to enable an experimental comparison of outcomes between treated and control households. The DIL team and its survey partner in Rwanda will conduct baseline surveys prior to GiveDirectly visiting and enrolling the households.

GiveDirectly estimates that 6 months are required to complete the baseline survey and to enroll participating treatment households. After the first payment to households, remaining payments will be distributed over the course of the following five months to one year, depending upon the exact research design. End line data collection will take place at a timeline to be determined by the evaluation team—potentially one to two years after the final payment, to allow for testing of longer-term impacts.

Phase IV: Dissemination. Led primarily by USAID with agreement and input from Google.org, during this phase GiveDirectly and the evaluation team will discuss results on the impacts of the project with decision-makers within USAID and the Government of Rwanda as well as the broader aid sector. This phase will be defined in a Memorandum of Understanding between
USAID, Google.org, and GiveDirectly and hence is not detailed here. However, the DIL team will provide support as required (including preparation of materials, participation in meetings, and presentations).
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<td>Please enter a household member’s name</td>
<td>Andika izina ry’umwe mu bantu baba muri uru rugo.</td>
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<td>What is ${m1_member_name_}$’s relationship to the head of household?</td>
<td>Andika izina ry’umwe mu bantu baba muri uru rugo.</td>
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<td>How many months did ${m1_member_name_}$ stay here out of the past 12 months?</td>
<td>Ni amezi angahe ${m1_member_name_}$ yari ari hano mu mezi 12 ashize? Niba ${m1_member_name_}$ atari ahari mu gihye cy’ibyumweru bibiri cyangwa muni icyarimwe, bara ko ${m1_member_name_}$ yari ari mu rugo. Niba ${m1_member_name_}$ atari ari mu rugo mu gihye kirene ibyumweru bibiri, baro ko ${m1_member_name_}$ atari mu rugo muri uko kwezi.</td>
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What is ${m1_member_name_}'s marital status?

Who is ${m1_member_name_}'s natural mother?

Is ${m1_member_name_} currently enrolled in school?

What grade is ${m1_member_name_} currently enrolled in?

In the past 3 months, did ${m1_member_name_} experience fever (without other major symptoms, such as diarrhea or vomiting)?

Has ${m1_member_name_} been unable to work or do his/her usual daily activities as a result of this illness?

Has ${m1_member_name_} been unable to work or do his/her usual daily activities as a result of this injury/accident?

Who is ${m1_member_name_}'s natural father live in this household?

Does ${m1_member_name_}'s natural father live in this household?

Has ${m1_member_name_} been vaccinated in the last 12 months?

Was the baby delivered in a medical facility?

Can you show ${m1_member_name_}'s vaccination book/card?

Has ${m1_member_name_} been vaccinated?
select_one

m1_health_27_b

Did $(m1\_member\_name\_j)$ receive a complete dose of vaccines according to Rwandan vaccine calendar?

Ese $(m1\_member\_name\_j)$ yaba yarafashe inkiko zose ukoto ziteganyirwe kuri gahunda y’ikingira gy’Minisiteri y’ubuzima

select_one

m1_health_28_

Where did the last vaccination take place?

Urukingo rwa nyuma yaruhurewe he?

select_one

m1_health_29_

How much did or will the household pay for the last vaccination?

Uru ruwo rwishyuye cyangwa ruwishyura amafaranga angahe y’urusingo rwa nyuma?

select_one

m1_health_30_

Why was $(m1\_member\_name\_j)$ never vaccinated?

Kuki $(m1\_member\_name\_j)$ atigeze akingirwa?

select_one

m1_health_weight__

Please specify

Sobanura

name8

name9

child_diet

Please describe everything that $(m1\_member\_name\_j)$ ate yesterday during the day or night, whether at home or away from home. (Ask what the child first ate after waking up in the morning. Then ask when was the next time the child ate anything and what was eaten. Continue this line of questioning for each eating occasion, including at mid-day, evening, at night and in between. If a food in any of the groups below is mentioned, enter a 1 for that group. Once a food in that group is named, there is no need to enter anything else for that group. If the respondent mentions mixed dishes, like a porridge, sauce or stew, ask “What ingredients were in that dish?”).) Sobanura buri kintu $(m1\_member\_name\_j)$ yariye ejo hashize ku manywa cyangwa nijoro, yaba ari mu ruco cyangwa atari mu rugo. (Baza icyo umwana yariye bwa mbere akibyuka mu gitondo. Hanumya ubaze igihe umwana yonge yuhubwa ibunguro n’ibyari bigirige. Komeza ubaze utyo kuri buri funguro harimo irya saa sita, irya n’imumoroba, irya nijoro n’igaburo yahawe hagati y’ayo mafunguro. Niba hari ibiribwa bivuzwe mu buri mu itsinda ry’ibiribwa biri munsu, andika 1 kuri iryo itsinda. Mu gihe ikiribwa cyo muri iryo itsinda cyavuzwe, si ngoribwa kigira ikindi wandika kuri iryo itsinda. Mu gihe usubiza avuze imvange y’ibiribwa runaka, nk’igikoma, isosi cyangwa imvange, baza uti, “Iri yagaburo nyari rigiiziwwe n’ibibi biribwa?”)

begin group

child_diet 1. Household Roster - Child’s Diet 1. Ibiri mu rugo - Igaburo ry’umwana

Please describe everything that $(m1\_member\_name\_j)$ ate yesterday during the day or night, whether at home or away from home. (Ask what the child first ate after waking up in the morning. Then ask when was the next time the child ate anything and what was eaten. Continue this line of questioning for each eating occasion, including at mid-day, evening, at night and in between. If a food in any of the groups below is mentioned, enter a 1 for that group. Once a food in that group is named, there is no need to enter anything else for that group. If the respondent mentions mixed dishes, like a porridge, sauce or stew, ask “What ingredients were in that dish?”) Sobanura buri kintu $(m1\_member\_name\_j)$ yariye ejo hashize ku manywa cyangwa nijoro, yaba ari mu ruco cyangwa atari mu rugo. (Baza icyo umwana yariye bwa mbere akibyuka mu gitondo. Hanumya ubaze igihe umwana yonge yuhubwa ibunguro n’ibyari bigirige. Komeza ubaze utyo kuri buri funguro harimo irya saa sita, irya n’imumoroba, irya nijoro n’igaburo yahawe hagati y’ayo mafunguro. Niba hari ibiribwa bivuzwe mu buri mu itsinda ry’ibiribwa biri munsu, andika 1 kuri iryo itsinda. Mu gihe ikiribwa cyo muri iryo itsinda cyavuzwe, si ngoribwa kigira ikindi wandika kuri iryo itsinda. Mu gihe usubiza avuze imvange y’ibiribwa runaka, nk’igikoma, isosi cyangwa imvange, baza uti, “Iri yagaburo nyari rigiiziwwe n’ibibi biribwa?”)

select_one

m1_childdiet_1_

Starches (like sorghum, cassava, maize, white sweet potato, irish potato, porridge or rice)?

Amido (nk’amasaka, ibitoki, inyumbati, ibigori, ibibumba by’umweru, ibiрай, igikoma cyangwa umwera)?

select_one

m1_childdiet_2_

Leafy dark green vegetables (like skumawik, pumpkin leaf or cow pea leaf)?

Imboga rwatsi z’amababi (sukumawiki, ibisusa cyangwa ibibabi by’mikunde/inkori)?

select_one

m1_childdiet_3_

Dairy products like milk, butter, yoghurt or cheese?

Ibikomoka ku mata nk’amata, amavuta y’inka, yawurute cyangwa cyangwa ny’intero?

select_one

m1_childdiet_4_

Organ meat? (liver, kidney, heart)

Inyama zo munda? (umwija, impiko, umutima)

select_one

m1_childdiet_5_

Other meat (beef, pork, lamb, goat, chicken, duck, fish)?

Izindi nyama (inka, ingurube, intama, ihene, inkoko, igishuhe, ifi)?

select_one

m1_childdiet_6_

Eggs

Amagi

select_one

m1_childdiet_7_

Orange colored fruits or vegetables (like orange sweet potato, pumpkin, mango, carrots)?

Imbuto cyangwa imboga zifite ibara rya oranje (nk’ibijumba by’umuhondo, amadegede/ibihaza, imyembe, karoti)

select_one

m1_childdiet_8_

Other vegetables (like cabbage, cucumber or peas)?

Izindi mboga (nk’amashu, kokomure cyangwa amashaza)

select_one

m1_childdiet_9_

Other fruit (like banana, pineapple, avocado or tomato)?

Izindi mbuto (imineke, inanasi, avoka cyangwa inyanya)

select_one

m1_childdiet_10_

Beans, groundnuts, simsim, sunflower seeds or other seeds?

Ibishyimbo, ubunyobwa, simusimu, imbuto z’ibihwagari n’izindi mbuto

select_one

m1_childdiet_11_

Vegetable oil or margarine?

Ubuto cyangwa marigarine?

select_one

m1_childdiet_12_

How many times did $(m1\_member\_name\_j)$ eat solid, semisolid, or soft foods other than liquids yesterday during the day or night?

Ni inshuro zinagae ejo hashize ku manywa cyangwa nijoro $(m1\_member\_name\_j)$ yariye ibiyo bikomeye, bikomeye buhoro cyangwa byoruhereye aho kunywa ibinyobwa?

end group

end repeat

roster_repeat

end group

roster

calculate

name1

calculate

name2

calculate

name3

calculate

name4

calculate

name5

calculate

name6

calculate

name7

calculate

name8

calculate

name9

calculate

name10

calculate

name11

calculate

name12

calculate

name13

calculate

name14

calculate

name15

begin group

dwelling

dwelling_2_

2. Dwelling Characteristics

2. Ibiranga imibereho

note

I now want to ask some questions about the household in which you live.

Ubu ndashaka kubaba ibibazo bike bijyanye n’urugho ubarno.
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. Do not include live-in house help or live-in house guard, and if respondent works as live-in house help or live-in house guard do not include employer or employer’s family in your answers.

Iyo muuze urugyo, ndashaka kuvuva aho ukunze kurara, atari ngombwa ko haba ku butaka bw’abosokuru bwawe cyu mugu ru y’abalabyezi bwawe. Iyo muuze abantu batuye muri ru ru ru, ndashaka kuvuva “abo musangira bose” kandi bakaraka byibura amagoro 4 cg visumbuyehe mu ru ru ru. Nyeshyireyo, umukozi wo mu ru ru ru boughamugu ngumuzamwo, kandi ndi bowa urimo gusubiza uri umukozi wo mu ru ru ru, nyushyireye urumuganye w’uwo ukerera mu bisibuzo byawee.

**Select One**

**m2_1** dwelling down

Do you own or are you purchasing this house, is it provided to you by an employer, do you use it for free, or do you rent this house?

Ese iyi ru ru ru ni iyawe cyangwa urimo kuri ikishyura, ese wayihiwe n’umukoresha wawe? Iyi ru ru ru uyi koresha ku butu cyangwa uruyikodesha?

**m2_2** worth

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

Ese ubu ushatse kubaka inza isu ni’yi utuyemwe muri ru ru ru mudugudu wayi, byagutuwa amarafanga angahe (ubahiremwe ay/biokoresho no guhemba abakodzi)?

**m2_3** rent

How much in RwF does your household pay for rent each month for this house / apartment?

Ese mu ru ru ru miwiwihwa amarafanga angahe ku kwezi yo gukodesha iyi ru? Amarafanga (9999=simibizi)?

**m2_4** type

What type of dwelling does the household live in?

Ese uru ru ru ru ru ru ru ru ru ru ru ru ru ru ru ru ru?

**m2_5** wall

Select the walling material:

- Kivuge: yes
- cyubakishije ibihoresho bwoko ki?: yes

**m2_6** roof

Select the roof material:

- Kivuge: yes
- cyigisenge cyi’iynu nini cyubakishije ik?: yes

**m2_7** floor

Select the floor material:

- Kivuge: yes
- Ese hasi mu ru ru ru ru ru ru ru ru?

**m2_8** rooms

How many separate rooms do the members of your household occupy? Please include living rooms and kitchens, but does not include bathrooms, hallways, or closets.

Ese ni’ibyumba banga bishutandukanye biwawemwe n’abo mubana mu ru ru ru? Shyiramo cyi’yuuganirango harnwe nyi’kikoni, ariko nyeshyireyo ubwuyahigiro intira zo mu ru ru ru cyangwa ubwihweroro.

**m2_9** electricity

Do you have electricity connected to your dwelling?

Ese mufite umuriro w’amashanyarazi muri ru ru?

**m3_1** mobile

Does your household have access to the use of a mobile phone?

Ese amafaranga angahe ku kwezi yo gukodesha (aha 9999=simbizi)?

**m3_2** water

What was your household’s main source of drinking water over the past month?

Ese ni ahahcy hir’iisanzi umuyo ru ruyawu ru ru ru amazv cyynu ru ru ru cyi’i gushize?

**m3_3** livestock

Over the last 12 months has any household member owned animals or poultry? Do not include animals that belong to others that you are caring for.

Mu mezi 12 ashize, hari umunzwo muri ru ru ru waba warigeze yorora amatungo cyangwa ibiguruka? Nbubiremwe amatungo wurereye abandi.

**m3_4** toilet

What kind of toilet facility does your household use?

Ese uru ru ru ru ru ru ru ru ru ru?

**Begin Group**

**assets**

**s3_start**

**begin group**

**calculate_here**

**end group**

**livestock**

**s3_start**

**begin group**

**calculate_here**

**end group**

**Select One**

**m3_1** livestock

Over the last 12 months has any household member owned animals or poultry? Do not include animals that belong to others that you are caring for.

Mu mezi 12 ashize, hari umunzwo muri ru ru ru waba warigeze yorora amatungo cyangwa ibiguruka? Nbubiremwe amatungo wurereye abandi.

**begin group**

**livestocktypes**

**s3_start**

**begin group**

**calculate_here**

**end group**

**Select One**

**m3_2** cattle

How much would you sell one cow or oxen on the average in today’s prices?

Mufite ina zingahe mu by’ukuri?

**m3_3** sheep

How much would you sell one sheep on the average in today’s prices?

Mufite inta zingahe mu by’ukuri?

**m3_4** goats

How much would you sell one goat on the average in today’s prices?

Mufite ihene zingahe mu by’ukuri?

**m3_5** pigs

How much would you sell one pigs on the average in today’s prices?

Mufite ingurube zingahe mu by’ukuri?

**m3_6** rabbits

How much would you sell one rabbits on the average in today’s prices?

Mufite inkwawu zingahe mu by’ukuri?

**m3_7** chickens

How much would you sell one chicken on the average in today’s prices?

Mufite inkoko zingahe mu by’ukuri?

**m3_9** otherpoultry

How much would you sell one other poultry on the average in today’s prices?

Mufite ibindi biguruka bingahe mu by’ukuri?
<table>
<thead>
<tr>
<th>integer</th>
<th>m3_otheranimals_2</th>
<th>How many other animals do you actually own?</th>
<th>Mutunze andi matungo angahe mu by'ukuri?</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>integer</td>
<td>m3_otheranimals_3</td>
<td>How much would you sell one other animals on the average in today's prices?</td>
<td>Ugereranyeje, irindi tungo nyagurishwa amafaranga angahe kuri ubu?</td>
<td>yes</td>
</tr>
</tbody>
</table>

| note | Read: Now I want to ask you about the items owned by you or your household. Remember, by household I mean the people who sleep here most nights and share the same pot as you. I want to remind you that the purpose of this survey is not to provide assistance, so please respond fully and completely, as your answers will not affect any kind of benefits. Only include assets in working condition. How many of each of the following items do you and your household own? Soma: Ubu rero ndifuza kukubaza ku bintu mutunze mu rugo rwanyu. Ndakwibutsa ko iyo mvuze urugo mba mvuzo abantu bara hano kenshi kandi mugasangira. Ndakwibutsa ko iyo ubu bushashatsi bugamije atari ukugitera inkunga, bityo rero ugerageze kumpa ibisubizo birimo amakuru yuysye kuku ibyo unasubiza nta bindi bintu byakubura guhabwa. Baraibiresho bikora gusa. Ese mutunze bingahe mu bikurikira? |

<p>| integer | m3_mango_num | How many mango trees do you own? | Ni ibiti bingahe by'imyembe mutunze? | yes  |
| integer | m3_mango_price | What is the value of one of your mango trees? | Ni akabe gaciro ka iyi mu ibiti by'imyembe utunze? | Impuzandengo- moyenne? | yes |
| integer | m3_banana_num | How many banana trees do you own? | Ni insina zingahe mutunze? | yes  |
| integer | m3_banana_price | What is the value of one of your banana trees? | Ni akabe gaciro (Impuzandengo- moyenne) k' imwe mu nsina zaw? | yes  |
| integer | m3_pineap_num | How many pineapple trees do you own? | Ni ibiti byeraho inanasi mutunze? | yes  |
| integer | m3_pineap_price | What is the value of one of your pineapple trees? | Ni akabe gaciro (Impuzandengo- moyenne) ka kimwe mu biti by'nanasi byaw? | yes  |
| integer | m3_othertrees_num | How many other kinds of trees do you own? | Ni ibiti bingahe mutunze? | yes  |
| integer | m3_othertrees_price | What is the value of one of your other kinds of trees? | Ni akabe gaciro (Impuzandengo- moyenne) ka kimwe mu yandi moko y'ibiti uti? | yes  |
| integer | m3_hoes_num | How many hoes do you own? | Mutunze amasuka angahe? | yes  |
| integer | m3_hoes_price | What is the value of one of your hoes? | Ni akabe gaciro (Impuzandengo- moyenne) k'imwe mu masuka utunze? | yes  |
| integer | m3_pangas_num | How many pangas do you own? | Mutunze imihoro ingahe? | yes  |
| integer | m3_pangas_price | What is the value of one of your pangas | Ni akabe gaciro (Impuzandengo- moyenne) k' umwe mu mihoro utunze? | yes  |
| integer | m3_plough_num | How many ploughs do you own? | Mutunze majagu ingahe? | yes  |
| integer | m3_plough_price | What is the value of one of your ploughs? | Ni akabe gaciro (Impuzandengo- moyenne) k'imwe muri majagu utunze? | yes  |
| integer | m3_granar_num | How many granaries do you own? | Mutunze ibigeya byo guhunikamo imyaka bingahe? | yes  |
| integer | m3_granar_price | What is the value of one of your granaries? | Ni akabe gaciro (Impuzandengo- moyenne) ka kimwe mu bigeya byo guhunikamo imyaka mutunze? | yes  |
| integer | m3_bicycl_num | How many bicycles do you own? | Mutunze imihoro ingahe? | yes  |
| integer | m3_bicycl_price | What is the value of one of your bicycles? | Ni akabe gaciro (Impuzandengo- moyenne) ka kimwe mu magare utunze? | yes  |
| integer | m3_motorc_num | How many motorcycles do you own? | Mutunze umwe muri moto utunze? | yes  |
| integer | m3_motorc_price | What is the value of one of your motorcycles? | Ni akabe gaciro (Impuzandengo- moyenne) k'imwe muri moto utunze? | yes  |
| integer | m3_motorv_num | How many motor vehicles (car or truck) do you own? | Mutunze imodoka (isanzwe cg ikamyo) ingahe? | yes  |
| integer | m3_motorv_price | What is the value of one of your motor vehicles (car or truck)? | Ni akabe gaciro k'imwe mu modoka(isanzwe cg ikamyo) utunze? | yes  |
| integer | m3_tracto_num | How many tractors (motorized) do you own? | Mutunze ibyuma bingahe (biti xe motor) ingahe? | yes  |
| integer | m3_tracto_price | What is the value of one of your tractors (motorized)? | Ni akabe gaciro k'imashini ihinga imwe mu mashini (Impuzandengo- moyenne) zihinga ingahe? | yes  |
| integer | m3_mobile_num | How many mobile phones do you own? | Mutunze telefonwe zirenda ingahe? | yes  |
| integer | m3_mobile_price | What is the value of one of your mobile phones? | Ni akabe gaciro (Impuzandengo- moyenne) ka telefone imwe muri telefonwe utunze? | yes  |
| integer | m3_beds_num | How many beds do you own? | Mutunze umwe mbiriri utunze? | yes  |
| integer | m3_beds_price | What is the value of one of your beds? | Ni akabe gaciro k'imwe utunze (zifite alo uhai matsa abako) | yes  |
| integer | m3_sofas_num | How many sofas do you own? | Mufite intekwe zifite ifashemo ingahe? | yes  |
| integer | m3_sofas_price | What is the value of one of your sofas? | Ni akabe gaciro (Impuzandengo- moyenne) k'imwe intekwe zifite ifashemo utunze? | yes  |
| integer | m3_armch_num | How many arm-chairs do you own? | Mufite intekwe zifite aho uhai matsa abako ingahe? | yes  |
| integer | m3_armch_price | What is the value of one of your arm-chairs? | Ni akabe gaciro k'imwe utunze (zifite alo uhai matsa abako) | yes  |
| integer | m3_straig_num | How many straight-back chairs do you own? | Mufite Intekwe zegamirwa ingahe? | yes  |
| integer | m3_straig_price | What is the value of one of your straight-back chairs? | Ni akabe gaciro k'imwe utunze (zifite alo uhai matsa abako) | yes  |
| integer | m3_large_num | How many large tables do you own? | Mufite impeza intekwe angahe? | yes  |
| integer | m3_large_price | What is the value of one of your large tables? | Ni akabe gaciro (Impuzandengo- moyenne) k'imwe impeza utunze? | yes  |
| integer | m3_otherables_num | How many other tables do you own? | Mufite impeza utunze | yes  |
| integer | m3_otherables_price | What is the value of one of your other tables? | Ni akabe gaciro k'imwe mu yandi impeza utunze? | yes  |
| integer | m3_mattre_num | How many mattresses do you own? | Mutunze Matola ingahe? | yes  |
| integer | m3_mattre_price | What is the value of one of your mattresses? | Ni akabe gaciro (Impuzandengo- moyenne) k'imwe muri matola | yes  |
| integer | m3_kettle_num | How many kettles do you own? | Mutunze bingahe uyi plastike cyangwa icyuma? | yes  |
| integer | m3_kettle_price | What is the value of one of your a kettle? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe mu ibirika utunze? yes |
| integer | m3_iron_num | How many iron (local) do you own? | Mutunze amapasi angahe? yes |
| integer | m3_iron_price | What is the value of one of your iron (local)? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe mu ipasi utunze? yes |
| integer | m3_jerry_num | How many jerry cans do you own? | Mutunze majerekanzi angahe? yes |
| integer | m3_jerry_price | What is the value of one of your jerry cans? | Ni akage gaciro k’imwe mu majerekanzi utunze? yes |
| integer | m3_stove_num | How many stoves (that are purchased) do you own? | Mutunze mashyiga (mwagwize) angahe? yes |
| integer | m3_stove_price | What is the value of one of your stoves (that are purchased)? | Ni akage gaciro ka rimwe mu mashyiga utunze? yes |
| integer | m3_setso_num | How many sets of brewing equipment do you own? (To make tea, coffee, or beer) | Mufite ubwoko bwibikoresho byenga cyangwa bishafisha mu gukora ibindi (urugero: Gukora icyayi, ikawa) bingahe? yes |
| integer | m3_setso_price | What is the value of one of your sets of brewing equipment? | Ni akage gaciro (Impuzandengo-moyenne) ka kimwe mu bikoresho byenga cyangwa bishafisha mu gukora ibindi (urugero: Gukora icyayi, ikawa) bingahe? yes |
| integer | m3_heaps_num | How many heaps of bricks do you own? | Mufite amatunura y’amafarani angahe? yes |
| integer | m3_heaps_price | What is the value of one of your heaps of bricks? | Ni akage gaciro (Impuzandengo-moyenne) k’itutara ny’amafarani rimwe mu matanura mufite? yes |
| integer | m3_potsa_num | How many pots and pans do you own? | Mufite masafurinya n’amapanu angahe? yes |
| integer | m3_potsa_price | What is the value of one of your pots and pans? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe mu masafurinya n’amapanu utunze? yes |
| integer | m3_washb_num | How many wash basins and buckets do you own? | Mufite amasaha angahe? yes |
| integer | m3_washb_price | What is the value of one of your wash basins and buckets? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe mu mабasи n’ndoba utunze? yes |
| integer | m3_carba_num | How many car batteries do you own? | Mutunze batiri y’imodka zingahe? yes |
| integer | m3_carba_price | What is the value of one of your car batteries? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe muri batiri z’igihwa angahe? yes |
| integer | m3 genera_num | How many generators do you own? | Mutunze masimhi zibyara umumiro (jenereta) zingahe? yes |
| integer | m3 genera_price | What is the value of one of your generators? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe mu masimhi zi n’imukari angahe? yes |
| integer | m3_sewing_num | How many sewing machines do you own? | Mutunze masimhi zidoda zingahe? yes |
| integer | m3_sewing_price | What is the value of one of your sewing machines? | Ni akage gaciro k’imwe mu masimhi zidoda utunze? yes |
| integer | m3_radios_num | How many radios do you own? | Mutunze amasahadi angahe? yes |
| integer | m3_radios_price | What is the value of one of your radios? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe muri radio y’urugero utunze? yes |
| integer | m3_watche_num | How many watches do you own? (arm-watches to tell time) | Ny’amahaya angahe mufite? (Amasaha yo ku kuboko amenyesha igihwa) yes |
| integer | m3_watche_price | What is the value of one of your watches? | Ni akage gaciro k’imwe mu masaba utunze? yes |
| integer | m3_cassett_num | How many cassette or cd players do you own? | Mutunze kasete cg igisoma sede bingahe? yes |
| integer | m3_cassett_price | What is the value of one of your cassette or cd players? | Ni akage gaciro ka kimwe mu byumva bya kasete cg bisoma sede utunze? yes |
| integer | m3_televi_num | How many televisions do you own? | Mutunze televiziyi zingahe? yes |
| integer | m3_televi_price | What is the value of one of your televisions? | Ni akage gaciro k’imwe muri televiziyi utunze? yes |
| integer | m3_video_num | How many video cassette or dvd players do you own? | Mutunze cassette video cyangwa dividi zingahe? yes |
| integer | m3_video_price | What is the value of one of your video cassette or dvd players? | Ni akage gaciro ka kimwe mu bikoresho bya kaseti videwo na dividi waba utunze? yes |
| integer | m3_laptop_num | How many laptops or desktop computers do you own? | Mutunze Mudusobwa nto cg nini zingahe? yes |
| integer | m3_laptop_price | What is the value of one of your laptops or desktop computers? | Ni akage gaciro k’imwe muri mudusobwa nto cg nini utunze? yes |
| integer | m3_wheelb_num | How many wheelbarrows do you own? | Mutunze ingorofani zingahe? yes |
| integer | m3_wheelb_price | What is the value of one of your wheelbarrows? | Ni akage gaciro k’imwe mu ngorofani utunze? yes |
| integer | m3_helmet_num | How many helmets do you own? | Mutunze Kasike zingahe? yes |
| integer | m3_helmet_price | What is the value of one of your helmets? | Ni akage gaciro k’imwe muri kasike utunze? yes |
| integer | m3_mirror_num | How many mirrors do you own? | Mutunze Indorewaro (ibyironi) zingahe? yes |
| integer | m3_mirror_price | What is the value of one of your mirrors? | Ni akage gaciro k’imwe mu ndorewaro utunze? yes |
| integer | m3_sprai_num | How many spraying machines do you own? | Mutunze Imashini zitera imiti zingahe? yes |
| integer | m3_sprai_price | What is the value of one of your spraying machines? | Ni akage gaciro k’imwe mu mashini zitera imiti utunze? yes |
| integer | m3_axe_num | How many axes do you own? | Mutunze amasamoka angahe? yes |
| integer | m3_axe_price | What is the value of one of your axes? | Ni akage gaciro (Impuzandengo-moyenne) k’imwe mu masha ko angahe? yes |
| integer | m3_charcoal_num | How many bags of charcoal do you own? | Mutunze imifukura y’amakara y’uzuye ingahe? yes |
| integer | m3_charcoal_price | What is the value of one of your bags of charcoal? | Ni akage gaciro k’umwe mu mifuka y’amakara y’uzuye mufite? yes |
| integer | m3_cropros_num | How many bags of crop stores (e.g., maize, g-nuts, etc) do you own? | Mutunze imifukura ibinshimo imyaka (nk’ubunyobwa n’ibindi) ingahe? yes |
| integer | m3_cropros_price | What is the value of one of your bags of crop stores (e.g., maize, g-nuts, etc) | Ni akage gaciro (Impuzandengo-moyenne) k’umufuka umwe uhyunikwama imyaka mu mifuka utunze? yes |
| integer | m3_boats_num | How many boats do you own? | Mutunze amasaha angahe? yes |
| integer | m3_boats_price | What is the value of one of your boats? | Ni akage gaciro (Impuzandengo-moyenne) k’ubwato bumwe mu utunze? yes |
| integer | m3_ironm_num | How many iron/metal/steel sheets do you own? | Mutunze abamati angahe? yes |
| integer | m3_ironm_price | What is the value of one of your iron/metal/steel sheets? | Ni akage gaciro (Impuzandengo-moyenne) k’ibati rimwe mu mababwa utunze? yes |
| integer | m3_solar_num | How many solar panels do you own? | Mutunze pano zikoresha mirasire y’izuba zingahe? (Solar panels) yes |
| integer | m3_solar_price | What is the value of one of your solar panels? | Ni akage gaciro k’imwe muri pano zikoresha mirasire y’izuba utunze? yes |
| integer | m3_refig_num | How many refrigerators do you own? | Mutunze frigo zingahe? yes |
| integer | m3_refig_price | What is the value of one of your refrigerators? | Ni akage gaciro ka frigo imwe muri frigo utunze? yes |
| integer | m3_freeze_num | How many freezers do you own? | Mutunze ibyuma gikwishina (fuzurero) bingahe? yes |
| integer | m3_freeze_price | What is the value of one of your freezers? | Ni akage gaciro (Impuzandengo-moyenne) k’icymu kimwe gikyoyes |
| integer | m3_satell_num | How many satellite dishes do you own? | Mutunze ibisahani bifasha kureba televiziyi bingahe? yes |</p>
<table>
<thead>
<tr>
<th>integer</th>
<th>m3_satell_price</th>
<th>What is the value of one of your satellite dishes?</th>
<th>Ni akahe gaciro k’imwe muri antene(giashani)igungasha kureba</th>
<th>yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>integer</td>
<td>m3_laundr_num</td>
<td>How many laundry machines do you own?</td>
<td>Mutunze Imashini ifura/isma zingahe?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_laundr_price</td>
<td>How many sound systems do you own?</td>
<td>Ni akahe gaciro k’imwe mu mashini ifura/isma utunze?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_sound_num</td>
<td>How many sound systems do you own?</td>
<td>Muftte ibikoresho ndangururamajwini byingaye?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_sound_price</td>
<td>What is the value of one of your sound systems?</td>
<td>Ni akahe gaciro ka kimwe mu bikoresho ndangururumajwi utunze?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_fish_num</td>
<td>How many fishing equipment sets do you own?</td>
<td>Muftte ibikoresho bikoresha mu burobyi byingaye?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_fish_price</td>
<td>What is the value of one of your fishing equipment sets?</td>
<td>Ni akahe gaciro ka kimwe mu bikoresho by’uburobyi byingaye?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_mill_num</td>
<td>How many mills/grinding equipment do you own?</td>
<td>Muftte ibikoresho byo gusheshaho (insoyo) byingaye?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_mill_price</td>
<td>What is the value of one of your mills/grinding equipment?</td>
<td>Ni akahe gaciro k’uruso rumwe ru mu insoy byingaye?</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_pumps_num</td>
<td>How many pumps do you own?</td>
<td>Mufite ipompo zingahe? (ipompo y’umwuba)</td>
<td>yes</td>
</tr>
<tr>
<td>integer</td>
<td>m3_pumps_price</td>
<td>What is the value of one of your pumps?</td>
<td>Ni akahe gaciro k’ipomo inwe mu mapompo yawe? (ipompo y’iyes</td>
<td>yes</td>
</tr>
</tbody>
</table>

### end group

#### assets

<table>
<thead>
<tr>
<th>begin group</th>
<th>land</th>
<th>4. Land</th>
<th>4. Ubutaka</th>
</tr>
</thead>
<tbody>
<tr>
<td>select_one</td>
<td>m4_1</td>
<td>Does your household own the land you live on?</td>
<td>Yaba ubu butaka mutuyeho ari ubw’uru rugo ( ubwanyu)?</td>
</tr>
<tr>
<td>decimal</td>
<td>m4_2</td>
<td>How many ARE is this land?</td>
<td>Ubu butaka bufite Ari zingahe?</td>
</tr>
<tr>
<td>select_one</td>
<td>m4_5</td>
<td>Does your household own any land separate from the land you live on?</td>
<td>Yaba urugo rwanyu ruftite ubundu butaka ubwone ubwuyeho?</td>
</tr>
<tr>
<td>integer</td>
<td>m4_6</td>
<td>How much would you sell one acre of land on average in today’s prices?</td>
<td>Ubu butaka bufite Ari zingahe?</td>
</tr>
<tr>
<td>select_one</td>
<td>m4_7</td>
<td>In the past one year, did your household rent any land?</td>
<td>Ugereranyije, Ari amafaranga angahe yose hamwe watanze uhemba abakozi</td>
</tr>
<tr>
<td>integer</td>
<td>m4_9</td>
<td>How much did you receive in total in sales from this activity in the last 12 months?</td>
<td>Mu mwaika ushize, hari ubwo urugo rwanyu rwigeze rukodesha ubutaka ( ari mwe mwiishyura)</td>
</tr>
<tr>
<td>select_one</td>
<td>m4_10</td>
<td>How much did your household pay to rent this land in total over the past 12 months?</td>
<td>Mwishyuye amafaranga angahe yo gukodeshe ubutaka ubamwa mu gishywe</td>
</tr>
<tr>
<td>integer</td>
<td>m4_11</td>
<td>In the past one year did your household sharecrop any land?</td>
<td>Mu mwaika ushize, hari ahw mwarakoreshehe ubutaka ngo</td>
</tr>
<tr>
<td>select_one</td>
<td>m4_12</td>
<td>What was your household’s share as a percentage of output?</td>
<td>Mu mwaika ushize, hari ubutaka mwa mwarakoreshehe mubuhawe mu ghe gito ariko amabaribakoreshehe cyangwa ngo mubuhinge maze mubuganabe umusaruro uuveyo na nyirubutaka</td>
</tr>
<tr>
<td>select_one</td>
<td>m4_13</td>
<td>In the past one year did your household use any land which was given to you temporarily but which you did not own, rent, or sharecrop?</td>
<td>Mu mwaika ushize, hari ubutaka mwa mwarakoreshehe mubuhawe mu ghe gito ariko amabaribakoreshehe cyangwa ngo mubuhinge maze mubuganabe umusaruro na nyirubutaka</td>
</tr>
</tbody>
</table>

### end group

#### timeuse_agincome

<table>
<thead>
<tr>
<th>begin group</th>
<th>calculate_here</th>
<th>timeuse_agincome</th>
<th>s5_start</th>
<th>5. Agricultural Income</th>
<th>5. Umusaruro w’ibikomoka ku buhini</th>
</tr>
</thead>
<tbody>
<tr>
<td>select_one</td>
<td>m5_a_cult</td>
<td>Did you cultivate (harvest) anything in last 12 months?</td>
<td>Hari ikintu mwigeze muhinga (musaarura) mu mezi 12 ashize?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>select_multiple</td>
<td>m5_a_crops</td>
<td>Did your household cultivate in the last 12 months?</td>
<td>N’i iki mwahinze mu mezi 12 ashize?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>select_one</td>
<td>m5_a_consume</td>
<td>Did your household consume some of what it grew in the last 12 months?</td>
<td>Mu mezi 12 ashize, mu ruwo ruwu mu mwa mu mwihiyige?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_consumevalue</td>
<td>How much would it cost your household to buy the amount it consumed?</td>
<td>Ni amafaranga angahe urugo rwanyu rwar wakura ibyo mwiari?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>select_one</td>
<td>m5_a_any</td>
<td>Did you sell any of the output from agriculture in the last 12 months?</td>
<td>Ese waba waragurishie ibyavuye muri iki IGIKORWA mu mezi 12 ashize?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_amt</td>
<td>How much did you receive in total sales from this activity in the last 12 months?</td>
<td>Ese wakuye amafaranga angahe yose hamwe mu mwiuru mwa mwa mwiuru</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_workers</td>
<td>In total, how many people in household in which you live - not including you - worked on agriculture over the last 12 months?</td>
<td>Bose hamwe, ni abantu bangahe bo mu rugo ubamo- wawe</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_hours_hh</td>
<td>How many hours did members of your household - not including you - work in agriculture in the last 7 days?</td>
<td>Bose hamwe, ni abakazi bangahe batari abo mu ruwo ruwu</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_hours_pt</td>
<td>In total, how many workers from outside the household (eg casual workers) to work on agriculture did you hire during the last 12 months?</td>
<td>Bose hamwe, ni abakazi bangahe batari abo mu ruwo ruwu</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_spend_tools</td>
<td>How many hours did workers from outside the household work in agriculture during the last 7 days?</td>
<td>Ni amasahe angahe abakazi bangahe bakora kuri iki IGIKORWA mu minsi 7 ishihe?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_spend_salary</td>
<td>How much did you spend on salaries for workers from outside the household in agriculture during the last 12 months?</td>
<td>Ese ni amafaranga angahe yose hamwe watanzo uhemba abakazi</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_spend_tools</td>
<td>How much did you spend on tools and machinery (i.e. plows, machetes, hoes, rental of tractors) for agriculture during the last 12 months?</td>
<td>Bose hamwe, ni abakazi bangahe batari abo mu ruwo ruwu</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_spend_medical</td>
<td>How much did you spend on animal medical care for agriculture during the last 12 months?</td>
<td>Ni amafaranga angahe wakoreshehe ku bikoresho n’imashini</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_spend_fertil</td>
<td>How much did you spend on fertilizer for agriculture during the last 12 months?</td>
<td>Ni amafaranga angahe wakoreshehe ku ifumbire mu mezi 12 ashize?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>integer</td>
<td>m5_a_spend_irrigation</td>
<td>How much did you spend on irrigation for agriculture during the last 12 months?</td>
<td>Ni amafaranga angahe wakoreshehe ku kuhirira (kuvomereka) mu</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>

### end group
How much did you spend on improved/hybrid seeds for agriculture during the last 12 months? Ni amafaranga angahe wakoresheje ku mbuto z’indobanure mu buhinzi mu mez 12 ashize? yes
Do you have formal insurance on your agricultural harvest? Ese waba ulite ubwishingizi buzi aw’umusaruro wowe uturuka mu buhinzi? yes
How much did you spend on formal insurance for agriculture during the last 12 months? Ni amafaranga angahe wakoresheje mu bwishingizi bw’ubuhinzi mu mez 12 ashize? yes
In what occupation is this work? Ese aka kazi ni bwoko ki? yes
Ni mu kuhe kwezi n’umwaka watangiye aka kazi kawe gaheruka (harimo aho wimenyereza urimo gukora nk’umukorerabushake, cg wimenyereza umwuga (sitage) cg nk’umukozi wiga akazi, waba utabihemberwa cg ubihemberwa rimwe na rimwe?)
Nonoho, nifuzaga kumenya irimiro okura ubora ngubu, harimo iyo uhemberwa n’iy oda hemberberwa (harimo aho wimenyereza umwuga cg wiga akazi), uhereye ku kazi karuta utundu ukora. Icoyo ubara nr’akazi ni akazi kose wahembewe cg wakoreye mu murima w’undi muntu mu mez 12 ashize. Ntushyire akazi wikerora ku giti cyawe mu gisibuzo cyawe
In what industry is this work? Ese aka kazi kari mu buhe bw’umurimo? yes
In what month and year did you start your most recent job? Ese amafaranga angahe wakoresheje ku mbuto z’indobanure mu buhinzi mu mez 12 ashize? yes
Are you currently employed, working for pay? Ese waba ulite akazi ubu, kaguhemba amafaranga? yes
Are you currently working as a volunteer, intern or an attachment, with either no pay or only occasional pay? Ese waba urimo gukora nk’umukorerabushake, cg wimenyereza umwuga (sitage) cg nk’umukozi wiga akazi, waba utabihemberwa cg ubihemberwa rimwe na rimwe? yes
Note: Now I would like to learn about what jobs you currently hold, including both paid and unpaid jobs (and internships and attachments), starting with your most important position. Please count as a job any work for pay on another person’s farm in the last 12 months. Please do not include self-employment positions in your answer.
For the last month at this job, what was the total value of your:
- payment in kind in food? Ese amafaranga y’umushashara wahembwe mu kwezi gushize ni/yari angahe? yes
- other allowances and benefits? Ese ni amafaranga angahe wishyuye mu misoro ku mushahara mu kwezi gushize? yes
Have you or members of your family received benefits from any of the following government programs?
- NSSF / health insurance? Y’ubwishingizi? yes
- training allowance? Ibyo wemerewe ku mahugurwa? yes
- improved/hybrid seeds for agriculture during the last 12 months. Please do not include self-employment positions in your answer.
- govt programs
- improved/hybrid seeds for agriculture during the last 12 months. Please do not include self-employment positions in your answer.
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<table>
<thead>
<tr>
<th>Timeuse</th>
<th>Wageincome</th>
</tr>
</thead>
</table>

I want to ask some questions about your own business activities. Now I am going to ask you about any business activities you yourself may be involved with. If you have more than one business activity, please tell me about all of them. At any time during the last 12 months, have you operated a business enterprise belonging to you, for example, a kiosk shop, barber shop, tailor shop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow. (No, Yes)

Ni mukuhe kwezi n’umwaka watangiye cyangwa wabye nyir’uro欣赏, akazu ko kogosha, akazu k’ubudodzi, ububaiji cu serivisi ya tagis? Ibi kandi birimo kugurisha imyaka utigeze uhinga. Arikikurishwa n’ihamwe n’ktshiyire umyingiye.

Now I am going to ask you about any business activities you yourself may be involved with. If you have more than one business activity, please tell me about all of them. At any time during the last 12 months, have you operated a business enterprise belonging to you, for example, a kiosk shop, barber shop, tailor shop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow. (No, Yes)

Now I am going to ask you about any business activities your household other than you may be involved with. If your household has more than one business activity, please tell me about all of them. At any time during the last 12 months, has anyone in the household operated a business enterprise belonging to you or someone in your household, for example, a kiosk shop, barber shop, tailor shop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow. (No, Yes)

I want to ask some questions about your own business activities. Now I am going to ask you about any business activities you yourself may be involved with. If you have more than one business activity, please tell me about all of them. At any time during the last 12 months, have you operated a business enterprise belonging to you, for example, a kiosk shop, barber shop, tailor shop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow. (No, Yes)

Who controls the use of profits from the business enterprise? I now want to ask some questions about the household in which you live. By your household, I mean the place where you usually sleep, however, this does not include selling crops that you grow. (No, Yes)

What is the number of typical operating days in a month? Ugereranyije ku munsi binjiza amafaranga angahe?

What are the total profits your business made over the past month? Mu kwezi gushize, winjije amafaranga angahe y’iinyungu (igiteranyo) muri ubucuruzi?

Who do you employ? I now want to ask some questions about the household in which you live. By your household, I mean the place where you usually sleep, however, this does not include selling crops that you grow. (No, Yes)

What type of business is this? Ni ubuhe bw’igikorwa cy’ubucuruzi?

What type of business is this? Ni ubuhe bw’igikorwa cy’ubucuruzi?

What type of business is this? Ni ubuhe bw’igikorwa cy’ubucuruzi?

What type of business is this? Ni ubuhe bw’igikorwa cy’ubucuruzi?
<table>
<thead>
<tr>
<th>m7_10</th>
<th>What is the number of typical operating days in a month?</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>m7_11</td>
<td>What are the total profits your business made over the past month?</td>
<td>Yes</td>
</tr>
<tr>
<td>m7_12</td>
<td>Who controls the use of profits from the business enterprise?</td>
<td>Yes</td>
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**begin group**

<table>
<thead>
<tr>
<th>calculate_here</th>
<th>consumption</th>
<th>B. Consumption</th>
<th>B.Ibikoresho byaguzwe</th>
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<td>s8_start</td>
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**select_one**

<table>
<thead>
<tr>
<th>yesno1</th>
<th>integer</th>
<th>m8_1</th>
<th>Has your household purchased any wrap around cloth for women (igitenge) over the last 12 months?</th>
<th>Muri uru rugo mwizege mugura igitenge mu mezi 12 ashize?</th>
<th>Yes</th>
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<tbody>
<tr>
<td>m8_1_b</td>
<td></td>
<td></td>
<td>How much did you spend on wrap around cloth for women (igitenge) over the last 12 months?</td>
<td>Mwatanze amafaranga angahe mugura igitenge mu mezi 12 ashize?</td>
<td>Yes</td>
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**select_one**

<table>
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<tr>
<th>yesno1</th>
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<th>m8_2</th>
<th>Has your household purchased any men's garments over the last 12 months?</th>
<th>Muri uru rugo mwizege mugura imyenda y'abagabo mu mezi 12 ashize?</th>
<th>Yes</th>
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<tr>
<td>m8_2_b</td>
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<td>How much did you spend on men's garments over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura imyenda y'abagabo mu mezi 12 ashize?</td>
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<th>m8_3</th>
<th>Has your household purchased any women's garments over the last 12 months?</th>
<th>Muri uru rugo mwizege mugura imyenda y'abagore mu mezi 12 ashize?</th>
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<tbody>
<tr>
<td>m8_3_b</td>
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<td>How much did you spend on women's garments over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura imyenda y'abagore mu mezi 12 ashize?</td>
<td>Yes</td>
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<tr>
<th>yesno1</th>
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<th>m8_4</th>
<th>Has your household purchased any children's clothing (excluding school uniform) over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira abana imyenda (hatabariwemo imyenda y'ishuri) mu mezi 12 ashize?</th>
<th>Yes</th>
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<tbody>
<tr>
<td>m8_4_b</td>
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<td>How much did you spend on children's clothing (excluding school uniform) over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura imyenda y'abana (hatabariwemo imyenda y'ishuri) mu mezi 12 ashize?</td>
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<tr>
<th>yesno1</th>
<th>integer</th>
<th>m8_5</th>
<th>Has your household purchased any women's tailoring over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira abana itike y'urugendo rwo mu mezi 12 ashize?</th>
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<tr>
<td>m8_5_b</td>
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<td>How much did you spend on women's tailoring over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura itike y'urugendo rwo mu mezi 12 ashize?</td>
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<tr>
<th>yesno1</th>
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<th>m8_6</th>
<th>Has your household purchased any men's footwear over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira abana itike y'urugendo rwo mu mahanga mu mezi 12 ashize?</th>
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<tr>
<td>m8_6_b</td>
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<td>How much did you spend on men's footwear over the last 12 months?</td>
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<th>m8_7</th>
<th>Has your household purchased any women's footwear over the last 12 months?</th>
<th>Muri uru rugo hari ubwo mwizege mugurira abana ikweto mu mezi 12 ashize?</th>
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<tr>
<td>m8_7_b</td>
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<td>How much did you spend on women's footwear over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura ikweto mu mezi 12 ashize?</td>
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<tr>
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<th>m8_8</th>
<th>Has your household purchased any children's footwear over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira abana ikweto abagabo mu mezi 12 ashize?</th>
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<tr>
<td>m8_8_b</td>
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<td>How much did you spend on children's footwear over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura abana ikweto abagabo mu mezi 12 ashize?</td>
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<tr>
<th>yesno1</th>
<th>integer</th>
<th>m8_9</th>
<th>Has your household purchased any international travel over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira abana inkweto z'abagabo mu mezi 12 ashize?</th>
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<tbody>
<tr>
<td>m8_9_b</td>
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<td></td>
<td>How much did you spend on international travel over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura inkweto z'abagabo mu mezi 12 ashize?</td>
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<tr>
<th>yesno1</th>
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<th>m8_10</th>
<th>Has your household purchased any building repairs (supplies) over the last 12 months?</th>
<th>Muri uru rugo mwizege mutanga amafaranga yo kugura ibikoresho byo gusana inzu mu mezi 12 ashize?</th>
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<tbody>
<tr>
<td>m8_10_b</td>
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<td></td>
<td>How much did you spend on building repairs (supplies) over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura ibikoresho byo gusana inzu mu mezi 12 ashize?</td>
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<tr>
<th>yesno1</th>
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<th>m8_11</th>
<th>Has your household purchased any building repair labor over the last 12 months?</th>
<th>Muri uru rugo mwizege mwiSHyura abantu ngo babasanire inzu mu mezi 12 ashize?</th>
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<td>m8_11_b</td>
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<td></td>
<td>How much did you spend on building repair labor over the last 12 months?</td>
<td>MwiSHyure amafaranga angahe abantu babasanire inzu mu mezi 12 ashize?</td>
<td>Yes</td>
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**select_one**

<table>
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<tr>
<th>yesno1</th>
<th>integer</th>
<th>m8_12</th>
<th>Has your household purchased any mattresses over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira abana matela mu mezi 12 ashize?</th>
<th>Yes</th>
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<tbody>
<tr>
<td>m8_12_b</td>
<td></td>
<td></td>
<td>How much did you spend on mattresses over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura matela mu mezi 12 ashize?</td>
<td>Yes</td>
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<table>
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<tr>
<th>yesno1</th>
<th>integer</th>
<th>m8_13</th>
<th>Has your household purchased any bed sheets and pillows over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira abana matashuka n'imisege mu mezi 12 ashize?</th>
<th>Yes</th>
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<tbody>
<tr>
<td>m8_13_b</td>
<td></td>
<td></td>
<td>How much did you spend on bed sheets and pillows over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura abana matashuka n'imisege mu mezi 12 ashize?</td>
<td>Yes</td>
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<tr>
<th>yesno1</th>
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<th>m8_14</th>
<th>Has your household purchased any local travel over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira itike y'urugendo rwo mu gihugu imbere mu mezi 12 ashize?</th>
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<td>m8_14_b</td>
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<td>How much did you spend on local travel over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura itike y'urugendo rwo mu gihugu imbere mu mezi 12 ashize?</td>
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**select_one**

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<thead>
<tr>
<th>yesno1</th>
<th>integer</th>
<th>m8_15</th>
<th>Has your household purchased any health insurance (mutuelle, rama, mmi, etc) over the last 12 months?</th>
<th>Muri uru rugo mwizege mugurira ubwishingizi bw'indwara (mitweli, y'rama, mmi, m'ibindi) mu mezi 12 ashize?</th>
<th>Yes</th>
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<tbody>
<tr>
<td>m8_15_b</td>
<td></td>
<td></td>
<td>How much did you spend on health insurance (mutuelle, rama, mmi, etc) over the last 12 months?</td>
<td>Mwatanze amafaranga angahe yo kugura ubwishingizi bw'indwara (mitweli, m'ibindi) mu mezi 12 ashize?</td>
<td>Yes</td>
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**select_one**

<table>
<thead>
<tr>
<th>yesno1</th>
<th>integer</th>
<th>m8_16</th>
<th>Has your household purchased any disinfectant and cleaners over the last 4 weeks?</th>
<th>Muri uru rugo mwizege mugurira imyenda y'abagabo n'ibikoresho by'suku n'isukura mu byumwero 4 bishize?</th>
<th>Yes</th>
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<tbody>
<tr>
<td>m8_16_b</td>
<td></td>
<td></td>
<td>How much did you spend on disinfectant and cleaners over the last 4 weeks?</td>
<td>MwiShyure amafaranga angahe yo kugura imyenda y'abagabo n'ibikoresho by'suku n'isukura mu byumwero 4 bishize?</td>
<td>Yes</td>
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</tbody>
</table>

**select_one**

| yesno1 | integer | m8_17 | Has your household purchased any shoe brushes and polish over the last 4 weeks? | Muri uru rugo mwizege mugurira uburoso na siraje by'inkweto mu byumwero 4 bishize? | Yes |
How much did you spend on sound systems over the last 4 weeks?

Has your household spent any money on bail or fines over the last 4 weeks?

How much did you spend on women's haircuts (stylist & treatment) over the last 4 weeks?

Has your household purchased any wages for household help over the last 4 weeks?

Has your household purchased any spare parts of motorcycle or bicycle over the last 4 weeks?

How much did you spend on spare parts of motorcycle or bicycle over the last 4 weeks?

Has your household purchased any film and developing equipment over the last 4 weeks?

Has your household purchased any generators over the last 4 weeks?

How much did you spend on passport photos over the last 4 weeks?

How much did you spend on labour for vehicle repair over the last 4 weeks?

Has your household purchased any bicycles/motorcycles over the last 4 weeks?

Has your household purchased any beauty/cosmetic products over the last 4 weeks?

How much did you spend on spare parts for vehicles over the last 4 weeks?

How much did you spend on film and developing equipment over the last 4 weeks?

Has your household purchased any sanitary napkins over the last 4 weeks?

How much did you spend on labour for repair of motorcycle or bicycle over the last 4 weeks?

Has your household purchased any fishing equipment over the last 4 weeks?

How much did you spend on spare parts of motorcycle or bicycle over the last 4 weeks?

Has your household purchased any hair products over the last 4 weeks?

Has your household purchased any sound systems over the last 4 weeks?

Has your household purchased any labour for repair of motorcycle or bicycle over the last 4 weeks?
<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much did you spend on fishing equipment over the last 4 weeks?</td>
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<tr>
<td>Has your household purchased any mills/grinding equipment over the last 4 weeks?</td>
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<tr>
<td>Has your household purchased any mobile phones over the last 4 weeks?</td>
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<td>Has your household purchased any sewing machines over the last 4 weeks?</td>
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<td>Has your household purchased any solar panels over the last 4 weeks?</td>
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<td>Has your household purchased any pumps over the last 4 weeks?</td>
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<tr>
<td>Has your household purchased any local rice over the last 7 days?</td>
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<tr>
<td>Has your household purchased any irish potato over the last 7 days?</td>
<td></td>
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</tr>
<tr>
<td>Has your household purchased any sorghum (flour) over the last 7 days?</td>
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<tr>
<td>Has your household purchased any corn (flour) over the last 7 days?</td>
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<tr>
<td>Has your household purchased any sorghum (flour) over the last 7 days?</td>
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<tr>
<td>Has your household purchased any corn (flour) over the last 7 days?</td>
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<tr>
<td>Has your household purchased any beef meat over the last 7 days?</td>
<td></td>
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<tr>
<td>Has your household purchased any peanut oil over the last 7 days?</td>
<td></td>
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<tr>
<td>Has your household purchased any palm oil over the last 7 days?</td>
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<tr>
<td>Has your household purchased any bananas - cooking (inyamunyo) over the last 7 days?</td>
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<tr>
<td>Has your household purchased any tomato over the last 7 days?</td>
<td></td>
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<tr>
<td>Has your household purchased any Irish potato over the last 7 days?</td>
<td></td>
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<tr>
<td>Has your household purchased any sweet potato over the last 7 days?</td>
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<tr>
<td>Has your household purchased any imported rice over the last 7 days?</td>
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<td>Has your household purchased any palm oil over the last 7 days?</td>
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<td>Has your household purchased any bananas - cooking (inyamunyo) over the last 7 days?</td>
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<td>Has your household purchased any Irish potato over the last 7 days?</td>
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<tr>
<td>Has your household purchased any sweet potato over the last 7 days?</td>
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<tr>
<td>How much did you spend on rice over the last 7 days?</td>
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<td>Has your household purchased any sorghum (flour) over the last 7 days?</td>
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<td>Has your household purchased any local rice over the last 7 days?</td>
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<td>Has your household purchased any irish potato over the last 7 days?</td>
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<tr>
<td>Has your household purchased any sorghum (flour) over the last 7 days?</td>
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<td>Has your household purchased any corn (flour) over the last 7 days?</td>
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<tr>
<td>Has your household purchased any beef meat over the last 7 days?</td>
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<td>Has your household purchased any peanut oil over the last 7 days?</td>
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<td>Has your household purchased any palm oil over the last 7 days?</td>
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<td>Has your household purchased any tomato over the last 7 days?</td>
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<tr>
<td>Has your household purchased any Irish potato over the last 7 days?</td>
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<tr>
<td>Has your household purchased any sweet potato over the last 7 days?</td>
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<td>Integer</td>
<td>m8_54_b</td>
<td>How much did you spend on sweet potato over the last 7 days?</td>
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<td>---------</td>
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<tr>
<td>Yes/No 1</td>
<td>m8_55_a</td>
<td>Has your household purchased any sugar (local) over the last 7 days?</td>
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<tr>
<td>Integer</td>
<td>m8_55_b</td>
<td>How much did you spend on sugar (local) over the last 7 days?</td>
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<td>Yes/No 1</td>
<td>m8_56_a</td>
<td>Has your household purchased any fresh milk over the last 7 days?</td>
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<td>Integer</td>
<td>m8_56_b</td>
<td>How much did you spend on fresh milk over the last 7 days?</td>
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<td>Yes/No 1</td>
<td>m8_57_a</td>
<td>Has your household purchased any local commercial beer over the last 7 days?</td>
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<td>Integer</td>
<td>m8_57_b</td>
<td>How much did you spend on local commercial beer over the last 7 days?</td>
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<td>Yes/No 1</td>
<td>m8_58_a</td>
<td>Has your household purchased any bar drinks over the last 7 days?</td>
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<td>Integer</td>
<td>m8_58_b</td>
<td>How much did you spend on bar drinks over the last 7 days?</td>
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<tr>
<td>Yes/No 1</td>
<td>m8_59_a</td>
<td>Has your household purchased any restaurant food &amp; drinks over the last 7 days?</td>
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<tr>
<td>Integer</td>
<td>m8_59_b</td>
<td>How much did you spend on restaurant food &amp; drinks over the last 7 days?</td>
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<tr>
<td>Yes/No 1</td>
<td>m8_60_a</td>
<td>Has your household consumed any local rice from your own production over the course of the last 12 months?</td>
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<tr>
<td>Integer</td>
<td>m8_60_b</td>
<td>How much local rice did you consume over the past 7 days?</td>
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<tr>
<td>Yes/No 1</td>
<td>m8_60_c</td>
<td>At what price could you sell one unit of local rice?</td>
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<td>Integer</td>
<td>m8_61_a</td>
<td>Has your household consumed any corn (flour) from your own production over the course of the last 12 months?</td>
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<td>Yes/No 1</td>
<td>m8_61_b</td>
<td>How much corn (flour) did you consume over the past 7 days?</td>
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<td>Integer</td>
<td>m8_61_c</td>
<td>At what price could you sell one unit of corn (flour) ?</td>
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<td>Yes/No 1</td>
<td>m8_62_a</td>
<td>Has your household consumed any sorghum (flour) from your own production over the course of the last 12 months?</td>
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<td>Integer</td>
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<td>Yes/No 1</td>
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<td>At what price could you sell one unit of sorghum (flour) ?</td>
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<td>Integer</td>
<td>m8_63_a</td>
<td>Has your household consumed any beef meat from your own production over the course of the last 12 months?</td>
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<td>Yes/No 1</td>
<td>m8_63_b</td>
<td>How much beef meat did you consume over the past 7 days?</td>
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<td>Integer</td>
<td>m8_63_c</td>
<td>At what price could you sell one unit of beef meat ?</td>
</tr>
<tr>
<td>Yes/No 1</td>
<td>m8_64_a</td>
<td>Has your household consumed any fresh milk from your own production over the course of the last 12 months?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_64_b</td>
<td>How much fresh milk did you consume over the past 7 days?</td>
</tr>
<tr>
<td>Yes/No 1</td>
<td>m8_64_c</td>
<td>At what price could you sell one unit of fresh milk?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_65_a</td>
<td>Has your household consumed any peanut oil from your own production over the course of the last 12 months?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_65_b</td>
<td>How much peanut oil did you consume over the past 7 days?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_65_c</td>
<td>At what price could you sell one unit of peanut oil ?</td>
</tr>
<tr>
<td>Yes/No 1</td>
<td>m8_66_a</td>
<td>Has your household consumed any palm oil from your own production over the course of the last 12 months?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_66_b</td>
<td>How much palm oil did you consume over the past 7 days?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_66_c</td>
<td>At what price could you sell one unit of palm oil ?</td>
</tr>
<tr>
<td>Yes/No 1</td>
<td>m8_67_a</td>
<td>Has your household consumed any bananas - cooking (inyamunyo) from your own production over the course of the last 12 months?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_67_b</td>
<td>How much bananas - cooking (inyamunyo) did you consume over the past 7 days?</td>
</tr>
<tr>
<td>Integer</td>
<td>m8_67_c</td>
<td>At what price could you sell one unit of banana - cooking (inyamunyo) ?</td>
</tr>
<tr>
<td>Yes/No 1</td>
<td>m8_68_a</td>
<td>Has your household consumed any tomato from your own production over the course of the last 12 months?</td>
</tr>
</tbody>
</table>
How much tomato did you consume over the past 7 days?

How much Irish potato did you consume over the past 7 days?

At what price could you sell one unit of tomato?

At what price could you sell one unit of Irish potato?

Has your household consumed any sweet potato from your own production over the course of the last 12 months?

Has your household consumed any milk and milk products consumed yesterday by anyone in your household?

Did you or anyone in your household eat anything (meal or snack) yesterday?

Please describe the foods (meals and snacks) that any member of your household ate or drank yesterday during the day and night, whether at home or outside the home [exclude foods both purchased and eaten outside household]. Start with the first food or drink of the morning.

Were any cereals consumed yesterday by anyone in your household?
Are you a member of a savings group (SILC savings and internal lending community)?

How many savings groups are you yourself a part of?

Do you yourself have SACCO savings?

What amount do you have saved as of today?

Do you yourself have bank kind savings (excluding MFI and SACCO)?

What amount do you have saved as of today?

Do you yourself have microfinance savings (excluding SACCO/SILC)?

How much have you deposited in the last 12 months?

How many times did you make deposits with this institution in the last 12 months?

How much have you deposited in the last 12 months?

How many times did you make deposits with this institution in the last 12 months?

How many times did you make deposits with this institution in the last 12 months?

How many times did you make deposits with this institution in the last 12 months?

How much have you withdrawn over the past 12 months?

What amount do you have saved as of today?

What amount do you have saved as of today?

What amount do you have saved as of today?

What amount do you have saved as of today?

How much have you withdrawn over the past 12 months?

How much have you withdrawn over the past 12 months?

How much have you withdrawn over the past 12 months?

How much have you withdrawn over the past 12 months?

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How much have you withdrawn over the past 12 months?

How much have you withdrawn over the past 12 months?

How much have you withdrawn over the past 12 months?

How much have you withdrawn over the past 12 months?
<table>
<thead>
<tr>
<th>Integer</th>
<th>m10_self_informal_amt</th>
<th>What amount do you have saved as of today?</th>
<th>Ubu ufite amafaranga angle igiye uyu munsi?</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integer</td>
<td>m10_self_crops</td>
<td>Do you yourself save by storing crops?</td>
<td>Ese wa ba uzi gama uhu nika iyama?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_crops_withdraw</td>
<td>How much have you deposited in the last 12 months?</td>
<td>Ni amafaranga angle yose hamwe wazigame mu mezi 12 ashize?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_mobile</td>
<td>What amount do you have saved as of today?</td>
<td>Ubu ufite amafaranga angle igiye uyu munsi?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_mobile</td>
<td>Do you yourself have mobile money savings?</td>
<td>Yaba wowe ubwawe kuri telefon (igeniwa (Mtn, Tiger), Airtel) ufite boro bo kigizamira?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_mobile_deposit</td>
<td>How many times did you make deposits with this institution in the last 12 months?</td>
<td>Ni inshuro zinga whe gushyira amafaranga muri ubu boro bwo kigizatana mu mezi 12 ashize?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_mobile_deposit</td>
<td>How much have you deposited in the last 12 months?</td>
<td>Ni amafaranga angle yose hamwe wazigame mu mezi 12 ashize?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_other_amt</td>
<td>What amount do you have saved as of today?</td>
<td>Ubu ufite amafaranga angle igiye uyu munsi?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_other</td>
<td>Do you yourself have other kind of savings?</td>
<td>Yaba wowe ubwawe kuri telefon (igeniwa (Mtn, Tiger), Airtel) ufite boro bo kigizamira?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_other_specific</td>
<td>Specify your other source of savings:</td>
<td>Kivuge</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_savings</td>
<td>What is the most important source of this saving?</td>
<td>Ese ni he hantu hy'ibane mukura aya amafaranga muzigama?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_savings</td>
<td>How many times did you make deposits with this institution in the last 12 months?</td>
<td>Ni inshuro zinga whe gushyira amafaranga muri ubu boro bwo kigizatana mu mezi 12 ashize?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_withdraw</td>
<td>How much have you deposited in the last 12 months?</td>
<td>Ni amafaranga angle yose hamwe wazigame mu mezi 12 ashize?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_self_withdraw</td>
<td>What amount do you have saved as of today?</td>
<td>Ubu ufite amafaranga angle igiye uyu munsi?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_hh_group_num</td>
<td>How many savings groups is your household a part of?</td>
<td>Ni amatinda angle ko kigizatana no kugurizanya abagize urugo rwanyu babamo?</td>
<td>Yes</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_savingsgroup</td>
<td>Are other members of your household members of a savings group (SILC- savings and internal lending community)?</td>
<td>Yaba abandi bantu bo mu rango ryavo abanyamurango 'b'tinda nyo kigizatana no kugurizanya (SILC)?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Begin Group**

<table>
<thead>
<tr>
<th>Integer</th>
<th>hh_grp_1</th>
<th>SILC #1</th>
<th>SILC #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integer</td>
<td>m10_grp_a_1</td>
<td>SILC #1: How many times did other members of your household make deposits with this institution in the last 12 months?</td>
<td>SILE #1: Ni inshuro zinga whe abandi bantu bo mu rango ryavo bashyire amafaranga muri iri tsinda nyo kigizatana no kugurizanya mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_a_1</td>
<td>SILC #1: How much have other members of your household deposited in the last 12 months?</td>
<td>SILE #1: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi game mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_c_1</td>
<td>SILC #1: How much have other members of your household withdrawn over the past 12 months?</td>
<td>SILE #1: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi game mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_d_1</td>
<td>SILC #1: What amount do other members of your household have saved as of today?</td>
<td>SILE #1: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi gme mu mezi 12 ashize?</td>
</tr>
</tbody>
</table>

**End Group**

<table>
<thead>
<tr>
<th>Integer</th>
<th>hh_grp_2</th>
<th>SILC #2</th>
<th>SILC #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integer</td>
<td>m10_grp_a_2</td>
<td>SILC #2: How many times did other members of your household make deposits with this institution in the last 12 months?</td>
<td>SILE #2: Ni inshuro zinga whe abandi bantu bo mu rango ryavo bashyire amafaranga muri iri tsinda nyo kigizatana no kugurizanya mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_b_2</td>
<td>SILC #2: How much have other members of your household deposited in the last 12 months?</td>
<td>SILE #2: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi gme mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_c_2</td>
<td>SILC #2: How much have other members of your household withdrawn over the past 12 months?</td>
<td>SILE #2: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi gme mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_d_2</td>
<td>SILC #2: What amount do other members of your household have saved as of today?</td>
<td>SILE #2: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi gme mu mezi 12 ashize?</td>
</tr>
</tbody>
</table>

**End Group**

<table>
<thead>
<tr>
<th>Integer</th>
<th>hh_grp_3</th>
<th>SILC #3</th>
<th>SILC #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integer</td>
<td>m10_grp_a_3</td>
<td>SILC #3: How many times did other members of your household make deposits with this institution in the last 12 months?</td>
<td>SILE #3: Ni inshuro zinga whe abandi bantu bo mu rango ryavo bashyire amafaranga muri iri tsinda nyo kigizatana no kugurizanya mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_b_3</td>
<td>SILC #3: How much have other members of your household deposited in the last 12 months?</td>
<td>SILE #3: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi gme mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_c_3</td>
<td>SILC #3: How much have other members of your household withdrawn over the past 12 months?</td>
<td>SILE #3: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi gme mu mezi 12 ashize?</td>
</tr>
<tr>
<td>Integer</td>
<td>m10_grp_d_3</td>
<td>SILC #3: What amount do other members of your household have saved as of today?</td>
<td>SILE #3: Ni amafaranga angle abandi bantu bo mu rango ryavo bazi gme mu mezi 12 ashize?</td>
</tr>
</tbody>
</table>
How many times did other members of your household make deposits with this institution in the last 12 months?

How much have other members of your household deposited in the last 12 months?

How much have other members of your household withdrawn over the past 12 months?

What amount do other members of your household have saved as of today?

What amount do other members of your household have saved as of today (excluding SACCO/SILC)?

Do other members of your household have MFI savings (excluding SACCO)?

Do other members of your household have MFI savings (excluding SACCO)?

Do other members of your household have SACCO savings?

Do other members of your household have SACCO savings?

Do other members of your household have bank savings (excluding MFI and SACCO)?

Do other members of your household have bank savings (excluding MFI and SACCO)?

Do other members of your household have bank savings (excluding MFI and SACCO)?

Do other members of your household have bank savings (excluding MFI and SACCO)?

Do other members of your household have bank savings (excluding MFI and SACCO)?

Do other members of your household have MFI savings (excluding SACCO)?

Do other members of your household have MFI savings (excluding SACCO)?

Do other members of your household have SACCO savings?

Do other members of your household have MFI savings (excluding SACCO)?
<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>m10_mobile_deposits</td>
<td>How many times did other members of your household make deposits with this institution in the last 12 months?</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_mobile_depositsMt</td>
<td>How much have other members of your household deposited in the last 12 months?</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_mobile_withdraw</td>
<td>How much have other members of your household withdrawn over the past 12 months?</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_mobile_amt</td>
<td>Amount what do other members of your household have saved as of today?</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_other</td>
<td>Do members of your household have any other kind of savings?</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_otherSpecify</td>
<td>Specify your other source of savings:</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_other_deposits</td>
<td>How much have other members of your household deposited with this institution in the last 12 months?</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_other_withdraw</td>
<td>How much have other members of your household withdrawn over the past 12 months?</td>
<td>Yes</td>
</tr>
<tr>
<td>m10_other_amt</td>
<td>Amount do other members of your household have saved as of today?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_friendsorn_6</td>
<td>What amount was originally borrowed from friends or neighbors?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_friendsorn_2</td>
<td>What amount do other members of your household have deposited in the last 12 months?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_friendsorn_5</td>
<td>What is the interest rate on what you have borrowed from friends or neighbors?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_friendsorn_7</td>
<td>When must you pay all money back to friends or neighbors?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_1</td>
<td>Would you say you are experiencing difficulties meeting your repayment obligations?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_2</td>
<td>What amount was originally borrowed from relatives?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_3</td>
<td>How much have you repaid to relatives in total to date?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_4</td>
<td>Can you best describe the terms of your borrowing from relatives in terms of an interest rate, or a total repayment amount?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_5</td>
<td>What is the total amount of the payments you will make on this debt from friends or neighbors?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_6</td>
<td>What is the interest rate on what you have borrowed from relatives?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_7a</td>
<td>Would you say you are experiencing difficulties meeting your repayment obligations?</td>
<td>Yes</td>
</tr>
<tr>
<td>m11_headsrela_7b</td>
<td>Do you think you are experiencing difficulties meeting your repayment obligations?</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from a private money lender? Include amounts that you still have not paid back, regardless of when the money was borrowed. If you borrowed money long ago but still owe money, include the amount. If you borrowed money recently but finished paying it back in the past, do not include the amount.

What was the value of what was originally borrowed from private money lender?

How much have you repaid to private money lender in total to date?

Can you best describe the terms of your borrowing from private money lender in terms of an interest rate, or a total repayment amount?

What is the total amount of the payments you will make on this debt from private money lender?

How much have you repaid to agricultural input suppliers in terms of an interest rate, or a total repayment amount?

When must you pay all money back to private money lender?

Would you say you are experiencing difficulties meeting your repayment obligations?

What is the total amount of the payments you will make on this debt from bank?

How much have you repaid to agricultural input suppliers in terms of an interest rate, or a total repayment amount?

When must you pay all money back to agricultural input suppliers?

Would you say you are experiencing difficulties meeting your repayment obligations?

What is the total amount of the payments you will make on this debt from bank?

How much have you repaid to bank in total to date?

Can you best describe the terms of your borrowing from bank in terms of an interest rate, or a total repayment amount?

What is the total amount of the payments you will make on this debt from bank?

What is the interest rate on what you have borrowed from bank?

Can you best describe the terms of your borrowing from bank?

What is the total amount of the payments you will make on this debt from bank by?

When must you pay all money back to bank?

Would you say you are experiencing difficulties meeting your repayment obligations?
| m11_bank_7 | When must you pay all money back to bank? | Ni ryari ugomba kwishyura amafaranga yose Banki? | yes |
| m11_bank_8 | Would you say you are experiencing difficulties meeting your repayment obligations? | Ese ubona bijya bikugora kwishyura amafaranga wagujije? | yes |
| m11_nonbank_1 | Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from a non-bank financial institutions? Include amounts that you still have not paid back, regardless of when the money was borrowed. If you borrowed money long ago but still owe money, include the amount. If you borrowed money recently but finished paying it back in the past, do not include the amount. | Ese hari umwe mu bantu baba muri uru rugo (wennyine cyangwa yifatanyije n’abandi bantu baba muri uru rugo cyangwa bataba muri uru rugo) uyia aguza amafaranga mu bigo by’imari bidakora nka banki? Shyiramo amafaranga ugifite atariishyurwa, utitaye ku gihe amafaranga yagugirirwe. Niba warujwije amafaranga, ariko ubaka utaranangije kuyishyura, yashyiremo. Niba warujwije amafaranga vuba aha ariko ubaka wararanangije kuyishyura mu gihe cyashize, nitsiryiremo ayo mafaranga. | yes |
| m11_NONGOSinclu_3 | Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from NGOs (including faith based)? Include amounts that you still have not paid back, regardless of when the money was borrowed. If you borrowed money long ago but still owe money, include the amount. If you borrowed money recently but finished paying it back in the past, do not include the amount. | Ni amafaranga angahe yose hamwe ugomba kwishyura ibigo by’imari bidakora nka banki? | yes |
| m11_nonbank_5 | What is the total amount of the payments you will make on this debt from non-bank financial institutions? | Ese ushobora gusobanura neza imiterere y’inguzanyo yawe wagujije mu bigo by’imari bidakora nka banki? Kugeza ubu umaze kwishyura amafaranga angahe yose hamwe ibigo by’imari bidakora nka banki? N’ijanisha n’urunguko cyangwa amafaranga yose hamwe uguza amafaranga. | yes |
| m11_nonbank_6 | What is the interest rate on what you have borrowed from non-bank financial institutions? | Hijanya ringana iki ku nguzanyo yose hamwe wahawe n’ibigo by’imari bidakora nka banki? | yes |
| m11_nonbank_7a | If there a certain date that you must pay back this amount by? | Haba hari itali ukuba kuba wishyuriyeho aya mafaranga? | yes |
| m11_nonbank_7 | When must you pay all money back to non-bank financial institutions? | Ni ryari ugomba kwishyura amafaranga yose hamwe uguza amafaranga. | yes |
| m11_NONGOSinclu_1 | Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from NGOs (including faith based)? Include amounts that you still have not paid back, regardless of when the money was borrowed. If you borrowed money long ago but still owe money, include the amount. If you borrowed money recently but finished paying it back in the past, do not include the amount. | Ese ubona bijya bikugora kwishyura amafaranga wagujije? | yes |
| m11_NONGOSinclu_2 | What amount was originally borrowed from NGOs (including faith based)? | Ni amafaranga angahe yigije imafaranga yose hamwe n’uburanga yose hamwe mu bigo by’imari bidakora nka banki? Ese wadusobanura kurushaho ubuyo wumwikanye na imafaranga. | yes |
| m11_NONGOSinclu_3 | How much have you repaid to NGOs (including faith based) in total to date? | Ni amafaranga angahe yigije imafaranga yose hamwe n’uburanga yose hamwe n’uburanga yose hamwe. | yes |
| m11_NONGOSinclu_4 | Can you best describe the terms of your borrowing from NGOs (including faith based) in terms of an interest rate, or a total repayment amount? | Ese wadusobanura kurushaho ubuyo wumwikanye na imafaranga. | yes |
| m11_NONGOSinclu_5 | What is the total amount of the payments you will make on this debt from NGOs (including faith based)? | Ni amafaranga angahe yigije imafaranga yose hamwe n’uburanga yose hamwe n’uburanga yose hamwe. | yes |
| m11_NONGOSinclu_6 | What is the interest rate on what you have borrowed from NGOs (including faith based)? | Ese wadusobanura kurushaho ubuyo wumwikanye na imafaranga. | yes |
| m11_NONGOSinclu_7a | If there a certain date that you must pay back this amount by? | Haba hari itali ukuba kuba wishyuriyeho aya mafaranga? | yes |
| m11_NONGOSinclu_7 | When must you pay all money back to NGOs (including faith based)? | Ni ryari ugomba kwishyura amafaranga yose hamwe uguza amafaranga. | yes |
| m11_NONGOSinclu_8 | Would you say you are experiencing difficulties meeting your repayment obligations? | Ese ubona bijya bikugora kwishyura amafaranga wagujije? | yes |
Was the total value (in cash and in kind) of gifts given 600 Rwf or more?
- Yes  
- No

What was the estimated total value of the in kind gifts given in Rwf?

Write gifts given in kind, received or given out.

What was the total amount in cash gifts given? (Rwf)

Over the past 12 months, did your household GIVE OUT any loans (in cash or in kind) to any individual or family outside of the household?
- Yes  
- No

Was the total value (in cash and in kind) of loans given 600 Rwf or more?

What were the reasons why people are undernourished?
- Hunger and malnutrition
- Food insecurity
- Health issues
- Economic hardships
- Lack of education

Do you treat this drinking water in any way to make it safe to drink?
- Yes  
- No

What was the estimated total value of the health expenditure?

What is the amount of loans given to be repaid? (Rwf)

Do you share your toilet facility with other households?
- Yes  
- No

What should we do to prevent undernutrition among infants (under 6 months old)?
- Breastfeeding
- Fortified baby milk
- Multivitamin supplements

How often do members of your household use any latrine facility?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

How can you recognize that someone is not having enough food?
- Weight loss
- Frequent hunger
- Fatigue
- Weakness

What do you usually do to make the water safer to drink?
- Boiling
- Chlorination
- Solar disinfection
- Filtering

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How can you recognize that someone is not having enough food?

What are the reasons why people do not get enough food?
- Poverty
- Lack of access to food
- Food price increases
- Health issues
- Lack of education

What can you do to avoid sickness from germs from human or animal faeces?
- Separate latrine for human and animal faeces
- Keep human and animal faeces away from food
- Wash hands before eating

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

What are the reasons why people are undernourished?
- Hunger and malnutrition
- Food insecurity
- Health issues
- Economic hardships
- Lack of education

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

What do you usually do to make the water safer to drink?
- Boiling
- Chlorination
- Solar disinfection
- Filtering

How often do members of your household use any latrine facility?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?

Were there any cholera outbreaks in your community?
- Yes  
- No

How often do members of your household wash their hands before eating?
- Never  
- Occasionally  
- Frequently  
- Always

Which household member(s) is covered by health insurance?
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
</table>
| 13. Health - Inpatient Care | This section collects information about inpatient stays, including the main type of health insurance, the duration of the stay, and any other medical costs.

### Questions:

- What is [name1]'s main type of health insurance? (yes/no)
- What is [name2]'s main type of health insurance? (yes/no)
- What is [name3]'s main type of health insurance? (yes/no)
- What is [name4]'s main type of health insurance? (yes/no)
- What is [name5]'s main type of health insurance? (yes/no)
- What is [name6]'s main type of health insurance? (yes/no)
- What is [name7]'s main type of health insurance? (yes/no)
- What is [name8]'s main type of health insurance? (yes/no)
- What is [name9]'s main type of health insurance? (yes/no)
- What is [name10]'s main type of health insurance? (yes/no)
- What is [name11]'s main type of health insurance? (yes/no)
- What is [name12]'s main type of health insurance? (yes/no)
- What is [name13]'s main type of health insurance? (yes/no)
- What is [name14]'s main type of health insurance? (yes/no)
- What is [name15]'s main type of health insurance? (yes/no)

### Instructions:

- Please specify the reason for the inpatient stay.
- Specify the medical provider for preventative or diagnostic care.
- Indicate if the patient or any other household members spent any costs separately, such as medicines or doctors' fees.

### Data Collection:

- **inpatient**: Which household member was involved in this stay?
- **instype**: What is the main type of health insurance? (inpatient)
- **m13_clinic_any**: In the last 12 months, did anyone in the household spend any time in hospital or clinic? (yes/no)
- **m13_clinic_which**: Which household members spent any time in hospital or clinic? (select_multiple)
- **m13_ins_type_1**: What is the main type of health insurance? (inpatient)
- **m13_inpatient_a_**: Which household member was involved in this stay? (select_one)
- **m13_inpatient_b_**: What was the reason for the stay? (select_one)
- **m13_inpatient_c_**: When did this stay occur? (date)
- **m13_inpatient_d_**: What was the duration of this stay in days? (integer)
- **m13_inpatient_e_**: How much was the bill the patient had to pay directly to the hospital? (RWF)
- **m13_inpatient_f_**: How much did you have to pay for any other costs? (select_multiple)
- **m13_ins_type_2**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_3**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_4**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_5**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_6**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_7**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_8**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_9**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_10**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_11**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_12**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_13**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_14**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_15**: What is the main type of health insurance? (inpatient)
- **m13_which**: Which household members visited a clinic, CHW, or other provider for preventative or diagnostic care? (select_multiple)
- **m13_prevent_1**: In the last 12 months, did anyone in the household spend any time as an in-patient in hospital or clinic? (yes/no)
- **m13_prevent_which**: Which household members visited a clinic, CHW, or other provider for preventative or diagnostic care in the past 12 months? (select_multiple)
- **m13_prevent_2**: In the last 12 months, did anyone in the household spend any time as an in-patient in hospital or clinic? (yes/no)

### Additional Information:

- **m13_clinic_any**: In the last 12 months, did anyone in the household spent any time as an in-patient in hospital or clinic? (yes/no)
- **m13_clinic_which**: Which household members spent any time as an in-patient in hospital or clinic? (select_multiple)
- **m13_ins_type_2**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_3**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_4**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_5**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_6**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_7**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_8**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_9**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_10**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_11**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_12**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_13**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_14**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_15**: What is the main type of health insurance? (inpatient)

### Additional Notes:

- **m13_which**: Which household members visited a clinic, CHW, or other provider for preventative or diagnostic care? (select_multiple)
- **m13_prevent_1**: In the last 12 months, did anyone in the household spent any time as an in-patient in hospital or clinic? (yes/no)
- **m13_prevent_which**: Which household members visited a clinic, CHW, or other provider for preventative or diagnostic care in the past 12 months? (select_multiple)
- **m13_prevent_2**: In the last 12 months, did anyone in the household spend any time as an in-patient in hospital or clinic? (yes/no)

### Additional Instructions:

- **m13_clinic_any**: In the last 12 months, did anyone in the household spent any time as an in-patient in hospital or clinic? (yes/no)
- **m13_clinic_which**: Which household members spent any time as an in-patient in hospital or clinic? (select_multiple)
- **m13_ins_type_2**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_3**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_4**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_5**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_6**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_7**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_8**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_9**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_10**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_11**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_12**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_13**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_14**: What is the main type of health insurance? (inpatient)
- **m13_ins_type_15**: What is the main type of health insurance? (inpatient)
- **m13_which**: Which household members visited a clinic, CHW, or other provider for preventative or diagnostic care? (select_multiple)
- **m13_prevent_1**: In the last 12 months, did anyone in the household spent any time as an in-patient in hospital or clinic? (yes/no)
- **m13_prevent_which**: Which household members visited a clinic, CHW, or other provider for preventative or diagnostic care in the past 12 months? (select_multiple)
- **m13_prevent_2**: In the last 12 months, did anyone in the household spent any time as an in-patient in hospital or clinic? (yes/no)
What was the nature of this preventative or diagnostic care received?

How much did your household spend in total on these visits in the past 3 months?

How many times did ${name1} receive preventative or diagnostic care in the past three months?

How many times did ${name2} receive preventative or diagnostic care in the past three months?

How many times did ${name3} receive preventative or diagnostic care in the past three months?

How many times did ${name4} receive preventative or diagnostic care in the past three months?

How many times did ${name5} receive preventative or diagnostic care in the past three months?

How many times did ${name6} receive preventative or diagnostic care in the past three months?

How many times did ${name7} receive preventative or diagnostic care in the past three months?

How many times did ${name8} receive preventative or diagnostic care in the past three months?

How many times did ${name9} receive preventative or diagnostic care in the past three months?

How many times did ${name10} receive preventative or diagnostic care in the past three months?

How many times did ${name11} receive preventative or diagnostic care in the past three months?

How much did your household spend in total on these visits in the past 3 months?

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<table>
<thead>
<tr>
<th>Integer</th>
<th>Description</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>m13_prevent_a_13</td>
<td>How many times did $(name13)$ receive preventative or diagnostic care in the past three months?</td>
<td>What was the nature of this preventative or diagnostic care received?</td>
</tr>
<tr>
<td>m13_prevent_c_13</td>
<td>How much did your household spend in total on these visits in the past 3 months?</td>
<td>Ni inshuro zingahe $(name13)$ yahawe inama z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_prevent_b_13</td>
<td>What was the nature of this preventative or diagnostic care received?</td>
<td>Ese ubufasha bwatanzwe buyanye n’imana z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_amtot</td>
<td>How many times did $(name14)$ receive preventative or diagnostic care in the past three months?</td>
<td>Ni amafaranga angahe yakoreshejwe muri rusange muri izi nshuro zose yi'uvuze mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_overnight_3</td>
<td>How many times did $(name15)$ receive preventative or diagnostic care in the past three months?</td>
<td>Ese ubufasha bwatanzwe buyanye n’imana z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_overnight_0</td>
<td>How much did your household spend in total on these visits in the past 3 months?</td>
<td>Ni amafaranga angahe yakoreshejwe muri rusange muri izi nshuro zose yi'uvuze mu mezi atatu ashize?</td>
</tr>
</tbody>
</table>

**end group**

**preventative**

<table>
<thead>
<tr>
<th>Integer</th>
<th>Description</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>m13_outpatient_any</td>
<td>In the last 3 months, did anyone in the household receive any out-patient care from a hospital or other formal medical provider?</td>
<td>Mu mezi 3 ashize, hari umuntu wo muri uru rugo wigeze wivuwa ataha, ku bitaro cyangwa ku wundu muganga wemewere n'amategeko?</td>
</tr>
<tr>
<td>m13_outpatient_which</td>
<td>In the last 3 months, which household members received any out-patient care from a hospital or other formal medical provider?</td>
<td>Mu mezi 3 ashize, ni abache bantu bo muri uru rugo bigeze bivuwa bataha, ku bitaro cyangwa ku wundu muganga wemewere n'amategeko?</td>
</tr>
<tr>
<td>m13_outpatient_reason_0</td>
<td>What was the reason for other (former, deceased) member's out-patient care?</td>
<td>Ni n'iyi mamputu undu muntu wo muri uru rugo (wahabaga cyangwa wafupaye) yi'uvuza ataha?</td>
</tr>
<tr>
<td>m13_outpatient_times_0</td>
<td>How many times did another (former, deceased) member seek this care in the past 3 months?</td>
<td>Mu mezi atatu ashize, fagitire yagomba kisyahura y'ibitaro/ivuro yiri'wiza ku buro kiyuta bataza, ubaryeme ikiguzi icycle ari cyo cyose, amafaranga yyo kwishyizwa, amafaranga yaguze imiti, yanginga ite?</td>
</tr>
<tr>
<td>m13_outpatient_which_0</td>
<td>In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?</td>
<td>Mu mezi atatu ashize, ni amafaranga angahe wishyuye ikindi ikiguzi cy’ubuvuzi cyishyuhwe ukuwacwo, nk’imiti cyangwa amafaranga wishyuye muganga (mu ghe gusa atashyizwe kuri fagitire wahawe n’ibitaro)?</td>
</tr>
<tr>
<td>m13_outpatient_overnight_0</td>
<td>In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?</td>
<td>Ni n’iyi mamputu z’wose y'uvuza mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_reason_1</td>
<td>What was the reason for $(name1)$’s out-patient care?</td>
<td>Ni n’iyi mamputu z’wose y’uvuza mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_times_1</td>
<td>How many times did $(name1)$ seek this care in the past 3 months?</td>
<td>Ni inshuro zingahe $(name1)$ yagije kivuviziano mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_which_1</td>
<td>In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?</td>
<td>Mu mezi atatu ashize, fagitire yagomba kisyahura y’ibitaro/ivuro yiri’wiza ku buro kiyuta bataza, ubaryeme ikiguzi icycle ari cyo cyose, amafaranga yyo kwishyizwa, amafaranga yaguze imiti, yanginga ite?</td>
</tr>
<tr>
<td>m13_outpatient_reason_2</td>
<td>What was the reason for $(name2)$’s out-patient care?</td>
<td>Ni n’iyi mamputu z’wose y’uvuza mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_times_2</td>
<td>How many times did $(name2)$ seek this care in the past 3 months?</td>
<td>Ni inshuro zingahe $(name2)$ yagije kivuviziano mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_which_2</td>
<td>In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?</td>
<td>Mu mezi atatu ashize, fagitire yagomba kisyahura y’ibitaro/ivuro yiri’wiza ku buro kiyuta bataza, ubaryeme ikiguzi icycle ari cyo cyose, amafaranga yyo kwishyizwa, amafaranga yaguze imiti, yanginga ite?</td>
</tr>
<tr>
<td>m13_outpatient_reason_3</td>
<td>What was the reason for $(name3)$’s out-patient care?</td>
<td>Ni inshuro zingahe $(name3)$ yagije kivuviziano mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_times_3</td>
<td>How many times did $(name3)$ seek this care in the past 3 months?</td>
<td>Mu mezi atatu ashize, ni amafaranga angahe wishyuye ikindi ikiguzi cy’ubuvuzi cyishyuhwe ukuwacwo, nk’imiti cyangwa amafaranga wishyuye muganga (mu ghe gusa atashyizwe kuri fagitire wahawe n’ibitaro)?</td>
</tr>
<tr>
<td>m13_outpatient_which_3</td>
<td>In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?</td>
<td>Mu mezi atatu ashize, ni amafaranga angahe wishyuye ikindi ikiguzi cy’ubuvuzi cyishyuhwe ukuwacwo, nk’imiti cyangwa amafaranga wishyuye muganga (mu ghe gusa atashyizwe kuri fagitire wahawe n’ibitaro)?</td>
</tr>
<tr>
<td>m13_outpatient_reason_4</td>
<td>What was the reason for $(name4)$’s out-patient care?</td>
<td>Ni n’iyi mamputu z’wose y’uvuza mu mezi atatu ashize?</td>
</tr>
<tr>
<td>m13_outpatient_times_4</td>
<td>How many times did $(name4)$ seek this care in the past 3 months?</td>
<td>Ni inshuro zingahe $(name4)$ yagije kivuviziano mu mezi atatu ashize?</td>
</tr>
</tbody>
</table>
integer m13_outpatient_times_4
m13_outpatient_treatment__her_4
m13_outpatient_overnight_4
m13_outpatient_reason_5
m13_outpatient_times_5
m13_outpatient_reason_6
m13_outpatient_overnight_5
m13_outpatient_reason_7
m13_outpatient_overnight_6
m13_outpatient_reason_8
m13_outpatient_reason_9
m13_outpatient_reason_10
m13_outpatient_times_10

How many times did $(name4)$ seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

What was the reason for $(name5)$’s out-patient care?

What was the reason for $(name6)$’s out-patient care?

What was the reason for $(name7)$’s out-patient care?

What was the reason for $(name8)$’s out-patient care?

What was the reason for $(name9)$’s out-patient care?

What was the reason for $(name10)$’s out-patient care?


directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

In the past three months, how much the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?
In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

What was the reason for ${name15}'s out-patient care?

In the past three months, how many times did ${name15} seek this care in the past 3 months?

How many times did ${name15} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name13}'s out-patient care?

In the past three months, how many times did ${name13} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name12}'s out-patient care?

In the past three months, how many times did ${name12} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name11}'s out-patient care?

In the past three months, how many times did ${name11} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name10}'s out-patient care?

In the past three months, how many times did ${name10} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name9}'s out-patient care?

In the past three months, how many times did ${name9} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name8}'s out-patient care?

In the past three months, how many times did ${name8} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name7}'s out-patient care?

In the past three months, how many times did ${name7} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name6}'s out-patient care?

In the past three months, how many times did ${name6} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name5}'s out-patient care?

In the past three months, how many times did ${name5} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name4}'s out-patient care?

In the past three months, how many times did ${name4} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name3}'s out-patient care?

In the past three months, how many times did ${name3} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name2}'s out-patient care?

In the past three months, how many times did ${name2} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name1}'s out-patient care?

In the past three months, how many times did ${name1} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name0}'s out-patient care?

In the past three months, how many times did ${name0} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name}'s out-patient care?

In the past three months, how many times did {name} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

What was the reason for ${name}'s out-patient care?

In the past three months, how many times did {name} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?
How much did you spend in total on this traditional treatment?

'Ni iyihe mpamvu yatumye ${name1} ajya kwivuza?

Was this treatment for ${name1}?

What was the reason for this treatment of ${name1}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name2}?

What was the reason for this treatment of ${name2}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name3}?

What was the reason for this treatment of ${name3}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name4}?

What was the reason for this treatment of ${name4}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name5}?

What was the reason for this treatment of ${name5}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name6}?

What was the reason for this treatment of ${name6}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name7}?

What was the reason for this treatment of ${name7}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name8}?

What was the reason for this treatment of ${name8}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name9}?

What was the reason for this treatment of ${name9}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name10}?

What was the reason for this treatment of ${name10}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name11}?

What was the reason for this treatment of ${name11}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name12}?

What was the reason for this treatment of ${name12}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name13}?

What was the reason for this treatment of ${name13}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for ${name14}?

What was the reason for this treatment of ${name14}?

Did you seek advice or treatment for the diarrhea from any

Has a child in the household had diarrhea in the last 2 weeks?

Did you seek advice or treatment for the diarrhea from any

Was this treatment for other (former, deceased) member?

How much did you spend in total on this traditional treatment

on behalf of another (former, deceased) member in the last 3

months?

Was this treatment for another (former, deceased) member?

How much did you spend in total on this traditional treatment

on behalf of another (former, deceased) member in the last 3

months?

Was this treatment for another (former, deceased) member?

How much did you spend in total on this traditional treatment

on behalf of another (former, deceased) member in the last 3

months?

Was this treatment for another (former, deceased) member?

How much did you spend in total on this traditional treatment

on behalf of another (former, deceased) member in the last 3

months?
Where did you seek advice or treatment?

Do you receive your income in certain months, or spread out evenly across the year?

Please indicate the anticipated amounts of your expenditure on other items?

Over the coming 12 months, do you anticipate any major expenditures on school fees?

Please indicate the months in which the biggest expenditures on school fees will take place?

Please indicate the anticipated amounts of your expenditure on school fees?

Please indicate the months in which the biggest expenditures on land will take place?

Please indicate the anticipated amounts of your expenditure on land?

Over the coming 12 months, do you anticipate any major expenditures on home durables?

Please indicate the months in which the biggest expenditures on home durables will take place?

Please indicate the anticipated amounts of your expenditure on home durables?

What are the main reasons you would be uncomfortable holding cash?

What are the assets?

What are the main reasons you would be uncomfortable holding large amounts of cash?

What is the largest amount of cash you would feel comfortable holding at your home?

What is the total amount of money you spent this month on purchases that you later regretted?

How many times in the past month have you regretted purchases that you later regretted?

In the past month, have you spent money on purchasing anything that you later regretted and wish you had not bought?

How many times in the past month have you regretted something that you purchased?

What is the total amount of money you spent this month on purchases that you later regretted?

Does your household have a certain income?

Do you receive your income in certain months, or spread out evenly across the year?

Please indicate the month in which your household faces the majority of its income.

Please indicate the month in which your household receives the majority of its income.

Now I am going to ask you some questions about your lifestyle and how you think about things like money and your family. There are no right or wrong answers, so please answer honestly for yourself.

In general, do you feel comfortable holding large amounts of cash?

Do you feel comfortable holding large amounts of cash?

In the past month, have you spent money on purchasing something that you later regretted and wish you had not bought?

How many times in the past month have you regretted something that you purchased?

What is the total amount of money you spent this month on purchases that you later regretted?

Does your household have a certain income?

Do you receive your income in certain months, or spread out evenly across the year?

Please indicate the month in which your household faces the majority of its income.

Please indicate the month in which your household receives the majority of its income.

Now I am going to ask you some questions about your lifestyle and how you think about things like money and your family. There are no right or wrong answers, so please answer honestly for yourself.

In general, do you feel comfortable holding large amounts of cash?

Do you feel comfortable holding large amounts of cash?

In the past month, have you spent money on purchasing something that you later regretted and wish you had not bought?

How many times in the past month have you regretted something that you purchased?

What is the total amount of money you spent this month on purchases that you later regretted?

Does your household have a certain income?

Do you receive your income in certain months, or spread out evenly across the year?

Please indicate the month in which your household faces the majority of its income.

Please indicate the month in which your household receives the majority of its income.

Now I am going to ask you some questions about your lifestyle and how you think about things like money and your family. There are no right or wrong answers, so please answer honestly for yourself.

In general, do you feel comfortable holding large amounts of cash?

Do you feel comfortable holding large amounts of cash?
Please indicate the months in which these other expenditures will take place?

Please indicate the anticipated amounts of your expenditure on other items.

What are the other items? Ibyo bintu bindi ni ibihe?

Please record the respondent’s entry for test #1 Andika igisubizo ubazwa akubwiye #1 yes

Please record the respondent’s entry for test #2 Andika igisubizo ubazwa akubwiye #2 yes

Please record the respondent’s entry for test #3 Andika igisubizo ubazwa akubwiye #3 yes

Please record the respondent’s entry for test #4 Andika igisubizo ubazwa akubwiye #4 yes

Please record the respondent’s entry for test #5 Andika igisubizo ubazwa akubwiye #5 yes

Please record the respondent’s entry for test #6 Andika igisubizo ubazwa akubwiye #6 yes

Please record the respondent’s entry for test #7 Andika igisubizo ubazwa akubwiye #7 yes

Please record the respondent’s entry for test #8 Andika igisubizo ubazwa akubwiye #8 yes

Do you have a specific investment in mind that you would make if you had the money? (House, Small business, Car or motorcycle, Farming, Wedding)

How much money would you need to make this investment?

When would you ideally get the money to make this investment?

Which individual is primarily responsible for making decisions in your Household?

Which individual is primarily responsible for making Major Purchases (purchases of house, land, etc.)?

Are you currently married?

Do you and your spouse have conflicts over money?

Do you say that you yourself ever have problems with wasting money on things that the household does not need?

Would you say that your spouse is irresponsible?

Would you say that your spouse is impulsive?

Does your spouse make more income than you do?

Does your spouse ever have problems with wasting money on things that the household does not need?

Would you say that you yourself ever have problems with wasting money on things that the household does not need?

Would you say that your spouse is impulsive?

Would you say that your spouse is irresponsible?

Which individual is primarily responsible for making Savings decisions?

What are the other items? Ibyo bintu bindi ni ibihe?

Do you and your spouse have conflicts over money?

Does your spouse ever have problems with wasting money on things that the household does not need?

Would you say that you yourself ever have problems with wasting money on things that the household does not need?

Would you say that your spouse is impulsive?

Would you say that your spouse is irresponsible?
Please record the respondent's entry for test #9.

Andika igisubizo ubawza akubwiye #9  yes

I am now going to show you a card with several numbers written on it. I will show you the card for 10 seconds. I will then wait 10 seconds, and ask you to repeat the numbers back to me. For example, if I showed you this card:

Then you would look at this card, remember the numbers, and after 10 seconds repeat back to me 7-5-2.

Okay, let's start with a card with 4 numbers on it. Murabyumvise, reka dutangirire ku ikarita ifite imibare 4.

You have now finished the memory activity. Wamaze gukina umukino wo kwibuka.

We will now do something a little different. For the next few minutes, we will ask you to play some games. These games are intended to help us understand how people make decisions about money. Do you consent to participate in these games?

In total, we will ask you to make twelve decisions. Once you have made all twelve decisions, we will determine your payout. There are two ways you might get paid. One possibility is that we will pay you a fixed amount of 500 RWF. The other possibility is that we will pay you based on one of the twelve decisions you have made. To determine your payout, we will first put two pieces of paper into a bag and draw one to determine whether you will be paid a fixed amount or an amount that depends on your decision. If this draw determines that your payout will depend on your choices, we will then draw one of these pieces of paper, numbered 1-12, from a bag to determine which task will count for real money.

Because any of the decisions you make could be selected as the one that counts to determine your payout today, you should take each of these decisions seriously. If you do not understand what you are being asked to do, please ask. If at any point you feel uncomfortable or do not want to participate in a particular decision, you are welcome to do so.

In any situation, we will pay you by mobile money at some point in the future ranging from tomorrow to in 120 days. If at any point you do not have access to a SIM card that allows for mobile money, you may provide us with the phone number of a trusted friend or neighbor who may receive money on your behalf. If you have no trusted friend or neighbor, then we can entrust your Community Health Worker to deliver the payment to you.

Note

For the purpose of the study, we will pay you 500 RWF more than is due to you if you chose the highest paying task out of the 12 tasks available, or you chose a task paying more than the standard amount or an amount that depends on your decisions. If this payout is more than your expected value, we will randomly select another task from the remaining tasks, and you will receive the standard amount or an amount that depends on your decisions. The payment to you will be paid by mobile money at some point in the future ranging from tomorrow to in 120 days. If at any point you do not have access to a SIM card that allows for mobile money, you may provide us with the phone number of a trusted friend or neighbor who may receive money on your behalf. If you have no trusted friend or neighbor, then we can entrust your Community Health Worker to deliver the payment to you.

In any situation, we will pay you by mobile money at some point in the future ranging from tomorrow to in 120 days. If at any point you do not have access to a SIM card that allows for mobile money, you may provide us with the phone number of a trusted friend or neighbor who may receive money on your behalf. If you have no trusted friend or neighbor, then we can entrust your Community Health Worker to deliver the payment to you.

We will now do something a little different. For the next few minutes, we will ask you to play some games. These games are intended to help us understand how people make decisions about money. Do you consent to participate in these games?

In any situation, we will pay you by mobile money at some point in the future ranging from tomorrow to in 120 days. If at any point you do not have access to a SIM card that allows for mobile money, you may provide us with the phone number of a trusted friend or neighbor who may receive money on your behalf. If you have no trusted friend or neighbor, then we can entrust your Community Health Worker to deliver the payment to you.
Imagine that you are playing a lottery. There are two pieces of paper in a bag. One piece of paper is blue and one piece of paper is white. After you have made your decisions today, if your decisions in this game are chosen to count for real payouts, we will ask you to draw a piece of paper from this bag. Then, depending on the color of that piece of paper, you may win some money.

The amount of money you win depends on the color of the piece of paper, and on the type of lottery that you choose at the start. There are 5 possible lotteries - A, B, C, D and E - and you are free to choose which lottery you would like to play. Each lottery pays different amounts if you draw the blue piece of paper or the white piece of paper.

Here is a picture of the 5 lotteries. It shows how much you will earn for each piece of paper, if you choose that lottery.

Dore igishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.

As you can see, in lottery A, you will get 2800 RWF if you draw the blue piece of paper and 2800 RWF if you draw the white piece of paper. In lottery B, you will get 2400 RWF if you draw the blue piece of paper and 3600 RWF if you draw the white piece of paper. In lottery C, you will get 2000 RWF if you draw the blue piece of paper and 4400 RWF if you draw the white piece of paper. In lottery D, you will get 1600 RWF if you draw the blue piece of paper and 5200 RWF if you draw the white piece of paper. Finally, in lottery E, you will get 1200 RWF if you draw the blue piece of paper and 6000 RWF if you draw the white piece of paper.

Remember that you must choose the lottery before we randomly select either the blue or the white piece of paper from the bag, so you will not know what color you will get when you choose a lottery. We will ask you to make this choice two times.

If the first of these tasks is chosen to play for real money, then you will draw a piece of paper from the bag, and we will pay you the amount of money that you win by mobile phone in 90 days.

If the second of these tasks is chosen to play for real money, then you will draw a piece of paper from the bag, and we will pay you the amount of money that you win by mobile phone tomorrow.

Either way, we will not pay you today, and either way, we will make this payment to you by mobile money.

You may make the same choice in both tasks, but you do not need to do so. Before we ask you to make your decisions, do you have any questions?

We will make the decision for you to play one of the five lotteries, A, B, C, D, or E. If this decision determines money transferred to your mobile money account in 90 days, which of these lotteries would you like to play?


Umubare w’amafaranga uratsindira uraterwa ni’ibera n’y’agapapuro n’uburupo bwa tombora wahiwmo mu ntanga. Harapo ubumwe 5 bwa tombora:- A, B, C, D na E - kandi ulite uburangazira bwo guhitamo gukina ubwose ubwo ari bwo bwo. Buri burapo bwa tombora bwihihihi umumwe utandukanye w’amafaranga mu gihye uraba uhiramo agapapuro k’ubururu cyangwa ak’umwe ru.

Dore igishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.

Nyuma y’yu gishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.

Nyumagishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.

Nyumagishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.

Nyumagishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.

Nyumagishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.

Nyumagishushanyo kigara raza ubumwe bwa tombora uko ari 5. Iki gishushanyo kireke reka umumwe bwa amafaranga uratsindira kuri burapo gurupihiremyo, nuhitamo ubwose ubwo burapo bwa tombora.
2. 2nd decision. Now, I will ask you again to choose a lottery to play. This decision will determine how much money you will be paid by mobile phone tomorrow, if we select this task to determine your actual payout. Consider again the five lotteries, A, B, C, D, or E. If this decision determines money transferred to your mobile money account tomorrow, which of these lotteries would you like to play?

2. Icyemezo cya kabiri. Ubu ndababasa na none guhitamo uburyo bwa tombora mushaka gukina. Iki cyemezo kirashingirarwo mu kugena umubare w'amafaranga uzishyurwa ejo kuri mobile money, nidyahitamo uyu mwiitozo kugira ngo tuge ne amafaranga tuwishyura by'ukuri. Ongera witegereze ubuswo butanu bwa tombora, A, B, C, D na E. Iki cyemezo ari cya gishingirarwo mu kugena amafaranga tuzakohereza ejo kuri konti y'abye ya mobile money, ni ubuhe buryo bwa tombora muri ubu wifuza gukina?

end group

begin group

beg_lottery

asc_curve

15. Lab Games - Convex Time Budget

Now, for the next 10 questions we will ask you to make decisions that allocate payouts to you by mobile phone between two dates in time.

If one of these decisions is selected to determine your payment, then you will be paid by mobile money on the specific dates we describe. Let's begin.

In the first five choices, we will ask you to make decisions between payments in 90 days ($\text{date90}$) and payments in 120 days ($\text{date120}$) and payments in 30 days ($\text{date30}$).

For each of the following decisions, you will be given six options. If that decision is chosen to count to determine your actual payoff, then we will pay you the amounts you choose on the dates described.

select_one ctb

m15_ctb1

Please select an option for Task 3. Remember, you may receive the first amount in 90 days ($\text{date90}$) and the second amount in 120 days ($\text{date120}$).

Hitamo ku mwitozo wa 3. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 90 ($\text{date90}$) n'amafaranga ya kabiri mu minsi 120 ($\text{date120}$).

select_one ctb

m15_ctb2

Please select an option for Task 4. Remember, you may receive the first amount in 90 days ($\text{date90}$) and the second amount in 120 days ($\text{date120}$).

Hitamo ku mwitozo wa 4. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 90 ($\text{date90}$) n'amafaranga ya kabiri mu minsi 120 ($\text{date120}$).

select_one ctb

m15_ctb3

Please select an option for Task 5. Remember, you may receive the first amount in 90 days ($\text{date90}$) and the second amount in 120 days ($\text{date120}$).

Hitamo ku mwitozo wa 5. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 90 ($\text{date90}$) n'amafaranga ya kabiri mu minsi 120 ($\text{date120}$).

select_one ctb

m15_ctb4

Please select an option for Task 6. Remember, you may receive the first amount in 90 days ($\text{date90}$) and the second amount in 120 days ($\text{date120}$).

Hitamo ku mwitozo wa 6. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 90 ($\text{date90}$) n'amafaranga ya kabiri mu minsi 120 ($\text{date120}$).

select_one ctb

m15_ctb5

Please select an option for Task 7. Remember, you may receive the first amount in 90 days ($\text{date90}$) and the second amount in 120 days ($\text{date120}$).

Hitamo ku mwitozo wa 7. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 90 ($\text{date90}$) n'amafaranga ya kabiri mu minsi 120 ($\text{date120}$).

For the next five choices, we will ask you to make decisions between payments tomorrow and payments in 30 days ($\text{date30}$).

As before, in each of the following decisions, you will be given five options. If that decision is chosen to count to determine your actual payoff, then we will pay you the amounts you choose on the dates described.

select_one ctb

m15_ctb1

Please select an option for Task 8. Remember, you may receive the first amount tomorrow and the second amount in 30 days ($\text{date30}$).

Hitamo ku mwitozo wa 8. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 1 n'amafaranga ya kabiri mu minsi 30 ($\text{date30}$).

select_one ctb

m15_ctb2

Please select an option for Task 9. Remember, you may receive the first amount tomorrow and the second amount in 30 days ($\text{date30}$).

Hitamo ku mwitozo wa 9. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 1 n'amafaranga ya kabiri mu minsi 30 ($\text{date30}$).

select_one ctb

m15_ctb3

Please select an option for Task 10. Remember, you may receive the first amount tomorrow and the second amount in 30 days ($\text{date30}$).

Hitamo ku mwitozo wa 10. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 1 n'amafaranga ya kabiri mu minsi 30 ($\text{date30}$).

select_one ctb

m15_ctb4

Please select an option for Task 11. Remember, you may receive the first amount tomorrow and the second amount in 30 days ($\text{date30}$).

Hitamo ku mwitozo wa 11. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 1 n'amafaranga ya kabiri mu minsi 30 ($\text{date30}$).

select_one ctb

m15_ctb5

Please select an option for Task 12. Remember, you may receive the first amount tomorrow and the second amount in 30 days ($\text{date30}$).

Hitamo ku mwitozo wa 12. Wibuke ko ushobora kwakira amafaranga ya mbere mu minsi 1 n'amafaranga ya kabiri mu minsi 30 ($\text{date30}$).

end group
First, we will put one blue piece of paper and one white piece of paper into the bag, and we will ask you to close your eyes and choose one of these. If you draw the white piece of paper, then we will pay you a show-up fee of 500 Rwf. If you draw the blue piece of paper, then we will choose one of your twelve decisions at random to determine your payoff.

You have chosen a blue piece of paper. This means that you will be paid a set amount of 500 Rwf by mobile money tomorrow.

You have selected task \( m_{15\_beg\_drawing2} \), where you will draw either a blue or a white piece of paper from the bag, and the payoff for this draw in the lottery you choose will determine how much money we send you in 90 days. You selected lottery \( \{ \text{selection1} \} \). Ubu tugiyi gukina uburyo bwa tombora wahisemo \( \{ \text{selection1} \} \).

We will now play the lottery you selected in lottery \( m_{15\_lottery\_play2} \). Please draw either a blue or a white piece of paper from the bag, and the payoff for this draw in the lottery you choose will determine how much money we send you tomorrow. You selected lottery \( \{ \text{selection2} \} \).

You have selected task \( m_{15\_beg\_drawing2} \), where you selected \( \{ \text{selection2} \} \). Ngaho hitamo agapapuro k’ubururu cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Nutoranya agapapuro k’umweru, ubwo turahitamo kimwe mu byemezo cumi na bibiri. Hano hari udupapuro twanditseho imibare. Ubu tugiyi gukina uburyo bwa tombora wahisemo \( \{ \text{selection2} \} \). Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa.

You have selected task \( m_{15\_beg\_drawing2} \), where you selected \( \{ \text{selection3} \} \). Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa.

You have selected task \( m_{15\_beg\_drawing2} \), where you selected \( \{ \text{selection4} \} \). Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa.

You have selected task \( m_{15\_beg\_drawing2} \), where you selected \( \{ \text{selection5} \} \). Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa.

You have selected task \( m_{15\_beg\_drawing2} \), where you selected \( \{ \text{selection6} \} \). Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa.

You have selected task \( m_{15\_beg\_drawing2} \), where you selected \( \{ \text{selection7} \} \). Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa.

You have selected task \( m_{15\_beg\_drawing2} \), where you selected \( \{ \text{selection8} \} \). Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa. Wafashe cyangwa ak’umweru mu gikapu, bityo ubwishyubu by'uyeyi n’iri hitamo kuri ubu buryo bwa tombora wahisemo w’amafaranga uzishyurirwa.
You have selected task ${m15_beg_drawing2}, where you selected ${selection9}. You will receive the first amount tomorrow and the second amount in 30 days (${date30}).

Wahisemo umukino wa ${m15_beg_drawing2}, aho wahisemo ${selection9}. Amafaranga ya 1 azakugeraho mu minsi 1, Amafaranga ya 2 akugereho mu minsi 30.

You have selected task ${m15_beg_drawing2}, where you selected ${selection10}. You will receive the first amount tomorrow and the second amount in 30 days (${date30}).

Wahisemo umukino wa ${m15_beg_drawing2}, aho wahisemo ${selection10}. Amafaranga ya 1 azakugeraho mu minsi 1, Amafaranga ya 2 akugereho mu minsi 30.

You have selected task ${m15_beg_drawing2}, where you selected ${selection11}. You will receive the first amount tomorrow and the second amount in 30 days (${date30}).

Wahisemo umukino wa ${m15_beg_drawing2}, aho wahisemo ${selection11}. Amafaranga ya 1 azakugeraho mu minsi 1, Amafaranga ya 2 akugereho mu minsi 30.

You have selected task ${m15_beg_drawing2}, where you selected ${selection12}. You will receive the first amount tomorrow and the second amount in 30 days (${date30}).

Wahisemo umukino wa ${m15_beg_drawing2}, aho wahisemo ${selection12}. Amafaranga ya 1 azakugeraho mu minsi 1, Amafaranga ya 2 akugereho mu minsi 30.

Would you like to receive your prize payment via mobile money to your own SIM card?

Ese urifuza kuzakira amafaranga uzaba watsindiye kuri SIM card yawe iri muri mobile money?

Please enter your SIM card telephone number in order to receive your prize via mobile money.

Tubwire nomero ya telefone yawe,izanyuzwo amafaranga watsindiye?

Would you like to name a friend or neighbor to receive your prize via mobile money on your behalf?

Ese urifuza gutanga nomero ya telefone y'inshuti cg umuturanyi kugirango ariyo izanyuzwo amafaranga watsindiye?

Please enter your trusted friend or neighbor's telephone number so they can receive your prize via mobile money on your behalf.

Tanga nomero ya telefone y'yo nshuti cg umuturanyi wawe izanyuzwo amafaranga uzatsindira?

Please enter your trusted friend or neighbor's name.

Tanga amazina y'yo nshuti cg umuturanyi wawe Carrier

We will contact your community health worker so that they can receive the prize via mobile money on your behalf.

Tuzavugana n'umujyanama w'ubuzima wanyu kugirango azakire amafaranga watsindiye kuri mobile money.

Did the respondent have difficulty understanding the lab games? Please rate your perception of the respondent on a scale from "not at all difficult" to "extremely difficult".

Umukarani:Ese ubazwa byamugogye kumva ibibazo byo mu mukino(tombola)?Gereranya uko ubazwa yasubizaga:"Ntibyamugora"kugeza kuri "Byamugoraga cyane"?

Why do you think the respondent found the lab games difficult? (eg disability, illiteracy)

Ese uratekereza ko ubazwa umukino wamugoraga kubera iki?Umugoroga,Umugoraga cyane?

Please record your current location.

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<td>Village (other)</td>
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<td>Village Code (Enter 7 digits)</td>
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<td>Re-enter the Village Code (Enter 7 digits) as confirmation</td>
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<td>m0_cell_other</td>
<td>Cell (other)</td>
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<td>geopoint</td>
<td>gps_start</td>
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<td>Record GPS now</td>
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<tr>
<td>begin group</td>
<td>id_start</td>
<td>s0_start</td>
<td>1. Household Roster</td>
<td>1. Abagize urugo</td>
</tr>
<tr>
<td>select_one</td>
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<td>m0_consent</td>
<td>Do you agree to participate?</td>
<td>yes</td>
</tr>
<tr>
<td>text</td>
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<td>m0_resp_id</td>
<td>Household ID</td>
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<td></td>
<td>The district doesn’t match</td>
<td>yes</td>
</tr>
<tr>
<td>note</td>
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<td>The sector doesn’t match</td>
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</tr>
<tr>
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<td>The village doesn’t match</td>
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<tr>
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<td>int_odd</td>
<td></td>
<td>How many people live in your household?</td>
<td>yes</td>
</tr>
<tr>
<td>note</td>
<td>note_start</td>
<td></td>
<td>Read: I will begin by asking you about those individuals who you described as being household members during your previous interview.</td>
<td>yes</td>
</tr>
<tr>
<td>note</td>
<td>note_hhmembers</td>
<td></td>
<td>Read: Now I would like to find out about all of the individuals in your household.</td>
<td>yes</td>
</tr>
<tr>
<td>calculate</td>
<td>number_odd_hhmembers</td>
<td></td>
<td>Calculation: number of household members at baseline. Taken from csv.</td>
<td>yes</td>
</tr>
<tr>
<td>begin repeat</td>
<td>oldmembers</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>calculate</td>
<td>hh_i</td>
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<td></td>
<td></td>
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<tr>
<td>calculate</td>
<td>oldmember_name</td>
<td>preloads hhmember name</td>
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<tr>
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<td>oldmember_ismember</td>
<td>Is oldmember_name still a member of this household?</td>
<td>yes</td>
</tr>
<tr>
<td>calculate</td>
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<td></td>
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<tr>
<td>text</td>
<td>nevermember_why</td>
<td></td>
<td>Why was oldmember_name never a member of the household?</td>
<td>yes</td>
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<tr>
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<td>1. Household Roster</td>
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<td>member_left_reasons</td>
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<td>In what district is oldmember_name primary residence today?</td>
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<tr>
<td>calculate</td>
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<td>Is oldmember_name still a member of this household?</td>
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<td>nevermember_why</td>
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<td>Why was oldmember_name never a member of the household?</td>
<td>yes</td>
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<td>1. Household Roster</td>
<td></td>
</tr>
<tr>
<td>select_one</td>
<td>member_left_reasons</td>
<td>member_left_reasons</td>
<td>Why is oldmember_name no longer a member of the household?</td>
<td>yes</td>
</tr>
<tr>
<td>text</td>
<td>left_reasons_sp</td>
<td>is  such as:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>select_one</td>
<td>member_left_person</td>
<td>member_left_person</td>
<td>In what district is oldmember_name primary residence today?</td>
<td>yes</td>
</tr>
<tr>
<td>end group</td>
<td>id_start</td>
<td>s2_start</td>
<td>1. Household Roster</td>
<td></td>
</tr>
</tbody>
</table>

### Tips for Completing the Survey
- **Consent:**
  - Your agreement is required.
- **District and Village:**
  - Please ensure the entered district and village match for accuracy.
- **Identification Information:**
  - Ensure all identification information is correct.
- **HH Members:**
  - Count all household members.
- **Old Member Status:**
  - Confirm if old member was a part of your household.
  - Specify if they died, moved away, or another reason.
- **Device Details:**
  - Enter the correct device information.
- **Member Status:**
  - Confirm the current status of household members.
- **Death Information:**
  - Provide details about deaths, including age and reason.
- **Miscellaneous:**
  - Answer any additional survey questions accurately.

By the end, you will have a comprehensive understanding of your household and its members.
According to the previous information, the list is ${hhsize}. All the people you listed are:

We will now discuss ALL CURRENT household members in turn.

Please, there is a mismatch. You said there are ${m1_hh_members} household members that were not currently any OTHER members of your household?

In addition to the household members already discussed, are there currently any OTHER members of your household? 

Please, there is a mismatch. You said there are ${m1_hh_members} members who were NOT recorded as household members during the baseline survey.

I am now going to ask you some questions about any members of the household who were NOT recorded as household members when you first completed the survey.

Please specify the cause of death of ${oldmember_name_}.

Please describe the symptoms suffered by ${oldmember_name_} prior to his/her death.

Specify the cause of death of ${oldmember_name_}.

Please describe any other symptoms suffered by ${oldmember_name_} prior to his/her death.

Specify any other symptoms suffered by ${oldmember_name_} prior to his/her death.

Please specify the cause of death of ${oldmember_name_}.

Specify the cause of death of ${oldmember_name_}.

Please specify any other symptoms suffered by ${oldmember_name_} prior to his/her death.

Specify the cause of death of ${oldmember_name_}.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name_templistconfirm</td>
<td>Select all members who are CURRENT member of the household. According to the previous information, the list is</td>
</tr>
<tr>
<td>name</td>
<td>$Mlist_allmemberspresent$</td>
</tr>
<tr>
<td>note</td>
<td>The list does not match</td>
</tr>
<tr>
<td>note_duplicate</td>
<td>Ntabwo listi illura.</td>
</tr>
<tr>
<td>note_duplicate2</td>
<td>Yes</td>
</tr>
<tr>
<td>note_duplicate3</td>
<td>The list does not match</td>
</tr>
<tr>
<td>note_duplicate4</td>
<td>Ntabwo listi illura.</td>
</tr>
<tr>
<td>begin_repeat</td>
<td>Yes</td>
</tr>
<tr>
<td>hhmembers_repeat</td>
<td>1. Household Roster</td>
</tr>
<tr>
<td>hhmembers_repeat</td>
<td>1. Biriri mu rugo</td>
</tr>
<tr>
<td>calculate</td>
<td>current hh member index</td>
</tr>
<tr>
<td>calculate</td>
<td>current hh member index</td>
</tr>
<tr>
<td>calculate</td>
<td>Please enter a household member's name. Andika inina r'ubuntu mu kantu baba r'ubuntu bu rugo.</td>
</tr>
<tr>
<td>select_one relhead</td>
<td>1. Relname</td>
</tr>
<tr>
<td>m1_rel</td>
<td>What is $M1_member_name_1$s relationship to the head of this household?</td>
</tr>
<tr>
<td>integer</td>
<td>How many months did $M1_member_name_1$ stay here out of the past 12 months?</td>
</tr>
<tr>
<td>m1_1</td>
<td>If $M1_member_name_1$ was absent for two weeks or less at a time, then $M1_member_name_1$ counts as staying in the household. If $M1_member_name_1$ was absent for more than 2 weeks, then $M1_member_name_1$ was absent during that month.</td>
</tr>
<tr>
<td>integer</td>
<td>How old is $M1_member_name_1$?</td>
</tr>
<tr>
<td>m1_3</td>
<td>$M1_member_name_1$'s age in years</td>
</tr>
<tr>
<td>integer</td>
<td>How many MONTHS old is $M1_member_name_1$?</td>
</tr>
<tr>
<td>m1_4</td>
<td>$M1_member_name_1$'s age in months</td>
</tr>
<tr>
<td>integer</td>
<td>How many DAYS old is $M1_member_name_1$?</td>
</tr>
<tr>
<td>m1_5</td>
<td>$M1_member_name_1$'s current age</td>
</tr>
<tr>
<td>integer</td>
<td>What is $M1_member_name_1$'s marital status?</td>
</tr>
<tr>
<td>m1_6</td>
<td>$M1_member_name_1$'s marital status</td>
</tr>
<tr>
<td>integer</td>
<td>Is $M1_member_name_1$ male or female?</td>
</tr>
<tr>
<td>m1_7</td>
<td>$M1_member_name_1$'s gender</td>
</tr>
<tr>
<td>integer</td>
<td>Does $M1_member_name_1$'s natural mother live in this household?</td>
</tr>
<tr>
<td>m1_8</td>
<td>$M1_member_name_1$'s natural mother</td>
</tr>
<tr>
<td>integer</td>
<td>Does $M1_member_name_1$'s natural father live in this household?</td>
</tr>
<tr>
<td>m1_9</td>
<td>$M1_member_name_1$'s natural father</td>
</tr>
<tr>
<td>integer</td>
<td>Does $M1_member_name_1$'s currently enrolled in school?</td>
</tr>
<tr>
<td>m1_10</td>
<td>$M1_member_name_1$ currently enrolled in school?</td>
</tr>
<tr>
<td>integer</td>
<td>Is $M1_member_name_1$'s school level?</td>
</tr>
<tr>
<td>m1_11</td>
<td>$M1_member_name_1$'s current school level</td>
</tr>
<tr>
<td>integer</td>
<td>Over the past four weeks, how many days of school did $M1_member_name_1$ miss</td>
</tr>
<tr>
<td>m1_school_missed</td>
<td>$M1_member_name_1$ experience fever (without other major symptoms, such as diarrhea or vomiting)</td>
</tr>
<tr>
<td>integer</td>
<td>Has $M1_member_name_1$ been unable to work or do $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_12</td>
<td>$M1_member_name_1$'s usual daily activities</td>
</tr>
<tr>
<td>integer</td>
<td>How many days was $M1_member_name_1$ unable to work or did $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_13</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>Has $M1_member_name_1$ been unable to work or do $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_14</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>How many days was $M1_member_name_1$ unable to work or did $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_15</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>Has $M1_member_name_1$ been unable to work or do $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_16</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>How many days was $M1_member_name_1$ unable to work or did $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_17</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>Has $M1_member_name_1$ been unable to work or do $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_18</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>How many days was $M1_member_name_1$ unable to work or did $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_19</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>Has $M1_member_name_1$ been unable to work or do $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_20</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>How many days was $M1_member_name_1$ unable to work or did $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_21</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>Has $M1_member_name_1$ been unable to work or do $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_22</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>How many days was $M1_member_name_1$ unable to work or did $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_23</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
<tr>
<td>integer</td>
<td>Has $M1_member_name_1$ been unable to work or do $M1_member_name_1$'s usual daily activities as a result of this illness?</td>
</tr>
<tr>
<td>m1_24</td>
<td>$M1_member_name_1$'s days of illness</td>
</tr>
</tbody>
</table>
begin group
member_under_5
QUESTIONS FOR CHILDREN UNDER AGE 5
IBIBAZO BY’ABARI MI NSI Y’IMYAKA ITANU

integer
m1_GrowthMonitoring
In the past 12 months, how many times has $m1_member_name_1 attended a Growth Monitoring Session held by the Community Health Worker?

select_one yesno1
m1_health_25
Has $m1_member_name_1 been vaccinated?

select_one yesno2
m1_health_16
Can you show $m1_member_name_1’s vaccination book/card?

select_one yesno1
m1_health_27
Has $m1_member_name_1 been vaccinated in the last 12 months?

select_one yesno1
m1_health_27_b
Did $m1_member_name_1 receive a complete dose of vaccines according to Rwandan vaccine calendar?

select_one vaccinewhere
m1_health_30
Where did the last vaccination take place?

select_one yesno1
m1_health_28
Why was $m1_member_name_1 never vaccinated?

select_one yesno1
m1_member_name_4
Can you show $m1_member_name_4’s vaccination book/card?

select_one vaccineno
m1_health_29
Has $m1_member_name_4 been vaccinated?

select_one yesno1
m1_health_31
Has $m1_member_name_4 been vaccinated in the last 12 months?

decimal
m1_health_weight
What was $m1_member_name_4’s weight at birth? (kg)

end group
member_under_5
end repeat
hhmembers_repeat
end group
call current hhmembers

begin group
dwelling
2. Dwelling Characteristics
2. Ibiranga inyubako

calculate
s2_start
I now want to ask some questions about the household in which you live.

note
note_hhliving
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. Do not include live-in house help or live-in house guard, and if respondent works as live-in house help or live-in house guard do not include employer or employer’s family in your answers.

note
note_hhliving1
Iyo muze urugo, ndashaka kuvuga aho ulumuri kurara, atari ngombwa ko hapa ku batuka bw’akaburuzi iwee abagari isanu y’igakirwe ebyo bwee. Iyi n’umukoresha wawe? Iyi n’umukoresha ku buntu cyangwa urayikodesha?

select_one dwellingown
m2_1
Do you own or are you purchasing this house, is it provided to you by an employer, do you use it for free, or do you rent this house?

integer
m2_2_worth
How much in Rwf does your household pay for rent each month for this house/apartment if you did not own it (MONTHLY)?

select_one yesno1
m2_3_rent
How much in Rwf does your household pay for rent each month for this house/apartment?

integer
m2_4_type
What type of dwelling does the household live in?

select_one wallmaterial
m2_5_wall
The outer walls of the main dwelling of the household are predominantly made of what material?

select_one roofmaterial
m2_6_roof
The roof of the main dwelling is predominantly made of what material?

text
m2_6_roof_other
Specify the roof material:

select_one floormaterial
m2_7_floor
The floor of the main dwelling is predominantly made of what material?

text
m2_7_floor_other
Specify the floor material:

begin group
dwelling
2. Dwelling Characteristics
2. Ibiranga inyubako

calculate
s2_start
I now want to ask some questions about the household in which you live.

note
note_hhliving
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. Do not include live-in house help or live-in house guard, and if respondent works as live-in house help or live-in house guard do not include employer or employer’s family in your answers.

note
note_hhliving1
Iyo muze urugo, ndashaka kuvuga aho ulumuri kurara, atari ngombwa ko hapa ku batuka bw’akaburuzi iwee abagari isanu y’igakirwe ebyo bwee. Iyi n’umukoresha wawe? Iyi n’umukoresha ku buntu cyangwa urayikodesha?

select_one dwellingown
m2_1
Do you own or are you purchasing this house, is it provided to you by an employer, do you use it for free, or do you rent this house?

integer
m2_2_worth
How much in Rwf does your household pay for rent each month for this house/apartment if you did not own it (MONTHLY)?

select_one yesno1
m2_3_rent
How much in Rwf does your household pay for rent each month for this house/apartment?

integer
m2_4_type
What type of dwelling does the household live in?

select_one wallmaterial
m2_5_wall
The outer walls of the main dwelling of the household are predominantly made of what material?

select_one roofmaterial
m2_6_roof
The roof of the main dwelling is predominantly made of what material?

text
m2_6_roof_other
Specify the roof material:

select_one floormaterial
m2_7_floor
The floor of the main dwelling is predominantly made of what material?

text
m2_7_floor_other
Specify the floor material:
How many separate rooms do the members of your household occupy? Please include living rooms and kitchens, but do not include bathrooms, hallways, or closets. 

How many motorcycles do you own? 

How many separate rooms do the members of your household occupy? 

How much would you sell one chicken on the average in today's prices? 

How much would you sell one cow or oxen on the average in today's prices? 

Do you have electricity connected to your dwelling? 

How many minutes does it take to get to the main source of water from your house to the water source, and not the trip back. 

How many goats do you own? 

How much would you sell one goats on the average in today's prices? 

How many pangas do you own? 

How much would you sell one rabbits on the average in today's prices? 

How many broccoli trees do you own? 

How many chickens do you own? 

How many pigs do you own? 

How much would you sell one pigs on the average in today's prices? 

How many pineapples do you own? 

How much would you sell one pineapples on the average in today's prices? 

How many pineapples do you own? 

How much would you sell one ploughs on the average in today's prices? 

How many other kinds of trees do you own? 

How much would you sell one other animals on the average in today's prices? 

How many minutes does it take to get to the main source of water from your dwelling? Please only consider the time it takes to get from your house to the main source of drinking water, and not the trip back.

How many ploughs do you own? 

How much would you sell one ploughs on the average in today's prices? 

How many other kinds of trees do you own? 

How much would you sell one other animals on the average in today's prices? 

How much would you sell one rabbits on the average in today's prices?

How much would you sell one ploughs on the average in today's prices?

How much would you sell one chicken on the average in today's prices?

How much would you sell one ploughs on the average in today's prices?

How much would you sell one ploughs on the average in today's prices?

How many bananas do you own? 

How many bananas do you own? 

How many pineapples do you own? 

How many pineapples do you own? 

How much would you sell one ploughs on the average in today's prices?

How many ploughs do you own? 

How many ploughs do you own? 

How much would you sell one ploughs on the average in today's prices?

How much would you sell one ploughs on the average in today's prices?

How many ploughs do you own? 

How many ploughs do you own? 

How much would you sell one ploughs on the average in today's prices?
m3_motorc_price: What is the value of one of your motorcycles?

m3_motorv_price: What is the value of one of your motor vehicles (car or truck)?

m3_motorc_price: What is the value of one of your motorcycles (car or truck)?

m3_motorc_price: What is the value of one of your motorcycles (car or truck)?

m3_tracto_num: How many tractors (motorized) do you own?

m3_tracto_price: What is the value of one of your tractors (motorized)?

m3_mobil_num: How many mobile phones do you own?

m3_mobil_price: What is the value of one of your mobile phones?

m3_beds_num: How many beds do you own?

m3_beds_price: What is the value of one of your beds?

m3_sofas_num: How many sofas do you own?

m3_sofas_price: What is the value of one of your sofas?

m3_armch_num: How many arm-chairs do you own?

m3_armch_price: What is the value of one of your arm-chairs?

m3_casset_price: What is the value of one of your cassette or cd players?

m3_casset_num: How many cassette or cd players do you own?

m3_casset_price: What is the value of one of your cassette or cd players?

m3_large_price: What is the value of one of your large tables?

m3_large_num: How many large tables do you own?

m3_large_price: What is the value of one of your large tables?

m3_mattre_num: How many mattresses do you own?

m3_mattre_price: What is the value of one of your mattresses?

m3_kettle_num: How many mirrors do you own?

m3_kettle_price: What is the value of one of your mirrors?

m3_wheelb_price: What is the value of one of your wheelbarrows?

m3_wheelb_price: What is the value of one of your wheelbarrows?

m3_mirror_price: What is the value of one of your mirrors?

m3_mirror_price: What is the value of one of your mirrors?

m3_sewing_num: How many sewing machines do you own?

m3_sewing_price: What is the value of one of your sewing machines?

m3_kettle_num: How many kettles do you own?

m3_kettle_price: What is the value of one of your kettles?

m3_sprayi_num: How many spraying machines do you own?

m3_sprayi_price: What is the value of one of your spraying machines?

m3_sofas_price: What is the value of one of your sofas?

m3_sofas_price: What is the value of one of your sofas?

m3_televi_num: How many televisions do you own?

m3_televi_price: What is the value of one of your televisions?

m3_video_price: What is the value of one of your video cassette or dvd players?

m3_video_price: What is the value of one of your video cassette or dvd players?

m3_casset_price: What is the value of one of your cassette or cd players?

m3_casset_price: What is the value of one of your cassette or cd players?

m3_casset_num: How many cassette or cd players do you own?

m3_casset_price: What is the value of one of your cassette or cd players?

m3_carba_price: What is the value of one of your car batteries?

m3_carba_price: What is the value of one of your car batteries?

m3_pixels_price: What is the value of one of your pixels?

m3_pixels_price: What is the value of one of your pixels?

m3_videoc_num: How many video cassettes or cd players do you own?

m3_videoc_price: What is the value of one of your video cassettes or cd players?

m3_videoc_num: How many video cassettes or cd players do you own?

m3_videoc_price: What is the value of one of your video cassettes or cd players?

m3_cased_price: How many cassette or cd players do you own?

m3_cased_price: How many cassette or cd players do you own?

m3_cased_price: How many cassette or cd players do you own?

m3_cased_price: How many cassette or cd players do you own?

m3_carba_price: What is the value of one of your car batteries?

m3_carba_price: What is the value of one of your car batteries?

m3_pixels_price: What is the value of one of your pixels?

m3_pixels_price: What is the value of one of your pixels?

m3_sprai_price: How many spraying machines do you own?

m3_sprai_price: How many spraying machines do you own?

m3_cased_price: How many cassette or cd players do you own?

m3_cased_price: How many cassette or cd players do you own?

m3_cased_price: How many cassette or cd players do you own?

m3_cased_price: How many cassette or cd players do you own?

m3_carba_price: What is the value of one of your car batteries?

m3_carba_price: What is the value of one of your car batteries?

m3_pixels_price: What is the value of one of your pixels?

m3_pixels_price: What is the value of one of your pixels?

m3_sprai_price: How many spraying machines do you own?

m3_sprai_price: How many spraying machines do you own?
What is the value of one of your spraying machines? Ni akahe gaciro k’imwe mu mashini zitera imiti utunze? yes

How many axes do you own? Mutunze amashoka angahe? yes

How many bags of charcoal do you own? Mutunze imifuka y’amakara y'uzuye ingihe? yes

What is the value of one of your bags of charcoal? Ni akahe gaciro k’imwe mu mifuka y’amakara y’uzuye mupfite? yes

How many bags of crop stores (e.g., maize, g-nuts, etc) do you own? Mutunze imifuka ihunitsemo imyaka nk’ubunyobwa r’ibindi ingihe? yes

What is the value of one of your bags of crop stores (e.g., maize, g-nuts, etc)? Ni akahe gaciro k’imwe mu mifuka y’amakara y’uzuye mupfite? yes

How many boats do you own? Mutunze amabatwa angahe? yes

What is the value of one of your boats? Ni akahe gaciro k’imwe mu mifuka y’amakara y’uzuye mupfite? yes

How many refrigerators do you own? Mutunze firigo zingahe? yes

How many hours did workers from outside the household (eg casual workers) to work on agriculture did you hire during the last 12 months? Include all crops, fruits and vegetables sold? Ese waba urugo rwanyu rufite ubundi butaka usibye ubwo mutuyeho? yes

In total, how many workers from outside the household in which you live - not including you - work in agriculture in the last 7 days? Yaba urugwiro ry’ubwato rufite ubundi butaka usibye ubwo mutuyeho? yes

In total, how many people in household in which you live - not including you - worked on agriculture over the last 12 months? Include part time workers. Ushyiremo ibihingwa byose, abanyabiraka bo gukora kuri iki IGIKORWA wahaye akati mu mezi 12 ashize? Shyiramo n’abanyabiraka bo gukora kuri iki IGIKORWA wahaye akati mu mezi 12 ashize? Shyiramo n’abanyabiraka yes

In the past one year did your household sharecrop any land? Hari amasaha angahe yose hamwe mu kugura ibyo mupfite kuri ubu? yes

In the past one year did your household use any land which was given to you temporarily but which you did not own, rent, or sharecrop? Mu mwa akazi, hari urugwiro ry’ubwato rufite ubundi butaka usibye ubwo mutuyeho? yes

In total, how many workers from outside the household in which you live - work in agriculture in the last 7 days? Yaba urugwiro ry’ubwato rufite ubundi butaka usibye ubwo mutuyeho? yes

In total, how many hours did members of your household - not including you - work on agriculture over the last 12 months? Bose hamwe, ni abantu bangwe bo mu nogo ubambo- wowo utarimoro-bakoze mu buhinzi mu mezi 12 ashize? yes

In total, how many workers from outside the household (eg casual workers) to work on agriculture did you hire during the last 12 months? Include part time workers. Bose hamwe, ni abantu bangwe bo mu nogo ubambo- wowo utarimoro - bakoze mu buhinzi mu mezi 12 ashize? yes

In total, how many hours did workers from outside the household work in agriculture during the last 7 days? Mu minzi 7 ishize, abantu munana mu nogo - wowo utarimoro - bakoze amahasa angahe bingahe mu murima? yes

In total, how many hours did members of your household - not including you - work in agriculture during the last 7 days? Minzi 7 ishize, abantu munana mu nogo - wowo utarimoro - bakoze amahasa angahe bingahe mu murima? yes

In total, how many workers from outside the household (eg casual workers) to work on agriculture did you hire during the last 12 months? Bose hamwe, ni abantu bangwe bo mu nogo ruwayo ruwindi mu nogo - wowo utarimoro - bakoze amahasa angahe bingahe mu murima? yes

In total, how many hours did members of your household - not including you - work in agriculture during the last 7 days? Mu minzi 7 ishize, abantu munana mu nogo - wowo utarimoro - bakoze amahasa angahe bingahe mu murima? yes

In total, how many workers from outside the household in which you live - work in agriculture in the last 7 days? Yaba urugwiro ry’ubwato rufite ubundi butaka usibye ubwo mutuyeho? yes

In total, how many hours did workers from outside the household work in agriculture during the last 7 days? Mu minzi 7 ishize, abantu munana mu nogo - wowo utarimoro - bakoze amahasa angahe bingahe mu murima? yes

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In total, how many workers from outside the household (eg casual workers) to work on agriculture did you hire during the last 12 months? Bose hamwe, ni abantu bangwe bo mu nogo ruwayo ruwindi mu nogo - wowo utarimoro - bakoze amahasa angahe bingahe mu murima? yes

In total, how many hours did members of your household - not including you - work in agriculture during the last 7 days? Mu minzi 7 ishize, abantu munana mu nogo - wowo utarimoro - bakoze amahasa angahe bingahe mu murima? yes
Has any member of your household stood for local election in the past year?

Is any member of your household currently occupying any local elected position?

How much did you spend on fertilizer for agriculture during the last 12 months?

How much did you spend in the last 12 months on tools and machinery (i.e. plows, machetes, hoes, rental of tractors) for agriculture?

How much did you spend on improved/hybrid seeds for agriculture during the last 12 months?

Do you have formal insurance on your agricultural harvest?

How much did you spend on animal medicine for agriculture during the last 12 months?

How much did you spend on irrigation (i.e. water pumps) for agriculture during the last 12 months?

Calculate here.

Approximately how many other employees work at this place?

In what industry is this work?

In what occupation is this work?

What is / was the amount of your cash salary for the last month?

What office? Mu wuhe mwanya?

Who is occupying a local elected position?

Who stood for local election?

Who is occupying a local elected position?

If you are currently employed, working for pay, please describe your employment status.

Specify your employment status.

How much did you spend on improved/hybrid seeds for agriculture during the last 12 months?

How much did you spend on animal medicine for agriculture during the last 12 months?

How much did you spend on fertilizer for agriculture during the last 12 months?

Do you have formal insurance on your agricultural harvest?
I want to ask some questions about your own business activities. If you have more than one business activity, please tell me about all of them. At any time during the last 12 months, have you operated a business enterprise belonging to you, for example, a kiosk shop, barber shop, tailorshop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow.

Now I am going to ask you about any business activities you or someone in your household, for example, a kiosk shop, barber shop, tailorshop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow.

Who is the number of typical operating days in a month?

In what month and year did you start, purchase, or gain control of your household operated a business enterprise belonging to you or someone in your household, for example, a kiosk shop, barber shop, tailorshop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow.

Select the type of business that this is.

Please describe the main business enterprise.

In what month and year did you start, purchase, or gain control of your household operated a business enterprise belonging to you or someone in your household, for example, a kiosk shop, barber shop, tailorshop, carpenter or taxi service? This includes selling crops that you did not grow. However, this does not include selling crops that you grow.

Specify which household members work in this business enterprise.

Who is the number of typical operating days in a month?

How did you obtain the resources you initially invested in this business?

How much did you spend on wrap around cloth for women over the last 12 months?

Has your household purchased any wrap around cloth for women over the last 12 months?

How much did you spend on men's garments over the last 12 months?

Has your household purchased any men's garments over the last 12 months?

How much did you spend on women's garments over the last 12 months?

Has your household purchased any women's garments over the last 12 months?

How many non-household workers does the enterprise employ?

Who controls the use of profits from the business enterprise?

What is the number of typical operating days in a month?

How much did you spend on men's garments over the last 12 months?

Has your household purchased any men's garments over the last 12 months?

What type of business is this?

What is the number of typical operating days in a month?

How much did you spend on women's garments over the last 12 months?

Has your household purchased any women's garments over the last 12 months?

Who is the number of typical operating days in a month?

How did you obtain the resources you initially invested in this business?

Please describe the main business enterprise.

Specify which household members work in this business enterprise.

Who is the number of typical operating days in a month?

How did you obtain the resources you initially invested in this business?

Please describe the main business enterprise.

Specify which household members work in this business enterprise.

Who is the number of typical operating days in a month?

How did you obtain the resources you initially invested in this business?
Has your household purchased any children's clothing (excluding school uniform) over the last 12 months?

Has your household purchased any women's haircuts (simple haircut, stylist or treatment) over the last 4 weeks?

How much did you spend on women's haircuts (stylist & treatment) over the last 4 weeks?

Has your household purchased any film and developing equipment over the last 12 months?

How much did you spend on film and developing equipment over the last 12 months?

Has your household purchased any wages for household (domestic) help over the last 4 weeks?

Has your household purchased any bed sheets and pillows over the last 4 weeks?

Has your household purchased any toothpaste (and accessories) over the last 4 weeks?

How much did you spend on toothpaste (and accessories) over the last 4 weeks?

Has your household purchased any local travel over the last 12 months?

Has your household purchased any international travel over the last 12 months?

Has your household purchased any women's footwear over the last 12 months?

Has your household purchased any international travel over the last 12 months?

Has your household purchased any women's footwear over the last 12 months?

How much did you spend on film and developing equipment over the last 12 months?

Has your household purchased any international travel over the last 12 months?

Has your household purchased any men's footwear over the last 12 months?

Has your household purchased any international travel over the last 12 months?

How much did you spend on international travel over the last 12 months?

How much did you spend on building repairs (supplies) over the last 12 months?

How much did you spend on film and developing equipment over the last 12 months?

Has your household purchased any wages for household (domestic) help over the last 4 weeks?

Has your household purchased any film and developing equipment over the last 12 months?

How much did you spend on building repairs (supplies) over the last 12 months?

Has your household purchased any wages for household (domestic) help over the last 4 weeks?

Has your household purchased any bed sheets and pillows over the last 12 months?

Has your household purchased any film and developing equipment over the last 12 months?

How much did you spend on building repair labor over the last 12 months?

Has your household purchased any film and developing equipment over the last 12 months?

Has your household purchased any international travel over the last 12 months?

Has your household purchased any wages for household (domestic) help over the last 12 months?

Has your household purchased any bed sheets and pillows over the last 12 months?

How much did you spend on building repair labor over the last 12 months?

Has your household purchased any bed sheets and pillows over the last 12 months?

Has your household purchased any health insurance (mutuelle, mmi, etc) over the last 12 months?

Has your household purchased any men's haircuts (barber) over the last 4 weeks?

Has your household purchased any film and developing equipment over the last 12 months?

How much did you spend on building repairs (supplies) over the last 12 months?

Has your household purchased any women's footwear over the last 12 months?

How much did you spend on building repairs (supplies) over the last 12 months?

Has your household purchased any women's haircuts (simple haircut, stylist or treatment) over the last 4 weeks?

How much did you spend on building repairs (supplies) over the last 12 months?

Has your household purchased any wages for household (domestic) help over the last 4 weeks?
m8_25_b How much did you spend on toothpaste (and accessories) over the last 4 weeks? Mwishyye amafaranga angahe yo kugura umutimurwico no (kiri)byiyana na wo mu byumweru 4 bishize? yes

select_one yesno1 m8_26_a Has your household purchased any sanitary napkins over the last 4 weeks? Mu byumweru 4 bishize, muri uru rugo mwigeze mugura kotegis? yes

select_one yesno1 m8_26_b How much did you spend on sanitary napkins over the last 4 weeks? Muri uru rugo mwigeze mugura byumwe mu byumweru 4 bishize? (Produits z'amakiri) yes

integer m8_27_a Has your household purchased any beauty/cosmetic products over the last 4 weeks? (Hair products, skin creams, make up) Muri uru rugo mwigeze mugura ibikoresho by'ubwiza mu byumweru 4 bishize? yes

integer m8_27_b How much did you spend on beauty/cosmetic products over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ibikoresho by'ubwiza mu byumweru 4 bishize? yes

select_one yesno1 m8_28_a Has your household purchased any spare parts for vehicles over the last 4 weeks? Muri uru rugo mwigeze mugura ibikoresho by'modoka byo guirimbara byysashye/ibyangiritse mu byumweru 4 bishize? yes

integer m8_28_b How much did you spend on spare parts for vehicles over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ibikoresho by'modoka byo guirimbara byysashye/ibyangiritse mu byumweru 4 bishize? yes

select_one yesno1 m8_29_a Has your household purchased any labour for repair of motorcycle or bicycle over the last 4 weeks? Muri uru rugo mwigeze maitshyura amafaranga abantu babakoreye moto cyangwa igare mu byumweru 4 bishize? yes

integer m8_29_b How much did you spend on labour for repair of motorcycle or bicycle over the last 4 weeks? Mwishyye amafaranga angahe abantu babakoreye moto cyangwa igare mu byumweru 4 bishize? yes

select_one yesno1 m8_30_a Has your household purchased any generators over the last 4 weeks? Muy'izuba? yes

select_one yesno1 m8_30_b How much did you spend on generators over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ibikoresho mu byumweru 4 bishize? yes

integer m8_31_a Has your household purchased any mobile phones over the last 4 weeks? Muri uru rugo mwigeze mugura batiri mu byumweru 4 bishize? yes

integer m8_31_b How much did you spend on mobile phones over the last 4 weeks? Muri rugo mwigeze mugura iy'andre mu byumweru 4 bishize? yes

select_one yesno1 m8_32_a Has your household purchased any generators over the last 4 weeks? Muri uru rugo mwigeze mugura imashini itanga ingufu z'amashanyarizi mu byumweru 4 bishize? yes

integer m8_32_b How much did you spend on generators over the last 4 weeks? Mwishyye amafaranga angahe yo kugura imashini itanga ingufu z'amashanyarizi mu byumweru 4 bishize? yes

select_one yesno1 m8_33_a Has your household purchased any money on bank or fines over the last 4 weeks? Mu byumweru 4 bishize, ungo mwigeze rukoresha amafaranga ku ingwate cyangwa amande? yes

select_one yesno1 m8_33_b How much did you spend on bank/fines over the last 4 weeks? Muri byumweru 4 bishize , muri uru rugo mwigeze mugura ibikoresho mu byumweru 4 bishize? yes

select_one yesno1 m8_34_a Has your household purchased any sewing machines over the last 4 weeks? Muri uru rugo mwigeze mugura ibikoresho ndangururamajwi mu byumweru 4 bishize? yes

integer m8_34_b How much did you spend on sewing machines over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ibikoresho ndangururamajwi mu byumweru 4 bishize? yes

select_one yesno1 m8_35_a Has your household purchased any fishing equipment over the last 4 weeks? Muri uru rugo mwigeze mugura ibikoresho byo kurobesha mu byumweru 4 bishize? yes

integer m8_35_b How much did you spend on fishing equipment over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ibikoresho byo kurobesha mu byumweru 4 bishize? yes

select_one yesno1 m8_36_a Has your household purchased any mills/grinding equipment over the last 4 weeks? Muri uru rugo mwigeze mugura ibikoresho byo gureshaho (Insyo) mu byumweru 4 bishize? yes

integer m8_36_b How much did you spend on mills/grinding equipment over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ibikoresho byo gureshaho (Insyo) mu byumweru 4 bishize? yes

select_one yesno1 m8_37_a Has your household purchased any labour for vehicle repair over the last 4 weeks? Muri uru rugo mwigeze maitshyura amafaranga abantu babakoreye imodoka mu byumweru 4 bishize? yes

select_one yesno1 m8_37_b How much did you spend on labour for vehicle repair over the last 4 weeks? Muri uru rugo mwigeze mugura ibikoresho mu byumweru 4 bishize? yes

select_one yesno1 m8_38_a Has your household purchased any beauty/cosmetic products over the last 4 weeks? Muri uru rugo mwigeze mugura igare/moto mu byumweru 4 bishize? yes

integer m8_38_b How much did you spend on beauty/cosmetic products over the last 4 weeks? Mwishyye amafaranga angahe yo kugura igare/moto mu byumweru 4 bishize? yes

integer m8_39_a Has your household purchased any sound systems over the last 4 weeks? Muri uru rugo mwigeze mugura ibikoresho mu byumweru 4 bishize? yes

integer m8_39_b How much did you spend on sound systems over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ibikoresho mu byumweru 4 bishize? yes

select_one yesno1 m8_40_a Has your household purchased any pumps over the last 4 weeks? Muri uru rugo mwigeze mugura ipompo mu byumweru 4 bishize? yes

select_one yesno1 m8_40_b How much did you spend on pumps over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ipompo mu byumweru 4 bishize? yes

select_one yesno1 m8_41_a Has your household purchased any wheelbarrows over the last 4 weeks? Muri uru rugo mwigeze mugura ingorofani mu byumweru 4 bishize? yes

integer m8_41_b How much did you spend on wheelbarrows over the last 4 weeks? Mwishyye amafaranga angahe yo kugura ingorofani mu byumweru 4 bishize? yes

select_one yesno1 m8_42_a Has your household purchased any batteries over the last 4 weeks? Muri uru rugo mwigeze mugura batiri mu byumweru 4 bishize? yes

integer m8_42_b How much did you spend on batteries over the last 4 weeks? Mwishyye amafaranga angahe yo kugura batiri mu byumweru 4 bishize? yes

select_one yesno1 m8_43_a Has your household purchased any local rice over the last 7 days? Muri uru rugo mwigeze mugura umuceri w'u Rwanda mu minsi 7 ishize? yes

integer m8_43_b How much did you spend on local rice over the last 7 days? Mwishyye amafaranga angahe yo kugura umuceri w'u Rwanda mu minsi 7 ishize? yes

select_one yesno1 m8_44_a Has your household purchased any imported rice over the last 7 days? Muri uru rugo mwigeze mugura umuceri uva hanze mu minsi 7 ishize? yes

integer m8_44_b How much did you spend on imported rice over the last 7 days? Mwishyye amafaranga angahe uva hanze mu minsi 7 ishize? yes

select_one yesno1 m8_45_a Has your household purchased any corn (flour) over the last 7 days? Muri uru rugo mwigeze mugura kawunga mu minsi 7 ishize? yes

integer m8_45_b How much did you spend on corn (flour) over the last 7 days? Mwishyye amafaranga angahe yo kugura kawunga mu minsi 7 ishize? yes

select_one yesno1 m8_46_a Has your household purchased any sorghum (flour) over the last 7 days? Muri uru rugo mwigeze mugura ifu y'amasaka mu minsi 7 ishize? yes

integer m8_46_b How much did you spend on sorghum (flour) over the last 7 days? Mwishyye amafaranga angahe yo kugura ifu y'amasaka mu minsi 7 ishize? yes
Has your household purchased any bananas - cooking (inyamunyo) over the last 7 days?

Has your household purchased any bars over the last 7 days?

Has your household purchased any beef meat from your own production over the course of the last 12 months?

Has your household purchased any cooking oil (local) over the last 7 days?

Has your household purchased any bananas - cooking (inyamunyo) over the last 7 days?

Has your household purchased any peanut oil over the last 7 days?

Has your household consumed any beef meat from your own production over the course of the last 7 days?

Has your household consumed any sugar (local) over the last 7 days?

Has your household consumed any fresh milk from your own production over the course of the last 7 days?

Has your household purchased any sweet potatoes over the last 7 days?

Has your household purchased any commercial beer over the last 7 days?

Has your household consumed any sorghum (flour) from your own production over the course of the last 7 days?

How much did you spend on restaurant food & drinks over the last 7 days?

How much did you spend on local commercial beer over the last 7 days?

How much did you spend on beef meat over the last 7 days?

How much did you spend on sweet potatoes over the last 7 days?

How much did you spend on local commercial beer over the last 7 days?

How much did you spend on restaurant food & drinks over the last 7 days?

How much did you spend on sweet potatoes over the last 7 days?

How much did you spend on local commercial beer over the last 7 days?

How much did you spend on local commercial beer over the last 7 days?
At what price could you sell one unit of Irish potato? What is the price of an Irish potato?

At what price could you sell one unit of tomato? What is the price of a tomato?

How much palm oil did you consume over the past 7 days?

At what price could you sell one unit of sweet potato? What is the price of a sweet potato?

How much tomato did you consume over the past 7 days?

Has your household consumed any palm oil from your own production over the course of the last 12 months?

Did your household consume any infant formula such as GUIGOZ or NAN?

Other meat (beef, pork, lamb, goat, chicken, duck, fish)?

Other fruit (like banana, pineapple, avocado or tomato)?

Note: This section is about the diet of your child. Please describe everything that your child ate yesterday during the day. Include any drinks. If the respondent mentions mixed dishes, like a porridge, potato, Irish potato, porridge or rice), that group is named, there is no need to enter anything else for that group. If a food in any of the groups below is mentioned, enter a 1 for that group. Once a food in that group is named, there is no need to enter anything else for that group. The respondent mentions mixed dishes, like a porridge, sauce, or stew, ask "What ingredients were in that dish?"

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end group

child_diet

end repeat

Child diet

begin group
diversity_list

9. Dietary Diversity

9.Indyo itandukanye

begin group
diversity_types

9. Dietary Diversity

9.indyo itandukanye

select_one yesno

m1_childdiet_10

Beans, groundnuts, simsim, sunflower seeds or other seeds?

m1_childdiet_11

Vegetable oil or margarine?

m1_childdiet_12

How many times did they eat something from a bottle with a nipple yesterday during the day or night?

m1_childdiet_13

Fresh, dried fish, shellfish, or seafood?

m1_childdiet_14

Did they drink anything from a bottle with a nipple yesterday during the day or night?

m1_childdiet_15

Within your household, are you the one who knows most about the food that is purchased and eaten outside household [exclude foods both purchased and eaten outside household]? Start with the first food or drink of the morning.

m9_cereals

Were any cereals consumed yesterday by anyone in your household?

m9_tubers

Were any white roots and tubers consumed yesterday by anyone in your household?

m9_legumes

Were any legumes consumed yesterday by anyone in your household?

m9_fish

Were any fish and seafood consumed yesterday by anyone outside your household (outside the home)?

m9_diversity_breakfast

Breakfast:

m9_diversity_lunch

Lunch:

m9_diversity_dinner

Dinner:

m9_diversity_snack1

Snack 1:

m9_diversity_snack2

Snack 2:

m9_diversity_snack3

Snack 3:

m9_diversity_snack4

Snack 4:

m9_diversity_snack5

Snack 5:

m9_diversity_snack6

Snack 6:

m9_milk

Were any milk and milk products consumed yesterday by anyone in your household?

m9_oils

Were any oils and fats consumed yesterday by anyone in your household?

m9_sweets

Were any sweets consumed yesterday by anyone in your household?

m9_spices

Were any spices, condiments, beverages consumed yesterday by anyone in your household?

m9_vitAveg

Were any vitamin a rich vegetables and tubers consumed yesterday during the day or night?

m9_legumes

Were any legumes consumed yesterday by anyone in your household?

m9_diversity_breakfast

Breakfast:

m9_diversity_lunch

Lunch:

m9_diversity_dinner

Dinner:

m9_diversity_snack1

Snack 1:

m9_diversity_snack2

Snack 2:

m9_diversity_snack3

Snack 3:

m9_diversity_snack4

Snack 4:

m9_diversity_snack5

Snack 5:

m9_diversity_snack6

Snack 6:

m9_milk

Were any milk and milk products consumed yesterday by anyone in your household?

m9_oils

Were any oils and fats consumed yesterday by anyone in your household?

m9_sweets

Were any sweets consumed yesterday by anyone in your household?

m9_spices

Were any spices, condiments, beverages consumed yesterday by anyone in your household?

m9_vitAveg

Were any vitamin a rich vegetables and tubers consumed yesterday during the day or night?

m9_centre

Were any vitamin a rich fruits consumed yesterday by anyone in your household?

m9_diversity_breakfast

Breakfast:

m9_diversity_lunch

Lunch:

m9_diversity_dinner

Dinner:

m9_diversity_snack1

Snack 1:

m9_diversity_snack2

Snack 2:

m9_diversity_snack3

Snack 3:

m9_diversity_snack4

Snack 4:

m9_diversity_snack5

Snack 5:

m9_diversity_snack6

Snack 6:

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m9_sweets

Were any sweets consumed yesterday by anyone in your household?

m9_spices

Were any spices, condiments, beverages consumed yesterday by anyone in your household?

m9_vitAveg

Were any vitamin a rich vegetables and tubers consumed yesterday during the day or night?

m9_centre

Were any vitamin a rich fruits consumed yesterday by anyone in your household?

m9_diversity_breakfast

Breakfast:

m9_diversity_lunch

Lunch:

m9_diversity_dinner

Dinner:

m9_diversity_snack1

Snack 1:

m9_diversity_snack2

Snack 2:

m9_diversity_snack3

Snack 3:

m9_diversity_snack4

Snack 4:

m9_diversity_snack5

Snack 5:

m9_diversity_snack6

Snack 6:

m9_milk

Were any milk and milk products consumed yesterday by anyone in your household?

m9_oils

Were any oils and fats consumed yesterday by anyone in your household?

m9_sweets

Were any sweets consumed yesterday by anyone in your household?

m9_spices

Were any spices, condiments, beverages consumed yesterday by anyone in your household?

m9_vitAveg

Were any vitamin a rich vegetables and tubers consumed yesterday during the day or night?

m9_centre

Were any vitamin a rich fruits consumed yesterday by anyone in your household?

m9_diversity_breakfast

Breakfast:

m9_diversity_lunch

Lunch:

m9_diversity_dinner

Dinner:

m9_diversity_snack1

Snack 1:

m9_diversity_snack2

Snack 2:

m9_diversity_snack3

Snack 3:

m9_diversity_snack4

Snack 4:

m9_diversity_snack5

Snack 5:

m9_diversity_snack6

Snack 6:

m9_milk

Were any milk and milk products consumed yesterday by anyone in your household?

m9_oils

Were any oils and fats consumed yesterday by anyone in your household?

m9_sweets

Were any sweets consumed yesterday by anyone in your household?

m9_spices

Were any spices, condiments, beverages consumed yesterday by anyone in your household?

m9_vitAveg

Were any vitamin a rich vegetables and tubers consumed yesterday during the day or night?

m9_milk

Were any milk and milk products consumed yesterday by anyone in your household?

m9_oils

Were any oils and fats consumed yesterday by anyone in your household?
In the past [4 weeks/30 days], were you or any household member note_silk how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you worry that your household hfs9 how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any other household member hfs7 how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs6 how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs5 how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs4 how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs3 how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you worry that your household hfs9a how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs7a how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any other household member hfs6a how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], was there ever no food to eat of any hfs7 how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs5a how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs6b how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs5b how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any other household member hfs6c how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs5c how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs6d how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs5d how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs6e how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any other household member hfs5e how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you worry that your household hfs9a how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any household member hfs7a how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes

In the past [4 weeks/30 days], did you or any other household member hfs6a how often did this happen in the past [4 weeks/30 days]? Byabayeho incuro zingahe mu byumweru bine/ iminsi 30 ishize? yes
SILC #2: How much have you withdrawn over the past 12 months in [calc_silcname2]?

SILC #2: Ni inshuro zingahe wagiye gushyira amafaranga muri ubu buryo bwo kuziyama mu mezi 12 ashize? [calc_silcname2]

Do you yourself have bank kind savings (excluding MFI and SACCO)?

Waba wowe ubwawe ukoresha SACCO mu buryo bwo kuzigamira?

How many times did you make deposits with this institution in the last 12 months?

Ni inshuro zingahe wagiye gushyira amafaranga muri ubu buryo bwo kuziyama mu mezi 12 ashize?

Do you yourself have informal kind of savings (ROSCA, other), excluding SACCO/SILC?

Wowe ubwawe waba ukoresha ukoresha kuri telefonne (MTN, Tigo, Airtel) ubwawe ubwawo?

How much have you withdrawn over the past 12 months?

Ni amafaranga angahe wabikuje mu mezi 12 ashize?

How much have you deposited in the last 12 months?

Ni amafaranga angahe azigamye uyu munsi?

What amount do you have saved as of today?

Ese wowe ubwawe ufite ubwizigame mu kigo cy'imari iciriritse?

How many times did you make deposits with this institution in the last 12 months?

Ni amafaranga angahe yose hamwe wazigamye mu mezi 12 ashize?

Do you yourself have informal kind of savings (ROSCA, other), excluding SACCO/SILC?

Wowe ubwawe ukoresha ukoresha kuri telefonne (MTN, Tigo, Airtel) ubwawe ubwawo?

How much have you withdrawn over the past 12 months?

Ni amafaranga angahe wabikuje mu mezi 12 ashize?

Do you yourself have cash savings (at home)?

Ese wowe ufite ubwizigame bw'amafaranga kashi (ubika mu rupo)?

What amount do you have saved as of today?

Ese wowe ufite ubwizigame bw'amafaranga kashi (ubika mu rupo)?

SILC #2: How much have you withdrawn over the past 12 months in [calc_silcname2]?

SILC #2: Ni inshuro zingahe wagiye gushyira amafaranga muri ubu buryo bwo kuziyama mu mezi 12 ashize? [calc_silcname2]

Do you yourself have informal kind of savings (ROSCA, other), excluding SACCO/SILC?

Wowe ubwawe ukoresha ukoresha kuri telefonne (MTN, Tigo, Airtel) ubwawe ubwawo?

How much have you withdrawn over the past 12 months?

Ni amafaranga angahe wabikuje mu mezi 12 ashize?

How much have you deposited in the last 12 months?

Ni amafaranga angahe azigamye uyu munsi?

What amount do you have saved as of today?

Ese wowe ubwawe ufite ubwizigame mu kigo cy'imari iciriritse?

How many times did you make deposits with this institution in the last 12 months?

Ni amafaranga angahe yose hamwe wazigamye mu mezi 12 ashize?

Do you yourself have informal kind of savings (ROSCA, other), excluding SACCO/SILC?

Wowe ubwawe ukoresha ukoresha kuri telefonne (MTN, Tigo, Airtel) ubwawe ubwawo?

How much have you withdrawn over the past 12 months?

Ni amafaranga angahe wabikuje mu mezi 12 ashize?
Do other members of your household have bank savings (excluding
your own)?

If yes, how many times did other members of your household
make deposits with this institution in the last 12 months?

If yes, how much have other members of your household
deposited in the last 12 months?

If yes, how much have other members of your household
withdrawn over the past 12 months?

Are other members of your household members of a savings group?

If yes, how many savings groups are other members of your household a part of?

If yes, what amount do other members of your household have saved as of today?

If yes, how much have other members of your household withdrawn over the past 12 months?

If yes, how much have other members of your household deposited in the last 12 months?

If yes, how much have other members of your household withdrawn in the past 12 months?

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If yes, how much have other members of your household deposited in the last 12 months?

If yes, how much have other members of your household withdrawn in the past 12 months?
If there a certain date that you must pay back this amount by? Haba hari italiki ugomba kuba wishyuriyeho aya mafaranga? yes

What is the interest rate on what you have borrowed from friends

Do other members of your household have mobile money savings

Do other members of your household have informal kind of savings

What amount do other members of your household have saved as

Do other members of your household have informal kind of savings

What amount do other members of your household have saved as

How much have other members of your household deposited in the

Do other members of your household have mobile money savings

Do other members of your household have mobile money savings

How many times did other members of your household make

How much cash have other members of your household put away

How much cash have other members of your household taken out

How much have other members of your household deposited over

How much have other members of your household deposited in the

How much have other members of your household deposited in the

How many times did other members of your household withdraw

Do other members of your household withdrawn over the past 12 months?

Do other members of your household have any other kind of savings?

Specify your other source of savings:

begin group

end group

Is any member of your household (alone or jointly with members or

Do other members of your household deposited in the last 12 months?

Do other members of your household deposited in the last 12 months?

Do other members of your household deposited in the last 12 months?

Do other members of your household deposited in the last 12 months?

Do other members of your household deposited in the last 12 months?

select_one yesno1

select_one yesno1

select_one yesno1

select_one yesno1

select_one yesno1

select_one yesno1

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select_one yesno1

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select_one yesno1

select_one yesno1

select_one yesno1

select_one yesno1

select_one yesno1

select_one yesno1

select_one yesno1

end group

select_one yesno1

select_one yesno1
Would you say you are experiencing difficulties meeting your debt obligations from relatives? Yes

Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from relatives? Yes

How much have you repaid to relatives in total to date? 100

What is the total amount of the payments you will make on this debt from relatives? 200

What is the interest rate on what you have borrowed from relatives? 5

When must you pay all money back to relatives? This month

Can you best describe the terms of your borrowing from relatives in debt type? Joint

What was the value of what was originally borrowed from relatives? 50

Would you say you are experiencing difficulties meeting your debt obligations from private money lenders? Yes

What amount was originally borrowed from private money lender? 100

How much have you repaid to private money lender in total to date? 50

What is the total amount of the payments you will make on this debt from private money lender? 150

What is the interest rate on what you have borrowed from private money lenders? 10

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from private money lenders in debt type? Joint

What was the value of what was originally borrowed from private money lender? 100

What amount was originally borrowed from agricultural suppliers? 200

How much have you repaid to agricultural input suppliers in total to date? 50

What is the total amount of the payments you will make on this debt from agricultural input suppliers? 150

What is the interest rate on what you have borrowed from agricultural input suppliers? 1

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from agricultural input suppliers in debt type? Joint

What was the value of what was originally borrowed from agricultural input suppliers? 200

What amount was originally borrowed from bank? 500

How much have you repaid to bank in total to date? 200

What is the total amount of the payments you will make on this debt from the bank? 300

What is the interest rate on what you have borrowed from bank? 5

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from bank in debt type? Joint

What was the value of what was originally borrowed from bank? 500

Would you say you are experiencing difficulties meeting your debt obligations from money lenders? Yes

What amount was originally borrowed from money lenders? 100

How much have you repaid to money lenders in total to date? 50

What is the total amount of the payments you will make on this debt from money lenders? 150

What is the interest rate on what you have borrowed from money lenders? 10

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from money lenders in debt type? Joint

What was the value of what was originally borrowed from money lenders? 100

Would you say you are experiencing difficulties meeting your debt obligations from agricultural suppliers? Yes

Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from agricultural suppliers? Yes

How much have you repaid to agricultural suppliers in total to date? 50

What is the total amount of the payments you will make on this debt from agricultural suppliers? 150

What is the interest rate on what you have borrowed from agricultural suppliers? 1

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from agricultural suppliers in debt type? Joint

What was the value of what was originally borrowed from agricultural suppliers? 200

Would you say you are experiencing difficulties meeting your debt obligations from bank? Yes

Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from bank? Yes

How much have you repaid to bank in total to date? 50

What is the total amount of the payments you will make on this debt from bank? 150

What is the interest rate on what you have borrowed from bank? 1

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from bank in debt type? Joint

What was the value of what was originally borrowed from bank? 100

Would you say you are experiencing difficulties meeting your debt obligations from money lenders? Yes

Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from money lenders? Yes

How much have you repaid to money lenders in total to date? 50

What is the total amount of the payments you will make on this debt from money lenders? 150

What is the interest rate on what you have borrowed from money lenders? 1

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from money lenders in debt type? Joint

What was the value of what was originally borrowed from money lenders? 100

Would you say you are experiencing difficulties meeting your debt obligations from agricultural suppliers? Yes

Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from agricultural suppliers? Yes

How much have you repaid to agricultural suppliers in total to date? 50

What is the total amount of the payments you will make on this debt from agricultural suppliers? 150

What is the interest rate on what you have borrowed from agricultural suppliers? 1

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from agricultural suppliers in debt type? Joint

What was the value of what was originally borrowed from agricultural suppliers? 200

Would you say you are experiencing difficulties meeting your debt obligations from bank? Yes

Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from bank? Yes

How much have you repaid to bank in total to date? 50

What is the total amount of the payments you will make on this debt from bank? 150

What is the interest rate on what you have borrowed from bank? 1

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from bank in debt type? Joint

What was the value of what was originally borrowed from bank? 100

Would you say you are experiencing difficulties meeting your debt obligations from money lenders? Yes

Is any member of your household (alone or jointly with members or nonmembers of the household) borrowing money from money lenders? Yes

How much have you repaid to money lenders in total to date? 50

What is the total amount of the payments you will make on this debt from money lenders? 150

What is the interest rate on what you have borrowed from money lenders? 1

If there is a certain date that you must pay back this amount by? This month

Can you best describe the terms of your borrowing from money lenders in debt type? Joint

What was the value of what was originally borrowed from money lenders? 100
select_one debttypes m11_bank_4 Can you best describe the terms of your borrowing from bank in terms of an interest rate, or a total repayment amount?

Ese waduusanuburira kurushaho ub uno wumukanye ka Banki uzaiya umuwishyuro mu binyanye n'ininyungo cy'umwinyo cy'umafaranga yeso umurimo?  

select_one debttypes m11_bank_5 What is the total amount of the payments you will make on this debt from bank?

(Yose hamwe) Ndi umafaranga angaye yose hamwe uzatanga wishyura iri deni wahawe na Banki? 

select_one debttypes m11_nonbank_4 What is the interest rate on what you have borrowed from non-bank financial institutions?

Niba ruhoro? Ndi ku ruhe ragero n'inyungo mwavafiyeyo Banki aja kugaha idi?

select_one yesno1 m11_bank_7a If there a certain date that you must pay back this amount by?

Haba hari itali k u gomba kubwa wishyuryihe y'a ya mafaranga?

select_one yesno1 m11_nonbank_7a If there a certain date that you must pay back this amount by?

Haba hari itali k u gomba kubwa wishyuryihe y'a ya mafaranga?

select_one yesno1 m11_NGOsinclu_4 Is any member of your household (alone or jointly with members or non-members of the household) borrowing money from NGOs (including faith based)?

(Niba ruhoro) Ndi ku ruhe rugo n'inyungo mwavafiyeyo Banki aya kugaha idi?

select_one yesno1 m11_nonbank_2 Would you say you are experiencing difficulties meeting your repayment obligations?

Ese ubona biyja bikugora kubwa wishyuryihe y'a ya mafaranga wagujiye?

select_one yesno1 m11_NGOsinclu_1 Is any member of your household (alone or jointly with members or non-members of the household) borrowing money from NGOs (including faith based)?

Ese waduusanuburira kurushaho ub uno wumukanye ka NGO mwavafiyeyo ya mafaranga yeso umurimo?

select_one debttypes m11_nonbank_3 How much have you repaid to non-bank financial institutions in total to date?

Kugaza ubu umaze kubwa wishyuryihe y'a ya mafaranga yose hamwe biyo by'mari bidakora nka banki?

select_one debttypes m11_nonbank_4 Can you best describe the terms of your borrowing from non-bank financial institutions in terms of an interest rate, or a total repayment amount?

Ese ubona biyja bikugora kubwa wishyuryihe y'a ya mafaranga wagujiye?

select_one debttypes m11_NGOsinclu_1 Is any member of your household (alone or jointly with members or non-members of the household) borrowing money from NGOs (including faith based)?

Ese waduusanuburira kurushaho ub uno wumukanye ka NGO mwavafiyeyo ya mafaranga yeso umurimo?

select_one debttypes m11_NGOsinclu_2 What amount was originally borrowed from NGOs (including faith based)?

Ni umafaranga angaye yose hamwe uzatanga wishyuryihe y'a ya mafaranga?

select_one debttypes m11_NGOsinclu_3 How much have you repaid to NGOs (including faith based) in total to date?

Ni umafaranga angaye wabashije kwishyura mwavafiyeyo n'abandi bo muri uru rugo cy'umafaranga?

select_one debttypes m11_NGOsinclu_4 Can you best describe the terms of your borrowing from NGOs (including faith based) in terms of an interest rate, or a total repayment amount?

Ese waduusanuburira kurushaho ub uno wumukanye ka NGO mwavafiyeyo ya mafaranga yeso umurimo?

select_one debttypes m11_NGOsinclu_5 What is the total amount of the payments you will make on this debt from NGOs (including faith based)?

(Yose hamwe) Ndi umafaranga angaye yose hamwe uzatanga wishyuryihe iri deni wahawe na NGO mwavafiyeyo ya mafaranga?

select_one debttypes m11_NGOsinclu_6 What is the interest rate on what you have borrowed from NGOs (including faith based)?

(Niba ruhoro) Ndi ku ruhe ragero n'inyungo mwavafiyeyo NGO mwavafiyeyo ya mafaranga?

select_one debttypes m11_NGOsinclu_7a If there a certain date that you must pay back this amount by?

Haba hari itali k u gomba kubwa wishyuryihe y'a ya mafaranga?

select_one debttypes m11_NGOsinclu_7b If there a certain date that you must pay back this amount by?

Haba hari itali k u gomba kubwa wishyuryihe y'a ya mafaranga?

select_one debttypes m11_NGOsinclu_8a If there a certain date that you must pay back this amount by?

Haba hari itali k u gomba kubwa wishyuryihe y'a ya mafaranga?

select_one debttypes m12_a_3 What was the estimated total value of the in kind gifts given in Raw?

Agaciro kose k'impamo zi'ibintu kugana gateruganire y'umafaranga y'u Rwanda?

select_one debttypes m12_a_4 Write gifts in kind received

Andika impamo zi'ibintu zakiriwe?

select_one debttypes m12_a_5 What was the total amount in cash gifts? (Rwf)

Ese umafaranga angaye yose hamwe yimpatana z'impamo (FRW)?

select_one debttypes m12_b_1 Over the past 12 months, did your household RECEIVE any gifts (in cash or in kind) from any individual or family outside of the household?

Mu m12 ashize, muri uru rugo rawogezwe MWAIRA impamo y'umafaranga cy'umafaranga y'ibintu mu muryango utari uwa lera (OMG) harimo mu OMG ni OMG ishigeye k'idi?

select_one debttypes m12_b_2 Was the total value (in cash and in kind) of gifts given 600 Raw or more?

Yose hamwe yimpatana z'impamo yose hamwe yimpatana?

select_one debttypes m12_b_3 What was the estimated total value of the in kind gifts given in Raw?

Agaciro kose k'impamo zi'ibintu kugana gateruganire y'umafaranga y'u Rwanda?
select_one:

- **m12_b_4**: Write gifts given in kind, received or given out. Andika impano z’ibintu zakiriwe cyangwa zatanzwe? yes
- **m13_practices5**: Do you treat this drinking water in any way to make it safe to drink? Haba hari uburyo mukoresha musukura aya amazi yo kunywa? yes
- **m13_practices6**: What do you usually do to make the water safer to drink? Ni iki mu busanzwe mukora kugira ngo musukura amazi yo kunywa? yes

end group:

- **begin group**: knowledge
- **calculate_here**: m13_start

**note**: note_health

Now, I want to know what you think about ways to keep you and your family healthy. Please attempt to answer these questions as best you can. There are no right or wrong answers.

select_multiple:

- **m13_knowledge1**: How can you recognize that someone is not having enough food? Ni giye wamanya ko umuntu atraya biryo bihajije? yes
- **m13_knowledge2**: What are the reasons why people are undernourished? Ni izihe mpamvu abantu bagira imirire mibi? yes
- **m13_knowledge3**: What are the reasons why people do not get enough food? Ni izihe mpamvu abantu batabona indyo ihagije? yes
- **m13_knowledge4**: How can you (caregiver) find out if the baby is growing well or not? Ni iki tugomba gukora kugira ngo turinde abana indyo ituzuye (abana baro muri yami itandatu)? yes
- **m13_knowledge5**: Families and healthy workers can find out if children are well nourished or malnourished by weighing them regularly and plotting their weights on growth charts. If the baby is not gaining weight, what does that mean? N’umuntu ushinwe kwita ku mwana, Ni iki cyagufasha kumenya ko umwana ari guruka neza cyangwa nabi? yes
- **m13_knowledge6**: What should we do to prevent undernutrition among infants (under 6 months old)? Ni iki tugomba gakora mugura ngo turinde abana indyo ituzuye (abana baro muri yami itandatu)? yes
- **m13_knowledge7**: Food poisoning often results from contact with germs from faeces. What can you do to avoid sickness from germs from human or animal faeces? Gushumana kwibiro biterwa no guruka n’ubudoko tuva mu mwanda. yes
- **m13_knowledge8**: There are key moments when you need to wash your hands to prevent germs from reaching food. What are these key moments? Habi bihe by’ingenzi ugbomba mugabire intoki kugira ngo rinonde ni ubudoko tugera ku biryo. Bihe ni bihe? yes
- **m13_knowledge9**: What actions can help prevent diarrhea? Ni bihe bikorwa byafasha mu kwirinda gicumbwano/gihutwa? yes

end group:

- **begin group**: practices
- **begin group**: knowledge
- **end group**

select_one:

- **m13_practices1**: We would like to know about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands? Turufuza kumenya abantu abantu bakabirira intoki mu ngo nazo. Usobora kibyuera abantu abantu bo muri uru rugo bakunda gukora intoki? yes
- **m13_practices3**: Do you share your toilet facility with other households? Ese udu hwemeroro mulubanga niitozi ngiyiso? no
- **m13_practices5**: Do you treat this drinking water in any way to make it safe to drink? Habi hari uburuyo mukoresa musukura ayaa amazi yo kunywa? yes
- **m13_practices6**: What do you usually do to make the water safer to drink? Ni iki mu busanzwe mukora mugura ngo musukure amazi yo kunywa? yes
- **m13_practices7**: How often do members of your household wash their hands before eating? Habi hari binyu abantu abantu bo muri uru rugo mukoresa musukura bari mu rugo bakoresha ubuzima buzira umuzwe. yes
- **m13_practices8**: How often do members of your household use any latrine facility? (As opposed to open defecation) Habi hari binyu abantu abantu bo muri uru rugo mukoresa musukura bari mu rugo bakoresha ubuzima buzira umuzwe. yes

end group:

- **begin group**: health_expend
- **end group**

select_one:

- **m13_ins_1**: Is any household member covered by any form of health insurance? Ese hari umuntu wo muri uru rugo ufurke ubwishingizi bwo kwivuza? no
- **m13_ins_2**: Which household member(s) is covered by health insurance? Ni uwiwe muntu/abahe bantu bo muri uru rugo ufurke ubwishingizi bwo kwivuza? yes
- **m13_ins_8**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes
- **m13_ins_9**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes
- **m13_ins_10**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes
- **m13_ins_11**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes
- **m13_ins_12**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes
- **m13_ins_13**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes
- **m13_ins_14**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes
- **m13_ins_15**: What is [name]’s main type of health insurance? $[name]$ afite uduhe bwishingizi bw’ibanze bwo kwivuza? yes

select_multiple:

- **m13_knowledge1**: Is anyone in the household seen a doctor or nurse in the last 12 months? Mu mwiizi mu mu rugo mukoresa musukura bari mu rugo bakoresha ubuzima buzira umuzwe. yes
- **m13_knowledge2**: Does your household have any health problem that lasts more than 3 days? Habi hari uremyango aitana abantu abantu bo muri uru rugo rugo bakoresha ubuzima buzira umuzwe. yes
- **m13_knowledge3**: Do you know what is the best time to wash hands? Habi hari umuntu awo muri uru rugo rugo bakoresha ubuzima buzira umuzwe. yes
- **m13_knowledge4**: Do you know the different types of germs that cause diarrhea? Habi hari umuntu awo muri uru rugo rugo bakoresha ubuzima buzira umuzwe. yes
- **m13_knowledge5**: Do you know how to wash your hands? Habi hari umuntu awo muri uru rugo rugo bakoresha ubuzima buzira umuzwe. yes

end group:

- **begin group**: health_expend
- **end group**

**select_one**: m13_ins_1

- **m13_ins_1**

**select_multiple**: m12_b_4

- **m12_b_4**

**select_multiple**: m12_b_5

- **m12_b_5**

**select_multiple**: m13_practices8

- **m13_practices8**

**select_multiple**: m13_ins_type_1

- **m13_ins_type_1**

**select_multiple**: m13_ins_type_7

- **m13_ins_type_7**

**select_multiple**: m13_ins_type_10

- **m13_ins_type_10**

**select_multiple**: m13_ins_type_11

- **m13_ins_type_11**
How much did your household spend in the last 12 months, how many times in total was a member of your household in the past 12 months?

How much did your household spend in the last 12 months, how many times in total was a member of your household in the past 12 months?

What was the reason for this stay?

What was the nature of this preventative or diagnostic care received?

How many times did you have to pay for any other costs, e.g. for meals of the patient and accompanying household members (Rwf)?

What was the nature of this preventative or diagnostic care received?

How many times in total was a member of your household in the past three months?

Instruction: I would now like you to tell me a few details about each in-patient stay experienced by current or former members of your household in the past 12 months.

Amabwiriza: Ubu ndifuza ko umbwira ibiyanye na buri wese, yaba akiba muri uru cyangwa astakia muri uru ru cyangwa wuvunjwe muri bitaro/vutiro abay, muri mezi 12 ashize?

What was the duration of this stay in days?

How much was the bill the patient had to pay directly to the hospital or clinic?

How many times did an other (former, deceased) member of the household visit a clinic, CHW, or other medical provider for any preventative or diagnostic care in the past three months?

How many times did a member of your household visit a clinic, Community Health Worker, or other medical provider for any preventative or diagnostic care? [Note: includes antenatal care and growth monitoring visits by all children under 5 years.]

How much did you have to pay separately, such as medicines or doctors' fees (only if not included in the bill charged by the hospital)? (Rwf)

What was the duration of this stay in days?

How many times did an other (former, deceased) member of the household visit a clinic, CHW, or other medical provider for any preventative or diagnostic care in the past three months?

How much did you have to pay for any other costs, e.g. for meals of the patient and accompanying household members (Rwf)?

In the past 3 months, did any household member visit a clinic, Community Health Worker, or other medical provider for any preventative or diagnostic care? [Note: includes antenatal care and growth monitoring visits by all children under 5 years.]

Which household members visited a clinic, CHW, or other medical provider for any preventative or diagnostic care in the past 3 months?

What was the nature of this preventative or diagnostic care? [Note: includes antenatal care and growth monitoring visits by all children under 5 years.]

How much did your household spend in total on these visits in the past 3 months?

How many times did a member of your household visit a clinic, Community Health Worker, or other medical provider for any preventative or diagnostic care in the past three months?

How much did your household spend in total on these visits in the past 3 months?

In the past 3 months, did any household member visit a clinic, Community Health Worker, or other medical provider for any preventative or diagnostic care? [Note: includes antenatal care and growth monitoring visits by all children under 5 years.]

How much did the bill the patient had to pay directly to the hospital in total, including any bed charges, delivery charges, medical consultation fees or medicines to be paid directly to the hospital (Rwf)?

How much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the hospital)? (Rwf)

How many times did ${name6} receive preventative or diagnostic care in the past three months?

How much was the bill the patient had to pay directly to the hospital or clinic?

How many times did ${name5} receive preventative or diagnostic care in the past three months?

How much did you have to pay for any other costs, e.g. for meals of the patient and accompanying household members (Rwf)?

What was the nature of this preventative or diagnostic care received?

How many times did ${name4} receive preventative or diagnostic care in the past three months?

How much did your household spend in total on these visits in the past 3 months?

How many times did ${name3} receive preventative or diagnostic care in the past three months?

How much did your household spend in total on these visits in the past 3 months?

How much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the hospital)? (Rwf)

Amabwiriza: Ubu ndifuza ko umbwira ibiyanye na buri wese, yaba akiba muri uru ru cyangwa astakia muri uru ru cyangwa wuvunjwe muri bitaro/vutiro abay, muri mezi 12 ashize?

What was the duration of this stay in days?

How many times did a member of your household visit a clinic, Community Health Worker, or other medical provider for any preventative or diagnostic care in the past three months?

How many times did an other (former, deceased) member of the household visit a clinic, CHW, or other medical provider for any preventative or diagnostic care in the past three months?

How much was the bill the patient had to pay directly to the hospital or clinic?

What was the nature of this preventative or diagnostic care received?

How many times did ${name2} receive preventative or diagnostic care in the past three months?

How much did your household spend in total on these visits in the past 3 months?

How much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the hospital)? (Rwf)

Amabwiriza: Ubu ndifuza ko umbwira ibiyanye na buri wese, yaba akiba muri uru ru cyangwa astakia muri uru ru cyangwa wuvunjwe muri bitaro/vutiro abay, muri mezi 12 ashize?

How many times did an other (former, deceased) member of the household visit a clinic, CHW, or other medical provider for any preventative or diagnostic care in the past three months?

How much did the bill the patient had to pay directly to the hospital in total, including any bed charges, delivery charges, medical consultation fees or medicines to be paid directly to the hospital (Rwf)?

How much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the hospital)? (Rwf)

Amabwiriza: Ubu ndifuza ko umbwira ibiyanye na buri wese, yaba akiba muri uru ru cyangwa astakia muri uru ru cyangwa wuvunjwe muri bitaro/vutiro abay, muri mezi 12 ashize?
How many times did ${name13} receive preventative or diagnostic care in the past three months? Ni inshuro zingahe ${name13} yahawe inama z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?

How much did your household spend on these visits in the past three months? Ni inshuro zingahe ${name13} yahawe inama z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?

What was the nature of this preventative or diagnostic care received? Ese ubufasha bwatarwose bwuyanye n’ina’ama z’ubuzima cyangwa no guiszumwa buyeze bune?

How many times did ${name15} receive preventative or diagnostic care in the past three months? Ni inshuro zingahe ${name15} yahawe inama z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?

How much did your household spend on these visits in the past three months? Ni inshuro zingahe ${name15} yahawe inama z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?

What was the reason for ${name2}'s out-patient care? Nyirizina ku buryo butaziguye, ubariyemo ikiguzi icyo ari cyo cyose, mu mezi atatu ashize fagitire yagombaga kwishyurwa ibitaro/ivuriro wapfuye) yagiye kwivuza mu mezi atatu ashize?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself? Mu mezi atatu ashize, fagitire yagombaga kwishyurwa ibitaro/ivuriro nyirizina ku buryo butaziguye, ubariyemo ikiguzi icyo ari cyo cyose, amafaranga yo kwissumishia, amafaranga yaguze imiti, yangana ite?

What was the nature of this preventative or diagnostic care received? Ese ubufasha bwatarwose bwuyanye n’ina’ama z’ubuzima cyangwa no guiszumwa buyeze bune?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)? Mu mezi atatu ashize, fagitire yagombaga kwishyurwa ibitaro/ivuriro nyirizina ku buryo butaziguye, ubariyemo ikiguzi icyo ari cyo cyose, amafaranga yo kwissumishia, amafaranga yaguze imiti, yangana ite?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)? Mu mezi atatu ashize, fagitire yagombaga kwishyurwa ibitaro/ivuriro nyirizina ku buryo butaziguye, ubariyemo ikiguzi icyo ari cyo cyose, amafaranga yo kwissumishia, amafaranga yaguze imiti, yangana ite?

begin group preventative care

select_one preventative

m13_outpatient_reason_0 What was the reason for ${name1}'s out-patient care? Ni inshuro zingahe ${name1} yahawe inama z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?

select_multiple preventative

m13_outpatient_reason_1 In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself? Mu mezi atatu ashize, fagitire yagombaga kwishyurwa ibitaro/ivuriro nyirizina ku buryo butaziguye, ubariyemo ikiguzi icyo ari cyo cyose, amafaranga yo kwissumishia, amafaranga yaguze imiti, yangana ite?

select_one yesno1

m13_outpatient_reason_0 What was the reason for ${name1}'s out-patient care? Ni inshuro zingahe ${name1} yahawe inama z’ubuzima cyangwa agasuzumwa mu mezi atatu ashize?

select_multiple preventative

m13_outpatient_reason_1 In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself? Mu mezi atatu ashize, fagitire yagombaga kwishyurwa ibitaro/ivuriro nyirizina ku buryo butaziguye, ubariyemo ikiguzi icyo ari cyo cyose, amafaranga yo kwissumishia, amafaranga yaguze imiti, yangana ite?

end group

begin group outpatient care

select_one yesno1

m13_outpatient_0 In the last three months, did anyone in the household receive any outpatient care from a hospital or other formal medical provider? Mu mezi 3 ashize, hari umuntu wo muri uru rugo wigwee wizwiza ataha, ku bitaro cyangwa ku wundu muganga wemewe n’amategeko?

select_multiple names

m13_outpatient_1 In the last three months, which household members received any outpatient care from a hospital or other formal medical provider? Mu mezi 3 ashize, ni ababe bantu bu muri uru rugo bigwee biwiza bataha, ku bitaro cyangwa ku wundu muganga wemewe n’amategeko?

select_multiple carereason

m13_outpatient_reason_0 What was the reason for other (former, deceased) member’s out-patient care from a hospital or other formal medical provider? Ni ihye mpaamu undi muntu wo muri uru rugo (wahabaga cyangwa wayugwe) yaguje bate?

m13_outpatient_reason_1 What was the reason for other (former, deceased) member’s out-patient care from a hospital or other formal medical provider? Ni ihye mpaamu undi muntu wo muri uru rugo (wahabaga cyangwa wayugwe) yaguje bate?

m13_outpatient_reason_2 What was the reason for other (former, deceased) member’s out-patient care from a hospital or other formal medical provider? Ni ihye mpaamu undi muntu wo muri uru rugo (wahabaga cyangwa wayugwe) yaguje bate?

m13_outpatient_reason_3 What was the reason for other (former, deceased) member’s out-patient care from a hospital or other formal medical provider? Ni ihye mpaamu undi muntu wo muri uru rugo (wahabaga cyangwa wayugwe) yaguje bate?

end group
In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

Mu mezi atatu ashize, fagitrre yagomabga kwyishyurwa bitararo/tuwiriro nyirizina ku buro byuto butaziyuye, ubaryambyo ikiguzi izo ari cyo cyose, amafaranga yo kwisuzumisha, amafaranga yaguze imiti, anyanga ite?

Yes

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

Mu mezi atatu ashize, ni amafaranga angahe wishyukese ikindi ikiguzi cy’ubovuzi cyiyishywe ukewacyo, nk’imiti cyangwa amafaranga wishyuke mugana (mu ghe guse atashyizwe kuri fagitrre wahawe n’ibitaro)?

Yes

What was the reason for $[name5]’s out-patient care?

Ni lyhe mpmavu yatumye $[name5] alya kwivuza ataha mu rugo?

Yes

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

Mu mezi atatu ashize, fagitrre yagomabga kwyishyurwa bitararo/tuwiriro nyirizina ku buro byuto butaziyuye, ubaryambyo ikiguzi izo ari cyo cyose, amafaranga yo kwisuzumisha, amafaranga yaguze imiti, anyanga ite?

Yes

How many times did $[name5] seek this care in the past 3 months?

Ni inshuro zingahe $[name5] vyagaye kwisuzumisha mu mezi atatu ashize?

Yes

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

Mu mezi atatu ashize, ni amafaranga angahe wishyukese ikindi ikiguzi cy’ubovuzi cyiyishywe ukewacyo, nk’imiti cyangwa amafaranga wishyuke mugana (mu ghe guse atashyizwe kuri fagitrre wahawe n’ibitaro)?

Yes

Select multiple carereason

What was the reason for $[name4]’s out-patient care?

Ni lyhe mpmavu yatumye $[name4] alya kwivuza ataha mu rugo?

Yes

How many times did $[name4] seek this care in the past 3 months?

Ni inshuro zingahe $[name4] vyagaye kwisuzumisha mu mezi atatu ashize?

Yes

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

Mu mezi atatu ashize, fagitrre yagomabga kwyishyurwa bitararo/tuwiriro nyirizina ku buro byuto butaziyuye, ubaryambyo ikiguzi izo ari cyo cyose, amafaranga yo kwisuzumisha, amafaranga yaguze imiti, anyanga ite?

Yes

How many times did $[name4] seek this care in the past 3 months?

Ni inshuro zingahe $[name4] vyagaye kwisuzumisha mu mezi atatu ashize?

Yes

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

Mu mezi atatu ashize, ni amafaranga angahe wishyukese ikindi ikiguzi cy’ubovuzi cyiyishywe ukewacyo, nk’imiti cyangwa amafaranga wishyuke mugana (mu ghe guse atashyizwe kuri fagitrre wahawe n’ibitaro)?

Yes

Select multiple carereason

What was the reason for $[name6]’s out-patient care?

Ni lyhe mpmavu yatumye $[name6] alya kwivuza ataha mu rugo?

Yes

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

Mu mezi atatu ashize, fagitrre yagomabga kwyishyurwa bitararo/tuwiriro nyirizina ku buro byuto butaziyuye, ubaryambyo ikiguzi izo ari cyo cyose, amafaranga yo kwisuzumisha, amafaranga yaguze imiti, anyanga ite?

Yes

How many times did $[name6] seek this care in the past 3 months?

Ni inshuro zingahe $[name6] vyagaye kwisuzumisha mu mezi atatu ashize?

Yes

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors’ fees (only if not included in the bill charged by the facility)?

Mu mezi atatu ashize, ni amafaranga angahe wishyukese ikindi ikiguzi cy’ubovuzi cyiyishywe ukewacyo, nk’imiti cyangwa amafaranga wishyuke mugana (mu ghe guse atashyizwe kuri fagitrre wahawe n’ibitaro)?

Yes
What was the reason for ${name14}'s out-patient care?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

Mu mezi atatu azishwe, ni amafaranga angahe wishiwyewe ikindi ikiguzi cy'ubuzuzi cyi’yubuzuzi cy’uyubuzuzi ukwacyo, nk’imiti cyangwa amafaranga wishiwyewe muganga (mu gihe gusa atashyizwe kuri kiditire wamunyeze b’iziti).

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

Mu mezi atatu azishwe, fagitire mugambanga kiyinshuvura ‘ibitaro/usururo nyirizina ku buroto butaziguye, ubariyemo ikiguzo icyo ari cyo cyose, amafaranga yo kwisuzumise, amafaranga yaguze imiti, yanganza ite?

What was the reason for ${name15}'s out-patient care?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

Mu mezi atatu azishwe, ni amafaranga angahe wishiwyewe ikindi ikiguzi cy’ubuzuzi cyi’yubuzuzi cy’uyubuzuzi ukwacyo, nk’imiti cyangwa amafaranga wishiwyewe muganga (mu gihe gusa atashyizwe kuri kiditire wamunyeze b’iziti).

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

Mu mezi atatu azishwe, fagitire mugambanga kiyinshuvura ‘ibitaro/usururo nyirizina ku buroto butaziguye, ubariyemo ikiguzo icyo ari cyo cyose, amafaranga yo kwisuzumise, amafaranga yaguze imiti, yanganza ite?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

Ni iyihe mpamvu yatumye ${name14} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name15} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name12} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name11} ajya kwivuza ataha mu rugo?

Ni inshuro zingahe ${name13} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name11} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name13} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name11} yagiye kwivurizayo mu mezi atatu azishwe?

Ni iyihe mpamvu yatumye ${name15} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name14} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name13} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name12} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name11} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name10} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name14} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name15} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name13} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name12} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name11} ajya kwivuza ataha mu rugo?

Ni iyihe mpamvu yatumye ${name10} ajya kwivuza ataha mu rugo?

In the past three months, how many times did ${name15} seek this care in the past 3 months?

Ni inshuro zingahe ${name15} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name15} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name15} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name15} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name15} yagiye kwivurizayo mu mezi atatu azishwe?

In the past three months, how many times did ${name15} seek this care in the past 3 months?

In the past three months, how many times did ${name10} seek this care in the past 3 months?

How many times did ${name10} seek this care in the past 3 months?

In the past three months, how much was the bill to be paid directly to the facility, including any fees, consultation charges, medicines, to be paid to the facility itself?

In the past three months, how much did you have to pay for other medical costs that had to be paid separately, such as medicines or doctors' fees (only if not included in the bill charged by the facility)?

Mu mezi atatu azishwe, ni amafaranga angahe wishiwyewe ikindi ikiguzi cy’ubuzuzi cyi’yubuzuzi cy’uyubuzuzi ukwacyo, nk’imiti cyangwa amafaranga wishiwyewe muganga (mu gihe gusa atashyizwe kuri kiditire wamunyeze b’iziti).

What was the reason for other (former, deceased) household members to receive treatment from a traditional healer, herbalist, faith healer, or other traditional medical practitioner?

Which household members received treatment from a traditional healer, herbalist, faith healer, or other traditional medical practitioner in the past 3 months?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?

Ni inshuro zingahe ${name10} yagiye kwivurizayo mu mezi atatu azishwe?
How much did you spend in total on this traditional treatment on behalf of another (former, deceased) member in the last 3 months?

What was the reason for this treatment of ${name15}? Ni iyihe mpamvu yatumye ${name15} ajya kwivuza? yes

What was the reason for this treatment of ${name14}?

What was the reason for this treatment of ${name13}?

What was the reason for this treatment of ${name12}?

What was the reason for this treatment of ${name11}?

What was the reason for this treatment of ${name10}?

What was the reason for this treatment of ${name9}?

What was the reason for this treatment of ${name8}?

What was the reason for this treatment of ${name7}?

What was the reason for this treatment of ${name6}?

What was the reason for this treatment of ${name5}?

What was the reason for this treatment of ${name4}?

What was the reason for this treatment of ${name3}?

What was the reason for this treatment of ${name2}?

What was the reason for this treatment of ${name1}?

Has a child in the household had diarrhea in the last 2 weeks?

When the child had diarrhea, was the child given less than usual to eat, about the same amount, more than usual, or nothing to eat?

To dispose of the stools?

What was the reason for this treatment of ${name15}?

What was the reason for this treatment of ${name14}?

What was the reason for this treatment of ${name13}?

What was the reason for this treatment of ${name12}?

What was the reason for this treatment of ${name11}?

What was the reason for this treatment of ${name10}?

What was the reason for this treatment of ${name9}?

What was the reason for this treatment of ${name8}?

What was the reason for this treatment of ${name7}?

What was the reason for this treatment of ${name6}?
How many months in the past have you regretted something you later regretted?  
What is the anticipated amount of your expenditure on land?  
What is your average monthly income?  
How many months in the past have you regretted something you later regretted?  
What is the anticipated amount of your expenditure on purchases that you later regretted?  
What is the total amount of money you spent this month on purchases?  
What is the majority of your income?  
Which individual is primarily responsible for making decisions about your household?  
Decisions in your Household?  
Farming, Wedding)  
other items  
over the coming 12 months, how many times have you regretted something you later regretted?  
what is this investment?  
What are the other items?  
Do you have a specific investment in mind that you would make if you had the money? (House, Small business, Car or motorcycle, Farming, Wedding)  
How much money would you need to make this investment?  
For the following questions, we ask about major expenditures.  
What is the amount that you later regretted and wish you had not bought?  
What is the total amount of money you spent this month on purchases?  
Please indicate the month in which your household receives the majority of its income.  
Please indicate the anticipated amounts of your expenditure on business assets that you later regretted.  
How many times in the past month have you regretted something you later regretted?  
How many times in the past month have you regretted something you later regretted?  
Please indicate the anticipated amounts of your expenditure on land.  
Please indicate the anticipated amounts of your expenditure on purchases that you later regretted.  
Please indicate the month in which you household receives the key expenditures your household faces each month.  
Please indicate the month in which the biggest expenditures on business assets will take place?  
What are the assets?  
Please indicate the anticipated amounts of your expenditure on business assets.  
Please indicate the month in which the biggest expenditures on school fees will take place?  
over the coming 12 months, do you anticipate any major expenditures on school fees?  
Please indicate the month in which the biggest expenditures on home durables will take place?  
Please indicate the anticipated amounts of your expenditure on business assets.  
Please indicate the month in which the biggest expenditures on home durables will take place?  
Please indicate the month in which the biggest expenditures on business assets will take place?  
over the coming 12 months, do you anticipate any major expenditures on school fees?  
Please indicate the month in which the biggest expenditures on land will take place?  
Please indicate the anticipated amounts of your expenditure on purchases that you later regretted.  
Please indicate the month in which the biggest expenditures on school fees will take place?  
over the coming 12 months, do you anticipate any major expenditures on business assets? (like equipment, materials, transport vehicles, or cashpower)?  
Please indicate the month in which expenditures on home durables will take place?  
Please indicate the month in which the biggest expenditures on school fees will take place?  
Please indicate the anticipated amounts of your expenditure on land that you later regretted.  
Please indicate the month in which your household faces your key expenditures.  
Please indicate the month in which the biggest expenditures on home durables will take place?  
Please indicate the month in which the biggest expenditures on business assets will take place?  
Over the coming 12 months, how many times have you regretted something you later regretted?
Do you and your spouse have conflicts over money? Yes

Does the livestock you received live in your household? Yes

Is this household the same as the baseline household? Yes

Did you receive any livestock form Gikuriro program? Yes

Has any member of this household participated in a nutrition education session in the past 12 months? Yes

Is this household the same as the baseline household? Yes

Has any member of this household participated in a training session at this Farmer Field Learning School? Yes

Which crops are grown in this Farmer Field Learning School? Yes

In which month did your household receive the FIRST installment of this transfer? Yes

Is the livestock you received live in your household? Yes

Would you say that you yourself ever have problems with wasting money on things that the household does not need? Yes

Did the livestock you received live in your household? Yes

Did a member of your household receive a monetary household transfer from GiveDirectly? Yes

In which month did this demonstration garden produce its first harvest? Yes

What was the nature of this problem? Yes

Which other crops are grown in this Farmer Field Learning School? Yes

If you have any final notes, please record them here. Then, save the survey by swiping your finger across the screen one time and pressing 'Save Form and Exit.' Yes

Gahunda ya Gikuriro

Amakuru ku kwitabira Gahunda ya Gikuriro

Amakuru ku kwitabira Gahunda ya Gikuriro

Amakuru ku kwitabira Gahunda ya Gikuriro

Amakuru ku kwitabira Gahunda ya Gikuriro

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Amakuru ku kwitabira Gahunda ya Gikuriro
ENUMERATOR TRAINING MANUAL

ENDLINE SURVEY

August, 2017

Version 1 Final
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Part 1: Field Preparations

1.1 Introduction

1.1.1 IPA

Innovations for Poverty Action (IPA) is a US-based non-profit research organisation with operations in 30 different countries in Africa, Asia, and North and South America. IPA works to develop and evaluate approaches to solving poverty problems using randomized evaluations, and works to scale up successful projects through implementation and dissemination to policymakers, practitioners, investors and donors around the world.

IPA partners with academics, practitioners and governments from around the world to determine the cost-effectiveness of poverty alleviation programs, using one of the most rigorous evaluation techniques.

The present manual is for the training of enumerators. It outlines project’s objectives, describes survey’s key variables, explains use of equipment (scales, height boards and phones/tablets), and lists field supervisors’, enumerators’ and back-checkers’ responsibilities. Please ensure that you bring this training manual to every training session, and that you carry it with you in the field at all times.

1.1.2 Gikuriro and GiveDirectly

This project will evaluate the impact and compare the cost effectiveness of two programs: Gikuriro, a nutrition and WASH program implemented by Catholic Relief Services and its partners; and a Household Grant (HG) program, implemented by GiveDirectly.

The stated aim of Gikuriro is to improve the nutritional status of women of reproductive age and children under five years of age, with an emphasis on the 1,000-day window of opportunity from pregnancy until a child’s second birthday. INWA will be implemented by Catholic Relief Services, who in turn will work with local implementing partners in each of the study districts. This activity includes investments in capacity at sector and district levels; however, the focus of the present proposed evaluation will be on those components of the activity that seek to directly impact behaviours and outcomes at the household level. These include the following four domains of activity: nutrition, agricultural productivity, savings and internal lending, and sanitation and hygiene.

To provide a benchmark for the health-sector programming, GiveDirectly has provided transfers to similar beneficiaries. GiveDirectly is the world leader in household grant delivery, with experience implementing similar programs in Kenya and Uganda. Transfers were made via secure electronic methods such as mobile money. GiveDirectly implemented a range of transfer amounts, with the transfer value always constant within each village in order to avoid potential reasons for dissatisfaction among some participants.

1.1.3 Description of intervention

The study will work in 250 villages, drawn from the two study districts of Kayonza and Nyabihu. The study team has worked with Community Health Workers to determine eligibility in all program villages. The research team has selected a sample of qualifying individuals, and a sample of those who do not qualify
as beneficiaries, in each village. All of which are planned for Gikuriro delivery. The experimental design is based on the randomized phase-in of CRS’s implementation of Gikuriro. Given finite implementation capacity, not all villages within the sectors in which they plan to work for the first two years can be treated within the first year; the proposed study allocates a subset of each sector’s villages to receive Gikuriro in Year 1, and a subset of villages to receive Gikuriro after the 12-14 months of the study period. Those villages that are allocated to the second phase of Gikuriro activities would either receive a variant of the GiveDirectly household grant program in Year 1, or would serve as a comparison group. In this way, households would be allocated for Year 1 of the study period to either Gikuriro, GiveDirectly, or Comparison, and all study households would receive Gikuriro within two years of baseline.

1.1.4 Survey Objectives

The objective of this endline survey is to provide data on the final characteristics of the sample.

The endline survey is divided into different main topics, gathering information on:
1. Housing characteristics
2. Household assets
3. Land ownership
4. Agricultural income
5. Time use
6. Household consumption
7. Household dietary diversity
8. Savings, borrowing, and lending
9. Health knowledge and practice
10. Psychometrics
11. Child Anthropometrics
1.2 Meet the Team

The field staff for this IPA Rwanda project is composed of Jean Aime Nsabimana (Senior Field Manager), Janvier Rurangwa (Field Manager) and Marius Chabi (Research Manager). It is their collective goal to make you the best enumerators possible. They will help you improve your work, skills and understanding of the field work and end-line survey. Their experience and skills are our greatest resource and they will be available for any questions.

**Field Managers:** Jean Aime Nsabimana and Janvier Rurangwa
Both Aime and Janvier are knowledgeable of the project and the survey. They will be overseeing all aspects of our work, focused on completing our tasks on a daily basis.

**Field supervisors:**

All the field supervisors worked during the baseline survey. They have already received training on the survey and on how to use the tablets, and they will also be available for any questions you might have during your training and daily work.

In the field, the field supervisors are responsible for arranging logistics, managing the team’s movements, distributing and collecting survey materials, receiving and checking all completed surveys. You will certainly become friendly with your field supervisor, but remember this person is your manager and will expect the highest level of professionalism from you throughout the survey.

**Researchers:** Andrew Zeitlin, Craig McIntosh and Bernard NGABO
The researchers will visit the field to oversee the survey progress and monitor data quality. They will review and analyze the data you collect in order to learn about the health and well-being of residents of Kayonza and Nyabihu.

**Enumerators: YOU!**
This is the title used for professional surveyors. Enumerators will work in villages in Kayonza and Nyabihu to interview respondents to collect data for the study. We have invited more people to this training than we will need during the survey. That means that many of you will be going home at the end of the week. We will select those who try the hardest and perform the best during training to join us at the end of the training. Thus, it is in your best interest to work and study as hard as you can during the training.

**Back-checkers:** To be selected after the first week of training among enumerators’ team.
Back-checkers’ job is to check that every survey is being conducted to the highest standard. They will review each and every survey that comes in and will report any errors or suspicious activity to the Field Supervisors, Field Manager, and IPA staff.

**Field Mobilizer:** In order to facilitate your work, some field mobilizers are selected. Their role is to visit the village 2 or 3 days before the enumerators will visit to mobilize and sensitize about the upcoming visits of enumerators.
As an enumerator, you should know that field supervisors and back checkers will be checking your work. They will review your surveys and even re-survey someone you have surveyed in order to check that you are getting accurate information.
During the training and the entire fieldwork, we expect high professionalism. This includes:

- **Punctuality:** It is not acceptable to be late for any activity and make other members of the project wait. We all are on a tight schedule.
- **Excellent organizational skills:** You need to meet daily survey targets and comply with all your duties on time.
- **Respect and collegiate attitude:** We are all a team and work will be much more enjoyable if we treat ourselves and others with respect and professionalism. Support others if you can, but always remember that your priority is to fulfill your responsibilities as enumerator.
- **Being respectful of every respondent:** This includes approaching them with respect and humility and going to every length to protect the confidentiality of their responses.
- **Be respectful of everyone you encounter:** Teachers, relatives of respondents, local officials, etc. Two reasons: 1. You are representing IPA and therefore MUST be kind and courteous with anyone that you encounter, and 2. It will help you with your work as people are often our best resources, especially in tracking.
- **Going the extra mile:** Doing more than what is asked of you. You will be rewarded by growing both professionally and personally.
- **Phones always on:** Communication is of the utmost importance. All of our teams will have phones. You should be in constant communication with your team leader. There should never be a moment where your team leader does not know where you are and exactly what you are doing. We will go over the details of phone use, but in short – you are never to use the project phone for personal calls and you are responsible for keeping the project phone charged at all times.

Our team is one of the most important parts of our work and we strongly believe in the benefits of collaboration and teamwork. Data collection is the most important step of the research process, meaning that our research depends on your work as enumerators. Our goal is to train and develop skilled employees.

Should you be selected to work on this project, and we are impressed by your work, we will consider you for other projects and offer opportunities for longer term employment. As mentioned previously, IPA is currently working on a number of projects throughout the country and is expecting many more in the future.

### 1.3 Expectations

1. **Follow the protocol:** Follow the instructions you are given, both on this manual and from your supervisors and field staff. In the field, unexpected problems will come up, and we will need to find appropriate solutions. You are all smart - that is why you are here. We know that if left on your own you could solve many of these small issues in your own way. However, the most crucial characteristic of good data is consistent and uniform data collection. That means that we always ask the questions as they are written, and we always probe to ensure that we understand the response correctly, but it also means that every time a problem arises, we solve it in a manner that is consistent among enumerators and across teams.

You should also know who to reach out to and when. When a problem arises, your immediate response should be to contact your field supervisor. We have a large team with many different positions for a reason. We are to work together at all times. We are to communicate at all times. You are almost never to do anything on your own.
1.3.1 Expectations for Training

During all training sessions, we expect active participation from each and every trainee. This will improve your own understanding of the material and demonstrate to us that you care. If you appear bored and unengaged during training, we will probably not hire you.

Throughout training, we will have you complete quizzes that will be graded to assess your progress and understanding of the training materials. Take every practice session as an exam—we will be observing your attitudes, your engagement and this will help us assess whether to hire you or not.

1.3.2 Expectations for Survey

1. Days - During the survey we will work from Monday through Friday, and every two weeks we will work on Saturdays.

2. Hours – You must be in your assigned village at 8h00 every day. To reach the village by 8 am, your departure time in the morning will vary. Most days you will need to be present at the IPA office at 7:00 am, but for some far away villages the departure time may be 5 am. Tardiness will not be accepted. We will leave the office at the designated time each morning and will sometimes not return until 7 or 8 pm. The days are long, but we expect everyone to have a good attitude on those days that are a particular challenge.

3. Conduct 3 surveys each day- This is your daily target and you will be given an assignment sheet with the households you have to visit every day.

4. Be prepared – We will often be working in very rural hard to access areas. You should wear comfortable shoes that are easy to walk in. You should also take good care of the supplies you are given: phones, pens, plastic folders, backup paper copies of the survey, training manual, etc. and have them with you at all times.

5. Commitment – At the end of the week we will discuss in detail your contracts, but again, just to be clear from the start, we expect every enumerator on the team to work for the duration of the project and anyone who quits early will lose out on a very significant portion of their salary. Family and personal emergencies are of course an exception.

6. Pay attention to detail – We have lots of details for you to learn, from clicking the right buttons on the phone to filling pages of notes. We expect that you will pay attention and complete every detail.

Let us re-emphasize this:

We have lots of details for you to learn, from clicking the right buttons on the phone to filling pages of notes. We expect that you will pay attention and complete every detail.
1.3.3 What You Can Expect from IPA

Just as IPA asks the highest quality of work, professionalism and work ethics, the IPA staff team is also subject to all the protocols outlined in this manual as well. The entire team has been carefully selected to lead the work in the field and you should expect from us the following:

- To be treated fairly and honestly at all times
- To receive feedback from your field supervisor and back-checkers regarding what you are doing well and where there is room for improvement
- To be provided with the tools you need to do your job
- An opportunity to build your skills, travel, and meet with new people
- Recommendations if you meet (or surpass) our high expectations of you

1.2 Training

1.2.1 Enumerator Training Process

Many of you have experience conducting surveys, and we are aware that some of what is being said is a review for some of you. Regardless of the experience you bring to the team, there is always more to learn especially regarding electronic data collection and unique aspects of this evaluation that you have probably not seen before. For those who do have more experience, please feel free to offer advice to your less experienced teammates – we will all learn from one another and everyone should feel free to share their personal knowledge with the group. However, for any ambiguity always ask a question. We’d prefer to answer all questions in the office rather than having you make guesses in the field.

The survey training session for enumerators will consist of the following elements:

- Training concerning the survey protocols
- The survey modules, questions and instructions will be discussed in detail, and you will be taught the intent of each survey question
- You will be taught preferred methods of handling difficulties you may experience with respondents, both in general and in regard to specific survey questions
- You will be taught how to record answers in the tablets
- You will be observed conducting practice surveys with respondents (pre-testing)

Each time you meet with fellow enumerators in your team to discuss your work, your training is being continued. This is particularly important during the first few days of fieldwork. As you run into situations you did not cover in training, it will be helpful to discuss them with your teammates. Other enumerators may have encountered similar problems, and you are encouraged to discuss these, so that you can all benefit from each other’s experiences.

We will first cover the basic principles of good surveying. How to introduce oneself, how to talk to the respondent, how to handle impatient or irresponsive respondents, how to properly probe for answers, how to properly record answers, etc. Then we will move on to a specific review of the survey itself. We will learn each of the different sections one by one and discuss the meaning and importance of each question.
We will work in large groups; smaller break-out groups, and one-on-one. We will expect you to actively participate in practice interviews and role-plays in smaller group settings.

If you take the initiative to study this manual, to complete all assignments and training activities to the best of your ability, to ask questions and seek out advice, to actively contribute to the team, you will greatly increase the likelihood of your selection for the team.

1.3 The Enumerator

1.3.1 The Role of the Enumerator
The enumerator’s role is crucial to the survey. The success of the entire project depends on the precision and completeness of the data they collect.

If any questions arise while conducting the survey, you should ask your respective field supervisor for assistance to avoid reporting information inaccurately. Field supervisors will be available to answer questions and offer assistance at any time during the survey.

As an enumerator, your main task is to conduct interviews with households at the rate of 3 interviews per day during the survey period. You must follow strictly all instructions contained in this manual. Read all questions exactly as they appear in the questionnaire.

1.3 Interviewing Procedures

1.3.1 Ethical Guidelines for Dealing with Respondents

- **Disclosure**
  Respondents have a right to know the objectives of the study and how the information collected will be used. All respondents are provided with an IPA information sheet (consent form)

- **Confidentiality**
  All necessary measures must be taken to safeguard the confidentiality of the respondents’ identity and the information they provide. Interviews should therefore be conducted in a private setting. Make sure that respondents understand that the information you collect will be gathered and stored in a manner that ensures confidentiality.

- **Voluntary Participation**
  Make sure you explain clearly to respondents that that their participation in the study is completely voluntary and that their responses will not affect their selection into any future programs. Ensure that the respondent understands this.

- **Informed Consent**
  Before agreeing to participate, an individual must be completely clear about the contents and procedures of the study, his or her role in it, any potential risks and benefits, and how the information resulting from the study will be used. You should convey this information using language that is clear, meaningful, and understandable. You have to make sure that the respondent has consented to participate before proceeding with the interview. For this study, consent forms will be provided for the respondents to sign as evidence that consent was given.
1.3.2 Building Rapport with Respondents

- **Make a good first impression:**
  Your first responsibility as an interviewer is to establish a relationship with a respondent who does not know you. The first impression is important in ensuring the respondent’s cooperation with you throughout the interview. Open the interview with a smile and a friendly greeting and then proceed with your introduction.

- **Always have a positive approach:**
  Never adopt an apologetic manner, and do not use questions like “Are you too busy?”, as they invite refusal of the interview. Instead, try to use sentences such as “I would like to ask you a few questions” or “I would like to talk to you for a few minutes”.

- **Reassure respondents of confidentiality where necessary:**
  If the respondent seems hesitant about the interview and what the data will be used for, make sure to explain that the information collected will be confidential and that their name and individual information will not be singled out. To gain their trust, do not discuss other respondents or completed questionnaires with your supervisor in front of the respondent.

- **Answer the respondent’s questions frankly:**
  Before the interview starts, the respondent may have questions, e.g. concerning the length of the interview. Answer these frankly and pleasantly.

- **Interview the respondent alone:**
  Do not conduct the interview with other people around you, as the respondent may not be able to be totally honest. Establishing privacy at the beginning will help the respondent to be more attentive to your questions. However, be subtle in your request for privacy as a direct request could arouse other people’s curiosity and/or suspicion about the nature of the interview.

1.3.3 Important Tips for Conducting the Interview

- **Be neutral throughout the interview:**
  Most people are inclined to give answers that they think you want to hear. Therefore, you must remain neutral as you ask the questions. Make sure to avoid any expressions that could lead the respondent to think that he/she has given the ‘right’ or ‘wrong’ answer to a question. Similarly, make sure never to appear to approve or disapprove of any of the respondent’s answers.

  The wording of questions in the survey has been carefully selected to ensure neutrality. Therefore, it is very important that you read the questions exactly as they appear in the survey.

  You should also be careful to maintain neutrality in probing. For instance, if your respondent gives a vague or ambiguous answer, use neutral probes such as:
  ‘Can you explain a little more?’
  ‘I did not quite hear you – could you please tell me again?’
  ‘There is no hurry. Take a moment to think about it.’
Never suggest answers to the respondent:
You should not suggest an answer or interpret the answers given to you. If you use sentences such as “I suppose you mean that. . . Is that right?”, the respondent will likely agree with the interpretation you offer even if it is not what he/she meant. FM – say this in Kinyarwanda again, please.

Do not change the wording or sequence of the questions:
Even in cases where the respondent has not understood the question, the wording of the questions and their sequence in the questionnaire must be maintained. You should repeat the question slowly and clearly and, if the respondent still has a problem, only then should you resort to rewording the question. In doing so, you should be careful not to alter the meaning of the original question. Before conducting any interviews, you should therefore read this manual carefully to ensure that you understand the meaning of each question.

Handle hesitant and distracted respondents tactfully:
Sometimes respondents simply say, “I don’t know,” give irrelevant answers, act very bored or detached, or contradict something they have already said. In these cases, you must try to re-engage them in the conversation. You can achieve that by spending a little time talking about unrelated topics such as the weather, the community, etc.

Do not stop the respondent even if his/her answers are irrelevant or elaborate. Listen to what they have to say and then try to steer them gently back to the original question. Do not stop the respondent even if his/her answers are irrelevant or elaborate.

If the respondent is reluctant or unwilling to answer a question, explain once again that the same question is being posed to many in the community and that the answers will be confidential. If the respondent is still reluctant, mark the question ‘refused’ and continue with the next question. Remember, the respondent cannot be forced to give an answer.

Do not form opinions:
Do not start an interview with opinions on the ability and knowledge of the respondent. For example, do not assume youth from certain areas will be less educated or illiterate.

Do not hurry the interview:
Ask the questions slowly to ensure the respondent understands what is being asked, and pause to give the respondent time to think. If the respondent feels hurried, they may respond with “I don’t know” or give an inaccurate answer. If you feel the respondent is answering without thinking just to speed up the interview, say to the respondent, “There is no hurry. Your opinion is very important, so consider your answers carefully.”

Provide a transition between major topics
As you leave one section and move to the next, try to introduce the next section of questions to the respondent. For example, say ‘I am now going to ask you some questions about...’

Don’t lose control of the interview
Make sure that you are in full control of the interview. Try not to show confusion or uncertainty at any point during the interview. If this happens, it may undermine the quality of the interview because the respondent might feel that you don’t know what you are doing.

Part 2: Enumeration Protocols

2.1 Problems with Conducting Interviews

The following section describes the procedures for dealing with situations in which you may have difficulties conducting an interview.

1. The respondent is not available
If the respondent is not at home when you visit, you should keep track of the time and date of the visit. If you cannot find the respondent, you should ask the neighbours or another family member if they know at what time the respondent is going to be back and visit the same household again at that time. You should return two more times, trying to make each visit at a different time of day. If after all three visits you could not find the respondent, then you should enter ‘NO’ on your phone as the response to the question ‘Is the respondent available for an interview?’ Be sure to record the outcome of the visits at the end of the day on their assignment sheet.

2. The respondent refuses to be interviewed
The respondent’s availability and willingness to be interviewed will depend in large part on the initial impression you make. Make sure to introduce yourself and explain the purpose of the visit. Emphasize the confidentiality of the information the respondent provides, and/or the importance of the interview. If the respondent is unwilling to be interviewed, it may be that the present time is inconvenient. You should ask whether another time would be more convenient and make an appointment. If the respondent still refuses to be interviewed, you should enter ‘NO’ on your phone as the response to the question ‘Do you agree to participate in this study?’, and record the outcome on the assignment sheet.

3. The interview is not completed
A respondent may be called away during the interview or they may not want to answer all the questions at the time of your visit. If an interview is incomplete for any reason, you should arrange an appointment to see the respondent again as soon as possible to obtain the missing information. This should be done on the same day, if possible. Be sure to record the fact that the interview is incomplete by entering ‘INCOMPLETE’ as the response to the question ‘Please select the result of the interview’ on the phone. Also be sure you record the outcome, as well as the date you and the respondent have selected to complete the interview, on the assignment sheet.

2.2 Enumerators’ Visits
To have a clear idea of all the activities that need to take place for you to be able to conduct your interviews and reach your daily targets, we have included a table outlining the steps to take every time. The protocol for your team’s visit to each village is as follows:
<table>
<thead>
<tr>
<th>Time</th>
<th>Concurrent Activities</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before</strong></td>
<td>• Field mobilizer notifies the Village (Umudugudu) Leader, who will alert the respondents who are to be interviewed.</td>
<td>• FM will coordinate village schedule, team assignments, and transport requirements for each day</td>
</tr>
<tr>
<td></td>
<td>• Field supervisor (FS) assigns specific households to each enumerator, such that the team can interview all households within the designated day</td>
<td>• Both Field manager and Field Mobilizer FM will ensure that FS has village tracking sheet</td>
</tr>
<tr>
<td></td>
<td>• FS coordinates with other FSs and the FM to reassign enumerators to other teams/villages, if needed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FS gets all household tracking sheets for his/her team</td>
<td></td>
</tr>
<tr>
<td><strong>Enumerators</strong></td>
<td>• Before leaving for the field, you must ensure that you have your correct phone and that it is fully charged. You must also have all other materials. You will assist your team leader to ensure that you have the proper supplies for the day: tracking sheets, consent forms, umbrella, permissions, first aid kit, etc.</td>
<td>Tardiness will not be accepted. If you cannot observe our schedule, you cannot work on the team.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Many of the villages we will be working in are remote and far from any trading center. There might not be any opportunity for you to purchase food while we are working in village. It is your responsibility to pack something to eat and drink while you are in field.</td>
</tr>
<tr>
<td><strong>8:00-8:15</strong></td>
<td>• Full team arrives in village</td>
<td>Enumerators should enter a village quietly and considerately. We are guests in each village, and we already draw a lot of attention to ourselves. Be cautious and quiet as you exit the vehicle.</td>
</tr>
<tr>
<td></td>
<td>• FSs assess geography and reconfigure any household assignments to enumerators, or reassigns enumerators to other teams and distribute household-level tracking sheets</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Concurrent Activities</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>8:15-17:00</td>
<td>• Enumerators interview their 2-3 households</td>
<td>Be sure to take the time for introductions. Umudugudu (Village) Leader and Community Health Workers can be an incredible resource. They have the power to make your job easier or harder. Keep in mind, though, that they have other responsibilities and they are not available simply to help us with our work. For this reason, you should be very appreciative and thankful for any time and effort they offer.</td>
</tr>
<tr>
<td>Enumerators</td>
<td>• At 12 PM noon, enumerators check in with their TL to report their progress</td>
<td>For the most part, Field Supervisors will be responsible for managing relations with village officials. If you encounter any problems accomplishing your activities, you are to contact your team leader immediately. You should not contact any other person on the team without first consulting with your Field Supervisor. He or she is to be aware of all activities of the team at all times.</td>
</tr>
<tr>
<td></td>
<td>• If needed, FSs reassign enumerators to assist each other in order to ensure that all respondents are visited</td>
<td>If you hear anything happening in each village related to GiveDirectly or CRS – please take note and report to the Research Manager this time. In your reporting, mention clearly the district, village, sector, the partner, and the issue or situation</td>
</tr>
<tr>
<td></td>
<td>• FSs help enumerators track down hard-to-find respondents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FSs accompany enumerators for complete interviews in order to provide guidance and constructive feedback on interviewing manner and survey questions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FSs spot check enumerators, randomly visiting enumerators during their interviews to ensure data quality and enumerator performance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Control data and submit to server on daily basis. Sign daily check-list on tasks</td>
<td></td>
</tr>
<tr>
<td>17:00</td>
<td>• Team departs from village</td>
<td>Total surveying time: ~9 hours</td>
</tr>
<tr>
<td></td>
<td>• FSs collect household-level tracking sheets, signed consent forms from each enumerator</td>
<td>3 baseline surveys/enumerator/day</td>
</tr>
</tbody>
</table>
1.1.5 Collection of special survey variables

Features of the survey and precautions that have been taken to ensure that high-quality data is collected and processed without delay include the following:

- **Weight and height measurement of infants and kids**: Electronic scales, heights boards and stadiometers are going to be distributed per every four enumerators. To assure accurate measurement, scales need to be calibrated every time an infant or child is being weighed. This procedure is described after section 1.1.6 “Care for the scales”.
- **Anemia testing**: Anemia test will conduct on selected participants. See “Tracking protocol”

1.1.6 Care for the scales and Hemocue Hb

The scales you are given are expensive and fragile pieces of equipment. They should be treated with extreme care.

Please make sure to transport the scales securely in your backpack, protecting them at all times from the rain or any other water spillage, and from any potential damage. Clean the scale with a cloth you will be provided with after every measurement. Scales will be cleaned with special equipment once a week.

If anything happens to any item of your equipment- be it the scale or the phones/tablets, or may other equipment you may have-, such as it being broken, stolen, or lost, they must inform you immediately. You are responsible for these items and if anything happens to them the value of them will be deducted from your salary.

The care you give to the scales should be given as well to the Hemocue Hb.

1.1.7 Calibration of scales¹

1. Place the scale on a level and stable surface (never on tables or desks as the child or infant would be at risk of falling). Then position the tray on the base of the scale and pull forward until the tray is heard to snap into place, and the release button is in the top position.
2. Align the scale by undoing the foot screws. The air bubble in the spirit level must be right in the centre of the circle.
3. Ensure that only the feet of the scale are in contact with the floor. The scale should not be in contact at any other point.

1.1.8 Correct weighing

1. Press the Start key with no load on the scale.
   a. The display should then show “SECA”, “88888”, “0.000” consecutively. The scale is then automatically set to zero and ready for use.
   b. Calibrate the scale (see procedure above).

2. Measuring infants and kids requires a slightly different procedure.
   a. **When weighing infants**: Place the infant on the tray, ensuring that the child lies as still as possible. Read the weighing result off the digital display and record it in the phone/tablet.
   b. **When weighing children able to stand up**: Take off the tray from the scale. Check secure positioning of the base. Place the child on the scale and make sure he/she keeps still. Read the weighing result off the digital display and record it in the phone/tablet.
   c. **Clean** the scale with a cloth you will be provided with before every measurement. Make sure the parent sees that the scale is clean before weighing the child. Scales will be clean with special equipment once a week.

**Other remarks on the scales**
The scale has an automatic switch-off mode, meaning that it does not need to be switched off manually after every weighing session. After pressing Start, the scale remains ready for weighing for approx. 20 seconds. Once weighing has been performed, the value is displayed for approx. 2 minutes until the scale switches off automatically.

### 1.2 The Field Supervisor

#### 1.2.1 The role of the Field Supervisor

As an enumerator, you need to report to your team’s field supervisor. There will be 15 teams, each with 4 enumerators, 1 Measurer, 1 Research Nurse and a field supervisor. S/he will help you coordinate your work, give you your daily lists of households, and help you prepare respondents so that you waste as little time as possible in the field.

The role of field supervisors is crucial to the success of the end-line survey. Field supervisors check on enumerators to make sure that they are conducting the survey properly, including the weighing of infants and kids, testing anemia. They are familiar with the survey to be able to spot any irregularities in your work. They will be ready to help you with any challenge you find in the field, and will be also ready to clarify any questions you might have on the survey.
1.2.2 Supervision of Enumerators

Observation and supervision throughout the fieldwork are a part of the data collection process. Your work will be checked by field supervisors, back checkers and the field managers. The responsibilities of field supervisors include:

- Conduct spot-checks to verify that enumerators have interviewed the correct respondents
- Locate respondents, arrange interviews and ensure an efficient use of the time in the field
- Ensure enumerators reach their daily targets of surveys completed
- Observe 10% of interviews to ensure that enumerators are asking the questions in the right manner and are recording the answers correctly. For this, field supervisors will be provided with a form that they have to fill in in their phones when observing the enumerator.
- Meet with the team daily to discuss performance, and give feedback to enumerators and give out future work assignments
- Give feedback on how to improve field operations and the study in general
- Help resolve any problems that enumerators might have with finding respondents, understanding the questionnaire, or dealing with difficult respondents
- Ensure that all study protocols are being followed. For example, ensure enumerators calibrate the scales properly.

1.2.3 Assessing enumerators’ performance

Every day, field supervisors will assess the performance of every enumerator in your team. They will check on punctuality and data quality. Feedback on errors found by field supervisors or project staff should be made at the beginning of each day.

In addition, 10-15% of surveys will be audited to check the accuracy of your teams’ data collection. You will be notified by your field supervisor of any discrepancies found. A high level of error (defined as more than 1 serious error per survey, or 3 or more minor errors) will result in a one-on-one meeting to discuss performance and additional training needs. Repeated high error levels or ANY evidence of data fabrication will result in immediate dismissal from the team.

1.2.4 Discipline policy

Discipline policy for enumerators

As explained in the previous section, a high level of error is defined as more than 1 serious error per survey, or 3 or more minor errors. In cases in which you have a high level of error in you work, the field supervisor together with Field Manager will proceed as follows:

- 1st survey with a high level of error: one-on-one meeting
- 2nd survey with a high level of error: one-on-one meeting and verbal warning
- 3rd survey with a high level of error: Two days unpaid probation during which time you will be required to shadow a good enumerator in the field to learn from them
- 4th survey with these errors: dismissal
- Any survey that is found to be fabricated will result in immediate dismissal from the team.
1.3 The Back Checkers

1.3.1 The Role of the Back Checkers

Back checkers also help control the quality of work of enumerators ex post. This means that they check the accuracy of the data that enumerators gathered through re-visits. For this, back checkers have a survey in their phones/tablets that is shorter than the original survey, and which contains key variables that are time-invariant. The back check survey needs to be conducted as soon as possible after the original survey, usually later on the same day or on the next day the latest.

Errors in data recorded threaten the quality of the study as a whole, and thus, back checkers need to be extremely thorough both when conducting the back check survey and when checking the results from the back check survey against the original survey conducted by the enumerator.

Back checkers need to check 10% of all surveys conducted in every team of enumerators.

After conducting the back check surveys, back checkers need to compare the answers of the questions they asked to those from the original survey conducted by the enumerators. Errors should be spotted and recorded on a separate sheet. Depending on the error rates, the discipline policy should be followed at every time. The back checker and field supervisor should always meet before giving feedback to enumerators with errors.

1.3.2 Steps to follow on the back check results

If back checkers find a 10-20% error rate in basic questions that should always match, you will be asked to meet with your field supervisor to get a first warning. For a 20% error rate or higher: Back checker will have to verify errors were in original survey, audit additional surveys by the enumerator, redo any surveys that have more than 20% errors, and put the enumerator (you) on probation. For a 40% error rate or higher: If errors were in the original survey, the back checker will have to audit all surveys by that enumerator and re-do any with 20% errors or more. Enumerators with 40% or errors of more will need to be dismissed from the team and entire study.

1.4.4 IPA Rwanda Regulations for Enumerators

The research manager may terminate the service of any enumerator who does not perform at the level necessary to produce the high-quality data required by IPA Rwanda.

For the workload to be equally divided among enumerators and support equally shared, the following survey regulations have been established and will be strictly enforced:

1. Except for illnesses, any person who is absent from duty during any part of the training or any part of the fieldwork (whether it is a whole day or part of a day) without prior approval from his/her supervisor may be dismissed from the survey.

2. The selection of the survey team members is competitive; it is based on performance, ability, and testing results during the training. Therefore, any person found offering assistance to or receiving assistance from another person during tests will be dismissed from the survey.
3. Throughout the survey training and fieldwork periods, you are a representative of IPA. As such, enumerators’ conduct must be professional and their behaviour must be congenial in dealing with the public. We must always be aware of the fact that we are only able to do our work with the good will and cooperation of the people we interview. Therefore, any team member who is consistently overly aggressive, abrupt, or disrespectful to people in the field may be dismissed from the survey team.

4. For the survey to succeed, members of the survey team must work closely together, sharing difficulties, cooperating and supporting each other. Any team member who creates a disruptive influence on the team may be asked to transfer to another team or may be dismissed from the survey.

5. It is critical that the data gathered during the fieldwork be both accurate and valid. To control for inaccurate or invalid data, spot checks will be conducted. Enumerators may be dismissed at any time during the fieldwork if their performance is not considered adequate for the high quality this survey demands.

6. Survey data is confidential. It should not be discussed with anyone, including among enumerators. Under no circumstances should confidential information be passed on to third parties. In keeping with this policy, it is also important that enumerators never interview anyone they may know in the survey. Persons breaking these rules, and therefore the confidence placed in them, will be dismissed.

Part 3: Field Protocols

3.1 Logistics

At the start of each day, you will be briefed on the day’s activities. In addition to the other materials you need, field supervisors will also provide you with a daily assignment sheet. You should clarify all questions at this time as you may not always be next to your field supervisor or fellow enumerators.

Your field supervisor is responsible for collecting the assignment sheets from your team at the end of each day.

Before you leave to begin the day’s work, ensure that:

- You know the location of the respondents you are to interview, and that you have sufficient materials (maps, written directions, etc.) to locate them
- You have clear instructions from your field supervisor
- You have all of the following materials with you:
  1. Phones/tablets completely charged and phone bags or tablet covers
  2. Consent forms (2 copies, 1 for IPA and 1 for the respondent)
  3. Daily assignment sheet
  4. Anthropometric sheet
  5. Household tracking sheet
  6. Transport log sheet
  7. IPA Rwanda ID
  8. Spare paper copies of the survey
  9. A pen
10. Waterproof backpack for carrying materials
11. A scale (two per team)
12. Hand sanitizers with ethanol
13. Your first aid kit
14. Hemocue Hb equipment and related materials and supplies

3.2 Liability for Equipment

For field equipment, including phones, scales, Hemocue Hb, we will ask every enumerator to sign a contract which stipulates which phone/tablet and scale he/she will be responsible for the entire duration of the survey. For this purpose, scales and tablets have been labelled with a specific number. You, as an enumerator, will be responsible for the equipment allocated to you for the duration of the work in the field. It is your responsibility to keep all equipment in good condition, and that both you and your field supervisor sign for equipment returned at the end of the survey. If any of your equipment is lost or damaged as a result of your negligence, the cost of replacement will be deducted from your salary, as stated in your contract.

3.3 End-of-Day Protocols

When you have completed your work for the day, you should return your daily assignment sheet to your field supervisor. Please refer to section “2.2 Enumerators’ Visits” for a complete overview of protocols to follow daily.

3.4 Safety measures and emergencies in the field

You will be provided with an emergency kit that will be useful in cases of small emergencies. This first-aid kit is to be used only in emergencies, and by no means does it suppose a substitute of health care. If you feel ill or had an accident, you must go to the nearest health center or hospital as soon as possible. Always call your field supervisors/Field Manger in any of these instances, as he/she will support you.

This kit was obtained from the office of Red Cross in Rwanda (valued in 60,000 RWF) and contains the following:

- An antibacterial soap to clean your hands
- 3-5 sterile latex surgical gloves
- 5 Paraffin gauze
- 1 Thermometer
- 8 sterile gauze swabs
- 5 bandages (small and big)
- A triangular bandage: this can be used to bandage a head, foot or knee wound
- One pair of scissors
- A bottle of antiseptic solution (200ml)
- Tablets: Paracetamol
- Adhesive strips
- Single-use carbon steel.

Some of the most common situations we will experience on the field are outlined below. In case any of these situations happens to you, please remain calm. You will almost never be alone and will be checked
on regularly. For this, remember to always have your phones on and pick up when someone else from the team calls you. If you do not answer, we will assume you are in trouble and will go and look for you. Take all precautions necessary to ensure your safety and that of others.

**General Safety measures**

1. **To avoid road accidents:** Do not allow passengers to ride with no seat belts and do not exceed the number of passengers ensured per vehicle. Every driver will be carefully instructed not to exceed any speed limits and be overly precautious in case of heavy rain or difficult roads.

Sometime you will be using motos, and it may be raining. Please plan in advance so that you can tell the moto driver to drive slowly when it is raining, or whenever the roads are slippery.

2. **Insolation and dehydration:** During field work, it is very important to drink water, even when not thirsty. Always carry with you water or plan to buy some during your work day. Try to wear light-coloured clothes and do not expose yourself directly to the sun unnecessarily. Wearing a sun hat is highly recommended.

3. **Injuries**

**Excessive bleeding:** Always ask for help, calling the nearest hospital or health center. Then, try to stop the bleeding by bandaging the wound:

- Stop the bleeding
- Raise an arm or a leg above the heart to decrease the bleeding
- With clean hands or gloves use a sterile bandage, gauze swabs or a clean cloth and apply firm pressure directly to the wound

It is also advised to clean the wound using clean running water for at least 5 minutes. **Do not** apply products with alcohol or iodine to cleanse a wound because they can damage the tissue and delay the healing.

**Cleaning a bite (from snakes):** Always ask for help right away, calling the nearest hospital or health center. Then, immediately and firmly wash the wound with an antibacterial soap and warm water to remove as much saliva as possible with the bacteria they carry.

It is very important to immediately seek for medical attention in case of animal bite.

After cleaning the area of the bite, use a clean cloth, gauze with a bandage or an adhesive strip to keep the wound clean and prevent from additional infections. Repeat this step after 24 hours (change the cloth or the bandage).

It is always good to cover a wound using an adhesive strip or gauze because it makes the wound heal faster.

4. **Respiratory distress:** To prevent this, you must always try to work in an aerated area, drink water and rest. Sleep is very important, so you will need to try and rest sufficiently at night.
In case there is a respiratory distress or any challenge related to one’s respiration: the first thing to do is to conduct a CPR (you will be explained how to do this during training) and meanwhile looking for the nearest hospital in the area where they can “put him/her on oxygen”.

**Step-by-step measures:** If a person is not breathing, the FIRST thing you have to do is call the emergency line (nearest hospital or health center).

If there is no hospital nearby, move to next step.

4. **1 Chest compressions:** Place two fingers on the spot where the ribs come together. Put the heel of your other hand just above your fingers on the breastbone. Use the heel of one hand with the other hand stacked on top of it. Lace your fingers together.

- Do at least 100 compressions per minute (between 1 and 2 per second)
- Press the chest down at least 2 inches (5 cm)
- 30 compressions, 2 breaths. Repeat this 30/2 cycle until help arrives or person breathes on his or her own.

**Part 4: Using the tablets**

4.1 **Care for the tablets**

The tablets you are given are expensive and should be treated with extreme care. Make sure to carry the tablets in your backpack, especially when it is raining, so as to protect them from any water damage.

If anything happens to your tablet (or to any other equipment you have, such as the scales), such as it being broken, stolen, or lost, you must inform your supervisor immediately.

4.2 **A Beginner’s Guide to Using the Samsung tablets**

We will show you how to use the tablets during the training.

4.2.1 **Opening SurveyCTO**

The only application you will need to use is the one named SurveyCTO. In your phone, the forms will be pre-loaded so that you only have to go to the home screen and there you will see the Survey CTO application. Once you click on it, you will see this menu:

**Menu on SurveyCTO**
1. Opening a Survey

Once you have clicked on the SurveyCTO icon and the menu shown above shows up, click on ‘Fill Blank Form’. Now touch the button labelled ‘GiveHealth Baseline Survey’. This will open up a blank version of the survey form.

Sometimes, if you were previously forced to stop a survey before the end you may have to continue a partially completed survey by clicking on “Edit Saved Form”. This will allow you to re-open a form you were working on before.

To move forward through the survey, you must swipe your finger straight across the screen, moving from right to left. If you want to go back to a previous question, you must swipe your finger in the opposite direction (straight across the screen, moving from left to right). If you attempt to swipe forward to the next question without answering the question currently on the screen, you will be prevented from moving forward and receive a message that says: ‘sorry, this response is required’, or a similar message. To keep moving forward, please enter an answer to the question currently on the screen. Then swipe forward to the next question.

2. Exiting a Survey

When a survey has been completed the program will automatically save the data and return you to the main menu where you may begin a new questionnaire.

If, at any time, you need to exit the survey before completing it, press the back button at the bottom of your screen. You will then be asked if you want to ‘save’ or ‘ignore’ the changes you have made to the survey form. Click on the appropriate option and you will then be returned to the main menu screen of the SurveyCTO application.

Note that if you touch ‘ignore’, you will lose all of the data you have entered into the form and be forced to redo the entire interview. Do NOT select this option.

Exiting SurveyCTO

When you have finished filling in the survey form, press the back button to return to the home screen.
4.3 Advancing to the Next Question

It is possible to go backwards in the questionnaire if you realize that a mistake has been made. However, this should be avoided as much as possible because it can cause problems for the data collection program and may make it crash.

As mentioned, sometimes when trying to get to the next page of questions, the program will prevent the enumerator from advancing. On these occasions, an error message will appear on the screen, explaining why progress has been blocked. The most common of these error messages says, “Sorry, this response is required!” This means that the enumerator has accidentally forgotten to fill out a required question. Make sure that all questions on the page have been completely filled out, including answers in drop-down menus or those further down on the page.

4.4 What if my SD card reports a failure?

The phones you have been given contain a micro SD card. The application SurveyCTO is stored in the internal memory of your phone. It can happen that the forms you finish and save are stored in the external memory, or SD card. When you experience an SD card failure, you can still recover the forms you have completed: SurveyCTO automatically keeps a backup for all finalized surveys in the internal memory of the phone.

What should you do when you experience an SD card failure?
If this happens, you have to insert a new SD card, run Collect, press your device’s menu button, and chose “Restore Data”. After restoring, you can upload the forms to the server.

Since you will not have an additional SD card with you, you will have to inform your supervisor immediately about the SD failure (especially if it is in the middle of your working day) and he/she will assist you so that you can continue with your schedule.
Survey questions that need any kind of clarifications are outlined below. **This is not the full survey; for this you will get a separate copy.** The writing in *italics* is the survey itself taken directly from the tablet version that you will use to conduct the survey. The non-italicised writing, as here, is used to provide further instructions to you regarding:

1) The delivery and recording of answers for each question/statement
2) Further information on the purpose of each question/statement.

There is no further information for questions where there seems to be no possibility of misinterpretation or confusion. You should be prepared for each interview with the following materials: tablets, consent form, contact form, and tracking form.

**Respondent Doesn’t Know**
If the respondent doesn’t know the answer to a question, multiple choice questions will have “Don’t Know” as an option. If the required answer is a blank field for text or numbers, enter “-39”.

**Identification of key beneficiaries and primary respondents**

Households at Baseline were enrolled under the Gikuriro or GiveDirectly program if they contained an eligible household member².

Given that there could be more than one eligible individual in a household, a ranking was agreed by implementers to determine who was most in need of support. In each case the highest ranking eligible member (also known as ‘**key beneficiary**’) was identified as the motivating factor for receiving support. **In any case anthropometric measurements were taken for all household members aged five and under.** The eligibility criteria are summarised below in priority order for enrolment:

**Criteria 1:** Have a malnourished child based on weight-for-age or mid-upper arm circumference.

**Criteria 2:** Be categorized as Ubudehe 1 or 2 with a child under the age of 5 as of August 1 2016

**Criteria 3:** Be a household in Ubudehe 1 with a pregnant or lactating women as of August 1 2016

Using the ranking above, a primary respondent to the household survey was identified as the closest relation to the key beneficiary. At **baseline the primary respondent** was identified as follows:

- If the “highest-ranking eligible member” were a **pregnant woman**, then she should be the primary respondent for the survey.
- If the “highest-ranking eligible member” were a child, then the primary survey respondent should be the **child’s mother**, or if she is not the child’s primary guardian, then the child’s primary guardian, or if he/she is not available, then the household head.

² There was also a group of households at baseline who were not eligible for support in the first year of the program (ineligible households).
Once the highest ranking eligible member was identified based on this program eligibility criteria, a sheet summarizing the village sample, vetted by field mobilizers, was then provided to enumerators. The same approach will be adopted at Endline.

The following section explains what to do in the event that either the key beneficiary or primary respondent has moved from the household where they were living at baseline.

*If no one has moved household, then the primary respondent should be the same as at baseline.*

**Tracking protocol**

Before we visit each HH in the village, a field mobiliser will have visited the village to confirm with the Community Health Worker (CHW) that the key beneficiary and primary respondent will be available to answer the survey using the sheet and record either the household has moved or not, if yes where they have moved to. On the summary sheet, the field mobiliser will have a list of village, HHID, primary respondent, key beneficiary.

*If all household members are present, as at baseline, you will survey the same primary respondent for the household survey and take anthropometric measurements and anaemia testing for children who were aged five and under at baseline. You will also test for anaemia for the mother if she was pregnant at baseline, is lactating currently or is the mother of the key beneficiary from the baseline survey. Further you will test for any woman over the age of 15 who has been pregnant in the last 12 months.*

If a new child was born after the survey you will identify them as part of the roster (see section 1) and conduct anthropometric measurements and anaemia testing for them. Anaemia will only be tested for children aged 6-23 months.

*Please take note that the following section describes differences in tracking between eligible and ineligible populations.*

Eligible households are those with a key beneficiary in the household. If the primary respondent has moved, the field mobiliser will already have confirmed who will answer the household survey before your arrival at the household. If the key beneficiary is no longer present, the field mobiliser will have confirmed where to find the key beneficiary (as well as any other children measured at baseline) and you or another enumerator will track the key beneficiary to the new household to take anthropometric measurements and conduct the anaemia test. If the key beneficiary at baseline was a pregnant mother or is currently lactating, you will also conduct the anaemia test for her.

Ineligible households are those who do not have a qualifying beneficiary. If the primary respondent has moved, the field mobiliser will already have confirmed who will answer the household survey before your arrival at the household. Usually this will be the head of household. *Unlike for the households that have received treatment,* if the children under five are no longer present in an ineligible household you will not track household members to take anthropometric measurements nor conduct an anaemia test. The instrument will be programmed to prompt whether the household is eligible or not.
Your survey will be preloaded with information from the baseline that will help to confirm that you have found the correct primary respondent for the survey. If the information provided by the respondent is different from baseline you will be prompted to confirm that this is correct. The same will be true in the case of the anthropometric measurements.

Even though the field mobiliser will have recently visited to confirm that survey respondents will be present when you arrive, it is very important that we confirm again the intended primary respondent to the household survey and who to conduct the anthropometric measurements for are present when you arrive at the household. The survey will include questions to confirm this. (see section 1 below)

Should for any reason the key beneficiary no longer be present in the household, you will be prompted to ask where to find the key beneficiary. This does not affect the household survey. You will still conduct the HH survey in the baseline HH. Your survey will prompt you to ask for the head of household if the baseline primary respondent is not available to ask for consent to proceed with the survey.
### Summary of the tracking protocol

<table>
<thead>
<tr>
<th>Eligible population</th>
<th>Tracking issue</th>
<th>What should the enumerator do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority order for highest ranking eligible member at baseline</td>
<td>Key beneficiary at baseline</td>
<td>Scenario</td>
</tr>
<tr>
<td>1</td>
<td>Malnourished child</td>
<td>Has left the baseline HH</td>
</tr>
<tr>
<td>2</td>
<td>Pregnant mother at baseline (and child born after baseline)</td>
<td>Mother and child have left the baseline HH</td>
</tr>
<tr>
<td>3</td>
<td>Child under 5 in ubudehe I or II</td>
<td>Has left the baseline HH</td>
</tr>
<tr>
<td>N/A</td>
<td>Two children at baseline under 5</td>
<td>HH split: one child stays at baseline HH, other leaves</td>
</tr>
<tr>
<td>N/A</td>
<td>Primary respondent not pregnant mother (not key beneficiary at baseline)</td>
<td>If primary respondent has left the HH but key beneficiary remains</td>
</tr>
<tr>
<td>N/A</td>
<td>Household survey respondent</td>
<td>Household moves</td>
</tr>
</tbody>
</table>

* Only track if new location of key beneficiary/ household is fewer than four hours away in travel from field office
## Ineligible population

<table>
<thead>
<tr>
<th>Tracking issue</th>
<th>Household member</th>
<th>Scenario</th>
<th>Household survey</th>
<th>Anthropometric measurements</th>
<th>Anaemia survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Child under 5</td>
<td>Has left the baseline HH</td>
<td>Continue survey of baseline HH</td>
<td>Do not track</td>
<td>Do not track</td>
</tr>
<tr>
<td>N/A</td>
<td>Pregnant mother at baseline (and child born after baseline)</td>
<td>Mother and child have left the baseline HH</td>
<td>Continue survey of baseline HH</td>
<td>Do not track</td>
<td>Do not track</td>
</tr>
<tr>
<td>N/A</td>
<td>Two children at baseline under 5</td>
<td>HH split: one child stays at baseline HH, other leaves</td>
<td>Continue survey of baseline HH</td>
<td>Survey child still at baseline HH. Do not track child that non longer lives in baseline HH</td>
<td>Survey child still at baseline HH. Do not track child that non longer lives in baseline HH</td>
</tr>
<tr>
<td>N/A</td>
<td>Primary respondent</td>
<td>If primary respondent has left the HH</td>
<td>Continue survey of baseline HH with head of household</td>
<td>Do not track</td>
<td>Do not track</td>
</tr>
<tr>
<td>N/A</td>
<td>Household survey respondent</td>
<td>Household moves</td>
<td>Track HH to new destination and survey baseline primary respondent*</td>
<td>Do not track</td>
<td>Do not track</td>
</tr>
</tbody>
</table>

* Only track if new location of key beneficiary/ household is fewer than four hours away in travel from field office
**Section 0 Survey Information**

*Enumerator Name*
Select your name from the list.

*Enumerator ID*
Enter your unique, 3-digits ID.

Please read the consent form, ask if the respondent has any questions, answer questions, request CONSENT.
You, as an enumerator, should make sure respondents understand the purpose of the interview, and that you answer any questions the respondent may have. Then you can proceed with the interview if the respondent answered ‘YES’ to the question: ‘Do you agree to participate?’

*Reflecting preloads in the enumerator training*

*Household ID.*
Type in the ID of the household.

*Re Enter Household ID*
Regardless of which option you chose at the previous screen, you must now confirm the respondent’s ID by typing it in manually. If the ID number you type in now does not match the ID number you typed in at the previous screen, you will receive the following error message: ‘ID does not match the entered ID. Please check the ID.’ If this happens, re-check the ID number on the card against the number displayed on your screen. If the numbers do not match, re-enter the correct number. If the numbers do match, you may have entered an incorrect number at the previous screen. Swipe left to go back to the previous screen and check the number you have entered there. If it does not match the ID card, re-enter the correct number.

**Section 1 Household Roster**

Before starting the survey, find a place to sit with and talk to the respondent in private. Once the respondent is ready, proceed to start with the survey questions.

*How many people live in your household?*
The household is the place where you usually sleep, not necessarily ancestral lands or family home. The individuals in the household are those who “eat from the same pot” and spend 4 nights or more in an average week sleeping in the home. Do not include live-in house help or live-in house guard, and if respondent works as live-in house help or live-in house guard do not include employer or employer’s family in your answers.

Be sure that this number is accurate, because you will need to answer detailed questions on each household member. The section contains questions for each member of the household, including basic details and health information. Some questions differ depending on the person’s age and gender.
Are you [name of primary respondent], who responded to the baseline survey

It is important that the primary respondent from the baseline survey is first sought out to answer the household survey. If they are not present, you will be directed for ask for the head of household to answer in place of the baseline respondent.

Does [name of key beneficiary] still live here...

It is important that we confirm that the intended beneficiary of support is still living in the household.

**Section 2 Dwelling Characteristics**

This section asks about the main dwelling of the household, including construction materials and dwelling value.

**Section 3 Assets**

This section asks about the assets owned by the family. Many respondents may be initially uncomfortable about revealing details of their assets to a stranger. Reassure them that this information is totally confidential – you are prohibited from ever talking about this information to any other person, outside of the senior research staff (who are also in turn prohibited from talking to anyone else about the information). Additionally, their individual identifying information will be kept separate from their responses, and only senior research staff will have access to it. The section starts with comprehensive questions on livestock purchases and ownership over the past 12 months. The primary respondent is then asked about individual assets owned by the household, and the average sale price of each of the owned assets. We want to know how many of each of these items the household owns. Read through them one at a time, and if the respondent says they do not own any of the mentioned item, select 0. Only count those items which are in working condition.

**Section 4 Land**

This section asks about the land owned by members of the household, both underneath their dwelling and otherwise.

**Section 5 Agricultural Income**

This section asks if members of the household have harvested any crops over the past 12 months, either for consumption or for sale. If so, the primary respondent is asked whether crops were sold and details pertaining to their cultivation and sale.
Section 6 Time Use

*During the seven days prior to today, how many hours did you spend doing ...?*
This section asks about how the primary respondent has spent time over the past 7 days, in hours, on activities including housework, economic activities, leisure, and sleep. If necessary, remind the respondent that these are weekly hours, not daily.

*Are you currently employed, working for pay?*
The section then asks about wage income and jobs for the primary respondent. Since the respondent may not consider some work to be “employment”, the question is asked multiple times in various ways to elicit accurate responses. If they have any jobs, more questions are asked on the details of the job.

Section 7 Microenterprise

*I want to ask some questions about your own business activities.*
This section asks about microenterprise activities of the primary respondent. Ensure that the activities reported are in fact the respondent’s, and not some other household member.

*I now want to ask some questions about the business activities of your household.*
The section then asks about microenterprise activities of other members of the household. Do not include the activities of the respondent.

Section 8 Consumption

This section asks about the goods that have been consumed by members of the household over the last 12 months, 4 weeks, or 7 days, depending on the type of item. For each item, the questions flow as follows:

*Has your household purchased any ... over the last ... days?*
Answer Yes/No

*How much did you spend on ... over the last ... days?*
Answer in Rwf. If the respondent doesn’t know, enter -39.

Section 9a Child diet
If there are any young children in the household, this section assesses how healthy a child’s diet is based on questions about breastfeeding, medicines and liquid intake specific to young children as well as how varied their food intake was the day before the survey. Start first by asking the respondent to confirm whether the child was breastfed ever and then ask about medicines and liquid intake given to the child during the day before the survey.

Next ask them to list all of the foods consumed by each young child any time during the day or night, and fill in the responses under the appropriate meal. If they mention dishes that contain multiple ingredients (e.g. stew, soup), please ask the respondent to name individual ingredients instead.
Once the respondent has listed all of the foods consumed by the young child in the household the day before the survey, answer the list of yes/no questions regarding various types of foods.

*Were any ... consumed yesterday by the child?*
These 15 yes/no questions ask about grains, vegetables, sweets, and other food groups.

Then, the questions are repeated for other young children in the household.

**Section 9b Dietary Diversity**

This section assesses how healthy a household’s diet is based on how varied its food intake was the day before the survey. Start first by asking the respondent to list all of the foods consumed by any household member for any meal, and fill in the responses under the appropriate meal. If they mention dishes that contain multiple ingredients (e.g. stew, soup), please ask the respondent to name individual ingredients instead.

Once the respondent has listed all of the foods consumed by any member of the household the day before the survey, answer the list of yes/no questions regarding various types of foods.

*Were any ... consumed in the last 7 days by anyone in your household?*
These 17 yes/no questions ask about grains, vegetables, sweets, and other food groups.

**Section 9c Food security**

The respondent for this module should be the person in the household who is most involved with the food preparation and meals. This person should answer on behalf of the household and all its members. The first five questions will ask who the respondent should be for these questions. If this is a new person, please make sure you have received their consent to proceed.

This section then asks nine questions about food security over the last 4 weeks first with a yes/no response and then, if yes, asks how many times the respondent recalls this happened. For each item, the questions flow as follows:

*In the past [4 weeks/30 days], did you worry that your household would not have enough food?*
Answer Yes/No

*How often did this happen in the past [4 weeks/30 days]?
Answer with number. If the respondent doesn’t know, enter -39.*

**Section 10 Savings**

This section asks whether the respondent is involved in various savings methods- savings groups, bank savings, SACCO, etc. For each activity that the respondent is a part of, there are several question on savings specifics. Do not include savings of other members of the household, only the respondent.

Then, the questions are repeated for the other members of the household, excluding the primary respondent.
**Section 11 Borrowing**

This section asks whether the respondent or any other member of the household has borrowed money from sources like friends and family, banks, and agricultural input suppliers. For each type of borrowing that a respondent reports, there are follow-up questions regarding borrowing amount and repayment details.

**Section 12 Inter-household transfers**

This section asks whether the respondent or any other member of the household has given out or received money or gifts to other people outside of the household. For each gift or money that was given out or received, questions are asked on loan duration and amount.

**Section 13 Health**

This section begins with a quiz of the primary respondent’s knowledge of health and sanitation practices. This module measures the knowledge of desirable and undesirable health and sanitary behaviour, the practice of desirable behaviours such as effective drinking water treatment and safe storage and dispensing, the construction and use of hygiene and sanitary behaviour supporting infrastructure such as improved latrines, hand washing stations with soap and drinking water treatment, safe storage and dispensing facilities and improved nutritional practices.

Next, the primary respondent is asked if any household member has health insurance or has been to an inpatient or outpatient facility. For each household member meeting those criteria, follow-up questions are asked regarding the details of their insurance or facility visit. If there are any young children in the household, there is a short list of questions asking about any diarrheal episodes and how they were treated.

**Section 14 Psychometrics**

*In general, do you feel comfortable holding large amounts of cash?*
There are no right answers to these questions; they reflect how the respondent feels about money, their spouse, and other personal subjects. If necessary, assure the respondent again that their answers are confidential, even from their spouse, and the answer openly and honestly.

*Please indicate the month in which your household receives the majority of its income.*
Please select the first day of the month when the household receives the majority of its income. If income is perfectly even over the year, select January.

**Section 15 INWA compliance**

This section asks about participation in any Gikuriro activities.

**Section 16 GD compliance**

This section asks about participation in a GiveDirectly activities. This question will only be asked in GiveDirectly villages.
Section 17 Child Anthropometrics

Preparation before measuring

1. Determine the child’s age

It is essential to determine the child’s age as accurately as possible in order to standardise the weight measurements into weight-for-age Z scores. Enumerators should first try to collect the date of birth of the child from a record e.g. birth certificate or immunisation card. If no record is available, ask the respondent. The respondent may not remember the date of birth accurately. Several scenarios are possible:

- If the respondent remembers the month and year of birth but not the exact day, record the first day of the month e.g. 01/MM/YY
- If the respondent remembers the year of birth but not the month, first locate a season around which the birth has taken place. This should give an indication about the probable months of birth. Then list local events or festivals occurring during that particular season to more accurately estimate the month of birth.
- If the respondent cannot remember the year of birth, the age can be ascertained with reference to the age of another child of known age. For example the child’s brother or sister’s age may be taken as reference. Subtract or add the days/months with reference to the other child to arrive at the age of the child. If a woman is not able to recall the age of the child, her date of marriage may be asked and then probe after how many months the child was born to calculate the age of the child.

2. Weigh and measure one child at a time

If there is more than one eligible child in a household, complete the weighing and measuring of one child at a time. Then proceed with the next eligible child. DO NOT weigh and measure all the children together. Otherwise measurements may get recorded in the wrong row or column of the questionnaire.

3. Control the Child

When you weigh and measure, you must control the child. The strength and mobility of even very young children should not be underestimated. Be firm yet gentle with children. Your own sense of calm and self-confidence will be felt by the parent and the child. When a child has contact with a measuring board, you must hold and control the child so the child will not trip or fall. Never leave a child alone with a piece of equipment.

4. Coping with stress

Protocol adapted from
Since weighing and measuring requires touching and handling children, normal stress levels for this type of survey work are higher than for surveys where only verbal information is collected.

Explain the weighing and measuring procedures to the mother, father, or other responsible adult and to a limited extent, the child, to help minimize possible resistance, fears or discomfort they may feel. You must determine if the child or the parent is under so much stress that the weighing and measuring must stop. Remember, young children are often uncooperative; they tend to cry, scream, kick and sometimes bite. If a child is under severe stress and is crying excessively, try to calm the child or return the child to the parent before proceeding with the measuring.

Do not weigh or measure a child if:
- The parent/responsible adult refuses
- The child is too sick or distressed
- The child is physically deformed which will interfere with or give an incorrect measurement. To be kind, you may want to measure such a child and make a note of the deformity on the questionnaire.

5. Recording measurements and being careful

Keep objects out of your hands and pens out of your mouth, hair or breast pocket when you weigh and measure so that neither the child nor you will get hurt due to carelessness. When you are not using a pen, place it in your equipment pack or on the questionnaire. Make sure you do not have long fingernails. Remove interfering rings and watches before you weigh and measure.

6. Strive for Improvement

You can be an expert measurer if you strive for improvement and follow every step of every procedure the same way every time. The quality and speed of your measurements will improve with practice. Do not take these procedures for granted even though they may seem simple and repetitious. It is easy to make errors when you are not careful. Do not omit any steps. Concentrate on what you are doing.

Steps for measuring weight (children 0-59 months)

1. Setting up the scale

Find a level and stable surface to place the scale ensuring that only the feet of the scale are in contact with the floor. Check the level of the floor using the spirit level. Ensure the air bubble in the spirit level is right in the middle of the circle before you start the measurement. If the floor is not level, either shift the place or adjust to horizontal level by unscrewing the feet of the scale. Make sure there is sufficient light to be able to read the display.
2. Preparing the child

Ask the mother/caretaker to undress the child. Leave the underpants on the child. If the child has braids or hair ornaments that will interfere with the weight/length measurement, ask the mother to remove them. Be reassuring about the process so that the child doesn’t get scared.

3. Weighing the child

Press the START key with no load on the scale. SECA, 88888 and 0.000 appear consecutively in the display. Wait until the display 0.000 appear on the screen before weighing.

When weighing an infant:
Ask the mother to place the infant in the tray. Ensure that the child lies as still as possible in the tray before recording the reading on the form. Make sure the tray is cleaned with an alcohol-based hand sanitizer before each measurement.

When weighing children able to stand up:
Remove the weighing tray by pressing the release button hard and sliding back the tray. Ask the child to step onto the platform and stand upright on the weighing machine with both feet parallel. Make sure that nobody holds the child during weighing and that the child stands freely without holding onto anything.

When you are taking weight measurements the child needs to be as calm as possible. Remember that a child who is excited or scared makes it difficult to obtain an accurate measurement. In order to make the process less intimidating for the child, the child may stand on the platform facing away from the reading screen looking at his mother while the enumerator is noting the reading.

Weighing range

Two weighing ranges can be selected:
- Range (1) is for children weighing less than 20 kilograms
- Range (2) is for children weighing between 20 Kg and 50 Kg

Make sure the scale is set up with range (1) because most children < 5 will be below 20 Kg. If the weight of the child exceeds 20 Kg, an error message will appear (Stop). In this case, the child should be removed from the platform and the range switched to position (2). To switch the range of the scale, please refer to the instruction of the machine attached.

Note than the scale is designed to weigh children <5 and the maximum load is 50 Kg. Make sure NO adult stands on the scale as this will result in damaging the scale.

Box 1: Summary of the key steps:
### General rules about maintenance of the scale

Each enumerator has been assigned one machine and is responsible for its care, cleaning, and proper operation. Make sure you handle the scale carefully:

- Do not drop or bump the scale
- Do not store the scale in direct sunlight
- Protect the scale against humidity/rain/water
- Make sure the foot bed is cleaned at the end of each day

If the scale breaks or the carry bag zip is damaged, please report immediately to the supervisor so that we can repair the equipment as soon as possible.

### Steps for measuring recumbent length (children 0-23 Months)

Height measurement will be conducted with two trained people, a **measurer** and an **assistant**.

Between each child measurement, clean the board with alcohol-based hand sanitizer and a cloth.

1. **Measurer or assistant:** Place the measuring board on a hard flat surface, i.e., ground, floor, or steady table.

2. **Assistant:** Place the questionnaire and pencil on the ground, floor, or table (Arrow 1). Kneel with both knees behind the base of the board if it is on the ground or floor (Arrow 2).

3. **Measurer:** Kneel on the right side of the child so that you can hold the foot piece with your right hand (Arrow 3).

4. **Measurer and assistant:** With the mother’s help, lay the child on the board by supporting the back of the child’s head with one hand and the trunk of the body with the other hand. Gradually lower the child onto the board.

5. **Measurer or assistant:** Ask the mother to kneel close on the opposite side of the board facing the measurer as this will help to keep the child calm.
6. **Assistant:** Cup your hands over the child’s ears (Arrow 4). With your arms comfortably straight (Arrow 5), place the child’s head against the base of the board so that the child is looking straight up. The child’s line of sight should be perpendicular to the ground (Arrow 6). Your head should be straight over the child’s head. Look directly into the child’s eyes.

7. **Measurer:** Make sure the child is lying flat and in the center of the board (Arrows 7). Place your left hand on the child’s shins (above the ankles) or on the knees (Arrow 8). Apply gentle pressure to the knees to straighten the legs as far as they can go without causing injury. Note: it is not possible to straighten the knees of newborns to the same degree as older children. Their knees are fragile and could be injured easily, so apply minimum pressure. While holding the knees, pull the footboard against the child’s feet. The soles of the feet should be flat against the footboard, toes pointing upwards. If the child bends the toes and prevents the footboard from touching the soles, scratch the soles slightly and slide in the footboard quickly when the child straightens the toes (Arrow 9).

8. **Measurer and assistant:** Check the child’s position (Arrows 1-9). Repeat any steps as necessary.

9. **Measurer:** When the child’s position is correct, read and call out the measurement to the last completed 0.1 cm (=1 mm). Remove the foot piece and release your left hand from the child’s shins or knees.

10. **Assistant:** Immediately release the child’s head, record the measurement, and show it to the measurer.

11. **Measurer:** Check the recorded measurement on the questionnaire for accuracy and legibility. Instruct the assistant to erase and correct any errors.
Figure 5.2. Child length measurement - length for infants and children 0-23 months

1. Questionnaire and pencil on clipboard on floor or ground
2. Child's feet flat against footpiece
3. Measurer on knees
4. Child flat on board
5. Arms comfortably straight
6. Hand on knees or shins, legs straight
7. Hands cupped over ears; head against base of board
8. Line of sight perpendicular to base of board
9. 90°

Example:

![Image](image_url)

Quality controls

During the training, we will conduct a standardization exercise as described in the manual ‘Anthropometric Indicators Measurement Guide’ (Cogill 2001).

In order to measure accuracy of measurement, approximately 5% of measurements will be conducted in duplicate. Half of the measurements will be conducted on the same child by two different measurers (to calculate the *inter-measurer* technical error of measurement). The other half consists of the same enumerator measuring the same child twice at different times (to calculate the *intra-measurer* technical error of measurement). These procedures are followed in order to monitor accuracy of measurement throughout the study.

Section 19 Anemia testing

Please confirm recipients of the test. Working assumption is:

- Children under 23 months
- Any new births
- Mothers who were identified as key beneficiary at baseline because they were pregnant
- Any lactating mothers

Final section of the survey

**INSTRUCTION:** You have reached the end of the interview portion of this survey. Please thank the respondent, GIVE THEM A COPY OF THE CONSENT FORM, and then please move on to the next household.

Thank you for completing the end-line survey. If you have any final notes, please record them here. Then, save the survey swiping your finger across the screen one last time and press ‘Save Form and Exit’.

You should then go to the next household and start another interview.
Annex E. Evaluation Team Information

Evaluation Team Information

**USAID/HESN**
USAID/HESN was responsible for conducting overall project monitoring and oversight responsibilities for the HESN DIL Award. This means that the AOR responsibilities, and all corollary budget monitoring and reporting requirements, was be performed by the HESN team.

**USAID/DIV**
USAID/DIV advised USAID/Rwanda, GiveDirectly, and the evaluators on indicators and target beneficiaries. USAID/DIV has captured learnings from this pilot project for potential future efforts to benchmark USAID programming against household grants.

**Development Impact Lab**
DIL coordinated and implemented the randomized evaluation described in this report. This included coordination of the study by co-investigators at UC San Diego and Georgetown University; contracting with the survey firm in Rwanda and monitoring field operations; liaising with GiveDirectly to ensure compliance with research protocols; reporting to USAID/HESN on progress and key outcomes of the study; and preparing analyses, data sets, code, and publications for dissemination to the public.

The principal investigator (PI) for this project was Craig McIntosh, a professor of economics in the School of Global Strategy and Policy at University of California, San Diego. He is a development economist whose work focuses on program evaluation and has conducted field evaluations of innovative anti-poverty policies in Mexico, Guatemala, Malawi, Rwanda, Uganda and Tanzania. He had primary responsibility for research design, data analysis, and reporting of results from the study. In addition, managed a sub-recipient contract with Innovations for Poverty Action, for coordination with implementation for field data collection.

The second PI is Andrew Zeitlin, professor of economics at Georgetown University. Professor Zeitlin’s research uses field and lab experimental methods to study how individual decision-making shapes state effectiveness, through the design of transfer programs, incentives in public-service provision, and tax policy and administration. He had joint responsibility for research design, survey design and translation, oversight of targeting and fieldwork, implementation of the evaluation, data analysis and reporting.

The PIs worked with Innovations for Poverty Action (IPA), which conducted the field implementation and data collection activities.

**USAID/Rwanda**
USAID/Rwanda will provide AOR oversight for the Global Development Alliance Award with Google and GiveDirectly that is supporting the household grant activity and will lead in determining the indicators and populations of interest for the study design and evaluation. USAID/Rwanda will work with all parties to disseminate findings.