
Index Based Livestock Insurance (IBLI) Borena Household Survey Codebook

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1. Research Objectives and Design

1.1. Overview

This survey was conducted as part of research and development activities under the Index Based Livestock Insurance (IBLI) project in the Borena Zone of Ethiopia. The International Livestock Research Institute (ILRI) and in collaboration with Cornell University and implementing partners Oromia Insurance Company (OIC) and Oromia Credits and Saving Share Company (OCSSCO) piloted in August 2012 a market-mediated index-based insurance product, designed to protect pastoralists from drought-related livestock mortality, on the Borena plateau of Southern Ethiopia. The basic product design, household survey, and evaluation strategy mimic and complement that of a previously designed IBLI product in the Marsabit district of Northern Kenya, first rolled out two years earlier (2010).

IBLI is an innovative microinsurance product that insures pastoralists in the arid and semi-arid lands (ASALs) of Borena against livestock mortality that often follows catastrophic drought. Like other index based insurance products, IBLI contracts are not designed around policyholders' actual losses, but instead an index that is calibrated to be highly correlated with those losses. Because severe forage scarcity is common during drought, the IBLI index tracks local vegetative conditions using freely available satellite data (i.e., the Normalized Differenced Vegetation Index, hereafter NDVI) to calculate indemnity payments for policy holders. When the index hits a pre-determined threshold indicative of large-scale livestock loss—the 15th percentile of the historical distribution at the Woreda-level since 1981—then IBLI policy holders receive a payout based on the amount and type of livestock insured. For more general information on the research and development process of the IBLI product, the pilot, or its launch in Borena visit www.ilri.org/ibli and <http://livestockinsurance.wordpress.com/ibli-southern-ethiopia/>.

While IBLI is a product that promises, in theory, considerable social and welfare benefits for pastoralists, the exact impacts and effects of securing livestock asset in pastoral settings by way of an IBLI-type product, have not been quantified and remain relatively unknown. It is believed that IBLI could act as a productive safety net for households affected by livestock losses after drought years and help them effectively manage the resulting shock. IBLI may also provide households with incentives to invest in livestock by reducing the risk inherent in keeping livestock in a vulnerable system. It is also hypothesized that with insurance having increased the collateral value of an otherwise risky asset, IBLI may enhance financial deepening in pastoral areas, making credit more available and catalyzing related market opportunities.

To better understand and monitor the success of IBLI as well as the various encouragement techniques and interventions implemented alongside the IBLI roll-out, there is the need for continuous impact evaluation and assessment, tracking IBLI uptake and the changes in well-being of individual households that can be attributed to the program and product. To that end, the IBLI team carried out a pre-intervention baseline survey (February-March 2012) and followed it with annual rounds in 2013 and 2014 (with a future-scheduled round in 2015), once IBLI had already been made available to households in Borena. Moreover, because of the similarity in agro-ecological zones and livelihoods between Northern Kenya and Southern Ethiopia, this survey effort provides a platform for comparative performance evaluation with the IBLI Marsabit product.

1.2. Impact Evaluation Strategy

The IBLI impact evaluation strategy relies on panel household survey data collected before and during the introduction of IBLI. This panel household survey was designed to occur during the same interval every year (March-April), starting in 2012, and to incorporate a range of well-being and behavioral change indicators. Monitoring changes in the magnitude of key variables alongside purchase of IBLI allows researchers the ability to attribute purchase of the IBLI product to observable impact. Variables of interest include, but are not limited to, income, asset accumulation/holding, education, and health and nutrition status. Table 1 shows the dates of the household survey rounds and IBLI sales periods. Round 1 of the survey was the baseline survey before IBLI products were launched in August 2012. Rounds 2 and 3 were follow-up surveys aimed at capturing the impacts of IBLI by comparing key variables of interest with those in the baseline survey.

Table 1. Dates of household survey rounds and sales periods

Date	Activity
March 2012	Household survey round 1
August-September 2012	1st IBLI sales period
January-February 2013	2nd IBLI sales period
April 2013	Household survey round 2
August-September 2012	3rd IBLI sales period
January-February 2013	4th IBLI sales period
March 2014	Household survey round 3

1.3. Structure of the Household Survey Instrument

The survey instrument is organized into several sections, as follows. More details on the exact variables contained in each section of the survey can be found in Section 5.3 of this codebook.

Household Demography (Section 1-5): These sections capture details about the overall household and all persons that comprise the household. Information collected at the overall household level includes physical location and situation within social hierarchies (e.g., clan and sub-clans). At the individual level, this information includes gender, age, relation to household head, marital status, education, health status, and economic roles. For children under six years, some anthropometric measurements (i.e. Middle Upper Arm Circumference (MUAC), weight, and height) are also recorded. Also asked is whether these children received school feeding and have been vaccinated against tuberculosis.

Livestock Stock and Accounting (Section 6): The livestock stock sub-section records the number of livestock under the direction of a given household (owned, herded, etc.) by species and gender. The livestock accounting sub-section contains information on losses, in-take, off-take, slaughters, and births. Before administering each of these sub-sections, enumerators first fill in a grid of species by gender and losses/births/intake/slaughter in order to limit the recall error. This grid also requires respondents to confirm the number of each livestock type by gender they had at the time of the previous year's survey (after baseline).

Milk Production (Section 6H): This section collects details on milk production by species and each of the four seasons in a year. For each season, the number of lactating animals and how much they produce is recorded. The respondent is also questioned about whether they sold any milk and, if so, at what prices.

Index Based Livestock Insurance (Section 7): This section includes details on the household's knowledge about and understanding of the IBLI product and their purchase behavior over each sales period. It also contains particulars about which sources of information were available to and used by the household in its purchase decision.

Livelihoods (Section 8): This section includes details on household income sources, amounts, and main livelihood activities by season.

Transfers (Section 9): In this section respondents provide information on cash and in-kind transfers they receive or give. Households are also asked about assistance from and participation in food aid, school feeding, Ethiopia's Productive Safety Net Program (PSNP), and other aid from NGOs or the government as a supplement to other income.

Herd Migration (Section 10): This section includes details on herd and sub-herd migration during the dry seasons, including livestock movement between the base and satellite camps and water points. Household perception of the condition and safety of water points are also included.

Network Groups, Expectations, and Subjective Welfare (Section 11): This section contains several sub-sections about household relationships with groups, perceptions and expectations about the future, subjective welfare, and perceived risks. Sampled households provide detail on whether and which household members are part of one or more network groups (e.g., youth or women's group). Respondents are also asked to predict future conditions of rangeland conditions, livestock losses, and livestock prices. A vignette-style sub-section seeks to elicit information about household welfare in relation to others in order to form a measure of comparable subjective welfare. Household perceptions of risks faced are also recorded in a separate sub-section.

Consumption and Expenditures (Section 12): This section seeks to establish a household's total annual expenditure levels. The first sub-section is a detailed inquiry into the consumption, purchase, and sources of food for the household over the last week. Subsequent sub-sections include monthly and annual non-food consumption and annual livestock related expenses.

Housing and Amenities (Section 13): This section contains details on the type of dwelling, materials used for construction, and main source of fuel (cooking and lighting) and water for the household. Respondents are also asked to compare the current dwelling to that of the previous year to establish changes in welfare over time.

Assets and Agriculture (Section 14): This section includes details on household productive assets beyond the livestock contained in Section 6, including other animals and livestock owned by the household (e.g., donkeys, fowls, cats, and dogs), agricultural land, and other major household non-durable assets. Together, these sub-sections can be used to estimate the asset accumulation of a household. Also contained in this section are details about any household crop harvest and input-related expenses in the main and short agricultural seasons.

Saving, Lending, and Borrowing (Section 15): This section contains several questions about the financial literacy, saving, lending, and borrowing of a household in an attempt to understand household liquidity, access to financial services like credit, and the main reasons for borrowing and lending.

Experiment of Risk Preference (Section 16): This section allows researchers to reveal the risk preferences of households the first time they are surveyed (baseline for all households except replacements). This experiment, performed like a lottery, relies on a coin toss gamble where risk and return are positively correlated. The respondent is shown a series of six images of head and tail sides of an Ethiopian coin and associated amounts of money and is asked to choose their preference. Possible outcomes range from risk neutral to extremely risky. The six gambles are displayed in Table 2.

Table 2. Risk preference experiment choices

Choice Number	Heads Amount (ETB)	Tails Amount (ETB)
0	50	50
1	45	95
2	40	120
3	30	150
4	10	190
5	0	200

1.4. IBLI Product Design and Seasonality

IBLI is marketed and sold over the course of two periods occurring directly before the two rainy seasons (August-September and January-February) with insurance coverage periods lasting one year and the potential for two indemnity payouts, one after each dry season (see Figure 1).

Figure 1. Time structure of IBLI Borena contract

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
		Long rain (LR) season			Long dry (LD) season				Short rain (SR) season		Short dry (SD) season				
		Long rain - long dry (LRLD)							Short rain - short dry (SRSD)						
Sales periods for LRLD-SRSD (Mar-Feb) contract		NDVI reading for LRLD							LRLD index announcement and potential payout						
									NDVI reading for SRSD					SRSD index announcement and potential payout	
		Insurance coverage period for LRLD-SRSD (Mar-Feb) contract													
							Sales periods for SRSD-LRLD (Oct-Sep) contract		NDVI reading for SRSD					SRSD index announcement and potential payout	
							Insurance coverage period for SRSD-LRLD (Oct-Sep) contract								
							Overlapped period if a household bought both LRLD-SRSD contract and SRSD-LRLD contract								

Note: The reference period for many household survey questions relate to the months highlighted in blue/purple: spanning March (the beginning of long rainy season) to February (the end of short dry season). The major exceptions to this general rule are the consumption and expenditure sections spanning the last 7 days, 1 month, 3 months, or 12 months depending on type of good.

If a household buys IBLI in the August-September sales period, it is insured from October to September of the following year and may receive indemnity payout in March and/or October. Note that if a pastoral household buys IBLI not only in the January-February sales period but also in the following August-September sales period, then the insurance coverage periods for the two contracts are overlapped from October to February and it may receive indemnity payouts for the both contracts in October. This temporally-overlapping design allows households to insure the same number of livestock but pay less on more frequent intervals and is, therefore, expected to reduce the cash constraints faced by pastoralists.

The cost of the IBLI contract (i.e., the premium payment) for household h is equivalent to:

$$premium_h = premium\ rate_w * TIHV_h$$

where $premium\ rate_w$ is a Woreda-specific insurance premium rate given spatial differences in expected mortality risk (see Table 3) and $TIHV_h$ is the total insured herd value based on the number of each livestock type the household chooses to insure, calculated as:

$$TIHV_h = (\#\ camel\ insured * p_{camel}) + (\#\ cows\ insured * p_{cow}) + (\#\ shoats^1\ insured * p_{shoat})$$

where the price per animal insured is found in Table 4.²

Table 3. Woreda-specific premium rates by IBLI sales period

Woreda	Aug/Sept 2012	Jan/Feb 2013	Aug/Sept 2013	Jan/Feb 2014
Dillo	9.75%	9.75%	9.75%	8.60%
Teltele	8.71%	8.71%	8.71%	7.70%
Yabello	7.54%	7.54%	7.54%	6.70%
Dire	9.49%	9.49%	9.49%	8.40%
Arero	8.58%	8.58%	8.58%	7.60%
Dhas	9.36%	9.36%	9.36%	8.30%
Miyo/Moyale	11.05%	11.05%	11.05%	9.80%
Dugda Dawa				7.10%
Malka Soda				6.10%

Note: These premium rates are close to actuarially fair premium rates

Table 4. Price per animal insured by IBLI sales period (ETB)

	Aug/Sept 2012	Jan/Feb 2013	Aug/Sept 2013	Jan/Feb 2014
p_{camel}	15,000	15,000	15,000	10,000
p_{cow}	5,000	5,000	5,000	6,000
p_{shoat}	700	700	700	800

In our questionnaire, we observe the details of IBLI contract purchase as recited by survey households. Because of the potential for recall error, we also include the relevant and matched administrative data for the sampled households from partners at OIC (see “S7B IBLI Contract Details”).

¹ The term “shoats” is a generic word for both goats and sheep used throughout the questionnaire and IBLI product.

² For those familiar with the IBLI Marsabit product, note that the IBLI Borena product differs in several important ways, including but not limited to the premium payment structure.

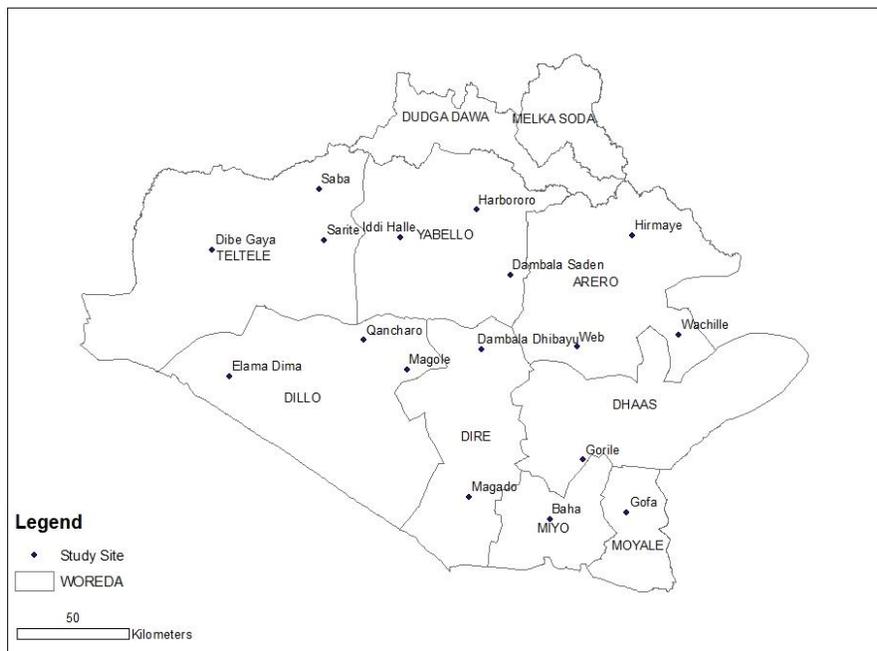
The feature of two potential payouts in a year and the 15th percentile trigger level mentioned in Section 1.1 means that the expected probability of payout is once every three and a half years. As of now, four sales periods have transpired (see Table 1) and no indemnity payouts have been made. If and when an indemnity payout occurs in the future, the compensation will be equal to the premium payment at a minimum and to the half of TIHV at a maximum, depending on the realized NDVI level.

2. Sampling Design

2.1. Study Site Selection and Household Sampling

Sampling for the household survey is clustered at the Reera level, an administrative unit in Ethiopia containing approximately 100-300 households.³ Population censuses in some Reera were available from the IBLI Borena Herd Mortality History Survey conducted by ILRI and Cornell University in 2011, which formed the backdrop of Reera selection to simplify logistics. Other Reeras were added to this list to maximize geographic distribution and capture agro-ecological and livelihood variation in the eight southernmost Woredas of Borena Zone where IBLI would be offered. Reeras inaccessible by vehicle were excluded for logistical and cost reasons (see Figure 2).⁴

Figure 2. IBLI Borena Household Survey Sites and Households



Note: This map represents most of the Borena Zone, save a few Woredas located to the north of our Study Site areas that are mostly not pastoral.

³ The next largest administrative unit is Kebele, followed by Woredas, then Zones. Ollaas are sub-Reeras.

⁴ Note that Reeras were not selected randomly and therefore cannot be said to be representative of Borena Zone, Woredas, or Kebeles from which they were drawn. Reera-level population data outside of the selected Reeras is not available and therefore survey weights, if used, apply only to the selected Reeras and will not be statistically valid for conclusions outside of the sample. Logistical issues, including difficult to reach households and impassible roads, during the IBLI Borena Herd History Mortality Survey in February 2011 brought about by using the Kebele as the unit of analysis forced the IBLI team to use the Reera as the Study Site level in this larger household survey.

Table 5. Number of sampled households in the selected Study Sites

Study Site ID	Woreda (Ana)	Kebele (Ganda)	Reera(s)	# of households in population list	# of sampled households (15% but minimum 25 HHs)	# of interviewed households		
						R1	R2	R3
1	Arero	Hirmaye	Oblo	267	40	41	39	40
2	Arero	Wachille	Taka Bulti and Elfatu	188	28	28	28	28
3	Arero	Web	Gaddaa Ejersa	205	30	29	29	28
4	Dhas	Gorile	Irbi	143	25	25	25	25
5	Dillo	Elama Dima	Obok	137	25	25	24	25
6	Dillo	Magole	Chamari, Funan Guba, and Huluqo	261	39	39	39	39
7	Dillo	Qancharo	Malata and Hidimtu	175	26	25	22	26
8	Dire	Dambala Dhibayu	Bokosa	126	25	25	25	25
9	Dire	Magado	Arido, Qora, and Tumsa	148	25	25	24	25
10	Moyale	Gofa	Dhibayu	166	25	25	24	25
11	Teltele	Dibe Gaya	Kiltiphe	191	28	18	18	18
12	Teltele	Saba	Qobo	156	25	25	25	25
13	Teltele	Sarite	Shomo	296	44	44	43	43
14	Yabello	Dambala Saden	Siqu/Siku	184	27	25	26	26
15	Yabello	Harbororo	Harboro and Gara Buya	209	31	31	31	31
16	Yabello	Iddi Halle	Siltacho	330	49	49	48	49
17	Miyo	Baha	Xache Godana and Coqorsa	241	36	36	36	36
Total				3,423	528	515	506	514

Note: While sampling was done at the Reera level, Kebeles are unique to the Study Site IDs and, therefore, the Kebele names are used in the survey and codebook to refer to the Study Sites given the combining of Reeras into one Study Site.

For the selected Reeras, local government development agents (DAs) were deployed in 2012 to compile household rosters containing the name of the household head and livestock holdings.⁵ After stratifying households based on livestock ownership level terciles, a proportional random sample of 15 percent of the total population in the Reera was drawn, a third of the sample from each of the livestock terciles, based on a Tropical Livestock Unit (TLU aggregate).⁶ In order to ensure a large enough sample in each Reera, a minimum rule of 25 households per Reera was implemented. Where 15 percent of households

⁵ Households were defined as “a group of people who live in the same homestead (which may consist of more than a single dwelling) and share food and other items bought from a common household budget.” In the context of polygamous marriages, one husband can have multiple wives and each wife may or may not have a separate household.

⁶ The number of livestock herded by a household was aggregated using TLUs based on cattle, camel, and shoats (sheep and goats) only. 1 TLU is equivalent to 1 cow, 0.7 camel, 10 goat, or 10 sheep. With the TLU aggregate, households were divided equally into three TLU classes at the 33.3 percent and 66.7 percent terciles within each Study Site in order to ensure enough households in the low, medium, and high TLU levels, respectively.

in one Reera did not meet the 25 household minimum, neighboring Reeras were combined into a single sampling unit, making a total of 17 sampling units, hereafter referred to as Study Sites. Table 5 displays the 17 Study Sites and numbers of sample households in each Study Site. 528 households were sampled for inclusion in round 1 but, due to logistical challenges, only 515 were interviewed. Across the first three survey rounds, 467 households are consistently interviewed (the balanced panel). In order to maintain a robust sample size, new households were added to replace lost households rounds 2 and 3, details on which are provided in Section 2.2.

2.2. Procedure for Replacing Households

Throughout all three survey rounds, the same procedure for household replacement into the sample was used. Due to the inability to find some of the chosen households using the sampling procedure described in Section 2.1, the field teams in round 1 randomly chose a few replacement households that fell into the same TLU tercile within that Study Site, based on the original population and livestock census conducted in 2012. Some care was taken to wait for households that were simply away from their household for a short time period (generally less than three days), but the field teams made no effort to track households said to be away for an extended period of time.

During implementation of rounds 2 and 3, the same TLU tercile-based replacement strategy within Study Sites was employed when previously surveyed households were not found at data collection time, again relying on the original population and livestock census. In round 3, an effort was made to find and interview households that were previously lost in round 2, adding 12 households back to the sample. More details on the number of lost and replacement households within each Study Site and follow-up round can be found in Table 6.

Table 6. Number of lost and replaced households in follow up survey rounds

Study Site ID	Kebele Name	Round 2		Round 3		
		# of lost HH	# of replacement HH	# of lost HH	# of replacement HH	# of HH lost in R2 but found in R3
1	Hirmaye	2	2	2	2	1
2	Wachille	4	4	0	0	0
3	Web	0	0	1	0	0
4	Gorile	1	1	0	0	0
5	Elama Dima	0	0	0	0	1
6	Magole	0	1	1	0	1
7	Qancharo	2	2	1	2	3
8	Dambala Dhibayu	1	1	0	0	0
9	Magado	2	2	0	0	1
10	Gofa	5	5	0	0	1
11	Dibe Gaya	3	3	0	0	0
12	Saba	0	0	0	0	0
13	Sarite	1	2	2	0	2
14	Dambala Saden	0	0	0	0	0
15	Harbororo	2	2	0	0	0
16	Iddi Halle	2	3	1	0	2
17	Baha	4	4	0	0	0
Total		29	32	8	4	12

2.3. Weighting Factors

Household level data can be weighted using the included survey weights (see file "S0 Household Identification Information") to create statistics representative of the population and livestock holding distribution at the Reera, and therefore Study Site, level. Because the sample of Reeras is not random within Kebeles, Woredas, or the overall Borena Zone, the weights only allow population representation at these two levels. These household weights were calculated (and re-calculated for re-interviewed households) after each survey round using the population and livestock census conducted by the IBLI team in 2012.

The sampling weight (the probability weight) of a household with TLU class j in Study Site i (w_{ij}) is the product of the inverse of the sampling fraction:

$$w_{ij} = \frac{N_{ij}}{n_{ij}}$$

where

n_{ij} is the number of sampled household with TLU class j in Study Site i , and

N_{ij} is the number of household with TLU class j in Study Site i from the population list.

3. Encouragement Design

To stimulate uptake of IBLI and construct a treatment-and-control quasi-experimental monitoring and evaluation design, three different encouragement tactics were offered to randomly selected sub-populations during some of IBLI sales periods: (1) the distribution of discount coupons and the dissemination of information about IBLI through (2) skit tapes and (3) cartoons, the latter two of which are collectively referred to as "learning kits" more broadly. More details on the design of each of these tactics as well as how implementation worked in practice are explained in the following subsections.

3.1. Discount Coupons

For the dual purpose of providing exogenous price variation in our analysis and encouraging IBLI uptake among Borena households, coupons were distributed that provided discounts ranging from 10 to 100 percent of the cost of purchasing IBLI for the first 15 TLU insured (see Figure 2 for an example).

For the 20 households participating in not only this IBLI Borena Household Survey but also the IBLI Borena Herd Migration Household Survey⁷, half of that full sample (10 households) received the full 100 discount coupon. For the remaining households not participating in the IBLI Borena Herd Migration Household Survey, 80 percent within each Study Site randomly received a discount coupon ranging from 10-80 percent, at 10 percent intervals. The remaining 20 percent of households within each Study Site did not receive discount coupons. Table 7 provides more detail on this coupon distribution design. This random assignment of coupons was iterated at each of the four sales periods conducted to date.

⁷ For details on the IBLI Borena Herd Migration Household Survey, contact Russell Toth (email: russell.toth@sydney.edu.au).

Figure 2. Example of an IBLI discount coupon



Table 7. Distribution of IBLI discount coupons

Portion of full sample	Portion of sub-sample	Percent discount from coupon
IBLI Herd Migration Household Survey (20 households)	10 households	100
	10 households	No coupon
All remaining households	10 percent of remaining sub-sample in each Study Site	10
	10 percent of remaining sub-sample in each Study Site	20
	10 percent of remaining sub-sample in each Study Site	30
	10 percent of remaining sub-sample in each Study Site	40
	10 percent of remaining sub-sample in each Study Site	50
	10 percent of remaining sub-sample in each Study Site	60
	10 percent of remaining sub-sample in each Study Site	70
	10 percent of remaining sub-sample in each Study Site	80
	20 percent of remaining sub-sample in each Study Site	No coupon

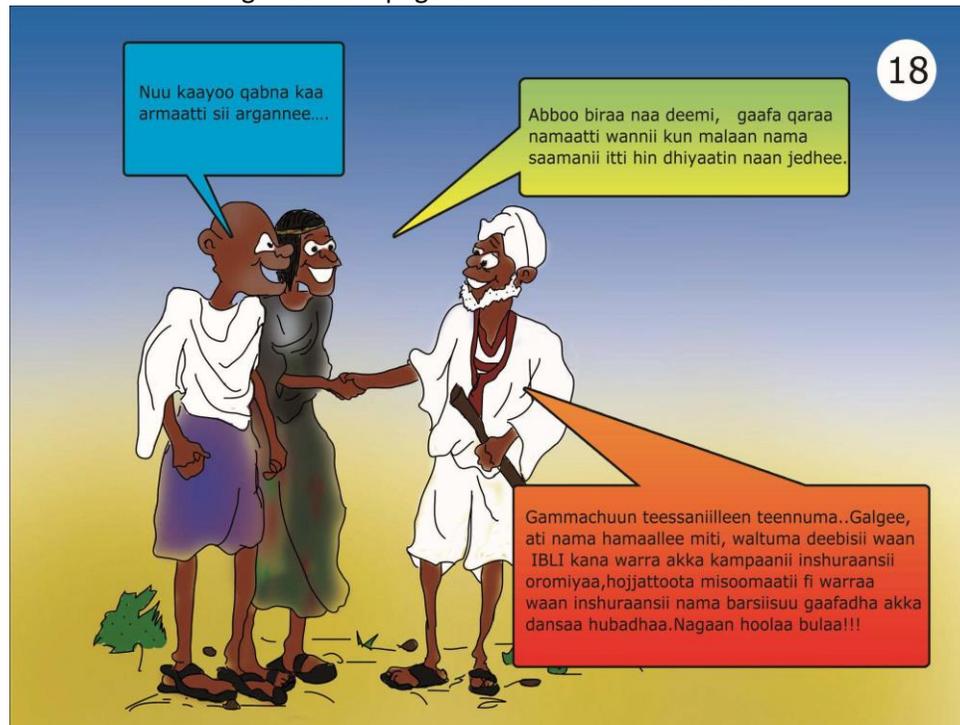
3.2. "Learning Kits:" Skit Tapes and Cartoons

In order to increase knowledge about the IBLI product, encourage uptake, and study the effects of different encouragement tools, skit tapes and cartoons, together referred to as "learning kits," were assigned to households.

Skit Tape: A tape-recorded skit was prepared by Oromia Insurance Company (OIC) during the launch of IBLI. Development Agents (DA) were asked to play the skit tape using a hand-held tape player to treatment households either at their house or to a group of individuals at a community meeting.

Cartoon: A caricature representation of the IBLI Kenya Marsabit product was developed by ILRI and the UAP Insurance Company.⁸ ILRI and OIC revised the cartoon to be relevant to the IBLI Borena product. Development Agents (DAs) were asked to read and show the contents to treatment households and to allow the household members to look through the cartoon as many times as they desired. See Figure 3 for an example from the last page of the cartoon book.

Figure 3. Last page of the IBLI Borena cartoon



In order to assign these two knowledge tools to our study households, a two-stage random assignment was used. First, the 17 Study Sites were categorized into the three clusters based on community level observable characteristics and then were randomly assigned to a treatment group (i.e., skit tape, cartoon, no treatment), ensuring that at least one Study Site within the three clusters did not receive treatment. The first stage clustering of Study Sites relied on the following three attributes:

- **Market Accessible:** This group contains sites located within a 10 km radius from major livestock markets in the towns of Dubluq and Haro Bake. These markets offer pastoralists an opportunity for timely offtake of livestock in the event of a drought. The grouped Study Sites include Iddi Halle, Dambala Saden, Harboro, and Dambala Dhibayu.
- **Sparse Rainfall:** This group contains Study Sites that routinely suffer severe lack of rainfall and are therefore most affected by drought and constraints suppressing livestock population growth. This cluster consists of Magole, Qancharo, Magole, Gofa, and Baha.
- **Mostly Pastoral:** This group contains the more remote areas that are far from functioning livestock markets. As a result, most of these households hold larger herd sizes and depend almost entirely on their livestock for subsistence. The grouped Study Sites include Web, Wachile, Dibe Gaya, Sarite, Saba, Gorile, Hirmaye, and Ella Dima.

⁸ For the full IBLI Marsabit cartoon (in English), see https://cgspace.cgiar.org/bitstream/handle/10568/3873/ibli_cartoonseries.pdf.

Table 8 shows the clustering of Study Sites and the distribution of knowledge-based treatments for the August-September 2012 and January-February 2013 sales periods. Second, within each Study Site, we randomly assigned the treatment to 50 percent of the surveyed households. This process was done separately for each sales period. Cartoon and skit tape treatments were not used in the August-September 2013 or January-February 2014 IBLI sales periods.

Table 8. Distribution of cartoon and skit tape by survey sites

Cluster	Kebele Name	Study Site ID	Aug-Sep 2012			Jan-Feb 2013		
			Cartoon	Skit Tape	No Treat	Cartoon	Skit Tape	No Treat
1 Market Accessible	Iddi Halle	16	1			1		
	Dambala Saden	14		1				1
	Harboro	15			1	1		
	Dambala Dhibayu	8	1					1
2 Sparse Rainfall	Magole	6		1				1
	Qancharo	7			1		1	
	Magado	9	1				1	
	Gofa	10		1				1
	Baha	17			1	1		
3 Mostly Pastoral	Web	3	1				1	
	Wachile	2		1		1		
	Dibe Gaya	11			1		1	
	Sarite	13	1			1		
	Saba	12		1			1	
	Gorile	4			1	1		
	Hirmaye	1	1					1
Ella Dima	5		1		1			

Note: These “learning kit” encouragement interventions were only tested in the two IBLI sales periods represented in this table. The columns “No Treat” refer to those study sites that received no learning kit intervention.

3.3. Encouragement Design in Practice

Field reports indicate that the implementation of the encouragement design described above was not perfect. ILRI staff learned that some DAs did not implement these random assignments rigorously during the first sales period. Starting in the second sales period, hired consultants and ILRI staff assumed some of these activities to improve the quality of implementation. Because of these anecdotes as well as a general concern about the potential for recall error, we include both the “intent to treat” variables based on the planned encouragement design as well as the household responses to whether they received each treatment in the data file “S7B IBLI Contract Details.”

4. Survey Implementation

All three rounds of the household questionnaires were administered using SurveyBe, a computer assisted interviewing software, as opposed to a paper-based tool, which has implications for enumerator training and survey implementation as described below. This software allows that the

questionnaire be designed with numerous validation checks, which help supervisors, enumerators, and interviewees to collect data with less inconsistent answers and data entry errors.

4.1. Enumerator Selection and Training

A list of potential enumerators was sourced from the Borena Zone Civil Service Office, which keeps records of graduates waiting to be employed. Key requirements for enumerator selection were:

- Fluency in English and *Afaan Oromo* with strong Borena dialect
- University graduate in any field
- Knowledge of local culture, pastoralist economies and the Gada Calendar
- Must be from one of the research sites
- Thorough probing skills
- Prior experience in survey work was an added advantage

Enumerator training spans two weeks and is done in English with limited use of the Oromo language. Most of the training is focused on understanding and how to properly administer the questionnaire. Because the questionnaire is administered using a computer, with which not all enumerators are sufficiently familiar, the training also includes essentials on how to operate the devices in addition to specific details on how to navigate through the SurveyBe screens, input data, and perform validation checks.

The final portion of the training involves a day for pre-testing of the questionnaire in a non-Study Site (before final revision of the questionnaire) and enumerator evaluation, after which some enumerators are dropped based on the training performance, working knowledge of IBLI, and understanding the sampling design the household replacement procedures. During field work, supervisors can drop any enumerator with serious data quality issues, poor team skills, or discipline problems at any time.

4.2. Field Work

After the intensive training, interviews begin and, for the first three days, enumerators conduct only one interview per day. This allows enumerators to familiarize themselves further with the questionnaire and improve their probing skills. Before leaving a Study Site, supervisors check through and approve questionnaires. When supervisors find missing or obviously wrong entries, enumerators are sent back to interviewed households to correct missing or wrong entries. By the end of the first three days of interview implementation, most enumerators master the tool and are comfortable moving on to two interviews per day.

Round 2 survey implementation was delayed and began at the start of the rainy season in March 2013 (as shown in Table 1) because the Nairobi-based ILRI staff were prohibited from working during the security precaution period around the elections in Kenya. This raised numerous logistical challenges, and the number of study households decreased from 515 to 506 as in Table 5. Regardless of timing of implementation, the reference period for questions related to production in the questionnaire for all survey rounds were kept as the time period of from March (the beginning of long rainy season) to February (the end of short dry season).

5. Household Questionnaire and Data Use

Once a questionnaire is approved by a supervisor in the field, the data is saved and immediately backed up. Due to poor internet connection while in the field, most of SurveyBe files were converted to Stata data files after returning to the ILRI office in Nairobi. Basic organizing and data cleaning for each survey round were done immediately after field work and file conversion by Nairobi-based ILRI staff.

Formatting the three rounds for use as a panel data set, during which no data was altered or replaced, was completed between April to August 2014 by a team ILRI and Cornell University researchers. The remainder of this section provides details necessary to understand and correctly utilize the resulting Stata files for research purposes.

5.1. Unique Identifiers

In Section 5.3 below, the variables necessary to uniquely identify a case are provided for each section and sub-section of the survey. Throughout all of the Stata files, households can be identified using the variable “hhid,” a unique ID assigned to each interviewed household that is consistent over all rounds. The first 1-2 digits of this variable correspond to the Study Site ID and the last two digits are the household ID within each Study Site. For example, the household with ID 124 is the 24th household in the 1st Study Site whereas the household with the ID 1714 is the 14th household in the 17th Study Site. Household member IDs are also consistent between rounds. Those instances when an identifier is not consistently observed and matched between survey rounds (e.g., interviewer/enumerator IDs) are noted in the tables provided in Section 5.3.

5.2. Missing Data

There are various forms of missing values throughout. Table 9 shows the codes for various type of missing values contained within the Stata files. By using these codes consistently, we avoid the confusion of interpreting the different type of missing values. Note that if and when there was a row (observation) with all “Not applicable” (“.” and “”) in a particular file, then we dropped these rows (observations) in order to decrease data size. We recommend that data users treat such missing values as “Not applicable” rather than “Narrowly-defined missing value” although some of them can be missing values of “Narrowly-defined missing value.”

In addition, there are certain households for which entire sections of the survey contained missing data. Instead of discarding the entire survey for those households, we kept the data from complete sections but make note of these entirely incomplete sections in Table 10.

Table 9. Missing value types and definitions

Code	Variable type	Name	Notes
“.”	Numeric	Not applicable	Enumerator followed the questionnaires’ skip patterns and did not ask a question deliberately.
“” (blank)	String		
“-98”	Both numeric and string	Don’t know	Enumerator asked a question but respondent did not know the answer to the question.
“-77”	Both numeric and string	Narrowly-defined missing value	Value missed due to one of the following unfortunate reasons: <ul style="list-style-type: none"> • respondent refused to answer to the question • interviewer forgot to ask the question • value was lost due to unknown reason

Table 10: Households with missing data by section and survey round

Section/sub-section name	R1	R2	R3
0 - Household Identification Information			
1 - Household Information			
2 - Household Roster			
3 – Education			
4 - Economic Roles and Individual Mobility			
5 - Health (and Child Health)			
6A - Livestock Stock		1334 (shoats)	
6B - Livestock Accounting			
6C - Livestock Loss			
6D - Livestock Intake		431, 1613	
6E - Livestock Offtake	1648		
6F - Livestock Birth			
6G - Livestock Slaughter			
6H - Milk Production			
7A - IBLI			
7B – IBLI Insurance Details			
8A - Main Livelihoods Activities			
8B - Livelihood Activities and Cash Income			
9A - Cash and In-Kind Transfers			
9B - Other Assistance			
10 - Herd Migration and Satellite Camps			
11A – Network Groups		1507	
11B – Perceptions and Expectations		1507	1529
11C – Subjective Welfare		1507	1529
11D – Risk Perception	111, 115, 116, 126, 139, 143, 145, 148, 1630		507, 715, 1606
12A - Weekly Food Consumption Expenditures		1507	
12B - Other Non-Food Expenditures	1427, 1648	1507	
12C - Livestock Expenditures	1427, 1648	1507	
13 - Housing and Amenities	1648	1507	1526
14A - Other Livestock	1648	1507	
14B - Land	1648	1507	
14C - Crop Production			
14D - Other Assets			
15 - Saving, Borrowing, Lending	1648	1507	1529
16 - Experiment of Risk Preference			

5.3. Data Files and Variable Descriptions

The series of tables that follow provide the names of the relevant data files, variable names, variable descriptions, and in which rounds each variable was collected by section and sub-section. The data user is encouraged to refer to the SurveyBe questionnaire report for each survey round, which shows the complete order, skipping pattern, and text for all questions. To more easily decipher to which set of households each question was asked without referring to the SurveyBe questionnaire reports, Table 11 contains reference codes for the sub-groups of households as they appear in the last three columns (i.e., by survey round) in the tables for each survey section and sub-section that follow.

Table 11. Codes for categorizing sub-groups of households and type of variables

Code	Sub-group	Description
P	Panel households	Those households that were interviewed more than once over the course of the survey
N	New households	Those households that were not interviewed in the previous round and added to the survey as replacement households
B	Both panel and new households	All households
R	Reference data	This is: <ul style="list-style-type: none"> • data from original reference tables (e.g., TLU class, Household ID), • ID numbers that were assigned in a sequence (e.g., Household Member ID, Child ID, Offtake Transaction ID, etc), or • data from outside of questionnaire (e.g. discount percentage on discount coupons we intended to distribute)
-	Data not collected for any households	

BASIC HOUSEHOLD INFORMATION

File: "SOA Household Identification Information.dta"

Uniquely identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
study_site	Study Site	R	R	R
TLU	TLU class	R	R	R
weight	Sampling weight (probability weight)	R	R	R
panelnewhh	1 if household is new or replacement, 2 if it is repeat	R	R	R
woreda	Woreda	R	R	R
Consent_new	Did you obtain the consent from the interviewee?	N	N	N
Interview_time_date	Interview start time	N	N	N
interviewer	Interviewer ID	N	N	N
HH_head_yn	Is the household head still this person?	N	N	N
HH_head_new	If no, who is the current household head? (member ID)	N	N	N
HH_head_tribe	Tribe	N	N	-
HH_head_clan	Clan	-	-	N
HH_subclan	Sub-clan	-	-	N
HH_subclan_other	If other, specify sub-clan name.	-	-	N
HH_subclan_subdivision	Sub-clan sub-division	-	-	N
HH_subclan_subdivision_other	If other, specify sub-clan sub-division name.	-	-	N
HH_Ardaa	Do you know your Ardaa? ⁹	-	-	N
HH_Ardaa_specify	If yes, could you please tell us your Ardaa?	-	-	N
HH_Hariyaa	Could you please tell us the house head's Hariyaa? ¹⁰	-	-	N

⁹ Ardaa is a community unit which consists of a few Ollaa and is different from Reera.

¹⁰ Hariyaa (direct translation from Oromiffaa is "same age") is a male-specific age-set system consisting of 10 eight year blocks from roughly ages 19 to 98 (based on informal conversation with community members in our sample). Members of an age-set (males born in same 8-year period) share an identity that evolves over their lifetime and share a series of military, economic, ritual, and political responsibilities.

Variable	Description	R1	R2	R3
HH_Hariyaa_other	If other, specify the Hariyaa	-	-	N
Reera	Reera	N	N	N
Reera_Other	Reera Other (specify)	N	N	N
Ollaa	Ollaa	N	N	N
Ollaa_Other	Ollaa Other (specify)	N	N	N
Contact_yn	Do you or anyone you know have a phone by which you can be contacted	N	N	N
relationhead	How does the person relate to the household head?	N	N	N
Contact_relation_to_head_other	If other, specify relationship	-	-	N
Consent	Did you obtain the consent from interviewee?	-	P	P
interview_time	Interview start time	-	P	P
Interviewer_current	Interviewer ID	-	P	P
HH_head_spelling	Is the household head name correctly spelled?	-	P	P
Headchange	Did the head change since the last year interview?	-	P	P
New_HH_head_ID	member ID of the new household head	-	P	P
Interviewee_Same	Is the main interviewee the same as in end of February of the previous year?	-	P	P
husband_status	What is the status of your husband? ¹¹	-	-	P
husband_status_other	Status of the husband other specify	-	-	P
Consumption_Interviewee_Same	Is the consumption interviewee the same as the last year interview?		P	P
Supervisor_Decision	If either interviewee is not the same, supervisor explain decision to proceed:	-	P	P
Interviewee_ID	Member ID for main interviewee	-	P	P
Interviewee_ID_consumption	Member ID for interviewee for consumption	-	P	P
reera_previous	Was this the right Reera in end of February of the previous year?	-	P	P
reera_confirmed	If No, what was the correct Reera?	-	P	P
reera_confirmed_other	If other, what was the correct Reera name?	-	P	P
Moved_reera	Has your household moved to a new Reera since March of the previous year?	-	P	P
New_reera	If yes, what is the new Reera?	-	P	P
new_reera_other	If other, what is the new Reera name?	-	P	P
olla_previous	Was this the right Olla in end of February of the previous year?	-	P	P
olla_confirmed	If No, what was the correct Olla?	-	P	P
olla_other	If other, what is the name of the correct Olla?	-	P	P
Moved_Olla	Has your household moved to a new olla since March of the previous year?	-	P	P
New_Olla	If yes, what is the new Olla?	-	P	P
New_olla_moved_other	If other, what is the name of the new Olla?	-	P	P
reason_move	Why did the household last move?	-	P	P
Other_reason_moved	If other, specify the reason.	-	P	P
clan_previous	Was this the right clan in end of February of the previous year?	-	-	P
clan_confirmed	If no, what is the right clan?	-	-	P
sub_clan	Which sub_clan do you belong to?	-	-	P

¹¹ This question was asked in R3 in order to understand the nature of households that previously reported being headed by a married female.

Variable	Description	R1	R2	R3
sub_clan_specify	If other, specify sub-clan	-	-	P
sub_clan_sub_division	Which sub-clan sub-division do you belong to?	-	-	P
sub_clan_sub_division_other	If other, specify sub-clan sub-division name	-	-	P
Ardaa	Do you know your Ardaa?	-	-	P
Ardaa_specify	If yes, could you please tell us your Ardaa?	-	-	P
Hariyaa	Could you please tell us the house head's Hariyaa (age-set)?	-	-	P
Hariyaa_other	If other, specify Hariyaa name	-	-	P
moved500m	Has the household's home stead moved more than 500 meters from where the household was located in March of the previous year?	-	P	P
s2q19	Has anyone joined the household?	-	P	P
interviewee_roster	Member ID of main interviewee	N	B	B
cattle_marriage	How many total cattle did you start out with when you married?	-	-	B
Horii_animals	Of the total cattle you started out with, how many were horrii siiqqee? ¹²	-	-	B
lossAccountedYN	Have all of the livestock losses been accounted for?	N	B	B
IntakeAccountedYN	Have all of the livestock losses been accounted for?	N	B	B
OffAccountedYN	Have all of the livestock offtake been accounted for?	N	B	B
BirthYN	Have all of the born livestock been accounted for?	N	B	B
SlaughterYN	Have all of the livestock been accounted for?	N	B	B
s9q1	Has your household received any CASH from any other households as a gift?	N	B	B
s9q2	Has your household given any CASH to any other households as a gift?	N	B	B
s9q3	Has your household received any in-kind transfers?	N	B	B
s9q4	Has your household given any in-kind transfers?	N	B	B
s9q8	Did anyone in your household participate in an employment programme that food or cash for work from March last year to Feb this year (NGO or government programme providing employment as a way to channel aid for people who don't have any other source of livelihood)?	N	B	B
nw_codeintervieweeconsption	Member ID of interviewee for consumption	N	B	B
Interview_End_Time	Interview end time	N	B	B
supervisor	Supervisor ID	N	B	B

Note: New/replacement households and repeat/panel households are often asked the same questions but the data is stored in different files due to the SurveyBe screen structure, hence the appearance of repeated variable names. Variables s2q19-supervisor are household level questions from other questionnaire sections moved to this data file when the corresponding section has a data file at a level other than household. ID numbers included in the variables interviewer (meaning enumerator), Interviewer_current, and supervisor are not consistent over survey rounds since field team composition changed over time.

¹² Horrii Siiqqee is the total cattle that were given to wife by her husband and her father at the time of marriage. Though camels/shoats are given at marriage, horrii siiqqee refers to only cattle.

COMMENT FILE

File: "S0B Comment.dta"

This file contains all of the comments that enumerators made about specific data entries while the survey was being conducted. In each of the other data files, a binary variable called "comment" has been added to indicate that a particular observation has comment text in this file. You can then locate that comment in this file using the long list of unique identifying variables, "TableName" variable (in R2 and R3 only), and "VariableName" variable. However, note that the entry in "VariableName" might not necessarily match the variable name in the other data files in all cases since some variable names have been changed in the cleaning and panel creation process. The text contained in the "Entry" variable represents the comment that the enumerator left.

HOUSEHOLD INFORMATION

File: "S1 Household Information.dta"

Uniquely identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	R	R	R
s1q2	Household's main religion	N	N	N
s1q3	Household's settlement status	N	B	B
s1q4a	Number of years household has been in current location	N	N	N
s1q4b	Number of months household has been in current location	N	N	N
s1q6	Why did the household last move?	N	N	N
s1q6a	Why did the household move to this spot?	N	N	N
s1q6b	Reason why the household moved (specified)	N	N	N
s1q7	From where did the household last move?	N	N	N

HOUSEHOLD ROSTERS

File: "S2 Household Rosters.dta"

Uniquely identifying variables: hhid, round, memberid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	R	R	R
memberid	Member ID	R	R	R
s2q5	Relationship of the household member to the household head	N	B	B
s2q5b	Other relation with head	N	B	B
s2q2	Gender of the household member	N	B	B
s2q3	Age of the household member in years	N	B	B
s2q20	Why did this person join this household?	-	P	P
s2q20b	Other reason joined	-	P	P
s2q17	Why did member leave this household?	-	P	P
s2q17b	Other reason left	-	P	P
s2q18	How many months was member present in the household between March previous year and February this year?	-	P	P
s2q4b	Year of birth for those under 5 years	N	B	B
s2q4a	Month of birth for those under 5 years	N	B	B
s2q6	Marital status of the household member	N	B	B
s2q7	Number of wives/partners if the individual is a married man	N	B	B

Variable	Description	R1	R2	R3
s2q8a	Member id for the first wife if living in the household	N	B	B
s2q8b	Member id for the second wife if living in the household	N	B	B
s2q8c	Member id for the third wife if living in the household	N	-	-
s2q24	Husband's memberid	N	B	B
s2q21	Does the member have any biological children?	N	B	B
s2q22	If yes, do the member's biological children live in this household?	N	B	B
s2q22b	If yes, how many the member's biological children live in this household?	N	B	B
s2q23a	Child 1 roster ID	N	B	B
s2q23b	Child 2 roster ID	N	B	B
s2q23c	Child 3 roster ID	N	B	B
s2q23d	Child 4 roster ID	N	B	B
s2q23e	Child 5 roster ID	N	B	B
s2q23f	Child 6 roster ID	N	B	B
s2q23g	Child 7 roster ID	N	B	B
s2q23h	Child 8 roster ID	N	B	B
s2q9	Is household member's biological father alive (for children under 18)?	N	B	B
s2q10	Does household member's biological father live in this household?	N	B	B
s2q11	Biological father's memberid	N	B	B
s2q12	Is the household member's biological mother alive? (for children under 18 only)	N	B	B
s2q13	Does the household member's biological mother live in this household?	N	B	B
s2q14	Biological mother's memberid	N	B	B
hv_s2q6	Previous marital status	-	R	R
s2q25	Did member change his/her marital status between March previous year and Feb this year	-	P	P
s2q26	If yes, what is his/her present marital status?	-	P	P

EDUCATION

File: "S3 Education.dta"

Unique identifying variables: hhid, round, memberid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
memberid	Member ID	R	R	R
skip_s3_new	1 if s3q1-s3q13 are skipped, 0 otherwise	R	R	R
s3q1	Can this member write a simple letter with several sentences in English?	N	B	B
s3q1a	Can this member write a simple letter with several sentences in Oromiffa?	N	B	B
s3q2	Has this member ever attended school or any other type of education facility?	N	B	B
s3q3	Why has this member never attended school or any other education facility?	N	B	B
s3q3b	Specify reason why member never attended school	N	B	B
s3q4	What type of school/education facility did/does [member name] attend? ¹³	N	B	B
s3q4b	Other type of school facility attended	N	B	B
s3q5	At what age did [member name] first enroll in school/educational facility?	N	B	B

¹³ "Adult Education" in this variable represents a non-standard set of programs that tend to be focused on literacy and numeracy with the goal of allowing individuals to access extension-like services related to farming and livestock production. For those who attend adult education, educational attainment is arbitrary due to the high variation in adult education programs. For R3, enumerators were instructed to report educational attainment of "Adult Education" for those who attend adult education.

Variable	Description	R1	R2	R3
s3q6	What is the highest grade [member name] has attained?	N	B	B
s3q6b	Highest grade other	N	B	B
s3q7	Is [member name] currently attending school? (This academic year, or about to start)	N	B	B
s3q8	Why is [member name] not currently in school? ¹⁴	N	B	B
s3q8b	Other reason why member is not in school	N	B	B
s3q10	Does [member name] receive school feeding?	N	B	B
s3q11	Was [member name] absent from school for any period(s) during term time in the last 12 months?	N	B	B
s3q12	What was the main reason for [member name] absences from school during the past 12 months?	N	B	B
s3q12b	Specify other reason why not in school	-	B	B
s3q13	Roughly how many school days did [member name] miss in the past 12 months?	N	B	B
skip_s3_old	1 if s3q14-s3q23 are skipped, 0 otherwise	-	R	R
s3q14	Can this member write a simple letter with several sentences in English?	-	B	B
s3q24	What is the highest grade [member name] has attained?	-	-	B
s3q24b	Highest grade other (specify)	-	-	B
InSchool ¹⁵	[member name] was in school in March in the previous year or not	-	R	R
hv_s3q6	Is the educational status for [member name] last year correct?	-	B	B
s3q15	Was this member a student in April the previous year?	-	B	B
s3q16	Did [member name] stop going to school between April (the previous year) and March (current year)	-	B	B
s3q17	Why did member stop going to school?	-	B	B
s3q17b	other reason why member stopped going to school	-	B	B
s3q18	Did [member name] enter or rejoin school between April (the previous year) and March (current year)	-	B	B
s3q19	What kind of school/education facility did/does [member name] attend between April previous year and March current year?	-	B	B
s3q19b	Other type of school/educational facilities specified	-	B	B
s3q20	Does [member name] receive school feeding?	-	B	B
s3q21	Was [member name] absent from school for any period(s) during term time in the last 12 months?	-	B	B
s3q22	What was the main reason for [member name] absences from school during the past 12 months?	-	B	B
s3q22b	Specify other reason why absent from school	-	B	B
s3q23	Roughly how many school days did [member name] miss in the past 12 months?	-	-	B

Note. s3q1-s3q13 are questions for the members who have not asked those question in the past. s3q14-s3q23 are questions for the members who have already asked s3q1-s3q13 in one of the previous rounds.

ECONOMIC ROLES AND MOBILITY

File: "S4 Economic Roles and Mobility.dta"

Unique identifying variables: hhid, round, memberid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	R	R	R

¹⁴ In Round 1, s3q8 was asked if the response to s3q7 is "No" and member's age is less than 30. In Round 2 and 3, s3q8 was asked if s3q7 is "No" only.

¹⁵ "InSchool" is data from the previous survey round in order to confirm the data by asking hv_s3q6.

Variable	Description	R1	R2	R3
memberid	Member ID	R	R	R
skip_s4	1 if S4 is skipped, 0 otherwise ¹⁶	-	R	R
s4q1	What is [member name]'s primary activity between March previous year and Feb current year? ¹⁷	N	B	B
s4q1b	Specify other primary activities	N	B	B
s4q2	How many hours per day did [member name] engage in this primary activity between March previous year and Feb current year?	N	B	B
s4q3a	Years engaged in primary activity	N	B	B
s4q3b	Months engaged in primary activity	N	B	B
s4q4	What is [member name]'s secondary activity between March previous year and Feb current year?	N	B	B
s4q4b	Specify other secondary activity	N	B	B
s4q5	How many hours per day did [member name] engage in this secondary activity on average	N	B	B
s4q6	Has [member name] been absent from the household for any time in the last 12 months?	N	B	B
s4q7a	Number of months member was absent from household in the last 12 months	N	B	B
s4q7b	Number of weeks member was absent from household in the last 12 months ¹⁸	N	B	B
s4q8	Why was [member name] absent?	N	B	B
s4q8b	Why absent other	-	-	B

HEALTH

File: "S5A Health.dta"

Unique identifying variables: hhid, round, memberid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
memberid	Member ID	R	R	R
skip_s5q1_10	1 if s5q1 - s5q10 are skipped, 0 otherwise ¹⁹	-	R	R
s5q1	Does this person suffer from any permanent disabilities?	N	B	B
s5q3	Has this person suffered from an illness that has lasted or is expected to last 3 months or more?	N	B	B
s5q5	Apart from any permanent disability or chronic illness, has this member suffered any illness or injury in the last 3 months?"	N	B	B
s5q2	What is the main permanent disabilities is [member name] suffering from?	N	B	B
s5q2b	Specified disability	-	B	B
s5q4	What chronic illness did/does this person suffer from?	N	B	B
s5q4b	Specified Chronic illness	-	B	B

¹⁶ All questions in Section 4 are skipped if a member was passed away in the last 12 months or left his/her household 8 month ago or earlier.

¹⁷ Categories "Herding (household-owned livestock)" and "Livestock production (e.g. milking, sale of livestock products)" are problematic, given that both categories are related to livestock production. Definition as of R3 puts milking, milk production activities, and production of other livestock products in "Livestock production" while all herding, watering, and fodder-collection fall into the "Herding" category.

¹⁸ If household member is absent for less than 4 days, this is recorded as 0. Enumerators were instructed to also leave a comment in the comment file.

¹⁹ Variables s5q1 –s5q10 are skipped if a member was passed away in the last 12 months or left his/her household 8 month ago or earlier.

Variable	Description	R1	R2	R3
s5q6	What was the other illness or injury this person suffered from in the last 3 months?	N	B	B
s5q6b	Specify other chronic illness or injury	-	B	B
s5q7	How many days was [member name] unable to do normal activities because of this illness or injury in the last 3 months? ²⁰	N	B	B
s5q8	Was a health worker consulted for this illness or injury?	N	B	B
s5q9a	Who was consulted for this illness or injury? First:	N	B	-
s5q9a2	Specify if other (for 1st consultation)	N	B	-
s5q9b	Who was consulted for this illness or injury? Second:	N	B	-
s5q9b2	Specify if other (for second consultation)	N	B	-
s5q10	What was the main reason nobody was consulted for this illness or injury?	N	B	B
s5q10b	Specified reason why no one was consulted	N	B	B

File: "S5B Child Health.dta"

Unique identifying variables: hhid, round, memberid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
memberid	Member ID	R	R	R
skip_s5q11	1 if s5q11-s5q16 are skipped, 0 otherwise	R	R	R
s5q11	Is [member name] receiving supplementary feeding (not school feeding)?	N	B	B
s5q12	Has [member name] received the BCG vaccination against tuberculosis (injection in the right arm that usually causes a scar)?	N	B	B
s5q13	For household children under the age of FIVE, I would like to measure the Mid-Upper Arm Circumference (MUAC), height, weight. May I proceed?	N	-	-
s5q13_r2	For household children under the age of FIVE, I would like to measure the Mid-Upper Arm Circumference (MUAC), height, weight. May I proceed?	-	B	-
s5q13_r3	For household children under the age of FIVE, I would like to measure the Mid-Upper Arm Circumference (MUAC). May I proceed?	-	-	B
s5q14	Measurement of [member name]'s MUAC (Mid-Upper Arm Circumference) (cm)	N	B	B
s5q15	Measurement of [member name]'s length / height (cm)	N	B	-
s5q16	Measurement of [member name]'s weight (kg)	N	B	-

LIVESTOCK

File: "S6A Livestock Stock.dta"

Unique identifying variables: hhid, round, LivestockID

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
LivestockID	Livestock type and gender ID	R	R	R
s6q1	Total number of animals currently herded by household ²¹	B	B	B

²⁰ In R1, s5q7 is enabled if (s5q3=1 or s5q5=1) and s2q3 > 6. In R2 and R3, s5q7 is enabled if s5q3=1 or s5q5=1.

²¹ In the case where animals are at satellite camp being herded by a non-household member (e.g., herd boy), but the herd boy is in constant contact with the household head about livestock management decisions, these animals are included in s6q1. Any milk production by those animals is also included, though the milk may be consumed by

Variable	Description	R1	R2	R3
s6q2	Number of herded animals that are owned by household	B	B	B
s6q16	Number of herded cattle that are horrii siiqee or descendants of horrii siiqee	-	-	B
s6q3	Number of herded animals that are adults (>=3 years for cattle/camel, >=6 months for goat/sheep)	B	B	B
s6q4	Number of herded animals that were always kept at home (never moved to satellite camp)	B	B	B
s6q5	Number of herded animals that are lactating	B	B	B
s6q6	Number of herded animals that are lactating and always kept at home	B	B	B
s6q7	Number of herded animals that are lactating and moved to satellite camp	B	B	B
s6q17	Number of animals owned by the household but not herded by household ²²	-	-	B

File: "S6B Livestock Accounting.dta"

Unique identifying variables: hhid, round, LivestockID

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey Round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
LivestockID	Livestock type and gender ID	R	R	R
Prev_herdsiz	Herd size at the end of previous reference period [Feb previous year]	-	P	P
hv_s6q1correct	Is the value of the previous year's herd size correct?	-	P	P
Reason_herdsiz_incorrect	Reason herd size is incorrect	-	P	P
s6q8	Herd Size at the beginning of March last year	N	B	B
s6q11	Livestock loss (e.g. death due to starvation)	N	B	B
s6q12	Livestock intake (e.g. purchased, received as gift)	N	B	B
s6q13	Livestock off take (e.g. sold, loaned out)	N	B	B
s6q14	Livestock births	N	B	B
s6q15	Livestock slaughters	N	B	B

File: "S6C Livestock Losses.dta"

Unique identifying variables: hhid, round, lossevent

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
lossevent	Loss event ID	R	R	R
s6q20	What month did you lose livestock between March previous year and Feb current year?	N	B	B
s6q21	What type of animal?	N	B	B
s6q22	What was the reason for this loss event?	N	B	B
s6q22b	Specified reason for the loss event	N	B	B
s6q23	At your base camp or satellite camp?	N	B	B
s6q24	How many of this animal type (camel, cattle, or goats/sheep) were lost	N	B	B
s6q25	Number of adult animals lost (3 years or more for cattle/camel, 6 months or more	N	B	B

the herd boy as a form of in-kind payment for his services to the livestock. This scenario was raised in R3 and it appears that most likely it was treated similarly in R1 and R2.

²² Includes *dabare* (defined as "loaned animals"), gifts that household has received but not yet collected, and other animals that other households are herding for this household. This figure can be added to s6q2 to get the total number of animals owned by the household.

Variable	Description	R1	R2	R3
	for sheep/goat)			
s6q26	How many lost cattle were horrii siqee?	-	-	B

File: "S6D Livestock Intake.dta"

Unique identifying variables: hhid, round, intakeevent

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
intakeevent	Intake event ID	R	R	R
s6q27	What month did you obtain/purchase livestock between March previous year and February current year?	N	B	B
s6q28	Type of animals	N	B	B
s6q29	Nature of transaction	N	B	B
s6q29b	Specified nature of transaction	N	B	B
s6q30	Number taken in	N	B	B
s6q31	Number of female animals	N	B	B
s6q32	What is the main reason for this intake?	N	B	B
s6q32b	Specified reason for the intake event	N	B	B
s6q33	From where	N	B	B
s6q34b	Total Amount spent on purchasing livestock	N	B	B
s6q34	Is this average price PER ANIMAL in case of purchased correct?	N	B	B

File: "S6E Livestock Offtake.dta"

Unique identifying variables: hhid, round, offtakeevent

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
offtakeevent	Offtake event ID	R	R	R
s6q36	What month did you have offtake between Mar previous year and Feb current year?	N	B	B
s6q37	Type of animals	N	B	B
s6q38	Nature of transaction	N	B	B
s6q38b	specified nature of transaction	N	B	B
s6q39	Number of animals offtaken	N	B	B
s6q40	Number of female animals	N	B	B
s6q41	Reason for offtake	N	B	B
s6q41b	specified reasons for offtake	N	B	B
s6q42	To where	N	B	B
s6q43a	Is the average price PER ANIMAL received in case of sold correct?	N	B	B
s6q43b	Total amount received from sales (ETB)	N	B	B
s6q44	Of the cattle offtaken how many were horrii siqee or descendants of horri siqee	-	-	B

File: "S6F Livestock Birth.dta"

Unique identifying variables: hhid, round, birthevent

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R

Variable	Description	R1	R2	R3
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
birthevent	Birth event ID	R	R	R
s6q45	What month was livestock born between Mar previous year and Feb current year?	N	B	B
s6q46	Type of animals	N	B	B
s6q47	Number born	N	B	B
s6q48	Of the calves born, how many were born to horrii siqee cattles or descendants of horrii siqee cattles?	-	-	B

File: "S6G Livestock Slaughter.dta"

Unique identifying variables: hhid, round, slaughterevent

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
slaughterevent	Slaughter event ID	R	R	R
s6q49	What month did you slaughter livestock between March previous year and February current year?	N	B	B
s6q50	Type of animals	N	B	B
s6q51	Number slaughtered	N	B	B
s6q52	What is the main reason for this slaughter?	N	B	B
s6q52b	Specified reason for slaughter	N	B	B
s6q55	Of the animals slaughtered how many were horrii siqee or descendants of horrii siqee animals?	-	-	N

File: "S6H Milk Production.dta"

Unique identifying variables: hhid, round, MilkID

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	R	R	R
MilkID	Milk ID code	R	R	R
season	Season	R	R	R
animaltype	Animal species	R	R	R
camp	Camp type (base or satellite)	R	R	R
s6q53	Did your household have milk production from (animal) in (season)?	N	B	B
s6q54	Total number of lactating animals kept at the camp	N	B	B
S6q54b	Total number of lactating animals that are milked ²³	-	-	B
s6q56	What container do you use for milking from each animal type?	N	B	B
s6q56b	Specify ml for 'other' container ²⁴	N	B	B
s6q57	How many of these containers of milk PER ANIMAL PER DAY did you produce?	N	B	B
s6q58	The answers above imply that you produced [x] liters of milk per day. Is this	N	B	B

²³ This question was added in R3 so that animals are differentiated by whether they are milked for human consumption or not. For R3, the subsequent questions (s6q56-s6q62) are calculated using this "total number of lactating animals that are milked" figure. This issue was not identified for R1 and R2, but where enumerators noticed it there may be a comment in the comment data file.

²⁴ Where container is specified as 0 ml in R2, this indicates households where milk was produced but there was no human milking or consumption. Milk was consumed entirely by baby animals. In these cases, s6q54>0, but s6q57=0.

Variable	Description	R1	R2	R3
	correct?			
s6q59	Did your household sell milk from Animal Type in Season?	N	B	B
s6q62	What container do you use for selling milk from each animal type?	N	B	B
s6q62b	Specify ml for 'other' container	N	B	B
s6q63	How many of these containers PER DAY did you sell on average from milk produced	N	B	B
s6q65	What is the average PRICE PER CONTAINER of milk sold? (Birr)	N	B	B
s6q65b	The answers above imply that you sold [x] liters of milk per week. Is this correct?	-	B	B

INDEX-BASED LIVESTOCK INSURANCE

File: "S7A IBLI.dta"

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	-	R	R
round	Survey round	-	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	-	R	R
s15q1	Have you heard of any livestock insurance being sold around?	-	B	B
s15q1a	Heard about the insurance from neighbors, friends and relative in informal groups	-	B	B
s15q1b	Heard about the insurance from DAs or other government officials	-	B	B
s15q1c	Heard about the insurance from community meetings	-	B	B
s15q1d	Heard about the insurance from survey conducted by ILRI	-	B	B
s15q1e	Heard about the insurance from NGO staff	-	B	B
s15q1g	Heard about the insurance from Oromia Insurance Company staff and/or Oromia Saving and Credits Share Company (WALQO)	-	B	B
s15q1ga	Heard about the insurance from insurance extension staff ²⁵	-	-	B
s15q1gc	Heard about the insurance from cooperatives ²⁶	-	-	B
s15q1h	Heard about the insurance from network groups	-	B	B
s15q1j	Heard about the insurance from discount coupons	-	B	B
s15q1k	Heard about the insurance from the poet tapes ²⁷	-	B	-
s15q1l	Heard about the insurance from the cartoons ²⁸	-	B	-
s15q1m	Heard about the insurance from the radio	-	B	B
s15q1n	Heard about the insurance from the television (TV)	-	B	B
s15q1o	Heard about the insurance from posters	-	B	B
s15q1i	Heard about the insurance from others	-	B	B
s15q1_other	Heard about the insurance from others (specified)	-	B	B
s15q2	What was the most important information source for you?	-	B	B
s15q20	IBLI knowledge question 1: Based on your understanding of the livestock insurance, how often do you have to pay a premium in order to remain insured?	-	B	B
s15q21	IBLI knowledge question 2: If you did not receive indemnity payout (compensation) from the livestock insurance, would you expect to receive your premium back?	-	B	B
s15q22	IBLI knowledge question 3: When you receive an indemnity payment (compensation) in what form do you expect to receive it in?	-	B	B
s15q23	IBLI knowledge question 4: Based on your understanding of the livestock insurance, under what conditions do you expect indemnity payout (compensation)?	-	B	B

²⁵ Insurance extension staff are local individuals trained and paid by OIC to provide information about IBLI to the community. This was only done for the Jan 2014 sales period.

²⁶ Cooperatives were the primary marketing vehicle during the Aug 2013 and Jan 2014 sales periods.

²⁷ Poet tapes were only used in the Aug 2012 and Jan 2013 sales periods.

²⁸ Cartoons were only used in the Aug 2012 and Jan 2013 sales periods.

Variable	Description	R1	R2	R3
s15q26	IBLI knowledge question 5: Suppose that you had insured 10,000 Birr of cows. What is the maximum indemnity payment that you can receive after a worse drought?	-	B	B
s15q28	IBLI knowledge question 6: What institution will provide you indemnity payout in (month/year) if there is a payout?	-	B	B
s15q28b	If other, specify the institution.	-	-	B
s15q30	IBLI knowledge question 7: Boru insured 10 cattle by IBLI. There was no drought but Boru lost 8 cattle due to disease outbreak. Will Boru receive indemnity payout?	-	B	B
s15q35	IBLI knowledge question 8: Godana has decided to purchase IBLI for 1 cattle, 1 camel and 1 shoat among his herds. Will Godana pay different amount of premium for all the three species of animals?	-	B	B

Note: The correct answers to the IBLI knowledge questions are as follows: s15q20 "Once every year", s15q21 "No", s15q22 "In Cash", s15q23 "At the end of each DRY season when forage conditions are MUCH WORSE than normal", s15q26 "5,000", s15q28 "Oromia Insurance Company (OIC)", s15q30 "No", s15q35 "Yes".

File: "S7B IBLI Contract Details.dta"

Unique identifying variables: hhid, round, IBLI_id

Variable	Description	R1	R2	R3
hhid	Household ID	-	R	R
round	Survey round	-	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	-	R	R
IBLI_ID	IBLI sales period ID	-	R	R
s15q3	Did any member purchase livestock insurance?	-	B	B
s15q4a	1 st reason why no member purchased livestock insurance	-	B	B
s15q4a_other	1 st reason why no member purchased livestock insurance (other specify)	-	B	B
s15q4b	2 nd reason why no member purchased livestock insurance	-	B	B
s15q4b_other	2 nd reason why no member purchased livestock insurance (other specify)	-	B	B
s15q4c	3 rd reason why no member purchased livestock insurance	-	B	B
s15q4c_other	3 rd reason why no member purchased livestock insurance (other specify)	-	B	B
s15q5	Whose name is listed in the contract?	-	B	B
s15q6_camel	How many camel did you insure?	-	B	B
s15q6_cattle	How many cattle did you insure?	-	B	B
s15q6_sheep_goat	How many sheep/goats did you insure?	-	B	B
s15q7	In what index area did you insure your livestock?	-	B	B
s15q8	Did you receive a discount coupon that reduced the price of insurance for this sales period?	-	B	B
s15q9	What percent reduction in the price of insurance did the coupon offer?	-	B	B
s15q10	What is the actual amount of money (in Birr) you paid to the agent for insurance?	-	B	B
s15q11	Did you use the discount coupon?	-	B	B
s15q12	Have you listened to poet tape about the livestock insurance in this sales period?	-	B	-
s15q13	Have you read/heard cartoon about the livestock insurance in this sales period?	-	B	-
false_positive	1 if purchase IBLI is false positive based on OIC data	-	R	R
false_negative	1 if purchase IBLI is false negative based on OIC data	-	R	R
s15q3_fpf	1 if purchase IBLI (after correcting false positive and false negative based on OIC data)	-	R	R
camel_oic	Number of camels insured based on OIC data	-	R	R
cattle_oic	Number of cattle insured based on OIC data	-	R	R

Variable	Description	R1	R2	R3
shoat_oic	Number of sheep/goats insured based on OIC data	-	R	R
discount_rate	Discount rate % on discount coupon	-	R	R
cartoon	1 if the household was supposed to receive cartoon treatment , 0 otherwise	-	R	-
skit_tape	1 if the household was supposed to receive skit tape treatment, 0 otherwise	-	R	-

Notes: We compared the household responds and Oromia Insurance Company (OIC) IBLI sales data and found discrepancies. False_positive – shoat_oic were not asked in our survey but constructed based on OIC sales data in order to correct this discrepancy. Discount_rate, cartoon, skit_tape are data on “intent to treat” (we intended to treat households based on these variables but the households were not treated necessarily treated as we intended).

LIVELIHOOD AND INCOME

File: “S8A Main Livelihood Activities.dta”

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	N	B	B
s7q5b	Main income source for Mar-May rainy season	N	B	B
s7q5b2	specified income source for Mar-May rainy season	N	B	B
s7q5a	Main income source for Jun-Sep dry season	N	B	B
s7q5a2	specified Main income source for Jun-Sep dry season	N	B	B
s7q5d	Main income source for Oct-Nov rainy season	N	B	B
s7q5d2	specified income source for the Oct-Nov rainy season	N	B	B
s7q5c	Main income source for Dec-Feb dry season	N	B	B
s7q5c2	specified income source for Dec-Feb dry season	N	B	B
s7q5e	Main income source 5 years ago	N	N	N
s7q5e2	specified income source 5 years ago	N	N	N
s7q5f	Main income source 10 years ago	N	N	N
s7q5f2	specified income source 10 years ago	N	N	N

File: “S8B Livelihood and Income.dta”

Unique identifying variables: hhid, round, incomesource

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	N	B	B
incomesource	Income source ID	R	R	R
income_category	Income source category	R	R	R
s8q1	Has anyone in your household earned income from this source in the past 12 months?	N	B	B
s8q2	Who is the main person who earned income from the stated source? (member ID)	N	B	B
s8q3	Nature of work, 1st	N	B	B
s8q3b	Nature of work, 1 st , specify if other	N	B	B
s8q4	Nature of work, 2nd	N	B	B
s8q4b	Nature of work, 2 nd , specify if other	N	B	B
s8q5b	How much was earned in total in Mar-may (rainy season) last year?	N	B	B

Variable	Description	R1	R2	R3
	(Birr)			
s8q5a	How much was earned in total in Jun-Sep (dry season) last year? (Birr)	N	B	B
s8q5d	How much was earned in total in Oct-Dec (rainy season) last year? (Birr)	N	B	B
s8q5c	How much was earned in total in Jan-Feb (dry season) this year? (Birr)	N	B	B

CASH, TRANSFERS, AND ASSISTANCE

File: "S9A Cash and In-Kind Transfers.dta"

Unique identifying variables: hhid, round, type, direction, transferid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey Round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
type	Type of transfer: Cash or Inkind	R	R	R
direction	Direction of transfer: Received or Given	R	R	R
transferid	Transfer ID	R	R	R
s9q2	Source of transfer	B	B	B
s9q2a	Source of transfer specified	B	B	B
s9q2b	Value of transfer (ETB): long dry season	B	B	B
s9q3b	Value of transfer (ETB): long rainy season	B	B	B
s9q4b	Value of transfer (ETB): short dry season	B	B	B
s9q5b	Value of transfer (ETB): short rainy season	B	B	B

File: "S9B Other Assistance.dta"

Unique identifying variables: hhid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
s9q6a	Did anyone in your hh receive food aid in the past 12 months	N	B	B
s9q6b	Number of months food aid received in past 12 months	N	B	B
s9q6c	Average monthly value (birr) of food aid received	N	B	B
s9q7a	Did anyone in your hh receive school feeding in past 12 months	N	B	B
s9q7b	Number of months school feeding received in the past 12 months	N	B	B
s9q7c	Average monthly value (birr) of school feeding	N	B	B
s9q8a	Did anyone in your hh receive supplementary feeding in the past 12 months	N	B	B
s9q8b	Number of months supplementary feeding received in past 12 months	N	B	B
s9q8c	Average monthly value (birr) of supplementary feeding received	N	B	B
s9q9	Did anyone in your hh participate in an employment program in last 12 months that gave food or cash for work?	N	B	B
s9q10a	1 st employment program: Was the activity participated in for food or cash	N	B	B
s9q10b	2 nd employment program: Was the activity participated in for food or cash	N	B	B
s9q10c	3 rd employment program: Was the activity participated in for food or cash	N	B	B
s9q10d	4 th employment program: Was the activity participated in for food or cash	N	B	B
s9q10e	5 th employment program: Was the activity participated in for food or cash	N	B	B
s9q11a	1 st employment program: Which member id code participated in activity	N	B	B
s9q11b	2 nd employment program: Which member id code participated in activity	N	B	B
s9q11c	3 rd employment program: Which member id code participated in activity	N	B	B
s9q11d	4 th employment program: Which member id code participated in activity	N	B	B

Variable	Description	R1	R2	R3
s9q11e	5 th employment program: Which member id code participated in activity	N	B	B
s9q12a	1 st employment program: Number of days in the last 12 months hh member participated in activity	N	B	B
s9q12b	2 nd employment program: Number of days in the last 12 months hh member participated in activity	N	B	B
s9q12c	3 rd employment program: Number of days in the last 12 months hh member participated in activity	N	B	B
s9q12d	4 th employment program: Number of days in the last 12 months hh member participated in activity	N	B	B
s9q12e	5 th employment program: Number of days in the last 12 months hh member participated in activity	N	B	B
s9q13a	1 st employment program: Daily rate that the hh member received for the activity	N	B	B
s9q13b	2 nd employment program: Daily rate that the hh member received for the activity	N	B	B
s9q13c	3 rd employment program: Daily rate that the hh member received for the activity	N	B	B
s9q13d	4 th employment program: Daily rate that the hh member received for the activity	N	B	B
s9q13e	5 th employment program: Daily rate that the hh member received for the activity	N	B	B
s9q14a	Did hh receive any (non-livestock) aid/help from Govt in the past 12 months?	N	B	B
s9q14b	Total value of aid received from Govt during long dry season (Jun-Sep)?	N	B	B
s9q14c	Total value of aid received from Govt during long rain season (Mar-May)?	N	B	B
s9q14d	Total value of aid received from Govt during short dry season (Dec-Feb)?	N	B	B
s9q14e	Total value of aid received from Govt during short rain season (Oct-Nov)?	N	B	B
s9q15a	Did hh receive any (non-livestock) aid/help from NGO in the past 12 months?	N	B	B
s9q15b	Total value of aid received from NGO during long dry season (Jun-Sep)?	N	B	B
s9q15c	Total value of aid received from NGO during long rain season (Mar-May)?	N	B	B
s9q15d	Total value of aid received from NGO during short dry season (Dec-Feb)?	N	B	B
s9q15e	Total value of aid received from NGO during short rain season (Oct-Nov)?	N	B	B
s9q16a	Did hh receive any (non-livestock) aid/help from PSNP in the past 12 months?	N	B	B
s9q16b	Total value of aid received from PSNP during long dry season (Jun-Sep)?	N	B	B
s9q16c	Total value of aid received from PSNP during long rain season (Mar-May)?	N	B	B
s9q16d	Total value of aid received from PSNP during short dry season (Dec-Feb)?	N	B	B
s9q16e	Total value of aid received from PSNP during short rain season (Oct-Nov)?	N	B	B

HERD MIGRATION

File: "S10A Herd Migration and Satellite Camps – Household level.dta"

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	N	B	B
s10q7	Did the livestock move from base camp to any waterpoint outside the village (satellite camp) between Dec last year and Feb this year?	N	B	B
s10q11	Who do you mainly consult in order to make the decision to move your animals to waterpoints?	N	B	B
s10q8	Was your cattle in satellite camp in sometime between Dec last year and Feb this year?	N	B	B
s10q9	Were your camels in satellite camp in sometime between Dec last year and Feb this year?	N	B	B
s10q10	Were your shoats in satellite camp in sometime between Dec last year and Feb this year?	N	B	B
s10q5	Who is the manager of main cattle subherd?	N	B	B

Variable	Description	R1	R2	R3
s10q5b	If other, specify the manager (if not a household member)	N	B	B
s10q5c	Relationship of herd manager to household head (if not a household member)	N	B	B
s10q6	Among cattle your household herded at the end of Feb this year, how many cattle belong to this subherd?	-	B	B

Notes: Variable s10q6 is added in round 2 to check whether the number of animals in the main cattle sub-herd is comprised of the total cattle herded by households.

File: “S10B Herd Migration and Satellite Camps – Water point level.dta”

Unique identifying variables: hhid, round, waterid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
waterid	Water point ID	R	R	R
s10q1	Woreda ID for water points	N	B	B
s10q1b	Water point names	N	B	B
s10q1c	If other, specify water point name	N	B	B
s10q2a	Days to walk to water point	N	B	B
s10q2b	Hours to walk to camp	N	B	B
s10q3	What month did your cattle subherd start staying in this waterpoint?	N	B	B
s10q3b	How many days did your cattle subherd stay in this waterpoint?	N	B	B
s10q12	Type of water point	N	B	B
S10q12b	If other, specify water point type	N	B	B
s10q13a	How congested was water access at the waterpoint most of the time while there?	N	B	B
s10q13b	How serious was there a disease outbreak at the waterpoint while you were there?	N	B	B
s10q6	Number of cattle belonging to the main cattle sub-herd	-	B	B

NETWORK GROUPS, PERCEPTIONS, EXPECTATIONS, AND INFORMAL RISK SHARING

File: “S11A Network Groups.dta”

Unique identifying variables: hhid, round, s19q12

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
s19q12	Network group ID	R	R	R
s19q12b	Other group (specify)	N	B	B
S19q13	Does any hh member belong to this group type?	N	B	B
s19q14	Main household member (id) that belongs to this group type	N	B	B
s19q15	Second main household member (id) that belongs to this group type	N	B	B

File: “S11B Perceptions and Expectations.dta”

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
s7q2	Expectation of rangeland condition in upcoming year: Mar(current year) to Feb (next year)	N	B	B
s7q6a	Number of camels expected to die out of 20 in upcoming year: Mar (current year) to	N	B	B

Variable	Description	R1	R2	R3
	Feb (next year)			
s7q6b	Number of cattle expected to die out of 20 in upcoming year: Mar (current year) to Feb (next year)	N	B	B
s7q6c	Number of goats expected to die out of 20 in upcoming year: Mar (current year) to Feb (next year)	N	B	B
s7q6d	Number of sheep expected to die out of 20 in upcoming year: Mar (current year) to Feb (next year)	N	B	B
s15q48	Expected price of cattle at end of Dec (current year) relative to now	N	-	-
s15q49	Expected price of camels at end of Dec (current year) relative to now	N	-	-
s15q50	Expected price of goats at end of Dec (current year) relative to now	N	-	-
s15q51	Expected price of sheep at end of Dec (current year) relative to now	N	-	-

File: "S11C Subjective Welfare.dta"

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
s19q1	On which step do you place your present economic conditions?	N	B	B
s19q2	Vignette order number for family A	R	R	R
s19q2a	Subjective welfare rank given for family A	N	N	N
s19q3	Vignette order number for family B	R	R	R
s19q3a	Subjective welfare rank given for family B	N	N	N
s19q4	Vignette order number for family C	R	R	R
s19q4a	Subjective welfare rank given for family C	N	N	N
s19q5	Present economic conditions of the Borena pastoralists?	N	B	B
s19q6	Present own economic conditions?	N	B	B
s19q7	Present own economic conditions compared to other Borena pastoralists?	N	B	B
s19q8	Economic conditions of the Borena pastoralists 1 year ago?	N	B	B
s19q9	Own economic conditions 1 year ago?	N	B	B
s19q10	Expectation of future economic conditions of the Borena pastoralists?	N	B	B
s19q11	Expectation of future own economic conditions?	N	B	B
s19q12	Present economic conditions of members of own hariyaa and own ardaa members?	-	-	B
s19q13	Present own economic conditions relative to own hariyaa and own ardaa members?	-	-	B

Note. S19q2-s19q4a were recollected for 7 of the 8 households (only not for 1606) that appeared in R1, not R2, and again in R3.

File: "S11D Risk Perception.dta"

Unique identifying variables: hhid, round, riskid

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
riskid	Risk type ID	R	R	R
s10q51a	Other risk (specify)	N	N	N
s10q51b	Has this been a major concern/risk to your household over the past 5 years?	N	N	N
s10q51c	If yes, rank the 3 pressing concerns/risks	N	N	N

Notes: Risk profiles missed for 9 households in R1. One of them (hhid 145) was collected in R3 but other 8 of 9 remain missing. Also 5 of the 8 households that were interviewed in R1, missed in R2, but interviewed again in R3 had their risk profile information taken again.

CONSUMPTION AND EXPENDITURE

File: "S12A Weekly Food Consumption Expenditures.dta"

Unique identifying variables: hhid, round, foodclass, foodtype

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
foodclass	Food class ID	R	R	R
foodtype	Food type ID	R	R	R
s11q2	Has household consumed in last 7 days	N	B	B
s11q3	Quantity consumed in last 7 days	N	B	B
s11q4a	Unit for quantity consumed in last 7 days	N	B	B
s11q4b	Unit for quantity consumed in last 7 days (other specify)	N	B	B
s11q5a	Per unit value of food type (ETB)	N	B	B
s11q6a	Primary means to acquire this food type	N	B	B
s11q6b	Secondary means to acquire this food type	N	B	B

File: "S12B Other Non-Food Consumption Expenditures.dta"

Unique identifying variables: hhid, round, itemtype

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
itemtype	Non-food item ID	R	R	R
Itemtype_os	Other specify annual expenditure item	-	-	B
interval	Time interval over which total value represents	R	R	R
s11q8	Total value of item over interval (birr)	N	B	B

File: "S12C Livestock Expenditure.dta"

Unique identifying variables: hhid, round, itemtype

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
itemtype	Livestock expenditure ID	R	R	R
itemtype_os	Livestock expenditure (other specify)	N	B	B
s11q11	Total annual expenditure on livestock item (birr)	N	B	B

HOUSING AND AMENITIES

File: "S13 Housing and Amenities.dta"

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
s12q14	Housing amenities improved, remained same or worsened compared to previous	N	B	B

Variable	Description	R1	R2	R3
	yrs.'			
s12q15_r2	Have your housing amenities improved, remained the same or worsened compared to 2 years ago?	-	N	-
s12q15_r3	Have your housing amenities improved, remained the same or worsened compared to 3 years ago?	-	-	N
s12q1	What are the walls of your dwelling predominantly made of?	N	B	B
s12q1b	Other walls specify	N	B	B
s12q2	What is the main flooring material?	N	B	B
s12q2b	specified flooring material	N	B	B
s12q3	How many rooms in total are there (all dwellings)?	N	B	B
s12q4	What is the main cooking appliance?	N	B	B
s12q4b	Other cooking appliance specify	N	B	B
s12q5 ²⁹	What is the main source of cooking fuel?	N	B	B
s12q5b	specified source of cooking fuel	N	B	B
s12q6 ³⁰	What is the main source of lighting fuel?	N	B	B
s12q6b	specified source of lighting fuel	N	B	B
s12q7	Does this household have a toilet?	N	B	B
s12q8	What kind of toilet facility does your household currently use?	N	B	B
s12q8b	specified toilet facility	N	B	B
s12q9	What is your main source of drinking water currently?	N	B	B
s12q9b	specified source of drinking water currently	N	B	B
s12q10a	Hours to walk to water, record 0 if less than an hour	N	B	B
s12q10b	Minutes to walk to water	N	B	B
s12q11	Do you have to pay to access this source of water?	N	B	B
s12q12	Your main source of drinking water in the previous 2 yrs. or more?	N	B	B
s12q12b	Specified main source of drinking water in the previous 2 yrs. or more?	N	B	B
s12q13	Main source of drinking water for this household in previous 2 yrs. or more	N	B	B

Note. For panel household in round 2 and 3, s12q1-s12q8b will be skipped if s12q14 is "remained the same."

ASSETS AND AGRICULTURE

File: "S14A Other Livestock.dta"

Unique identifying variables: hhid, round, animal type

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
animaltype	Other type of animal	N	B	B
s13q1	Number of other animals owned	N	B	B
s13q2	Number of other animals reared	N	B	B

File: "S14B Land Owned and Farmed.dta"

Unique identifying variables: hhid, round, animal type

Variable	Description	R1	R2	R3
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²⁹ There is ongoing confusion about the difference between "kerosene," "paraffin," and "gas." Categories were adjusted for R3 so that cooking with kerosene is not captured in "Gas," though it was likely captured in the "Gas" category in R1 and R2.

³⁰ Due to confusion about the difference between "kerosene," "paraffin," and "gas," these categories were combined in R3.

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	N	B	B
s13q3	Does this household have cultivation right of any agricultural land?	B	B	B
s13q4	Has household ever farmed?	B	N	N
s13q5a	Total irrigated land owned	B	B	B
s13q5b	Units for irrigated land owned	B	B	B
s13q5c	Total non-irrigated land owned	B	B	B
s13q5d	Non-irrigated land unit	B	B	B
s13q6a	Total irrigated land currently farmed	B	B	B
s13q6b	Units for irrigated land currently farmed	B	B	B
s13q6c	Total non-irrigated land currently farmed	B	B	B
s13q6d	Units for non-irrigated land currently farmed	B	B	B
s13q20	Did you plant any crops during March-May rainy season (gana) last year?	-	B	B
s13q32	Did you spend money on any inputs (e.g fertilizer, seeds, labour) during the main season?	-	B	B
s13q26	Did you plant any crops during October-November rainy season (hagaiya) last year	-	B	B
s13q35	Did you spend money on any inputs (e.g fertilizer, seeds, labour) during the short season?	-	B	B
s13q7a	Total irrigated land farmed one year ago	B	N	N
s13q7b	Units for irrigated land farmed one year ago	B	N	N
s13q7c	Total non-irrigated land farmed one year ago	B	N	N
s13q7d	Units for non-irrigated land farmed one year ago	B	N	N
s13q8a	Total irrigated land farmed two years ago	B	N	N
s13q8b	Units for irrigated land farmed two years ago	B	N	N
s13q8c	Total non-irrigated land farmed two years ago	B	N	N
s13q8d	Units for non-irrigated land farmed two years ago	B	N	N

Note. 1 sanga =6 bois. 1 hectare = 6 sangas.

File: "S14C1 Crop Harvest – Main Season.dta"

Unique identifying variables: hhid, round, CR_ID

Variable	Description	R1	R2	R3
hhid	Household ID	-	R	R
round	Survey round	-	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	-	B	B
CR_ID	Crop ID	-	R	R
s13q21	Crop name	-	B	B
s13q21b	If other, specify crop name	-	B	B
s13q22	How much did you harvest?	-	B	B
s13q23	Unit of production	-	B	B
s13q25	Out of the total production, how much did you sell?	-	B	B
s13q24	How much was the price of per unit? ³¹	-	B	B

Note. These questions were asked if s13q20 in S14B was yes. 1 debe = 20 kilograms. 1 kunta = 50 kilograms. 1 kuntal = 100 kilograms.

³¹ During the R3 training, it was pointed out that the unit of production may not be the unit used for sale. Previous enumerators said they tried to convert sale units to production units when calculating the price. A conversion table was provided in the R3 questionnaire to facilitate accurate conversion by enumerators.

File: "S14C2 Crop Cost – Main Season.dta"**Unique identifying variables: hhid, round, Inp_ID**

Variable	Description	R1	R2	R3
hhid	Household ID	-	R	R
round	Survey round	-	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	-	B	B
Inp_ID	Crop Input ID ³²	-	R	R
s13q33	Amount spent (In Birr)	-	B	B
s13q34	If other, specify input name	-	B	B

Note. These questions were asked if s13q32 in S14B was yes.

File: "S14C3 Crop Harvest – Short Season.dta"**Unique identifying variables: hhid, round, CRS_ID**

Variable	Description	R1	R2	R3
hhid	Household ID	-	R	R
round	Survey round	-	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	-	B	B
CRS_ID	Crop ID	-	R	R
s13q27	Crop name	-	B	B
s13q27b	If other, specify crop name	-	B	B
s13q28	How much did you harvest?	-	B	B
s13q29	Unit of production	-	B	B
s13q30	Out of the total production, how much did you sell?	-	B	B
s13q31	How much birr was the price per unit?	-	B	B

Note. These questions were asked if s13q26 in S14B was yes.

File: "S14C4 Crop Cost – Short Season.dta"**Unique identifying variables: hhid, round, InpS_ID**

Variable	Description	R1	R2	R3
hhid	Household ID	-	R	R
round	Survey round	-	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	-	B	B
InpS_ID	Crop input ID	-	R	R
s13q36	Amount spent (In Birr)	-	B	B
s13q37	If other, specify input name	-	B	B

Note. These questions were asked if s13q35 in S14B was yes.

File: "S14D Other Assets.dta"**Unique identifying variables: hhid, round, AssetID**

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	N	B	B
AssetID	Asset ID	R	R	R
Asset_Desc	Asset description	R	R	R

³² In R3, an input called "Dabo" was added in order to accommodate the situation where friends and neighbors work on the respondent's farm in exchange for a meal. The costs associated with hosting dabo are recorded here. Additionally, the "seed" input was divided into "Seed from stocks" and "Purchased seed." These same changes were also applied to the variable InpS_ID in "S14C4 Crop Cost – Short Season."

Variable	Description	R1	R2	R3
Asset_Type	Asset Type	R	R	R
s13q9	Do you own this Asset	N	N	N
s13q9a	Other specified assets for new households	N	N	N
s13q10	How many (of the specified assets) do you own	N	N	N
s13q11	If you were to sell the asset, how much per unit (in Birr) would you sell it?	N	N	N
s13q12	Did you buy, receive, sell, or give away this asset between April last year to March this year?	-	P	P
s13q12a	Other specified assets	-	P	P
s13q13	How many of the (specified asset) did you buy or receive	-	P	P
s13q14	How much in monetary value was the change (buy or receive) equivalent to?	-	P	P
s13q15	How many of the (specified asset) did you sell or give away ³³	-	P	P
s13q16	How much in monetary value was the change (sell or give away) equivalent to?	-	P	P

SAVING, LENDING, AND LOANS

File: "S15A Saving and Lending.dta"

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
s14q73a	If you have 6 female goats and 3 male goats how many goats do you have in total	N	N	N
s14q73b	If you have 4 cattle sub herds with each sub herd with 5 animals, how many animals do you have in total	N	N	N
s14q73c	If you have 400 goats and subdivide then into 10 equal sub herds, how many goats are in each sub herd	N	N	N
s14q73d	Could you memorize the following 6 digits 369219?	N	N	N
s14q73	Suppose you want to borrow some money, and you have to pay back Birr 10 for every Birr 100 that you borrow. This is called interest rate. Are you familiar with this concept?	N	N	N
s14q71	Suppose you borrow Birr 100, and you have to pay back Birr 10 every month for every Birr 100 that you borrow. If you have not repaid any of the total for a period of three months, how much do you owe at the end of three months	N	N	N
s14q72	Suppose you need to borrow Birr 500. Two people offer you a loan. One requires you to pay back Birr 600 in a month. The second requires you to pay back Birr 500 plus Birr 15 for every Birr 100 you borrow that month. Which loan represents a better deal for you?	N	N	N
s14q1	Do you or anyone in this household currently have any cash savings?	N	B	B
s14q2	Where do you keep the largest part of your cash savings?	N	B	B
s14q2b	specified place where you keep largest part of savings	N	B	B
s14q4	What is the main reason why your household has not kept money in a bank/institute	N	B	B
s14q4b	specified reason why not kept money in a bank	N	B	B
s14q3	How much savings do you currently have (Birr)?	N	B	B

³³ In R3, this category was rephrased to explicitly include broken, worn out, or stolen items. It is unclear how this type of item loss was accounted for in R2 or whether stocks at R2 are reflective of actual stocks.

Variable	Description	R1	R2	R3
s14q51	Have you or anyone in your household lent out any money in the last 12 months?	N	B	B
s14q52	If not, why not?	N	B	B
s14q52b	specified reason why no one has lent out money from the household	N	B	B
s14q53	How many times did you lend out in the last 12 months?	N	B	B
s14q54	How much did you lend out in total in the last 12 months? (Birr)	N	B	B
s14q83	On the top of the amount above, how much does your borrower have to add when he repays?	N	B	B
s14q55	Out of the total amount how much has been paid back? (Birr)	N	B	B
s14q57	What was this last loan for?	N	B	B
s14q57b	Specified reason for the last loan	N	B	B
s14q58	Have you or anyone in your household requested to borrow or applied for any loan in the past 12 months?	N	B	B
s14q59	If not, why not?	N	B	B
s14q59b	Specified reason why no one has borrowed money from this household	N	B	B

File: "S15B Loan Portfolio.dta"

Unique identifying variables: hhid, round, LSID

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in SOB Comment.dta, 0 otherwise	N	B	B
LSID	Loan ID	R	R	R
s14q74	What was the source of this loan?	-	B	B
s14q74b	Specify source of the loan	-	B	B
S14q74c	Loan Source	R	-	-
S14q74d	Have you applied or asked for loan from this source in the last 12 months?	N	-	-
S14q74e	If other, specify loan source	N	-	-
s14q75	How many times have you applied or asked for loan from this source in the last 12 months?	N	-	-
s14q70	What was the major purpose of applying for loans to this source?	N	B	B
s14q70b	If other, specify major purpose	N	B	B
s14q76	How many times have your applications been approved for loan from this source?	N	-	-
s14q62	When did you borrow most recently during the last 12 months?	N	B	B
s14q64	Is (was) there a specific date, by which you are (were) expected to return the money to [loan source]?	N	-	-
s14q65a	If yes, which month?	N	-	-
s14q65b	If yes, which year?	N	-	-
s14q63	Total amount of borrowings (Birr)	N	B	B
s14q66	Is this amount less than what you applied?	-	B	B
s14q66_r1	What is the total amount of money (Birr) that you are expected to return for this loan	N	-	-
s14q69	How much money do you currently owe on this particular loan (in Birr)? (Amount outstanding)	N	-	-

RISK PREFERENCE EXPERIMENT

File: "S16 Experiment of Risk Preference.dta"

Unique identifying variables: hhid, round

Variable	Description	R1	R2	R3
hhid	Household ID	R	R	R
round	Survey round	R	R	R
comment	1 if there is comment in S0B Comment.dta, 0 otherwise	N	B	B
s16q1	Which one do you choose?	N	N	N
s16q2	What is the result, head or tail?	N	N	N
s16q3	How much do you obtain? Birr	N	N	N
s16q4	Did you receive the money	N	N	N

Note: There are 8 households which were interviewed in R1 and R3 but not in R2. We did not ask questions in this section to those 8 households since we have already asked in R1. See the SurveyBe questionnaire reports for more details on how this experiment was conducted and how to interpret the results.

6. Conditions on Data Use

All publications based on the data will give due acknowledgement to the project for its role in generating the data and to the US Agency for International Development (USAID), Australian Department of Foreign Affairs and Trade, and CGIAR Research Programs for financing their collection. An attribution statement similar to that provided in the Section 6.1 below should be included.

For the purpose of maintaining a comprehensive archive of studies based on these data, authors of publicly released studies using these data must provide a copy of the studies to Munenobu Ikegami (email: m.ikegami@cgiar.org).

6.1. Suggested Citation for Acknowledgement

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7. Changelog

- September 20th, 2014: revise acknowledgement and Section 6.1 Suggested Citation for Acknowledgment.
- August 26th, 2014: correct errors in weight in "SOA Household Identification Information.dta" and revise this codebook accordingly.

- August 15th, 2014: the initial public release of R1 and R2 data, questionnaire report, and this codebook.