

## Appendix E: Variable Definitions

This appendix defines all variables used throughout the main report that were constructed based on data collected in our study.

**Table E1: Variable definitions for baseline descriptive variables**

Variable	Definition
<b>PANEL B</b>	
<b>Demographics</b>	
Head of Household Characteristics	Age, gender, and highest level of education.
Distance to Branch (km)	Distance (in km) between household house and associated KGFS branch location: for treatment villages, this is the actual branch location; for control, this is the hypothetical branch location determined by KGFS.
<b>Occupation &amp; Income</b>	
Employed in Wage Labor (last 7 days)	Dummy variable equal to 1 if the household answered yes to: "Did any member in the household work for wage as labor/service in non-household owned employment in the last 7 days in this town panchayat/ village panchayat?"
Below Poverty Line	Dummy variable equal to 1 if the household's self-reported monthly income falls below Rs. 880 times the number of household members. There are fewer observations in the table because it was not collected in Baseline I. 3 components: (1) Self-reported income: "How much rupees, in total, did household members earn in the last 30 days from all income-generating activities?", (2) Number of household members: "How many members are there in your household?" (3) Rural Tamil Nadu poverty line of Rs. 880 (monthly per capita), determined by the Suresh Tendulkar Panel Recommendations in 2011-2012.
Self-Employed or Owns a Business	Dummy variable equal to 1 if the household answered yes to: "Is any member of the household currently self-employed or the owner of a business which excludes any sort of farming or animal-husbandry?"
Earns Farming Income	Dummy variable equal to 1 if the household answered yes to: "Was your household involved in farming any crop in the past 12 months?" "Involvement" can include farming for sustenance, hiring laborers, etc.
Wage Labor Income (weekly)	For those who reported wage employment, 2 components: i) Cash wage per payment cycle (including in-kind payment, converted to Rs.) ii) Frequency of payment (daily, weekly, fortnightly, monthly, "daily" converted to "weekly" by multiplying by 8 hours per workday, and "fortnightly" and "monthly" were divided by 2 and 4, respectively). Equal to 0 for households that reported no wage employment in the last 7 days.

Variable	Definition
Business Income (30 days)	For those who reported self-employment/owned business, calculation uses 2 components: (1) Rental income: "Over the most recent 30 days of operations what was the total rental value in rupees of equipment (tools, machines, animals etc) leased from this [business] activity?" (2) Sales income: "What is the estimated value of all sales of finished good and services over the most recent 30 days of this [business] activity?" Equal to 0 for households that reported no self-employment or owned business.
Farming Income	For those who reported farming, calculated as the sum of 4 components as reported for the last farming season: i) Seasonal unsold crops, ii) Seasonal sold crops, iii) Perennial unsold crops, iv) Perennial sold crops Equal to 0 for households that reported no farming in the last 12 months.
<b>Wealth &amp; Properties</b>	
Owns Land	Dummy variable equal to 1 if households report "owning or currently holding the right to use plots of land", excluding land on which any buildings the household owns/use stand.
Cultivated Area (acres)	Self-reported amount of cultivable land owned. Equal to 0 if households report owning no land, or if household owns land but no cultivable land.
<b>Formal &amp; Informal Borrowing</b>	
Number of Outstanding Formal Loans	Equal to 0 if households report having no loans, or if household has loans but no formal loans. A loan is defined as "formal" if it is taken from a: Private Bank, NGO/MFI, Nationalized Bank, PAC/Co-operative Bank, Self Help Group (SHG), Non-Banking Financial Corporation (NBFC).
Formal Borrowed Amount (last 24m.)	Total borrowed amount of all formal loans taken by all households in the last 24 months. Equal to 0 if no loans or no formal loans.
Number of Outstanding Informal Loans	Self-reported number of loans taken from informal sources at the time of the survey. Equal to 0 if households report having no loans, or if household has loans but no informal loans. A loan is defined as being "informal" if it is taken from a: Friend/Neighbor/Relative, Shopkeeper, Employer, Moneylender, Pawnbroker, Landlord, Rotating Savings Group (ROSCA), Chitfund, Financier, or Religious Trust.
Informal Borrowed Amount (last 24 months)	Total borrowed amount of all loans taken from informal sources in the last 24 months. Equal to 0 for households that reported no loans or no informal loans.
<b>Savings &amp; Insurance</b>	
Probability of Having Any Savings	Dummy variable equal to 1 for households that reported a non-zero amount in their savings account(s) with a bank or financial institution. Equal to 0 if no savings accounts, or savings accounts with no savings.

Variable	Definition
Amount in Savings Account(s)	Self-reported total amount of money saved in all savings accounts with banks or financial institutions: "What is the total amount of money that you have saved in all accounts?" Equal to 0 for households that report having no savings accounts.
Probability of Giving Out Any Loans	Dummy variable equal to 1 for households that answer yes to: "Has your household given out loans to individuals not in your household, which are currently outstanding?"

#### **Shocks Experienced in the last 12 months**

Any Shock	Dummy variable equal to 1 for households that reported having experienced at least once of the following events "unexpectedly during the course of the last 12 months": Death of a money earner, Heavy rain/flood, Drought, Pest infestation or crop diseases which destroyed more than 1/4 of the crop, Serious injury/illness that kept the affected household member from doing normal activities.
Serious Injury or Illness Shock	Dummy variable equal to 1 for households that reported having the event of a "serious injury/illness that kept the affected household member from doing normal activities" at least once in the last 12 months.

#### **PANEL C**

##### **SNM**

Number of households (Census)	Number of households in each village as enumerated in SNM Census Survey.
Number of surveyed households (SNM)	Number of households actually surveyed within each village recorded in SNM Census.
Distance to the bank branch (km)	Distance in km from the center of each village to the associated KGFS branch location (for treatment villages, this is the actual branch location; for control, this is the hypothetical branch location identified by KGFS).

**Note:** Panel B variables are from the Household Survey component of our study. Fluctuations in observation counts are due to missing values. Panel C are from the Social Network Mapping (SNM) survey component of our study, and are aggregated at the village level. The fluctuation in observation counts is due to missing GPS data. Tables 26 uses these variables.

**Table E2: Variable definitions for formal & informal loans**

Variable	Column	Definition
P(Formal Loan Outstd), P(Informal Loan Outstd), Nr of Outstd Formal Loans, Nr of Outstd Informal Loans, Formal Borrowed Amt, Informal Borrowed Amt Formal Share of Borrowed Amt	1-6      7	cf Table E1.       Total formal amount borrowed in the last 24 months divided by total formal and informal amount borrowed in the last 24 months, i.e. the variable used in Column (5) divided by the sum of those used in Columns (5) and (6) for each household. The observation count falls in Column (7) only. This is because only households with non-zero borrowing are included, to allow for the share to be computed.

Note: Tables that concern these variables are Tables 1 and 10.

**Table E3: Variable Definitions for Reasons for Borrowing**

Variable	Column	Definition
Farming & Business Investment	1	Total principal amount borrowed in currently outstanding loans for which the reported primary purpose was "general farming or business inputs (seeds, fertilizer, livestock, raw materials, inventory)", "farming or business equipment (plow, sewing machine, rickshaw)", or "paying employees [for business or farming labor]".
House & Land Repair	2	Total principal amount borrowed in currently outstanding loans for which the reported primary purpose was "repairing or upgrading a house, land, or buildings".
Weddings	3	Total principal amount borrowed in currently outstanding loans for which the reported primary purpose was "weddings, festivals, or functions".
Day-to-Day Expenses	4	Total principal amount borrowed in currently outstanding loans for which the reported primary purpose was "buying food, clothing, or other day-to-day household items".
Education Related	5	Total principal amount borrowed in currently outstanding loans for which the reported primary purpose was "education related".
Health Related	6	Total principal amount borrowed in currently outstanding loans for which the reported primary purpose was "covering health expenses".

Note: These variables are used in Tables 2, and 3

**Table E4: Variable Definitions for Borrowing from Moneylenders**

Variable	Column	Definition
P(Moneyl. and Fin. Loan Outstd)	1	Probability of having an outstanding loan at the time of the survey from a moneylender or financier. Dummy equal to 1 if a loan is held, and equal to 0 if the household only has loans from other sources or has no loans.
Nr of Moneyl. and Fin. Outstd Loans	2	Total number of outstanding loans held by the household at the time of the survey from moneylenders or financiers.
Moneyl. and Fin. Borrowed Amount	3	Total borrowed amount of all loans taken from moneylenders or financiers in the last 24 months. Equal to 0 if the household had no reported loans or none from moneylenders/financiers.

Note: These variables are used in Table 4.

**Table E5: Variable Definitions for SNM Contacts**

Variable	Column	Definition
Any Contact	1	Dummy variable equal to 1 if households reported any contacts they could borrow from their inside village/outside village/moneylender contacts in the Social Network Mapping component survey.
Nr. Contacts	2	Total number of inside village/outside village/moneylender village contacts households reported having.
Emergency Borrowing Capacity	3	Total Rs. amount that households report they could borrow in the event of an emergency from inside village/outside village/moneylender contacts.
Business Borrowing Capacity	4	Total Rs. amount that households report they could borrow from inside village/outside village/moneylender contacts if they were going to start a business or expand an existing business in the last 12 months.
Actual Borrowed Amt	5	Total Rs. amount households have actually borrowed from inside village/outside village/moneylender contacts in the last 12 months.

Note: These variables are used in Tables 5 and 6.

**Table E6: Variable Definitions for Savings & Insurance**

Variable	Column	Definition
P(Any Saving Account), Saving Account Amt, P(Giving out loans)	1, 2, 3	Columns 1, 2, 3 can be matched one-to-one to variables defined in Table E1.
Nr of Informal Loans Given Out	4	Total number of loans given out by the household informally that are currently outstanding at the time of the survey. This includes loans to: friends, relatives outside the household, neighbors, shopkeepers, money guards, tenants, and employees.
Informal Loans Given Out Amount	5	Total Rs. amount that households report having currently lent out.
P(Active Insurance)	6	Dummy variable equal to 1 if any household member has insurance that is currently active. This includes government provided crop insurance, Life Insurance Corporation (LIC), General Insurance Corporation (GIC), etc.

Note: These variables are used in Table 7.

**Table E7: Variable Definitions for Employment & Income Composition**

Variable	Column	Definition
HH Farms, HH Self Employed, Self-Reported Income (log), Below Poverty Line, Business Income (30 days) (log)	1, 2, 4, 5, 8	Columns 1, 2, 4, 5, and 8 can be matched one-to-one to variables defined in Table E1. Log income is calculated as $\log(\text{income} + 1)$ .
P(Business Hires Employees)	3	Dummy variable equal to 1 if the household business hired employees to work in the business. Note that this is as per the definition of "self-employment/business" specified in Table E1 - that is, it excludes farming and animal-husbandry. Equal to 0 if household did not hire any employees in the most recent 30 days, or if the household is not self-employed or does not own a business.
Governmental Wage Labor Income (log)	6	Log of the household's daily wage labor income subsidized by the government, namely from NREGA. For each member of the household who has worked in wage labor in the past 7 days, respondents report the cash and in-kind wage paid in various time units (hourly, daily, weekly, etc.), which are then converted to a log daily wage using $\log(\text{wage} + 1)$ .
Non-Governmental Wage Labor Income	7	Log of the household's daily wage labor income, excluding farming, government work, and government subsidized work (NREGA). For each member of the household who has worked in wage labor in the past 7 days, respondents report the cash and in-kind wage paid in various time units (hourly, daily, weekly, etc.), which are then converted to a log daily wage using $\log(\text{wage} + 1)$ . Primary labor types include: non-farm jobs (unskilled), private formal salary jobs, electricians, drivers, and woodworkers.

Note: These variables are used in Table 8.

**Table E8: Variable Definitions for Wages from-Non Household Employment**

Variable	Column	Definition
Log total daily wage, per daily payment cycle	1, 2, 3	Total daily wage, per daily payment cycle. Sum of daily cash and inkind wages per household, earned from working for non-household owned employment. Unconditional value, i.e. zero for households who either did not work for non-household owned employment, or, who worked for non-household owned employment that only paid employees on non-daily payment cycles.
Log total monthly wage, per daily payment cycle	4,5,6	Total monthly wage, per monthly payment cycle. Sum of monthly cash and inkind wages per household, earned from working for non-household owned employment. Unconditional value, i.e. zero for households who either did not work for non-household owned employment, or, who worked for non-household owned employment that only paid employees on non-monthly payment cycles.

Note: These variables are used in Table 9.

**Table E9: Variable Definitions for Life Perception**

Variable	Column	Definition
Happiness Scale	1	Respondents are asked to consider how they feel at the moment and what they hope for their future, and are then asked: "Keeping everything in mind, tell us about yourself overall: are you very happy, quite happy, not very happy, or not happy at all?" The variable is coded as (1) if very happy, (2) if quite happy, (3) if not very happy, and (4) if not happy at all.
Perception of Current Life	2	Equal to a number from 1 to 10 representing each household respondents' current perception of life, where 10 is the best possible life, and 1 is the worst. Respondents are presented with a ladder with 10 steps, increasing from 1 at the bottom to 10 at the top, and are told that the top of the ladder represents the best possible life for them, while the bottom represents the worst possible life. They are then asked: "On which step of the ladder do you personally feel you stand at this time, assuming that the higher the step, the better you feel about life, and the lower the step, the worse you feel about it? Which step comes to the closest to the way you feel?"



Variable	Column	Definition
Better Perception of Life 5 years ago	3	Equal to 1 if the respondent feels they had a better life 5 years ago than at the time of the survey; 0 if the respondent feels their life is the same as it was 5 years ago; -1 if the respondent feels they had a worse life 5 years ago than at the time of the survey. This is measured by asking the respondent the same question as in Column 2, but with respect to their life 5 years ago as opposed to at the time of the survey. Their responses between the two questions are then compared to determine this variable.
Better Perception of Life in 5 years	4	Equal to 1 if the respondent feels they will have a better life 5 years in the future than at the time of the survey; 0 if the respondent feels their life will be the same; -1 if the respondent feels their life will be worse in 5 years than at the time of the survey. This is measured by asking the respondent the same question as in Column 2, but with respect to their life 5 years in the future as opposed to at the time of the survey. Their responses between the two questions are then compared to determine this variable.

Note: These variables are used in Table 11.

**Table E10: Variable Definitions for Psychological Distress**

Variable	Column	Definition
Self-Assessed Health	1	Equal to a number from 1 to 10 representing the Household Survey Part 2 respondents' self-reported health at the time of the survey. The respondent is presented with a picture of a ladder, and is asked: "if the top rung of the ladder represents very good health and the bottom step represents very bad health, where would you place yourself?". Note that the Part 2 respondent is a female spouse within the household, and answers questions on female empowerment, health, social networks, and risk aversion, while the Part 1 respondent answers all else.
Felt Nervous, Hopeless, Restless, Depressed, Everything Was an Effort, Worthless	2-7	Columns 2-7 correspond to questions asked about how respondents felt over the past 30 days. The variables are equal to: 1 if the respondent reported feeling nervous/hopeless/restless/depressed/that everything was an effort/worthless none of the time; 2 if a little; 3 if some of the time; 4 if most of the time; and 5 if all of the time.
K6 Scale	8	The Kessler Psychological Distress Scale (K6) measure, calculated for each household by summing the values reported in Columns 2-7.

Note: These variables are used in Table 12.

**Table E11: Variable Definitions for Household Controls**

Variable	Definition
Distance to branch (km)	Distance in km from each household house to the associated KGFS branch location (for treatment villages, this is the actual branch location; for control, this is the hypothetical branch location identified by KGFS).
Head of Household Age	Age of the head of household, identified by the respondent.
Head of Household Years of Education	Number of years of education completed by the head of household. Respondents are asked what the highest class is that the head of the household completed, which is then converted into years: no class passed/Anganwadi/Balwadi is 0 years, and all other specified classes (Class 1-5, 6, 7, etc.) are converted by adding 2 to the class number. For example, Class 6 equates to 8 years.
Household Caste	Reported caste of the household, of the following categories: Forward Caste, Backward Caste, Most Backward Caste, Scheduled Caste, Scheduled Tribe, Other Backward Caste. Included in tables concerning the Household Survey Sample only, since caste was not asked in the SNM survey.
Household Religion	Reported religion of the household, of the following categories: Hindu, Christian, Muslim, Jain, Sikh, Buddhist, Zoroastrian (Parsi), Atheist. Included in tables concerning the Household Survey Sample only, since religion was not asked in the SNM Survey.
Land ownership	Reported land ownership of the household.

Note: These variables are utilized in all tables that report using household controls.