

Online Appendix: Long-term Effects of the Targeting the Ultra Poor Program

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I. Timeline and Intervention Description

The TUP program in India was implemented by NGO Bandhan in Murshidabad district of West Bengal.

A. Selection

The poorest households were identified in two steps. First, residents across 120 village hamlets ranked households into five wealth quintiles in a participatory rural appraisal exercise. Among households ranked in the bottom quintile Bandhan then verified eligibility per seven criteria: (i) presence of an able-bodied female member (to manage the asset), (ii) no credit access, (iii) landholding below 0.2 acres, (iv) no ownership of productive assets, (v) no able-bodied male member, (vi) presence of school-aged children who are working instead of attending school, and (vii) primary source of income being informal labor or begging. Households had to meet the first two and at least three of the remaining five criteria in order to be eligible for the TUP intervention. In total, nine hundred seventy eight (978) households were deemed eligible. Roughly half of these (514) were randomly assigned to receive the intervention, with stratification at the hamlet level. However, of these, only 266 accepted treatment.

B. Take-up

Some individuals in the treated group refused to participate in the program: 266 of 514 (52%) agreed to participate. As per Bandhan, the implementing organization, 13% were found ineligible by Bandhan because they participated in microcredit or self-help groups. The remaining 35% refused to participate for one of two reasons as also reported in Banerjee et al. (2015): First, in some villages, households mistakenly thought that Bandhan was a Christian organization trying to convert beneficiaries, and accepting livestock would obligate them to participate in Christian rituals. Second, some wives were worried that their husbands would mishandle the asset, causing them to lose face in their village.

C. Intervention

Households in the treatment group who chose to participate chose a productive asset from a menu of options (2 cows, 4 goats, 1 cow and 2 goats, non-farm

microenterprise inventory, etc). About 82% chose livestock. The most commonly chosen assets were goats (52%), cows (30%) and nonfarm microenterprise inventory (11%). In addition to the asset they received weekly consumption support for 13-40 weeks, depending on the chosen asset: 30 weeks for households choosing goats, 40 weeks for households receiving cows, and 13 weeks for nonfarm enterprise. The allowance of Rs.90/week (\$7.6 in 2007 USD PPP) was meant to aid subsistence. Households were visited weekly by Bandhan staff for 18 months after the transfer. They were required to save approximately INR 10 (\$0.84 in 2007 USD PPP) at these weekly meetings. The meetings were also designed to deliver training on generating income from the chosen asset, life skills coaching, and health information. Bandhan had no contact with beneficiary households starting 18 months after the asset transfer, unless they became microfinance clients, which was rare.

The asset transfer was valued at INR 4500 (\$462 in 2018 USD PPP, to be used in cost-benefit calculations).

D. Timeline

Table A1 depicts the timeline of asset transfer as well as survey waves.

II. Index construction

Indices representing household and adult outcomes in Table 1 are constructed using the same methodology as in Banerjee et al. (2015), which studied the TUP's impact 3 years post the delivery of assets. All outcomes in Table 1 of this paper are exactly as in Banerjee et al. (2015), with one exception. We do not include information about women's empowerment as this was not measured after endline 1.

The asset index aggregates ownership of livestock, other productive assets (e.g. bicycle or sewing machine), and durable household items (e.g. TV, refrigerator). It is constructed by first performing principal component analysis on the constituent components, and then creating a z-score with respect to the baseline value of the index, i.e., subtracting the baseline mean of the index and dividing by its baseline standard deviation.

All other indices (per capita consumption, food security, financial inclusion, physical health, mental health) are created by first constructing z-scores, i.e., subtracting the baseline mean and dividing by the baseline standard deviation for each variable comprising the index, averaging over these scores, and standardizing to the baseline value of the index. One exception is the income and revenue index, for which we do not have baseline information about some sub-components; it is therefore standardized to the control mean.

Per capita consumption is constructed using a detailed consumption module asking about households' food, non-food and durable purchases. The food security index aggregates whether everyone in the household gets enough food every

day, whether it is not the case that any adult skipped a meal in the last year, that no household member went without food for a day, no children skipped meals, and everyone in the household regularly ate 2 meals a day. Financial inclusion aggregates monthly loans and savings. The physical health index combines measures of individuals' perceived health, whether the individual missed a day of work in the past month due to poor health, and an activities of daily living score. The mental health index aggregates measures of life satisfaction, feelings of sadness, and periods of worry. The political involvement index aggregates information about whether they voted in the last election and ever approached a Gram Pradhan (village head) or booth member about village needs.

The income and revenues index aggregates measures of income from livestock ownership, micro-enterprise, and other self and wage employment activities of household members, including remittances, as reported in the household roster.

The construction of indices is exactly analogous to Banerjee et al. (2015). One exception is the income and revenues index, which adds reports of household members' earnings from self employment (business, livestock, fishery), wage employment (agricultural, non-agricultural, and salaried/regular) and remittances as reported in the household roster to create a measure of a household's monthly earnings. The version in Banerjee et al. (2015) adds to this reports of livestock revenue from the sale of livestock or livestock products in an avg. month reported in a separate livestock roster, as well as net business income (revenues minus costs) as reported in the module asking about details of household micro-enterprise activities. We rely only on measures reported in the household roster so as not to double-count income from self-employment activities.

III. Balance and Attrition

Table A2 reports average levels of household and adult variables for treated and control households at baseline, and tests for balance between the two. The two groups are indistinguishable along baseline characteristics.

We define a household as comprising all members who have lived under that roof for at least 30 days in the past year, when they are together share food from a common source, and contribute to and/or share in a common resource pool. We track the TUP (potential) recipient's household, defined in this way, across the four waves.

Table A3, Panel A reports rates of household-level attrition across the four endline survey waves for treated and control households and tests for differential attrition. On average 17% of households attrit at the first endline, 11% at the second and third, and 10.5% at the last; the rate of attrition is not statistically significantly different between the control and treated groups. Panel B explores whether treated and control households that attrit differ along observable characteristics. It regresses different household characteristics on an indicator for treatment, for having attrited in any given wave, and an interaction between the two, and reports the coefficient on the last. For each wave, treated and control

households that attrit resemble each other on observable characteristics. Among the 14 characteristics tested across 4 waves, the only statistically significant differences are in outstanding loans at endline 1, and savings in endline 1 and 2.

To alleviate the concern that differential attrition between treated and control groups could be driving effects, Table A4 reports the treatment effect on household and adult outcomes for households that are successfully tracked for all four waves of the survey. They demonstrate magnitudes and time patterns consistent with Table 1.

IV. Cost-benefit analysis

A. India

To get an estimate of costs, Banerjee et al. (2015) convert all monetary figures from INR to USD PPP at the start of the program. They then convert from USD PPP for that year to 2014 USD values by multiplying by the ratio of the 2014 US Consumer Price Index to the US CPI for that year. This paper further converts the cost figures from Table 4 in Banerjee et al. (2015) to 2018 USD PPP by multiplying by the ratio of the 2018 US CPI to 2014 US CPI. They are then inflated to year 10 net present values using a social discount rate of 5%, as in Banerjee et al. (2015) using the following formula.

$$cost_{year10} = cost_{year0} * (1.05)^{10}$$

This rate is chosen in harmony with the World Bank and IMF policy¹. Costs were provided by Bandhan, following a template provided by Banerjee et al. (2015). The organizations provided details of the total program costs and each line item, and the total number of participants in the program. Costs were then converted to a per-person basis. Only 52% of treated group households took up the program: the cost-benefit exercise conservatively uses the per-person cost only of those who received the program (rather than the total costs divided by the number of all people selected in the randomization), although benefits are as per the ITT estimates.

To get an estimate of benefits in nondurable consumption this paper converts monetary figures from INR to USD PPP in the year of the survey. To convert into 2018 USD corrected for PPP it then multiplies the figure by the ratio of the 2018 US CPI to that year's US CPI. These benefits are then inflated to year 10 net present values using the discount rate 5%. For post-intervention years in which there is no survey, we assume benefits grow linearly between the last and next survey wave. Non-durable per capita monthly consumption is converted to annual household-level values by multiplying by the avg. household size (3.8) and 12 (months/year).

¹The World Bank, "Staff guidance note on the application of the joint bank-fund debt sustainability framework for low-income countries" 2013.

To get the value of future consumption in perpetuity, we assume endline 10 consumption continues in perpetuity and calculate its value as:
$$= \frac{\text{Year 10 ITT effect on nondurable consumption}}{\frac{1.05}{0.05}}.$$

The value of assets was not asked in the surveys. To get an estimate of how much the gain in household asset is worth, Banerjee et al. (2015) then use the following formula: $HH\ Asset\ Value\ ITT = HH\ Asset\ Index\ ITT * \frac{\gamma * asset_i}{effect\ size} * \frac{\alpha * USD}{1\ asset_i}$, where γ is the asset weight in the index and α is the asset price. They find the resulting value as being \$6 (2014 USD PPP, but also the same when rounded in 2018 USD PPP). This is small because households owned virtually no assets at baseline. We do not have asset prices in 2018 and so simply use the \$6 value (which is the same in 2018 USD PPP after rounding to the nearest number, the decimal is \$6.3). Since the value is small, it does not materially affect the estimate of benefits, which are largely driven by gains in consumption. By way of magnitude, the ITT effect on annual household consumption at year 10 is \$830.

The PPP corrected exchange rates used for 2007, 2008, 2009, 2010, 2011, 2014, 2015, 2016, 2017, and 2018 are: 12.131, 12.929, 13.609, 14.653, 15.109, 16.997, 16.996, 17.523, 17.729, 17.729. These are obtained from the World Bank. The U.S. CPIs used for 2007, 2008, 2009, 2010, 2011, 2014, 2015, 2016, 2017, and 2018 are: 207.342, 215.303, 214.537, 218.056, 224.939, 236.736, 237.017, 240.007, 245.120, 250.089. These are obtained from the US Bureau of Labor Studies.

The benefit/cost ratio is calculated as the net present value of the benefits over the net present value of the costs. Table A5 provides the resulting cost and benefit figures.

B. Other settings

We calculate what the cost-benefit analysis in four other settings from Banerjee et al. (2015) (Ethiopia, Ghana, Pakistan, and Peru) would look like had the path of consumption growth followed exactly pattern in India. We inflate costs (reported in Banerjee et al. (2015)) to year 10 values exactly as above. Treatment effects on non-durable consumption until year 3 are also reported in Banerjee et al. (2015), which we inflate to year 10 NPV using the 5% social discount rate.

We then calculate counterfactual consumption gains in years 4-10 had the path of consumption grown exactly like in India. In other words, we assume $\frac{Year\ 7\ ITT\ in\ country\ j}{Year\ 3\ ITT\ in\ country\ j} = \frac{Year\ 7\ ITT\ in\ India}{Year\ 3\ ITT\ in\ India}$ and the same for the ratio between year 10 and 3. We linearly interpolate the path of consumption between years 3-7 and 7-10, as above. We inflate all values to year 10 NPV using the 5% social discount rate.

For household assets we assume the gain remains the same as observed in year 3 and inflate that to year 10 values.

Table A6 provides the cost-benefit figures for the four other settings.

REFERENCES

Banerjee, Abhijit, Esther Duflo, Nathanael Goldberg, Dean Kar-

lan, Robert Osei, William Parienté, Jeremy Shapiro, Bram Thuysbaert, and Christopher Udry. 2015. "A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries." *Science*, 348(6236): 1260799.

Table A1: Timeline

Activity	Date
Baseline survey	Feb 2007 - Mar 2008
Asset transfer	Jun 2007 - Mar 2008
Endline survey 1	Dec 2008 - Aug 2009
Endline survey 2	Jul 2010 - Feb 2011
Endline survey 3	Jan 2014 - Mar 2015
Endline survey 4	Jan 2018 - Jun 2018

Table A2: Balance

	Treatment Mean	Control Mean	Difference	Obs
<i>Household Level Variables</i>				
Consumption per capita, month	40.527	40.969	-0.946 (1.554)	978
Everyone in HH gets enough food everyday	0.105	0.114	-0.008 (0.019)	978
No adults skipped meals	0.086	0.088	0.004 (0.018)	978
Agricultural Profits (last month)	0.100	-0.119	0.244 (0.206)	978
Nonfarm Microenterprise Income (last month)	26.241	17.047	6.998 (11.105)	978
Wage income (last month)	86.460	80.861	6.820 (3.899)	991
Self-Reported Economic Status (1-10)	2.012	1.925	0.065 (0.075)	978
Total Outstanding Loans	219.509	221.669	-10.681 (28.019)	976
Total Savings (last month)	1.542	2.954	-1.603 (2.839)	977
<i>Adult Level Variables</i>				
Minutes spent on productive activities in last day	168.190	170.791	-0.702 (9.910)	1731
Member has not missed any days due to illness, last month	0.476	0.512	-0.045 (0.024)	1731
Activities of Daily Living Score	0.603	0.593	0.010 (0.017)	1731
Self-reported happiness	1.682	1.631	0.040 (0.038)	1730
Member has not experienced a period of worry in last year	0.203	0.199	-0.004 (0.019)	1725

Notes: Column 1 reports the treated mean, Column 2 the control mean, Column 3 reports the coefficient on treatment in a regression of the baseline outcome on treatment status. The regression includes hamlet-level fixed effects. Robust standard errors are reported in parentheses.

Table A3: Attrition

	Endline 1		Endline 2		Endline 3		Endline 4	
	Attrit HH (1)	Standard Error (2)	Attrit HH (3)	Standard Error (4)	Attrit HH (5)	Standard Error (6)	Attrit HH (7)	Standard Error (8)
<i>Panel A: Attrition in Treatment vs Control</i>								
Treatment	-0.01	(0.02)	-0.02	(0.02)	0.02	(0.02)	0.01	(0.02)
Treatment Mean	0.161		0.096		0.125		0.112	
Control Mean	0.174		0.123		0.108		0.101	
<i>Panel B: Attrition & BL Characteristics in Treatment vs Control</i>								
	Attrit HHxT (1)	SE (2)	Attrit HHxT (3)	SE (4)	Attrit HHxT (5)	SE (6)	Attrit HHxT (7)	SE (8)
<i>Household Level Variables</i>								
Consumption per capita, month	-0.42	(4.32)	-1.70	(5.25)	1.37	(5.25)	0.97	(5.33)
Everyone in HH gets enough food everyday	-0.01	(0.05)	-0.04	(0.07)	-0.03	(0.07)	-0.09	(0.07)
No adults skipped meals	0.02	(0.05)	0.05	(0.06)	0.10	(0.06)	-0.00	(0.06)
Agricultural Profits (last month)	-0.33	(0.57)	-0.48	(0.69)	-0.41	(0.69)	-0.26	(0.71)
Nonfarm Microenterprise Income (last month)	-2.33	(30.86)	-31.55	(37.70)	4.94	(37.72)	12.65	(38.04)
Wage income (last month)	18.38	(10.82)	-1.51	(13.22)	-12.05	(13.21)	6.64	(13.37)
Self-Reported Economic Status (1-10)	0.03	(0.21)	0.31	(0.25)	-0.08	(0.25)	0.06	(0.26)
Total Outstanding Loans	-121.06	(77.65)	-41.39	(94.44)	35.34	(94.84)	-77.96	(95.91)
Total Savings (last month)	-15.98	(7.85)	-21.12	(9.56)	-23.89	(9.57)	0.50	(9.74)
<i>Adult Level Variables</i>								
Minutes spent on productive activities in last day	19.40	(28.19)	-19.32	(34.52)	19.00	(33.73)	-21.15	(22.07)
Member has not missed any days due to illness, last month	0.04	(0.07)	0.00	(0.08)	0.07	(0.08)	0.06	(0.05)
Activities of Daily Living Score	0.01	(0.05)	0.00	(0.06)	-0.03	(0.06)	-0.05	(0.04)
Self-reported happiness	0.12	(0.11)	0.15	(0.13)	-0.16	(0.13)	0.08	(0.08)
Member has not experienced a period of worry in last year	0.02	(0.05)	-0.03	(0.06)	-0.00	(0.06)	-0.04	(0.04)

Notes: Panel A reports the coefficient on treatment in a regression of an indicator for attrition on treatment status at each of the four endline waves of the survey. Panel B regresses different household characteristics on an indicator for treatment, for having attrited in any given wave, and an interaction between the two, and reports the coefficient on the last. All specifications include hamlet-level fixed effects. Robust standard errors are shown in parentheses.

Table A4: Effect on household and adult outcomes (all 9 indices)

	Asset Index	Per-capita Consumption	Food Security Index	Income and Revenues	Financial Inclusion Index	Physical Health Index	Mental Health Index	Productive time use	Political Involvement Index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>A: Endline 1 (18 months)</i>									
Treatment	0.217 (0.111)	0.311 (0.076)	0.184 (0.048)	0.145 (0.075)	-0.004 (0.042)	0.061 (0.028)	0.115 (0.029)	0.285 (0.049)	0.009 (0.034)
q-value	0.041	0.001	0.001	0.041	0.262	0.028	0.001	0.001	0.248
Control Mean	-0.20	0.35	0.35	0.00	0.14	0.12	0.32	0.23	-0.05
Baseline Mean	-0.00	-0.00	-0.00	.	-0.00	-0.00	-0.00	-0.00	0.00
Observations	679	813	812	814	812	1,504	1,502	1,504	1,504
<i>B: Endline 2 (3 years)</i>									
Treatment	0.389 (0.103)	0.292 (0.079)	0.251 (0.059)	0.172 (0.071)	0.192 (0.062)	0.027 (0.027)	0.012 (0.037)	0.102 (0.044)	0.021 (0.032)
q-value	0.001	0.001	0.001	0.015	0.003	0.160	0.334	0.018	0.232
Control Mean	-0.25	0.85	0.94	-0.00	0.30	0.21	0.75	0.28	0.13
Baseline Mean	-0.00	-0.00	-0.00	.	-0.00	-0.00	-0.00	-0.00	0.00
Observations	875	875	875	875	875	1,757	1,757	1,756	1,759
<i>C: Endline 3 (7 years)</i>									
Treatment	0.814 (0.132)	0.717 (0.125)	0.431 (0.062)	0.334 (0.070)	0.181 (0.135)	0.130 (0.031)	0.249 (0.042)	0.165 (0.044)	0.031 (0.027)
q-value	0.001	0.001	0.001	0.001	0.047	0.001	0.001	0.001	0.060
Control Mean	-0.46	1.09	1.09	0.00	0.67	0.57	1.09	-0.04	0.27
Baseline Mean	-0.00	-0.00	-0.00	.	-0.00	-0.00	-0.00	-0.00	0.00
Observations	807	867	867	869	867	1,906	1,900	1,915	1,925
<i>D: Endline 4 (10 years)</i>									
Treatment	0.346 (0.121)	0.579 (0.175)	0.127 (0.063)	0.264 (0.080)	0.121 (0.152)	0.187 (0.040)	0.203 (0.044)	0.148 (0.052)	-0.023 (0.027)
q-value	0.005	0.002	0.020	0.002	0.105	0.001	0.001	0.005	0.105
Control Mean	-0.26	1.61	1.21	0.00	1.08	0.12	0.76	-0.02	0.45
Baseline Mean	-0.00	-0.00	-0.00	.	-0.00	-0.00	-0.00	-0.00	0.00
Observations	885	880	885	885	885	1,229	1,229	1,229	1,229

Notes: This table is the analog of table 1, but adds the political involvement index, making it the same as the Banerjee et al. 2015 paper. Robust standard errors are shown in parentheses. They are clustered by household for adult outcomes. The components of indices are described in detail in section 3.1. Columns 1-5 refer to household level outcomes and 6-9 refer to adult-level outcomes. The asset index is constructed by first performing principal component analysis on the constituent components, and then creating a z-score with respect to the baseline value of the index (i.e., subtracting the baseline mean of the index and dividing by its baseline standard deviation). The per capita consumption, food security, financial inclusion, physical health, mental health, productive time, and political involvement indices are constructed by first constructing component-wise z-scores (i.e., subtracting the baseline mean and dividing by the baseline standard deviation), averaging the z-scores, and then standardizing by the baseline value of the index (i.e., subtracting the baseline mean of the index and dividing by its baseline standard deviation). Thus, all coefficients are reported in units of baseline standard deviation of the index. The income and revenues index does the analog by standardizing to the control group, i.e. coefficients are reported in units of endline standard deviations of the control group (since not all components were measured at baseline). Time use is reported in minutes. To correct for multiple hypothesis testing we calculate q-values per the Benjamini-Hochberg step-up method; reported q-values indicate the smallest false discovery rate at which the null hypothesis of zero effect is rejected. All specifications include baseline controls, and hamlet-level fixed effects.

Table A5: Monthly Consumption and Food Security (full table)

	Per capita consumption, excl. migrant	Per capita consumption, hh avg. c for migrant	Per capita food consumption	Per capita non-food consumption	Per capita durable goods consumption	Everyone in HH gets enough food everyday	No adults skipped meals	No one in the HH went a whole day without food	No children skipped meals	Everyone in the HH regularly eats 2 meals per day
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>A: Endline 1 (18 months)</i>										
Treatment	7.554 (1.837)	8.196 (2.255)	5.362 (1.195)	2.133 (1.082)	-0.356 (0.374)	0.074 (0.025)	0.078 (0.025)	0.128 (0.030)	0.032 (0.034)	0.012 (0.019)
Control Mean	49.25	52.77	33.28	15.97	2.28	0.11	0.10	0.68	0.75	0.91
Baseline Mean	40.74	26.76	14.00	0.97	0.11	0.09	0.28	0.51	0.51	0.77
Observations	813	813	813	813	813	812	811	811	613	812
<i>B: Endline 2 (3 years)</i>										
Treatment	7.080 (1.913)	7.429 (2.441)	3.021 (1.151)	4.010 (1.139)	0.881 (0.385)	0.141 (0.034)	0.138 (0.034)	0.038 (0.023)	0.085 (0.025)	0.026 (0.013)
Control Mean	61.37	66.59	37.54	23.83	1.93	0.42	0.42	0.85	0.86	0.95
Baseline Mean	40.74	26.76	14.00	0.97	0.11	0.09	0.28	0.51	0.51	0.77
Observations	875	875	875	875	875	875	875	875	636	875
<i>C: Endline 3 (7 years)</i>										
Treatment	17.385 (3.030)	21.252 (3.916)	9.778 (1.731)	7.542 (1.681)	2.471 (0.507)	0.205 (0.032)	0.239 (0.032)	0.095 (0.022)	0.045 (0.026)	0.087 (0.021)
Control Mean	67.15	72.95	37.76	29.40	2.27	0.59	0.55	0.83	0.87	0.85
Baseline Mean	40.74	26.76	14.00	0.97	0.11	0.09	0.28	0.51	0.51	0.77
Observations	867	867	867	867	867	867	867	867	546	867
<i>D: Endline 4 (10 years)</i>										
Treatment	14.037 (4.242)	18.454 (5.390)	7.354 (1.595)	6.700 (3.438)	4.204 (1.845)	0.075 (0.029)	0.067 (0.032)	0.029 (0.026)	-0.031 (0.036)	0.020 (0.022)
Control Mean	79.88	86.88	39.09	40.85	5.75	0.70	0.62	0.78	0.84	0.85
Baseline Mean	40.74	26.76	14.00	0.97	0.11	0.09	0.28	0.51	0.51	0.77
Observations	880	880	880	880	880	885	885	884	451	885

Notes: This table is the analog of table 2, but includes all the food security measures. Robust standard errors are shown in parentheses. Columns 1-5 report monthly consumption. Column 1 does not include migrant workers in the calculation. Column 2 assumes migrant workers consume the household average. Columns 3-5 do not include migrant workers. All values are in 2018 USD adjusted for purchasing power parity. All specifications include baseline controls, and hamlet-level fixed effects.

Table A6: Monthly Income and Revenue (full table)

	Livestock revenue	Nonfarm microen- terprise income	Self- employment (typ month)	Productive Asset Index	Household Asset Index	Wages: migrants remit 100% of wage	Wages: migrants remit 30% of wage	Wages: impute typical migrant earnings	Remittances	Self- Reported Economic Status (1-10)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>A: Endline 1 (18 months)</i>										
Treatment	10.258 (2.342)	7.927 (4.538)	18.665 (5.796)	0.444 (0.086)	0.123 (0.092)	3.902 (6.685)	3.902 (6.685)	5.083 (8.485)	0.000 (.)	0.204 (0.071)
Control Mean	3.33	36.24	46.09	-0.23	-0.12	96.06	96.06	106.45	0.00	2.77
Baseline Mean	0.00	13.24	16.30	-0.00	-0.00				.	1.97
Observations	814	814	814	681	809	814	814	814	814	811
<i>B: Endline 2 (3 years)</i>										
Treatment	7.683 (2.652)	25.116 (6.257)	31.057 (6.897)	0.571 (0.072)	0.245 (0.098)	6.112 (11.663)	6.539 (13.135)	4.628 (13.674)	3.696 (2.369)	0.297 (0.080)
Control Mean	7.99	49.47	60.50	-0.30	-0.17	201.07	211.41	217.89	12.88	3.36
Baseline Mean	0.00	13.24	16.30	-0.00	-0.00				.	1.97
Observations	875	875	875	875	875	875	875	875	875	875
<i>C: Endline 3 (7 years)</i>										
Treatment	27.262 (5.158)	67.592 (14.264)	108.360 (15.149)	0.795 (0.083)	0.600 (0.118)	75.675 (22.299)	79.802 (24.650)	89.024 (25.730)	8.871 (6.455)	1.575 (0.141)
Control Mean	9.70	90.49	103.15	-0.40	-0.35	279.06	295.46	301.31	34.87	4.73
Baseline Mean	0.00	13.24	16.30	-0.00	-0.00				.	1.97
Observations	869	869	869	807	867	869	869	869	869	867
<i>D: Endline 4 (10 years)</i>										
Treatment	16.710 (8.756)	36.816 (14.259)	93.872 (20.803)	0.197 (0.105)	0.245 (0.113)	38.238 (24.526)	47.306 (31.054)	52.291 (30.057)	19.057 (7.440)	0.642 (0.129)
Control Mean	17.80	98.49	144.27	-0.10	-0.21	325.04	350.70	354.93	36.81	4.03
Baseline Mean	0.00	13.24	16.30	-0.00	-0.00				.	1.97
Observations	885	885	885	885	885	885	885	885	885	885

Notes: This table is the analog of table 3, but includes the household asset index in addition. Robust standard errors are shown in parentheses. All values are in 2018 USD PPP. Column 1 reports revenue from the sale of livestock or livestock products in an avg. month. Column 2 reports the sum of household members' earnings from microenterprise in a typical month, as reported in the household roster. Column 3 reports self-employment income from a typical month, calculated as the sum of income earned by each individual member from various self-employment activities, as reported in the household roster. Columns 4 and 5 report indices of productive and household durable assets, constructed by first performing principal component analysis on the constituent components, and then creating a z-score with respect to the baseline value of the index (i.e., subtracting the baseline mean of the index and dividing by its baseline standard deviation). The components of these indices are described in detail in section 3.1 Columns 6-8 sum over income earned by each individual member from various activities in a typical month, as reported in the household roster. Wages comprise the sum of household members' earnings from agricultural labor, casual labor, and salaried employment. We sum over locally earned wage income as reported in the household roster, and x times the remittances sent back as a migrant worker. We vary x to reflect different assumptions about the share of a migrant's earnings that are remitted back to a household: 100% remitted (Column 6), 30% remitted (Column 7), or earning as much as they would in the village over a typical month (Column 8). Column 9 reports the monthly avg. of remittances sent back by migrant members of a household. We do not collect data on remittances at the 18 month survey. Column 10 reports a measure of economic satisfaction on a scale of 1-10. All specifications include baseline controls, and hamlet-level fixed effects.

Table A7: Effect on household and adult outcomes for non-attrited sample

	Asset Index	Per-capita Consumption	Food Security Index	Income and Revenues	Financial Inclusion Index	Physical Health Index	Mental Health Index	Productive time use	Political Involvement Index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>A: Endline 1 (18 months)</i>									
Treatment	0.279	0.310	0.156	0.143	-0.041	0.060	0.134	0.268	-0.001
	(0.122)	(0.080)	(0.053)	(0.080)	(0.047)	(0.030)	(0.032)	(0.051)	(0.036)
q-value	0.024	0.001	0.005	0.045	0.107	0.038	0.001	0.001	0.277
Control Mean	-0.18	0.37	0.36	0.01	0.16	0.12	0.31	0.24	-0.04
Baseline Mean	0.03	0.02	-0.01	0.01	0.01	-0.00	0.02	0.02	0.01
Observations	571	696	696	696	696	1,311	1,309	1,311	1,311
<i>B: Endline 2 (3 years)</i>									
Treatment	0.380	0.357	0.252	0.221	0.199	0.040	0.038	0.150	-0.001
	(0.118)	(0.089)	(0.069)	(0.077)	(0.069)	(0.030)	(0.042)	(0.048)	(0.034)
q-value	0.004	0.001	0.002	0.005	0.005	0.086	0.157	0.004	0.308
Control Mean	-0.26	0.85	0.94	-0.09	0.30	0.20	0.74	0.26	0.14
Baseline Mean	0.03	0.02	-0.01	0.01	0.01	-0.00	0.02	0.02	0.01
Observations	696	696	696	696	696	1,397	1,397	1,396	1,398
<i>C: Endline 3 (7 years)</i>									
Treatment	0.999	0.815	0.474	0.395	0.081	0.141	0.332	0.175	0.024
	(0.157)	(0.149)	(0.072)	(0.070)	(0.153)	(0.033)	(0.046)	(0.048)	(0.029)
q-value	0.001	0.001	0.001	0.001	0.153	0.001	0.001	0.001	0.117
Control Mean	-0.43	1.11	1.05	-0.06	0.72	0.57	1.04	-0.04	0.27
Baseline Mean	0.03	0.02	-0.01	0.01	0.01	-0.00	0.02	0.02	0.01
Observations	639	694	694	696	694	1,594	1,588	1,602	1,609
<i>D: Endline 4 (10 years)</i>									
Treatment	0.509	0.770	0.144	0.333	0.247	0.202	0.248	0.191	0.001
	(0.146)	(0.217)	(0.072)	(0.090)	(0.170)	(0.045)	(0.049)	(0.060)	(0.029)
q-value	0.001	0.001	0.020	0.001	0.059	0.001	0.001	0.001	0.199
Control Mean	-0.27	1.67	1.24	-0.04	1.09	0.10	0.77	0.01	0.47
Baseline Mean	0.03	0.02	-0.01	0.01	0.01	-0.00	0.02	0.02	0.01
Observations	696	692	696	696	696	1,001	1,001	1,001	1,001
p-value for test: EL3<=EL2	0.000	0.001	0.024	0.005	0.773	0.008	0.000	0.349	0.282
p-value for test: EL3=EL4	0.002	0.850	0.518	0.000	0.444	0.223	0.157	0.820	0.564

Notes: This table is the analog of table 1, but follows the sample of households who do not attrit in any wave of the survey. Robust standard errors are shown in parentheses. They are clustered by household for adult outcomes. The components of indices are described in detail in section 3.1. Columns 1-5 refer to household level outcomes and 6-9 refer to adult-level outcomes. The asset index is constructed by first performing principal component analysis on the constituent components, and then creating a z-score with respect to the baseline value of the index (i.e., subtracting the baseline mean of the index and dividing by its baseline standard deviation). The per capita consumption, food security, financial inclusion, physical health, mental health, productive time, and political involvement indices are constructed by first constructing component-wise z-scores (i.e., subtracting the baseline mean and dividing by the baseline standard deviation), averaging the z-scores, and then standardizing by the baseline value of the index (i.e., subtracting the baseline mean of the index and dividing by its baseline standard deviation). Thus, all coefficients are reported in units of baseline standard deviation of the index. The income and revenues index does the analog by standardizing to the control group, i.e. coefficients are reported in units of endline standard deviations of the control group (since not all components were measured at baseline). Time use is reported in minutes. To correct for multiple hypothesis testing we calculate q-values per the Benjamini-Hochberg step-up method; reported q-values indicate the smallest false discovery rate at which the null hypothesis of zero effect is rejected. All specifications include baseline controls, and hamlet-level fixed effects.

Table A8: Cost-Benefit Analysis

Panel A: Program costs per household, USD PPP 2018

Direct transfer costs	739
Asset cost	462
Food stipend	278
Total supervision costs	430
Salaries of implementing organization staff	314
Materials	1
Training	20
Travel costs	18
Other supervision expenses	77
Total direct costs	1169
Start-up expenses	40
Indirect costs	118
Total costs, calculated as if all incurred immediately at beginning of year	1328
Total costs, inflated to year 10 at 5% annual discount rate	2163

Panel B: Benefits per households, USD PPP, all values inflated or deflated to year 10 at 5% annual social discount rate

Year 1 annual consumption ITT, assuming treatment effect equal to 18 month endline	588
Year 2 annual nondurable consumption ITT treatment effect equal to 18 month endline	560
Year 3 annual nondurable consumption ITT treatment effect equal to 3 year endline	517
Year 4 annual nondurable consumption ITT treatment effect equal to 3 year endline	702
Year 5 annual nondurable consumption ITT treatment effect equal to 3 year endline	868
Year 6 annual nondurable consumption ITT treatment effect equal to 3 year endline	1017
Year 7 annual nondurable consumption ITT treatment effect equal to 7 year endline	1150
Year 8 annual nondurable consumption ITT treatment effect equal to 7 year endline	1035
Year 9 annual nondurable consumption ITT treatment effect equal to 7 year endline	928
Year 10 annual nondurable consumption ITT treatment effect equal to 10 year endline	830
Year 10 household asset ITT treatment effect	6
Year 10 onward total consumption ITT treatment effect, assuming year 10 gains persist in perpetuity	15810
Total benefits over 10 years:	8201
Total benefits if sustained in perpetuity:	24011

Panel C: Benefit/cost ratios

Total benefits/total costs ratio over 10 years: total benefits/total costs	379%
Total benefits/total costs ratio if sustained in perpetuity: total benefits/total costs	1110%

Notes: All assumptions are as in Banerjee et al. 2015 and are detailed in the online appendix. Figures are reported in 2018 USD PPP.

Table A9: Cost-Benefit Analysis for other settings

	<i>Ethiopia</i>	<i>Ghana</i>	<i>Pakistan</i>	<i>Peru</i>
<i>Panel A: Program costs per household, USD PPP 2018</i>				
Total costs, calculated as if all incurred immediately at beginning of year	3591	4672	5150	4960
Total costs, inflated to year 10 at 5% annual discount rate	5849	7610	8389	8079
<i>Panel B: Benefits per households, USD PPP, all values inflated or deflated to year 10 at 5% annual social discount rate</i>				
Year 1 annual consumption ITT, assuming treatment effect equal to 18 month endline	634	413	863	476
Year 2 annual nondurable consumption ITT treatment effect equal to 18 month endline	604	393	821	454
Year 3 annual nondurable consumption ITT treatment effect equal to 3 year endline	597	467	635	370
Year 4 annual nondurable consumption ITT treatment effect, if follows the same path as India	809	634	862	503
Year 5 annual nondurable consumption ITT treatment effect, if follows the same path as India	1001	784	1064	622
Year 6 annual nondurable consumption ITT treatment effect, if follows the same path as India	1172	918	1247	727
Year 7 annual nondurable consumption ITT treatment effect, if follows the same path as India	1325	1038	1410	822
Year 8 annual nondurable consumption ITT treatment effect, if follows the same path as India	1200	939	1277	744
Year 9 annual nondurable consumption ITT treatment effect, if follows the same path as India	1084	848	1152	672
Year 10 annual nondurable consumption ITT treatment effect, if follows the same path as India	975	764	1037	605
Year 3 household asset ITT treatment effect, inflated to year 10 values	89	21	10	52
Year 10 onward total consumption ITT treatment effect, assuming year 10 gains persist in perpetuity	18571	14552	19752	11524
Total benefits over 10 years:	9490	7219	10378	6047
Total benefits if sustained in perpetuity:	28061	21771	30130	17571
<i>Panel C: Benefit/cost ratios</i>				
Total benefits/total costs ratio over 10 years: total benefits/total costs	162%	95%	124%	75%
Total benefits/total costs ratio if sustained in perpetuity: total benefits/total costs	480%	286%	359%	217%

Notes: Figures are reported in 2018 USD PPP. The replicates the cost-benefit exercise had the path of gains in other settings resembled that in India. Gains until year 3 gains are taken from Banerjee et al. 2015 and then extrapolated over time. Details in the online appendix