PPAF-CERP Asset Transfer Program

One Year Impact Report

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EXECUTIVE SUMMARY

The Asset Transfer Program aims to evaluate the effectiveness of asset versus cash transfers as a means of social protection, hence providing recommendations for devising optimal policy to graduate ultra and vulnerable poor households out of poverty. The program was implemented in four districts of southern Punjab, and also serves as a rigorous evaluation of PPAF's flagship asset transfer program that is operated in numerous districts across the country. Following the implementation of the asset and cash transfers in 2014, a comprehensive household survey was conducted one year after the intervention to measure the impact on different outcomes of interest for the treated households, as well as untreated households in treated villages. The major findings from the survey are summarized below:

- A significant shift in occupational patterns was noted for the households who received assets as well as those who received cash, as they moved away from wage employment and into self-employment.
- Following this, household earnings from livestock related businesses registered a significant increase in both treatment arms, whereas earnings from wage employment, particularly casual wage employment, decreased. Net household earnings have so far not shown any change for households who received any type of transfer.
- There have been increases in consumption, savings and investment for both treatment arms.
- Analysis of spill-over effects on poor households who did not receive any transfer but were located in the treatment villages is so far inconclusive. These effects will likely take much longer to manifest in the local economies.
- The intervention has also caused community level organizations to become more active and financially sound. Individual level analysis has revealed that education is strongly correlated with increased participation in community organizations.
- So far in the short run, we can conclude that households who were part of our program are on their way to achieving the intended goals of the intervention.
- Continued engagement with our treatment and control groups is necessary to track their performance in the long run and reach clearer conclusions and policy lessons regarding the impact of our intervention on poverty outcomes.

INTRODUCTION

The Asset Transfer Program is a regional poverty alleviation development intervention, which helps raise the economic and social well-being of ultra and vulnerable poor households through increased ownership of livestock and non-livestock assets. In this preliminary report, we provide an evaluation of the short run (one year) impacts of the Program. The Program is evaluated relative to a control group, and also in comparison to an intervention with unconditional cash transfers of equivalent value. The Program is being implemented in four of the poor districts of Southern Punjab namely; Bahawalpur, Muzaffargarh, Lodhran and Bahawalnagar.

The exercise aims to provide evidence on the causal impacts of the Pakistan Poverty Alleviation Fund (PPAF) program on various outcomes for targeted households, by measuring them rigorously with a Randomized Control Trial (RCT). These outcomes include the household's engagement in different sectors, their productivity and earnings from the sectors, and the overall wellbeing of households as measured in terms of their total income, consumption and self-reported life satisfaction. This particular report provides an overview of the activities carried out during the first phase of intervention.

Although this program is primarily an evaluation study, the basic structure of the program is similar to the regular PPAF Asset Transfer Program. The program divides the total sample into two treatment arms: the first treatment arm is a replica of regular asset transfer programs where an in-kind asset combined with complementary trainings is provided to beneficiaries, whereas in the second treatment arm, beneficiaries also have a choice of choosing equivalent amount of cash instead of asset and trainings. The evaluation nature of this study will primarily help the team to measure the welfare impact of both interventions.

The intervention was completed in mid-2014, and 1,832 Ultra Poor and Vulnerable Poor households received one of the two treatments (asset transfers, or the unconditional cash transfer (UCT)). In order to track beneficiary households as well as measure the short-term impact of the program, two follow up tracker surveys were conducted after 4 and 8 months of the transfers. The objective of this report is to highlight key findings of the comprehensive household survey, which was conducted after fourteen months of the asset transfers and to document the impact of the intervention on different variables of interest for the treated households.

MARKET IMPERFECTIONS AND SOCIAL PROTECTION PROGRAMS

A number of market imperfections contribute to reinforcing poverty in Pakistan. These imperfections often create hurdles that dilute the effect of social protection programs. In Pakistan, multiple poverty alleviation methods are currently in practice. These include financing households through both micro loans and unconditional cash transfers (UCTs), asset and skill transfers and skill transfers alone. Most of these programs are designed to promote entrepreneurial behaviour among the poor so as to divert labour away from wage employment and towards self-employment.

The poor face multiple challenges in seeking to expand their incomes. Some of these include transaction costs of accessing faraway markets, which have a large opportunity cost of time spent in travel. Informational asymmetry is also a frequent outcome of these costs, which create a mismatch in the skills market[1]. Furthermore, the poor, due to the very nature of their vulnerable financial condition have to resort to an imperfect market of social insurance which requires informal taxation by their kin[2]. These constraints have a more direct bearing on UCTs as opposed to asset transfers as the possession of liquid money does not solve the issues of distance and skills while making informal taxation by kin even more likely.

Furthermore, some of the market imperfections faced by the program implementing body are also endogenous to the household. UCTs are susceptible to be diverted to fulfil immediate consumption needs of the poor such as marital expenditures. As a result, the policy aim that requires the poor to invest in small businesses is frustrated. Furthermore, UCTs also suffer from lack of control and commitment on the part of the beneficiaries to use the money for the desired purpose. Flypaper effects are particularly relevant as the household spends the exogenous income more readily and with less caution as opposed to when extra income originates from the household itself.

These and other market imperfections then lead to a policy debate as regards to the design of optimal social protection programs. The government of Pakistan currently finances an income supplementing program named Benazir Income Support Program (BISP) while simultaneously facilitating various asset and skill transfer programs as well as micro finance loans. Given a perfect market, all of these programs are bound to lead to similar results on poverty alleviation. However, as explained above, they may have varying degrees of success due to the inherent market failures. Asset and skill bundle transfers have had a better record of improving incomes as they circumvent many of the

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[1] Das et al 2005, de Janvry and Sadoulet 2005
[2] Fafchamps et al. 2013, Angelucci et al. 2015

shortcomings of UCTs[3]. Additionally, in-kind transfers also generate positive externalities on the communities as expansion of businesses engenders local economic growth. Because of the fact that in-kind transfers are more costly to implement than UCTs, there is a need for clear evidence that can manifest the precise differential effectiveness of the two types of Social Security Programmes to adequately weigh them as policy options.

As a result, this study is aimed at understanding the nature of market constraints and their exact effect on UCTs as compared to asset and skill transfers. By employing a randomized control trial with two treatment groups, we aim to find the individual impact of asset and unconditional cash transfers as well as their differential impact on poverty. This research analyses different market imperfections and will lead us to an evidence based policy on the best way to approach the issue of poverty in Pakistan. Moreover, we aim to relate any differential effects of the two approaches to individual characteristics of the households or the local economy. In doing, so, our emphasis will be on computing the cost effectiveness of the two approaches.

This research is among the first to compare these kinds of asset transfer programs to UCTs in the same setting. The experimental research design and data collection exercise on communities/households allows us to determine the underlying demand for UCTs over in-kind transfers, and estimate the causal impacts of both choices on outcomes including labour productivity, income generating activities, earnings and earnings volatility, consumption and asset holdings. A second novel aspect is that we have collected data on the supply side of livestock and other markets (e.g. informal and formal vets, informal and formal sources of finance, milk collectors etc.). This data allows us to shed light on the nature of market failures that might create a gap between the rates of return to asset transfers and UCTs.

If UCTs have higher returns, our analysis down the road will assess if there are investment opportunities available to ultra-poor households that do not take the form of livestock transfers. If UCTs have lower returns, our study will shed light on the behavioural biases and market failures that drive this. Both will be novel findings relative to the existing literature and will be investigated as and when we observe a wedge between the outcomes of both treatment groups.

In the longer term, by continuing to follow the same households, we expect our results to inform the design of social protection programs for the ultra-poor, but also foster research/policy into the market failures that lead to extreme forms of poverty in the first place.

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[3] Banerjee et al. 2015, Bandiera et al. 2015

The study design follows a partial-population experiment design[4] and so has in-built features to ensure that we can measure the impacts of the program on other non-treated but eligible households that are resident in the same village but whose economic and social outcomes can be impacted through spill over effects. These can operate through various markets (labour, credit, and livestock) and also be mediated through the family/social networks linking households together.

Accounting for these spill over effects is vital to accurately understanding the full set of benefits arising from such programs, and thus correctly conducting a cost-benefit analysis of the intervention.

PARTNERS AND STAKEHOLDERS

PPAF (Pakistan Poverty Alleviation Fund) and CERP (Center for Economic Research in Pakistan) are the lead partners for this research study. The former is responsible for the implementation of the intervention and for coordinating field activities with the two implementing partners—NRSP (National Rural Support Programme) and FDO (Farmers Development Organization). The role of CERP is to design the research study and to obtain valid results on the impact of the intervention using an RCT. NRSP and FDO were responsible for the transfer of physical assets and cash grants and ensuring a transparent process evaluation mechanism. They were responsible for carrying out social mobilization, formation of procurement committee for transferring the assets and progress reports of the activities. Since the completion of the transfers, their role in the program has declined.

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[4] Moffitt 2001

PROGRAM DESIGN

The exercise was based on a household sample chosen from 103 randomly selected *mouzzas* in the four districts Bahawalpur, Bahawalnagar, Lodhran and Muzaffargarh. These *mouzzas* are revenue villages comprising entire *mouzzas* instead of specific blocks within these.

From the sample of 103 *mouzzas*, selected households in 58 *mouzzas* received either asset or cash transfers, while households in the remaining 45 *mouzzas* did not receive anything. The first 58 set of *mouzzas* will be referred to as the **Treatment Group** and the remaining 45 will be called the **Control Group**. The Treatment Group was further subdivided in two groups: Treatment 1 and Treatment 2. Selected households in Treatment 1 villages received PPAF's asset transfer + training program, while selected households in Treatment 2 villages received the option of choosing an asset transfer + training program OR an equivalent unconditional cash grant. The map below shows the location of the sample villages in the four districts:
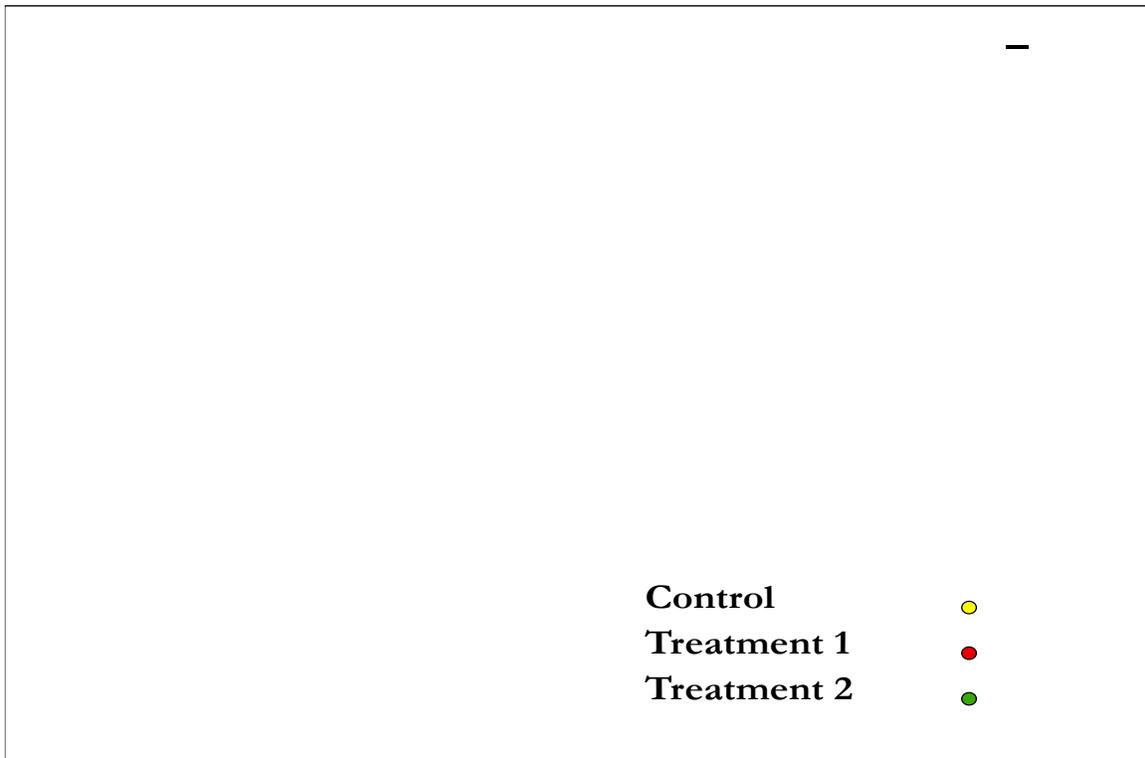

Figure 1: Map of Sample Villages

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SOCIAL MOBILIZATION

Social mobilization was also done in all 103 villages, through the formation of community and village organizations. These organizations were also used as a vehicle for the asset and cash transfers. Three types of organizations were formed in the villages namely: Community Organizations (COs), Village Organizations (VOs) and Local Support Organizations (LSOs).

Formation of CO

COs were formed through gathering community members within a village at a designated venue, where the social mobilizer highlighted the importance of the meeting and explained the need to attend the meetings and community savings. For NRSP villages, all members of the community became members of the CO, whereas for FDO villages, only those who volunteered became members. The President, Secretary, and Treasurer are then elected at the next meeting.

Formation of VO

VO's were formed at a village level. 2-3 members from every CO acquired VO membership through electoral process. After the members are elected, VO President, Secretary and Treasurer are elected again through an electoral process.

Formation of LSO

The process of formation of LSO was similar to the formation of lower tier organizations (CO/VO). They were formed at the Union Council level and 2-3 members from every VO acquired LSO membership via ballot.

ORGANIZATIONAL ACTIVITIES

At CO level

- Attend meetings
- Involve in Community Saving
- Taking part in different skill based training

At VO level

- Attending meetings
- Raising funds for creation of different public goods

- Identifying key issues at a village level
- Making efforts to solve these issues

At LSO level

- Attending training
- Running small funded projects of their own
- Assisting any NGO in their projects

BALANCE CHECKS

Once the villages had been randomly assigned to a treatment category, balance checks were conducted to ensure that randomization had been done correctly and villages in one treatment group were not systematically different from those in other groups on key characteristics. This was necessary to ensure that any observed post-treatment changes could be confidently attributed to the program and not any underlying differences in characteristics between the control and treatment groups. Balance checks were done for village level characteristics, as well as household and household head level characteristics. The graphs below show similarity among the Control, Treatment 1 and Treatment 2 villages along key characteristics. The height of each bar represents the average value of a characteristic for the respective group of villages.

VILLAGE CHARACTERISTICS
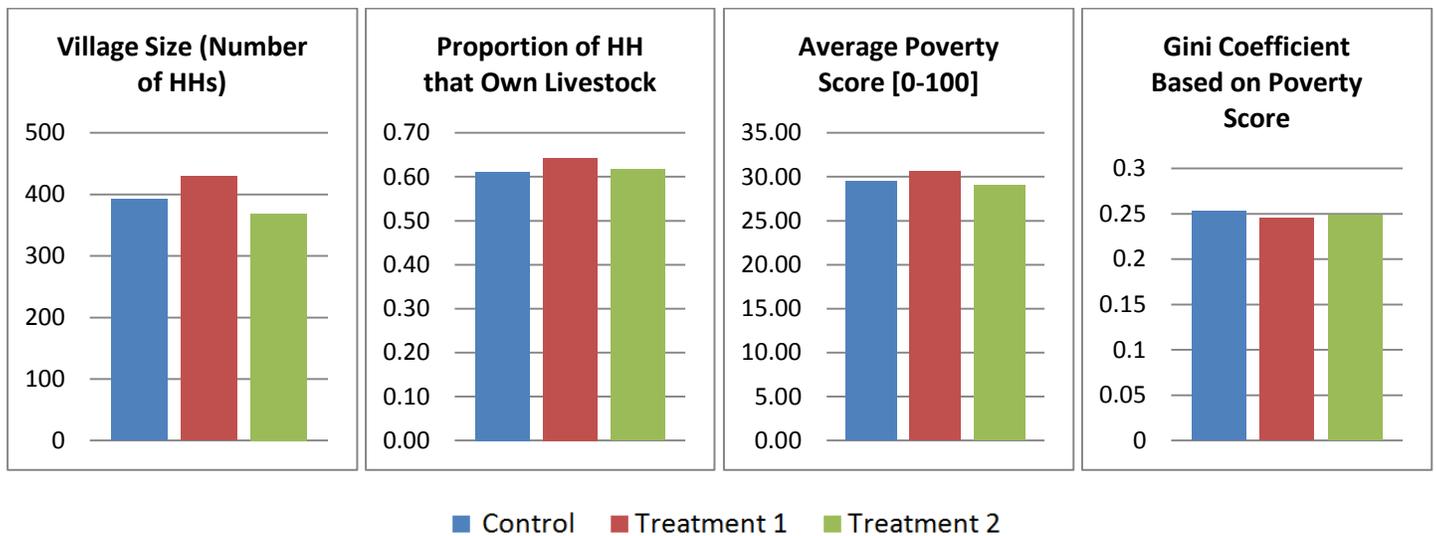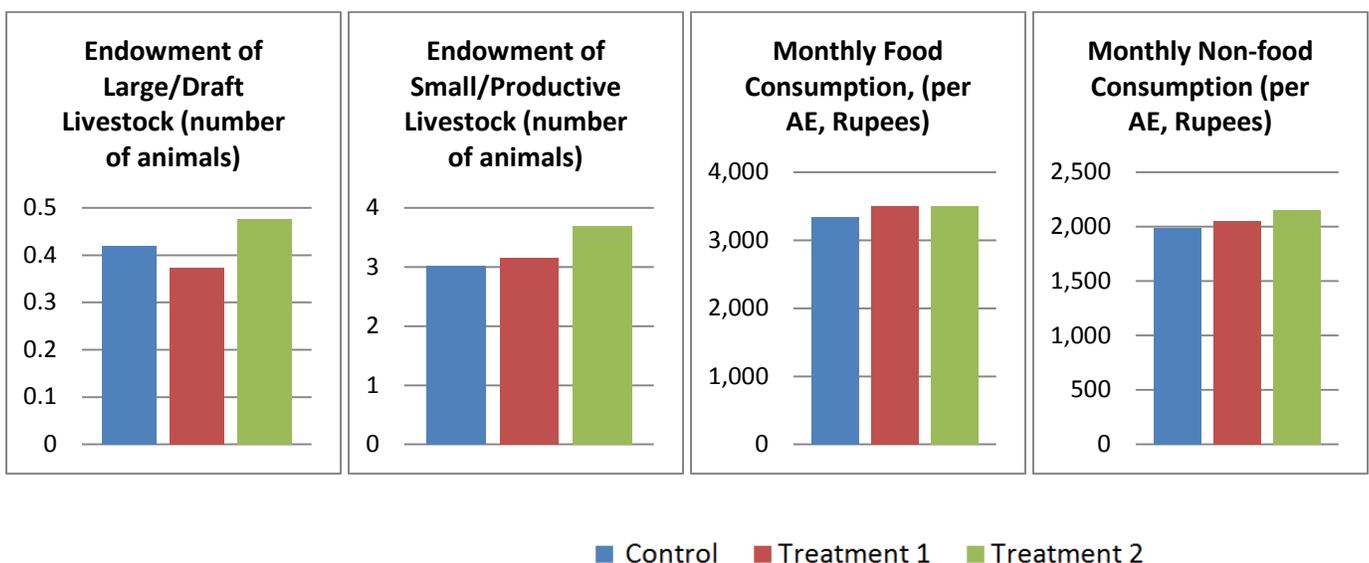
HOUSEHOLD CHARACTERISTICS
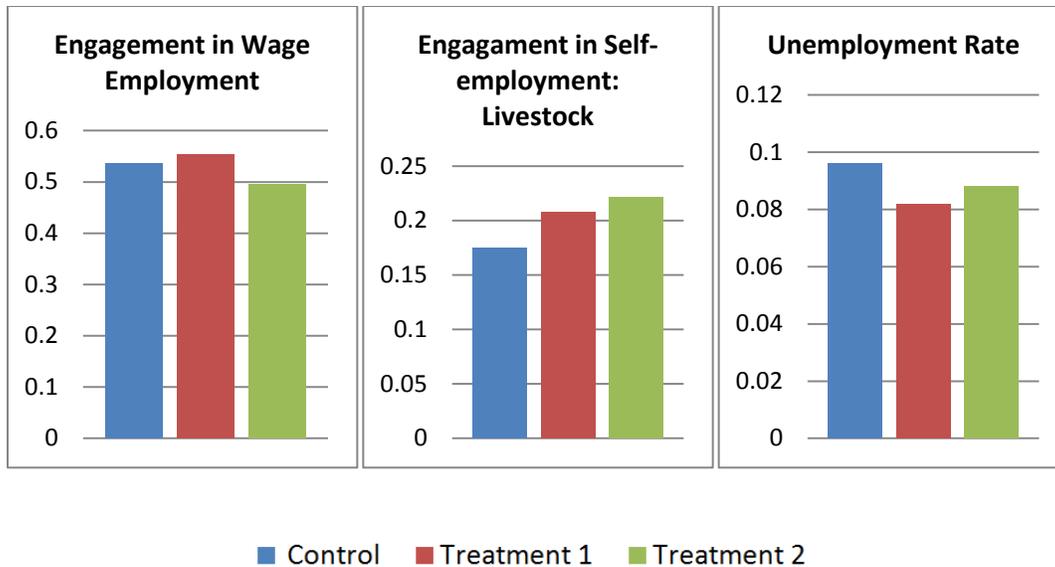
Figure 2: Balance Checks

Notes: All village level data are taken from the community survey or aggregated from the household census. Household level data are taken from the baseline survey. The poverty score varies on a scale of 1 to 100, with 1 being the poorest. The Gini Coefficient ranges between 0 and 1, and represents the level of inequality in a village. The consumption levels for food and non-food are *adult equivalent* using "OECD scale". The "OECD scale" has been used to calculate adult equivalence, and uses the formula: *1+ (0.7*number of adults - 1) + (0.5*number of children).*

The graphs show that the average values of various key characteristics such as village size, household livestock endowment, consumption, and employment are approximately the same for all treatment groups. We found no statistically significant differences among the three village groups on these key characteristics, and can therefore be confident that village randomization was done correctly.

BENEFICIARY IDENTIFICATION AND SELECTION

Within each village, the poverty ranking of each household belonging to the two treatment groups was created on the basis of the BISP poverty score card. This allowed categorisation of each household according to their poverty status:

1.   Ultra-poor (Score: 0-11);

2.   Vulnerable poor (Score: 12-18);

3.   Poor (Score: 19-23); and

4.   Non-poor (Score: 24-100).

The beneficiaries for this study were the households that fall in the first two poverty brackets (ultra and vulnerable poor). It is important to note that not all the ultra and vulnerable poor households in each treatment village were treated, but a subsample of these actually received the treatment. The selection of the subsample from the larger population of ultra and vulnerable poor was done through random selection, and the sample size was determined after careful statistical inference to ensure the detection of an effect.
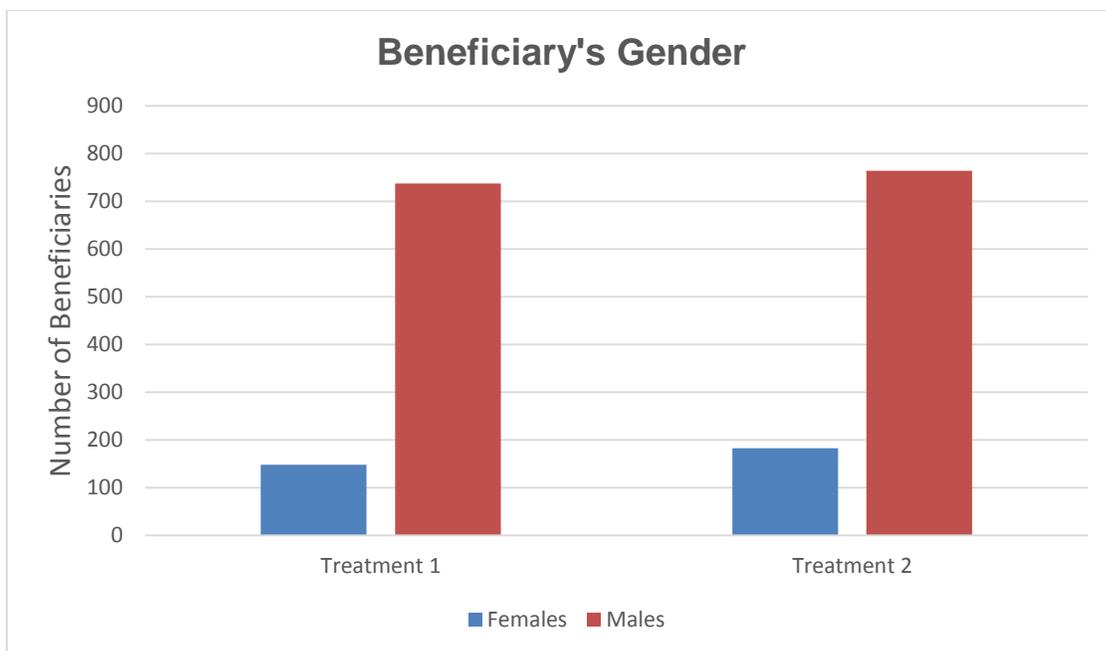
BENEFICIARY GENDER

Figure 3: Beneficiary Gender

The assets were transferred to the household member nominated by the household head. Figure 3 shows the gender wise disaggregation of the beneficiaries. We can see that males dominated the beneficiary list and were almost six times more than female beneficiaries.

TREATMENT GROUPS

The RCT design leads to some households being designated as treatment households and some other households who were selected as controls and will not receive any program from PPAF over the duration of the study. The treatment group was further randomly assigned to two different treatment arms. It was made sure that all control and treatment villages had functioning community organizations prior to the initiation of the programme.

In the first treatment arm, eligible households were presented a menu of asset from which they could choose any combination up to the value of PKR 50,000. The asset list was based on thorough market research conducted at the village and union council level. A sample asset list is shown in Figure 4 below. In addition to this, beneficiary households were offered at least two trainings; the first dealt with the management of business enterprise (Enterprise Development Training), whereas second one is an asset specific training that mostly deals with the technical knowledge of an asset (Asset Management Training/Technical Training).

The only difference between the two treatment arms is that the asset list in the second treatment includes one more item; an equivalent amount of unconditional cash transfer (PKR 50,000). Furthermore, those households that select cash do not receive any training instead they receive an additional amount of unconditional cash (PKR 12,000), one month after the first instalment of cash described above.

Livestock Assets	Retail Assets	Crop Farming Assets	Non-Livestock Production Assets
Goat Raising (One Goat @ Rs. 15,000)	Grocery Shop (Material up to Rs. 50,000)	Cultivation of cotton (Seeds @ Rs.20,000 + Fertilizer @ Rs.15,000)	Tailoring (Sewing machine @ Rs.6,000 + Table @ Rs.4,000)
Dairy Farming (One Cow @ Rs. 48,000)	Fruit Stall (Stall @ Rs. 5,000 + Fruit up to Rs. 45,000)	Pesticides @ Rs. 50,000	
Calf Rearing (One Calf @ Rs. 25,000)	General Store @ Rs. 50,000		
Fodder @ Rs. 50,000	Barber Shop @ Rs. 35,000		
Veterinary Medical Store @ Rs. 50,000	Carpenter Shop @ Rs. 30,000		
Animal Breeding Shop @ Rs. 40,000	Cycle Repairing Shop @ Rs. 35,000		

Figure 4: Sample Village Asset List

ASSET/CASH CHOICES AT INTERVENTION

From Figure 5, we can see that:

i. In Treatment 1, most households chose livestock (more than 84%), and productive animals were the most popular type of livestock asset chosen (59.8%).

ii. In Treatment 2, more than 96% of households chose cash over any other asset-training bundle.

Despite most Treatment 2 households opting for cash, we observed that they invested in livestock within four months of the cash transfer. We observed a large variation in the prices paid for the same animals by these households as compared to Treatment 1 households. This was true for all animal types except for goats. On average, Treatment 2 households paid more for cows and buffaloes but less for calves and goats. Treatment 2 households also purchased more cows and less calves as opposed to Treatment 1 household's choices at the time of the treatment. These results are detailed in Table A of the appendix.

Treatment 1 Asset Categories

- Livestock Productive Animals
- Livestock Draft Animals
- Draft and Productive Animals
- Retail
- Crop Farming
- Other Categories

Treatment 2 Asset Categories

0.2 1.9 1.5

96.3

- ■ Livestock Productive Animals
- ■ Livestock Draft Animals
- ■ Cash
- ■ Retail
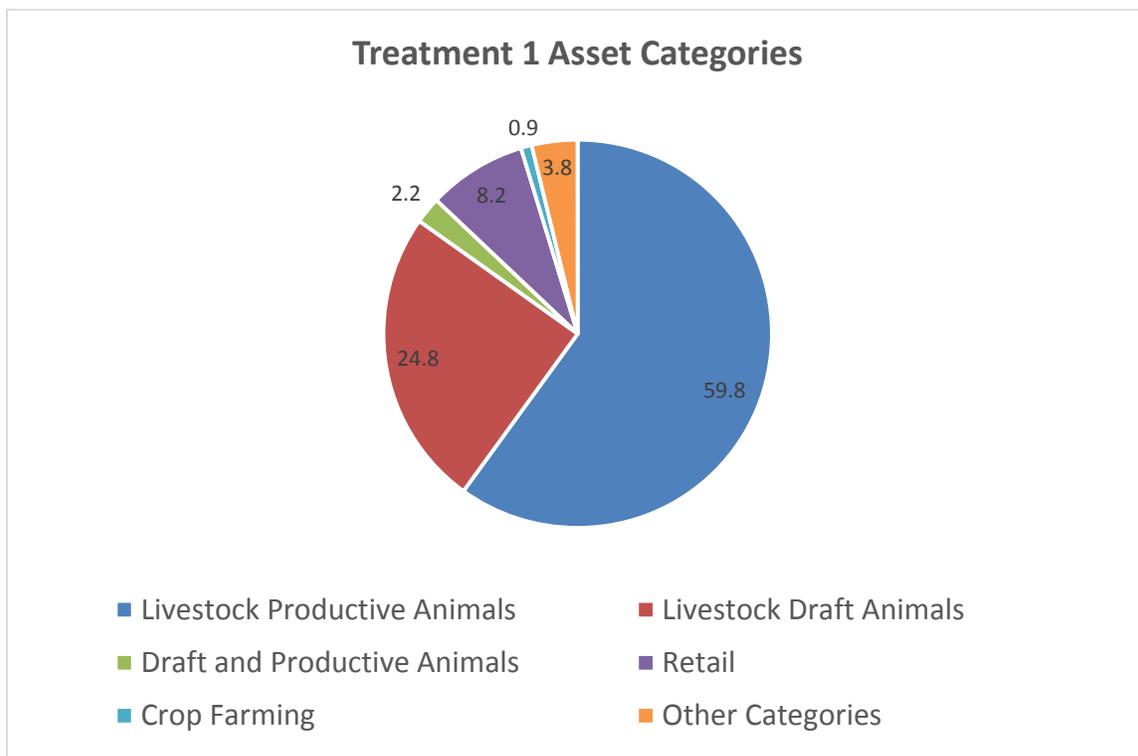
Figure 5: Asset Choices

Note: Productive animals include cows, female buffalo, female calves, and goats. Draft animals include bulls, male calves and male buffaloes. The "Livestock: Combination" category includes households that chose some draft and some productive animals. "Other asset choices" includes households that chose a combination of asset types, including some livestock.

DATA COLLECTION

We have already collected a number of community/household surveys – a) a village survey measuring village infrastructure, history of developments/shocks, population structure and organizations, main forms of employment, access to (in)formal vets, moneylenders etc., and prices; b) a household census o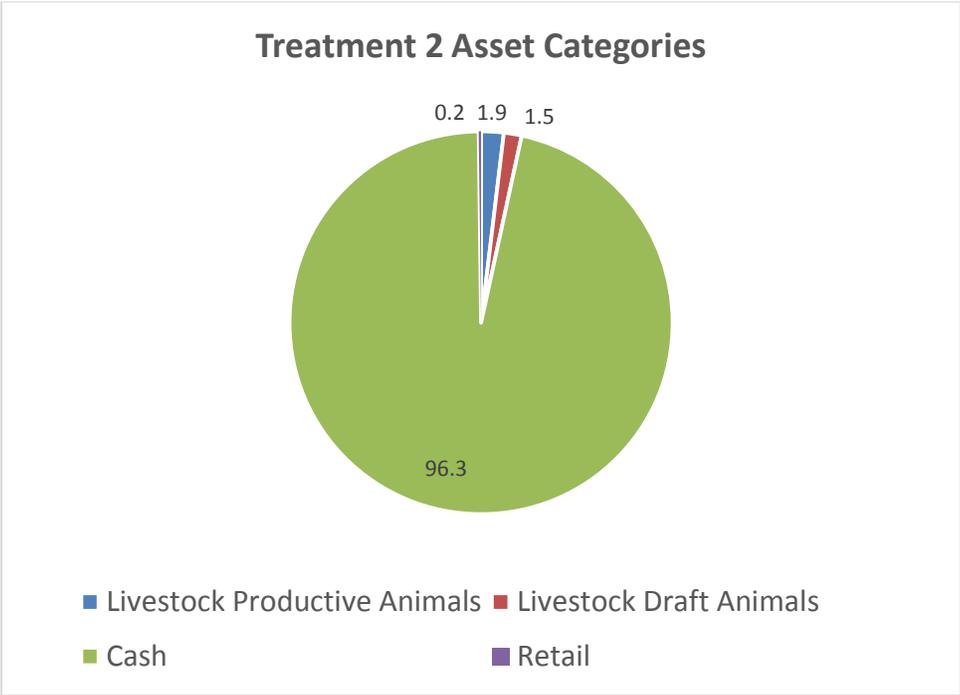f all households resident in the sample villages; c) a detailed baseline survey enumerated to ultra-poor households and a random sample of other households representative of the wealth distribution in villages, which recorded households' well-being prior to the asset and cash transfers; d) two household tracker surveys a few months after the completion of the transfers. The latest survey covered in this report is a comprehensive household survey, a year after the transfers to capture the long-term impact of the program.

Below is a brief description of the household surveys, and their sample sizes, followed by a snapshot of all data collection timelines:

i) Household Census: This survey was done as a listing of all households in the village, and collected data on basic household characteristics. All 41,498 households from the 103 sample villages were covered in the listing.

ii) Baseline Survey: The baseline was conducted to collect detailed information on various household indicators such as income, consumption, employment, etc.

iii) Livelihood Investment Plan: This survey was a part of intervention, and was enumerated to the 1,832 households randomly selected for treatment.

iv) Tracker Surveys: After the intervention of transferring the assets and cash was completed, in order to evaluate immediate results of the program, two tracker surveys were conducted from May 2014 till December 2014. The surveys covered 3,386 households from 103 villages.

v) End line Survey: This was conducted after a year of the initial transfer and consisted of a long survey with separate modules for both male and female household representatives conducted only for poor households and a shorter version of the survey that covered non-poor households as well. Additionally, there was also a village mapping survey conducted at the village level. The long survey covered 7,065 male respondents and 7,554 female respondents (male and female respondents of the long survey were from the same household wherever possible) and 10,233 respondents were covered by the short survey. In all, 103 villages were covered. **Although this survey has been named as the 'End-**

line' survey, more surveys will be conducted in the coming years in order to keep track of the treated households and their poverty outcomes.

Community Surveys

Jan – Aug 2012
Village Mapping

May - Jul 2015
Village Mapping

Household Survey Instruments

Mar – July 2012
Household Listing

Feb – Jun 2013
Baseline Survey

Oct– Dec 2013
Social Mobilization

Jan – Mar 2014
Asset/Cash Transfers

May – Aug 2014
Sep – Dec 2014
Tri-annual Trackers

May - Jul 2015
End-line Survey

Livestock Supply Side Surveys

July – Sep 2012
Supply Side Phase 1

Oct 2012 – Mar 2013
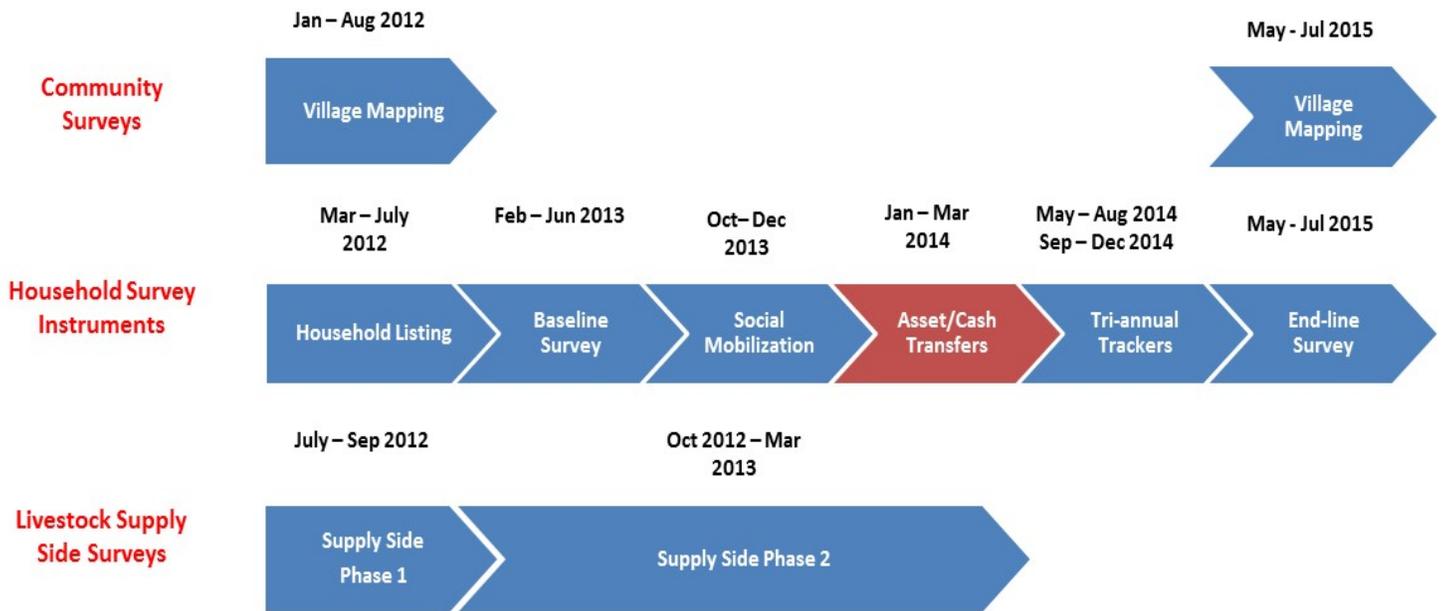Supply Side Phase 2

Figure 6: Data Collection Timelines

THE END LINE SURVEYS

PURPOSE

The long, short and village mapping surveys were conducted one year after the completion of the intervention respectively, with the following objectives:

a) Assess the short-term (one year) impact of asset and cash transfers on the beneficiaries.
b) Observe short term changes in the balance sheets, income and expenditures of households after asset and cash transfers have taken place. This tracing of funds and assets after a year will enable us to begin analysing the effect on consumption, investment and savings of the transfers.
c) Observe short-term changes in various household level indicators to be able to check asset retention rates, sample attrition and changes in employment categories one year after the intervention.
d) Analyse changes in village level indicators to understand evolving economic environment.
e) Track control households to isolate the direct effect of both treatments and analyse external effects of the intervention.

SURVEY MODULES

The end-line long (male and female) and short surveys included the following modules to enable the research team to fulfil the above objectives and track the effects of the treatment:

Household Characteristics: This module collected basic information about the household, which can be used for identification such as name, location, caste etc. It also included a complete household roster in which information about household size, members' education and members' employment status was also collected.

Employment Details: Information about different type of employment such as wage employment and self-employment of household members in different sectors was collected.

Consumption Details: Detailed information about food and non-food consumption was collected. Modules on land holding and purchase of non-business assets were also asked.

Livestock Related Details: The survey covered in-depth, data related to livestock practices, skills involved in this business, rearing, feeding, insemination of animals, labour requirements, income generation, training requirements and milk production from different livestock animals.

Networks Information: The survey asked about the economic and family networks of the poor households within the village.

General Outcomes: This included questions that checked cognitive performance of the respondent, their views on risk and time preference, perception and causes of poverty, gender equality, decision making in the household and involvement in social organizations.

Financial Information: Different modules were used to gauge the financial position of the households. Modules on borrowing, different sources of income, their attitude towards banking, status of assets they received and any other forms of social safety net assistance they received recently.

Asset Details: These included questions on total asset ownership in terms of land, livestock and housing.

The short survey did not add any extra sections but omitted some of the above non-core sections.

The village mapping survey included the following modules to enable the research team to place the household economic conditions in the larger context of the village economy. This survey was conducted with a group of participants from each village.

Social Organizations: This module asked about social organizations active in the village, their memberships and financial workings. Additionally it collected information about successful projects initiated through collective action of those organizations.

Facilities in the Village: This mapped the existence of various government and private health, education, economic, transportation, financial, retail and communication services available in the village and their usage by the villagers.

Economic Facilities: This section ascertained the existence of livestock markets, money lenders, vets, *dhodhis* and job helpers close to the village. Questions noted the accessibility, affordability and quality of these services from the respondents' perspective.

SAMPLE SIZE

For the purpose of our analysis, a sample of total 17,923 households was chosen. We included all of the control households covered at baseline and all of the poor households including those not covered at baseline. The survey planned to cover 19,417 households from 103 villages in four districts of Punjab. Some households could not be surveyed however due to a number of reasons. Tables 1A and 1B below provide the sample breakdown for the end-line survey:

	Control (45 Villages)	Treatment 1 (29 Villages)	Treatment 2 (29 Villages)	Total Households
Covered	7863	5131	4929	**17923**
Refused	136	72	63	**271**
Migrated	535	330	259	**1124**
Temporary Lock	41	17	5	**63**
Others*	18	11	7	**36**
Total Intended Sample	**8593**	**5561**	**5263**	**19417**

Table 1A: End-line Coverage Status

*Others include households where the head of household(s) passed away and no adult member was available to answer the survey.

Districts	Control (45 Villages)	Treatment 1 (29 Villages)	Treatment 2 (29 Villages)	Total
Household Survey				
Bahawalnagar	2,081	1,102	1,278	**4,461**
Bahawalpur	2,075	1,732	1,103	**4,910**
Lodhran	1,178	352	730	**2,260**
Muzaffargarh	2,529	1,945	1,818	**6,292**
	7,863	**5,131**	**4,929**	**17,923**
Focus Group Discussions (Village Level)				
Bahawalnagar	14	9	10	**33**
Bahawalpur	13	10	7	**30**
Lodhran	6	2	4	**12**
Muzaffargarh	12	8	8	**28**
	45	**29**	**29**	**103**

Table 1B: End-line Covered Sample Breakdown, by District

ANALYSIS METHODOLOGY

Data for the main analysis in this report, where we estimate the impact of treatment on treated households, have been taken from the baseline survey, the first and second tracker surveys, and the end-line survey. Our relevant sample is the 3,375 ultra or vulnerable poor households that were covered in the trackers as well as the baseline or end-line (so the "tracked" poor). This includes all treated households from treatment villages, and a sample of poor households from control villages. For the determining the spill-over effects on other households in treatment villages, we have used the sample of non-treated eligible (ultra or vulnerable poor) households from treatment villages. Only end-line survey data have been used for this part of the analysis.

In order to assess the impact of the two treatments, we have compared the post-treatment average of key household indicators in each treatment group with the control group, while controlling for the pre-treatment level of the respective indicator, except where pre-treatment (baseline) data was unavailable. All estimates also control for a vector of other household characteristics such as household size, share of dependents, education of the head of household, etc., as well as strata fixed effects - stratum are defined on the basis of geographic location and village size, and divide the sample of 103 villages into four groups. This methodological approach is advocated by World Bank Lead Economist David McKenzie in his paper titled "Beyond baseline and follow-up: The case for more T in experiments", which was published in the Journal of Development Economics in 2012[5].

The statistical technique used to calculate these differences is an Ordinary Least Squares regression, with standard errors clustered at the village level. Only differences that were statistically significant at the 10% level have been reported. If a difference is not statistically significant, it has been reported in the appendix tables but not in the main report. All monetary measures (such as consumption, investments, earnings, etc.) have been adjusted for inflation using changes in the monthly Consumer Price Index since the time of the baseline (2013). Price Index data has been taken from the Pakistan Bureau of Statistics (http://www.pbs.gov.pk/cpi). The top 1% outliers of all monetary variables have been removed.

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[5] McKenzie, David. "Beyond Baseline and Follow-up: The Case for More T in Experiments." Journal of Development Economics, no. 99 (2012): 210-221.

HOUSEHOLD LEVEL RESULTS & OUTCOMES

IMPACT ON TREATED HOUSEHOLDS

ASSET RETENTION

The design of the program involved unconditional asset transfers. This means that it was not incumbent on beneficiaries to retain the asset they were given for a particular period of time, and they had the option of selling it if they wanted to. Some transferred assets were also lost or stolen, so not all assets were still owned by the households when they were surveyed.

The following graph shows the percentage of assets retained at the time of Tracker 1, Tracker 2 and End-line Survey, or after four, eight and fourteen months of the transfer respectively. We can see that for most asset types, the rate of retention fell between subsequent surveys, but that the bulk of households have still retained productive livestock assets, which were the most popular choice among those who received as asset.

These outcomes are short run (one year impacts) and we expect them to show considerable changes further down the line which requires continued engagement with these households.
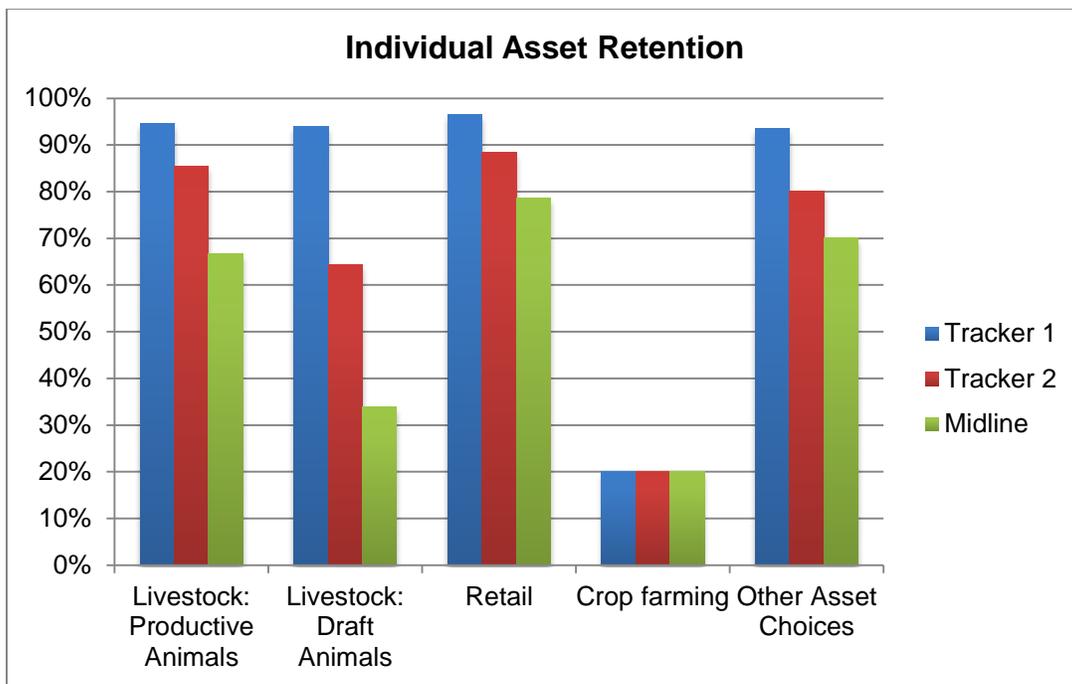
Figure 7: Asset Retention Rate

OCCUPATIONAL RESPONSES TO TREATMENT

This section discusses the impact of the treatment on occupational and employment choices made by the head of the household and spouse, as observed in the household survey. In particular, it discusses changes in engagement in casual wage employment, other wage employment, self-employment in livestock, and self-employment in other sectors. In general, we should expect to see a move out of wage employment and into self-employment as a result of the program, since the assets transferred could easily be used in a small business. The cash injection too could provide households the investment they need for a small business venture.

Casual Labour includes daily wage workers; Other Wage Labour includes salaried employees, apprentices, etc. Self-Employment in Livestock includes animal producers, mixed crop and animal producers, subsistence livestock and mixed crop and livestock farmers, livestock farm labourers and mixed crop and livestock farm labourers whereas all other types of self-employment are included in Other Self-Employment. All employment engagement statistics represent all jobs reported within an employment category by the household head and spouse.

Results

Occupational Responses to Treatment (Spouse)
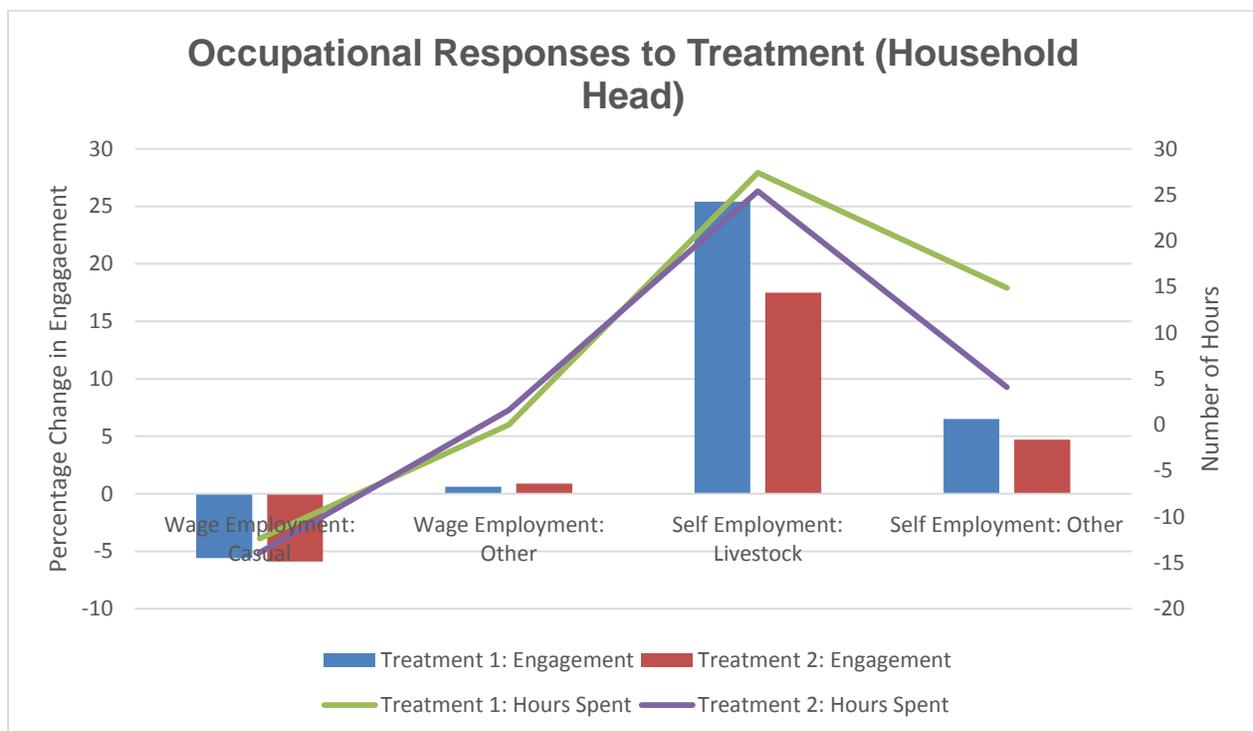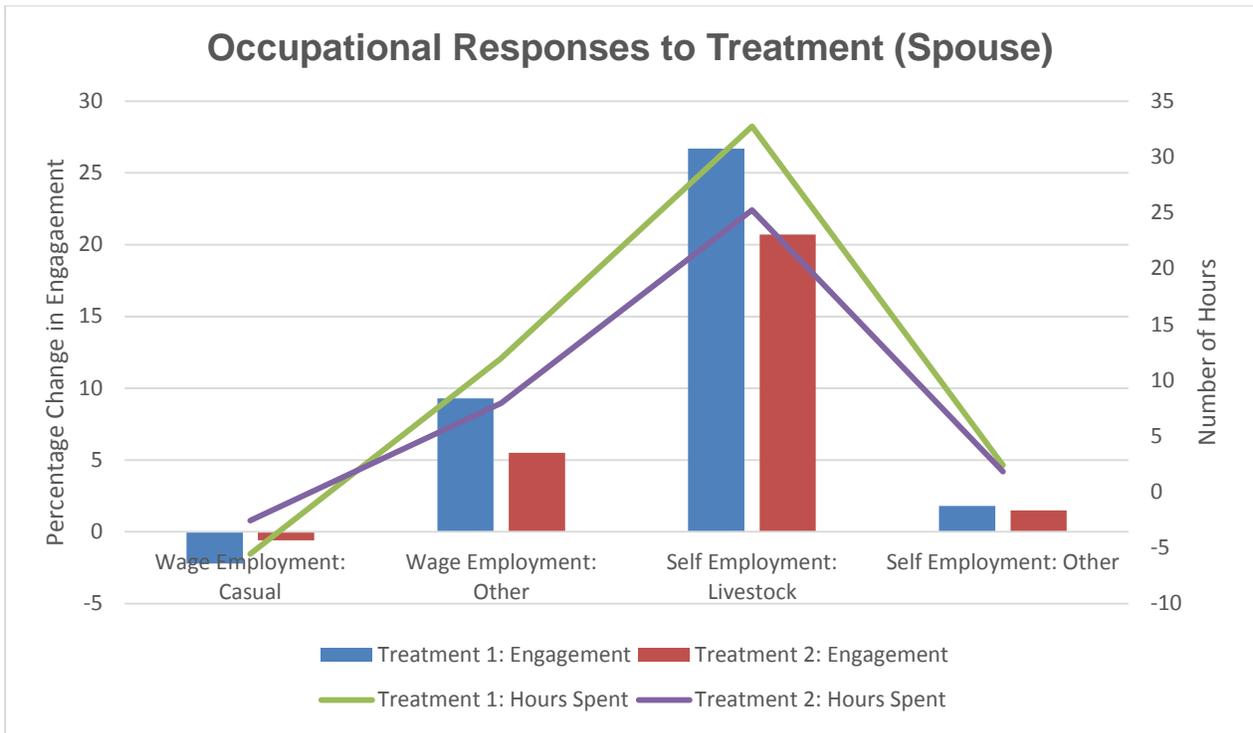
Figure 8: Occupational Responses to Treatment

Aggregate Employment Responses to Treatment (Household Head)
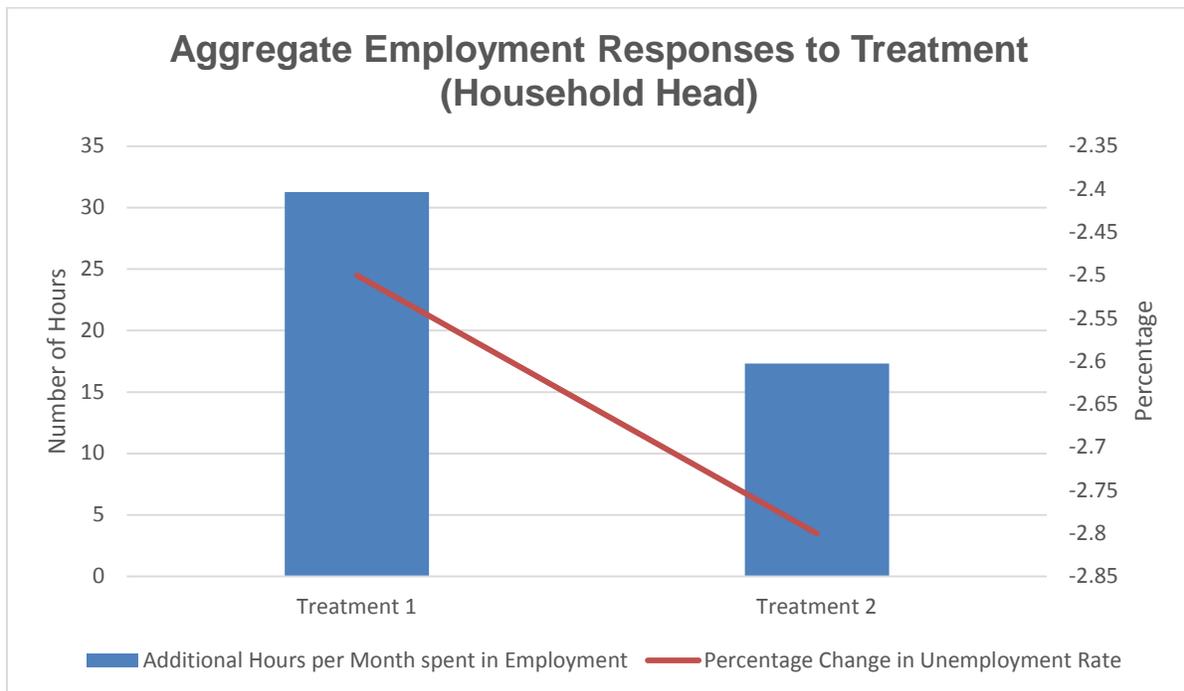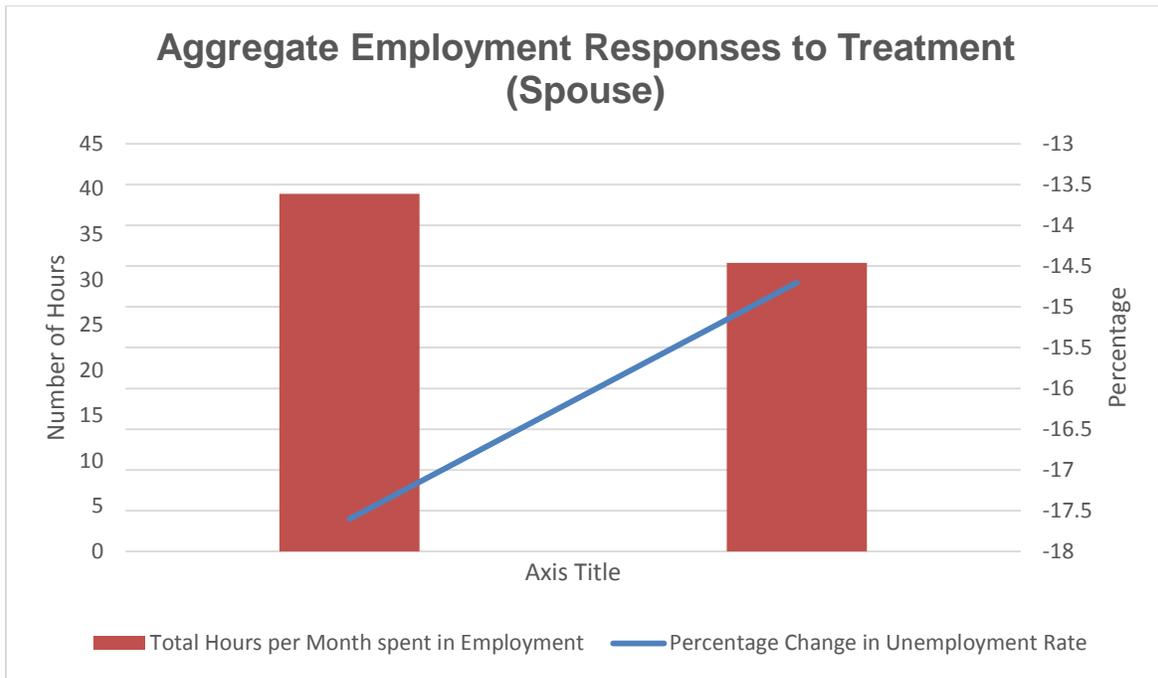
Figure 9: Aggregate Employment Responses to Treatment

Figure 8 above shows OLS regression results for different occupational choices for the household head and spouse. From these we can observe the following:

i. **Engagement in casual wage employment**
   a) For the household head, a decrease was observed over time for both treatment arms. In Treatment 1 households, it fell by 5.6% and for Treatment 2 Households, it fell by 5.9%. As a result, hours worked in casual wage labour also fell by 12.4 hours per month on average for Treatment 1 household heads and by 13.9 hours per month for Treatment 2 households.
   b) For the spouse, slight decreases in both treatment groups were not statistically significant.

ii. **Engagement in other wage employment**
   a) For the household head, we were unable to observe any significant change for both treatment arms.
   b) For the spouse, an increase of 9.3% and 5.5% was observed for Treatment 1 and Treatment 2 groups respectively. The number of hours worked also increased by 12 and 8 hours per month for Treatment 1 and 2 spouses respectively.

iii. **Self-employment in livestock**
   a) For the household head, employment increased for both treatment arms, and by as much as 25.4% for Treatment 1 households as compared to 17.5% for Treatment 2

households. Number of hours worked per month increased by 27.4 and 25.4 in Treatment 1 and 2 respectively.

b) For the spouse, employment increased for both treatment arms, and by as much as 26.7% for Treatment 1 households as compared to 20.7% for Treatment 2 households. Number of hours worked per month increased by 32.7 and 25.3 in Treatment 1 and 2 respectively.

This is consistent with our expectations, since the asset transfer removed a significant barrier to entry for low income households who had basic business agency to set up their livestock businesses. Some households who received cash also used it to enter livestock related businesses.

iv. **Other Self Employment**

a) For the household head, we also see a slight increase in other kinds of self-employment among Treatment 1 households, probably for households who chose a non-livestock asset at the time of the transfer (such as retail or crop farming related assets) at the level of 6.5% for Treatment 1 and 4.7% for Treatment 2. For Treatment 1 household heads, there was an increase in number of hours worked per month in other self-employment of 14.9 hours. For Treatment 2 household heads, the rise in working hours was insignificant.

b) For the spouse, similar increases were observed at 1.8% and 1.5% for both treatment groups respectively. Number of hours worked per month increased by 2.4 in Treatment 1 and by 1.8 in Treatment 2.

We also tested for the equality of the effect on the two treatment groups at end-line. We see that the treatment effect on occupational choice is the same for both Treatment groups, except when it comes to livestock related self-employment. Households have different self-employment responses if they are transferred asset and skill bundles as compared to if they are transferred cash, and **there has been a greater shift from wage employment to self-employment where asset and skill bundles were transferred**. This implies that asset transfers encourage entrepreneurial behaviour.

Figure 9 shows the aggregate effect of employment by reporting unemployment rates and total hours per month spent in employment for each treatment group and separately for both spouse and household head. The results show that for the household head, the unemployment rate has fallen by 2.5% in Treatment 1 and by 2.8% in Treatment 2. In terms of working hours, employment has increased by 31.2 and 17.3 hours per month in Treatment 1 and 2 respectively.

Similar results can be seen for the spouse as unemployment rates have fallen by 17.6% and 14.7% for Treatment 1 and 2 respectively. Simultaneously, hours worked per month have increased by 36.5 and 31.9 for Treatment 1 and 2 respectively.

The equality tests show that for household heads, the change in unemployment rate is the same for both treatments but the increase in hours worked per month is greater in Treatment 1 than Treatment 2. For spouses, the additive hours worked per month is the same, however, the drop in unemployment rate is higher for Treatment 1 as compared to Treatment 2.

Collectively these results show that not only has there been a shift away from wage labour and towards self-employment, the overall employment levels have also increased and in the short run, these will positively affect the earnings of the households. The employment effect of spouses is larger as their initial participation in the work force was much lower compared to the household heads and the intervention has resulted in a massive increase in their working hours per month. We expect these changes to be reinforced in the long run as households gain more expertise in their businesses and self-employment work becomes more lucrative than wage employment. **It is therefore important to keep tracking these households in order to understand the full policy implications.**

All occupational level results are detailed in Tables B1, B2, and B3 of the appendix.

GENDER-BASED DIFFERENCES IN OCCUPATIONAL RESPONSE TO TREATMENT

We observed an increase in the total number of working hours for both men and women in treated households, as shown in Figure 10 below. Comparing this increase between the household heads (men) versus that of the spouses (women), we find a significant divergence among the genders only for Treatment 2. This means that **the increase in total number of hours worked (in any kind of employment) was greater for women than for men among households that received cash**, while the same impact was the same across genders for households that received an asset bundle.
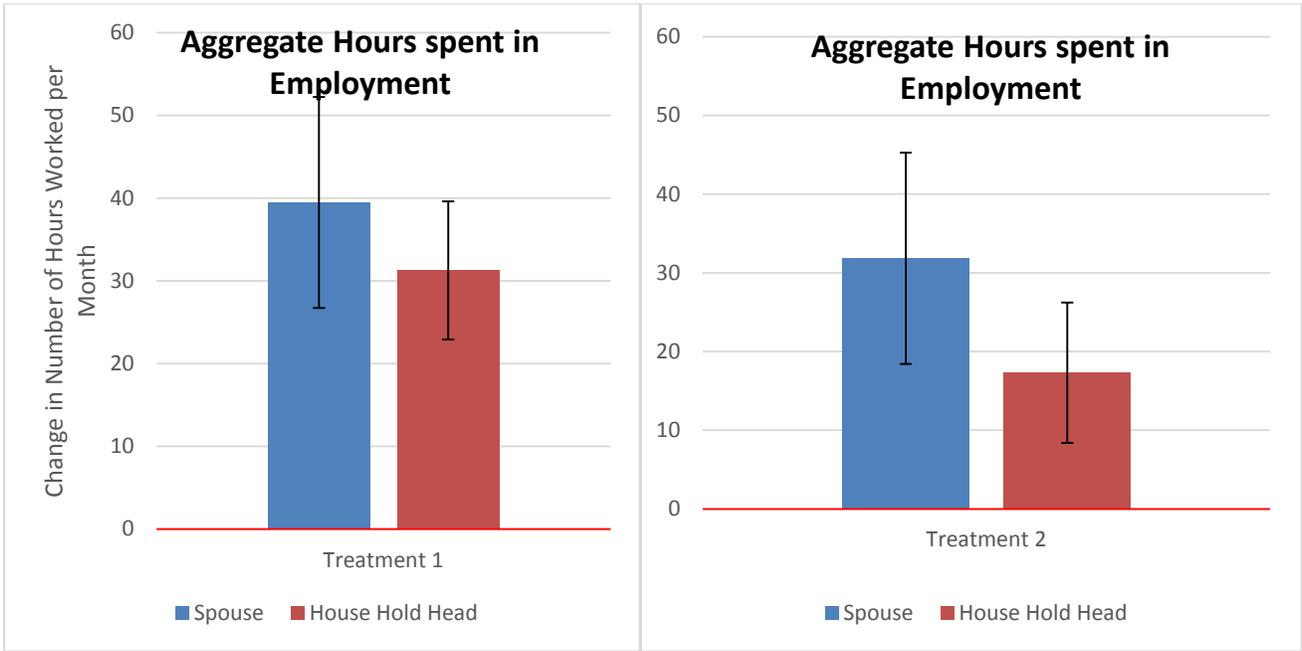
Figure 10: Gender Based Differences in Occupational Responses
(Note: Error bars represent 95% confidence intervals. If an error bar intersects the horizontal axis (change=0), then the impact is statistically insignificant)

EFFECTS ON EARNINGS

This section discusses the impact of the treatment on household earnings from different kinds of employment activities, namely wage employment, self-employment in livestock related businesses, and self-employment in other businesses (classified same as described in the section above). We should expect our findings for household income to correspond to our findings for occupational choice of the household head and spouse, especially over the longer run.

Results
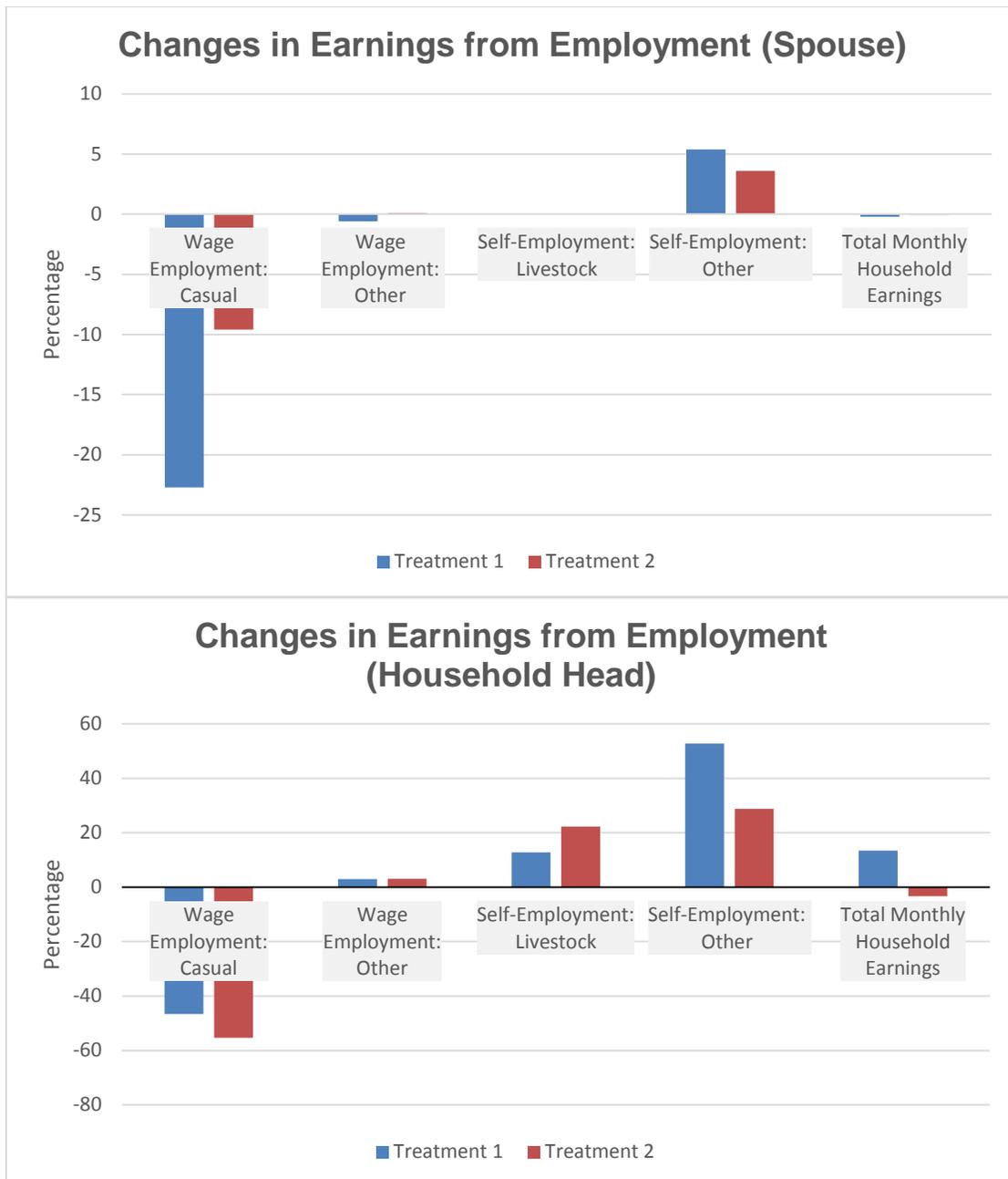
Figure 11: Changes in Earnings

Figure 11 above shows OLS regression results for earnings in different occupational choices for household head and spouse respectively. We can observe that:

i. **Earnings from casual wage employment**

    a) We observe a fall for Treatment 1 household head, by as much as 46.6%. We also see a fall in casual wage earnings for Treatment 2 households by 55.4%.

    b) The decrease in earnings for the spouse in both treatment groups is not statistically significant.

    This is consistent with our results for occupational choice where we saw a huge move out of wage employment for household heads belonging to both treatment types.

ii. **Earnings from other wage employment**

    a) The positive change for household head was not statistically significant.

    b) Spouses showed a fall in other wage employment earnings of 0.6% in Treatment 1 and no statistically significant change in Treatment 2.

iii. **Earnings from livestock related businesses**

    a) Household heads registered a statistically significant increase only for Treatment 2 households where incomes rose by 22.3%. For Treatment 1, no change was observed.

    b) Spouse earnings showed no change at all.

iv. **Earnings from other self-employment**

   a) Household heads showed an opposite pattern here to livestock business earnings. Treatment 1 household heads showed an increase of 52.8% whereas there was no observable change for Treatment 2 household heads.

    b) Spouses showed an increase for both treatment groups which was 5.4% and 3.6% in Treatment 1 and 2 respectively.

v. **Total household earnings** did not experience a change for either treatment group. It appears then, that in the short run, the composition of earnings changed drastically, but the households did not witness a substantial increase in total earnings, even when broken down by gender. This is more evident in Figure 12, where we can see that the change in earnings for both the household head and spouse is statistically insignificant (error bars cross zero) in both Treatment 1 and Treatment 2.

Overall, there was no difference in the treatment effect on those who received cash versus those who received an asset, as shown by the equality p-values for both heads and spouses. The results of income response to treatment are explained in detail in tables C1 and C2 of the appendix. These

results are short run impacts and might change over the longer term as newly set-up businesses get a chance to flourish, and their increase in earnings outstrips the fall in wage earnings. As a result, there is a need to keep track of these households in the coming years.

There was no significant change in aggregate earnings for either the household head or spouse, for either treatment type. The differences across treatment groups were also statistically insignificant.
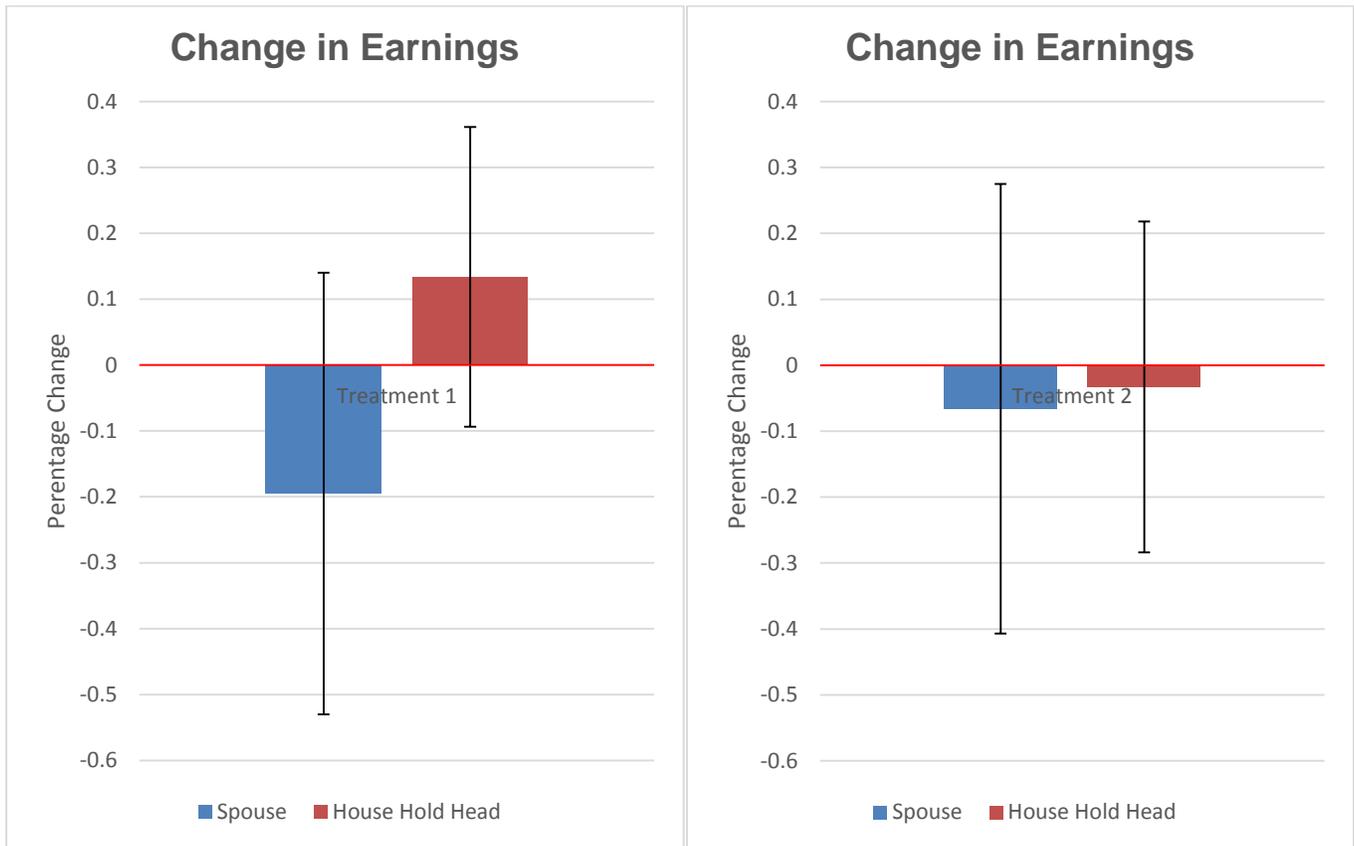
Figure 12: Impact on Aggregate Earnings
(Note: Error bars represent 95% confidence intervals. If an error bar intersects the horizontal axis (percentage change=0), then the impact is statistically insignificant)

Effect on Non-Earned Income

Non-Earned income is an essential variable in our analysis as it explains any changes in the household finances not captured by other measures. Income sources under this heading include cash transfers or remittances, borrowings and loan outs. These variables will capture any outflow or inflow of capital from the household finances which will assist our efforts to keep track of the transferred asset or cash and isolate its effect on the households' finances.

Results
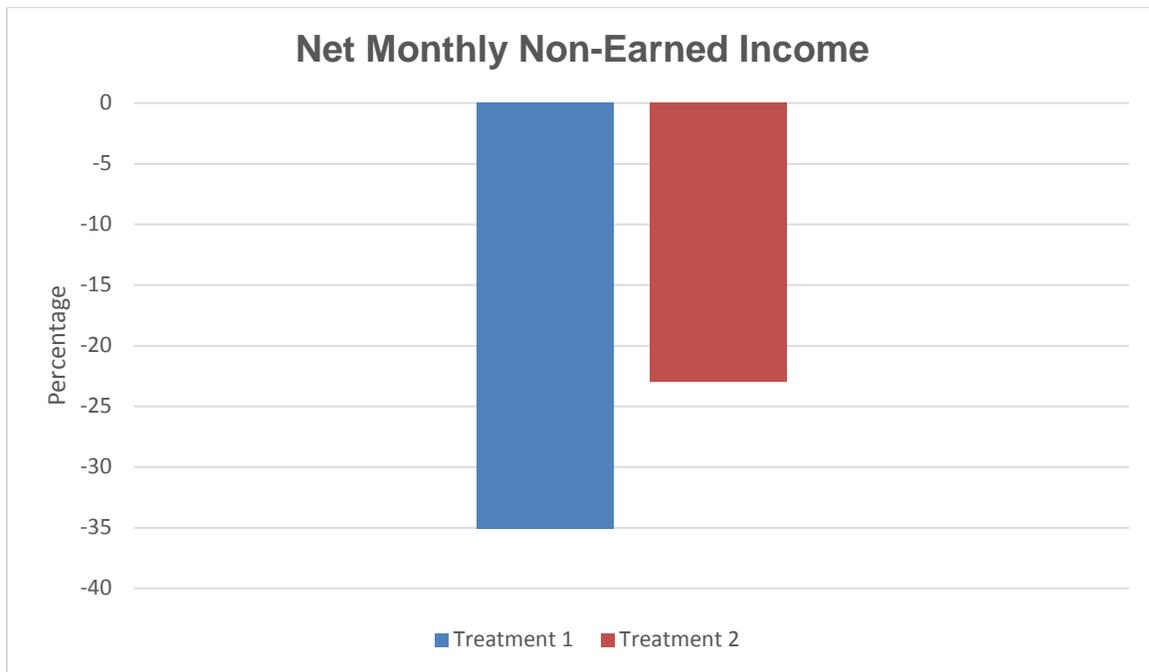
Figure 13: Changes in Non-Earned Income

Note: Non-earned income includes transfers, loans, borrowings and remittances. The data shown is net of all these

Figure 13 shows the effect on transfers and remittances of Treatment 1 and 2. The columns report both the incidence of transfers to and from the household and the value of these transfers at end-line. The effect on value of transfers notes the change across post-treatment survey waves of trackers and end-line.

We can see that there was no statistically significant effect on household financial transfers for both treatment arms.

Appendix table D2 reports the effect on household lending of both types of treatment. The incidence of lending is reported at end-line and the value analysed both across post-treatment survey waves and in cross section at end-line by comparing to control households.

The results show that there was no statistically significant effect on lending for either treatment arm.

Appendix table D3 reports the effect on borrowing of both types of treatment. Borrowing has been disaggregated according to source i.e. formal or informal. Formal sources of borrowing include formal institutions such as banks, credit unions, or savings associations, as well as micro-finance institutions and NGOs. Informal sources of borrowing include pawn shops, neighbours, friends, and family, landlords, shop credit, and any other informal money lenders. The incidence of borrowing has been reported at end-line and compared with baseline, whereas the value of borrowing has been analysed both across post-treatment survey waves and in cross section at end-line by comparing to control households.

The results show that there was no statistically significant impact of the intervention on the incidence of borrowing, whether formal or informal, for both treatment arms. We did however observe a large decrease (45.8%) in the average amount borrowed per month from informal sources among households that received an asset.

For comparison purposes, Figure 14 shows the proportion of households that were borrowing at baseline. We can see that about 50% of households in all types of villages were borrowing from an informal source at the baseline, while only a few were using formal sources of financing.
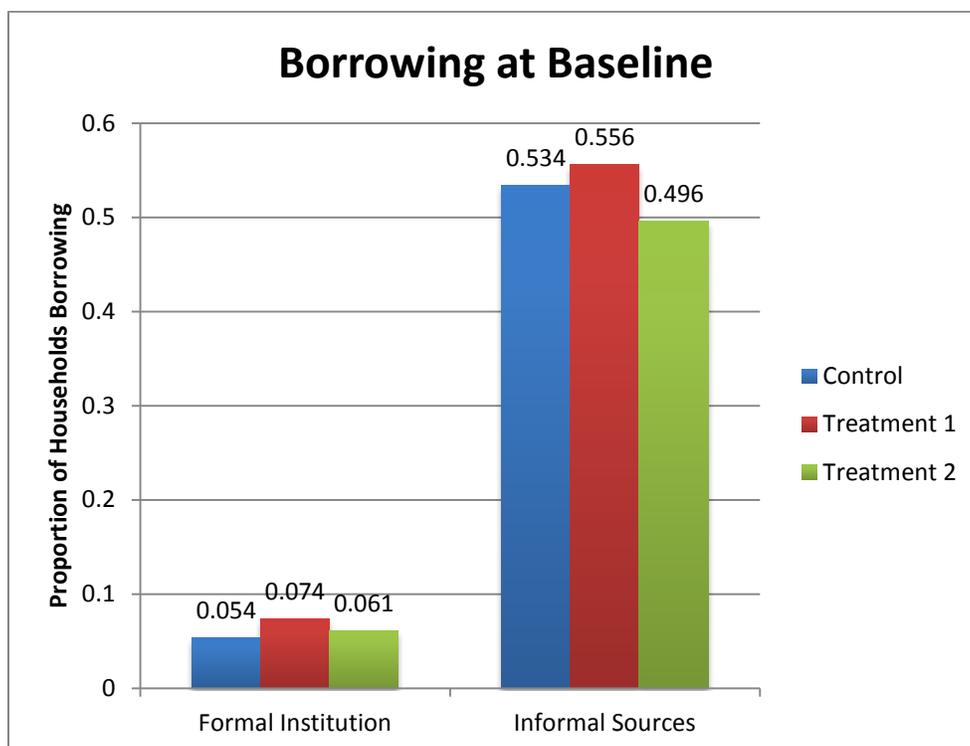
Figure 14: Borrowing at Baseline

The regression results of this section are tabulated in tables D1-D4 of the appendix.

EXPENDITURE RESPONSES TO TREATMENT

This section analyses the three household expenditures of consumption, savings and investment together to reach conclusions about any incremental effect from our treatments. Tables E1, E2 and E3 give results of these regressions in the appendix.
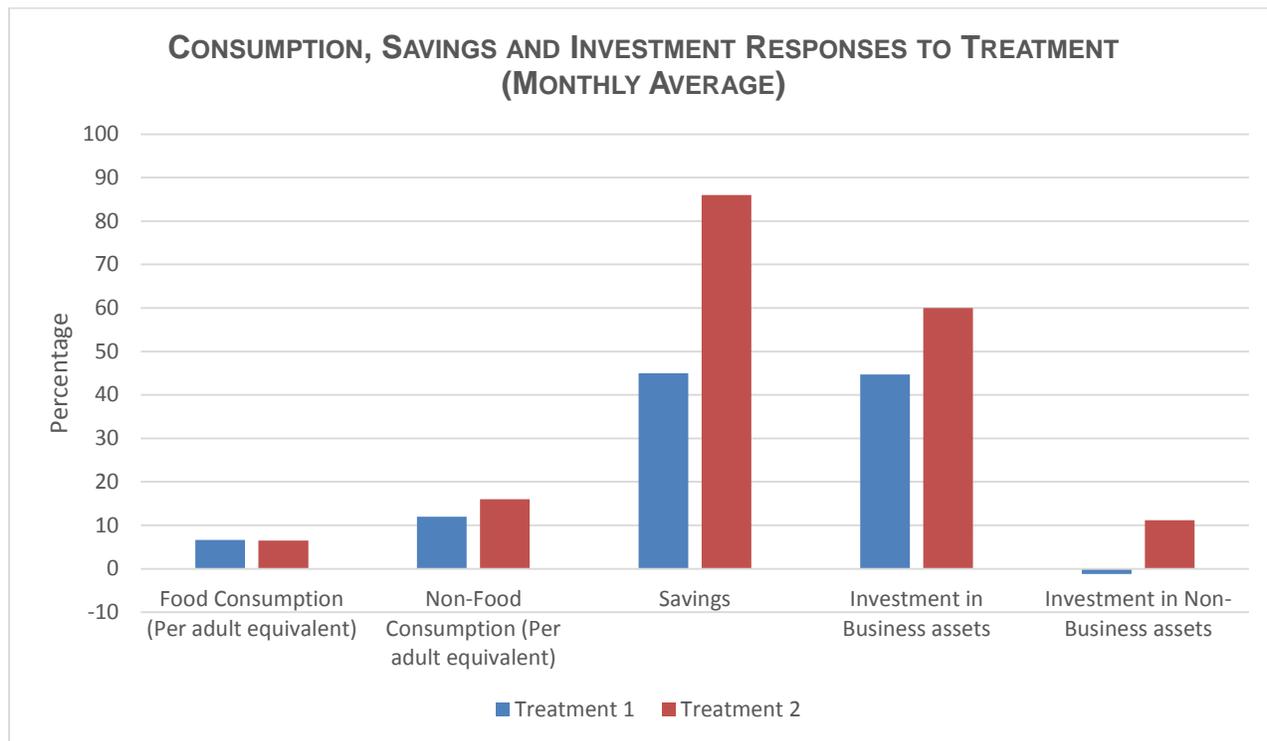
Figure 15: Consumption, Savings and Investment Responses to Treatment

CONSUMPTION

Consumption is an important indicator of well-being, and an increase in consumption is therefore an outcome that any poverty alleviation program is very interested in. Long term changes in consumption however, often tend to be "sticky", in that it takes some time for sustained increases to materialize since they are dependent on many other factors and behaviours changing (such as employment, etc.).

For the purpose of this analysis, we look at food and non-food consumption per adult-equivalent living in a household (as opposed to a simple per capita average). Food consumption includes cereal grains, meat, vegetables, dairy, oils, major condiments and meals away from home or bought for visitors. Non-food consumption includes expenditure on fuel, cosmetics, toiletries, entertainment, transportation, electricity, maid salary, clothing, footwear, utensils, furniture, household textiles, legal

matters, education, dowry, rituals, and others. The OECD scale has been used to calculate adult equivalence, and uses the formula 1+ (0.7*number of adults - 1) + (0.5*number of children).

Results

Figure 15 summarizes the results for treatment effects on the two types of consumption. We can conclude that both food and non-food consumption are largely responsive to treatment for both treatment groups. We observe a 6.6% spike in food consumption for Treatment 1 households and a 6.5% increase for Treatment 2 households. The non-food consumption shows a greater increase of 12% and 16% for Treatment 1 and 2 households respectively. These results are consistent with our expectations, since by end-line, the intervention has been successful in raising the consumption levels of the poor.

We can also see that the treatment effect on food and non-food consumption is the same for both treatment groups. This means that households have same consumption pattern in the short term irrespective of whether they received an asset or cash. The current increase in consumption was expected given that the households received large exogenous transfers of capital. However, the intervention can be deemed a success only if this consumption change is sustained in the future on the back of increased incomes. For that, we must conduct more surveys to finalize any conclusions about the intervention's impact on poverty.

SAVINGS

Savings is an important measure for our intervention as initial cash transfers or early sale of transferred assets may have a positive effect on savings. On the other hand, as households try to expand livestock or other businesses, they may feed additional investment requirements from existing savings. As such, an analysis of savings completes our picture of household finances and makes it possible to track the effects of our intervention.

Results

Figure 15 shows saving responses to both treatment for households. The first column shows the effect across survey waves whereas the second column is a cross sectional analysis of savings at end-line. We observe positive changes in savings for both treatment groups. For the first group, the rise is of 45% as compared to a rise of 86% for Treatment 2.

Similarly, the cross sectional analysis shows a rise of 52.1% and 67.8% for Treatment 1 and 2 respectively. The cross sectional analysis compares treatment groups to control households. As

such, the rise in savings of the treatment groups is larger than the change in savings of control households by the mentioned percentage levels mentioned.

Such high increases in savings show that households have responded to the treatments by considerably altering their savings patterns. The change in savings across both treatments is equal. This means that households have the same savings patterns regardless of which treatment group they belong to.

INVESTMENT

Investment is an important aspect of our analysis because the intervention seeks to divert employment away from wage labour and towards self-employment. This entrepreneurial effect will only be strengthened through effective and regular investment in business assets to sustain the effect of the initial cash or asset transfer.

In the following analysis, investments have been broken down into business and non-business assets which are essentially durable goods for household consumption such as furniture and electronic items. Two columns for each type separately report post-treatment effect across the tracker and end-line survey waves and cross sectional results at end-line. Note that for non-business assets, both measures are from a cross sectional analysis with data either from tracker surveys or end-line. The end-line measure only provides the value of the assets and not the investment into the asset.

Results

Figure 15 shows household investment results for both treatment groups and segregated according to asset type and further divided according to analysis type.

We can see that investment in business assets has shown an increase for both treatment groups across the survey waves. For Treatment 1, the increase in investment was equal to 44.7%, whereas the increase for Treatment 2 equalled 60%. Similarly, the cross sectional analysis for this survey gives increases in investment of 124% and 127.8% for Treatment 1 and 2 respectively as compared to control households.

For non-business assets, we do not see a statistically significant effect from any of the measurement methods.

The rise in investment in business assets is encouraging as it shows that households are committed to switching from wage labour and towards self-employment. It is expected that in the long run, this investment will effect a positive change in the household earnings and consumption.

SPILL-OVER EFFECTS ON UNTREATED POOR HOUSEHOLDS

As stated above, the RCT experiment was designed to allow us to analyse the effect of treatment on other households in the treated villages. In theory, non-treated households will be affected by our intervention through the labour, credit, and livestock markets. Given that we have witnessed significant changes in these markets for the treated poor, we would expect these changes to have an effect on the outcomes for the untreated poor in the same village as well. However, it must be noted that just as the outcome changes for treated households show large changes only in the long run, the changes for non-treated households will take even longer to show significant changes.

We analyse the non-treated households in treatment villages in comparison to similar households in control villages. The outcomes are examined for the end-line survey data. Similar to the earlier section, our analysis looks at employment and earnings responses to treatment and the consumption, saving and investment, as well as non-earned income responses.

EFFECTS ON EMPLOYMENT

We analyse any occupational change for both household head and the household head's spouse in non-treated, eligible households from treatment villages. The occupational categories are the same as earlier that is: casual wage employment, other wage employment, self-employment in livestock, and self-employment in other sectors.

Results
No significant spill-over effect was observed within these occupational categories for the household head. For the spouse, we noticed a decrease of 10 hours per month in treatment 1 villages and 9 hours per month in treatment 2 villages for time spent in casual wage labour.

In aggregate employment terms, we again did not notice any significant change for the household head but a large decrease of 17 working hours per month was noted in treatment 1 village.

However, both the given changes above were statistically insignificant.

As expected, the spill-over effects of our treatment do not show any significant change for now. These changes will take time to show in our analysis as when the indicators for the treated households improve further.

The results of this analysis are detailed in tables F1, F2 and F3 of the appendix.

EFFECTS ON EARNINGS

This section discusses the impact of the treatment on eligible households in the treatment villages who did not receive any treatment from PPAF. Earnings come from different kinds of employment activities, namely wage employment, self-employment in livestock related businesses, and self-employment in other businesses (classified same as described in the section above).

Results

Earning measures from all the occupational categories show no significant spill-over effects for the household head.

Spouses showed large changes in some categories however these changes were not statistically significant. Hence nothing conclusive can be said about the spill-over effects at this stage.

The results of income response to treatment are explained in detail in tables G1 and G2 of the appendix.

EFFECTS ON NON-EARNED INCOME

We did not find any significant impact on net borrowings or lending for the poor households in treatment villages who were not part of our intervention.

The detailed results can be found in table H of the appendix.

EFFECTS ON EXPENDITURE

This section analyses the three household expenditures of consumption, savings and investment together to reach conclusions about any incremental effect on the non-treated households. Tables I1, I2 and I3 give results of these regressions in the appendix.

CONSUMPTION, SAVINGS AND INVESTMENT RESPONSES TO TREATMENT (MONTHLY AVERAGE)
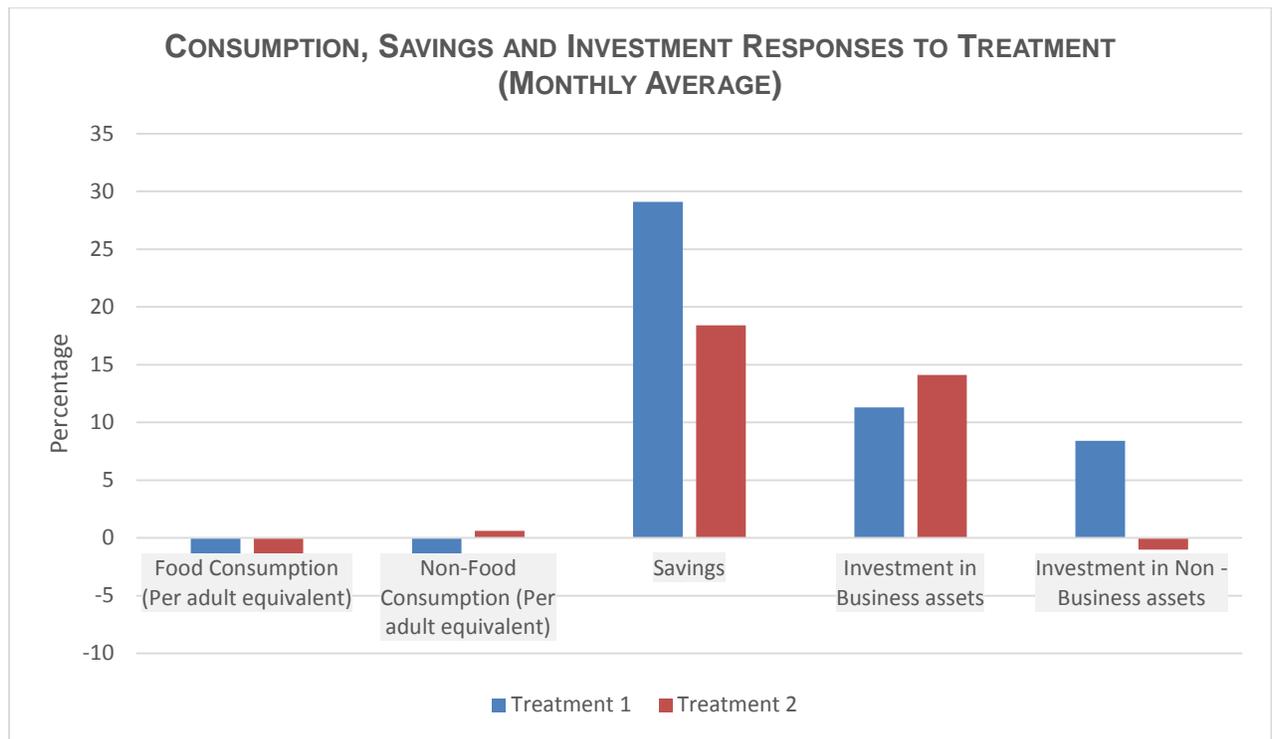
Figure 16: Spill-over effects on Consumption, Savings and Investment Responses to Treatment

CONSUMPTION

Consumption changes have been recorded for the non-treated poor households in treatment villages. Consumption patterns of these households may change as they interact with the treated households. This analysis will be more complete when we incorporate network effects within this analysis later in the program.

Results

We note no change in non-food consumption for either treatment arm. However, we observe a decrease of 5.8% in food consumption for non-treated poor households in Treatment 2 villages. Such households in treatment 1 villages did not show any change.

Overall we can see that there is no observable difference in consumption outcomes across the treatment groups.

SAVINGS

Results

We observe large changes in savings however they are statistically insignificant. For treatment 1 village control poor households, savings rise by 29.1%. For similar households in treatment 2 villages, the savings rise by 18.4% as compared to similar households in control villages.

INVESTMENT

The analysis for investment was disaggregated into business and non-business assets. Investments by non-treated poor households can also increase due to their interaction with the treated households whose immediate wealth increases as a result of our transfers.

Results

There were large increases of 11.3% and 14.1% in investment in business assets for treatment 1 and 2 village households respectively. The changes in non-business assets were smaller with a positive change of 8.4% for treatment 1 and of 1% for treatment 2 village households. All of these changes were statistically insignificant.

Spill-over effects on all measurable outcomes are expected to take even longer than the treatments' effect on treated households. For this reason, the control households must be included in our future surveys for long term evaluation of the intervention. Only then will we be able to make a comprehensive cost benefit analysis for the two types of treatment.

COMMUNITY LEVEL RESULTS & OUTCOMES

SOCIAL ORGANIZATIONS

The community organizations created at the village level were mandated to resolve village issues through collective action or by putting up a collective voice to the authorities. Results from our community surveys show that the most common issues being raised are for the need of roads, sewage, drinking water and other utilities in the village as shown in Figure 17 below. These organizations do not have any formal authority, or budget; instead their role is limited to identifying issues and raising funds to address them through collective organization. Some of these organizations also provide trainings and small loans to members. However, smooth and efficient running of these organizations can positively affect the achievement of their goals. On the other hand, mismanagement, lack of regular meetings, spending on frivolous items can reduce their success rates. Figure 18 below summarizes the reasons behind their (in)-effectiveness.
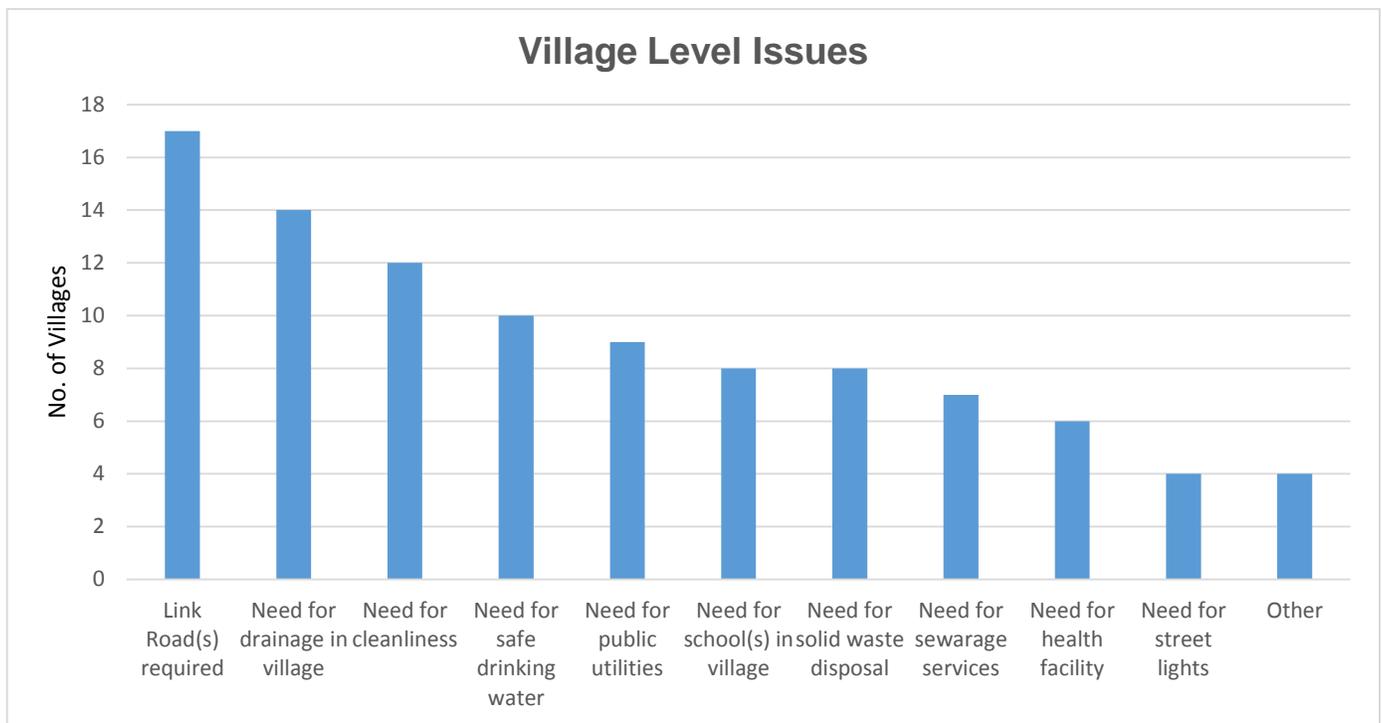
Figure 17: Issues faced by Villagers
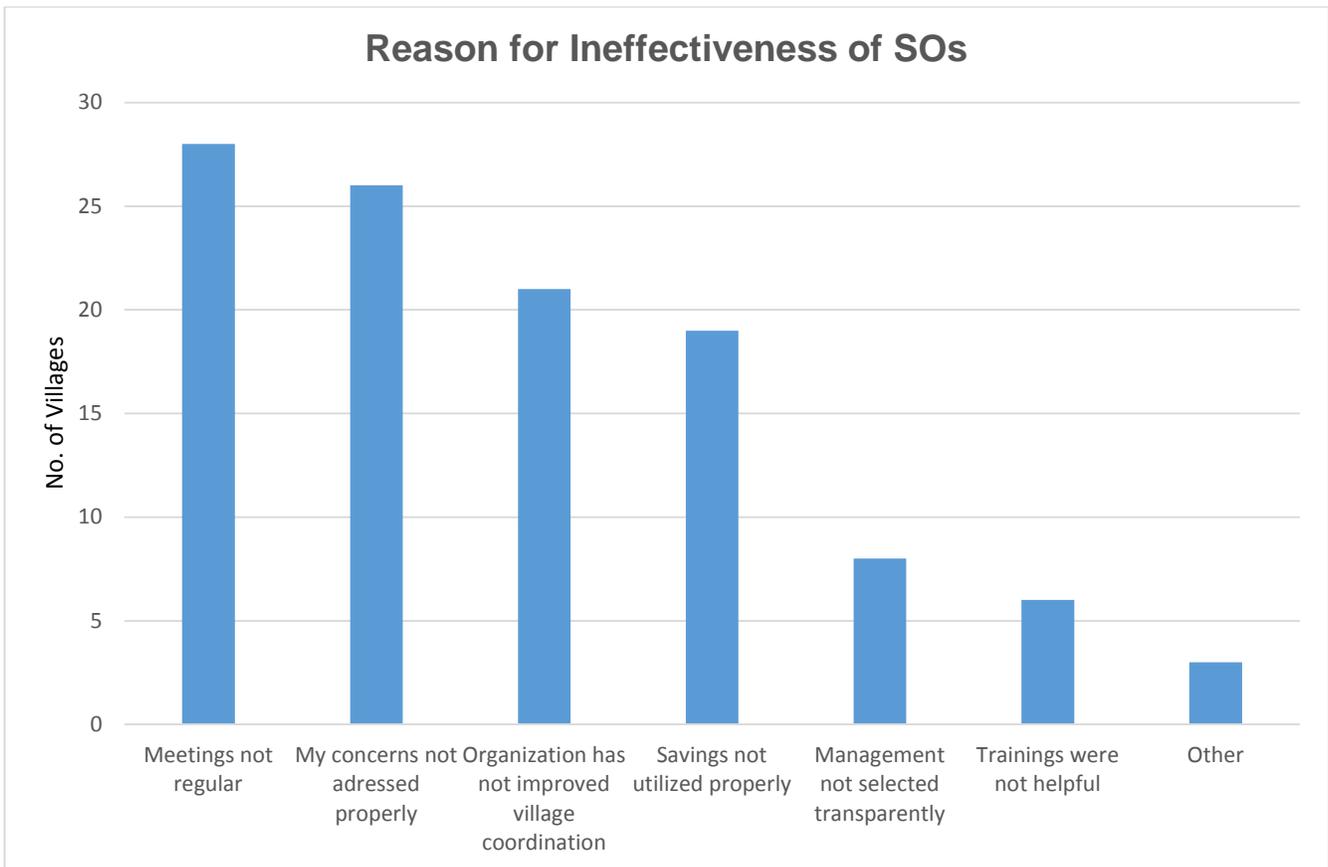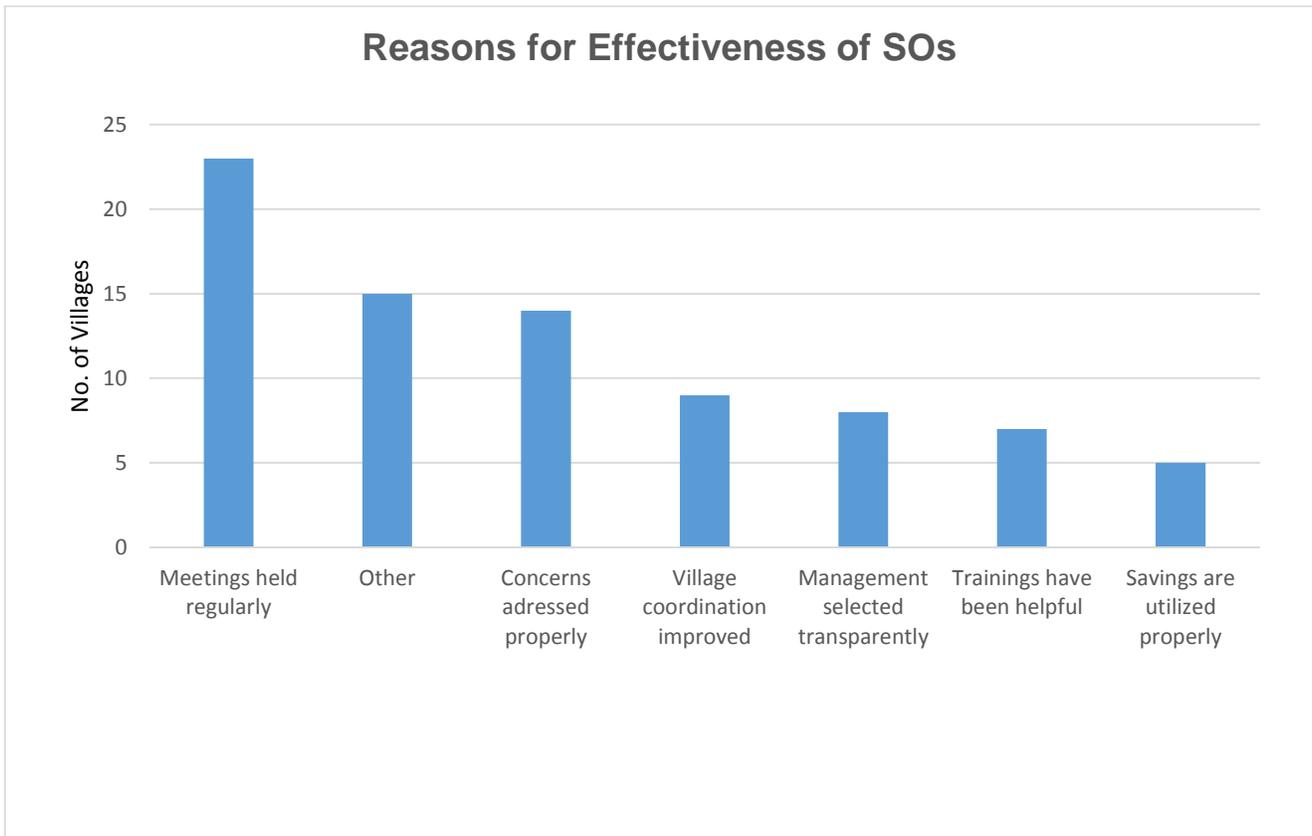
Figure 18: Perceived Reasons for Effectiveness or Non-Effectiveness of Community Organizations

From our analysis shown in Figure 19 below, we found that the overall perceived level of community organization activity was more in the treatment villages as compared to control villages, however, the difference was not statistically significant for Treatment 1 group as compared to the control. The average activity score out of 5 was 3.15 in control villages whereas it was 3.35 and 3.93 in Treatment 1 and 2 groups respectively. However, attendance in meetings was higher in both treatment groups. Out of a maximum of 4, control villages scored 2.15, Treatment 1 villages scored 2.72 and Treatment 2 villages scored 2.66.

Similar results were observed in skills training with the probability of organizing training sessions being higher in treatment villages. 28% of Treatment 1 villages and 24% of Treatment 2 villages arranged training sessions while only 2% of the control villages arranged such sessions.

Average organizational saving was also higher in both treatment groups with values of Rs. 15,933 in control villages as compared to Rs. 45,444 and Rs. 43,000 in Treatment 1 and 2 villages respectively. The difference from control villages was statistically significant only for Treatment 2 villages.

Lastly, perceived effectiveness of community organizations had overall weak average scores of only 3, 3.52 and 3.86 in the control, Treatment 1 and Treatment 2 villages respectively out of a maximum of 10. There was no significant difference between control and treatment groups' response.

Lastly, it is imperative that we recheck these outcomes in the coming years to ascertain whether these were only short run effects or if they can be sustained in the longer run, given that the initial implementation of the intervention was done through these community organizations.

The findings of Figure 19 are detailed in Table J of the appendix.
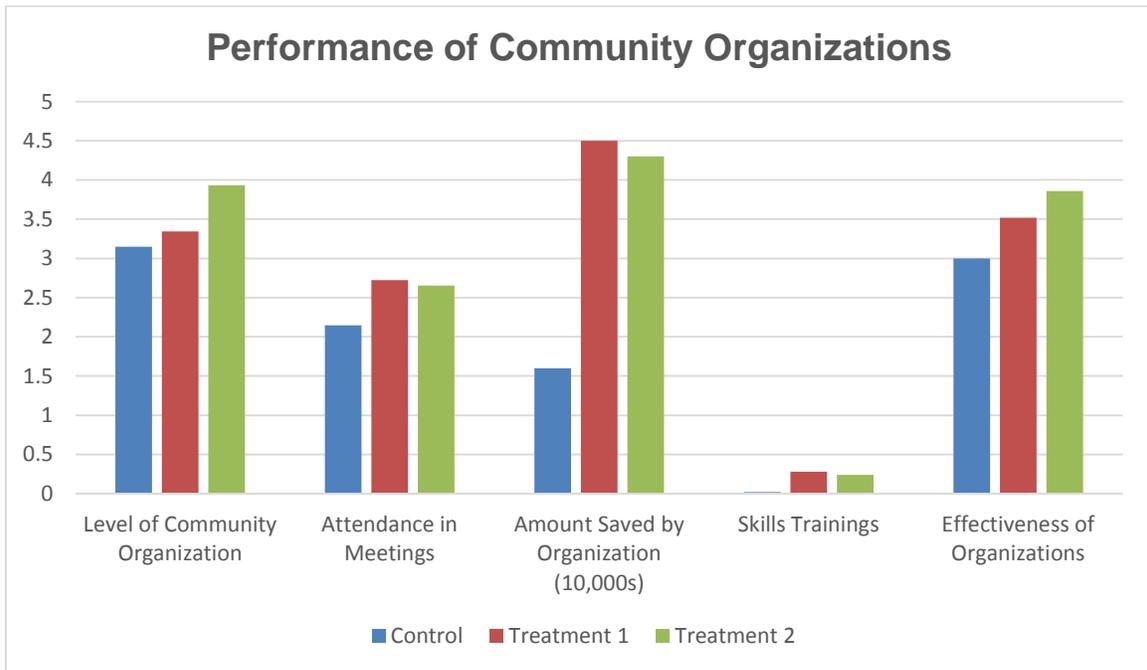
Figure 19: Performance of Community Organizations

Note: Level of Community Organization: 1 = dormant, 5 = very active
Attendance in Meetings: 1 = None, 4 = More than 80%
Skills Trainings: Fraction of villages which organized trainings session
Effectiveness of Organizations: 1 = Highly Ineffective, 10 = Highly Effective

Social Organizations Index

We created an index to gauge the performance of social organizations. The index was created by giving scores to each village organization on three broad criteria of: a) Activity, b) effectiveness, c) finances.

We created the index separately for responses from village level focus group sessions and from individual respondents in our household surveys who were members of village organizations. All data was post treatment and from the end-line survey module.

The activity score consisted of the perceived level of activity and the level of attendance in the organizational meetings. The effectiveness of organization was measured through the success of their training sessions, identification of village issues, fund raisings and fund utilization and finally the perception of respondents as to the effectiveness of those organization. Each individual score was scaled between zero and one. Finally, the organization finances were scored based on their saving practises and the magnitude and success of their loans. The scoring was finally normalized to z-values.

Village Level Index

At the village level, the activity score was similar across the treatment and control villages with average values of .523, .569 and .560 for control, Treatment 1 and Treatment 2 villages respectively, as shown in Figure 20. The effectiveness score showed a statistically significant difference between the average values for control villages which was .200 as compared to Treatment 1 villages which scored .308 on average. The Treatment 2 villages did not show a statistically significant difference from the other two groups and scored .270. Finally, the financial score showed a higher value in both treatment groups as compared to control groups with values of .056, .172, and .206 for control and Treatment 1 and 2 villages respectively. There was no difference in averages within the treatment groups.

The overall index score was also higher for both treatment groups as compared to control villages. These values stood at -.321, .099 and .199 for control and Treatment 1 and 2 villages respectively. There was no difference in averages within the treatment groups.
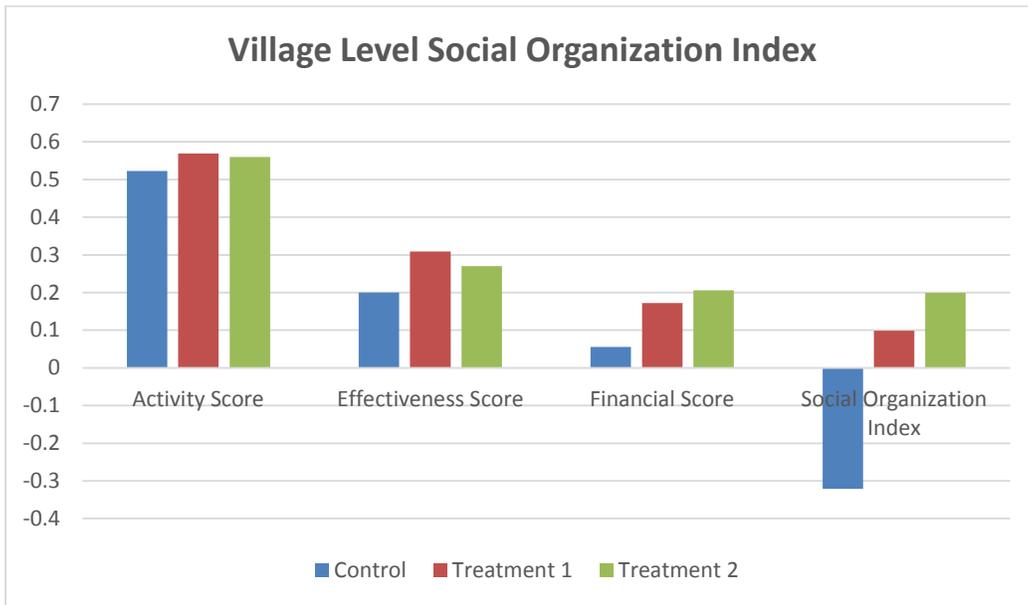
Figure 20: Village Level Social Organization Index

HOUSEHOLD LEVEL INDEX

At the household level, the index illustrated in Figure 21 was only calculated from respondents who were treated in any of the two groups. Control households were not used in the analysis because there were very few community organization members among the sample of control households for the end-line survey.

The results showed that organizational performance was similar across all criteria other than the effectiveness score. Treatment 1 households reported a higher effectiveness of social organizations with an average value of .230 as compared to .197 for Treatment 2 households.

Both indices are also further detailed in tables K1 and K2 of the appendix.
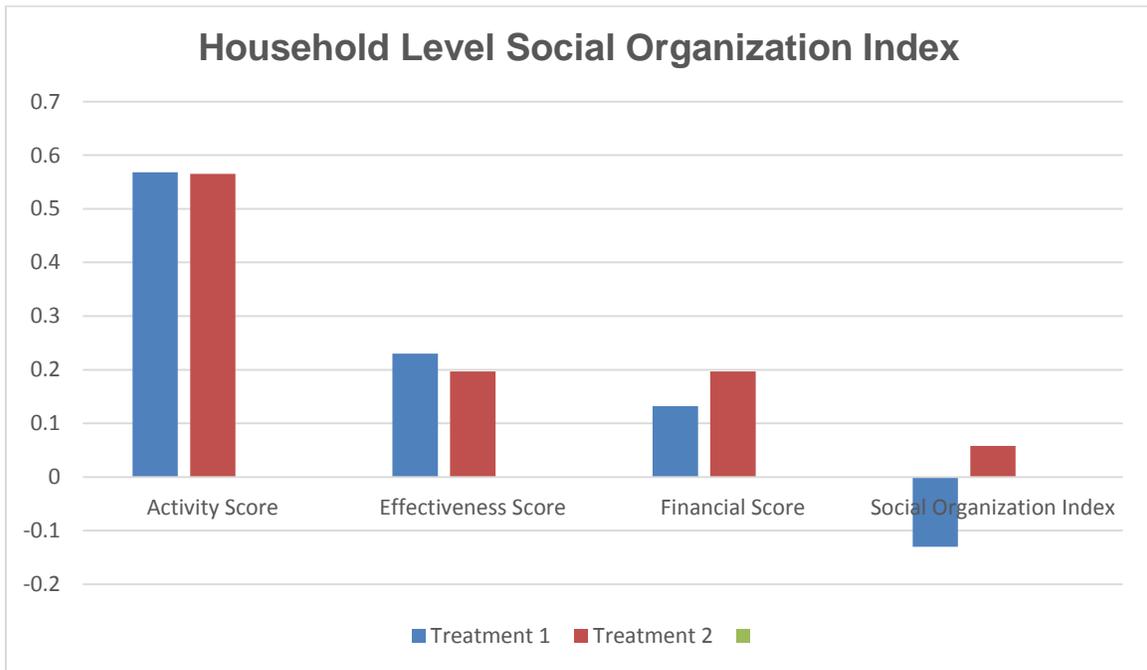
Figure 21: Household Level Social Organization Index

RESPONDENT CHARACTERISTICS AND INVOLVEMENT IN SOCIAL ORGANIZATIONS

We related membership, attendance and perception of effectiveness of social organizations to survey respondents' individual characteristics while controlling for village features (such as the existence of markets, number of facilities in the village, etc.). The purpose of this exercise was to check if individual level characteristics have any effect on a person's propensity to be involved in community organizations. Figure 22 summarizes the results of this analysis. Although membership of organization can be high, they suffer from a chronic shortage of attendance which substantially restricts their effectiveness. This is why both membership and attendance have to be separately analysed.

We find that membership and attendance both have a positive relation with the respondent having primary education. There is a 2% greater chance of membership given primary education and almost 7% greater chance of attending organization meetings if respondent had primary education.

Furthermore, we find that if the respondent manifested a belief that powerful people can exploit them and showed an intention to challenge this exploitation, they were 2% more likely to become members of social organizations. Other variables such as self-employment, land ownership, self-belief, acknowledging social structural failures and complete acceptance of fate as ultimate cause of success/failure did not show any relation with either membership or attendance.

Finally, perception of effectiveness of social organizations did not show any statistically significant variance across any respondent characteristics. Data restrictions do not allow us to conclude whether the actual effectiveness of organizations was perfectly reflected in these opinions and thus rendered respondent characteristics as insignificant.

The respondent level regressions are detailed in Table L of the appendix.
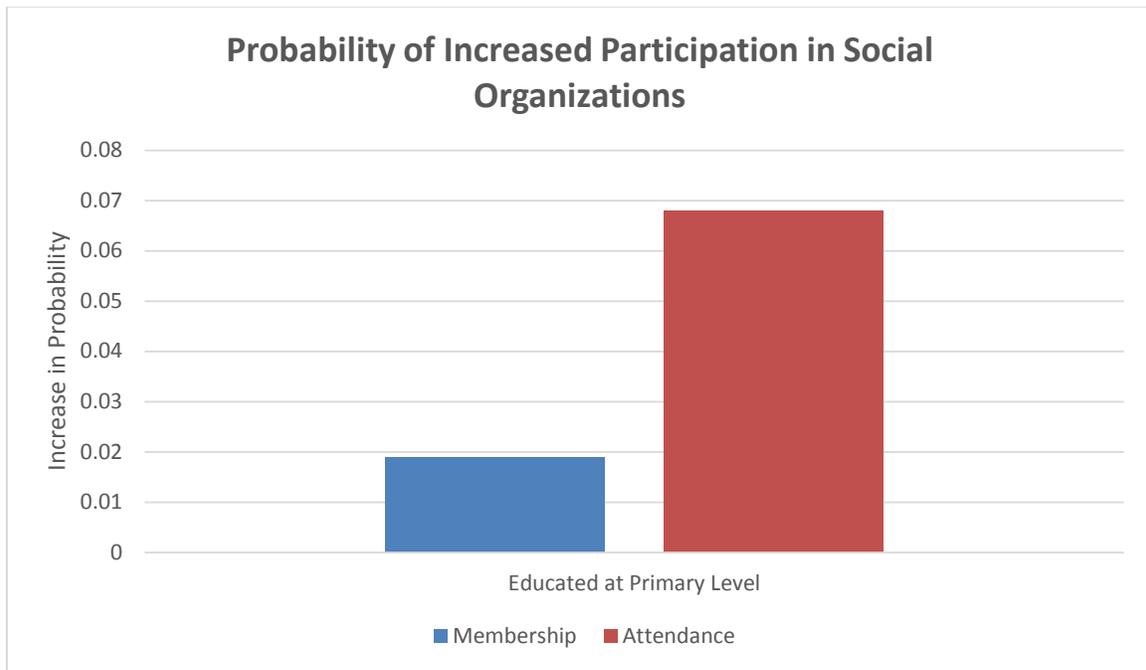
Figure 22: Participation in Social Organizations

CONCLUSION

Based on the findings of the end-line surveys, we have noted a significant occupational shift out of wage employment and into self-employment. In the short run, this is an encouraging result as occupational shift was the first indicator of successful implementation of the program. This means that the treated households are responding to the intervention as expected. This also shows that the transferred assets have been largely retained and the household decision making and workings now revolve around those assets. This shift towards self-employment is what is expected to raise incomes over the long term for the households as they divert away from low paid wage labour.

Following this, household earnings from self-employment, particularly from livestock related businesses have grown whereas there has been a fall in earnings from wage employment. This result shows that as opposed to observations 4-8 months from the transfers, now the extra labour in self-employment has begun to reap benefits. A delay in income growth from self-employment was expected as household members took time to settle into their new roles and gained expertise in managing their respective transferred assets.

Overall however, we fail to observe a net increase (or decrease) in earnings. This shows that so far, despite the occupational shift and corresponding income change, households are still earning at the pre-treatment levels. As explained above, earnings from self-employment take time to increase. Given the rapid rise of earnings as observed in subsequent survey waves, we expect earnings from self-employment to improve further, finally making the treated households better off as compared to baseline.

Furthermore, consumption, savings and investment in business assets have all picked up in both treatment groups. This is in-line with economic theory, as well as our expectations at the time of the tracker surveys. Although earnings have not improved, a rise in expenditures proves that households also expect incomes from self-employment to rise in the future. Overall, we do not see any difference within the treatment groups in terms of expenditures. A divergence in outcomes between treatment groups may take more time to manifest as they depend on an overall increase in earnings.

We also expect some spill-over effects of our intervention on other households in the treated villages. These households may be either poor or non-poor. For now, our analysis has been focused on eligible households only (the ultra or vulnerable poor). We assume that due to large transfers of capital in treated villages, there will be some positive externalities or changes in occupational patterns for the non-treated households. However so far we fail to see any significant changes. Some indicators can be observed to be

taking particular directions however it is too early to make a case based on them. We expect the spill-over effects to show larger changes when the treated households show greater responses to the treatment in the longer run. Moreover, the spill-over effects will have to be analysed in-line with the local village family and economic networks to fully understand the situation.

Additionally, our analysis of social organizations also showed that treatment has had a positive impact on their performance with substantial increases in both activity and financial performance in treatment villages as compared to control villages. This was expected, given that our intervention used these organizations to distribute cash transfers and to arrange training sessions.

Lastly, we have witnessed that education levels are important in terms of promoting community participation among the citizens. Most respondents believe that these community organizations are ineffective. However the ineffectiveness can also result from a lack of interest on part of the villagers. As such the exact nature of working of these organizations needs to be further investigated.

So far, the end-line survey has shown that the households are on their way to achieving the goals that the treatments intended. Consumption and earnings are both expected to grow and we also expect to see more divergence between the treatment groups in terms of outcomes.

As such, **there is a vital need for continued engagement with the treated and control households to track their performance and poverty outcomes in the longer run and to determine the long-term impact of the interventions on household and village welfare.**

APPENDIX

Table A: Purchases of Assets

Means, standard deviation in parentheses

	Proportion of HHs that Chose Animal		Average Price per Animal (Rs)	
	Treatment 1 (In-Kind)	Treatment 2 (UCT)	Treatment 1 (In-Kind)	Treatment 2 (UCT)
Cows	.228	.201	48,643	50,810
	(.420)	(.401)	(2,372)	(16,264)
Calves	.447	.158	27,818	20,712
	(.498)	(.365)	(8,418)	(12,229)
Buffaloes	.060	.030	43,053	59,609
	(.237)	(.171)	(10,188)	(26,099)
Goats	.186	.145	14,898	10,919
	(.390)	(.353)	(10,389)	(7,621)

Table B1: Occupational Responses to Treatment (Household Head)

OLS Regressions, Standard Errors Clustered by Village

	Engagement in Wage Employment: Casual	Engagement in Wage Employment: Other	Engagement in Self Employment: Livestock	Engagement in Self Employment: Other
Treatment 1	-0.056**	0.006	0.254***	0.065**
	(0.024)	(0.016)	(0.032)	(0.025)
Treatment 2	-0.059*	0.009	0.175***	0.047*
	(0.030)	(0.014)	(0.033)	(0.029)
Treatment 1 = Treatment 2 [p-value]	[.921]	[.865]	[.024]	[.601]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	3,008	3,008	3008	3008

	Hours per Month spent in Wage Employment: Casual (hours)	Hours per Month spent in Wage Employment: Other (hours)	Hours per Month spent in Self-employment: Livestock (hours)	Hours per Month spent in Self-employment: Other (hours)
Treatment 1	-12.378***	0.025	27.409***	14.875**
	(4.306)	(4.135)	(4.509)	(5.778)
Treatment 2	-13.884**	1.601	25.387***	4.088
	(5.823)	(3.961)	(4.426)	(5.442)
Treatment 1 = Treatment 2 [p-value]	[.789]	[.733]	[.692]	[.097]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	3,008	3,008	3008	3008

Notes: All data are taken from the baseline survey, the first and second tracker surveys, and the end-line survey, and only tracked poor households are considered the relevant sample for this comparison. The base period is the baseline and the base group is the control group for all regressions. Employment is categorized as follows: Casual Labour (Daily wage workers), Other Wage Labour (salaried employees, apprentices, etc.), Livestock Self-employment (animal producers, mixed crop and animal producers, subsistence livestock and mixed crop and livestock farmers, livestock farm labourers and mixed crop and livestock farm labourers),and Other Self-employment. For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

Table B2: Occupational Responses to Treatment (Spouse)

OLS Regressions, Standard Errors Clustered by Village

	Engagement in Wage Employment: Casual	Engagement in Wage Employment: Other	Engagement in Self Employment: Livestock	Engagement in Self Employment: Other
Treatment 1	-0.022	0.093***	0.267***	0.018**
	(0.025)	(0.027)	(0.027)	(0.007)
Treatment 2	-0.006	0.055*	0.207***	0.015**
	(0.028)	(0.028)	(0.027)	(0.006)
Treatment 1 = Treatment 2 [p-value]	[.505]	[.255]	[.005]	[.735]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	2,964	2,894	2,894	2,894

	Hours per Month spent in Wage Employment: Casual (hours)	Hours per Month spent in Wage Employment: Other (hours)	Hours per Month spent in Self-employment: Livestock (hours)	Hours per Month spent in Self-employment: Other (hours)
Treatment 1	-5.566	11.963***	32.740***	2.400**
	(4.182)	(2.904)	(4.190)	(1.147)
Treatment 2	-2.552	7.944**	25.262***	1.838*
	(4.187)	(3.656)	(3.715)	(0.937)
Treatment 1 = Treatment 2 [p-value]	[.424]	[.348]	[.067]	[.693]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	2,894	2,894	2,894	2,894

Notes: For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$

.

Table B3: Aggregate Employment Responses to Treatment (Household Head and Spouse)

OLS Regressions, Standard Errors Clustered by Village

	Unemployment Rate	Total Hours per Month spent in Employment (hours)
Treatment 1 (Household Head)	**-0.025*****	**31.273*****
	(0.009)	(4.256)
Treatment 2 (Household Head)	**-0.028*****	**17.308*****
	(0.008)	(4.548)
Treatment 1 = Treatment 2 [p-value]	[.666]	[.005]
Strata Fixed Effects	Yes	Yes
Number of Households	3,008	3,008
Treatment 1 (Spouse)	**-0.176*****	**39.492*****
	(0.024)	(6.502)
Treatment 2 (Spouse)	**-0.147*****	**31.855*****
	(0.028)	(0.028)
Treatment 1 = Treatment 2 [p-value]	[.065]	[.249]
Strata Fixed Effects	Yes	Yes
Number of Households	2,894	2,894

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1

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Table C1: Effects on Income for Household Head

OLS Regressions, Standard Errors Clustered by Village

	Log Monthly Household Earnings from Wage Employment: Casual (Rupees)	Log Monthly Household Earnings from Wage Employment: Other (Rupees)	Log Monthly Household Earnings from Self-Employment: Livestock (Rupees)	Log Monthly Household Earnings from Self-Employment: Other (Rupees)	Log Total Monthly Household Earnings (Rupees)
Treatment 1	**-0.466****	0.030	0.128	**0.528****	0.134
	(0.206)	(0.134)	(0.107)	(0.221)	(0.116)
Treatment 2	**-0.554****	0.031	**0.223****	0.288	-0.033
	(0.249)	(0.125)	(0.107)	(0.240)	(0.128)
P-value on test of equality:					
Treatment 1 = Treatment 2	[.729]	[.996]	[.456]	[.391]	[.288]
Strata Fixed Effects	Yes	Yes	Yes	Yes	Yes
Number of Households	2,968	2954	2,965	2,999	2,981

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

Table C2: Effects on Income for Spouse

OLS Regressions, Standard Errors Clustered by Village

	Log Monthly Household Earnings from Wage Employment: Casual (Rupees)	Log Monthly Household Earnings from Wage Employment: Other (Rupees)	Log Monthly Household Earnings from Self-Employment: Livestock (Rupees)	Log Monthly Household Earnings from Self-Employment: Other (Rupees)	Log Total Monthly Household Earnings (Rupees)
Treatment 1	-0.227	**-0.006****	-0.000	**0.054***	-0.195
	(0.211)	(0.003)	(0.000)	(0.031)	(0.171)
Treatment 2	-0.096	0.001	-0.000	**0.036***	-0.066
	(0.224)	(0.005)	(0.000)	(0.019)	(0.174)
P-value on test of equality: Treatment 1 = Treatment 2	[.495]	[.137]	[.601]	[.583]	[.396]
Strata Fixed Effects	Yes	Yes	Yes	Yes	Yes
Number of Households	2,837	2,894	2,894	2,875	2,838

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

Table D1: Effects on Non-Earned Income (Transfers and Remittance)

OLS Regressions, Standard Errors Clustered by Village

	HH Received Cash Transfer/Remittance	Log Value of Monthly Cash Transfer/Remittance Received (Rupees)	HH Gave Cash Transfer/Remittance	Log Value of Monthly Cash Transfer/Remittance Given (Rupees)
Treatment 1	-0.013	-0.015	-0.019	0.014
	(0.038)	(0.169)	(0.039)	(0.057)
Treatment 2	-0.017	-0.149	-0.008	0.000
	(0.037)	(0.100)	(0.044)	(0.065)
P-value on test of equality:				
Treatment 1 = Treatment 2	[.929]	[.443]	[.796]	[.830]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	2,736	2,736	2,736	2,736

Notes: All data are taken from the baseline survey, the first and second tracker surveys, and the end-line survey, and only tracked poor households are considered the relevant sample for this comparison. Transfers include both cash and in-kind transfers made or received from any individual. Borrowing and lending also includes both cash and in-kind loans, as well as interest bearing and non-interest bearing loans. Informal sources of borrowing include: a micro-finance institution or NGO, pawnshops, neighbours, friends and family, landlords, and store credit. Net non-earned income is calculated as (transfers given - transfers received) + (borrowing - lending). For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table D2: Effects on Non-Earned Income (Lending)

OLS Regressions, Standard Errors Clustered by Village

	Household Lent to Someone	Log Value of Monthly Lending (Rupees)	Log Value of Monthly Lending (Rupees)
Treatment 1	0.009	0.021	0.049
	(0.006)	(0.015)	(0.043)
Treatment 2	0.003	0.012	-0.001
	(0.006)	(0.012)	(0.037)
P-value on test of equality: Treatment 1 = Treatment 2	[.410]	[.560]	[.284]
Survey Waves Used	End-line	Trackers, End-line	End-line
Strata Fixed Effects	Yes	Yes	Yes
Number of Households	2,737	2,737	2,863

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

Table D3: Effects on Non-Earned Income (Borrowing)

OLS Regressions, Standard Errors Clustered by Village

	HH borrowed from a Formal Institution [0/1]	Log Value of Monthly Borrowing from a Formal Institution [Rupees]	HH borrowed from an Informal Source [0/1]	Log Value of Monthly Borrowing from Informal Sources [Rupees]
Treatment 1	0.007	-0.034	-0.069	**-0.458***
	(0.014)	(0.031)	(0.042)	(0.254)
Treatment 2	0.007	0.008	0.008	-0.124
	(0.014)	(0.033)	(0.041)	(0.218)
P-value on test of equality: Treatment 1 = Treatment 2	0.990	0.216	0.116	0.189
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	2,737	3,039	2,737	2,928

Notes: For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table D4: Net Monthly Transfers and Borrowings

OLS Regressions, Standard Errors Clustered by Village

	Log Value of Monthly Net Transfers, Net Borrowing (Rupees)	Log Value of Monthly Net Transfers, Net Borrowing (Rupees)
Treatment 1	**-0.351***	-0.445
	(0.210)	(0.355)
Treatment 2	-0.230	0.076
	(0.210)	(0.339)
P-value on test of equality:		
Treatment 1 = Treatment 2	[.565]	[.146]
Strata Fixed Effects	Yes	Yes
Survey Waves Used	Trackers, End-line	End-line
Number of Households	2,974	2,749

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

Table E1: Consumption Responses to Treatment

OLS Regressions, Standard Errors Clustered by Village

	Log Monthly Food Consumption (per adult equivalent, Rupees)	Log Monthly Non-Food Consumption (per adult equivalent, Rupees)
Treatment 1	**0.066****	**0.120****
	(0.032)	(0.050)
Treatment 2	**0.065****	**0.160*****
	(0.031)	(0.047)
P-value on tests of equality: Treatment 1 = Treatment 2	[.967]	[.393]
Strata Fixed Effects	Yes	Yes
Number of Households	3,067	3,117

Notes: All data are taken from the baseline survey, the first and second tracker surveys, and the end-line survey, and only tracked poor households are considered the relevant sample for this comparison. The base period is the baseline in the consumption. Food consumption includes cereal grains, meat, vegetables, dairy, oils, major condiments, food at ceremonies, and meals away from home or bought for visitors. Non-food consumption includes expenditure on fuel, cosmetics, toiletries, entertainment, transportation, electricity, maid salary, clothing, footwear, utensils, furniture, household textiles, legal matters, education, dowry, rituals, health, and others. For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

Table E2: Savings Responses to Treatment

OLS Regressions, Standard Errors Clustered by Village

	Log Value of Monthly Savings (Rupees)	Log Value of Monthly Savings (Rupees)
Treatment 1	0.450*	0.521**
	(0.236)	(0.240)
Treatment 2	0.860***	0.678*
	(0.278)	(0.377)
P-value on tests of equality: Treatment 1 = Treatment 2	[.210]	[.721]
Survey Waves Used	Trackers, end-line	End-line
Strata Fixed Effects	Yes	Yes
Number of Households	3,228	3,022

Notes: The base period is tracker 1 for the savings. For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

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Table E3: Investment Responses to Treatment

OLS Regressions, Standard Errors Clustered by Village

	Log Value of Monthly Investment in Business Assets (Rupees)	Log Value of Monthly Investment in Business Assets (Rupees)	Log Value of Monthly Investment in Non-Business Assets (Rupees)	Log Value of Non-Business Assets (Rupees)
Treatment 1	**0.447***	**1.240***	-0.012	0.019
	(0.097)	(0.242)	(0.106)	(0.063)
Treatment 2	**0.600***	**1.278***	0.112	0.020
	(0.112)	(0.246)	(0.101)	(0.067)
P-value on tests of equality: Treatment 1 = Treatment 2	[.209]	[.904]	[.261]	[.980]
Survey Waves Used	Trackers, end-line	End-line	Trackers, end-line	End-line
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	3,222	3,016	3,232	2,933

Notes: **The base period is the baseline for non-business assets and tracker 1 for investment in business assets. Business assets include productive and draft livestock, retail business assets, farming business assets, stitching business assets, and other non-livestock related business assets. Non-business assets include household furniture, fixtures and fittings, household appliances, vehicles, and other assets such as clocks, tube-wells and hand-pumps. Value of non-business assets at baseline have been imputed from end-line data, using the average value of an asset for the control group. For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.**

Table F1: Spill-Over Occupational Responses to Treatment (Non-treated, Poor Household Head)

OLS Regressions, Standard Errors Clustered by Village

	Engagement in Wage Employment: Casual	Engagement in Wage Employment: Other	Engagement in Self Employment: Livestock	Engagement in Self Employment: Other
Treatment 1	0.010	-0.006	0.036	0.031
	(0.041)	(0.070)	(0.025)	(0.015)
Treatment 2	-0.002	0.009	0.015	0.021
	(0.028)	(0.021)	(0.034)	(0.027)
Treatment 1 = Treatment 2 [p-value]	[.691]	[.552]	[.634]	[.746]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	7,185	7,172	7,179	7,173

	Hours per Month spent in Wage Employment: Casual (hours)	Hours per Month spent in Wage Employment: Other (hours)	Hours per Month spent in Self-employment: Livestock (hours)	Hours per Month spent in Self-employment: Other (hours)
Treatment 1	-2.481	0.679	5.265	-0.972
	(5.140)	(5.141)	(5.119)	(4.113)
Treatment 2	-2.991	2.918	2.334	0.087
	(5.679)	(5.537)	(5.283)	(5.158)
Treatment 1 = Treatment 2 [p-value]	[.929]	[.753]	[.609]	[.827]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	7,191	7,191	7,179	7,170

Notes: All data are taken from the end-line survey, and only poor households are considered the relevant sample for this comparison. The base group is poor households from control villages for all regressions. Employment is categorized as follows: Casual Labour (Daily wage workers), Other Wage Labour (salaried employees, apprentices, etc.), Livestock Self-employment (animal producers, mixed crop and animal producers, subsistence livestock and mixed crop and livestock farmers, livestock farm labourers and mixed crop and livestock farm labourers),and Other Self-employment. For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table F2: Spill-Over Occupational Responses to Treatment (Non-treated, Poor Spouse)

OLS Regressions, Standard Errors Clustered by Village

	Engagement in Wage Employment: Casual	Engagement in Wage Employment: Other	Engagement in Self Employment: Livestock	Engagement in Self Employment: Other
Treatment 1	-0.051	-0.040	-0.002	0.024
	(0.041)	(0.070)	(0.025)	(0.015)
Treatment 2	-0.054	0.015	0.007	-0.002
	(0.042)	(0.072)	(0.021)	(0.007)
Treatment 1 = Treatment 2 [p-value]	[.933]	[.503]	[.734]	[.113]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	6,493	6,485	6,526	6,483

	Hours per Month spent in Wage Employment: Casual (hours)	Hours per Month spent in Wage Employment: Other (hours)	Hours per Month spent in Self-employment: Livestock (hours)	Hours per Month spent in Self-employment: Other (hours)
Treatment 1	-9.928	-4.670	-4.386	1.157
	(7.966)	(6.987)	(3.589)	(1.298)
Treatment 2	-8.821	2.699	0.438	-0.402
	(6.708)	(7.605)	(3.472)	(0.852)
Treatment 1 = Treatment 2 [p-value]	[.890]	[.391]	[.184]	[.241]
Strata Fixed Effects	Yes	Yes	Yes	Yes
Number of Households	6,496	6,496	6,526	6,481

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1

Table F3: Spill Over Aggregate Employment Responses to Treatment (Non-treated, Poor Household Head and Spouse)

OLS Regressions, Standard Errors Clustered by Village

	Unemployment Rate	Total Hours per Month spent in Employment (hours)
Treatment 1 (Household Head)	-0.004	2.511
	(0.010)	(6.174)
Treatment 2 (Household Head)	-0.010	2.479
	(0.012)	(4.803)
Treatment 1 = Treatment 2 [p-value]	[.653]	[.996]
Strata Fixed Effects	Yes	Yes
Number of Households	7,170	7,193
Treatment 1 (Spouse)	0.004	-17.839
	(0.021)	(11.223)
Treatment 2 (Spouse)	0.026	-6.272
	(0.024)	(9.963)
Treatment 1 = Treatment 2 [p-value]	[.393]	[.384]
Strata Fixed Effects	Yes	Yes
Number of Households	6,483	6,529

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1

Table G1: Spill Over Effects on Income for Household Head

OLS Regressions, Standard Errors Clustered by Village

	Log Monthly Household Earnings from Wage Employment: Casual (Rupees)	Log Monthly Household Earnings from Wage Employment: Other (Rupees)	Log Monthly Household Earnings from Self-Employment: Livestock (Rupees)	Log Monthly Household Earnings from Self-Employment: Other (Rupees)	Log Total Monthly Household Earnings (Rupees)
Treatment 1	0.092	-0.024	-0.097	0.168	0.087
	(0.216)	(0.144)	(0.168)	(0.198)	(0.102)
Treatment 2	-0.039	0.077	0.022	0.157	0.004
	(0.232)	(0.166)	(0.155)	(0.220)	(0.133)
P-value on test of equality: Treatment 1 = Treatment 2	[.596]	[.623]	[.432]	[.960]	[.555]
Strata Fixed Effects	Yes	Yes	Yes	Yes	Yes
Number of Households	7,098	7,151	7,024	7,044	7,029

Notes: For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table G2: Spill Over Effects on Income for Spouse

OLS Regressions, Standard Errors Clustered by Village

	Log Monthly Household Earnings from Wage Employment: Casual (Rupees)	Log Monthly Household Earnings from Wage Employment: Other (Rupees)	Log Monthly Household Earnings from Self-Employment: Livestock (Rupees)	Log Monthly Household Earnings from Self-Employment: Other (Rupees)	Log Total Monthly Household Earnings (Rupees)
Treatment 1	-0.408	-0.017	-0.002	**0.145***	-0.267
	(0.322)	(0.013)	(0.002)	(0.085)	(0.272)
Treatment 2	-0.441	0.021	-0.003	-0.009	-0.304
	(0.325)	(0.018)	(0.003)	(0.045)	(0.283)
P-value on test of equality: Treatment 1 = Treatment 2	[.917]	[.026]	[.581]	[.104]	[.894]
Strata Fixed Effects	Yes	Yes	Yes	Yes	Yes
Number of Households	6,410	5,665	6,496	6,429	6,429

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.

Table H: Spill-Over Effects on Non-Earned Income (Poor HHs Only)

OLS Regressions, Standard Errors Clustered by Village

	Log Value of Monthly Net Transfers (Rupees)	Log Value of Monthly Net Borrowing (Rupees)	Log Value of Monthly Net Transfers, Net Borrowing (Rupees)
Treatment 1	0.172	-0.211	-0.222
	(0.407)	(0.358)	(0.435)
Treatment 2	0.083	-0.006	-0.052
	(0.408)	(0.291)	(0.390)
P-value on test of equality: Treatment 1 = Treatment 2	[.865]	[.626]	[.749]
Strata Fixed Effects	Yes	Yes	Yes
Number of Households	6,366	6,990	6,758

Notes: All data are taken from the end-line survey, and only poor households are considered the relevant sample for this comparison. The base group is poor households from control villages for all regressions. Transfers include both cash and in-kind transfers made or received from any individual. Borrowing and lending also includes both cash and in-kind loans, as well as interest bearing and non-interest bearing loans. Informal sources of borrowing include: a micro-finance institution or NGO, pawnshops, neighbours, friends and family, landlords, and store credit. Net non-earned income is calculated as (transfers given - transfers received) + (borrowing - lending). For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table I1: Spill Over Consumption Responses to Treatment

OLS Regressions, Standard Errors Clustered by Village

	Log Monthly Food Consumption (per adult equivalent, Rupees)	Log Monthly Non-Food Consumption (per adult equivalent, Rupees)
Treatment 1	-0.024	-0.025
	(0.032)	(0.067)
Treatment 2	**-0.058***	0.006
	(0.030)	(0.058)
P-value on tests of equality: Treatment 1 = Treatment 2	[.333]	[.654]
Strata Fixed Effects	Yes	Yes
Number of Households	7,023	7,022

Notes: All data are taken from the end-line survey, and only poor households are considered the relevant sample for this comparison. The base group is poor households from control villages for all regressions. The base period is the baseline in the consumption. Food consumption includes cereal grains, meat, vegetables, dairy, oils, major condiments, food at ceremonies, and meals away from home or bought for visitors. Non-food consumption includes expenditure on fuel, cosmetics, toiletries, entertainment, transportation, electricity, maid salary, clothing, footwear, utensils, furniture, household textiles, legal matters, education, dowry, rituals, health, and others. For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table I2: Spill Over Savings Responses to Treatment

OLS Regressions, Standard Errors Clustered by Village

	Log Value of Monthly Savings (Rupees)
Treatment 1	0.291
	(0.223)
Treatment 2	0.184
	(0.160)
P-value on tests of equality: Treatment 1 = Treatment 2	[.681]
Survey Waves Used	End-line
Strata Fixed Effects	Yes
Number of Households	7159

Notes: For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.

Table I3: Spill Over Investment Responses to Treatment

OLS Regressions, Standard Errors Clustered by Village

	Log Value of Monthly Investment in Business Assets (Rupees)	Log Value of Monthly Investment in Non-Business Assets (Rupees)
Treatment 1	0.113	-0.020
	(0.224)	(0.044)
Treatment 2	0.141	0.021
	(0.138)	(0.045)
P-value on tests of equality: Treatment 1 = Treatment 2	[.902]	[.341]
Survey Waves Used	End-Line	End-Line
Strata Fixed Effects	Yes	Yes
Number of Households	7169	7176

Notes: For regression coefficients, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table J: Village Level Community Organization Indicators

Means, Standard Deviations

	Level of Community Organization	Attendance in Meetings	Amount Saved by Organization	Skills Trainings	Effectiveness of Organizations
Control	3.148	2.148	15933	0.02	3
	(1.586)	(1.064)	(12986)	(.149)	(2.527)
Treatment 1	3.345	2.724	45444	0.28	3.52
	(1.233)	(1.032)	(63279.36)	(.455)	(2.340)
Treatment 2	3.931	2.655	43000	0.24	3.86
	(1.387)	(1.045)	(39643.41)	(.435)	(2.997)
P-value on tests of equality:	[0.609]	[0.045]	[0.218]	[0.014]	[0.431]
Control = Treatment 1	[0.055]	[0.078]	[0.082]	[0.027]	[0.249]
Control = Treatment 2	[0.095]	[0.801]	[0.921]	[0.769]	[0.627]
Treatment 1 = Treatment 2					
Survey Waves Used	End-line	End-line	End-line	End-line	End-line

Notes: All village level data is taken from the village level focus group discussion.

Level of Community Organization: 1 = dormant, 5 = very active

Attendance in Meetings: 1 = None, 4 = More than 80%

Skills Trainings: Fraction of villages which organized trainings session

Effectiveness of Organizations: 1 = Highly Ineffective, 10 = Highly Effective

Table K1: Village Level Community Organization Index

Means, Standard Deviations

	Activity Score	Effectiveness Score	Financial Score	Social Organization Index
Control	.523	.200	.056	-.321
	(.104)	(.203)	(.160)	(.759)
Treatment 1	.569	.309	.172	.099
	(.140)	(.231)	(.274)	(1.072)
Treatment 2	.560	.270	.206	.199
	(.140)	(.268)	(.273)	(1.079)
P-value on tests of equality: **Control = Treatment 1** **Control = Treatment 2** **Treatment 1 = Treatment 2**	[.104] [.221] [.756]	[.052] [.185] [.619]	[.042] [.005] [.503]	[.085] [.020] [.596]
Survey Waves Used	End-line	End-line	End-line	End-line

Notes: All data has been taken from end-line survey. The sample only contains villages for whom social organization members showed up for focus group sessions. The final index has been normalized on z-values.

Table K2: Respondent Level Community Organization Index

Means, Standard Deviations

	Activity Score	Effectiveness Score	Financial Score	Social Organization Index
Treatment 1	.568	.230	.132	-.130
	(.144)	(.188)	(.223)	(.971)
Treatment 2	.565	.197	.197	.058
	(.150)	(.158)	(.252)	(.987)
P-value on tests of equality: Treatment 1 = Treatment 2	[.531]	[.087]	[.567]	[.914]
Survey Waves Used	End-line	End-line	End-line	End-line

Notes: All data has been taken from end-line survey. The sample only contains HH members that have a membership of a social organization, and may include more than one member from a household. The final index has been normalized on z-values.

Table L: Respondent Characteristics Effect on Community Organization Participation

OLS Regressions, Standard Errors Clustered by Village

	Membership	Attendance	Perception of Effectiveness
Primary Education	**.019***	**0.068**	.046
	-0.007	(.032)	(.032)
Self-Employment	-.004	0.007	.007
	(.006)	(.012)	(.010)
Land Ownership	-.006	-0.032	.008
	(.005)	(.024)	(.017)
LOC - Internal	.003	-0.014	-.025
	(.003)	(.024)	(.024)
LOC - Power play	**.012***	-0.002	.002
	(.006)	(.033)	(.022)
LOC - Chance	.002	-0.008	-.003
	(.002)	(.020)	(.011)
LOC - Structural	0	-.002	(.003)
	(.003)	(.017)	(.013)

Notes: All data are taken from the End-line survey. The sample is all the respondents who took the survey and hence counts some households twice. Membership statistic takes into account all of the sample, however attendance and perception of effectiveness only include responses from organization members. For regression coefficients, *** p<0.01, ** p<0.05, * p<0.1.
LOC - Internal**:** High score indicates high self-belief and intention to take control of their own life.
LOC – Power play**:** High score indicates recognition of exploitation by powerful others and intention to challenge it.
LOC - Chance: High score indicates lack of action/planning and acceptance of fate as the ultimate cause of success/failure.
LOC - Structural: High score indicates acknowledgement of structural failures that fail to protect the vulnerable.