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12 Month Impact Report for the Evaluation of Zimbabwe's Harmonised Social Cash Transfer Programme

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Contributors

The evaluation of the Harmonised Social Cash Transfer (HSCT) is being conducted by the American Institutes for Research (AIR) for the government of Zimbabwe, under contract to UNICEF, with funding from the Cooperating Partners—UNICEF, Department for International Development (DfID), the European Union (EU), Swiss Development Cooperation (SDC), Kingdom of the Netherlands, Embassy of Sweden/Sida. The Principal Investigators for the overall evaluation are David Seidenfeld (American Institutes for Research) and Sudhanshu Handa (University of North Carolina at Chapel Hill; UNC). The Zimbabwe-based Principal Investigators are Mr. Sydney G. Mhishi of the Ministry of Public Service, Labour, and Social Welfare (MPSLSW) and Billy Mukamuri of CASS. The overall team leaders of this report are David Seidenfeld (AIR) and Sudhanshu Handa (UNC), but many others made important contributions and are listed below by institutional affiliation and alphabetical order within institution:

AIR: Andi Coombes, Thomas de Hoop, Cassandra Jessee, Leah Prencipe, Hannah Reeves, Rosa Castro Zarzur
FAO: Silvio Daidone
UNC: Sarah Abdoulayi, Gustavo Angeles, Garima Bhalla, Mary Jane Hill, Adria Molotsky, Frank Otchere
UNICEF Office of Research: Tia Palermo, Amber Peterman

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Contact information:

David Seidenfeld	Sudhanshu Handa
dseidenfeld@air.org	**shanda@email.unc.edu**

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David Seidenfeld, Ph.D.
Sudhanshu Handa, Ph.D.

List of Acronyms

AIR	American Institutes for Research
BEAM	Basic Education Assistance Module
CASS	Centre of Applied Social Sciences
CES-D	Center for Epidemiological Studies Depression Scale
CPF	Child Protection Fund
DD	Difference-in-differences
DfID	Department for International Development
DSSO	District Social Services Officer
FAO	Food and Agriculture Organization
FGD	Focus group discussion
HDDS	Household Diet Diversity Score
HFIAS	Household Food Insecurity Access Scale
HH	Household
HSCT	Harmonised Social Cash Transfer
IDI	In-depth interview
MCP	Multiple Category Cash Transfer Programme
MoLSS	Ministry of Labour and Social Services
MPSLSW	Ministry of Public Service, Labour and Social Welfare
NAP	Zimbabwe National Action Plan for Orphans and Vulnerable Children
NFE	Non-farm enterprise
SCT	Social cash transfer
SD	Standard deviation
SSI	Semi-structured interview
UNC	University of North Carolina at Chapel Hill
UNICEF	United Nations Children Fund
WHO	World Health Organisation
ZDHS	Zimbabwe Demographic and Health Survey
ZIMSTATS	Zimbabwe National Statistics Agency

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Executive Summary

In 2013, Zimbabwe's Ministry of Public Service, Labour and Social Welfare (MPSLSW) began implementing the Harmonised Social Cash Transfer (HSCT) programme in 10 new districts. An impact evaluation accompanied the programme to learn its effects on recipients and provide evidence to be used in deciding the future of the programme. UNICEF Zimbabwe contracted the American Institutes for Research (AIR) and its partners the University of North Carolina at Chapel Hill (UNC), and the Centre of Applied Social Sciences (CASS) to conduct the evaluation of the HSCT.

The primary goals of this report are to describe the results of the 12-month follow up data collection, including the programme performance and key outcome variables. These goals are briefly summarised here and expanded in the full report.

The Programme: The HSCT targets households that are both labour constrained and food poor as defined by MPSLSW. Eligible households receive $10 to $25 a month depending on the household size. By February 2014, 55,509 households in 20 out of 65 districts in the country were covered. It is anticipated that the programme will eventually cover the whole country, with plans to help 250,000 poor families by 2015 in all 65 districts of Zimbabwe. HSCT is jointly funded by the Zimbabwe government and donors, and UNICEF provides additional financial and technical support in addition to managing the Child Protection Fund (CPF).

Study Design: The MPSLSW chose to start the Phase 2 rollout of the HSCT in three new districts: Binga, Mwenzi, and Mudzi. Households in these three districts are compared with eligible households in three Phase 4 districts (UMP, Chiredzi, and Hwange) that do not receive the transfers during the period of the study. The comparison districts were selected by the Ministry and research team to match the treatment districts by agro-ecological characteristics (they neighbour each other), culture, and level of development.

The longitudinal impact evaluation includes 3,000 households in 90 wards across six districts, with 60 wards in the treatment sample and 30 wards in the comparison sample. About 86 percent of the households from baseline remain in the 12-month follow-up sample. Fortunately, we do not find evidence of differential attrition at the 12-month follow-up, meaning that we preserve the similarity of the treatment and control groups found in the baseline survey. Baseline data were collected in May 2013 and the 12 month follow-up data were collected in June of 2014 (after 12 months of program implementation).

Operational Performance: The process evaluation of the HSCT programme assesses the fidelity of implementation and points to programme areas operating well and those in need of further development. Overall, MPSLSW is successfully implementing the HSCT programme. Survey data indicate that the vast majority of beneficiaries receive the correct amount of money, on time, and regularly, and do not face significant challenges with the payment process. Further, beneficiaries consider the programme eligibility criteria to be fair. We do identify several key areas of weakness, however, including harmonisation, programme understanding, communications, and complaint management. Perhaps the most critical of these is harmonisation: interviews and survey data suggest that beneficiaries and implementing partners do not fully understand this programme objective and instead believe that HSCT beneficiaries are ineligible to receive other assistance programmes. This misconception runs counter to the very objectives of the HSCT (to harmonise assistance to Zimbabwe's neediest) and has the potential to undermine the programme's positive impact.

Impact Results: We investigated the impact of the HSCT on a wide range of economic and social domains of beneficiary households. Three contextual features of the programme and the study are important to understand when interpreting the results. First, most evaluations of this type measure impacts after two years (e.g., Kenya, Zambia, Ghana, Lesotho) while this study is done after one year in order to learn about the program in the short run. This shortened timeline gives less opportunity for recipients to understand and internalise that there is a change in their permanent income because they have only received 5 or 6 payments; changes in permanent income are typically what induce permanent shifts in consumption and other long-term behaviours. Instead we see behaviour patterns that are more similar to people who receive acute injections of cash into the household which tend to lead to debt reduction and large item purchases for investment. Secondly, 50 percent of recipient households have more than 4 residents—for these households the transfer is a flat $25 and there is a significant difference in the per capita value of the transfer between small and large households ($4.1 versus $7.50). Thus, we would expect to see differences in impacts and spending behaviour between larger and small households. Last, the study collected data soon after the harvest season in May and June, due external constraints about the timing of fieldwork. Households typically have more food after harvest and thus will focus additional resources on other areas of consumption. The baseline and follow-up data collections were conducted soon after harvest, thus we would not expect to see large changes in food consumption between time periods as households are more likely to spend the transfer in other areas during that time period.

The overall results of this report are consistent with the context described above. Impacts on consumption are mostly found for small households, and in fact, across most domains studied here, there are often positive impacts among smaller households and no impacts on the full sample or among larger households. This pattern is true for example for food poverty rates, diet diversity, subjective welfare, school attendance, asset ownership and exposure to shocks. The impacts on consumption are relatively small compared to other cash transfer programmes, likely because the programme is too young to have generated a perceived change in permanent income. This argument is supported by evidence that the programme increases livestock holdings (goats, donkeys) and reduces debt exposure—such lumpy spending occurs when households receive a perceived 'windfall' in their revenues. The decrease in debt, the average increase of eight goats per household and the increase in consumption together 'account' for the average size of the transfer received by households over this period. These are important and meaningful impacts given the timing of the study and data collection.

Overall the results shown here are encouraging given the short evaluation window. The 36-month follow-up, currently planned for 2016, will provide a more comprehensive picture of the impact of the HSCT after it has time to consolidate itself among the target population and work out the operational challenges on the ground.

Consumption: The HSCT Programme increased consumption expenditure by $2.74 per month, which is about 55 percent of the median transfer per person of $5 per month. This overall increase is mostly coming from an increase in food expenditures of $1.56 followed by a somewhat large increase in transportation of $0.45. The bulk of the 1.56 increase in food consumption is devoted to meat and fish—there is a 97 percent increase in consumption in this category which represents 63 percent (0.97 divided by 1.56) of the total increase in food consumption. This share contrasts with the baseline meat/fish consumption share of only 2 percent, highlighting that households spend the transfer in a way that is different from their pre-

existing consumption pattern.

When breaking down impacts by household size, not surprisingly, we find a significant impact of the programme for smaller households but not for larger households who have more than four members. The size of the impact among smaller households is $6.13, more than double the overall average effect of $2.74 reported above. The consumption impact in small households represents 82 percent of the median value of the transfer to these households (6.13 divided by 7.5), but the 95 percent confidence interval around the $6.13 estimate easily includes $7.50, hence we can conclude that among small households, virtually all the transfer is being consumed. Among larger households on the other hand, there are no overall impacts on consumption; instead larger households appear to spend money on livestock and debt reduction (see Resiliency Section below).

Poverty, food security and diet diversity: Consistent with the impacts on consumption, the HSCT does not have a measurable impact on reducing the food poverty headcount in the full sample, but has decreased it by 10 percentage points among smaller households. The HSCT also impacts the number of different food groups purchased by beneficiary households, a common indicator of diet diversity. The proportion of recipient households who are now food secure increased significantly (from 2 to 4 percent), and respondents report higher scores on a Life Satisfaction Scale (by 12 percent). In most cases these impacts are just as large or larger among smaller households indicating important heterogeneous treatment effects by size, due to the larger per capita value of the transfer among smaller households. The lack of an impact overall in food poverty could also relate to the fact that data were collected soon after harvest, when households are more likely to spend additional resources on other areas besides food since they have the largest supply of food for the year in their reserves.

Household resiliency: The results suggest that after only 12 months the HSCT may already be enabling households to strengthen their resiliency. Specifically, the programme leads to some improvements in a number of domains that are typically associated with strengthening resilience, including increased agricultural assets (hoes, sickles) and livestock (goats, donkeys), diversifying income sources (different cropping patterns, more non-farm enterprises), and a reduction in debt (improvement in credit market position). The programme does lead to a reduction in exposure to shocks among smaller households, a somewhat surprising result given that the most important shocks faced by households are covariate shocks such as price increases, crop failure and drought. Nevertheless, given that the programme has only been operating for one year in the evaluation sample, there are some clear positive indications that the HSCT may be helping households become more resilient. Also, the reduction in debt and increased assets, especially among large households, helps explain where the transfer is going when it is not used for consumption items.

Health and nutrition: Overall we find few positive impacts of the HSCT in the domain of health and nutrition and material well-being of children. However as in previous domains, we see an important interaction between programme participation and household size. For example, we find strong positive impacts on material well-being of children among smaller households, and some negative impacts on young child morbidity and care-seeking among larger households. We also find some positive impacts on care received by the chronically ill in labour-constrained households, supporting the notion that in Zimbabwe household demographic composition is an important moderator of programme impacts.

Schooling and child labour: The analysis of schooling outcomes reveals some interesting dynamics surrounding the HSCT programme. The operational audit confirms that the programme may not be fully harmonised at the local level and some beneficiaries might be kept out of the Basic Education Assistance Module (BEAM), a program that provides resources for children to go to school, evidence that is corroborated by the results from the evaluation study showing a 6 percentage point decline in receipt of BEAM among beneficiaries as compared to the comparison group. We are unable to determine if the increase in BEAM among the comparison versus the treatment group results from intentionally allocating BEAM away from HSCT beneficiaries or if BEAM happened to be targeted to the comparison districts during the course of the study, but is unrelated to the existence of the HSCT. This relative increase in BEAM among the comparison group of course offsets any positive impact the HSCT has on school enrolment, so that we in fact find very small effects of the programme on enrolment, and concentrated at primary rather than secondary levels, when we would expect the opposite given the larger out of pocket costs associated with secondary school. We also fail to see an impact on attendance, which can also be traced to receipt of BEAM in the comparison group, as attendance is a requirement of the BEAM program. On the plus side, the overall attendance levels among beneficiary children is the same as among the comparison group, indicating the lack of a positive treatment effect is due to catch-up among comparison children (rather than declines among the treatment group), and may be due to increased receipt of BEAM in the comparison group. A further positive result is that child labour due to the programme did not go up, and actually declined in some activities (e.g., farming).

Impacts on adolescent development: Overall, after only 12 months of operation, results suggest that the HSCT supports the safe transition to adulthood through a number of different domains, including delaying marriage and sexual debut, as well as decreasing the likelihood of early pregnancy among female youth in large households. In addition, the programme positively impacted safe sex practices among sexually active youth (i.e., condom use at first sex) as well as decreased the probability of lifetime reports of forced sex. However, we are somewhat limited in our ability to draw many conclusions about specific aspects of first sex experiences as well as recent sexual behaviours due to small sample sizes. In addition, some of the indicators examined are not balanced at baseline, thus providing a less robust framework for analysing impacts. Despite these limitations, results suggest that the HSCT, a household-level unconditional poverty-targeted cash transfer impacts adolescent HIV risk and wellbeing outcomes, similar to evidence from Kenya and South Africa.

One interesting aspect about the impact results reported here are the heterogeneous impacts by sex of the youth and the household heads. In nearly all cases where we find significant positive impacts, these are driven by samples of female youth and female-headed households. It could be that female adolescents are more marginalized in comparison to males in the same households, and thus in some cases benefit comparatively more when the household experiences an increase in resources. Moreover, female-headed households could be more likely to invest in youth of both sexes when given additional cash, and this could result in greater impacts among girls, who may be more vulnerable to begin with – however these are hypotheses that require further investigation. This pattern is similar to findings from the Kenya cash transfer program, which found that the programme reduced the odds of sexual debut among females but not males.

However, in contrast to the positive impacts discussed above, we found no impacts on mental health or alcohol use. In addition, unexpectedly, the programme positively impacted 12-month

reports of physical violence, and negatively impacted HIV testing. However, the physical violence result is driven by the least severe form of violence reported on (slapped/pushed), and did not affect reports of the other forms of physical violence. In addition, there is an increase in 'authority figures' as the main perpetrator of violence, hence the reported violence is not directly affected by household dynamics around the receipt of the transfer—but rather by changes in other behaviours such as in schooling. There is also the possibility that reported violence has increased due to increased awareness in treatment areas from child protection interventions linked to the HSCT. These dynamics will be further explored in the 36-month follow up evaluation.

1. Introduction

This report provides the 12-month impact results of the Harmonised Social Cash Transfer (HSCT) evaluation. In 2013, Zimbabwe's Ministry of Public Service, Labour and Social Welfare (MPSLSW, formerly the Ministry of Labour and Social Services (MoLSS)) began implementing the HSCT programme in 10 new districts. An impact evaluation accompanied the programme to learn its effects on recipients and provide evidence for making decisions about the future of the programme. UNICEF Zimbabwe contracted the American Institutes for Research (AIR) and its partners, the University of North Carolina at Chapel Hill (UNC), and the Centre of Applied Social Sciences (CASS), to conduct the evaluation of the HSCT. The evaluation team designed and implemented a 12-month impact evaluation of the programme and conducted the necessary data collection, analysis, and reporting.[1] This 12-month impact report includes 12 sections: Introduction, Background on program, Conceptual framework, Study design, Attrition, HSCT process evaluation, Impacts on consumption expenditures, Food security and subjective well-being, Health and material well-being of children, Education, Adolescents, Household resilience, and Conclusion.

[1] Ruzivo Trust was contracted by AIR to assist with the baseline data collection.

2. Background on programme

The HSCT programme, which is positioned to become Zimbabwe's primary social protection programme, provides cash to the most vulnerable households across the country. The programme targets labour-constrained households that are also food poor. Eligible households receive unconditional cash payments every other month that range from US$10 to $25 per month and are based on household size. At the time of the follow-up data collection, peak enrolment was 55,509 households, though the number has since progressively declined for various reasons such as deaths or relocations. It is anticipated that the programme will eventually cover the whole country, with plans to help 250,000 poor families by 2015 in all 65 districts of Zimbabwe.

HSCT is jointly funded by the Zimbabwe government and donors, and UNICEF provides additional financial and technical support in addition to managing the Child Protection Fund (CPF). The CPF is the funding mechanism for the HSCT embedded in a single sector policy and budget framework, the Zimbabwe National Action Plan for Orphans and Vulnerable Children (NAP).

2.1 Objectives

Cash transfers empower the beneficiary households to increase their consumption to a level which exceeds the food poverty line, reduce child labour, increase school enrolment and attendance, and access basic social services. The mechanism in the HSCT programme for improving the individual's health and human capital development, thus providing increased protection from risks and shocks, is a monthly stipend to households delivered bimonthly. Therefore, an evaluation of Zimbabwe's HSCT programme should assess short-term impacts to recipients' food and nutritional intake, use of health and education services and also assess long-term impacts to recipients' health, wealth, and educational attainment (if the recipient is of school age). In addition to an impact evaluation, we also conducted an implementation evaluation, a summary of which is included in this report, to assess programme fidelity and generalizability for scaling.

2.2 Locations

The MPSLSW chose to start the Phase 2 rollout of the HSCT in three new districts: Binga, Mwenzi, and Mudzi.[2] Households in these three districts are compared with eligible households in three Phase 4 districts (UMP, Chiredzi, and Hwange) that did not receive the transfers during the period of the study. The comparison districts were selected by the Ministry and research team to match the treatment districts by agro-ecological characteristics (they neighbour each other), culture, and level of development. An explanation of the study design follows in a later section.

2.3 Transfer amount

After comparing the sample, we assessed the transfer size as a percentage of per capita expenditure. We find that the transfer size represents 20 percent of household consumption, a percentage that places the HSCT among the more successful cash transfer programmes in Africa. The programme provides between $10 and $25 per month, which translates to $5 a month per capita for a family of five, the median size household in the sample. This study shows that median per capita expenditure in recipient households before the transfer was $26 per month. Thus, the $5 monthly per capita transfer is a 20 percent increase in the household's monthly expenditure.

[2] The MPSLSW has taken a phased approach to the rollout of the HSCT. Phase 1 represents the first 10 districts to receive the HSCT programme, which started prior to the commissioning of this evaluation.

3. Conceptual Framework

The HSCT provides an unconditional cash transfer to households that are labour constrained and food poor. Households at very low levels of consumption will spend almost all their income. We therefore expect that among the beneficiary population, virtually all the cash transfer will be spent at the initial stages of the programme and that the composition of spending will focus on basic needs such as food, clothing, and shelter. Once immediate basic needs are met, and possibly after a period of time, the influx of new cash may then trigger further responses within the household economy—for example, by providing money for investment and other productive activity, the use of services, and the ability to free up older children to attend school.

Figure 1 brings together these ideas into a conceptual framework that shows how the HSCT can affect household activity, the causal pathways involved, and the potential moderating and mediating factors (moderators and mediators). The diagram is read from left to right. We expect a direct effect of the cash transfer on household consumption (food poverty, diet diversity), on the use of services, and possibly even on productive activity after some time. Sociological and economic theories of human behaviour suggest that the impact of the cash may work through several mechanisms (mediators), including bargaining power within the household, the degree to which the household is forward looking, and the expectations the household has about the quality of life in the future (which could determine investment and other choices with longer-term implications). Similarly, the impact of the cash transfer may be smaller or larger depending on local conditions in the community. These moderators include access to markets and other services, prices, and shocks. Moderating effects are shown with lines that intersect the direct causal pathways between the cash transfer and outcomes to indicate that they can influence the strength of the direct effect.

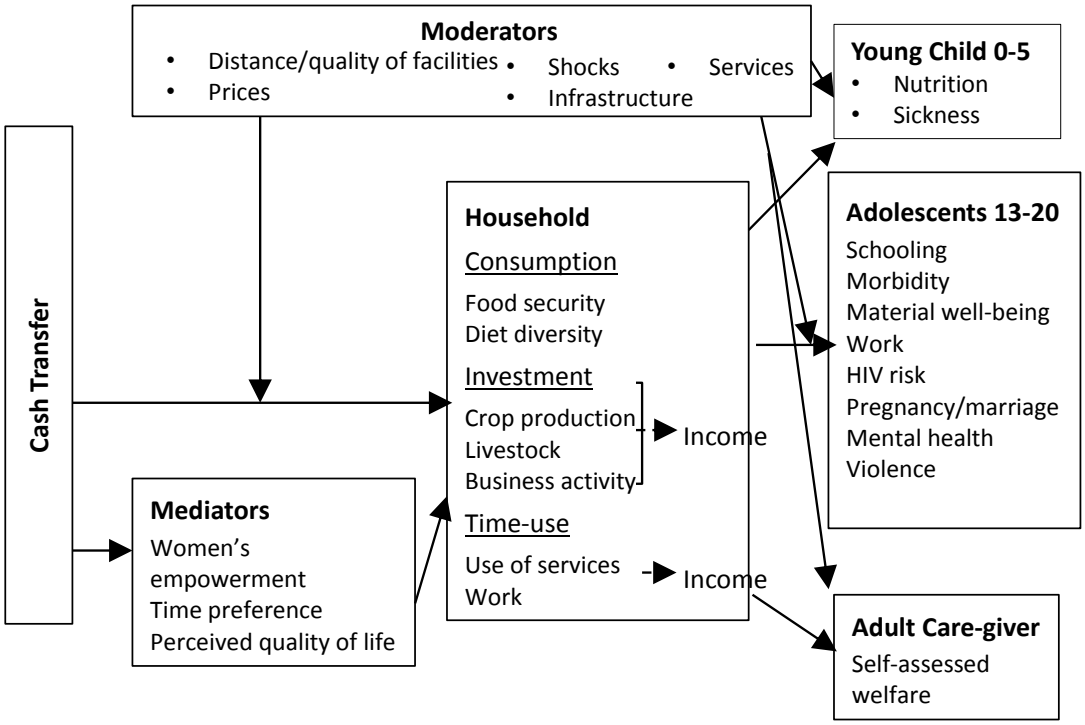
The next step in the causal chain is the effect on young children and adolescents. Here we focus on young children under age 5 and adolescents ages 13–20 because these are important demographic groups for public policy. The key point to recognise here is that any potential impact of the programme on these groups must work through the household through spending or time allocation decisions (including use of services). The link between the household and children can also be moderated by environmental factors, such as distance to schools or health facilities, as indicated in the diagram, and household-level characteristics themselves, such as the mother's literacy. Indeed, from a theoretical perspective, some factors cited as mediators may actually be moderators. We can test for moderation versus mediation through established statistical techniques,[3] and this information will be important to help us understand the actual impact of the programme on behaviour.[4]

In Figure 1, we list some of the key indicators along the causal chain that we will analyse in the evaluation of the HSCT. These are consistent with the long timeframe of the project and are in most cases measured using established items in existing national sample surveys such as the Zimbabwe Demographic and Health Survey (ZDHS).

[3] Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182.

[4] A mediator is a factor that can be influenced by the programme and so lies directly within the causal chain. A moderator, in contrast, is not influenced by the programme. Thus, service availability is a moderator, whereas women's bargaining power may be either a moderator or a mediator depending on whether it is itself changed by the programme. Maternal literacy is a moderator and not a programme outcome, unless the programme inspires caregivers to learn to read and write.

Figure 1. Conceptual Framework for Impact Evaluation of Zimbabwe's HSCT



The overarching research questions that are relevant to the Impact Report follow:

1. Do social cash transfers (SCTs) reduce food poverty considering both the amount of food and diet diversity?
2. Do SCTs improve the human development of children and adolescents, including improved access to health and education services, improved nutrition, reduced abuse and exploitation, and reduced HIV risk?
3. Do SCTs improve the productive capacity of the household?

4. Study Design

The impact evaluation of Zimbabwe's HSCT is a two-year,[5] mixed methods, longitudinal, *non-experimental* design study.[6] The study compares cash transfer recipient households from Phase 2 districts (specifically Binga, Mwenzi, and Mudzi) with eligible households in Phase 4 districts (UMP, Chiredzi, and Hwange) that did not begin receiving the transfers during the period of the study. The comparison districts were selected by the Ministry to match the treatment districts by agro-ecological characteristics (they neighbour each other), culture, and level of development.

A major factor in the choice of a non-experimental design rather than a randomized controlled trial is the stated policy of the Ministry that all eligible households will be enrolled in the programme once a district enters the programme. In other words, the programme will immediately be scaled up within each district. The Ministry determined that it would be ethically and politically unfeasible to provide the programme to some households while delaying others within the same district to serve as a control group because it would conflict with this stated policy. Therefore, a randomized controlled trial design is not possible because all eligible households within a district must receive the programme at the same time. The Ministry and UNICEF are aware that the current design leaves open the possibility that observed differences between the treatment and comparison households could result from an effect other than the cash transfers owing to, for example, circumstances that occur in an early-entry district and not in a delayed-entry district (e.g., flood, crop disease). However, eligibility is not demand driven, there is no element of self-selection in the recruitment process, and take-up is thought to be 100 percent. Thus, any differences between the two groups are likely to be observable to the researcher and can be accounted for in the statistical analysis.

4.1 Analysis Approach

This study is a longitudinal evaluation with repeated measures at the individual and household levels. We estimate programme impacts on individuals and households using a differences-in-differences (DD) statistical model that compares change in outcomes between baseline and follow-up and between treatment and comparison groups (see Annex C for details on this method).[7] The DD estimator is the most commonly used estimation technique for impacts of cash transfer models and has been used, for example, in Mexico's Progresa program,[8] Kenya's Cash Transfer for Orphans and Vulnerable Children,[9] and in the evaluation of Zambia's Child Grant Program. We use cluster-robust standard errors to account for the lack of independence across observations due to clustering of households within Wards.[10] We also use inverse probability weights to account for the 14 percent attrition in the follow-up sample.[11] We investigate differential impacts by household size for each outcome. We present impacts by household size only when they are different.

[5] AIR has a contract with UNICEF to conduct the baseline and 12-month follow-up rounds of data collection. UNC, with money from 3IE, will conduct the 36-month follow-up round of data collection.
[6] Non-experimental designs to not manipulate the selection process to determine who receives the programme, while randomized controlled trials use a lottery process to select who will receive the programme and who will be controlled to not receive it.
[7] Local economy effects use a different analysis approach, which is explained in the annex.
[8] http://wbro.oxfordjournals.org/cgi/reprint/20/1/29
[9] Kenya CT-OVC Evaluation Team. (2012). The impact of the Kenya CT-OVC Programme on human capital. *Journal of Development Effectiveness*, *4*(1), 38–49.
[10] http://www2.sas.com/proceedings/sugi23/Posters/p205.pdf
[11] Woolridge, J. W. (2010). *Econometric analysis of cross section and panel data*. Cambridge, MA: MIT Press.

4.2 Sampling design

The longitudinal impact evaluation includes 3,000 households in 90 wards across six districts, with 60 wards in the treatment sample and 30 wards in the comparison sample. This unbalanced design results from limited resources and time available to conduct targeting in the comparison districts. All wards receiving the HSCT in 2013 must be targeted for the programme, regardless of the study, but the comparison wards are being targeted only for the purpose of the study. Thus, the comparison wards require additional resources and time not necessitated by current programme implementation. This study will calculate the average impact estimate by using a DD model that accounts for clustering of households in wards and wards in districts. Owing to the limited number of wards in each district, this study is unable to estimate impacts at the district level with reasonable precision (95 percent confidence) and can only estimate the impacts of the programme as a whole.

Because the selected districts have more beneficiary households and wards than are needed for the sample, a subset of households and wards was identified and selected for the study. Table 4.1 lists the number of wards in each district.

Table 4.1. Study Districts by Treatment Status

District	Status	Number of Wards in Study	Wards Excluded From Study*
Mudzi	Treatment	18	0
Mwenezi	Treatment	18	0
Binga	Treatment	24	1
Hwange	Comparison	12	7
UMP	Comparison	9	6
Chiredzi	Comparison	9	15

* 60 treatment wards and 30 comparison wards

4.3 Selection of programme and comparison groups

The steps for selecting the sample follow:

1. Three treatment districts from Phase 2 and three matching comparison districts from Phase 4 were selected by the MPSLSW. The comparison districts were matched by agro-ecological conditions, level of development, and culture.
2. The MPSLSW, with oversight from UNICEF and the evaluation team, randomly selected 60 wards from the three treatment districts.
3. The evaluation team then worked with the MPSLSW to select 30 wards from the comparison districts that are similar to the selected wards from the treatment districts. Wards were selected by similarity of geography, climate, overall development level, availability of services, access to other development programmes, and culture, with an emphasis on making sure that the agro-ecological environment of the treatment wards is similar to that of the comparison wards. The baseline report provides a detailed description of the matching process and the results.
4. After selecting the 90 study wards, the MPSLSW conducted targeting in these 90 wards to identify eligible households. Targeting was conducted in exactly the same way in both the treatment and the comparison wards to create equivalent and comparable groups. In this sense, households in the comparison group are precisely those that are eligible for the

programme and that will enter the programme at a future date—they are thus a genuine 'delayed entry' comparison group.

5. Last, the evaluation team randomly selected 34 households that had been identified through the targeting process as eligible for the programme from each of the 90 wards. These randomly selected households make up the sample for the impact evaluation. If a ward did not have 34 eligible households, additional households were identified from larger study wards in the same district.

4.4 Data Collection Instruments

The evaluation team piloted all instruments in the field at baseline and at the 12 month follow up before implementing them for the study, to ensure that they are appropriate and valid. The team revised the instruments based on feedback from the pilot session.

Quantitative

Indicators for the impact evaluation were selected to address the research questions and also align with the log frame.

The data reported in the impact evaluation came from four quantitative instruments:

- **Household survey** for the head of every household in the treatment and comparison groups
- **Adolescent survey** for up to three young people ages 13–20 in the study sample, covering sexual activity, mental health, and child protection
- **Anthropometric measures** for all children ages six and under in the study sample
- **Community survey** (one survey per ward) administered to a group comprising community leaders, shop owners, and local government extension workers

Qualitative

The impact evaluation is a mixed methods design that includes qualitative data in addition to the quantitative data. The qualitative research is used to strengthen the quantitative focused mixed method evaluation, providing a basis for in-depth analysis and insights into the impact of the HSCT. The qualitative data will serve as a means of triangulating the evidence collected and extending the comprehensiveness of and generating new insights into the evaluation findings.

The qualitative data in the impact evaluation came from three qualitative instruments

- **In-depth interviews (IDIs)** with 12 youths and 12 caregivers (future beneficiaries) at baseline, and nine youths and eight caregivers roughly one year into the programme
- **Focus group discussions (FGDs)** with community members at 12 months into HSCT implementation in treatment communities
- **Semi-structured interviews (SSIs)** with key informants in treatment communities at 12 months into programme implementation

The team conducted qualitative field work to understand the impacts of the HSCT on household economy, local economy, and community social networks, as well as impressions of the operational implementation of the first phase of the transfer. The rich contextual information we obtain through the qualitative interviews and focus group with young people and their caretakers, community leaders and service providers will help us understand how the programme impacts individuals and communities and thus contribute to the transferability of study findings to other settings. See Annex A for more details on the qualitative instruments.

4.5 Timing and Process of Data Collection

To ensure high-quality and valid data, we paid special attention to the process and timing of data collection, making sure that it was culturally appropriate, sensitive to Zimbabwe's economic cycle, and consistently implemented. AIR contracted with CASS, a Zimbabwean research firm with years of experience conducting household surveys throughout Zimbabwe, to help implement the HSCT 12 month survey and enter the data. A team of Zimbabwe enumerators experienced in household and community surveys and fluent in the local language where they worked were trained on the HSCT 12 month instrument and then tested in the field before moving into their assigned communities for data collection.

One enumerator collected data in each household, interviewing the identified recipient and documenting his/her answers. This oral interview process was necessary because many of the recipients are illiterate. In addition to interviewing the head of household, the enumerator collected anthropometric measures (height and weight) for every child age 6 or under, using high-quality height boards and scales endorsed by UNICEF. Enumerators were trained in proper anthropometric measuring techniques and then supervised in the field by specialists. The team also surveyed adolescents in each household separately. Some questions on the survey are sensitive, so male enumerators interviewed male adolescents and female enumerators interviewed female adolescents. In addition to the household and adolescent survey, two senior enumerators administered a community questionnaire in every Ward to a group of community leaders, including teachers, village headmen, and local business owners.

The timing of this round of data collection fell in June 2014, approximately 13 months after the baseline study in May 2013 (12 months of program implementation), meaning that households are being compared in the same season as baseline. May and June are the months immediately following the annual harvest. This timing means that data were collected when households have the most amount of food in their reserves for the year and will influence how they spend additional resources. Thus, this study is most likely to investigate the effects of the cash transfer on consumption when households are most food secure for the year. CASS entered the data as they came in from the field. Data were verified using double entry on separate computers, flagging inconsistent responses between the two entries, and referring to the original questionnaire to see the actual response.

The MPSLSW and UNICEF chose to conduct the first round follow up after 12 months of program implementation in order to learn lessons about the program so that they can change and improve it for in the short run, without having to wait for later rounds of the evaluation. These changes are particularly important for the program as it scales up to new districts.

5. Attrition

Attrition within a sample occurs when households from the baseline sample are missing in the follow-up sample. Mobility, the dissolution of households, death, and divorce can cause attrition and make it difficult to locate a household for a second data collection. Attrition causes problems in conducting an evaluation because it not only decreases the sample size (leading to less precise estimates of programme impact) but it could also introduce bias into the sample, if the attrition is selective, which could lead to incorrect programme impact estimates, or it could change the characteristics of the sample and affect its representativeness.

There are two types of attrition: differential and overall. Differential attrition occurs when the treatment and control samples differ in the types of individuals who leave the sample. Differential attrition can create biased samples by eliminating the balance between the treatment and control groups achieved at baseline. Overall attrition is the total share of observations missing at follow-up from the original baseline sample. Overall attrition can change the characteristics of the remaining sample and render it not representative of the population from which it was obtained. Overall attrition can affect the ability of the study's findings to be generalized to the population of interest. Ideally, both types of attrition should be null or small.

We investigate attrition at the 12-month follow-up by testing for similarities at baseline between (1) treatment and control groups for all households included in both the baseline and follow-up surveys (differential attrition) and, (2) all remaining households at the 12-month follow-up and the households who were missing in the follow-up survey (overall attrition).

Fortunately, we do not find evidence of differential attrition at the 12-month follow-up, meaning that we preserve the similarity of the treatment and control groups found in the baseline survey. However, there is some evidence of overall attrition.

5.1 Differential Attrition

We find only few differences in baseline characteristics between the treatment and control households that remain in the study at the 12-month follow-up, meaning that there is no evidence of differential attrition being a problem in this study. Table 5.1 shows the household response rates at the 12-month follow-up by group and by treatment-comparison pair of districts. The response rates are balanced between the overall treatment and comparison groups. They are also balanced between Mwenezi (treatment) and Chiredzi (comparison) districts. However, they are not balanced between the treatment and comparison districts in the first two pairs of districts. To further explore differential attrition we test 135 individual and household outcome measures and control variables for statistical differences at baseline between the treatment and comparison groups that remain in the 12-month follow-up, and found that only 12 of the 135 indicators (8.8%) are statistically different at 5% significance. However, 4 of those 12 indicators have relatively small differences between the treatment and control measures.[12] For instance, for "% of individuals that are female," the measure is 54% in the comparison group and 56% in the treatment group; for "Enrolment in primary school," the measure is 92% in the comparison group and 94% in the treatment group. These differences at baseline are meaningfully small and the reason they show up as statistically significant is because of the large sample sizes which can render as statistically significant differences that are meaningless in research terms.

[12] The difference between the treatment and comparison measures is less than 0.25 standard deviations for each indicator.

Nevertheless, our impact estimation strategy is based on a DD model which controls for baseline differences between treatment and control groups. It should be noted that even in randomized evaluations where randomization was successful at balancing the groups, we would expect to find differences in 5 percent of the indicators. These results demonstrate that, on average, households that remained in the 12-month follow-up sample looked similar at baseline regardless of whether they were from the treatment or comparison group. The similarity of the characteristics of people remaining in the follow-up sample between treatment statuses allays the concern that attrition introduced selection bias. See Annex C for the results of the tests' mean differences on the 135 indicators.

Table 5.1: Household Response Rates by group and district at 12-Month Follow-Up (*N* = 3,063)

		Response Rate	N
Treatment group		86.2	2,029
Comparison group		85.3	1,034
Total sample		85.9	3,063
District	Status		
Mudzi	Treatment	90.7	612
UMP	Comparison	84.2	311
Binga	Treatment	86.2	816
Hwange	Comparison	90.2	417
Mwenezi	Treatment	81.5	601
Chiredzi	Comparison	79.7	306

5.2 Overall Attrition

About 86 percent of the households from baseline remain in the 12-month follow-up sample. Table 5.2 indicates that a higher proportion of missing households come from the Mwenezi and Chiredzi pair of districts. We further explore overall attrition by testing 135 outcome and background variables for differences at baseline between the group of households that remained to the follow-up and the households who were missing in the follow-up. We found statistical differences in 24 of the 135 variables (17.7 percent) which indicate that overall attrition might be a problem in the study. In order to deal with this problem, we used an Inverse Probability Weighting (IPW) procedure to correct the sampling weights for general attrition and we also added control variables in the DD models used to estimate programme impact. To implement the IPW, we estimated a model of continuation in the follow-up survey using household background and outcome measures as explanatory variables, and corrected the baseline sampling weights using the predicted probabilities of remaining in the follow-up obtained from that model. In addition, we included several control variables in the DD regression models. The control variables included were region dummies (defined by the pairs of districts), household size and demographic composition, main respondent's age, education and marital status, and a set of ward-level prices. These methods are used to increase the generalizeability of the study, also known as the external validity. They do not affect the ability of the study to attribute differences to the intervention (internal validity), they only address the ability of the study to make generalizations to populations outside of the study. These methods attempt to broaden the

population that the study can generalize to. See Annex C for the results of the mean comparisons between groups for overall attrition.

Table 5.2: Overall attrition by district, at 12-Month Follow-Up (*N* = 3,063)

	Household at baseline		Missing HH at follow-up	
District	N	%	N	%
Mudzi	612	20.0	57	13.2
UMP	311	10.2	49	11.3
Binga	816	26.6	113	26.1
Hwange	417	13.6	41	9.5
Mwenezi	601	19.6	111	25.6
Chiredzi	306	10.0	62	14.3
	3,063	100.0	433	100.0

6. HSCT process evaluation

In 2013, Zimbabwe's MPSLSW began implementing the HSCT programme in 10 new districts. A process evaluation accompanied the programme to understand the fidelity of programme implementation. UNICEF Zimbabwe contracted AIR and its partners UNC, CASS, and the University of Zimbabwe's Geography department to conduct the evaluation of the HSCT. The Food and Agriculture Organization's From Protection to Production project also provided financial and technical support to the evaluation.

The MPSLSW had been implementing the HSCT in the study districts (Binga, Hwange, and Mudzi) for approximately one year when AIR and its partners conducted this process evaluation. We use this opportunity to investigate the fidelity of programme implementation from the perspective of beneficiaries, local stakeholders, and implementing partners. We explain the methodology and data sources in detail in subsequent sections, but essentially the process evaluation relies on both qualitative data obtained through interviews and focus groups at 12 month follow-up, and quantitative data gathered through the 12 month follow-up surveys, in addition to relevant available documents.

Overall, MPSLSW is successfully implementing the HSCT programme. Survey data indicate that the vast majority of beneficiaries receive the correct amount of money, on time, and regularly, and do not face significant challenges with the payment process. Further, beneficiaries consider the programme eligibility criteria to be fair. There are weaknesses, however, in terms of the trainings provided to HSCT staff, programme-related communications between MPSLSW, HSCT staff, beneficiaries, and other community members, and general understanding of the programme. Particularly problematic is the lack of understanding of the harmonisation component (i.e., that HSCT beneficiaries are intended to benefit from multiple assistance programmes and are not ineligible for other programmes as a result of receiving the HSCT). Below we summarize the key takeaways for the major components of the report.

Capacity: The programme conducts trainings at all levels, though HSCT staff lack comprehensive understanding of the different roles and responsibilities of positions at the district, provincial, and headquarters levels. Furthermore, the technological capacity of some HSCT staff is limited and further trainings are needed to ensure familiarity with computers and other devices required to implement the HSCT.

Communication and programme understanding: The HSCT programme's communication and sensitization strategy awaits finalisation and full-scale implementation, and therefore it is not entirely surprising that significant gaps exist in programme understanding. Eligibility criteria, in particular, are not well understood.

Monitoring: While programme monitoring is occurring regularly (primarily in the form of field visits by HSCT staff and partners), the information collected is not used systematically to address issues or improve programme implementation.

Grievances: Survey data reveal that beneficiaries are not fully aware of the process for filing complaints, and interviews confirm that the grievance mechanism is not fully operational yet. Furthermore, more than one quarter of beneficiaries who brought forth a complaint either did not receive a response or were dissatisfied with the response they received.

Harmonisation: A number of interviewees expressed a lack of understanding of the HSCT's intended programme complementation. There was a fairly common belief that receiving the

HSCT programme makes one ineligible to receive other assistance programmes, most notably the BEAM scholarship programme. This indicates a large gap in understanding the intent of the programme to harmonise with other ongoing activities in the communities which has the potential to undermine the positive impact of the HSCT.

7. Impacts on consumption expenditures

We investigated the impact of the HSCT on a wide range of economic and social domains of beneficiary households. Three contextual features of the programme and the study are important to understand when interpreting the results. First, most evaluations of this type measure impacts after two years (e.g., Kenya, Zambia, Ghana, Lesotho) while this study is done after one year. This shortened timeline gives less opportunity for recipients to understand and internalise that there is a change in their permanent income because they have only received 5 or 6 payments; changes in permanent income are typically what induce permanent shifts in consumption and other long-term behaviours. Instead we see behaviour in spending patterns that are more similar to people who receive acute injections of cash into the household which tend to lead to debt reduction and purchases of large item for investment. Secondly, 50 percent of recipient households have more than 4 residents—for these households the transfer is a flat $25 and there is a significant difference in the per capita value of the transfer between small and large households ($4.1 versus $7.50). Thus, we would expect to see differences in impacts and spending behaviour between larger and small households. Last, the data collection for the evaluation occurred soon after harvest, due to limitations on when the research team were permitted to enter the field at baseline and the need to collect follow-up data in the same period. Households have the most food in their stores during this period as compared to any other time of the year. Thus, we would expect them to consume additional resources, such as the cash transfer, on items that they do not grow themselves (ie. not on maize, beans, tomatoes, etc.).

The conceptual framework suggests that the primary direct impact of the HSCT will be on the consumption spending behaviour of recipient households, so we expect to see the most important impacts of the programme on levels of spending, with relatively higher impacts on items that are more sensitive to income. The HSCT Programme increased consumption expenditure by $2.74 per month, which is about 55 percent of the median transfer per person of $5 per month. This overall increase is mostly coming from an increase in food expenditures of $1.56 followed by a somewhat large increase in transport and communication of $0.46. The share of the increase devoted to food is 57 percent (1.56 divided by 2.74)—a ratio slightly lower than the baseline food share of 63 percent, indicating that households are spending the transfer differently from their pre-programme consumption pattern. This change in spending patterns is especially noticeable for transport and communication, which takes up 16 percent of the increase in consumption from the transfer (0.46 divided by 2.74) yet only represented 2 percent of the budget share at baseline. Almost all of this impact comes from transportation ($0.45). This shift in the pattern of consumption out of the transfer suggests that households treat this transfer differently from regular income—we will return to this issue later in the section.

Tables in this report follow a format that provides information about impacts at 12 months and baseline statistics. Our explanation of the first table, Table 7.1, can be applied to all similar tables that follow. Table 7.1 reports results for total consumption as well as seven categories of consumption. Column (1) in this table shows the impact of the HSCT after 12 months. Column (2) shows the baseline mean value of the indicator mentioned at the beginning of each row, while columns (3) and (4) show the mean values for the treatment and control groups at 12 months. These are important in assessing the absolute levels of consumption for the two groups, because the impact estimates in column (1) only indicate differences in levels. We restrict our attention to statistical significance at 5 percent confidence because of the large sample size in this study. Table 7.1 shows the impact estimates for total per capita expenditure (row 1) and then impacts

on per capita spending on other consumption items.

Table 7.1: Impacts of HSCT on Monthly Consumption Expenditures per person

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Total	2.74**	32.11	33.41	32.80
	(2.24)			
Food	1.56	20.41	19.33	19.09
	(1.35)			
Household Items	0.26	7.77	9.20	9.43
	(0.64)			
Education	0.08	1.18	1.29	1.05
	(0.68)			
Health & Hygiene	0.37*	1.24	1.73	1.78
	(1.87)			
Transport & Communication	0.46***	0.59	0.87	0.59
	(2.86)			
Clothing Items	-0.01	0.34	0.39	0.44
	(-0.15)			
Alcohol & tobacco	-0.01	0.51	0.52	0.36
	(-0.08)			
N	5,245			

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

We further breakdown the impact of the HSCT on specific food items (Table 7.2). The bulk of the 1.56 increase in food consumption is devoted to meat and fish—there is a 97 cent increase in consumption in this category which represents 63 percent (0.97 divided by 1.56) of the total increase in food consumption. This contrasts with the baseline meat/fish consumption share of only 2 percent, again highlighting that households spend the transfer in a way that is different from their pre-existing consumption pattern. Note that only two specific food group increases are actually statistically significant (fats and sugars)—overall absolute levels of impacts are quite low, and when spread across many items leads to non-significant differences in a statistical sense. We do however find statistically significant improvements in diet diversity which we present in the next chapter. These results could be partially attributable to the timing of data collection immediately after harvest when households have their largest supply of staple foods for the year, making them more likely to use additional resources like the transfer on items they do not grow like meat, fish, fats, and sugars.

Table 7.2: Impacts of HSCT on Food Expenditures: With Panel Weights

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Cereals	-0.06	7.75	6.72	6.14
	(-0.14)			
Roots and tubers	0.13	0.20	0.44	0.44
	(1.55)			
Pulses and legumes	0.34	1.58	1.62	1.32
	(1.58)			
Fruits and vegetables	-0.42	5.20	4.53	5.08

	(-0.99)			
Meats (incl fish)	0.97	1.78	2.03	2.27
	(1.57)			
Dairy and egg items	0.09	0.86	0.71	0.80
	(0.41)			
Fats	0.26*	1.22	1.46	1.35
	(1.89)			
Sugar and sweet items	0.11*	0.69	0.84	0.71
	(1.98)			
Nonalcoholic beverage items	-0.14	0.59	0.53	0.58
	(-0.75)			
N	5,245			

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

7.1 Impacts by Household Size

Under the HSCT, the size of the transfer varies by household (HH) size as follows:

1. one person HH receives USD10 per month,
2. two persons HH receives USD15 per month,
3. three person HH receives USD20 per month, and
4. four or more person HH receives USD25 per month

This design feature means that for households with over four members, the transfer-size remains constant and on a per capita basis, the value of the transfer-size starts declining with household size. The median household size for the beneficiary population is five, so more than half of the beneficiary households lie over this cut-off of four. For example, the median value of the transfer is $7.50 for smaller households (less than five people) and only $4.17 among larger households, though the share of the transfer as a proportion of baseline consumption is around 20 percent for both groups of households.[13] Due to this structure of the programme, we might expect to find heterogeneous effects of the programme between these two halves—those households with more than four members, compared to those who have four or fewer members.

Not surprisingly, we find a significant impact of the programme on consumption for smaller households but not for larger households who have more than four members. The size of the impact among smaller households is $6.13, more than double the overall average effect of $2.74 reported above. The consumption impact in small households represents 82 percent of the median value of the transfer to these households (6.13 divided by 7.5), but the 95 percent confidence interval around the $6.13 estimate easily includes $7.50, hence we can conclude that among small households, virtually all the transfer is being spent. Table 7.3 below shows impacts on total expenditure and broad groups by large (> 4 members) and small (≤ 4 members) households. Also to be noted in columns (2) and (4) of the first row in Table 7.3 is that smaller households are richer than larger households.

Table 7.3: Impacts of HSCT on Expenditures by Household Size

	Size <=4		Size>4	
Dependent	Program	Baseline	Program	Baseline

[13] This seemingly contradictory fact is because larger households are poorer, so the transfer, though lower in absolute value, represents about the same share of pre-programme consumption. Technically the transfer share is slightly lower (19 percent) among larger households compared to 21 percent in smaller households.

Variable	Impact (1)	Treated Mean (2)	Impact (1)	Treated Mean (2)
Total	6.13**	45.03	1.29	22.52
	(2.25)		(1.09)	
Food	3.32	29.02	0.66	14.03
	(1.34)		(0.70)	
Household Items	1.25*	11.46	-0.01	5.03
	(1.64)		(-0.04)	
Education	0.08	0.92	0.11	1.37
	(0.50)		(0.73)	
Health & Hygiene	0.70*	1.72	0.20	0.89
	(1.77)		(1.45)	
Transport & Communication	0.80**	0.52	0.21	0.64
	(2.46)		(1.36)	
Clothing Items	0.07	0.44	-0.04	0.27
	(0.39)		(-0.76)	
Alcohol & tobacco	-0.19	0.91	0.16	0.22
	(-0.62)		(1.38)	
N	2,404		2,841	

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

7.2 Impacts by Gender of Main Respondent

We further investigate if the programme generates different impacts on consumption expenditure by gender of the main respondent. We find that the HSCT had a significant impact on households where the main respondent was female, but no impact on households with male main respondents. Here, we assume the main respondent is making the main decisions within the household. The size of the impact is USD3.86 when the main respondent is female, compared to the overall average effect of USD 2.74 for all households.

Table 7.4: Impacts of HSCT on Expenditures by Gender of Main Respondent

	Female		Male	
Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Program Impact (1)	Baseline Treated Mean (2)
Total	3.86**	31.11	-0.11	34.40
	(2.46)		(-0.06)	
Food	2.01	19.76	0.13	21.92
	(1.36)		(0.08)	
Household Items	0.76	7.76	-0.82	7.78
	(1.57)		(-1.40)	
Education	0.24	1.20	-0.25	1.14
	(1.60)		(-0.80)	
Health & Hygiene	0.35	1.18	0.44	1.38
	(1.47)		(1.38)	
Transport & Communication	0.47***	0.42	0.44	1.00
	(4.22)		(1.23)	
Clothing Items	0.05	0.34	-0.15	0.36
	(0.48)		(-1.43)	
Alcohol & tobacco	-0.05	0.40	0.07	0.77

	(-0.35)	(0.19)
N	3,587	1,658

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

7.3 Expenditure Patterns

We noted earlier that the pattern of spending out of the HSCT transfer is different from pre-programme consumption patterns. We therefore investigate the impact of the programme on the share of consumption devoted to specific goods and services. Consistent with a significant impact on the level of spending on transportation and communication we see an associated shift in the budget share devoted to this group. However, we also see a statistically significant (though small—one percentage point) shift in the budget devoted to educational expenses (Table 7.5).

Table 7.5: Impacts of HSCT on Expenditure Shares

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
	(1)	(2)	(3)	(4)
Food	-0.01	0.63	0.59	0.59
	(-0.61)			
Household items	-0.02	0.26	0.28	0.29
	(-1.39)			
Health and hygiene	0.01	0.04	0.05	0.05
	(1.46)			
Transport, Communication	0.01**	0.02	0.02	0.02
	(3.18)			
Education	0.01*	0.04	0.05	0.04
	(2.34)			
Water	0.00	0.00	0.00	0.00
	(1.23)			
Clothing	-0.00	0.01	0.01	0.01
	(-0.30)			
N	5,245	1,741	1,743	880

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

We also investigate these shifts in consumption patterns by household size and find that the significant shift towards transportation is driven by smaller households, while the shift towards educational expenses is driven by larger households who presumably have more school-age children (Table 7.6).

Table 7.6: Impacts of HSCT on Expenditure Shares by household size

	small		large	
Dependent Variable (expenditures)	Program Impact	Baseline Treated Mean	Program Impact	Baseline Treated Mean
	(1)	(2)	(3)	(4)
Total food	-0.01	0.64	-0.01	0.62
	(-0.83)		(-0.50)	
Household	-0.02	0.28	-0.02	0.25
	(-1.01)		(-1.31)	
Health and hygiene	0.01	0.04	0.00	0.04
	(1.81)		(0.75)	
Transport and	0.01**	0.01	0.01	0.02

communication				
	(3.05)		(1.93)	
Education	0.00	0.03	0.01*	0.06
	(1.21)		(2.04)	
Water	0.00	0.00	0.00	0.00
	(0.44)		(1.46)	
Clothing	0.00	0.01	-0.00	0.01
	(0.73)		(-1.11)	
N	2,404	792	2,841	949

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

We performed similar analyses for food shares and report those results in the Annex D. They show a statistically significant shift towards the share of food consumption on fruits and fats/sweets and a decline in the share devoted to vegetables. This result is consistent with the level increases in fats we noted earlier, which is driven by increases in cooking oil.

7.4 Summary

The overall impact of the HSCT on consumption differs by household size with small households consuming the entire amount while it is unclear what large households are doing with the money (more on this later). Among poor food insecure households an increase in permanent income typically leads to an immediate increase in consumption, particularly food consumption which tends to make up a large share of the consumption of the poorest. Thus the impacts for small households are expected while the results for larger households raise several possible hypotheses about the way they perceive the cash transfer and its impact. First, the fact that half the beneficiaries have more than four members means that the transfer level is significantly smaller for larger households, and might not be large enough to generate a big impact on consumption. This hypothesis is consistent with the results for smaller households, where the increase in consumption generated by the HSCT is in line with the median value of the transfer.

The programme may simply not have been operating long enough (beneficiaries only received a maximum of six payments during the study period) to generate a perceived increase in permanent income, implying that recipients may treat the money as a windfall, and use it to make ‘lumpy’ expenditures such as paying down debt or purchasing assets. The programme has only been operating for 12 months—increases in consumption typically are generated by a perceived increase in permanent (long term) income. Last, the timing of the study in the harvest season means that households are more likely to use additional income on non-food items since their food stores are at the maximum for the year during this period. We will explore the impact of the HSCT on these other domains later in the report in order to gain a more complete understanding of how beneficiaries use the transfer. This investigation is particularly important among larger households where the difference between the median transfer ($4.17) and the increase in consumption ($1.29) leaves $2.88 per person per month ‘unaccounted’ for.

8. Poverty, food security & well-being

Earlier in this report we showed that the HSCT has a significant impact in raising the average consumption level of households. In this section, we provide estimates of the programme's impact on measures of poverty and food security and subjective wellbeing.

8.1 Poverty

We provide details on the impact of the HSCT on the three commonly used Foster–Greer–Thorbecke (FGT) poverty indicators: the headcount, poverty gap, and squared poverty gap. While the programme does not have a significant effect on poverty indicators for the entire panel, it reduces the food poverty headcount rate (percent of beneficiaries living in households below the food poverty line set by ZIMSTATS) by 10 percentage points in households with four or fewer members. This result is not surprising because the poverty count is based on consumption (we follow the method ZIMSTATS uses to calculate poverty), so we will see impacts on poverty for groups that we see impacts on consumption (small households).

As reported in the baseline report, poverty and food poverty rates are very high in the HSCT beneficiary population. At both baseline and follow-up, 96 percent of beneficiaries live in households below the poverty line set by ZIMSTATS and 82 percent live below the food poverty line. We first provide results for the entire panel of households (Table 8.1) and then we restrict it to only those households who have less than or equal to four members (Table 8.2). We do not find any results for households with more than four members, so that table is not included. The results are in line with those from the last section. Column 1 provides the impact estimates, followed by means of both groups at baseline and follow-up. These are weighted by household size to be representative of the population of individuals living in beneficiary households.

Table 8.1: Impacts on Poverty: Entire Panel of Households

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	12M Treated Mean	12M Control Mean
	(1)	(2)	(3)	(4)	(5)
Headcount - Total Poverty Line	-0.00	0.97	0.96	0.97	0.96
	(-0.62)				
Headcount – Food Poverty Line	0.02	0.82	0.81	0.79	0.79
	(0.45)				
Poverty Gap	-0.00	0.64	0.63	0.62	0.62
	(-0.11)				
Squared Poverty Gap	-0.00	0.45	0.44	0.43	0.43
	(-0.25)				
N	5,245				

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

Table 8.2: Impacts on Poverty: Households with <=4 members

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	12M Treated Mean	12M Control Mean
	(1)	(2)	(3)	(4)	(5)
Headcount - Total Poverty Line	-0.03	0.91	0.87	0.90	0.90
	(-1.56)				
Headcount – Food Poverty Line	-0.10*	0.59	0.50	0.54	0.54
	(-1.87)				
Poverty Gap	-0.03	0.49	0.45	0.47	0.47
	(-1.33)				
Squared Poverty Gap	-0.04	0.31	0.27	0.29	0.28
	(-1.63)				
N	2,356				

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

8.2 Food Security

One of the main objectives of the HSCT programme is reduction of food-poor households. In this section, we report the impacts of the programme on several food security indicators including the Household Food Insecurity Access Scale (HFIAS).

One indicator that captures the experiential aspect of food poverty is the HFIAS, developed by the Food and Nutritional Technical Assistance (FANTA) project of USAID. The HFIAS is a 9-item scale, where households are asked to rate their experience from a scale of 'Rarely' to 'Often'. The reference period is past four weeks and the scale generates a score ranging from 0 to 27. The higher the score, the more food insecure the household is. The score is also used to categorize households into four categories–severely food insecure, moderately food insecure, mildly food insecure, and finally, food secure households. The impacts of the HSCT on HFIA score and the four categories of household food insecurity are provided in Table 8.3 below. All variables, other than food secure households, are coded so that higher values represent greater food insecurity.

In keeping with our findings from the consumption expenditure section, we find that the programme does not have an impact on the HFIA scale. However, it increases the percentage of households classified as food secure by 2 percentage points. Given that these households are all food poor and living below the poverty line, only 2 percent of these households were classified as food secure at baseline in the first place, and therefore this 2-percentage point increase represents a 100 percent increase.

Table 8.3: Impacts of HSCT on Food Security: Panel of Households

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
HFIA scale	-0.11	14.04	10.54	10.66
	(-0.18)			
Severely food insecure (%)	0.07	0.61	0.40	0.36
	(1.42)			
Moderately food insecure (%)	-0.06	0.34	0.51	0.55
	(-1.39)			
Mildly food insecure (%)	-0.02	0.03	0.05	0.07
	(-1.17)			
Food secure (%)	0.02*	0.02	0.04	0.02
	(1.94)			
N	5,257			

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

We investigated whether these impacts varied by household size and gender of main respondent. Consistent with previous results on well-being, the percentage of food-secure households increases for smaller households (≤ 4 members) as well as for households with a female respondent. Thus, the programme seems to be having a heterogeneous impact: larger and significant impacts on consumption, poverty and food security for smaller households but not so for those with greater than four members.

Table 8.4: Impacts of HSCT on Food Security By Household Size and Gender of Main Respondent

Dependent Variable	Program Impact HH size ≤ 4 (1)	Program Impact HH size > 4 (2)	Program Impact Females (3)	Program Impact Males (4)
HFIA scale	-0.44	0.06	-0.47	0.69
	(-0.67)	(0.09)	(-0.71)	(1.01)
Severely food insecure (%)	0.06	0.07	0.06	0.09
	(1.08)	(1.28)	(1.10)	(1.28)
Moderately food insecure (%)	-0.05	-0.07	-0.05	-0.09
	(-0.88)	(-1.51)	(-1.03)	(-1.23)
Mildly food insecure (%)	-0.03	-0.00	-0.01	-0.01
	(-1.57)	(-0.20)	(-0.92)	(-0.49)
Food secure (%)	0.04**	0.00	0.05***	-0.01
	(2.31)	(0.47)	(3.11)	(-0.90)
N	2,363	2,894	3,593	1,664

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

Key informants confirmed that beneficiaries feel more food secure as a result of the programme. Additionally, this food security is having spillover effects that benefit relationships and wellbeing among the larger community. A community leader from Mwenezi said that

beneficiaries assist non-beneficiaries with their food needs: "The beneficiaries and non-beneficiaries stated that people in Kumbire village have a good relationship because they assist each other with food basics e.g., salt hence there is no constrain or tension." The positive effect on relationships (due to food security) is corroborated by other qualitative interviews as well. Also in Mwenezi, a caregiver indicated during an IDI that "There is a great change in my relationship with the family because if you receive your transfer and you bring sugar to your family they become happy and also when relatives visit they can now drink tea and they feel important whenever they receive such a welcome from someone who didn't manage to feed a visitor before." It is important to note, however, that several beneficiaries did report food shortages within the past year during IDIs.

8.3 Diet Diversity

A diversified diet, i.e., consumption of a wide variety of foods across nutritionally distinct food groups, is associated with increased household food access as well as individual probability of adequate micronutrient intake. Knowing that a household consumed six different food groups than say six different foods, which might all be cereals or roots and tubers, offers a better picture of the household's capability to access assorted food stuffs that provides the required micronutrients to lead a healthy life.

A widely used diet diversity indicator is Household Diet Diversity Score (HDDS). It measures the number of different food groups consumed over a given reference period. The FAO recommends the following set of 12 food groups to calculate the HDDS: Cereals; Roots/tubers; Vegetables; Fruits; Meat/poultry/offal; Eggs; Fish/seafood; Pulses/legumes/nuts; Milk and milk products; Oil/fats; Sugar/honey; and Miscellaneous (spices and beverages). We use two and four week reference periods for these selected food groups. Households were asked to recall all the foods eaten and beverages taken in the 2 and 4 weeks prior to the interview. We use this reference period because it offers a better picture of the habitual diet of households. We awarded a point to each food group consumed over the reference period and then calculated the sums of all points for the dietary diversity score for each household.

Unlike poverty and food security, we find that the programme impacts for diet diversity are significant across all sub-samples, i.e. the HSCT increases diet diversity for the treated group, across household size and gender of the main respondent. Almost all households consume cereals and vegetables in both time periods and across treatment and comparison groups. Fruits, pulses & legumes, dairy, fats, sweets, and condiments and beverages all see an increase in consumption. Among the least consumed food groups were eggs at baseline and though more households start consuming eggs in the follow-up period, the increase is in fact more in the comparison group. This result is consistent with the idea that data were collected during the harvest season when households have food they planted, but still need to purchase food they do not grow. Table 8.5 below reports results for the entire panel of households.

Table 8.5: Impacts of HSCT on Diet Diversity: Panel of Households

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
	(1)	(2)	(3)	(4)
Diet Diversity Score	0.70***	5.94	7.16	6.76
	(3.68)			
Cereals	-0.00	0.99	0.99	0.99
	(-.91)			
Roots & Tubers	0.04	0.10	0.28	0.27
	(0.85)			
Vegetables	0.00	0.99	0.99	0.99
	(0.28)			
Fruits	0.25***	0.32	0.57	0.38
	(3.67)			
Meat	-0.02	0.39	0.42	0.44
	(-0.44)			
Eggs	-0.03*	0.07	0.10	0.12
	(-1.83)			
Fish	0.01	0.23	0.34	0.32
	(0.22)			
Pulses & Legumes	0.13***	0.56	0.69	0.61
	(3.03)			
Dairy	0.08**	0.29	0.32	0.32
	(2.11)			
Fats	0.11**	0.61	0.79	0.76
	(2.45)			
Sweets	0.11***	0.47	0.68	0.58
	(3.15)			
Misc. (Condiments & Beverages)	0.03**	0.91	0.97	0.97
	(2.45)			
N	5,260			

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance.

8.4 Satisfaction with Life and Future Expectations

A unique feature of the survey instrument is a Satisfaction with Life Scale[14] that we implemented for the main respondent, composed of five statements with response codes on a five-point Likert Scale (strongly agree, agree, neither agree nor disagree, etc.):

- In most ways my life is close to my ideal
- The conditions of my life are excellent
- I am satisfied with my life
- So far I have gotten the important things I want in life
- If I could live my life over, I would change almost nothing

[14] Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Peresonality Assessment, 49*(1), 71-75.

We find that the HSCT raises the score by 1.13 points, which is a 12 percent increase over baseline score (Table 8.6). The score ranges from 5 to 25, and a higher score indicates greater life satisfaction. The mean score on this scale was 9.5 for the treatment group at baseline. We also asked about perceptions of adverse shocks, such as the likelihood of facing food shortage, seeking financial help or falling ill in the next year. However, we did not find significant impacts on these three indicators.

Results on subjective welfare were in the same direction across large and small households and in households with male and female main respondents. In all cases, there was a significant increase in satisfaction with life score, but not on perceptions of likelihood of adverse shocks.

Table 8.6: Impacts of HSCT on Subjective Well-Being: Panel of Households

Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Subjective Well-being (SWL)	1.13**	9.53	11.68	10.90
	(3.77)			
Likely to have food shortage in next year	-0.05	0.59	0.49	0.54
	(-1.12)			
Likely to seek financial help in next year	-0.02	0.56	0.61	0.67
	(-0.43)			
Likely to fall ill next year	-0.03	0.33	0.36	0.37
	(-1.00)			
N	5,246			

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

8.5 Summary

The HSCT impacts the number of different food groups purchased by beneficiary households, a common indicator of diet diversity. The programme also increases the proportion of households who are food secure, and respondents report higher scores on a Life Satisfaction Scale. In most cases these impacts are only for smaller households indicating important heterogeneous treatment effects by size, due no doubt to the larger per capita value of the transfer among smaller households.

9. Household Resiliency (Assets, Livelihoods and Risk Coping)

Resilience has become a key focus of the international development community recently due to the increasing disruption in food supplies and agricultural productivity caused by climate change, as well as the rising incidence of civil unrest and armed conflict. Consequently, this section of the report presents some preliminary findings on the impact of the HSCT on resiliency.

The definition of resilience is still a matter of some discussion since it is a relatively new concept in economic development. The Resilience Alliance defines the concept as "The capacity of a system to absorb disturbance and reorganise while undergoing change." DfID defines it as "…the ability of countries, communities and households to manage change, by maintaining or transforming living standards in the face of shocks or stresses—such as earthquakes, drought or violent conflict—without compromising their long-term prospects," while the FAO's Resilience Measurement Technical Working Group defines it as "…the capacity that ensures adverse stressors and shocks do not have long-lasting adverse development consequences."[15] The common thread through these and other definitions is the notion that resiliency reflects an ability to successfully manage or withstand a shock or stress. Efforts to measure resilience are still very much in their infancy, but Alinov et al.'s (2010) Resilience Index Measurement and Analysis Model (RIMA) is perhaps the most sophisticated measure currently available.[16] The dimensions of this index include income and food access, agricultural and non-agricultural assets, access to basic services and safety nets, as well as "adaptive capacity" dimensions such as human capital.

While the HSCT evaluation survey was not explicitly designed with the objective of measuring resiliency, our survey collected data on many of the indicators that are now commonly used to measure the concept. This gives us the opportunity to provide an initial assessment of the programme's impact on resiliency. Additionally, the types of households targeted by the HSCT are those that grapple with conditions that necessitate resiliency to succeed. HSCT households are extremely poor, headed by widows caring for orphans or seniors caring for orphans, and/or containing people with disabilities. Many households do not have sufficient able-bodied adults to generate adequate resources to support children, especially when living in a subsistence farming community. Informed by the notion that resiliency involves being able to manage or withstand a shock, and motivated by the conceptual framework of RIMA, we investigated four domains that were covered by our survey instrument and capture resiliency: 1) agricultural assets; 2) livelihood diversification and strengthening sources of income; 3) access to transfers, safety nets and credit position; and 4) exposure to shocks and use of non-detrimental coping strategies. We look at each of these in turn and then provide some concluding remarks at the end of this section.

9.1 Agricultural Assets

The HSCT has a significant impact on the number of households owning goats (nine percentage points) and among small households, also on the number owning a donkey or mule (Table 9.2), though there are no impacts on the overall total number of livestock owned (Table 9.3) neither for smaller nor larger households. The programme also appears to stimulate the purchase of

[15] Resilience Alliance. 2002. *Key concepts* (available at http://www.resalliance.org/index.php/key_concepts). DFID. 2011. *Defining disaster resilience: a DFID approach paper.* London (available at https://www.gov.uk/government/publications/defining-disaster-resilience-a-dfidapproach-paper). Food Security Information Network (FSIN) 2014 "Resilience Measurement Principles", FSIN Technical Series No.1, January 2014.

[16] Alinovi L., D'Errico M., Main E. and Romano D. (2010), *Livelihoods strategies and households resilience to food security: An empirical analysis to Kenya.*

sickles with a significant programme impact of 10 percentage points (Table 9.4) on the proportion of households with a sickle which is concentrated among smaller households. The total number of sickles owned has also increased significantly as has the number of hoes (by 0.22—10 percent significance) (Table 9.5). These impacts are even larger among smaller households, where the total numbers of yokes, sickles and axes has all increased significantly among programme households (Table 9.6) Overall then, and after only 12-months, the HSCT appears to have at least begun to stimulate the accumulation of agricultural assets in the form of livestock and small implements.

Additionally, qualitative data indicated that beneficiaries share agricultural assets with non-beneficiaries. A community leader from Mwenezi said, "There is a good relationship between the beneficiaries and non-beneficiaries, as people in Imbayago village assist each other through borrowing farming implements, e.g., animal drawn plough for field cultivation."

Table 9.1: Percentage of households raising or owning livestock

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Calf	-1.73	21.73	21.80	25.85
	(-0.63)			
Ox	-1.20	19.47	20.88	24.15
	(-0.37)			
Cattle Adult Female	0.22	34.01	35.18	38.55
	(0.08)			
Goats	9.10**	41.74	52.92	48.87
	(3.15)			
Chickens	4.55	60.82	69.22	67.69
	(1.24)			
Donkeys, Mule	2.36	6.31	5.55	2.95
	(1.23)			
Sheep	-0.54	2.41	2.29	2.15
	(-0.59)			
N	5,693	2,029	1,748	882

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Table 9.2: Percentage of households raising or owning livestock by household size

	Size <=4		Size >=5	
Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Programme Impact (3)	Baseline Treated Mean (4)
Calf	0.12	13.19	-3.29	29.33
	(0.04)		(-0.79)	
Ox	1.97	12.57	-3.66	25.61
	(0.63)		(-0.81)	
Cattle Adult Female	1.48	23.14	-0.81	43.67
	(0.40)		(-0.22)	
Goats	8.07	30.89	9.22*	51.40
	(1.79)		(2.57)	
Chickens	6.96	51.10	2.49	69.46
	(1.55)		(0.63)	
Donkeys, Mule	3.81*	3.14	1.13	9.12
	(2.19)		(0.33)	
Sheep	-1.63	0.84	0.04	3.82
	(-1.33)		(0.03)	
N	2,606	955	3,087	1,074

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Table 9.3 Number of Livestock owned

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Calf	-0.05	0.39	0.32	0.45
	(-0.79)			
Ox	-0.07	0.38	0.37	0.47
	(-1.04)			
Cattle Adult Female	-0.01	0.77	0.74	0.99
	(-0.06)			
Goats	0.17	1.72	1.85	2.05
	(1.09)			
Chickens	0.26	3.38	3.88	4.12
	(0.72)			
Donkeys, Mule	0.06	0.17	0.15	0.09
	(0.86)			
Sheep	-0.01	0.11	0.08	0.07
	(-0.26)			
N	5,693	2,029	1,748	882

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Table 9.4: Proportion owning agricultural assets

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Hoe	-0.94	91.92	93.48	93.99
	(-0.49)			
Axe	2.10	72.89	78.32	79.02
	(0.76)			
Panga machete	4.73	14.34	16.65	16.21
	(1.15)			
Sickle	10.06**	38.05	46.85	39.46
	(2.84)			
Watering Can	-1.64	13.80	10.01	10.77
	(-0.48)			
Chains	2.45	23.56	27.52	31.18
	(0.90)			
Yokes	3.38	27.85	30.32	34.81
	(1.54)			
Ox Plough	-0.11	30.06	30.66	36.85
	(-0.04)			
Chicken House	2.63	46.43	56.81	57.03
	(0.88)			
N	5,693	2,029	1,748	882

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Table 9.5: Ownership of productive assets (number)

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Hoe	0.22	2.48	2.58	2.57
	(1.75)			
Axe	0.07	1.05	1.13	1.10
	(1.37)			
Panga machete	0.04	0.18	0.20	0.19
	(0.74)			
Sickle	0.13**	0.46	0.54	0.46
	(2.72)			
Watering Can	0.07	0.33	0.21	0.22
	(0.58)			
Chains	0.02	0.33	0.39	0.44
	(0.40)			
Yokes	0.08	0.40	0.43	0.46
	(1.58)			
Ox Plough	0.01	0.34	0.34	0.40
	(0.28)			
Chicken House	0.03	0.48	0.59	0.59
	(0.79)			
N	5,693	2,029	1,748	882

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Table 9.6: Number of productive assets owned by household size

	Size <=4		Size >=5	
Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Program Impact (3)	Baseline Treated Mean (4)
Hoe	0.31	1.76	0.14	3.12
	(1.71)		(0.86)	
Axe	0.17*	0.90	-0.02	1.19
	(2.36)		(-0.37)	
Panga machete	0.08	0.13	0.01	0.24
	(1.40)		(0.09)	
Sickle	0.13*	0.38	0.12	0.54
	(2.25)		(1.69)	
Watering Can	-0.08	0.19	0.17	0.46
	(-1.02)		(1.00)	
Chains	0.02	0.17	0.02	0.46
	(0.28)		(0.30)	
Yokes	0.11**	0.21	0.05	0.57
	(2.86)		(0.68)	
Ox Plough	0.02	0.22	0.00	0.45
	(0.42)		(0.07)	
Chicken House	0.05	0.38	0.00	0.58
	(1.04)		(0.03)	
N	2,606	955	3,087	1,074

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

9.2 Livelihood Diversification and Income Strengthening

A key dimension of resilience is diversifying sources of income in order to reduce the risk associated with relying on a sole income source, as well as strengthening existing income-generating activities to allow for increased savings, which can be used when there is a negative shock to the primary source of income. The primary source of income for HSCT households is agriculture so we investigated whether the programme has stimulated a move to either a more diverse set of crops or more non-farm enterprise, and whether income from agriculture has increased.

The HSCT appears to be supporting a diversification of income sources among beneficiary households. A key informant from Binga specifically mentioned that "the lives of people in Binga has improved because of this programme in the sense that people can now do income generating projects such as gardening and chicken projects." Similarly, a beneficiary from Mwenezi indicated during an IDI that "When I receive these transfers I buy livestock adding to what I have and the fish pond project helps in buying food stuffs." In Binga, a beneficiary reported using the transfer funds to purchase kapenta (fish) which she then resells for profit in her village.

Table 9.7 shows significant impacts on the proportion of households now cultivating groundnuts and roundnuts by seven and five percentage points, respectively. There appears to be a decline in the overall quantity of crops produced (measured in kgs) which could be explained by the slight, but statistically significant, declines in heavier crops such as maize and sorghum and the substitution towards nuts. Of interest is the fact that this shift in the pattern of crop production is

equally present among small and large households. Table 9.8 shows impacts for small households, where the increase in the proportion growing groundnuts is eight percentage points and three points for roundnuts; for large households the respective increases are six percentage points each (not shown) and both statistically significant. We performed additional analysis to see if programme households were more likely to sell their crops and found no significant impacts along this dimension of income generation.

Table 9.7: Impacts of HSCT on Crop Production

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Total harvested (kgs)	-120.36	207.05	469.57	540.69
	(-1.66)			
Log of total harvested	-0.54*	3.78	5.22	5.23
	(-2.11)			
HH harvested maize	-0.01	0.58	0.71	0.76
	(-0.27)			
HH harvested sorghum	-0.05	0.41	0.39	0.51
	(-1.44)			
HH harvested groundnut	0.07**	0.16	0.24	0.16
	(2.75)			
Millet	0.05	0.31	0.34	0.17
	(1.08)			
HH harvested roundnut	0.05**	0.03	0.06	0.01
	(2.95)			
HH harvested cowpeas	-0.01	0.09	0.04	0.03
	(-0.35)			
N	5,006	1,748	1,590	786

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

Table 9.8: Impacts of HSCT on Crop Production: Household size<5

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
tot	-72.73	128.92	288.08	347.91
	(-1.45)			
lntot	-0.53	3.18	4.55	4.69
	(-1.67)			
HH harvested maize	0.03	0.53	0.71	0.74
	(0.52)			
HH harvested sorghum	-0.04	0.35	0.38	0.41
	(-0.92)			
HH harvested groundnut	0.08*	0.16	0.27	0.19
	(2.05)			
millet	-0.02	0.26	0.27	0.16
	(-0.39)			
HH harvested roundnut	0.03	0.04	0.04	0.01
	(1.74)			
HH harvested cowpeas	0.01	0.06	0.05	0.03
	(0.43)			
N	2,173	794	674	317

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

Table 9.9: Impacts of HSCT on Non-farm enterprise (NFE)

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
NFE	0.05**	0.11	0.10	0.08
	(2.68)			
Own NFE asset	-0.04	0.28	0.30	0.31
	(-0.35)			
Log value of assets (if own)	-1.08	0.20	3.18	4.51
	(-1.83)			
N	2,455	1,595		

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

We did not find programme impacts on the value of sales or profits among those who do run an NFE, hence the HSCT appears to have impacted the extensive margin, encouraging more households to engage in a non-agricultural income source, rather than the intensive margin (higher sales and profits for those already engaged in NFE). Only 11 percent of the households in the sample were engaged in NFE at baseline, and—as seen in row 1 of Table 9.9—the programme has had a significant impact on increasing the share of households engaged in NFE by five percentage points, though there is no impact on the proportion of households owning assets that are dedicated to their NFE nor on the value of assets for those who do have assets. While we did not find any differential impacts by household size, we did find that the impacts on NFE are almost entirely driven by the poorest households, those whose consumption at baseline

is below the median. Table 9.10 shows results for these poorest households—the impact of the HSCT on operating an NFE is 10 percentage points, indicating an important role that the HSCT plays in allowing the poorest to diversity their livelihoods source.

Table 9.10: Impacts of HSCT on NFE: poorest 50 percent of households

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
NFE	0.10**	0.11	0.12	0.08
	(3.60)			
Own NFE asset	-0.06	0.30	0.31	0.36
	(-0.39)			
Log value of assets	-1.55	0.23	3.20	5.21
(if own)	(-1.93)			
N	1,313	856		

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

9.3 Transfers, Safety Nets and Debt

A key component of resilience is having access to networks, whether formal or informal, in the event of an emergency. Our survey instrument gathered information on the receipt of cash transfers from both government and non-government sources (NGO as well as private individuals), as well as remittances sent to other individuals outside the household. Households in the treatment group were more likely to receive assistance in the form of cash or food though not significantly so (Table 9.11). Of particular interest is the fact there is no impact on programme participation of receiving BEAM despite the fact that the cash transfer is supposed to be harmonised with other poverty alleviation programmes such as BEAM. Among smaller households there does appear to be a significant impact on the proportion receiving cash or food (by 20 pp) but there continues to be no programme impact on receiving BEAM (Table 9.12).

Table 9.11: Impacts of HSCT on Transfers

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
	(1)	(2)	(3)	(4)
rec'd gifts of cash/food	0.08	0.56	0.48	0.53
	(1.15)			
value cash+food	-24.58	118.45	75.21	134.33
(if received)	(-1.19)			
rec'd programmes	-0.04	0.54	0.41	0.51
	(-0.74)			
value received	21.93	63.13	29.32	42.54
	(1.18)			
rec'd BEAM	-0.03	0.14	0.17	0.18
	(-1.19)			
rec'd labour or ag tools	0.03	0.38	0.42	0.41
	(0.96)			
sent cash or food	0.03	0.14	0.21	0.15
	(1.16)			
value of food/cash given	-47.38	69.13	48.16	52.29
(if sent)	(-1.45)			
offered labour/tools	-0.00	0.15	0.15	0.14
	(-0.12)			
N	5,260	1,748	1,748	882

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

Table 9.12: Impacts of HSCT on Transfers: Small households

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
	(1)	(2)	(3)	(4)
rec'd gifts of cash/food	0.20*	0.62	0.59	0.58
	(2.41)			
value cash+food	-52.39	102.30	63.23	140.82
	(-1.68)			
rec'd programmes	-0.07	0.54	0.33	0.43
	(-1.01)			
value received	44.97	50.73	23.57	28.80
	(1.13)			
rec'd BEAM	-0.03	0.10	0.11	0.12
	(-1.15)			
rec'd labour or ag tools	0.06	0.42	0.50	0.50
	(1.19)			
if give cash or food	0.04	0.11	0.19	0.15
	(1.14)			
value of food/cash given	-58.66	53.26	49.44	71.10
	(-1.48)			
give labour/tools	0.02	0.11	0.11	0.12
	(0.40)			
N	2,364	794	794	388

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

Most IDI respondents indicated that the HSCT is the only programme from which they are benefitting, but a few other assistance programmes were mentioned by one or two respondents: Save the Children's Food for Work programme, the BEAM scholarship programme, food aid from CARE, and CAMFED (another scholarship programme which also provides uniforms, books, and sanitary napkins for girls).

Without a personal network of friends and relatives to turn to for assistance or receipt of programme benefits, poor rural households typically have to borrow money or seek purchases on credit in times of crisis, though this is the least preferred form of coping. Indeed the HSCT has significantly reduced the debt exposure among programme households. Though programme households were somewhat more likely to have obtained credit in the last 12 months (by 7 percentage points), the total amount outstanding on current credit is $17 less than for control households (Table 9.13). While the is no programme impact on loans themselves, the reason for taking out a loan is revealing—43 percent of loans are for consumption purposes followed by education (21 percent) and then health (13 percent). Only 15 percent of loans are for some sort of investment activity (farming, land improvement or NFE), illustrating the precarious living conditions of programme households.

Table 9.13: Impacts of HSCT on Debt: With Panel Weights

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Have loan prior to April 2012	0.00 (0.24)	0.09	0.07	0.07
Amount of old loan outstanding (if have) ($)	-17.29 (-0.53)	80.12	79.28	135.97
Taken loan L12 months	-0.01 (-0.32)	0.13	0.20	0.25
Amount current loan ($)	-10.74 (-0.23)	78.79	29.87	51.67
Taken credit L12 months	0.07 (1.98)	0.19	0.27	0.22
amount of credit outstanding	-17.19** (-2.90)	29.35	11.81	16.08
N	4,158	1,444	1,326	674

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

Interviews among community leaders also pointed out that relationships between beneficiaries and non-beneficiaries have improved, which enables non-beneficiaries to borrow from those who receive the HSCT. A participant in the FGD of community leaders from Binga said, "Relationships between, among and within the communities is mutual and has improved after the HSCT programme. Those who benefit from the programme help the non-beneficiaries – e.g., they can borrow money or food from each other." IDIs corroborated this information, with one respondent indicating that the HSCT improved familial relations: "The cash from Social Welfare has improved my family well-being and my relations with my relatives have improved since I am now in a position to [lend] them cash when they need it."

9.4 Shocks and Coping Mechanisms

Our final resilience domain is shocks and associated coping strategies. We asked the main

respondent whether the household had experienced one of 15 specific shocks, whether the shock had a negative or positive effect on the household, and if negative, what coping mechanism the household employed to deal with the shock. At baseline, the most common shock—reported in 28 percent of households—was crop failure or disease. The other main shocks were food or input price changes (21 percent) and livestock disease and drought (each of which was reported by 10 percent of households) and family illness (nine percent). Similar shocks were mentioned by IDI respondents, who also mentioned the challenge of wildlife disturbing or consuming their crops (elephants, crocodiles, and hippopotami were mentioned specifically).

We estimated the impact of the HSCT on the probability of experiencing any shock, and then two specific types of shocks and found that there was some suggestion that HSCT households were less likely to be exposed to a shock (by six percentage points) but the impact is not statistically significant (Table 9.14). On the other hand when we look at specific shock categories, we find that HSCT households are less likely to suffer debt default by three percentage points, which is consistent with the finding above of significantly less debt exposure among programme households. Analysis by household size reveals that in fact among smaller households the likelihood of a shock among HSCT households is statistically smaller (by 13 percentage points), and the impact on reduction of debt default is concentrated among larger households (Table 9.15).

Table 9.14: Experience of any shock: With Panel Weights

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Any shock	-0.06	0.88	0.78	0.79
	(-1.46)			
Shock from high food prices	-0.03	0.30	0.27	0.28
	(-0.44)			
Shock of inability to pay loan	-0.03*	0.04	0.05	0.05
	(-2.19)			
N	5,693	2,029	1,748	882

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Table 9.15: Experience of any shock by household size

	Size <=4		Size >=5	
Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Program Impact (3)	Baseline Treated Mean (4)
Any shock	-0.13*	0.86	-0.02	0.91
	(-2.01)		(-0.64)	
Shock from high food prices	-0.07	0.28	0.01	0.31
	(-1.09)		(0.15)	
Shock of inability to pay loan	-0.02	0.03	-0.04*	0.05
	(-1.32)		(-2.34)	
Shock from business failure	-0.00	0.02	-0.00	0.02
	(-0.04)		(-0.31)	
N	2,541	930	3,087	1,074

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Among those who suffer a negative shock, how did they cope and how has the HSCT affected their coping strategies? At baseline, the most common coping mechanism was to "do nothing," followed by changing eating patterns and receiving assistance from friends or relatives or from government or NGOs (Table 9.16). Very few sold assets and even fewer went into debt. At the time of the follow-up data collection, the pattern of coping appears generally the same except that among treatment households – there is an increase in assistance from government while there is a decrease in this coping mechanism among control households. And among both groups the proportion that did nothing in the face of a negative shock has actually increased by six percentage points.

Table 9.16; Coping strategies by study arm (%)

	Control Households		Treatment Households	
	Baseline	12M follow-up	Baseline	12M follow-up
Nothing	43	53	41	47
Change eating pattern	12	14	11	12
Assistance from relatives	11	9	14	7
Assistance from NGO/Gov't	12	3	9	8
Savings	10	12	10	12
Worked more	2	1	2	2
Sold assets	2	1	2	2
Other	8	8	11	10
		100		

Figure 2. Control Coping Mechanisms

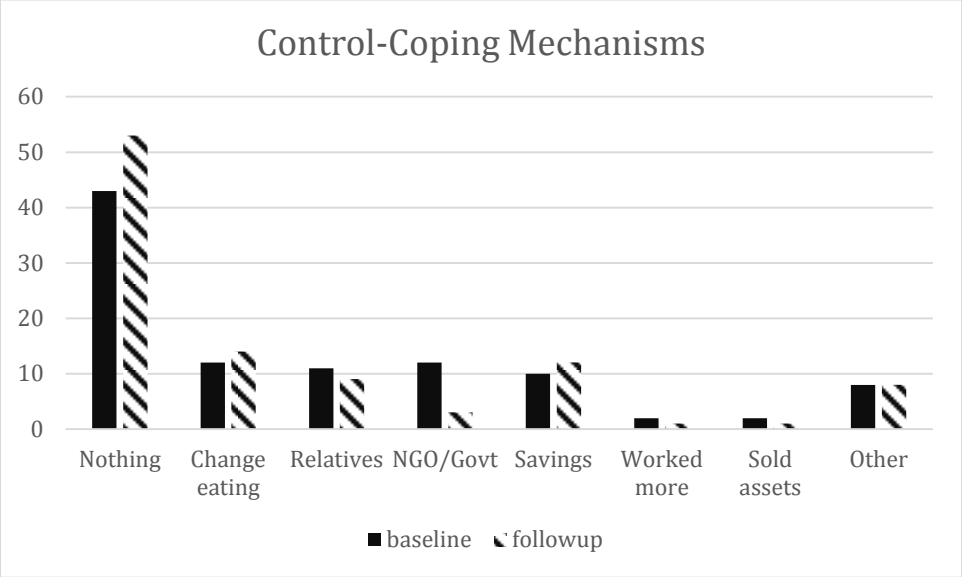
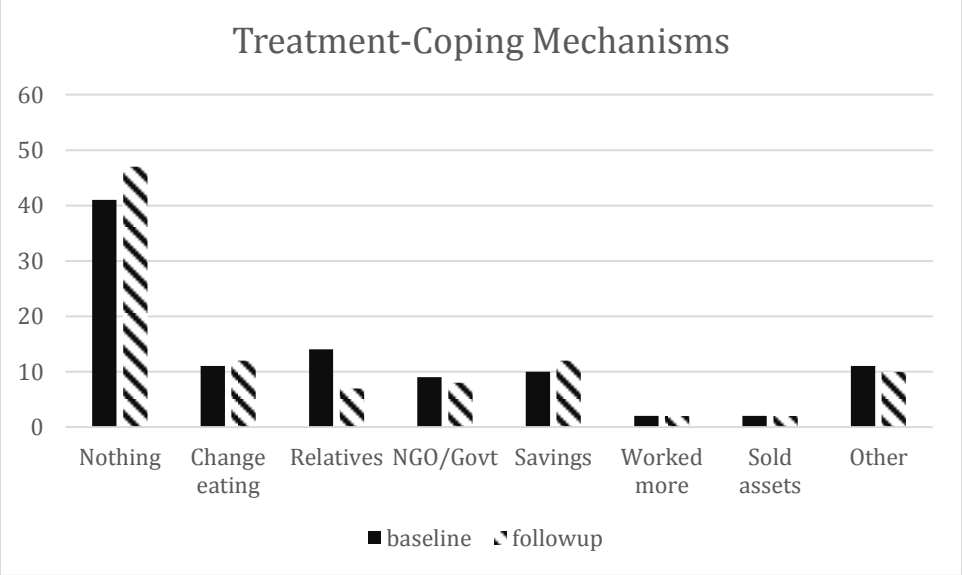


Figure 3. Treatment Coping Mechanisms



9.5 Summary of Effects on Resiliency

The results above suggest that after only 12 months the HSCT may already be enabling households to strengthen their resiliency. Specifically, the programme has led to improvements in a number of domains that are typically associated with strengthening resilience, including increased agricultural assets (hoes, sickles) and livestock (goats, donkeys), diversifying income sources (different cropping patterns, more NFE), and a reducing debt (improvement in credit market position). The programme leads to a reduction in exposure to shocks among smaller households, a somewhat surprising result given that the most important shocks faced by households are covariate shocks, such as price increases, crop failure and drought. Nevertheless, given that the programme has only been operating for one year, there are some clear positive indications that the HSCT may be helping households become more resilient.

10. Health and material well-being of children

The conceptual framework demonstrates ways the HSCT could impact health outcomes, such as if a beneficiary seeks treatment if he or she has been sick in the past 30 days. Meanwhile, some life circumstances, such as having a disability or caring for a chronically ill person, can also moderate the impact of the programme on other outcomes. On average, we do not find any programme impacts on health indicators (i.e., disability, morbidity, or chronic illness and care-seeking behaviours) for all persons in the household or for those under 5 years, nor do we find significant impacts on the material well-being of older children overall. We do, however, find positive impacts on material well-being of children in smaller households, and some negative impacts on young child morbidity and care-seeking among larger households which is consistent with our household size-based findings on other indicators. We also find some positive impacts on care received by the chronically ill in labour-constrained households, also supporting the notion that in Zimbabwe household demographic composition is an important moderator of programme impacts.

10.1 Health

The percent of the study population that *has a disability* remains at six percent – unchanged from baseline to follow-up across the two arms of the study. We find the HSCT has significantly decreased the likelihood of those with disability seeking care by 12 percentage points. However, this impact estimate is driven by an increase in the percentage of people in the comparison group seeking care, which is so great that it drowns out the increase in the treatment group and, in fact, yields a negative impact estimate. Specifically, care-seeking behaviour among those with disabilities increased by 8 percentage points among beneficiary households, and increased by 17 percentage points among control group households.

The *morbidity* rate (i.e., the population who was sick or injured in 30 days prior to data collection) at follow-up was over 25 percent of the population, with more than two-thirds of this population seeking treatment. The percentage seeking treatment declines slightly across both study arms in the follow-up period (by five percentage points), though this impact is not significant.

Table 10.1: Impacts on Health: Entire Panel of Individuals

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12-M Treated Mean (3)	12M Control Mean (4)
Chronically ill (N=25,476)	-0.00	0.10	0.09	0.09
	(-0.04)			
Chronically ill people receiving Home Based Care (N=2,344)	0.01	0.03	0.05	0.03
	(0.88)			
Chronically ill people receiving some kind of care (N= 2344)	0.09	0.73	0.82	0.77
	(1.49)			
People with disability (N= 25486)	0.00	0.06	0.06	0.06
	(0.35)			
Disabled population receiving care (N=1547)	-0.12**	0.38	0.46	0.55
	(-1.99)			
Morbidity (if sick/injured in last 30 days) (N=25448)	0.00	0.26	0.28	0.27
	(0.23)			
Sick/injured people who sought curative care (N=6692)	-0.02	0.73	0.68	0.68
	(-0.53)			
Sick/injured people who spent $ for treatment (N=6692)	-0.04	0.32	0.27	0.24
	(-1.06)			
N	12,137	4,017	4,123	1,988

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

In general, the incidence of *chronic illness* is low, with only 10 percent of the treatment group suffering from a chronic illness at baseline. In Table 10.2 we show that the programme has a positive impact of 10 percentage points (significant at 10 percent level) on the percentage of chronically ill who are seeking home-based care or any sort of treatment, specifically in labour-constrained households. This aligns with our assessment at baseline that impacts of the programme on labour constrained households may be greater than the impacts on poor eligible households that are not labour-constrained (i.e., do not have a disabled or chronically ill person), as we would expect the labour-constrained to focus more on the protective aspects of the programme since they are unable to contribute to household productivity. We also find a negative programme impact on the percentage of people who spend money for treatment for a sickness or injury in households that are not labour constrained.

Table 10.2: Impacts on Health: By Individuals Belonging to Labour Constrained Status of Household

	Labour Constrained N= 18,739		Not Labour Constrained N = 6,737	
Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Program Impact (3)	Baseline Treated Mean (4)
Chronically ill	-0.01	0.11	0.01	0.06
	(-0.45)		(0.98)	
Chronically ill people receiving Home Based Care	0.03*	0.02	-0.01	0.07
	(1.81)		(-0.59)	
Chronically ill people receiving some kind of care	0.10*	0.72	-0.02	0.78
	(1.74)		(-0.19)	
People with disability	0.00	0.08	0.01	0.02
	(0.26)		(1.14)	
Disabled population receiving care	-0.09	0.40	-0.48	0.20
	(-1.34)		(-1.94)	
Morbidity (if sick/injured in last 30 days)	0.03	0.28	-0.04	0.21
	(1.63)		(-1.38)	
Sick/injured people who sought curative care	0.01	0.73	-0.05	0.76
	(0.15)		(-0.77)	
Sick/injured people who spent $ for treatment	0.01	0.30	-0.18***	0.40
	(0.14)		(-3.10)	

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance
The N provided is the number of observations used for estimating the program impact on the first indicator, which indicates if the individual is chronically sick.

We do not find any statistically significant impacts on health indicators at the household level. However, we do find that the percentage of households that seek care for a chronic illness or disability increased by 3-6 percentage points in both study arms (though not significant).[17]

10.2 Morbidity of Younger Children

At baseline, almost half the children in the treatment group under age five experienced diarrhoea, fever, or cough in the prior two weeks (48 percent) and parents of more than half of these children sought treatment for them (61 percent). At follow-up, we find that prevalence of illnesses increased dramatically in both study arms, but even more so in the treatment group which indicates a programme effect of 15 percentage points (Table 10.3). We also see that children in programme households are less likely to seek curative care (negative programme impact of 18 percentage points). Table 10.3 shows these results.

[17] See Annex F for table of estimates of the programme on morbidity indicators at the household level.

Table 10.3: Impacts on Health of Children 0-5 years of age: Panel of Individuals

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Children who had diarrhoea/fever/cough in last two weeks (N= 3281)	0.15***	0.48	0.41	0.36
	(2.82)			
Children who sought care for diarrhoea/fever/cough (N=1458)	-0.18**	0.61	0.56	0.67
	(-2.47)			
Children who have health card (N=3210)	0.03	0.82	0.78	0.87
	(0.93)			

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

However, Table 10.4 illustrates that these results are entirely driven by young children living in large households. While the reason for the worsening morbidity in larger households is not immediately clear, the results are consistent with an overall pattern of heterogeneous impacts by household size with larger households typically faring worse than smaller households.

Table 10.4: Impacts on Health of Children 0-5 years of age: By Household Size

	Household Size<=4 N = 337		Household Size>4 N = 2,944	
Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Program Impact (3)	Baseline Treated Mean (4)
Children who had diarrhoea/fever/cough in last two weeks	-0.16	0.56	0.18***	0.47
	(-1.09)		(2.85)	
Children who sought care for diarrhoea/fever/cough	0.02	0.61	-0.22***	0.60
	(0.10)		(-2.75)	
Children who have health card	0.08	0.86	0.02	0.81
	(1.39)		(0.45)	

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance
The N provided is the number of observations used for estimating the program impact on the first indicator, which indicates if the child has suffered from diarrhoea/fever/cough.

Finally, the HSCT does not have any impact on the three common child anthropometric indicators of height for age (stunting), weight for height (wasting) and weight for age (underweight) overall or when stratified by household size, as shown in Table 10.5.

Table 10.5. Impacts on Anthropometric Outcomes, Aged 0-60 months at Baseline

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
z-score weight/age	-0.25	-0.70	-.53	-0.33
	(-1.60)			
z-score height/age	-0.05	-1.29	-1.08	-1.00
	(-0.29)			
z-score weight/height	-0.26	0.05	0.07	0.34
	(-1.45)			
< -2 height/age	0.03	0.31	0.25	0.22
	(0.40)			
< -2 weight/height	-0.00	0.03	0.03	0.03
	(-0.10)			
< -2 weight/age	-0.01	0.12	0.08	0.06
	(-0.60)			
< -3 height/age	-0.02	0.11	0.08	0.07
	(-0.53)			
< -3 weight/age	0.03	0.03	0.02	0.01
	(1.77)			
N	2,170	1040	914	417

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Anthropometric measures are unlikely to change dramatically in a 12-month period because the link between the cash transfer and child nutritional status is contingent on a number of behavioural and environmental factors.

10.3 Material Well-Being of Older Children

We do not find significant impacts on material well-being of older children, as measured on a three point scale where a child gets a point for having a shared blanket, a second set of clothing, and shoes. However, the percentage of children ages six to 17 that had these three items in the treatment group increased from 37 percent at baseline to 64 percent at follow-up. We show these results in Annex F.

The programme does significantly increase the material wellbeing of children belonging to households with four or fewer members by 11 percentage points. It also increases the material wellbeing of children belonging to households where the main respondent is male by 27 percentage points, a result which is primarily driven by an increase in the proportion of children with shoes. Table 10.6 shows these impacts.

Table 10.6: Impacts on Material Well Being of Children (6-17 years): By Household Size and Main Respondent

	Household Size<=4 N=2,181	Household Size>4 N=9.949	Female Respondent N= 8,285	Male Respondent N= 3,845
Dependent Variable	Program Impact (1)	Program Impact (2)	Program Impact (3)	Program Impact (4)
All needs met	0.11*	0.05	-0.06	0.27***
	(1.65)	(0.93)	(-0.99)	(3.49)
Child has blanket	0.07*	0.01	0.00	0.06
	(1.91)	(0.46)	(0.01)	(1.53)
Child has shoes	0.10	0.06	-0.05	0.27***
	(1.40)	(1.17)	(-0.81)	(3.38)
Child has two sets of clothing	0.06	-0.05	-0.02	-0.04
	(1.46)	(-1.24)	(-0.57)	(-0.55)

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance
The N provided is the number of observations used for estimating the program impact on the first indicator, which indicates if all three material needs of children are met.

10.4 Summary

Overall, we find few positive impacts of the HSCT on health and nutrition or material well-being of children. However, as in previous sections, we see an important interaction between programme impacts and household size. The overall non-significant results make sense, as health outcomes are second-round effects that are not affected directly by the cash transfer but require a series of behavioural responses by the household induced by the income effect of the cash transfer. Rather, we would only expect to see impacts on indicators for which income is an important determinant or binding constraint. Care seeking behaviour in particular is offered free of charge in many clinics and local hospitals in Zimbabwe to those in need, hence it is unlikely that the HSCT would influence such behaviour unless the cash eliminated transportation costs and these costs were large barriers to access.

11. Education and child labour

11.1 Education

Improving human development – in particular on dimensions related to education – is present in the overarching objectives guiding the impact evaluation of the HSCT programme. Pathways through which the HSCT might have an impact on education outcomes for youth include money for school fees, uniforms, and supplies; reduced need for child labour time at home, thus freeing up time for school; and better health and nutrition, enabling children to attend school more often. Characteristics such as household size, gender of HSCT recipient, and distance to school may act as moderators of the programme's impact.

Overall, the HSCT has led to an increase in school enrolment among boys in primary school, and on grade progression at the primary level for children in small households despite the fact that enrolment rates were already quite high at the primary level. We find a negative impact on BEAM enrolment among beneficiaries, but this effect is mostly explained by the comparison group catching up while there is little change in the treatment group. We examine education impacts on 8 education outcomes related to BEAM scholarship aid enrolment, attendance, and grade progression for children of ages seven to 17, dividing indicators for primary school age children (7-12 years old) and secondary school age range (13-17 years old). We investigate the HSCT impact on the overall sample and carry out subgroup impact analysis by gender and household size, and describe in the text where differences exist. Additionally, we conduct sensitivity analyses by running the regressions with full samples of households at baseline and follow-up, and then restricting our analyses to only individuals in households that appear in both waves. Substantive results are not different when using the panel of households versus full samples at baseline and follow up.

Enrolment and Grade Progression

HSCT had no impact on enrolment and grade progression in primary ages for the overall sample, as shown in Table 11.1. School enrolment[18] and progression rates in primary ages were already high at baseline, at 94 percent for treated children and 88 percent for control children. Similarly, 94 percent of both treated and comparison children in primary ages were progressing through grades satisfactorily. Because of these high rates of enrolment and grade progression in primary ages at baseline, we anticipated that the programme would have a low impact on these indicators. When investigating impacts by household size, however, we do find that the HSCT increases the probability of school progression by seven percentage points for all children in primary school ages living in smaller households (as shown in Table 11.2). This is consistent with the larger effects of the programme on smaller households across indicators.

[18] It is important to highlight that this outcome was not balanced at baseline. Treated household children had enrolment rates of 94% and 71% in primary and secondary school ages, respectively. Comparison household children had enrolment rates of 88% and 64% in primary and secondary school ages, respectively.

Table 11.1: Impacts on Enrolment and Grade Progression

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Enrolment in primary	0.01	0.94	0.96	0.90
	(0.86)			
N	6,180	2,225	1,925	919
Enrolment in secondary	0.03	0.71	0.73	0.63
	(0.95)			
N	4,828	1,664	1,618	740
Grade progression primary	0.01	0.94	0.92	0.90
	(0.25)			
N	4,779	1,724	1,511	690
Grade progression secondary	-0.02	0.95	0.96	0.96
	(-0.91)			
N	3,287	1,139	1,127	481

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

Table 11.2: Impacts on Enrolment and Grade Progression by household size

Dependent Variable	Size>4: large Programme Impact	Size<=4: small Programme Impact	All Programme Impact
Enrolment in primary	-0.00	0.05	0.01
	(-0.19)	(1.49)	(0.86)
N	5,098	1,082	6,180
Enrolment in secondary	0.06	0.05	0.06
	(1.89)	(0.67)	(0.95)
N	3,861	967	4,828
Grade progression primary	-0.02	0.07**	0.01
	(0.93)	(2.00)	(0.25)
N	3,932	847	4,779
Grade progression secondary	-0.04	0.02	-0.02
	(-1.65)	(1.30)	(-0.91)
N	2,621	666	3,287

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

Additionally, when breaking up the sample by gender, we find that HSCT increases the probability of being enrolled in school by 3 percentage points for primary school-aged boys. As noted in the baseline report, girls outscored boys in terms of enrolment and grade progression in primary[19] and secondary school, so there was more room for the programme to improve boys' education outcomes.

Table 11.3: Impacts on Enrolment and Grade Progression by Gender

Dependent Variable	Boys Programme Impact	Girls Programme Impact	All Programme Impact
Enrolment in primary	0.03**	-0.01	0.01
	(2.32)	(-0.38)	(0.86)
N	3,081	3,099	6,180
Enrolment in secondary	0.03	0.02	0.03
	(0.70)	(0.49)	(0.95)
N	2,388	2,440	4,828
Grade progression primary	0.02	-0.01	0.01
	(0.74)	(-0.56)	(0.25)
N	2,326	2,453	4,779
Grade progression secondary	-0.03	0.00	-0.02
	(-1.12)	(0.14)	(-0.91)
N	1,610	1,667	3,287

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

Interestingly, there are no programme impacts at secondary level despite lower overall enrolment rates and higher out of pocket barriers to schooling. Qualitative data also point to possible reasons for these results on enrolment. Interviews with beneficiaries and community leaders indicated that HSCT recipients may be using the cash to pay off debts in school fees, rather than to enrol children who were not previously attending school. One caregiver from Mwenezi said, "The Cash Transfer has made a very big difference because all my children are now up to date in their school fees payment and they are going to school in complete school uniforms." A participant in a focus group of beneficiaries and non-beneficiaries in Mwenezi similarly described the relationship between school staff and parents:

> *Headmasters and parents have an interactive relationship on issues such as student performance and payment of school fees which could be negotiated for a later date payment. Teachers and parents have a good relationship and communication is through the School Development Committee (SDC) where they receive assistance – e.g., parents negotiate for a "grace period" to pay school fees and buy proper uniforms.*

[19] Baseline Report, p.30

This may partly explain why enrolment among beneficiaries did not change between baseline and follow-up.

BEAM Scholarships

BEAM is one component of the Government of Zimbabwe's Programme of Support (CPF Strategic Concept & Design, 23) which aims at increasing access to schooling for the poor children by paying school fees. The intent is for HSCT to complement BEAM, among other assistance programmes such as child protection services.[20] That is, HSCT and BEAM are part of a comprehensive package that aims to assist vulnerable children.

We find a slight decrease in BEAM receipt among beneficiary households while comparison households increase their BEAM enrolment. At baseline, 22 percent and 21 percent of treatment and control children in secondary grades, respectively, were receiving BEAM scholarship aid. At follow up we find a statistically significant proportion of children in secondary ages in comparison households receiving BEAM aid scholarships. This result is consistent with results from the process analysis, which revealed a lack of understanding on the part of district programme officials on the 'harmonisation' aspect of the programme. Many programme staff thought that HSCT beneficiaries should not also receive BEAM or other programme support. This may have affected any positive impact the HSCT would have on school enrolment.

Additionally, when stratifying by household size, we find the same negative impact as above is present in large households (>4 members) but not in small households.[21] This is consistent with the positive results on some of the other aspects of schooling among smaller households. Table 10.4 shows the programme's impact on receiving BEAM scholarship aid.

Table 11.4: BEAM Scholarships: Full Sample Weights

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
Received BEAM primary	0.00	0.16	0.14	0.16
	(0.15)			
N	5,618	2,037	1,768	823
Received BEAM secondary	-0.06**	0.21	0.18	0.25
	(-2.02)			
N	3,472	1,211	1,205	501

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

School Attendance

At the 12-month follow up, although both control and treated children increase their school attendance,[22] children in control households show a larger increase from their baseline mean.[23]

[20] Oxford Policy Management, *Qualitative Research and Analyses of the Economic Impacts of Cash Transfer Programmes in Sub Saharan Africa; Zimbabwe Country Case Study Report,* March 2013, OPML: Oxford, UK, p5

[21] Results not shown. We did not find differential impacts by sex.

[22] We define attendance as being present in school 4 or 5 days in the reference week, and estimate this effect only among those children actually enrolled in school.

[23] It is important to highlight that this outcome was not statistically balanced at baseline. For primary school attendance, 89% of the treatment sample and 78% of the comparison sample were attending school.

As a result, the HSCT reduces the probability of attending school by seven percentage points for beneficiary household children of secondary school age. This 'negative' attendance effect is driven by large increases in the control group from a low baseline of only 78%. In contrast, the mean enrolment rate at baseline among treated children was already 88 percent – leaving much less room for improvement (as shown in Table 11.5).

Table 11.5. Impacts on Education School Attendance: Using Full Sample Weights

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
Primary Attendance	-0.04 (-1.53)	0.89	0.94	0.92
N	4,906	1,467	1,768	823
Secondary Attendance	-0.07** (-2.09)	0.88	0.91	0.92
N	3,052	901	1,205	497

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

This effect is consistent when we stratify by gender, although we also find that the programme decreases the probability of school attendance by five percentage points for girls of primary school age. Table 11.6 shows these results.

Table 11.6. Impacts on Education School Attendance by Gender: Using Full Sample Weights

Dependent Variable	Girls Programme Impact	Boys Programme Impact	All Programme Impact
Primary Attendance	-0.05* (-1.89)	-0.02 (-0.57)	-0.04 (-1.53)
N	2,513	2,393	4,906
Secondary Attendance	-0.07* (-1.72)	-0.07* (-1.77)	-0.07** (-2.09)
N	1,552	1500	3,052

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

Finally, when we look at the programme's impact by household size, we find that the HSCT has a negative and large impact on school attendance of children of secondary ages living in small households; it reduces their probability of attending school by 25 percentage points (see Table 11.7).

Table 11.7. Impacts on School Attendance by Household Size: Using Full Sample Weights

Dependent Variable	Size > 4: Large Programme Impact	Size ≤ 4: Small Programme Impact	All Programme Impact
Primary Attendance	-0.05*	0.01	-0.04
	(-2.03)	(-0.12)	(-1.53)
N	4,073	833	4,906
Secondary Attendance	-0.02	-0.25***	-0.07**
	(-0.47)	(-2.84)	(-2.09)
N	2,440	612	3,052

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

These negative results on attendance may be partly related to the increase in comparison households receiving BEAM compared to treatment households among secondary aged children. One important reason for combining HSCT with BEAM Scholarships is that BEAM recipients have to follow school attendance requirements. BEAM recipients should therefore perform better than non-BEAM recipients on this dimension. Indeed, regression analysis using baseline data associates receiving BEAM scholarships with a higher probability of attending school by both children in primary and secondary ages.[24] Without this additional support from BEAM, it is possible that these secondary school aged beneficiaries – who also live in households that are small and labour constrained – attend school less frequently.

11.2 Child Labour

Our conceptual framework suggests that the HSCT might have an impact on child labour by reducing the need for help from children at home or their engagement in casual labour. Reduction in child labour is expected to positively impact education outcomes by freeing up time for school. We investigate child labour and time use outcomes related to domestic chores and farming activities for child beneficiaries ages six to 18, and maricho/casual labour and wage employment for individuals ages 10 to 18. For each indicator, we investigate the programme's impact on participation in the activity and intensity of participation (measured in hours or days). We also carry out subgroup impact analysis by gender and household size. Additionally, we conduct sensitivity analyses by running the regressions with full samples of households at baseline and follow-up, and then restricting our analyses to only individuals in households that appear in both waves. Substantive results are not different when using the panel of households versus full samples at baseline and follow up. The sample was balanced at baseline for all outcomes in this section.

[24]Probit regressions (using population weights) of secondary and primary school attendance on household demographic characteristics and a BEAM scholarship indicator show that, for children in both primary and secondary ages, BEAM aid is associated with an increase in the probability of school attendance of 7 percentage points ($p<0.01$).

Domestic Chores and Household Training Activities

When looking at the overall sample, we find no HSCT impact on participation in and hours employed on domestic chores and farming activities. This result is encouraging because it means that households are not making their children work more even though they have more money to purchase inputs like fertilizer and seed. At baseline, 44 percent of children reported having been engaged in domestic chores the previous day, and both boys and girls contributed to farming in terms of both participation (around 55 percent of the children) and intensity of work (around 23 days for the last cropping season). At follow up, both treated household children and comparison household children reduced their participation in domestic chores, though these results were not significant, as shown in Table 11.8 below.

Table 11.8: Impacts on Child Labour

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
Individual in maricho labour last year	-0.03	0.15	0.11	0.12
	(-1.39)			
N	8,463	2,900	2,774	1,339
Days of work in maricho labour last year	2.03	24.06	21.34	26.83
	(0.34)			
N	865	356	243	115
Individual in wage employment last year	-0.00	0.02	0.01	0.02
	(-0.68)			
N	8,435	2,890	2,761	1,336

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Table 11.9 shows that when stratifying by sex, we find that the HSCT significantly reduced the number of days girls spent on farming activities last rainy season by 5.6 days on average.

Table 11.9: Impacts on Child Labour and Children Time Use by Gender: Using Full Sample Weights

Dependent Variable	Boys Programme Impact	Girls Programme Impact	All Programme Impact
Individual was engaged in domestic chores yesterday	-0.06	-0.08	-0.07
	(-1.38)	(-1.43)	(-1.40)
Hours employed for all domestic chores yesterday	-0.17	-0.26	-0.21
	(-1.43)	(-1.52)	(-1.60)
Individual involved in any farming activities last rainy season	-0.03	-0.04	-0.04
	(-0.77)	(-1.40)	(-1.25)
Days worked in farming activities last rainy season	0.26	-5.55**	-2.60
	(0.09)	(-2.43)	(-1.18)
	6,121	6,024	12,145

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

Finally, this effect was also present for small HSCT households during the last rainy season which, on average, decreased the number of days dedicated to farming activities by 7.5 days (shown in Table 11.10).

Table 11.10: Impacts on Child Labour and Children Time Use by Household Size: Using Full Sample Weights

Dependent Variable	Size > 4 : large Programme Impact	Size ≤ 4: small Programme Impact	All Programme Impact
Individual was engaged in domestic chores yesterday	-0.06	-0.05	-0.07
	(-1.19)	(-0.79)	(-1.40)
Hours employed for all domestic chores yesterday	-0.15	-0.31	-0.21
	(-0.91)	(-1.43)	(-1.60)
Individual involved in any farming activities last rainy season	0.00	-0.08	-0.04
	(0.16)	(-1.16)	(-1.25)
Days worked in farming activities last rainy season	0.29	-7.54*	-2.60
	(0.12)	(-1.90)	(-1.18)
	9,901	2,244	12,145

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

Given the indications in qualitative data that households are using the transfer to pay off debts, the need for children to engage in household chores or labour may have still been present. Child labour is quite common among households, with domestic chores and farming being the most common activities performed by children. As noted in the baseline report, both girls and boys have participation patterns similar to those of adults of the same gender.[25] Additionally, the lack of impacts on child labour may be related to the negative programme impact on school enrolment.

Maricho/Casual Labour and Wage Employment

In the overall sample we find no impact of the HSCT on participation in and days worked in maricho/casual labour and wage employment. When stratifying by household size, we find that HSCT reduces the probability of casual labour/maricho participation by five percentage points in individuals between 10 and 18 years old in large households[26] (Table 11.11 shows this result). While participation in maricho/casual labour and wage employment is not as common as participation in domestic chores and farming activities[27] for individuals in this age group, qualitative findings suggest that children drop out of school to engage in these activities.

[25] Baseline Report, p 60. Appendix E, Table E.3
[26] We find no differential impact by sex.
[27] At baseline, between 13 and 15 percent of children in the relevant age range reported having been involved in maricho labour last year, while only two percent said they had engaged in wage employment for the same period of time

Table 11.11: Impacts on Child Labour by Household Size

Dependent Variable	Size>4 : large Programme Impact	Size<=4: small Programme Impact	All Programme Impact
Individual in maricho labour last year	-0.05**	0.01	-0.03
	(2.21)	(0.22)	(-1.39)
N	6,769	1,649	8,463
Days of work in maricho labour last year	0.87	13.89	2.03
	(0.12)	(1.11)	(0.34)
N	698	167	865
Individual in wage employment last year	-0.01	0.00	-0.00
	(-0.71)	(0.22)	(-0.68)
N	6,745	1,690	8,435
Days of work in wage last year	15.25	-193.56	-69.03
	(0.16)	(-0.44)	(-1.36)
N	67	28	95

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

11.3 Summary

The analysis of schooling outcomes has revealed some interesting dynamics surrounding the HSCT programme. The process analysis confirms that the programme is not harmonised at the local level and beneficiaries are not brought into the BEAM program at the same rate as comparison households. This of course offsets any positive impact the HSCT has on school enrolment, so that we in fact find very small effects of the programme on enrolment, concentrated at primary rather than secondary levels, when we would expect the opposite given the larger out of pocket costs associated with secondary school. We also see no change in attendance rates among the treatment group while the control group catches up, which can also be traced to receipt of BEAM as attendance is a requirement for such assistance. On the plus side, the overall attendance levels among beneficiary children is the same as among the comparison group, indicating the that the effect is due to catch-up among comparison children, and may be due to increased receipt of BEAM in that group. A further positive result is that child labour due to the programme has not gone up, and has actually declined in some activities (farming).

12. Adolescents

Improving the human development—including access to health and education, reduced abuse, and HIV risk—of children and adolescents is one of four overarching objectives guiding the impact evaluation of the HSCT programme. Of particular interest to programme planners and evaluators of the HSCT programme are impacts on adolescents as they transition to adulthood.

Pathways through which the HSCT may influence adolescent outcomes include household spending and household time allocation decisions. Characteristics such as household size, gender of the HSCT recipient, and environmental factors such as distance to schools and health facilities may moderate programme impacts. We examined programme impacts on six broad categories of youth outcomes, including: 1) sexual debut, marriage, pregnancy, 2) risky sexual behaviours among youth who had ever had sex, 3) mental health, 4) alcohol use, 5) HIV perceptions and testing, and 6) physical and sexual violence.

To assess these outcomes, interviews with youth were administered during baseline (when adolescents were aged 13 to 20 years) and during the 12-month follow-up data collection (when adolescents were aged 14 to 21 years). Additionally, information on marriage and pregnancy among these youths was obtained from the main household questionnaire, which interviewed the main household respondent. Due to the sensitive nature of the questions, youth interviews were conducted in private by enumerators of the same sex as the youth. No interviews were conducted if privacy could not be assured. Informed consent was obtained from parents of youth aged 17 and under, and assent was also obtained from these youth. For youth aged 18 and above, informed consent was obtained directly from the youth. Referral information for Childline, a telephone-based crisis line with trained counsellors providing multi-lingual counselling in English, Shona and Ndebele, was provided to all interviewed youth in the event they wanted professional counselling relating to the subject matter discussed. Youth who were at risk and requested assistance were also referred to their local District Social Services Officers (DSSOs).

The sample for analysis included adolescents residing in households interviewed at both waves (though adolescents may have been interviewed at only one wave). Impacts were estimated using DD modelling for current or time variant measures (e.g., CESD or those with 12-month recall periods). For outcomes that were lifetime measures (e.g., ever had sex, ever experienced forced sex, etc.), we analysed only those who had not reported experiencing the outcome at baseline. For these outcomes, we performed cross-sectional analyses at follow-up comparing control and treatment groups. The rationale is that youths who have already sexually debuted (or experienced other lifetime outcomes) had no likelihood of being influenced by the programme with respect to this outcome, and thus there would be no variation in their outcomes over the panel period. Standard errors were adjusted for clustering at the ward level, and weights adjusted for attrition and probability of selection were used to provide population-level estimates of programme impacts. Controls used were the same as in the household-level models, however we also controlled for sex and baseline age of the adolescent. In addition to overall impacts, we report findings stratified by household size (small indicating four or fewer members and large indicating over four members). We also tested for differences by gender of household head (results not shown), and describe in the text where differences exist. Finally, we ran sensitivity analyses to test for differential impacts by adolescent's sex for key outcomes.

Overall, the sample (N = 798) was balanced at baseline between treatment and control youth with respect to the 25 outcomes examined (results not shown). There were three exceptions at the

p<0.05 level (control youth were more likely to have ever received an HIV test and receive the outcome of HIV test, and treatment youth were more likely to perceive themselves to be at moderate/high risk of HIV), and there were three exceptions at the p<0.10 level (control youth were more likely to have been pregnant and report consensual first sex and less likely to report forced sex).

12.1 Sexual Debut, Pregnancy, and Marriage

Poverty and early sexual debut, pregnancy, and marriage are intertwined in a cycle that heightens vulnerability to each condition, decreasing future potential productivity and well-being. Evidence from some existing cash transfer programmes (including two in Africa—in Malawi and Kenya) has demonstrated the programmes' abilities to delay sexual debut [28,29], childbearing[1,30], and marriage[1,3] among adolescents. However, another study from Zambia found no significant programme impacts on adolescent childbearing or sexual debut.[31]

In the overall sample, we found no impacts on adolescent pregnancy, but evidence was mixed by household size. At baseline, 12 percent and 17 percent of the treatment and control females, respectively, reported ever having been pregnant (p<.10). By the 12-month follow-up, the percentage of all female adolescents reporting having ever been pregnant was 17 percent and 19 percent in the treatment and the control samples respectively. To analyse programme impact on this indicator on a cross-section at follow-up, we dropped seven percent of the sample (those who reported pregnancy prior to the programme initiation). Treatment youth in large households were one percentage point more likely to have been pregnant in small households (p<.05) and three percentage points less likely to have ever been pregnant than control youth in large households (p<0.10).

Table 12.1. Impacts on Adolescent Pregnancy, Females aged 12-20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Ever pregnant	-0.01 (-0.65)	0.12	0.17	0.19	0.01** (2.05)	-0.03* (-1.73)
N	1088	642	765	323	215	873

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

We find significant programme impacts on reports of early marriage. In the overall sample, youth in treatment households were two percentage points less likely to have ever been married or co-habiting at follow-up than those in control households (p<0.10), and this impact is driven by youth in large households. By the 12-month follow-up, the total percentage of adolescents

[28] Baird, S., et al.,*"The short-term impacts of a schooling conditional cash transfer programme on the sexual behavior of young women.* Health Economics, 2010. **19**(S1): p. 55-68.
[29] Handa, S., et al., *The Government of Kenya's Cash Transfer Programme Reduces the Risk of Sexual Debut among Young People Age 15-25.* PloS one, 2014. **9**(1): p. e85473.
[30] Gulemetova-Swan, M., *Evaluating the impact of conditional cash transfer programs on adolescent decisions about marriage and fertility: the case of oportunidades.* 2009.
[31] American Institutes for Research (AIR), *Zambia's Multiple Category Program: 24-Month Impact Report*. August 2014, AIR: Washington, DC

reporting having ever been married or co-habiting is 17 percent and 23 percent in the treatment and the control samples, respectively. Similar to the analysis of early pregnancy, for the cross-sectional analysis at follow-up, we dropped four percent of the sample aged 12 to 20 at baseline who reported being married or co-habiting prior to the programme initiation.

Table 12.2. Impacts on Adolescent Marriage and Co-habitation, Aged 12-20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Ever married or co-habited	-0.02*	0.12	0.17	0.23	-0.04	-0.02**
	(-1.91)				(-1.49)	(-2.20)
N	2410	1396	1586	713	484	1903

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

We found the programme had a large, negative impact on likelihood of sexual debut (13 percentage points among the entire sample, and ranging from 13 to 14 percentage points among large and small households, respectively; $p<0.01$). Approximately seven percent of the treatment sample and 13 percent of the control sample aged 13 to 20 at baseline reported having had sex prior to the programme initiation. By the 12-month follow-up, the percentage of adolescents reporting having sexually debuted is 18 percent and 29 percent in the treatment and the control samples, respectively. These results were driven by female youth, and there were no significant impacts among male youth (results not shown). When stratifying by sex of the main respondent/household head, we found significant, negative impacts in female-headed households, but not male-headed households (results not shown).

Table 12.3. Impacts on Adolescent Sexual Debut, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Ever had sex	-0.13***	0.08	0.17	0.28	-0.14**	-0.13**
	(-3.25)				(-2.43)	(-2.45)
N	787	553	539	248	174	613

Notes: *10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log(household size), recipient age, recipient education and marital status, household demographic composition, and a vector of cluster-level prices.

12.2 Risky Sexual Behaviours

In addition to sexual debut, we examined various indicators of risky sexual behaviours among the sample reporting having engaged in sex, including characteristics surrounding first sex (age, partner's age, and condom use) and characteristics of recent sexual activity (number of partners, condom use, and most recent partner's age). We first examined whether youth had ever engaged in transactional sex (defined as giving or receiving gifts, favours or money for sex). At programme baseline seven percent and 13 percent of treatment and control youth, respectively, reported ever engaging in transactional sex ($p<0.10$), and this figure dropped to four percent and seven percent respectively among treatment and control samples at follow-up. We dropped those

who reported transactional sex prior to programme initiation for our follow-up cross-sectional analysis and found no overall programme impacts on engaging in transactional sex; however, when stratifying by sex of the main respondent/household head, we did find significant, negative impacts in female-headed households (results not shown).

Table 12.4. Impacts on Adolescent Lifetime Transactional Sex, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Lifetime transactional sex	0.01	0.07	0.04	0.07	0.00	-0.01
	(-0.60)				(1.22)	(-1.38)
N	786	551	538	248	613	613

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

Among adolescents who had sexually debuted, we further examined sexual behaviours at first sex and most recent sex. The sample size of sexually experienced youth was relatively small [n=68 (8.7 percent) at baseline and n=139 (17.3 percent) at follow-up], and responses were not available for all sexual behaviour questions, so we were limited in our ability to draw conclusions about programme impacts on these outcomes. At baseline, among the treated sample, adolescents reported age at first sex of 15.26, while average partner age at first sex was 17.35. Approximately 77 percent of the treated sample reported that their first sex was consensual, and 46 percent used a condom at their first sex. To analyse these characteristics of first sex, we dropped all youth who reported sexual debut at baseline for our cross-sectional analysis at follow-up. The programme positively impacted adolescents' likelihood of reporting condom use at first sex ($p<0.05$) among the full sample and among the sample of adolescents residing in large households. Further, though there were no overall impacts on consensual first sex, the programme negatively impacted reporting of consensual first sex in female-headed households (results not shown; $p<0.10$). Impacts among the sample of youth residing in small households were not estimated due to small sample sizes for many outcomes.

Table 12.5. Impacts on Characteristics of Adolescent First Sex, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Age first sex (N=134)	0.23 (0.82)	15.26	16.10	15.80	-0.32 (-0.90)	0.29 (0.89)
First sex consensual (N=134)	0.02 (0.18)	0.77	0.70	0.62	-	0.13 (1.16)
First sex-Condom used at first sex (N=134)	0.27** (2.65)	0.46	0.43	0.15	-	0.22* (1.89)
Partner age at first sex (N=121)	0.89 (1.15)	17.35	18.84	20.83	-	2.33** (2.69)

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

Turning to outcomes on recent sexual experiences, at baseline approximately 10 percent of the treated sample reported having unprotected sex in the past three months, and reported overall 4.16 sexual acts during that time. Adolescents in the treatment group reported an average of one partner in the last 12 months at baseline, and an age of 18.75 for their most recent partner at baseline. We found no overall programme impacts on characteristics of recent sexual behaviours. Similar to characteristics of first sexual experiences, due to small sample sizes, we were limited in our ability to draw conclusions about programme impacts on these outcomes, particularly in stratified analyses.

Table 12.6. Impacts on Characteristics of Adolescent Recent Sex, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean	Small HH Program Impact	Large HH Program Impact
	(1)	(2)	(3)	(4)	(5)	(6)
Unprotected sex, last 3 months (N=130)	0.49 (0.14)	0.10	0.37	0.79	-	0.06 (0.19)
Number sex acts, last 3 months (N=126)	5.06 (0.35)	4.16	5.98	15.97	-	1.46 (0.10)
Number partners, last 12 months (N=207)	0.07 (0.10)	1.00	1.26	1.09	-6.67 (-1.52)	0.07 (0.08)
Age of most recent partner (N=145)	1.71 (0.85)	18.75	21.51	22.89	19.87 (1.16)	4.77* (1.86)

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust t- and z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

12.3 Mental Health and Well-being

Mental health is a key component of the World Health Organization's (WHO's) definition of health,[32] and is important for enabling adolescents to reach their full potential in terms of education and productivity. A study from Malawi demonstrated the ability of a cash transfer programme to improve female adolescent mental health outcomes, and the authors concluded these impacts were mediated through physical health, increased schooling and family support for education, as well as higher levels of individual consumption and leisure.[33]

We operationalized mental health and well-being using two indices: 1) Center for Epidemiological Studies-Depression Scale (CES-D) [34] and 2) the Hope Scale.[35] Specifically, we used a ten-item short-form of the CES-D scale based on a longer 20-item scale and has been validated internationally[36,37,38] and implemented in Africa.[39] The CES-D has high internal consistency and reliability in household surveys across a variety of demographic

[32] World Health Organization. [cited 2014 5 December]; Available from: http://www.who.int/about/definition/en/print.html.
[33] Baird, S., J. De Hoop, and B. Özler, *Income shocks and adolescent mental health.* Journal of Human Resources, 2013. **48**(2): p. 370-403.
[34] Radloff, L.S., *The CES-D scale a self-report depression scale for research in the general population.* Applied Psychological Measurement, 1977. **1**(3): p. 385-401.
[35] Snyder, C.R., et al., *Development and validation of the State Hope Scale.* Journal of Personality and Ssocial Psychology, 1996. **70**(2): p. 321.
[36] Boey, K.W., *Cross K.Widation of a short form of the CES-D in Chinese elderly.* International Journal of Geriatric Psychiatry, 1999. **14**(8): p. 608-617.
[37] Bojorquez Chapela, I. and N. Salgado de Snyder, *Psychometric characteristics of the Center for Epidemiological Studies-depression Scale (CES-D), 20-and 10-item versions, in women from a Mexican rural area.* Salud Mental, 2009. **32**(4): p. 299-307.
[38] Cheung, Y.B., K.Y. Liu, and P.S. Yip, *Performance of the CESu, and P.S. Yip, ter for Epidemiological Srom: ced abuse, anness in the Community.* Suicide and Life-Threatening Behavior, 2007. **37**(1): p. 79-88.
[39] Onuoha, F.N., et al., *Negative mental health factors in children orphaned by AIDS: natural mentoring as a palliative care.* AIDS and Behavior, 2009. **13**(5): p. 980-988.

characteristics.[40] Questions were asked on a Likert scale regarding feelings and behaviours in the past seven days. To calculate the scale, scores are summed for all 10 questions and can range from 0 to 30, with higher scores reflecting more depressive symptoms. We further constructed a binary outcome variable indicating whether the respondent scored above a validated threshold for depression (score > 20). The Hope Scale defines hope as "as a cognitive set compromising agency (belief in one's capacity to initiate and sustain actions) and pathways (belief in one's capacity to generate routes) to reach goals."[8]

We find no programme impacts on mental health as measured by CES-D or the Hope scale, and no heterogeneous impacts by gender of main household respondent or household size. At baseline, we found that the sample of adolescents in treatment households had a CES-D score of 19.23 (60 percent qualified as not depressed) and reported an average Hope scale of 18.06.

Table 12.7. Impacts on Adolescent Mental Health, Aged 13 to 20 at baseline

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean	Program Impact	Program Impact
	(1)	(2)	(3)	(4)	(5)	(6)
CES-D	0.85	19.23	18.55	17.48	-1.56	1.24
	(0.97)				(-1.22)	(1.36)
Not depressed	-0.05	0.59	0.66	0.71	0.15	-0.08
	(-0.75)				(1.18)	(-1.06)
Hope scale	0.30	18.06	18.24	17.70	0.80	0.27
	(0.38)				(0.60)	(0.28)
N	1,605	553	554	253	326	1,279

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust t-and z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

12.4 Alcohol use

The potential for increased expenditures on alcohol and tobacco is often cited as an argument against unconditional cash transfer programmes. However, studies to date from unconditional cash transfers have found little evidence that programmes increase spending on alcohol and tobacco.[41,42] We, too, find no meaningful impacts on alcohol consumption among adolescents. Approximately nine percent of the baseline treatment sample report having ever drunk alcohol (defined as ever had a drink of alcohol, other than a few sips). Consistent with the existing evidence, we found no meaningful impacts on alcohol consumption among adolescents. We were not able to analyse programme impacts on smoking due to the low percentage of adolescents in our sample who had ever smoked [n=22 (2.4%) at baseline and n=25 (3.10%) at follow-up].

[40] Andresen, E.M., et al., *Screening for depression in well older adults: Evaluation of a short form of the CES-D.* American Journal of Preventive Medicine, 1994.
[41] The Kenya CT-OVC Evaluation Team, *The impact of the Kenya Cash Transfer Programme for Orphans and Vulnerable Children on household spending.* Journal of Development Effectiveness, 2012. **4**(1): p. 9-37.
[42] Evans, D.K. and A. Popova, *Cash Transfers and Temptation Goods: A Review of Global Evidence.* World Bank Policy Research Working Paper, 2014. **6886**.

Table 12.8. Impacts on Adolescent Alcohol Use, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Ever drank Alcohol	0.00	0.09	0.07	0.06	-0.00**	0.00
	(0.35)				(-2.17)	(0.12)
N	788	553	541	247	326	1,276

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

12.5 HIV Perceptions and Testing

Evidence is largely lacking on cash transfers' abilities to prevent the transmission of HIV, [43] despite the aforementioned growing body of evidence on cash transfers' impacts on intermediate outcomes (*i.e.*, those related to sexual behaviours). One evaluation in the Zomba district of Malawi found that the programme reduced the odds of contracting HIV,[44] though there were very few HIV-positive individuals in the sample and the weighted results may have driven the statistically significant findings.[45]

At baseline, 15 percent and 27 percent of treatment and control youth, respectively, reported ever having had an HIV test ($p<0.05$). We dropped those who reported lifetime HIV testing at baseline for our follow-up cross-sectional analysis (six percent) and found a negative programme impact on lifetime reports of having had an HIV test ($p<0.01$), and this result appears to be driven by youth in large households, as there was no significant impact in small households. We did not collect biomarkers in this study to test actual HIV prevalence.

Table 12.9. Impacts on Adolescent Lifetime HIV Testing, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
HIV test-Lifetime	-0.19***		0.30	0.51	0.00	-0.27***
	(-3.10)				(0.02)	(-3.45)
N	645	0	447	198	140	505

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

At baseline, five percent and two percent of treatment and control youth, respectively, considered themselves to be at moderate to high risk of contracting HIV ($p<0.05$). We found, in small households only, that the programme decreased by 26 percentage points the probability that a

[43] Pettifor, A., et al., *Can money prevent the spread of HIV? A review of cash payments for HIV prevention.* AIDS and Behavior, 2012. **16**(7): p. 1729-1738.
[44] Baird, S.J., et al., *Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: a cluster randomised trial.* The Lancet, 2012. **379**(9823): p. 1320-1329.
[45] Webb, E.L., R.J. Hayes, and J.R. Glynn, *Cash transfer scheme for reducing HIV and herpes simplex type 2.* The Lancet, 2012. **380**(9844): p. 802.

youth thought they were at moderate or high risk of contracting HIV ($p<0.05$). We also found that the programme reduced the probability of having an HIV test in the past 12 months by nine percentage points in the overall sample (and 10 percentage points in large households; $p<0.10$).

Table 12.10. Impacts on Adolescent HIV Testing and Self-Perceived HIV risk, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Self-perceived HIV risk Moderate/High	-0.03 (-0.84)	0.05	0.06	0.05	-0.26** (-2.08)	-0.03 (-1.04)
HIV Test, last 12 months	-0.09* (-1.91)	0.12	0.22	0.45	0.04 (0.24)	-0.10* (-1.54)
Received HIV results	-0.00 (-0.07)	0.12	0.24	0.44	0.20 (1.08)	-0.04 (-0.59)
N	1,327	443	468	215	260	1,067

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

Qualitative data from IDIs with beneficiaries suggest that obtaining HIV/AIDS-related medications has gotten easier since the inception of the HSCT programme. In terms of HIV/AIDS-related changes over the past year, a number of interviewees reported that obtaining medication had gotten easier. To this end, an HIV-positive caregiver from Mwenezi reported: "There is change these days because in the past it was difficult to get our pills but now it's easy." Another caregiver from Mwenezi echoed these sentiments, saying "People are sick and they get their pills. Many passed away last year because of lack of medication but as of this year people are getting medication."

12.6 Physical and Sexual Violence

A growing body of evidence examines the impacts of cash transfer programmes on intimate partner violence,[46] however, to our knowledge, no rigorous quantitative evaluations to date have examined impacts on violence perpetrated against children and adolescents. Cash transfer programmes may alleviate stress within households, which in turn may decrease the amount of physical violence perpetrated by other household members against adolescents and children.

[46] Angelucci, M., *Love on the rocks: Domestic violence and alcohol abuse in rural Mexico.* The BE Journal of Economic Analysis & Policy, 2008. **8**(1).
Bobonis, G. and R. Castro, *The role of conditional cash transfers in reducing spousal abuse in Mexico: short-term vs. long-term effects.* University of Toronto, Toronto. Processed, 2010.
Bobonis, G.J., M. González-Brenes, and R. Castro, *Public transfers and domestic violence: The roles of private information and spousal control.* American Economic Journal: Economic Policy, 2013. **5**(1): p. 179-205.
Hidrobo, M. and L. Fernald, *Cash transfers and domestic violence.* Journal of Health Economics, 2013. **32**(1): p. 304-319.
Hidrobo, M., A. Peterman, and L. Heise. *The effect of cash, vouchers and food transfers on intimate partner violence: Evidence from a randomized experiment in Northern Ecuador*. in *SVRI Forum*. 2013.
Haushofer, J. and J. Shapiro, *Welfare Effects of Unconditional Cash Transfers: Evidence from a Randomized Controlled Trial in Kenya*, 2013.

At baseline, 49 percent and 46 percent of treatment and control youth, respectively, reported experience of physical violence in the last 12 months. This decreased to 38 percent and 25 percent, respectively, at follow-up. We found programme impacts in the opposite direction of that hypothesized on physical violence (defined as being slapped/pushed, punched/kicked, and/or threatened with a knife or gun in the last 12 months). We defined severe physical violence as having been punched/kicked, and/or threatened with a knife or gun in the last 12 months. The significant impacts on violence were driven by small households responses to the "slapped/pushed" category, as the programme increased the probability of youth reporting this outcome by 16 percentage points overall ($p<0.05$) and 34 percentage points in small households ($p<0.10$). Further, these impacts were significant in female-headed households, but not male-headed ones.

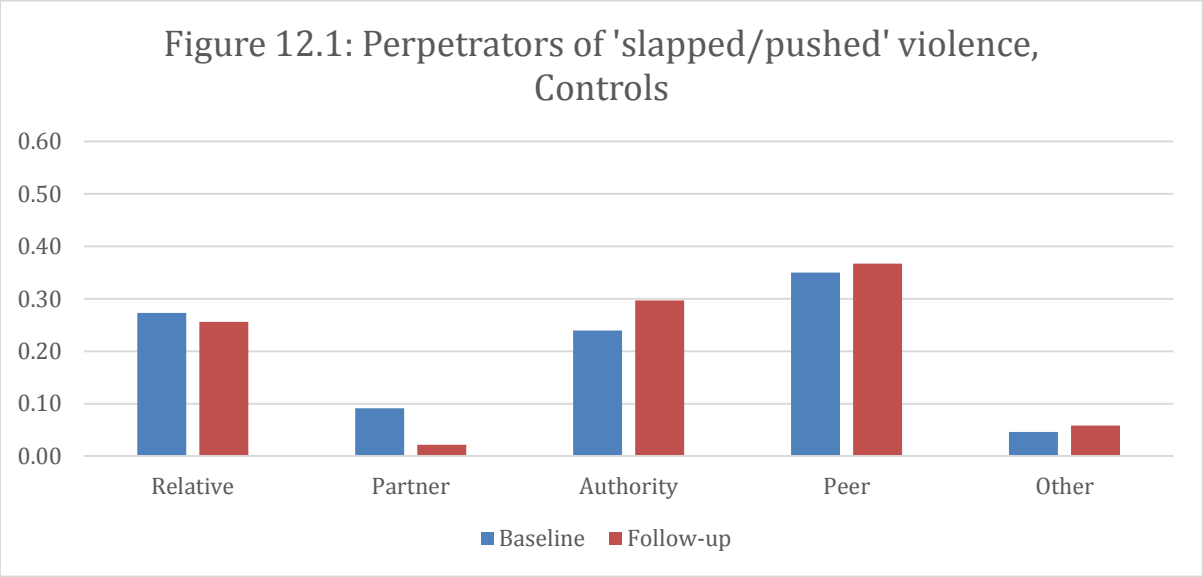
Table 12.11. Impacts on Adolescent 12-Month Reports of Physical Violence, Aged 13 to 20 at baseline

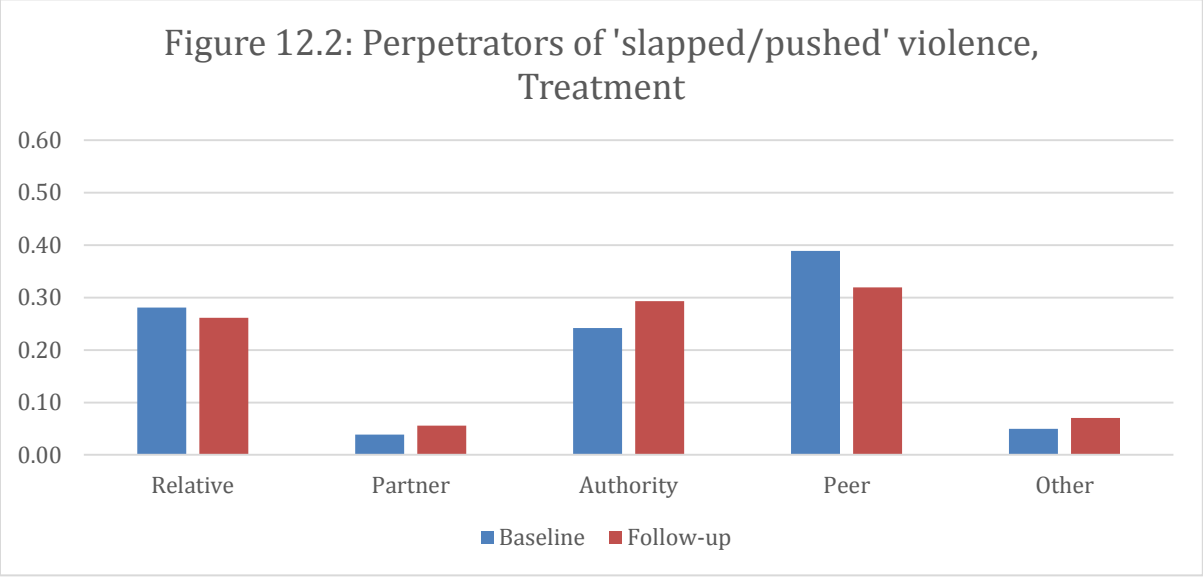
Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Experienced Physical Violence, last 12 months	0.16** (1.99)	0.49	0.38	0.25	0.39* (1.84)	0.11 (1.52)
Threatened with knife/gun, last 12 months	0.01 (0.66)	0.04	0.03	0.02	0.00 (0.90)	0.01 (0.66)
Punched/kicked, last 12 months	0.07 (1.32)	0.22	0.20	0.15	0.16 (1.18)	0.06 (1.03)
Slapped/pushed, last 12 months	0.16** (1.98)	0.41	0.27	0.15	0.34* (1.80)	0.12 (1.37)
Experienced severe physical violence, last 12 months	0.09 (1.39)	0.24	0.22	0.16	0.18 (1.30)	0.07 (1.17)
N	1,602	550	554	253	326	1,276

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

For the category of 'slapped/pushed' we further explored the perpetrators of violence as reported by the youth. Figures 21.1 and 12.2 show that the most common perpetrators are peers, relatives and authority figures. Among both control and treatment groups the proportion of perpetrators who were authority figures increased and the proportion who were relatives decreased. Hence the relative increase in reported violence among treatment youth is not due to increased domestic violence due to for example intra-household conflict surrounding the HSCT. Meanwhile among treatment youth, the proportion of perpetrators that are peers has actually declined while it has

increased among control youths. On the other hand there is a small increase in violence (slapped/pushed) perpetrated by partners from 4 to 6 per cent. Discussion with Ministry social welfare workers suggested that the increased *reporting* of violence in treatment households may be due to increased awareness brought about by child protection interventions operating in treatment areas linked to the HSCT; this increased reporting may not necessarily reflect actual increased prevalence of violence.





Incidence of sexual violence may also decrease among treatment adolescents if the programme lowers incentives to engage in risky sexual behaviours (e.g., transactional sex or engaging in relationships with unequal power dynamics). At baseline, two percent and one percent of treatment and control youth, respectively, reported lifetime forced sex. By follow-up, this

increased to five percent and 11 percent, respectively. In our cross sectional analysis at follow-up, we removed those reporting forced sex at baseline (<1 percent) and found that treatment adolescents were three percentage points less likely to report forced sexual intercourse than control adolescents ($p<0.05$) due to the programme. These impacts appear to be driven by youth in female-headed households, as impacts were not significant in male-headed households (results not shown).

Table 12.12. Impacts on Adolescent Lifetime Forced Sex, Aged 13 to 20 at baseline

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Ever Experienced Forced Sex	-0.03** (-1.98)	0.03	0.06	0.12	-	-0.03 (-2.16)
N	800	551	548	252	-	622

Notes: * 10% significance; ** 5% significance; *** 1% significance; robust z-statistics computed from standard errors clustered at the ward level are in parentheses. All estimations control for baseline values of age in years of youth, sex of youth, log of household size, recipient age, education and marital status, household demographic composition, and a vector of cluster-level prices.

12.7 Summary

Overall, after only 12 months of operation, results suggest that the HSCT supports the safe transition to adulthood through a number of different domains, including delaying marriage and sexual debut, as well as decreasing the likelihood of early pregnancy among female youth in large households. In addition, the programme positively impacted safe sex practices among sexually active youth (i.e., condom use at first sex) as well as decreased the probability of lifetime reports of forced sex. However, we are somewhat limited in our ability to draw many conclusions about specific aspects of first sex experiences as well as recent sexual behaviours due to small sample sizes. In addition, some of the indicators examined are not balanced at baseline, thus providing a less robust framework for analysing impacts. Despite these limitations, results suggest that the HSCT, a household-level unconditional poverty-targeted cash transfer impacts adolescent HIV risk and wellbeing outcomes, similar to evidence from Kenya and South Africa.

One interesting aspect about the impact results reported here are the heterogeneous impacts by sex of the youth and the household heads. In nearly all cases where we find significant positive impacts, these are driven by samples of female youth and female-headed households. It could be that female adolescents are more marginalized in comparison to males in the same households, and thus in some cases benefit comparatively more when the household experiences an increase in resources. Moreover, female-headed households could be more likely to invest in youth of both sexes when given additional cash, and this could result in greater impacts among girls, who may be more vulnerable to begin with – however these are hypotheses that require further investigation. This pattern is similar to findings from the Kenya cash transfer programme, which found that the programme reduced the odds of sexual debut among females but not males.

However, in contrast to the positive impacts discussed above, we found no impacts on mental health or alcohol use. In addition, unexpectedly, the programme positively impacted 12-month reports of physical violence, and negative impacts on HIV testing. However, the physical violence result is driven by the least severe form of violence reported on (slapped/pushed), and

did not affect reports of the other forms of physical violence. This violence appears to be driven by authority figures and is thus not directly affected by household dynamics around the receipt of the transfer—but rather by changes in other behaviours such as in schooling or social interactions among youth in transfer beneficiary households. The increased reporting may also not reflect actual increased prevalence because of awareness campaigns linked to the HSCT—this will be explored in the 36-month follow up evaluation.

13. Limitations

There are three main limitations to this study that all relate to the ability to generalize the findings to other populations, seasons of the year, and duration of time. None of these limitations affect challenge the validity of the results presented in this report (internal validity), but they do raise questions about how one speaks of these results in other contexts (external validity).

Timing – the data for the study were collected in May and June for both the baseline and 12 month follow up. These months occur immediately after harvest in the study locations, when households gather all of their crops that are used for consumption and sales throughout the year. Limitations imposed on the study team required that they collect data during this period at baseline. The evaluation team collected data during the same months for follow up to maintain internal validity and consistency from baseline to the 12 month follow-up. However, this timing for data collection affects what the evaluation can say about program effects for outcomes that are measured in a timeframe around data collection. For instance, consumption data are collected by asking about the amount of an item consumed in the last two weeks for a long list of items. This practice is standard for consumption data because people's memories are less reliable beyond two weeks of recall. However, it means that all consumption data are relative to the harvest time period when households have the most food and resources available compared to any other month of the year. Households' spending patterns may change throughout the year and look different in December when food is low compared to May and June when it is more bountiful. Thus, this study can only estimate the effect of the program on consumption during the harvest season and cannot say what, if any impacts might occur on consumption during the lean season (December through April). We expect that this study under estimates impacts on food consumption and consumption in general compared to what might occur during the lean season when beneficiary households might choose to spend more of the transfer on food than on investment items like chickens, goats, and fertilizer.

Length of Study – most evaluations of this type measure impacts after two years (e.g., Kenya, Zambia, Ghana, Lesotho) while this study is done after one year. This shortened timeline gives less opportunity for recipients to understand and internalise that there is a change in their permanent income because they have only received 5 or 6 payments; changes in permanent income are typically what induce permanent shifts in consumption and other long-term behaviours. Instead we see behaviour patterns that are more similar to people who receive acute injections of cash into the household which tend to lead to debt reduction and large item purchases for investment. Fortunately, there will be another round of data collection and analysis for this study that will occur after more time has passed to see how impacts change over time when beneficiaries can become more secure that their payments will truly continue longer than one year.

Overall Attrition – This study incurred 14 percent attrition between baseline and 12 month follow-up waves of data collection. Fortunately, the attrition was balanced between the treatment and control group, called differential attrition (see section on attrition in this report), so that the study maintains internal validity. However, the overall attrition that occurred between waves of data collection resulted in a follow-up group that looks slightly different than the baseline group. This type of attrition affects the external validity of the study, in other words the

ability to generalize the findings to other populations. Technically, the findings of the study are only generalizeabel to populations that look similar those who remain at the 12 month wave and not to everyone who started at baseline. However, we use a statistical method called inverse probability weights (IPW) to adjust for the missing households at 12 month wave who were present at baseline, enabling the results of the study to be generalizeable to populations that look similar to the larger baseline sample. In short, IPWs give more weight to households at the 12 month follow up who look like the missing households from baseline, thus they stand in for, or help represent these missing households.

14. Conclusion

We investigated the impact of the HSCT on a wide range of economic and social domains of beneficiary households. Three features of the programme and the study are important to understand when interpreting the results. First, most evaluations of this type measure impacts after two years (e.g., Kenya, Zambia, Ghana, Lesotho) while this study is done after one year. UNICEF and the MPSLSW chose to conduct the first follow-up after one year of implementation in order to learn about how to change and improve the program before the next round of scale-up to new districts. However, this shortened timeline gives less opportunity for recipients to understand and internalise that there is a change in their permanent income because they have only received 5 or 6 payments; changes in permanent income are typically what induce permanent shifts in consumption and other long-term behaviours. Secondly, 50 percent of recipient households have more than 4 residents—for these households the transfer is a flat $25 and there is a significant difference in the per capita value of the transfer between small and large households ($4.1 versus $7.50). Thus, we would expect to see differences in impacts and spending behaviour between larger and small households. Last, the study collected data soon after the harvest season in May and June, due external constraints about the timing of fieldwork. Households typically have more food after harvest and thus will focus additional resources on other areas of consumption. The baseline and follow-up data collections were conducted soon after harvest, thus we would not expect to see large changes in food consumption between time periods as households are more likely to spend the transfer in other areas during that time period.

The overall results of this report are consistent with the context described above. Impacts on consumption are mostly found for small households, and in fact, across most domains studied here, there are often positive impacts among smaller households and no impacts on the full sample or among larger households. This pattern is true for example for food poverty rates, diet diversity, subjective welfare, school attendance, asset ownership and exposure to shocks. The impacts on consumption are relatively small compared to other cash transfer programmes, likely because the programme is too young to have generated a perceived change in permanent income and the timing of data collection in the harvest season means beneficiaries are more likely to spend the transfer on non-food items. This argument is supported by evidence that the programme increases livestock holdings (goats, donkeys) and reduces debt exposure—such lumpy spending occurs when households receive a perceived ‘windfall’ in their revenues. The decrease in debt, the average increase of eight goats per household and the increase in consumption together ‘account’ for the average size of the transfer received by households over this period.

Overall the results shown here are encouraging given the short evaluation window. Specifically, after only 12-months (representing 6 payments) the HSCT has contributed to improving consumption and food security among smaller households, and has improved resiliency through debt reduction, increased livestock holdings and reductions in exposure to shocks. Among young people specifically, the HSCT has also reduced certain aspects of HIV-related behavioural risk such as delaying the age at first sex and increasing the use of condoms at first sex. This section concludes with tables of all of the statistically significant impacts. The tables are organized by the sample. The 36-month follow-up, currently planned for 2016, will provide a more comprehensive picture of the impact of the HSCT after it has time to consolidate itself among the target population and work out some operational challenges on the ground.

Table 14.1: Statistically Significant Impacts of HSCT on Panel of Households

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	*N* (5)
Monthly Consumption Expenditures per person					
Total	2.74**	32.11	33.41	32.8	5,245
	(2.24)				
Health & Hygiene	0.37*	1.24	1.73	1.78	5,245
	(1.87)				
Transport & Communication	0.46***	0.59	0.87	0.59	5,245
	(2.86)				
Food Expenditures: with panel weights					
Fats	0.26*	1.22	1.46	1.35	5,245
	(1.89)				
Sugar and sweet items	0.11*	0.69	0.84	0.71	5,245
	(1.98)				
Expenditure Shares					
Transport, Communication	0.01**	0.02	0.02	0.02	5,245
	(3.18)				
Education	0.01*	0.04	0.05	0.04	5,245
	(2.34)				
Food Security					
Food secure (%)	0.02*	0.02	0.04	0.02	5,257
	(1.94)				
Diet Diversity					
Diet Diversity Score	0.70***	5.94	7.16	6.76	5,260
	(3.68)				
Fruits	0.25***	0.32	0.57	0.38	5,260
	(3.67)				
Eggs	-0.03*	0.07	0.1	0.12	5,260
	(-1.83)				
Pulses & Legumes	0.13***	0.56	0.69	0.61	5,260
	(3.03)				
Dairy	0.08**	0.29	0.32	0.32	5,260
	(2.11)				
Fats	0.11**	0.61	0.79	0.76	5,260
	(2.45)				
Sweets	0.11***	0.47	0.68	0.58	5,260
	(3.15)				
Misc. (Condiments &	0.03**	0.91	0.97	0.97	5,260

Beverages)					
	(2.45)				
Subject Well-Being					
Subjective Well-being (SWL)	1.13**	9.53	11.68	10.9	5,246
	(3.77)				
Percentage of households raising or owning livestock					
Goats	9.10**	41.74	52.92	48.87	5,693
	(3.15)				
Proportion owning agricultural assets					
Sickle	10.06**	38.05	46.85	39.46	5,693
	(2.84)				
Ownership of productive assets (Number)					
Sickle	0.13**	0.46	0.54	0.46	5,693
	(2.72)				
Crop Production					
Log of total harvested	-0.54*	3.78	5.22	5.23	5,006
	(-2.11)				
HH harvested groundnut	0.07**	0.16	0.24	0.16	5,006
	(2.75)				
HH harvested roundnut	0.05**	0.03	0.06	0.01	5,006
	(2.95)				
Non-farm enterprise (NFE)					
NFE	0.05**	0.11	0.1	0.08	2,455
	(2.68)				
NFE: poorest 50 percent of households					
NFE	0.10**	0.11	0.12	0.08	1,313
	(3.60)				
Debt: with panel weights					
Amount of credit outstanding	-17.19**	29.35	11.81	16.08	4,158
	(-2.90)				
Health					
Disabled population receiving care	-0.12**	0.38	0.46	0.55	1,547
	(-1.99)				

Notes: *10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. Estimations use difference-in-differences modelling among panel households.

Figure 14.2: Statistically Significant Impacts of HSCT on Consumption for Households (by size)

	Small		Large	
Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Program Impact (1)	Baseline Treated Mean (2)
Expenditures				
Total	6.13**	45.03	1.29	22.52
	(2.25)		(1.09)	
Household Items	1.25*	11.46	-0.01	5.03
	(1.64)		(-0.04)	

Health & Hygiene	0.70*	1.72	0.2	0.89
	(1.77)		(1.45)	
Transport & Communication	0.80**	0.52	0.21	0.64
	(2.46)		(1.36)	
Expenditure Shares				
Transport and communication	0.01**	0.01	0.01	0.02
	(3.05)		(1.93)	
Percentage of households raising or owning livestock				
Donkeys, Mule	3.81*	3.14	1.13	9.12
	(2.19)		(0.33)	
Number of productive assets owned				
Axe	0.17*	0.9	-0.02	1.19
	(2.36)		(-0.37)	
Sickle	0.13*	0.38	0.12	0.54
	(2.25)		(1.69)	
Yokes	0.11**	0.21	0.05	0.57
	(2.86)		(0.68)	
N	2606	955	3087	1074

Notes: *10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. Estimations use difference-in-differences modelling among panel households.

Table 14.3: Impacts of HSCT on Small Households

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (4)	12M Control Mean (5)
Poverty				
Headcount – Food Poverty Line	-0.10*	0.59	0.54	0.54
	(-1.87)			
Crop Production				
Household harvested groundnut	0.08*	0.16	0.27	0.19
	(2.05)			
Transfers				
Received gifts of cash/food	0.20*	0.62	0.59	0.58
	(2.41)			
N	2,364	794	794	388

Notes: *10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. Estimations use difference-in-differences modelling among panel households.

Figure 14.4: Statistically Significant Impacts of HSCT on Children (by household size)

Dependent Variable	Large Households Programme Impact (1)	Small Households Programme Impact (2)	All Programme Impact (3)
Health			
Children who had diarrhoea/fever/cough in last two weeks	0.18***	-0.16	0.15***
	(2.85)	(-1.09)	(2.82)
Children who sought care for diarrhoea/fever/cough	-0.22***	0.02	-0.18**
	(-2.75)	(0.10)	(-2.47)

Education			
Grade progression primary	-0.02	0.07**	0.01
	(0.93)	(2.00)	(0.25)
Primary Attendance	-0.05*	0.01	-0.04
	(-2.03)	(-0.12)	(-1.53)
Secondary Attendance	-0.02	-0.25***	-0.07**
	(-0.47)	(-2.84)	(-2.09)
Child Labour			
Days worked in farming activities last rainy season	0.29	-7.54*	-2.6
	(0.12)	(-1.90)	(-1.18)
Individual in maricho labour last year	-0.05**	0.01	-0.03
	(2.21)	(0.22)	(-1.39)

Notes: *10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. Estimations use difference-in-differences modelling among panel households

Figure 14.5: Statistically Significant Impacts of HSCT on Children (by gender)

Dependent Variable	Boys	Girls	All
	Programme Impact	Programme Impact	Programme Impact
	(1)	(2)	(3)
Education			
Enrolment in primary (N=6,180)	0.03**	-0.01	0.01
	(2.32)	(-0.38)	-0.86
Primary Attendance (N=4,906)	-0.05*	-0.02	-0.04
	(-1.89)	(-0.57)	(-1.53)
Secondary Attendance (N=3,052)	-0.07*	-0.07*	-0.07**
	(-1.72)	(-1.77)	(-2.09)
Child Labour			
Days worked in farming activities last rainy season (N=12,145)	0.26	-5.55**	-2.6
	(0.09)	(-2.43)	(-1.18)

Notes: *10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. Estimations use difference-in-differences modelling among panel households.

Table 14.6: Statistically Significant Impacts on Individuals

Dependent Variable	Program Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean	N
	(1)	(2)	(3)	(4)	(5)
Health					
Disabled population receiving care	-0.12**	0.38	0.46	0.55	1,547
	(-1.99)				
Health: Children 0-5 years					
Children who sought care for diarrhoea/fever/cough	-0.18**	0.61	0.56	0.67	1,458
Children who had diarrhoea/fever/cough in last two weeks	0.15***	0.48	0.41	0.36	3,281
	(2.82)				

BEAM Scholarships: Full Sample Weights					
Received BEAM secondary	-0.06** (-2.02)	0.21	0.18	0.25	3,472
School Attendance: Full Sample Weights					
Secondary Attendance	-0.07** (-2.09)	0.88	0.91	0.92	3,052

Notes: *10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. Estimations use difference-in-differences modelling among panel households.

Table 14.7: Statistically Significant Impacts of HSCT on Adolescents

Dependent Variable	All HH Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)	Small HH Program Impact (5)	Large HH Program Impact (6)
Females, aged 12-20 at baseline						
Ever pregnant (N=1088)	-0.01 (-0.65)	0.12	0.17	0.19	0.01** (2.05)	-0.03* (-1.73)
Sexual Debut, aged 13-20 at baseline						
Ever had sex (N=787)	0.13*** (-3.25)	0.08	0.17	0.28	-0.14** (-2.43)	-0.13** (-2.45)
Marriage and Co-habitation, aged 12-20 at baseline						
Ever married or co-habited (N=2410)	-0.02* (-1.91)	0.12	0.17	0.23	-0.04 (-1.49)	-0.02** (-2.20)
Sex, aged 13-20 at baseline						
Condom used at first sex (N=134)	0.27** (2.65)	0.46	0.43	0.15	-	0.22* (1.89)
Partner age at first sex (N=121)	0.89 (1.15)	17.35	18.84	20.83	-	2.33** (2.69)
Age of most recent partner (N=145)	1.71 (0.85)	18.75	21.51	22.89	19.87 (1.16)	4.77* (1.86)
Ever Experienced Forced Sex (N=800)	-0.03** (-1.98)	0.03	0.06	0.12	-	-0.03 (-2.16)
Alcohol						
Ever drank alcohol (N=788)	0.00 (0.35)	0.09	0.07	0.06	-0.00** (-2.17)	0 (0.12)
HIV						
HIV test - lifetime (N=645)	0.19*** (-3.10)		0.3	0.51	0.00 (0.02)	-0.27*** (-3.45)
Self-perceived HIV risk Moderate/High (N=1,327)	-0.03 (-0.84)	0.05	0.06	0.05	-0.26** (-2.08)	-0.03 (-1.04)
HIV Test, last 12 months (N=1,327)	-0.09* (-1.91)	0.12	0.22	0.45	0.04 (0.24)	-0.10* (-1.54)
Physical Violence, aged						

13-20 at baseline						
Experienced Physical Violence, last 12 months (N=1,602)	0.16** (1.99)	0.49	0.38	0.25	0.39* (1.84)	0.11 (1.52)
Slapped/pushed, last 12 months (N=1,602)	0.16** (1.98)	0.41	0.27	0.15	0.34* (1.8)	0.12 (1.37)

Notes: *10% significance; ** 5% significance; *** 1% significance; robust t-statistics computed from standard errors clustered at the ward level are in parentheses. Estimations use difference-in-differences modelling among panel households.

Annexes

Annex A: Note on Qualitative Instruments

The first component of the qualitative work consisted of IDIs with 12 youths and 12 caregivers (future beneficiaries) at baseline, and nine youths and eight caregivers roughly one year into the programme. We conducted IDIs separately for the youth and caregivers. At baseline, we used stratified purposeful sampling to select the 12 families based on district, ward, and sex. If the youth or caregiver from baseline could not be reached for an interview at follow up, the team identified a different caregiver or youth from the same household interviewed at baseline, or approached the nearest beneficiary household that is part of the quantitative study if the first option was not possible. These interviews provided a rich picture of the life of families prior to the programme, as well as how the programme changed beneficiaries' social and economic situation. They augment the household surveys by capturing interaction among complex and changing contextual factors that could influence the HSCT impact and how and why constraints or behaviours may or may not have differed post-intervention.

The second component of the qualitative work also consisted of 20 FGDs with community members at 12 months into HSCT implementation in treatment communities. As we intended for these FGDs to help us to understand the beneficiary selection process and how the programme affected social dynamics, we did not conduct FGDs at baseline. We selected two wards from the three treatment districts and worked with the MPSLSW and local leaders to identify appropriate participants for the FGDs. Focus groups included both beneficiaries and non-beneficiaries, with six to eight participants (both male and female) in each group.

For the third component of the qualitative work, we conducted 18 SSIs with key informants in treatment communities at 12 months into programme implementation. These interviews elicit opinions about how the programme has affected the community, and perceptions from service providers about how the programme interacts with other services. Again we worked with the MPSLSW to construct a list of all service providers, focusing on those providing child protection services and providing psychosocial care and support services for HIV/ AIDS affected families and for victims of abuse. The rich contextual information we will obtain through the qualitative interviews and focus group with young people and their caretakers, community leaders and service providers will help understand how the programme impacts individuals and communities and thus contribute to the transferability of study findings to other settings.

Annex B: Note on Sampling Design and Weight Calculation

This note briefly describes the procedure of sampling design and the calculation of the sampling weights for the evaluation of Zimbabwe's HSCT programme. More details on the sampling procedure are presented in the report. This non-experimental impact evaluation is based on a DD with matched comparison group evaluation design which basically compares the changes over time of two groups, one that received a treatment and a matched group that does not.

Selection of the treatment group

The treatment group is a sample of households of three districts: Mwenezi, Binga, and Mudzi, which were selected by the MPSLSW for the Phase 2 rollout of the programme. All wards in Mwenezi and Mudzi were selected for the study; in Binga, 24 out of 25 were randomly selected for the study.

Table B.1. Number of treatment wards selected

District	Wards in the district	Wards in the sample
Mwenezi	18	18
Binga	25	24
Mudzi	18	18
Total	61	60

In the next stage of selection, two simple random samples of households were selected in each ward: 34 eligible households, and 10 non-eligible households

Selection of the comparison group

The comparison group is a sample of households of three districts: Chiredzi, Hwange, and UMP, which were selected by the MPSLSW on the basis of similar characteristics to the treatment districts and being part of the Phase 4 (later) rollout of the program. Wards within these three districts were selected by experts to match the wards in the treatment group. The matching criteria were similarity by their agro-ecological characteristics, culture and urbanicity. The total number of wards in the three comparison districts was 58.

Table B.2. Number of wards in comparison districts selected for the comparison group

District	Wards selected
Chiredzi	9
Hwange	12
UMP	9
Total	30

Finally, two simple random samples of households were selected in each ward: 34 eligible households and 10 non-eligible households.

Weighting

As a consequence of the sampling procedure, a set of weights should be computed for the eligible households and another set for the non-eligible households. Weights are defined as follows. The sampling weight for the comparison group is:

$$w_j = \frac{N_j}{n_j}$$

Where N_j is the number of households (eligible or non-eligible) in ward j, and n_j is the number of completed household (eligible or non-eligible) interviews in ward j. In this case, the population of reference for the comparison group is the population of the 30 wards that better matched the 60 wards selected for the intervention group.

In contrast, the sampling weight for the treatment group is:

$$w_j = \alpha \frac{N_j}{n_j}$$

Where α=1 for Mwenezi and Mudzi districts; but for Binga district, α is a constant that makes the sum of the weights equal to the total number of households in the district (eligible or non-eligible). This factor represents the simple random selection of 24 out of 25 wards in Binga.

Correction for follow-up overall attrition: As indicated in the attrition section of the report, the follow-up survey had an overall household response rate of 85.9%, and there was evidence of overall attrition. To control for this potential problem we used an Inverse Probability Weighting (IPW) procedure to correct the sampling weights for general attrition. We estimated a household-level probit model of continuation in the follow-up survey using household background and outcome measures as explanatory variables, and corrected the baseline sampling weights using the predicted probabilities of remaining in the follow-up obtained from that model. The corrected weight for household i located in ward j is:

$$w_{ij}^{C} = \frac{w_j}{\widehat{Prob(Cont_{ij} = 1|X_{ij})}}$$

Weights for the Youth module: The follow-up survey included a module to collect information from individuals aged 14-21 years (the baseline survey included a similar module for youth aged 13-20). Up to three (3) individuals were interviewed per household. The weights for the youth are calculated in the following way:

$$Youth\ weight_{ij} = (w_{ij}^{C})\ .\ (Factor\ Y_{ij}).\ (Factor\ Response\ Follow-up)$$

Where,

(1) w_{ij}^{C} : These are the household weights corrected by overall attrition, described above.

(2) $Factor\ Y_{ij} = \frac{Total\ \#\ Youth_{ij}}{\#\ Youth\ interviewed_{ij}}$

(3) $Factor\ Response\ Follow-up$:

- For the baseline survey observations, this factor is equal to 1.
- For the follow-up observations, this factor is the ratio of the follow-up distribution to the baseline distribution for four age-sex groups. The groups are, at follow-up:
    - Female, 14-17
    - Male, 14-17
    - Female, 18-21
    - Male 18-21

Annex C: Mean Differences at Baseline for Attrition Analysis (section 5)

I. Selective Attrition

Table C.1: Individual-level characteristics comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	Comparison N1	Treatment Mean	Treatment N2	Mean Diff	Diff SE	p-value
Age (in years)	25.70	4,319	25.67	8,489	-0.02	1.03	0.98
Children	0.59	4,328	0.59	8,495	0.01	0.01	0.60
Adult	0.25	4,328	0.24	8,495	-0.01	0.01	0.46
Elderly	0.17	4,328	0.17	8,495	0.00	0.02	0.91
Female	0.54	4,328	0.56	8,495	0.02	0.01	0.04
Chronically ill	0.09	4,328	0.10	8,495	0.00	0.01	0.82
Disabled	0.06	4,328	0.06	8,495	-0.00	0.01	0.85
Attending school	0.37	4,328	0.40	8,495	0.03	0.01	0.02

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.2: Household demographic characteristics comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	Comparison N1	Treatment Mean	Treatment N2	Mean Diff	Diff SE	p-value
Household size	5.28	882	5.13	1,748	-0.15	0.25	0.53
Number of children 0-5	0.81	882	0.76	1,748	-0.05	0.08	0.55
Number of children 6-17	2.29	882	2.29	1,748	-0.00	0.14	0.98
Number of adults	1.31	882	1.22	1,748	-0.09	0.10	0.41
Number of elderly	0.87	882	0.86	1,748	-0.01	0.05	0.83
HH with disabled people	0.29	882	0.26	1,748	-0.03	0.02	0.27
HH with elderly	0.64	882	0.64	1,748	0.00	0.04	0.91

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.3: Household's main respondent characteristics comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	Comparison N1	Treatment Mean	Treatment N2	Mean Diff	Diff SE	p-value
Female	0.65	882	0.69	1,748	0.04	0.03	0.14
Age	56.95	882	56.75	1,748	-0.20	1.48	0.89
Widowed	0.36	882	0.36	1,748	0.00	0.03	0.85
Divorced/separated	0.08	882	0.09	1,748	0.01	0.01	0.37
Ever attended school	0.59	882	0.55	1,748	-0.04	0.03	0.16
Currently attending school	0.01	881	0.02	1,742	0.00	0.01	0.44
Highest grade obtained	3.39	875	3.23	1,724	-0.16	0.19	0.40

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.4: Household total expenditure, poverty, food security and shocks comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	N1	Treatment Mean	N2	Mean Diff	Diff SE	p-value
Total household expenditure per person	32.45	882	31.45	1,748	-1.00	1.76	0.57
Total household food expenditure per person	20.58	882	20.43	1,748	-0.16	1.27	0.90
Poor	0.92	882	0.94	1,748	0.02	0.02	0.26
Food Poor	0.70	882	0.72	1,748	0.02	0.03	0.57
Mildly food insecure	0.02	882	0.02	1,745	0.00	0.01	0.72
Moderately food insecure	0.33	882	0.34	1,745	0.01	0.03	0.68
Severely food insecure	0.62	882	0.61	1,745	-0.01	0.03	0.67
HFIA scale	13.92	882	14.02	1,745	0.10	0.47	0.84
HH was affected by any shock	0.87	882	0.90	1,746	0.03	0.02	0.22
HH was affected by flood	0.03	882	0.04	1,746	0.01	0.02	0.63
HH was affected by drought	0.40	882	0.47	1,746	0.07	0.04	0.12

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.5: Household well-being measures comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	N1	Treatment Mean	N2	Mean Diff	Diff SE	p-value
One meal or less per day	0.15	882	0.11	1,748	-0.04	0.02	0.10
Grain last harvest lasted< 3 months	0.58	882	0.59	1,748	0.01	0.03	0.72
Ate fish/meat last month	0.45	881	0.44	1,746	-0.01	0.03	0.77
SWL (Satisfaction with Life score)	9.91	880	9.54	1,745	-0.37	0.22	0.09
Expect food shortage	0.60	882	0.60	1,748	-0.00	0.05	0.97
Expect need financial assistance	0.61	879	0.56	1,742	-0.05	0.04	0.28
Expect to fall ill	0.31	878	0.33	1,739	0.03	0.04	0.45

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.6: Household expenditure measures comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	N1	Treatment Mean	N2	Mean Diff	Diff SE	p-value
Total household consumption expenditure	134.64	882	129.95	1,748	-4.69	6.20	0.45
Total household non-consumption expenditure	0.74	882	1.01	1,748	0.26	0.26	0.32
Total household expenditure on food	85.63	882	83.23	1,748	-2.40	5.10	0.64
Total household expenditure on non-food	49.01	882	46.72	1,748	-2.29	2.64	0.39
HH expenditure on cereal	28.96	882	30.65	1,748	1.69	1.42	0.24
HH expenditure on roots/tuber	1.00	882	0.84	1,748	-0.16	0.32	0.62
HH expenditure on pulses and legumes	6.83	882	6.94	1,748	0.11	1.03	0.91
HH expenditure on vegetable	18.74	882	18.99	1,748	0.26	1.69	0.88
HH expenditure on fruit	2.82	882	2.13	1,748	-0.69	0.40	0.09
HH expenditure on fish	1.20	882	1.16	1,748	-0.04	0.24	0.86
HH expenditure on meat/poultry	7.19	882	6.58	1,748	-0.61	1.36	0.66
HH expenditure on dairy and egg	5.15	882	3.46	1,748	-1.68	0.87	0.06
HH expenditure on fat	5.15	882	4.49	1,748	-0.67	0.41	0.11
HH expenditure on sugar and sweet	2.50	882	2.55	1,748	0.06	0.28	0.84
HH expenditure on non-alcoholic beverage	1.76	882	1.93	1,748	0.17	0.57	0.76
HH expenditure on alcohol & tobacco	2.17	882	1.57	1,748	-0.60	0.68	0.38
HH expenditure on non-frequent other food and beverage items	2.17	882	1.93	1,748	-0.24	0.23	0.30
HH expenditure on non-frequent household	30.94	882	30.07	1,748	-0.88	1.42	0.54
HH expenditure on hygiene	4.31	882	3.79	1,748	-0.52	0.34	0.13
HH expenditure on transportation	3.01	882	2.37	1,748	-0.64	0.67	0.35
HH expenditure on communication	0.74	882	0.84	1,748	0.09	0.19	0.62
HH expenditure on other (non-food)	0.24	882	0.29	1,748	0.04	0.14	0.76
HH expenditure on education	5.89	882	6.87	1,748	0.98	0.65	0.13
HH expenditure on health	2.24	882	1.06	1,748	-1.18	0.40	0.00
HH expenditure on water	0.05	882	0.02	1,748	-0.03	0.02	0.21
HH expenditure on clothing	1.58	882	1.41	1,748	-0.17	0.26	0.51
HH expenditure on financial services and funerals	0.73	882	1.00	1,748	0.27	0.26	0.31
HH expenditures on bribes	0.00	882	0.01	1,748	0.01	0.00	0.22
HH expenditures on other	0.01	882	0.00	1,748	-0.01	0.01	0.36

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.7: Per capita household expenditure measures comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	N1	Treatment Mean	N2	Mean Diff	Diff SE	p-value
PC total consumption expenditure	32.45	882	31.45	1,748	-0.99	1.76	0.57
PC non- consumption expenditure	0.16	882	0.31	1,748	0.15	0.15	0.30
PC expenditure on food	20.58	882	20.43	1,748	-0.15	1.27	0.90
PC expenditure on non-food	11.86	882	11.02	1,748	-0.84	0.74	0.26
PC expenditure on cereal	7.00	882	7.57	1,748	0.57	0.45	0.21
PC expenditure on roots/tuber	0.29	882	0.19	1,748	-0.10	0.10	0.30
PC expenditure on pulses and legumes	1.57	882	1.70	1,748	0.13	0.30	0.66
PC expenditure on vegetable	4.44	882	4.53	1,748	0.09	0.27	0.75
PC expenditure on fruit	0.57	882	0.53	1,748	-0.05	0.08	0.56
PC expenditure on fish	0.36	882	0.33	1,748	-0.04	0.11	0.75
PC expenditure on meat/poultry	1.90	882	1.41	1,748	-0.50	0.42	0.24
PC expenditure on dairy and egg	0.99	882	0.82	1,748	-0.17	0.19	0.36
PC expenditure on fat	1.28	882	1.17	1,748	-0.11	0.13	0.42
PC expenditure on sugar and sweet	0.64	882	0.66	1,748	0.02	0.10	0.84
PC expenditure on non-alcoholic beverage	0.45	882	0.52	1,748	0.08	0.17	0.64
PC expenditure on alcohol & tobacco	0.41	882	0.49	1,748	0.09	0.11	0.45
PC expenditure on non-frequent other food and beverage items	0.69	882	0.52	1,748	-0.17	0.19	0.38
PC expenditure on non-frequent household	7.99	882	7.68	1,748	-0.31	0.55	0.57
PC expenditure on hygiene	1.07	882	0.92	1,748	-0.15	0.09	0.11
PC expenditure on transportation	0.62	882	0.42	1,748	-0.20	0.11	0.07
PC expenditure on communication	0.15	882	0.15	1,748	-0.00	0.03	0.99
PC expenditure on other (non-food)	0.05	882	0.06	1,748	0.00	0.03	0.92
PC expenditure on education	1.07	882	1.21	1,748	0.13	0.11	0.24
PC expenditure on health	0.50	882	0.26	1,748	-0.24	0.09	0.01
PC expenditure on water	0.01	882	0.01	1,748	-0.00	0.01	0.35
PC expenditure on clothing	0.39	882	0.32	1,748	-0.07	0.07	0.31
PC expenditure on financial services and funerals	0.15	882	0.31	1,748	0.15	0.15	0.30
PC expenditures on bribes	0.00	882	0.00	1,748	0.00	0.00	0.28
PC expenditures on other	0.00	882	0.00	1,748	-0.00	0.00	0.36

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.8: Education measures comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	Comparison N1	Treatment Mean	Treatment N2	Mean Diff	Diff SE	p-value
Attendance + 80%, overall	0.78	1,150	0.89	2,067	0.11	0.04	0.01
Attendance + 80% primary	0.78	748	0.89	1,274	0.11	0.04	0.01
Attendance + 80% secondary	0.78	402	0.88	793	0.10	0.05	0.05
Received BEAM	0.19	1,507	0.17	3,136	-0.02	0.02	0.42
Received BEAM primary	0.19	872	0.16	1,804	-0.03	0.03	0.22
Received BEAM secondary	0.20	492	0.21	1,081	0.01	0.03	0.84
Enrolment rate	0.79	1,688	0.85	3,440	0.06	0.02	0.00
Enrolment in primary	0.89	979	0.94	1,966	0.05	0.02	0.00
Enrolment in secondary	0.65	709	0.72	1,474	0.08	0.03	0.01
Grade progression primary	0.94	751	0.93	1,596	0.00	0.02	0.81
Grade progression secondary	0.95	481	0.95	1,068	0.00	0.02	0.81
Ever attended	0.86	297	0.82	516	-0.04	0.04	0.42
Minutes to school	53.07	1,635	49.75	3,358	-3.32	4.68	0.48

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.9: Adolescent measures comparisons (Comparison versus Treatment for households in both the baseline and follow-up surveys)

Variables	Comparison Mean	Comparison N1	Treatment Mean	Treatment N2	Mean Diff	Diff SE	p-value
Ever had sex	0.13	239	0.08	547	-0.05	0.04	0.21
Ever forced to have sex	0.01	239	0.03	547	0.02	0.01	0.08
Sexual transactions lifetime	0.13	239	0.08	547	-0.05	0.04	0.21
First sex consensual	0.95	24	0.75	42	-0.20	0.09	0.04
Had unprotected sex in past 3 months	0.31	13	0.11	25	-0.20	0.23	0.39
Number sex acts past 3 months	25.86	12	6.30	22	-19.56	20.97	0.36
Age at first sex	14.88	24	15.40	44	0.52	0.77	0.50
Condom used first time sex	0.24	24	0.48	44	0.24	0.14	0.09
Number of partners last 12 mo	1.18	24	1.13	44	-0.04	0.68	0.95
Age of partner at first sex	18.94	20	17.95	38	-0.99	1.48	0.51
Most recent sex partner's age	19.34	14	19.55	27	0.21	1.34	0.87
Believes HIV risk is moderate/high or has HIV/AIDS	0.01	201	0.06	444	0.04	0.02	0.04
Ever had HIV test lifetime	0.28	201	0.15	443	-0.13	0.05	0.02
HIV test past 12 months	0.19	200	0.12	443	-0.07	0.04	0.10
Got HIV results	0.23	201	0.12	443	-0.11	0.05	0.03
Smoked daily past 30 days	0.00	245	0.00	550	0.00	0.00	0.17
Ever smoked cigs	0.03	245	0.01	550	-0.01	0.02	0.44
# days drank past 30 days	0.02	242	0.02	533	0.01	0.02	0.62
Ever had drink of alcohol	0.07	245	0.08	550	0.01	0.03	0.67
CESD scale-youth only	18.58	244	19.31	552	0.73	0.64	0.26
Not depressed: CESD	0.63	244	0.58	552	-0.05	0.05	0.38
Hope scale	17.77	245	18.06	553	0.29	0.67	0.67
Ever experienced physical violence	0.43	245	0.51	550	0.08	0.05	0.11
Threatened with knife/gun	0.02	245	0.05	549	0.02	0.02	0.21
Ever punched/kicked	0.20	245	0.23	550	0.03	0.04	0.54
Ever pushed/slapped	0.36	245	0.43	550	0.07	0.04	0.09

Notes: Weighted results; standard errors obtained by clustering at ward-level.

II. General Attrition

Table C.10: Individual-level characteristics comparisons (Remaining sample versus drop-outs households)

Variables	Remaining sample Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
Age (in years)	25.68	12,808	24.71	1,767	-0.97	0.68	0.16
Children	0.59	12,823	0.60	1,774	0.01	0.01	0.49
Adult	0.24	12,823	0.24	1,774	0.00	0.01	0.75
Elderly	0.17	12,823	0.16	1,774	-0.01	0.01	0.36
Female	0.55	12,823	0.54	1,774	-0.01	0.01	0.24
Chronically ill	0.10	12,823	0.09	1,774	-0.00	0.01	0.72
Disabled	0.06	12,823	0.06	1,774	-0.00	0.01	0.83
Attending school	0.39	12,823	0.36	1,774	-0.03	0.01	0.03

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.11: Household demographic characteristics comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
Household size	5.18	2,630	4.46	433	-0.71	0.14	0.00
Number of children 0-5	0.77	2,630	0.78	433	0.01	0.06	0.86
Number of children 6-17	2.29	2,630	1.88	433	-0.41	0.08	0.00
Number of adults	1.25	2,630	1.09	433	-0.16	0.06	0.01
Number of elderly	0.86	2,630	0.68	433	-0.18	0.04	0.00
HH with disabled people	0.27	2,630	0.23	433	-0.03	0.02	0.17
HH with elderly	0.64	2,630	0.57	433	-0.07	0.03	0.04

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.12: Household's main respondent characteristics comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
Female	0.68	2,630	0.68	433	0.01	0.02	0.79
Age	56.81	2,630	54.03	433	-2.77	1.21	0.02
Widowed	0.36	2,630	0.40	433	0.04	0.03	0.28
Divorced/separated	0.09	2,630	0.09	433	-0.00	0.01	0.84
Ever attended school	0.56	2,630	0.63	433	0.07	0.03	0.03
Currently attending school	0.01	2,623	0.02	432	0.01	0.01	0.22
Highest grade obtained	3.28	2,599	3.75	427	0.47	0.28	0.09

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.13: Household total expenditure, poverty, food security and shocks comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
Total household expenditure per person in the HH	31.74	2,630	37.16	433	5.41	1.67	0.00
Total household food expenditure per person in the HH	20.47	2,630	23.86	433	3.38	1.21	0.01
Poor	0.93	2,630	0.89	433	-0.05	0.02	0.01
Food Poor	0.71	2,630	0.64	433	-0.07	0.02	0.00
Mildly food insecure	0.02	2,627	0.02	432	-0.01	0.01	0.51
Moderately food insecure	0.34	2,627	0.32	432	-0.02	0.04	0.68
Severely food insecure	0.61	2,627	0.63	432	0.01	0.04	0.79
HFIA scale	13.99	2,627	14.20	432	0.21	0.51	0.68
HH was affected by any shock	0.89	2,628	0.88	432	-0.02	0.01	0.24
HH was affected by flood	0.04	2,628	0.02	432	-0.02	0.01	0.13
HH was affected by drought	0.45	2,628	0.41	432	-0.04	0.03	0.18

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.14: Household well-being measures comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
One meal or less per day	0.13	2,630	0.15	433	0.03	0.02	0.27
Grain last harvest lasted< 3 months	0.59	2,630	0.68	433	0.09	0.04	0.02
Ate fish/meat last month	0.45	2,627	0.40	432	-0.04	0.02	0.09
SWL (Satisfaction with Life score)	9.65	2,625	9.48	431	-0.17	0.26	0.52
Expect food shortage	0.60	2,630	0.57	433	-0.03	0.03	0.29
Expect need financial assistance	0.58	2,621	0.54	429	-0.03	0.04	0.35
Expect to fall ill	0.32	2,617	0.33	429	0.01	0.03	0.81

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.15: Household expenditure measures comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
Total household consumption expenditure	131.33	2,630	121.10	433	-10.23	5.25	0.05
Total household non-consumption expenditure	0.93	2,630	1.48	433	0.55	0.44	0.21
Total household expenditure on food	83.93	2,630	77.39	433	-6.54	3.54	0.07
Total household expenditure on non-food	47.39	2,630	43.71	433	-3.69	2.40	0.13
HH expenditure on cereal	30.15	2,630	26.98	433	-3.17	1.19	0.01
HH expenditure on roots/tuber	0.89	2,630	0.79	433	-0.09	0.28	0.74
HH expenditure on pulses and legumes	6.91	2,630	5.76	433	-1.15	0.51	0.03
HH expenditure on vegetable	18.92	2,630	18.34	433	-0.58	1.25	0.64
HH expenditure on fruit	2.33	2,630	3.69	433	1.36	0.97	0.17
HH expenditure on fish	1.17	2,630	1.77	433	0.60	0.43	0.17
HH expenditure on meat/poultry	6.76	2,630	5.41	433	-1.35	1.09	0.22
HH expenditure on dairy and egg	3.96	2,630	2.99	433	-0.96	0.54	0.08
HH expenditure on fat	4.68	2,630	4.29	433	-0.39	0.37	0.29
HH expenditure on sugar and sweet	2.53	2,630	2.23	433	-0.31	0.22	0.16
HH expenditure on non-alcoholic beverage	1.88	2,630	1.69	433	-0.19	0.63	0.76
HH expenditure on alcohol & tobacco	1.75	2,630	1.39	433	-0.35	0.41	0.39
HH expenditure on non-frequent other food and beverage items	2.00	2,630	2.05	433	0.05	0.14	0.71
HH expenditure on non-frequent household	30.33	2,630	26.02	433	-4.30	0.83	0.00
HH expenditure on hygiene	3.94	2,630	4.61	433	0.67	0.58	0.25
HH expenditure on transportation	2.56	2,630	3.78	433	1.22	0.79	0.13
HH expenditure on communication	0.81	2,630	0.85	433	0.04	0.20	0.85
HH expenditure on other (non-food)	0.27	2,630	0.78	433	0.51	0.39	0.19
HH expenditure on education	6.59	2,630	4.38	433	-2.21	0.63	0.00
HH expenditure on health	1.41	2,630	1.76	433	0.36	0.45	0.43
HH expenditure on water	0.03	2,630	0.01	433	-0.02	0.01	0.09
HH expenditure on clothing	1.46	2,630	1.51	433	0.06	0.25	0.82
HH expenditure on financial services and funerals	0.92	2,630	1.48	433	0.56	0.44	0.21
HH expenditures on bribes	0.00	2,630	0.00	433	-0.00	0.00	0.21
HH expenditures on other	0.00	2,630	0.00	433	-0.00	0.00	0.25

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.16: Per capita household expenditure measures comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
PC total consumption expenditure	31.74	2,630	37.16	433	5.41	1.67	0.00
PC non- consumption expenditure	0.26	2,630	0.37	433	0.11	0.08	0.20
PC expenditure on food	20.47	2,630	23.86	433	3.38	1.21	0.01
PC expenditure on non-food	11.27	2,630	13.30	433	2.03	0.68	0.00
PC expenditure on cereal	7.40	2,630	8.11	433	0.71	0.39	0.08
PC expenditure on roots/tuber	0.22	2,630	0.22	433	0.01	0.07	0.93
PC expenditure on pulses and legumes	1.66	2,630	1.64	433	-0.02	0.18	0.92
PC expenditure on vegetable	4.51	2,630	5.72	433	1.22	0.28	0.00
PC expenditure on fruit	0.54	2,630	1.04	433	0.50	0.23	0.03
PC expenditure on fish	0.34	2,630	0.46	433	0.12	0.11	0.25
PC expenditure on meat/poultry	1.55	2,630	1.54	433	-0.01	0.29	0.97
PC expenditure on dairy and egg	0.87	2,630	0.85	433	-0.02	0.15	0.88
PC expenditure on fat	1.20	2,630	1.43	433	0.23	0.15	0.12
PC expenditure on sugar and sweet	0.65	2,630	0.76	433	0.11	0.08	0.16
PC expenditure on non-alcoholic beverage	0.50	2,630	0.57	433	0.07	0.18	0.69
PC expenditure on alcohol & tobacco	0.47	2,630	0.76	433	0.29	0.25	0.24
PC expenditure on non-frequent other food and beverage items	0.57	2,630	0.74	433	0.17	0.09	0.07
PC expenditure on non-frequent household	7.77	2,630	8.58	433	0.80	0.39	0.04
PC expenditure on hygiene	0.96	2,630	1.45	433	0.49	0.18	0.01
PC expenditure on transportation	0.48	2,630	1.06	433	0.58	0.25	0.03
PC expenditure on communication	0.15	2,630	0.26	433	0.11	0.06	0.09
PC expenditure on other (non-food)	0.05	2,630	0.18	433	0.12	0.08	0.11
PC expenditure on education	1.17	2,630	0.91	433	-0.26	0.14	0.07
PC expenditure on health	0.33	2,630	0.42	433	0.09	0.09	0.32
PC expenditure on water	0.01	2,630	0.00	433	-0.00	0.00	0.06
PC expenditure on clothing	0.34	2,630	0.45	433	0.11	0.08	0.17
PC expenditure on financial services and funerals	0.26	2,630	0.37	433	0.11	0.08	0.19
PC expenditures on bribes	0.00	2,630	0.00	433	-0.00	0.00	0.28
PC expenditures on other	0.00	2,630	0.00	433	-0.00	0.00	0.26

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.17: Education measures comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
Attendance +80%, overall	0.85	3,217	0.83	448	-0.03	0.03	0.42
Attendance + 80% primary	0.86	2,022	0.82	293	-0.04	0.04	0.40
Attendance + 80% secondary	0.85	1,195	0.84	155	-0.01	0.06	0.88
Received BEAM	0.17	4,643	0.20	593	0.03	0.04	0.43
Received BEAM primary	0.17	2,676	0.19	351	0.02	0.03	0.56
Received BEAM secondary	0.20	1,573	0.28	193	0.07	0.06	0.27
Enrolment rate	0.83	5,128	0.80	678	-0.04	0.02	0.09
Enrolment in primary	0.92	2,945	0.91	391	-0.01	0.02	0.54
Enrolment in secondary	0.70	2,183	0.63	287	-0.07	0.04	0.05
Grade progression primary	0.94	2,276	0.96	314	0.02	0.02	0.27
Grade progression secondary	0.95	1,495	0.91	191	-0.04	0.04	0.30
Ever attended	0.83	813	0.82	122	-0.02	0.05	0.72
Minutes to School	50.69	4,993	51.10	649	0.40	2.65	0.88

Notes: Weighted results; standard errors obtained by clustering at ward-level.

Table C.18: Adolescent measures comparisons (Remaining sample versus drop-outs households)

Variables	Remaining Mean	N1	Left Mean	N2	Mean Diff	Diff SE	p-value
Ever had sex	0.09	786	0.14	122	0.05	0.05	0.39
Ever forced to have sex	0.02	786	0.06	122	0.04	0.04	0.42
Sexual transactions lifetime	0.09	786	0.14	122	0.05	0.05	0.39
First sex consensual	0.84	66	0.90	11	0.07	0.10	0.50
Had unprotected sex in past 3 months	0.18	38	0.08	8	-0.10	0.14	0.48
Number sex acts past 3 months	13.76	34	1.68	8	-12.08	9.49	0.21
Age at first sex	15.18	68	13.93	11	-1.25	1.58	0.43
Condom used first time sex	0.38	68	0.14	11	-0.25	0.14	0.08
Number of partners last 12 mo	1.15	68	0.94	11	-0.21	0.40	0.59
Age of partner at first sex	18.36	58	16.38	9	-1.98	1.36	0.15
Most recent sex partner's age	19.48	41	18.62	8	-0.86	1.21	0.48
Believes HIV risk is moderate/high or has HIV/AIDS	0.04	645	0.06	104	0.01	0.03	0.70
Ever had HIV test lifetime	0.19	644	0.19	105	0.00	0.06	1.00
HIV test past 12 months	0.14	643	0.16	105	0.02	0.05	0.74
Got HIV results	0.15	644	0.19	105	0.03	0.05	0.54
Smoked daily past 30 days	0.00	795	0.00	122	-0.00	0.00	0.17
Ever smoked cigs	0.02	795	0.03	122	0.01	0.02	0.40
# days drank past 30 days	0.02	775	0.04	119	0.02	0.03	0.52
Ever had drink of alcohol	0.08	795	0.06	122	-0.02	0.03	0.51
CESD scale-youth only	19.09	796	19.17	122	0.08	0.83	0.92
Not depressed: CESD	0.59	796	0.67	122	0.08	0.08	0.33
Hope scale	17.97	798	17.81	122	-0.16	0.73	0.82
Physical violence, last 12 months	0.49	795	0.39	122	-0.10	0.08	0.21
Threatened with knife/gun, last 12 months	0.04	794	0.05	122	0.01	0.02	0.56
Punched/kicked, last 12 months	0.22	795	0.26	122	0.04	0.06	0.51
Pushed/slapped, last 12 months	0.41	795	0.30	122	-0.11	0.07	0.15

Annex D: Consumption tables (Section 7)

Table D.1: Impacts of HSCT on Food Expenditure Shares

Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Cereal	-0.01	0.41	0.38	0.35
	(-0.57)			
Roots, tubers	0.00	0.01	0.02	0.02
	(0.75)			
shr_exp_pulses_legumes	0.01	0.07	0.07	0.07
	(1.36)			
shr_exp_vegetables	-0.05**	0.24	0.20	0.25
	(-4.26)			
shr_exp_fruits	0.02**	0.02	0.04	0.02
	(2.85)			
shr_meat_fish	-0.01	0.05	0.05	0.06
	(-0.95)			
shr_exp_dairy_eggs	0.01	0.03	0.03	0.03
	(1.36)			
shr_fats_sweets	0.01**	0.05	0.07	0.06
	(2.86)			
shr_exp_non_alcohol	0.00	0.02	0.02	0.02
	(0.62)			
shr_exp_other_food	0.00	0.03	0.02	0.02
	(1.05)			
shr_exp_alcoholtob	-0.00	0.02	0.02	0.02
	(-0.76)			
N	5,245	1,741	1,743	880

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

Table D.2: Impacts of HSCT on Food Expenditure Shares by Household Size

	Size<=4		Size>=5	
Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	Program Impact (3)	Baseline Treated Mean (4)
shr_exp_cereal	-0.01	0.41	-0.01	0.41
	(-0.65)		(-0.53)	
shr_exp_roots_tubers	0.00	0.01	0.00	0.01
	(0.97)		(0.62)	
shr_exp_pulses_legumes	0.02	0.06	0.01	0.07
	(1.83)		(0.74)	
shr_exp_vegetables	-0.04**	0.24	-0.05**	0.24
	(-3.26)		(-3.19)	
shr_exp_fruits	0.01	0.02	0.03**	0.02
	(1.10)		(4.33)	
shr_meat_fish	0.01	0.04	-0.01	0.05
	(0.61)		(-1.32)	
shr_exp_dairy_eggs	0.00	0.03	0.01	0.03
	(0.31)		(1.69)	
shr_fats_sweets	0.01	0.06	0.01*	0.05
	(1.97)		(2.11)	
shr_exp_non_alcohol	0.00	0.02	0.00	0.01
	(0.01)		(0.81)	
shr_exp_other_food	0.00	0.03	0.00	0.03
	(0.84)		(0.97)	
shr_exp_alcoholtob	-0.01	0.03	0.00	0.02
	(-1.81)		(0.54)	
N	2,404		2,841	

Notes: Estimations use difference-in-difference modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, districts, household demographic composition, and a vector cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 5% significance; ** 1% significance

Annex E: Anthropometric Tables (Section 9)

Table E.1. Impacts on Anthropometric Outcomes, Aged 0-60 months at Baseline, Small Households

Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
z-score weight/age	-0.54	-0.66	-0.42	-0.32
	(-1.73)			
z-score height/age	-0.30	-1.18	-1.02	-1.02
	(-0.42)			
z-score weight/height	-0.59	-0.01	0.17	0.29
	(-0.68)			
<-2 height/age	0.11	0.29	0.23	0.27
	(1.09)			
<-2 weight/height[1]		0.05	0.01	0.02
<-2 weight/age	-0.01	0.11	0.03	0.05
	(-0.52)			
<-3 height/age	0.01	0.08	0.08	0.13
	(0.24)			
<-3 weight/age	-0.07	0.06	0.01	0.00
	(1.71)			
N	297	64	140	63

Notes: t stats in parentheses. * 5% significance; ** 1% significance; 1/ Model did not converge due to few positive observations.

Table E.2. Impacts on Anthropometric Outcomes, Aged 0-60 months at Baseline, Large Households

Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
z-score weight/age	-0.24	-0.71	-0.54	-0.19
	(-1.68)			
z-score height/age	-0.01	-1.31	-1.11	-0.96
	(-0.04)			
z-score weight/height	-0.30*	0.03	0.10	0.53
	(-2.24)			
<-2 height/age	0.02	0.32	0.28	0.22
	(0.27)			
<-2 weight/height	-0.02	0.05	0.04	0.02
	(-0.84)			
<-2 weight/age	0.00	0.14	0.10	0.05
	(0.01)			
<-3 height/age	-0.02	0.11	0.08	0.07
	(-0.77)			
<-3 weight/age	0.03	0.03	0.02	0.00
	(1.93)			
N	1,895	635	661	302

Notes: t stats in parentheses. * 5% significance; ** 1% significance;

Annex F: Non-significant Impacts for Health and Material Well-being (Section 9)

Table F.1: Impacts on Health: Entire Panel of Households

Dependent Variable	Programme Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
	(1)	(2)	(3)	(4)
Households with at least one chronically ill member (N = 5,260)	-0.00	0.37	0.35	0.36
	(-0.13)			
Beneficiary households with chronically ill members that have been referred to Home Based Care (N=1,852)	0.01	0.04	0.06	0.03
	(0.62)			
Households with chronically ill members that sought some kind of care (N=1,852)	0.04	0.78	0.84	0.81
	(0.79)			
Households that have a member with any disability (N=5,258)	0.04	0.25	0.26	0.26
	(1.47)			
Households with disabled members that sought care for the disability (N=1,367)	-0.08	0.37	0.46	0.56
	(-1.43)			

Notes: Estimations use difference-in-differences modelling among panel households. All estimations control for baseline household size, main respondent's age, education and marital status, regions, household demographic composition, and a vector of cluster level prices. Robust t-statistics clustered at the district-ward level are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

Annex G: Education and Child Labour Non-significant Impact Tables

Table G.1: Impacts on Child Labour and Children Time Use: Using Full Sample Weights

Dependent Variable	Programme Impact	Baseline Treated Mean	12M Treated Mean	12M Control Mean
Individual was engaged in domestic chores yesterday	-0.07	0.44	0.36	0.40
	(-1.40)			
Hours employed for all domestic chores yesterday	-0.21	1.08	0.85	1.09
	(-1.60)			
Individual involved in any farming activities last rainy season	-0.04	0.58	0.59	0.59
	(-1.25)			
Days worked in farming activities last rainy season	-2.60	25.91	20.31	22.29
	(-1.18)			
N	12,145	4,274	3,872	1,876

Notes: t stats in parentheses. ; * 10% significance; ** 5% significance;*** 1% significance

Annex H: Inflation in the HSCT Evaluation Study Sample

Differential price inflation across treatment and comparison districts between baseline and follow-up can be a cause for concern. In order to check for this, we utilized price data on key consumption items collected through the community questionnaire that was implemented at the district ward level, as part of the survey fieldwork.

First, we checked to see if there had been any overall inflation/deflation across the country. According to the CPI index reported by the Central Bank (at http://www.rbz.co.zw/inc/about/inflation.htm) there has been almost no change in prices between baseline (June 2013 = 100.81) and follow-up (July 2014 = 100.74). In fact, prices had declined by a tiny factor (0.9993), which would call for an equally negligible correction factor (1.00069).

Second, we checked to see if there had been any excess inflation/deflation in treatment districts compared to comparison wards. Table H.1 reports difference-in-difference estimates that compare the change in price from baseline to follow-up between treatment and comparison wards. This is similar to the program impact estimates reported in the main text, except that this analysis is conducted at the ward level rather than household level. This analysis informs us if the HSCT Program has led to changes in prices in treatment wards relative to comparison wards. We find that though price for some items has in fact decreased, these differences in price are not attributable to the program. In no case was the difference-in-difference estimator significant.

Table H.1: HSCT Impacts on Prices

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	12M Treated Mean (3)	12M Control Mean (4)
Maize grain price	-0.32	8.36	7.32	6.93
	(-0.46)			
Rice price	-0.07	2.61	2.27	2.34
	(-0.51)			
Bean price	0.14	1.47	1.48	1.32
	(0.83)			
Beef price	-0.29	4.95	4.47	4.90
	(-0.71)			
Salt price	-0.03	1.00	0.90	0.88
	(-0.19)			
Sugar price	-0.03	1.47	1.48	1.47
	(-0.32)			
Cooking oil price	-0.11	2.41	2.27	2.36
	(-1.02)			
Soap price	0.02	2.19	1.92	1.83
	(0.12)			
N	178	60	60	29

Notes: Estimations use difference-in-difference modeling among district wards. Robust t-statistics are in parentheses. * 10% significance; ** 5% significance; *** 1% significance

Annex H: References

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Annex J: UNICEF Request for Proposal

unicef
unite for children

REQUEST FOR PROPOSAL

''For the design and implementation of a comprehensive Monitoring Evaluation Framework, including baseline, follow-up surveys, and a final impact evaluation, for the Government of Zimbabwe Child Protection Fund (CPF) in support of the National Action Plan for Orphans and Vulnerable Children Phase II 2011-2015 (NAP II).''

RPF /ZIMA/2011/003

Bid closing date and time: 25 MARCH 2011 @ 10:00HRS

NOTE: THERE WILL BE NO PUBLIC OPENING FOR THIS RFP.

Verified/Approved by: -

Aubaid Raman – Supply and Logistics Manager

Signature ……. Date: 22 February 2011

Bid issue Date: 23 February 2011

REQUEST FOR PROPOSAL (RFP/ZIMA/2011/003)

UNITED NATIONS CHILDREN'S FUND (UNICEF)

Wishes to invite you to submit a proposal for

The design and implementation of "A comprehensive Monitoring and Evaluation Framework, including baseline, follow-up surveys, and a final impact evaluation, for the Child Protection Fund (CPF) in support of the National Action Plan for Orphans and Vulnerable Children II."

SEALED Proposals should be sent to:

Aubaid Raman, Chief of Supply & Logistics
UNICEF Harare, Zimbabwe
6 Fairbridge Avenue, Belgravia, Harare, Zimbabwe

Bid Reference No: RFP/ZIMA/2011/003

IMPORTANT – ESSENTIAL INFORMATION

The reference number must be shown on the envelope containing the Technical Proposal and on the envelope containing the Price Proposal, as well as on the outer packaging containing both envelopes.

The bid form must be used when replying to this request for proposal.

The Proposals MUST be received at the above address by latest **10h00, 25 March 2011**, Zimbabwe time. Due to the nature of this RFP, there will be no public opening of proposals.

Proposals received after the stipulated date and time will be invalidated.

It is important that you read all of the provisions of the request for proposal, to ensure that you understand UNICEF's requirements and can submit a proposal in compliance with them. Note that failure to provide compliant proposals may result in invalidation of your proposal.

BID FORM

THIS BID FORM must be completed, signed and returned to UNICEF. Bid must be made in accordance with the instructions contained in this Request for Proposal.

TERMS AND CONDITIONS OF CONTRACT

Any Contract or Purchase Order resulting from this INVITATION shall contain UNICEF General Terms and Conditions and any other Specific Terms and Conditions detailed in this INVITATION.

INFORMATION

Any request for information regarding this INVITATION must be forwarded by email to Mr. Aubaid Raman (araman@unicef.org) and Mr. Clement Gba (cgba@unicef.org), with specific reference to the RFP reference number.

The Undersigned, having read the Terms and Conditions of RFP [RFP/ZIMA/2011/003] set out in the attached document, hereby offers to supply the services specified in the schedule at the price or prices quoted, in accordance with any specifications stated and subject to the Terms and Conditions set out or specified in the document.

Signature: _____

Date: _____

Name & Title: _____

Company: _____

Postal Address: _____

Tel. No.: _____
E-mail: _____
Validity of Offer: _____
Currency of Offer: _____

Please indicate after having read UNICEF Payment Terms which of the following Payment Terms are offered by you:
10 Days, 3.0%_____ 15 Day, 2.5%_____ 20 Days, 2.0%_____ 30 Days, Net_____

Other Trade Discounts: _____

1.0 .....PROCEDURES AND RULES

1.1 ORGANISATIONAL BACKGROUND

UNICEF is the agency of the United Nations mandated to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. Guided by the Convention on the Rights of the Child UNICEF strives to establish children's rights as international standards of behaviour towards children. UNICEF's role is to mobilise political will and material resources to help countries ensure a "first call for children". UNICEF is committed to ensuring special protection for the most disadvantaged children.

UNICEF carries out its work through it headquarters in New York, 8 regional offices and 125 country offices world-wide. UNICEF also has a research centre in Florence, a supply operation based in Copenhagen and offices in Tokyo and Brussels. UNICEF's 37 committees raise funds and spread awareness about the organisation's mission and work.

1.2 PURPOSE OF THE RFP

The purpose of this RFP is to invite proposals for an institutional contract for:

The design and implementation of "A comprehensive Monitoring and Evaluation Framework, including baseline, follow-up surveys, and a final impact evaluation, for the Child Protection Fund (CPF) to the National Action Plan for Orphans and Vulnerable Children II."

1.3 FORECAST SCHEDULE

The schedule of the contractual process is as follows:

a) Closing date and time for submission of full proposal: **10h00 25 March 2011 (Zimbabwe time)**
b) Award Notice: **29 March 2011**
c) Signature of contract: **01 April 2011**

1.4 RFP CHANGE POLICY

All requests for formal clarification or queries on this RFP must be submitted in writing to Mr Aubaid Raman, via e-mail at araman@unicef.org and copy to Mr Clement Gba (cgba@unicef.org). Please make sure that the e-mail mentions the RFP reference number.

Only written inquiries will be entertained. Please be informed that if the question is of common interest, the answer will be shared with all potential RFP bidders.

Erasures or other corrections in the proposal must be explained and the signature of the applicant shown alongside. All changes to a proposal must be received prior to the closing time and date. It must be clearly indicated that it is a modification and supersedes the earlier proposal, or state the changes from the original proposal. Proposals may be withdrawn on written request received from bidders prior to the opening time and date. Bidders are expected to examine all instructions pertaining to the work. Failure to do so will be at bidder's own risk and disadvantage.

1.5 RFP RESPONSE FORMAT

Full proposals should be submitted in ENGLISH and must be received not later **10h00 25 March 2011** in three (**03**) original copies, duly signed and dated. Bidders must submit a sealed proposal, with two **separate sealed envelopes inside for a) the Technical Proposal and b) the Price Proposal.**
It is recommended that post is sent by Courier (FEDEX, DHL…). Please allow at least 4-5 days for delivery.

Sealed proposals must be securely closed in suitable envelopes and dispatched to arrive at the UNICEF office indicated no later than the closing time and date. They must be clearly marked as follows:

- Outer envelope: Name of company
  RFP no. ZIMA/2011/003
  UNICEF Zimbabwe
  Attention: Aubaid Raman, UNICEF Supply and logistics Manager
  6 Fairbridge Avenue
  Belgravia
  Harare, Zimbabwe
- Inner envelope – Technical proposal: Name of company, RFP number - technical proposal
- Inner envelope - Price proposal: Name of company, RFP number - price proposal

Sealed proposals received prior to the stated closing time and date will be kept unopened. The responsible officers will open technical proposals when the specified time has arrived and no proposal received thereafter will be considered. UNICEF will accept no responsibility for the premature opening of a proposal not properly addressed or identified. Any delays encountered in the mail delivery will be at the risk of the bidder.

Offers delivered at a different address or in a different form than prescribed in this RFP, or which do not respect the required confidentiality, or received after the designated time and date, **will be rejected**.

All references to descriptive materials should be included in the appropriate response paragraph, though the material/documents themselves may be provided as annexes to the proposal/response.

The bidder must also provide sufficient information in the proposal to address each area of the Proposal Evaluation contained in 1.10 to allow the evaluation team to make a fair assessment of the candidates and their proposal.

1.6 BIDDER RESPONSE

1.6.1 Formal submission requirements

The formal submission requirements as outlined in this Request for Proposal must be followed, e.g. regarding form and timing of submission, marking of the envelopes, no price information in the technical proposal, etc.

1.6.2 Bid Form

The completed and signed bid form must be submitted together with the proposal.

1.6.3 Mandatory criteria

All mandatory (i.e. must/have to/shall/should/will) criteria mentioned throughout this Request for Proposal have to be addressed and met in your proposal.

1.6.4 Technical Proposal

The technical proposal should address all aspects and criteria outlined in this Request for Proposal, especially in its statement of work, terms of reference and paragraph 1.10 of this Request for Proposal. It should be no longer than 3 pages, including a workplan and deliverables. However, all these requirements represent a wish list from UNICEF. The bidders are free to suggest/ propose any other solution. UNICEF welcomes new ideas and innovative approaches.

No price information should be contained in the technical proposal.

1.6.5 Price Proposal

The price proposal should be as per but not limited to paragraph 1.10 of this Request for Proposal.

1.6.6 Checklist for submission of proposals

- ☐ Bid form filled in and signed

- ☐ Envelope for technical proposal
  - Technical proposal
  - Technical proposal does not contain prices
  - Envelope is sealed
  - Envelope is marked as follows:
    Name of company, RFP number - technical proposal

- ☐ Envelope for price proposal
  - Price proposal
  - Envelope is sealed
  - Envelope is marked as follows:
    Name of company, RFP number - price proposal

- ☐ 1 outer enveloped
  - Containing ☐ bid form, ☐ envelope for technical proposal, and ☐ envelope for price proposal
  - Envelope is sealed
  - Envelope is marked as follows

    Name of company
    RFP Number
    UNICEF Zimbabwe
    Attention: Aubaid Raman, UNICEF Supply and Logistics Manager
    6 Fairbridge Avenue
    Belgravia
    Harare, Zimbabwe

1.7 CONFIDENTIAL INFORMATION

Information, which the bidder considers proprietary, should be clearly marked "proprietary", if any, next to the relevant part of the text, and UNICEF will treat such information accordingly.

1.8 RIGHTS OF UNICEF

UNICEF reserves the right to accept any proposal, in whole or in part; or, to reject any or all proposals. UNICEF reserves the right to invalidate any Proposal received from a Bidder who has previously failed to perform properly or complete contracts on time, or a Proposal received from a Bidder who, in the opinion of UNICEF, is not in a position to perform the contract. UNICEF shall not be held responsible for any cost incurred by the Bidder in preparing the response to this Request for Proposal. The Bidder

agrees to be bound by the decision of UNICEF as to whether her/his proposal meets the requirements stated in this Request for Proposal. Specifically, UNICEF reserves the right to:

- contact any or all references supplied by the bidder(s);
- request additional supporting or supplementary data (from the bidder(s));
- arrange interviews with the bidder(s);
- reject any or all proposals submitted;
- accept any proposals in whole or in part;
  - negotiate with the service provider(s) who has/have attained the best rating/ranking, i.e. the one(s) providing the overall best value proposal(s);
- Contract any number of candidates as required to achieve the overall evaluation objectives.

1.9 PROPOSAL OPENING

Due to the nature of this RFP, there will be no public opening of proposals.

1.10 PROPOSAL EVALUATION

After the opening, each proposal will be assessed first on its technical merits and subsequently on its price. The proposal with the best overall value, composed of technical merit and price, will be recommended for approval. UNICEF will set up an evaluation panel composed of technical UNICEF staff and their conclusions will be forwarded to the internal UNICEF Contracts Review Committee.

The evaluation panel will first evaluate each response for compliance with the requirements of this RFP. Responses deemed not to meet all of the mandatory requirements will be considered non-compliant and rejected at this stage without further consideration. Failure to comply with any of the terms and conditions contained in this RFP, including provision of all required information, may result in a response or proposal being disqualified from further consideration.

The proposals will be evaluated against the following:

CATEGORY		**POINTS**
1.	**<u>Technical Evaluation Criteria</u>**	
1.1	*Overall Response* − Understanding of UNICEF's needs and responsiveness to the requirements − Understanding of scope, objectives and completeness of response − Overall concord between RFP requirements and proposal.	5
1.2	*Proposed Team and its Professional Orientation* − Structure of Management Team − Team leader: relevant experience, qualifications and position with bidder − Team members: relevant experience of similar scope and complexity qualifications − Professional expertise and knowledge − Local contractor included as sub-contractee	25
1.3	*Proposed Methodology and Approach* − Quality of proposed approach/ methodology − Quality of proposed implementation plan, i.e. how the bidder will undertake each task and maintenance of project schedules	25

- Recognition of direct as well as risks/ peripheral problems and methods to prevent and manage risks/ peripheral problems

1.4 *Organisational experience* 15

- Range and depth of experience with similar projects/ contracts/ client
- Financial status
- Evidence of similar assignments undertaken in the region/ in Africa/ elsewhere

Total Technical 70

Only proposals which receive a minimum of **50** points will be considered further.

2. **Price Proposal** 30

The total amount of points allocated for the price component is **30**.

As the most financially interesting offers will be at an advantage, if some extra options are suggested, they should be clearly marked as so in the financial proposal to facilitate the comparison.

3. **Overall Evaluation (Total Technical and Price)** **100 points**

The maximum number of points will be allotted to the lowest price proposal that is opened and compared among those invited firms/institutions which obtain the threshold points in the evaluation of the technical component.
All other price proposals will receive points in inverse proportion to the lowest price; e.g.:

$$\text{Score for price proposal X} = \frac{\text{Max. score for price proposal} * \text{Price of lowest priced proposal}}{\text{Price of proposal X}}$$

UNICEF will award the contract to the bidder whose response is of high quality, clear and meets the projects goals, including:

The price/cost of each of the technically compliant proposals shall be considered only upon evaluation of the above technical criteria.

The bidders should ensure that all pricing information is provided in accordance with the following: The currency of the proposal **shall be in** USD (United States Dollars) **Invoicing will be in the currency of the proposal.** The bidder will suggest a payment schedule for the Contract, linked to unambiguous Contract milestones. All prices/rates quoted must be **exclusive of all taxes** as UNICEF is a tax-exempt organization.

1.11 PROPERTY OF UNICEF

This RFP, along with any responses there to, shall be considered the property of UNICEF and the proposals will not be returned to their originators. In submitting this proposal the bidder will accept the decision of UNICEF as to whether the proposal meets the requirements stated in this RFP. All data collected during the surveys remains the property of UNICEF and the Government of Zimbabwe. All data

must be shared with and handed over to UNICEF upon the completion of each survey and upon request from UNICEF.

1.12 VALIDITY

Proposal must be valid for a minimum of ninety (90) days from the date of opening of this RFP and must be signed by all candidates included in the submission. For proposals from institutions, the proposal must also be signed by an authorised representative of the institution. Bidders are requested to indicate the validity period of their proposal in the Proposal Form. UNICEF may also request for an extension of the validity of the proposal.

1.13 CONTRACTUAL TERMS AND CONDITIONS

The UNICEF Special and General Terms and Conditions are attached and will form part of any contract resulting from this RFP.

1.14 FULL RIGHT TO USE AND SELL

The bidder warrants that it has not and shall not enter into any agreement or arrangement that restrains or restricts UNICEF or the recipient Governments rights to use, sell, dispose of or, otherwise, deal with any item that may be acquired under any resulting Contract.

1.15 PAYMENT TERMS

Payment will be made only upon UNICEF's acceptance of the work performed in accordance with the contractual milestones. The terms of payment are Net 30 days, after receipt of invoice and acceptance of work. Payment will be effected by bank transfer in the currency of billing. Financial proposals should include proposed stage payments, in line with deliverables and the proposed workplan.

ANNEX I – STATEMENT OF WORK AND TERMS OF REFERENCE

1. BACKGROUND

1. Zimbabwe's Enhanced Social Protection Programme, acknowledged as one of the best in Africa has been significantly eroded during the last ten years due to chronic underfunding and a

breakdown in social service delivery more generally. At the same time the numbers of children and families in need of social protection has grown as a result of the HIV epidemic and socio-economic decline; of a total population of 12,462,879 approximately 78 per cent[47] lives below the Total Consumption Poverty Line, 55 per cent below the Food Poverty Line[48] and 25 per cent of all children have been orphaned[49]. Yet, as of March 2010, only about 11,000 people were receiving assistance through Government's existing social assistance programme, led by the Ministry of Labor and Social Services (MoLSS).

2. To address household poverty as a key driver of child vulnerability in Zimbabwe, the revised National Action Plan for Orphans and Vulnerable Children (NAP II) 2011-2015 and its accompanying pooled funding mechanism (the Child Protection Fund) will include social cash transfers as a major programme component, accompanying other key interventions in child protection and access to social services. The Fund is a multi-donor pooled funding mechanism managed by UNICEF in partnership with MoLSS which seeks to address inequities through a comprehensive child protection and social protection approach to vulnerable children and their families.

3. The CPF, operational in a context of transition, aims to contribute to the goal of the NAP II to enable the most vulnerable children in Zimbabwe to secure their basic rights through the provision of quality social and child protection services[50]. The CPF's purpose is that orphans and vulnerable children living in extremely poor families and exposed to other risks secure their basic rights and are able to meet their essential needs. This will be achieved through a series of outputs including strengthening of household economies (through a cash transfer programme), improved child protection and improved access to basic services (especially education) all of which will be supported by effective programme management and learning. A significant investment for the CPF will be in operational research to ensure that innovations in programming are documented to inform and strengthen programming and policy/advocacy. The CPF is managed by UNICEF and follows on from a similar Programme of Support to the Government's original NAP, which ran from 2006-2010.

Rigorous and robust operational research, including the implementation of a baseline and follow-up surveys, are required particularly in the area of cash transfer programming. Such research, as outlined in the attached logframe, ambitiously intends to monitor and assess the intermediate and long term effects of an unconditional social cash transfer initiative that specifically targets equity, nutrition, health, education, and protection and HIV outcomes.

4. The NAP II also initiates a number of interventions at national scale and not necessarily linked to the cash transfer element. These include legislative reform, advocacy for child protection standards to be implemented, the design of a case management programme and other initiatives. The various components of the CPF in turn reflect the pillars of the revised National Action Plan for Orphans and Vulnerable Children (NAP for OVC 2011-2015) and include:
i) Strengthening Household Economy through the delivery of cash transfers to at least 55,000 extremely poor households by 2013.

[47] World Bank (2010) World Development Indicators
[48] 2003 Poverty Assessment Survey, ZDHS 2006, UNICEF MIMS 2009, ZIMVAC 2009 and the 2007 OVC Baseline Study generally agree on these estimate figures, with a view that poverty has likely increased in recent years.
[49] Zimbabwe Demographic and Health Survey 2005/2006. Central Statistical Office. Harare
[50] NAP II, November 2010

ii) To enhance all vulnerable children's access to effective child protection services including protective services (legal, welfare, judicial) to child survivors of violence, exploitation and abuse, including 25,000 vulnerable children every year by 2013.
iii) To facilitate improved access to basic education through the Basic Education Assistance Module (BEAM) to poor orphans and other vulnerable children in Year 1 of the Programme's implementation (NOTE: to be monitored and evaluated separately)[51].
iv) Effective Programme Management for smooth operation and coordination of the Programme.

5. A robust Monitoring and Evaluation (M&E) Framework is therefore required to monitor inputs and activities for all these pillars as well as outcomes related to the cash transfer and other interventions included in the Programme (child protection and BEAM) as per the attached logframe (Annex IV). Such a Framework needs to capture activities for routine monitoring of outputs and activities, as well as the effectiveness of programme management by UNICEF in addition to medium term and longer term impacts.

6. Annex 1 details the main parameters of the cash transfer element of the CPF for NAP II. The first cash transfer is due to take place (pending adequate capacity and resources) in June/ July 2011. The first batch of beneficiaries will not form part of the baseline, but rather the second or third rounds which are due to take place towards the end of 2011. A detailed strategy for national coverage is still being worked out by the Government, but full district coverage, of selected districts, is currently the favored approach. It is likely that village level roll-out will include some elements of randomization for control/ comparison but it is not yet clear how this would work in practice.

2. PURPOSE:

1. *Firstly*, to **generate an M&E framework for the CPF in support of NAP II** including child protection, social cash transfers, and programme management. This framework will include activities for measuring outputs, outcomes and longer term impacts and use the attached logframe as a draft basis. A final logframe will be submitted as part of the overall M&E Framework. Detail must be provided on the practicalities of implementing this framework. In particular it is important that the various stakeholders' specific roles and responsibilities for M&E, including lines of accountability, stakeholder capacities and resources available to each stakeholder for M&E. It is likely that the former NAP's M&E system for monitoring NGO activities is a key resource for this framework. Recommendations must also be taken into account of the observations of the 2010 Outcome Assessment of the first Programme of Support for the NAP I (2007-2010) managed by UNICEF (now replaced by the CPF) which articulated weaknesses in monitoring quality of service delivery and tracking outcomes for children. It is critical that the M&E Framework designed by the bidding institution outlines a comprehensive framework that tracks activities, programme management effectiveness as well as short and longer term impacts achieved by the CPF that is supporting NAP II. Resources and approaches required to deliver outcome and impact monitoring must be explicitly described and must be considerably greater and more sophisticated than those required for the previous phase of the CPF. Given the learning from the previous PoS to the NAP I, around the lack of information gathered around outcomes (as opposed to outputs) it is required that the M&E Framework indicates how the new approaches are distinct/ improve upon the systems

[51] A national evaluation of BEAM is planned by the MoLSS and Ministry of Education, with possible World Bank, UNICEF and other technical support in 2011.

and approaches used within the previous phase. The Framework will need to address monitoring and evaluation activities and a revised logframe for child protection, cash transfers and programme management elements of the CPF. This M+E Framework must be designed in collaboration with UNICEF, MoLSS and other stakeholders (e.g. donors) to ensure its feasibility and rigor to suit the complex operating environment of Zimbabwe.

NOTE: Whilst funded through this programme BEAM will be subject of separate M&E.

2. The *second purpose* of this consultancy is to design an impact evaluation strategy, including a credible control or comparison group as well as a methodology for evaluating the program's targeting mechanism, and undertake a **baseline survey in cash transfer sites,** prior to implementation of cash transfer element of the programme which feeds into the design and implementation of a national Management and Information System (MIS) by 15 January 2012. *NOTE that the design of a MIS for cash transfers is currently underway and will be complete by end March/ April 2011. This consultancy is not required to design an MIS, but to link the M&E framework and subsequent research (baselines and follow-up surveys) to the MIS as well as other sources of data.*

3. The *third* purpose is then to design and implement 2 follow-up surveys (end 2012 and end 2013, pending the programme cycle of the cash transfers), including a final impact evaluation, for the cash transfer component of the Programme; the first follow-up survey to the baseline to be conducted 12 months after the baseline then a final impact evaluation survey another 12 months later. This means that there will be 1 baseline and two follow up surveys, including one final impact evaluation between 2012 and 2013.

The overall programmatic purpose of the proposed intervention research activity will generate policy-relevant evidence on the impact of the cash transfer scheme of the CPF to the NAP II on key child health, education, HIV, equity, nutrition and protection outcomes. A rigorous research design will be applied to describe the process of the intervention across pre-selected sites, to compare and measure outcomes, document good practice and generate policy related evidence.

A further purpose of the research is to generate learning for programme implementation on cost efficiency, targeting effectiveness and overall UNICEF programme management – the fourth pillar of the Programme.

The draft Logframe (attached as Annex II) should form the basis for selection of indicators and should a number of different indicators for different levels of impact (see TABLE 1 below). The draft will be reviewed by the consultancy as part of the development and submission of a comprehensive M&E Framework for the CPF as outlined in point 1) above. Revisions to the Logframe must again take place in close collaboration with MoLSS and UNICEF, with frequent interaction and communication with donors and other stakeholders.

TABLE 1: Working definitions of monitoring and evaluation terms for the purpose of this consultancy

Term:	*First level impact*	*Second level impact*	*Final level of impact*
Definition:	Measures activities or inputs in a short timeframe, including immediate needs of	Measures changes in children and other beneficiaries' lives over a longer period of time	Measures longer term changes in the lives of beneficiaries such as changes in: nutritional

	beneficiary households receiving cash transfers (such as food consumption and dietary diversity)	including expenditure in health and education (mediated by availability of schooling) and an investment in productive activities	status, use of health services and care seeking practices, child labour and HIV/AIDS behaviour change strategies
The current logframe proposed by the CPF includes both short and longer term impacts. For the purposes of this consultancy, the final evaluation of the cash transfer component will be termed an "impact evaluation" as this is synonymous with other regional studies on cash transfers.			

3. METHODOLOGY

The consultancy will be staggered over a period of 38 months approximately (mid 2011 – end 2013) in 4 phases:

1. Design of a **Monitoring and Evaluation Framework** for the whole CPF together with MoLSS, UNICEF and other stakeholders (e.g. donors) (2011-2013) including M+E activities, research methodology tools (including questionnaires, proxy measures for shifts in HIV-related behavior change, etc) as well as resources and roles of key stakeholders and timeframes for different activities. A thorough review of the M&E system for the previous Programme of Support (replaced by the CPF 2011-2013) will be required to analyse which tools and methodologies may be appropriate. Note is also to be taken of the revised NAP (NAP II) to ensure that the M&E framework is synonymous with this policy document. A revised draft of the current draft Logframe for the CPF will also be submitted with the Framework. Examples of activities to be included in the Framework include: routine activity monitoring (e.g. UNICEF and MoLSS field visits and financial spot checks), beneficiary verification (based on reports of the national MIS system on beneficiaries of the cash transfer programme and NGO beneficiary lists for child protection interventions), beneficiary feedback surveys and implementation of the Child Status Index and Community Perception Indices tools developed for Zimbabwe (to analyse the quality of services provided by NGOs, Government and other partners through UNICEF coordination), Annual Donor Reviews including key stakeholder interviews, secondary review of available data and reports and self reporting tools for UNICEF, as well as a baseline and follow up surveys for the cash transfer element of CPF in support of NAP II. See Annex II Logical Framework for the CPS as reference.

2. Design and Implementation of a **Baseline Survey** in selected cash transfer sites, including design and implementation of case control groups. The MoLSS is currently determining its strategy for national scale up and roll out of the cash transfer programme with possible full saturation of selected districts as resources becoming increasingly available. The Operations Manual and Design Strategy of the cash transfer element of NAP II being finalized by the MoLSS in early 2011 will form the basis of design of the Baseline Survey. The roll out of the cash transfer initiative will be a phased process and it will only be possible to determine which districts will be the sites for the baseline and respective control/ comparison by May 2011. For the purposes of this bid, it is recommended that bidders design a baseline based on full district coverage for cash transfer roll out over a period of 1 year. Ward/ village level randomization is proposed. District selection for the prioritization of the phased cash transfer programme will be based on a cross-analysis of the Poverty Assessment Survey (2003), the Nutrition Survey (2010) and the ZIMVAC (2010) to determine a proxy for prioritizing certain districts. Baseline methodology should include trainings of enumerators to collect anthropometric data, the use of cell

phone or PDAs for data collection and proxy measures for shifts in HIV-related behavior change (HIV testing is not included in the baseline or follow up surveys). Qualitative approaches should also be used, particularly to establish baselines for child protection concerns, to inform design of the baseline survey questionnaire (on hard to address subjects such as sexual attitudes and behaviour), to inform interpretation of quantitative results, to discuss subjects too difficult or too sensitive to capture in a quantitative household survey, and to understand social processes affected by the different program interventions of the CPF, including the cash transfer program.

Indicators for measurement amongst cash transfer beneficiary households (see also Annex II- Logframe of the CPF to the NAP II) must be included in the household survey

- Changes in food consumption and patterns of dietary diversity (frequency of meals, composition of meals, volume of meals) of children and other household members
- Breastfeeding practices for mothers of infants
- Care-seeking practices for pneumonia for children
- Change in incidence of food poverty
- Nutrition status of children 0-5 years measured by stunting prevalence
- HIV related risk behaviours (as proxies for HIV prevalence and incidence- not HIV testing will form part of the research)
- School attendance
- Quality of care by caregivers of vulnerable children in terms of protection, including with reference to physical, emotional and other violence and exploitation
- Child labour disaggregated by gender
- Women and girls in beneficiary households reporting physical or sexual violence
- Economic multiplier effects

A community survey should collection information from community leaders and/or other key informants in areas as determined by the sampling framework. The questionnaire should include information about access to social and economic infrastructure, economic (drought, crop disease) and social (crime, violence) shocks, existence of other key social programmes, wage rates for men, women and children, and price of key consumer and producer goods.

A facility survey, also administered in the sampling clusters, should characterize the local availability and quality of public services, in particular health and education services.

Further, the evaluation must also evaluate the following components of the program, using information from the household and community surveys, as well as any additional necessary information:

- Targeting efficiency
- Programme efficiency of UNICEF and other partners involved in the Programme

Survey materials should conform as much as possible to standardized national household surveys regularly implemented in Zimbabwe, including the DHS and MICS.

3. Implementation of two (2) follow-up surveys at the end of each programme year and 12 months after the initial baseline. (These follow up surveys must be timed across the CPF's full programme cycle of 2011-2013). The final follow-up survey will be an impact evaluation examining the longer term outcomes of the inputs provided in each year of the by end 2013.

The Government's cash transfer initiative under NAP II may indeed allow for randomization and the proposal should contain two alternatives for constructing the control/comparison group: with and without randomization. The household and community surveys must collect information reflecting alternative possibilities for creating the counterfactual based on the level of randomization and selection of case control districts/ villages.

The contractor will complete the following tasks, in consultation with UNICEF, the MoLSS, the CCORE and partner stakeholders as well as the OECD donor group. Annex I describes the main parameters of the cash transfer programme of the NAP II.

Main tasks

1. Develop a **Monitoring and Evaluation Framework** for the CPF in support of NAP II setting out the parameters of each of the three pillars (Cash Transfers, Child Protection and Programme Management) to be measured in terms of their short and longer term impacts on children and households. The Framework will include the issues to be monitored and the evaluation questions. The framework will also outline the processes for data collection, data capture, analysis and reporting (i.e. who does what, how and by when) over a three year period (the CPF's lifespan) so that it is rigorous and can be used to build an evidence base for cash transfer, child protection and other interventions associated with the CPF. Routine monitoring methodology must be included in to the framework linked to the MIS database. Experimental or quasi experimental design methods are requested, if feasible for the framework. The framework should also cover both the efficiency of the programme's targeting mechanism as well as the efficiency of UNICEF and other partners involved in implementing the Programme. The Framework should assist MoLSS, UNICEF and partners to regularly track indicators agreed in the logframe of the CPF agreed between the Government of Zimbabwe, UNICEF and the OECD donors. A finalized Logframe will be submitted with the final version of the M&E Framework.

   Child Protection interventions are national in scale and may not necessarily coincide with cash transfer programming. Thus, it is essential that specialized studies and verification activities are designed to accommodate these interventions in the Framework. This may include roll-out of the Child Perception and Community Perception Indices, specialized operational research studies, client survey feedback studies and other quantitative and qualitative studies to ensure quality of service delivery and the effectiveness of a continuum of care approach to orphans and vulnerable children outlined in the CPF's design.

   Special note must also be made of the purely research questions forming part of the surveys (baseline and follow-ups) as well as those that are definitely expected to generate results as a result of the cash transfer intervention. For example, there is limited data available to link cash transfers and increased protection of women and girls from gender-based violence. The CPF seeks to explore the link but should not be accountable if there is no link. Similarly, in nutrition, high stunting prevalence may be due to breastfeeding and sanitation practices rather than household economy. These risks, assumptions and research purposes should be clearly outlined in the Framework.

2. Design one baseline and 2 follow up surveys: i) a baseline survey timed towards the end of 2011, early 2012 in selected districts targeted to receive the next round of cash transfers, ii) *follow-up survey* at the end of 2012, iii) final *follow-up survey* at the end of 2013 looking also acting as a closing evaluation and report. All surveys should include indicators for efficient and

effective programme management, e.g. targeting criteria, UNICEF coordination, etc. The first cash transfer is due to take place (pending adequate capacity and resources) in June/ July 2011. The first batch of beneficiaries will not form part of the baseline, but rather the second or third rounds which are due to take place towards the end of 2011.

3. On provisional approval of the monitoring and evaluation framework, a budget, and in line with its provisions, the contractor will pilot the research instruments, and prepare a corresponding report.

4. The contractor will subsequently contract a field research team, making use of locally based enumerators where possible e.g. from the Zimbabwe Statistics Office (ZIMSTATS), academic institutions or local Civil Society Organisations.

5. Implement baseline and periodic data collection work as agreed in the final approved monitoring and evaluation framework and implementation plan.

6. Undertake data cleaning, prepare a baseline and subsequent survey implementation report including a detailed description of the processes followed during the field-work, analyse data in line with agreed framework (logframe) and M&E design, prepare baseline survey report and subsequent data reports, present and discuss the reports with relevant stakeholders.

The evaluation design should include a process evaluation with an emphasis on the internal dynamics of implementing organizations, their policy instruments, their service delivery mechanisms, their management practices, and the linkages among these and a summative evaluation intended to provide an assessment with emphasis on effectiveness after Year 1. An assessment of the effectiveness and relevance of the M&E system must be included as part of the outcome assessments.

7. Innovative documentation of findings should be included in the bid, for example an annual video documentary to accompany the formal final reports.

Schedule of tasks and timeframe:

Timeframe	External M&E
Within 4 weeks of contract signing	Inception presentation to key stakeholders in Harare by key / lead named personnel. Inception presentation to include provisional M&E framework including revised Logframe, routine data collection linked to MIS system, qualitative data collection, baseline and follow-up surveys design and strategy for cash transfer implementation (resources, roles of stakeholders, etc) including a draft 3 year timeline. Annual Workplan should also be included which details, among others: (i) activities, (ii) timeline, (iii) allocation of responsibilities, iv) resources, v) partnerships, vi) related studies, vii) feedback forums (e.g. donor meetings, Government and NGO forums etc). NOTE this Framework must include activities for three pillars of the CPF: Child Protection, Cash Transfers and Programme Management as noted

	above. Framework must include a clear description of which kinds of monitoring and evaluation activities are appropriate to which Programme Pillar (e.g. for child protection, cash transfers, programme management).
Within 8 weeks of contract signing (suggested)	Submission of comprehensive evaluation methodology / strategy, proposed research instruments, final result framework and definition/description of the indicators, survey questionnaires and research instruments to be piloted, field-work implementation plan for the baseline and follow up surveys, and field work implementation plan for periodic data collection. Tools should have been piloted. All submissions in electronic and hardcopy formats. Consultants to be available upon request for meetings with Government, UNICEF and donors.
Within 10 weeks of contract signing (suggested)	Agreement reached with stakeholders on the final instruments to be used for baseline and regular data collection and, if needed, a revised field-work operation implementation plans for the baseline and periodic surveys.
Within 12 weeks of contract signing	All tools, plans and processes in place to implement, analyse and report baseline, substantive data rounds and periodic evaluation as agreed in strategy, notwithstanding any additional delays that may be reflected in strategy and agreed in order to optimise timing of data collection.
Early 2012/ end 2011	Data collection for baseline survey underway
By March 2012 (to be confirmed by actual programme implementation)	Baseline completed
By April 2012 (to be confirmed by actual programme implementation)	Initial findings from the baseline, including targeting analysis, shared in a preliminary report and presented to stakeholders in Harare
By end April 2012	Baseline survey report finalized and disseminated formally, including all comments from Government, UNICEF, donors and other stakeholders.
By end 2012	Firs follow up survey monitoring shorter term impacts conducted.
Early 2013 (timeline to be finalized based on programme roll out)	Report of first follow up survey drafted and finalized with comments from all stakeholders incorporated. Note: report must include detailed narrative, multi-variate quantitative analysis of progress of the cash transfer, qualitative data on follow-up with beneficiaries and government and qualitative data on child protection services. Information on programme management will be included in this report and a revised and realistic logframe if required. Programme efficiency study finalized.
End 2013	Final impact evaluation underway to the same standards as above, but taking into account any learning from the first follow up survey to improve research methodology
First quarter 2014	Final impact report published and disseminated based on discussions of earlier drafts and presentations to partners.

Periodic	Periodic visits to be defined by the consultants including programme management including mitigating and contextual factors
Other dates	Include feedback meetings, dissemination meetings with partners, government etc.

While timelines for both M & E activities are indicative, it will be important to focus on the M & E baseline planned for end 2011/ early 2012 and ensure that it gets done within the deadlines. The comprehensive M+E Framework, the first deliverable, should clearly state all planned deadlines and activities to be conducted as agreed with Government in view of the roll-out of the NAP II and CPF.

Deliverables:

The contractor is expected to provide all of the above activities in the form of:

1. One inception report and dissemination on the overall M&E framework (within 4 weeks), including revised Logframe for the CPF to the NAP II
2. Complete design documentation in line with the requirements outlined above (after 8 weeks)
3. A technical report following the baseline survey, presenting full findings (including targeting analysis and qualitative work), copies of survey instruments, and useable / cleaned databases of survey data by April 2012 (all quantitative analysis will be accompanied by programming code to permit replication of results);
4. Two (2) impact evaluation reports on the cash transfer element of the CPF's implementation, building comparative analysis of findings over time. This will include full findings from data rounds, and reports on cost analysis, operations and other elements of the agreed research design (annually). The first report will be due one-two months after the evaluation conducted at the end of 2012 and the second and final report early 2014 after the final impact evaluation conducted at the end of 2013 (all quantitative analysis will be accompanied by programming code to permit replication of results);
5. A succinct and appropriately designed annual summary report, highlighting emerging findings on processes and impact for widespread dissemination (annually) accompanying the Annual Report, based on quantitative and qualitative studies;
6. Innovative presentation of analysis and data at end of every year, for example through video documentary.

The activities for external M&E will be contracted through a multi-year contract for supply of services including design, implementation, analysis and reporting of a baseline and annual surveys etc as will be agreed with the contractor. It is expected that following the design and baseline phase, the contractor will be responsible for the collection, analysis and reporting of data for duration of up to 3 years, subject to satisfactory performance. UNICEF reserves the right to cancel the contract any deliverables are unsatisfactory (e.g. poor delivery of baseline report).

All M&E activities will be led by the MoLSS, with support of UNICEF, and will follow Government roll out of the NAP II and Government policy and programmatic documents. Key documentation informing this consultancy will be:

a. NAP II Policy 2011-2015 (January 2011)

b. CPF Programme Design Document (January 2011), including draft logframe

c. MoLSS Cash Transfer Design Strategy and Operations Manuals (March 2011)

d. MIS design report for the MoLSS Cash Transfer Design (February 2011)

All reports are required to be final, fully edited and formatted and provided in electronic and 3 hardcopies. No payment will be made until the documents are endorsed and considered final and ready for issuance by all parties involved - donors, MoLSS and UNICEF.

4. QUALIFICATIONS/ EXPERIENCE

The team must have demonstrable experience in similar work, both nominated team members and institutional experience. The team must be lead by a named manager, who will be a senior member of the team, and will be the lead point for communications between the contractor, the contracting agency, and the MoLSS.

The team must consist of a multidisciplinary team of professionals with qualifications and skills including:

- Areas of technical competence (monitoring, evaluation, social cash transfer, social policy)
- Experience in quantitative and qualitative survey design
- Experience with the development of databases for routine monitoring
- Experience in capacity building for national systems development in African countries
- Experience with evaluation methods and data-collection
- Statistical analytical skills
- Sampling expertise and proven experience
- Language proficiency
- Local Zimbabwean personnel
- Process management skills, such as facilitation skills
- Appropriate gender mix in the team

5. BIDDER'S RESPONSE

To establish your qualifications, please provide the following in your response:

3.1 Technical Proposal

The technical proposal must be size 12 Times New Roman font.

The technical proposal must include: a) Approach to the work, including methodology, b) work plan with deliverables, c) profile of the team and qualifications.

The timeframe for the work is 38 months years, beginning in April 2011.

3.2 Price Proposal

A summary budget must be included in the Price Proposal, including consultancy fees, daily living allowance (in line with UN rates) and administrative as well as transport costs. The consultancy team is expected to provide for their own transport to Zimbabwe, as well as within Zimbabwe, in addition to their laptops.