



THE UNIVERSITY  
*of* NORTH CAROLINA  
*at* CHAPEL HILL

# Zimbabwe's Harmonised Social Cash Transfer Programme Endline Impact Evaluation Report

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This report is dedicated to the memory of Dr. Sidney Mishi, Director of Social Services in the Ministry of Labour and Social Services, an original member of the study team who passed away before the evaluation could be completed.

## Executive summary

This report presents results from the four-year endline evaluation of the Harmonised Social Cash Transfer (HSCT) programme, Zimbabwe's flagship social protection cash transfer programme. The HSCT began in 2012 as a response to chronic food insecurity and deep poverty in rural Zimbabwe. A key feature of the HSCT is its explicit focus on addressing the vulnerability of orphans and vulnerable children (OVC). As such, the HSCT was conceived of and implemented as part of a suite of interventions under the National Action Plan (NAP) for OVC. The 'harmonised' feature of the programme was to focus a set of child protection interventions on food poor households, many of whom would also be eligible for the cash transfer. The impact evaluation of the HSCT was initiated through a public tender in 2012 and the baseline was conducted in 2013. The goal of the impact evaluation was to understand the impacts of the programme on food security, children's human capital (schooling, nutrition), and child protection.

**The Programme:** The HSCT targets households that are both labour constrained and food poor as defined by the implementing agency, the Ministry of Public Service, Labour and Social Welfare (MPSLSW). Targeting is done in two stages. First, in designated expansion districts, a census is conducted in all Wards, and basic socioeconomic and demographic information is collected. This information is then used by the Ministry to identify eligible households – those falling below a proxy threshold indicating food poverty that have a dependency ratio of greater than 3, where the dependency ratio is the number of household members not-fit-to-work relative to those who are fit-to-work. The transfer value is \$10, \$15, \$20 or \$25 a month for households with 1, 2, 3 and 4+ members respectively; over half of all beneficiary households receive \$25.

**Study design:** Baseline data was collected in 2013 on 3,063 households in 90 wards across six districts, with 60 wards in the treatment sample and 30 wards in the comparison sample. Randomization of wards to comparison status was not possible because programme guidelines dictated that once the programme entered a district, all eligible households in that district would immediately be enrolled. Thus, households in the three districts that entered the programme in phase 2 (Binga, Mwenzi, and Mudzi) are compared with eligible households in three comparison districts that were scheduled to enter the programme in phase 4 (UMP, Chiredzi, and Hwange). Within comparison districts, wards were selected by the Ministry and the research team to match the treatment wards by agro-ecological characteristics, culture, and level of development.

A follow-up survey was conducted with these same households in 2014 by American Institutes for Research (AIR) and the University of North Carolina at Chapel Hill (UNC-CH). Reports from the baseline and 12-month follow-up evaluation are available [here](#).

This study returned to the households in the sample for the third time. A total of 2,567 households (1,725 treatment and 842 comparison) were successfully located and surveyed in July and August 2017.

## Operations

Since HSCT's last evaluation there have been interruptions in delivery of transfers, owing to the economic situation in Zimbabwe. However, the programme has now caught up on all of its payments, with nearly 90 per cent of self-reported current beneficiaries getting a payment in the month prior to the survey, and only half a per cent reporting not yet receiving a payment in 2017. As a result, beneficiaries have now come to expect timely payments from the programme, with four out of five respondents anticipating the next transfer within two months. On the other hand, a quarter of recipients said they did not know how long the transfers would last.

The value of HSCT grant payments have risen slowly in real terms since the programme's inception due to overall deflation in Zimbabwe, and has continuously remained above 20 per cent share of baseline expenditures for most households. The programme has many other positive features: there is a high level of satisfaction with staff and a negligible level of transfer leakages. However, respondents are spending an average of 6.2 hours picking up the transfer between travel and wait time, and a quarter do not feel safe while collecting the grant.

There is also a fair amount of confusion about the programme's selection criteria and rules. While most respondents believe that HSCT selection is clear, they could not correctly identify why they were chosen to receive the transfer. Even more disconcerting, 42 per cent of current beneficiaries erroneously believe that they have to follow certain 'rules' to remain in the program (such as spending money only in certain ways, on education and investment), and many of them reported that they got this information from HSCT representatives or at a payment point.

## Overview of results

**Consumption:** A key finding in this report is that the HSCT has allowed households to increase their own purchases of food and other consumption items, thus expanding their self-reliance and reducing their dependency on gifts from neighbours and relatives. The increased purchases are concentrated in cereals, fats and sugars. Overall consumption levels (from all sources—purchases, gifts and own production) remain the same due to the substitution of consumption sources away from reliance on gifts to own purchases enabled by the HSCT. The freedom of choice provided by the HSCT increases diet diversity, with more consumption of meat, fish and poultry. These effects are all larger among the poorest households.

**Poverty, food security:** We find that the HSCT has led to noticeable improvements in household food security and subjective well-being of respondents. These results are consistent with the notion that households are now less dependent on neighbours and friends, and are more self-reliant. Though overall consumption has not increased, the stress and worry related to depending on others to survive has been reduced, leading to more food security and an improved quality of life – important impacts for destitute households existing at the very edge of survival.

**Assets, productive activities:** We find positive programme impacts on the ownership of productive assets as well as the quantity and monetary value of crops produced. There are also positive impacts on household finances, with reductions in the share of households with a long-term loan, recent purchases on credit, outstanding debt on credit purchases, and increases in cash savings. When households experience shocks, HSCT households are now less likely to respond with negative coping strategies. There are also positive impacts on recent purchases of livestock and the amount spent on such purchases. We find no program impacts on non-farm enterprise operations.

**Spending Multiplier:** We explored whether the HSCT has enabled households to generate a ‘multiplier’—that is, to increase their overall spending by more than the net amount of the transfer. When we aggregate the net in-flows and outflows caused by the HSCT, we arrive at a multiplier effect of 1.47, derived by dividing the total annual household estimated spending of \$272 by the total net income received of \$185 (income received from the HSCT less the reduction in the value of in-kind gifts received by the household). This net multiplier reflects the important reduction in the value of food that beneficiary households receive from neighbours and relatives. This multiplier is lower than the local economy multiplier estimated by the FAO of 1.73, because that includes secondary effects on non-beneficiaries.

**Health, child material well-being:** While we hypothesize that the receipt of cash through the programme would reduce adult morbidity, and increase the use of health services and health expenditures, we fail to detect positive health impacts. In some cases we find counterintuitive results, such as an increase in the incidence of chronic illness and self-reported disability among cash recipients, and a decrease in the likelihood of payment for treatment during illnesses and injuries. We do find, however, that disabled individuals in small households are more likely to receive care. The programme also failed to impact child health outcomes. It did, however, have significant and positive effects on the material wellbeing of children. Children aged 5-18 years in households receiving transfers through HSCT were more likely to own shoes and have three basic needs met (a blanket, shoes and two pairs of clothing).

**Education:** With primary school enrolment above 90 percent there was virtually no room for the HSCT to impact schooling at this level. Secondary school enrolment rates at baseline were 70 percent, yet we do not find any programme impacts on secondary schooling. This is likely due to the negative effects of the HSCT on receipt of BEAM scholarships at the secondary level. This is consistent with earlier evidence from the HSCT (from the 2014 survey) that indicated that beneficiaries were not included in the BEAM program, and likely explains why we do not find positive impacts of the HSCT on secondary school enrolment.

**Protection of young persons:** A specially designed module for young people explored impacts around early sexual activity, mental health, perceived HIV risk, and violence. Results indicate that the HSCT is protective for young people. We find a significant negative effect of the HSCT on sexual debut (by 8 percentage points) and a small increase in age at first pregnancy/impregnation. We also observe significant reductions in reporting of physical violence in the last 12 months among youth in the HSCT of 13 percentage points, driven by the category of ‘punched or slapped’. The main perpetrators of this violence are peers and authority figures.

New questions introduced at endline show that the protective environment of the young person is quite weak, with 14 percent of young people reporting that they were made to feel unwanted, and 9 percent threatened with abandonment. The HSCT appears to strengthen the protective environment, with fewer HSCT young people reporting witnessing violence against their parents (by 4 percentage points), and fewer (by 6.4 percentage points) experiencing a form of emotional violence – being humiliated in public – themselves.

## Policy recommendations

**Overall:** The significant effects on food purchases and diet diversity, along with the strong multiplier effects generated by the programme, indicate that the HSCT is making an important positive difference in the lives of beneficiaries in both protective and productive domains. The programme thus represents a fruitful model for scale-up to achieve poverty mitigation and productive inclusion objectives of the Government of Zimbabwe.

**Operations:** There are a number of areas around programme operations that need to be strengthened based on the results. One area is around programme *communication*. Essential features of the programme are still not clearly understood by a large group of recipients, including when the next payment can be expected, how long recipients will remain in the programme, and whether or not there are rules or conditions to be followed for transfer receipt. The latter is particularly concerning, as recipients could be exploited if they believe they may be removed from the programme. A second area is around *payments*, as respondents spend over six hours collecting payments on average, and a quarter do not feel safe while collecting their payment. The actual timeliness and predictability of payments also has important consequences for programme impact insofar as they affect planning and forward thinking, so the Ministry should ensure these essential features of the programme are maintained. Finally, *coordination* with other poverty relief interventions should be improved, as HSCT recipients report being consistently excluded from NGO and other programmes, such as input support and drought relief.

**Coordination with BEAM:** Consistent with earlier evidence from midline study, HSCT beneficiaries are still systematically excluded from BEAM. The Ministry should reach out to the Ministry of Education, particularly at local level, to explain the purpose of the HSCT, and to coordinate the targeting of BEAM benefits at the Ward level. Ideally HSCT recipients would automatically qualify for BEAM, as is done in Ghana and Jamaica, for example, where cash transfer beneficiaries automatically qualify for free health insurance and school fee waivers respectively.

**Youth:** The ramping up of child protection services since the midline study appears to have paid dividends, with positive impacts on violence reduction and other child protection outcomes. These services should be continued, and possibly expanded to areas such as menstrual hygiene, which continues to be an important barrier for young women to fulfil their development potential.

**Strategic dissemination of results:** The evaluation contains evidence of positive programme impacts across a range of domains, such as consumption and diet diversity, productive activity, and child protection. Evidence could be packaged in a user-friendly, accessible manner (for example through short, focused research briefs) and disseminated to key change agents such as the media, academics, and Parliamentarians. Innovative dissemination strategies used in other countries should also be investigated and potentially adapted to the local context. The Ghana LEAP cash transfer has utilized T.V. infomercials, videos and radio spots to raise awareness and support for the programme, and Zambia, Ghana and Kenya have organized social protection weeks (for example <http://spc.socialprotection.or.ke/>) to facilitate national dialogues on the role of social protection. Such efforts will leverage the large investment in the impact evaluation, and the positive results it contains.

## Acronyms

3ie	International Initiative for Impact Evaluation
AE	Adult equivalent
AIR	American Institutes for Research
ATT	Average treatment effect on the treated
BEAM	Basic Education Assistance Module Programme
C	Comparison group
CASS	Centre of Applied Social Sciences
CPF	Child Protection Fund
CPI	Consumer Price Index
DD	Difference-in-differences
DfID	Department for International Development, United Kingdom
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
HFIAS	Household Food Insecurity Access Scale
HSCT	Harmonised Social Cash Transfer
IPW	Inverse Probability Weighting
ITT	Intent-to-treat
MoLSS	Ministry of Labour and Social Services, prior name of the MPSLSW
MPSLSW	Ministry of Public Service, Labour and Social Welfare
NAP	Zimbabwe National Action Plan for Orphans and Vulnerable Children
NFE	Non-farm household enterprises
PC	Per capita
PMT	Proxy means test
PP	Percentage point
SCT	Social cash transfer
T	Treatment group
TLU	Total livestock units
UNC	University of North Carolina at Chapel Hill
UNICEF	The United Nations Children's Fund
USD	United States dollar

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## 1. Introduction

This document presents the endline 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. A three-wave impact evaluation accompanied the programme to learn its effects on recipients and provide evidence for making decisions about the future of the programme<sup>i</sup>. UNICEF Zimbabwe contracted the American Institutes for Research (AIR) and the University of North Carolina at Chapel Hill (UNC), together with the Centre of Applied Social Sciences (CASS), to conduct the baseline and 12-month impact evaluation of the HSCT, which were successfully completed in 2014 (AIR, 2013, 2014). The endline evaluation – the final step of the study – was funded by 3IE in a grant to UNC through the Social Protection Open Window, and was slated to follow at 36 months after the baseline, but due to delays in implementing the programme, was postponed. Cash payments by the programme were regularized in mid-2016 and the endline was conducted in July-August 2017. This report presents the findings from the endline, focusing on impacts on consumption, food security, health, education, productive activities, and programme operations. We recommend that this report be read in conjunction with both the baseline and midline reports in order to get a more complete picture of the HSCT evaluation,<sup>ii</sup> although a summary of impacts at midline and comparison to endline is presented in Section 14 of this report.

## 2. Background on HSCT programme

A major challenge for public policy is to ensure that the fruits of economic growth benefit all citizens, and this often requires direct intervention to assure that the poorest and socially excluded can participate in and enjoy the benefits of economic growth. Thus, creating and strengthening social protection systems has become an important priority among governments and development partners in Eastern & Southern Africa (ESA). Among some development partners, social protection is now considered part of the essential package of basic social services that the state ought to provide to its citizens. Amid the array of social protection programmes available, cash transfers in particular have become the focus of much policy and programmatic attention. In sub-Saharan Africa in the last ten years there has been a doubling in the number of governments operating cash transfer programmes, from 20 to 40.

Zimbabwe's Enhanced Social Protection Programme, acknowledged as one of the best in Africa, has been significantly eroded during the last fifteen years due to chronic underfunding and a more general breakdown in social service delivery. 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. Approximately 78 per cent of the population lives below the poverty line,<sup>1</sup> 55 per cent below the food poverty line,<sup>iii</sup> and 15 per cent of all children have been orphaned.<sup>2</sup>

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

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<sup>i</sup> The Terms of Reference for the evaluation are provided in Appendix A4.

<sup>ii</sup> The [baseline](#) and [midline](#) reports can be found at the transfer project website, <https://transfer.cpc.unc.edu>

<sup>iii</sup> 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.

funding mechanism (the Child Protection Fund) included social cash transfers as a major programme component, accompanying other key interventions in child protection and access to social services. The Fund was a multi-donor pooled funding mechanism managed by UNICEF in partnership with MoLSS which sought to address inequities through a comprehensive child protection and social protection approach to vulnerable children and their families. NAP II includes four primary components: 1) a social cash transfer program; 2) enhanced access to child protection services; 3) improved access to basic education for OVCs; and 4) improved program management and implementation of services. The cash transfer component (the HSCT) began operating in 2011.

The main objective of the programme is to reduce poverty and empower vulnerable households by increasing consumption and promoting access to education, opportunities, and basic services among the extreme poor. The programme aims to achieve this through a series of specific objectives, namely: (1) improving basic household consumption and nutrition among vulnerable groups such as children, the elderly and the disabled; (2) increasing access to health care services; (3) increasing basic school enrolment, attendance and retention of beneficiary children between five and 15 years of age; and (4) facilitating access to complementary services (such as welfare, livelihoods and improvement of productive capacity) among beneficiary households.

At the time of the follow-up data collection in 2014, peak enrolment was 55,509 households. The long run goal of the Ministry is to cover 250,000 poor families in all 65 districts of Zimbabwe. Due to funding constraints and an extended economic recession in the country, the total number of beneficiaries has dropped to approximately 29,000. However, the new government that entered in November 2017 has sent signals of a commitment to the social sectors and to social protection in particular via the 100 Day Rapid Results Initiative, and its first budget itself called for increases to the HSCT as well as the Basic Education Assistance module (BEAM), an important social protection programme addressing school enrolment among low-income families.

HSCT is jointly funded by the Zimbabwe government and donors<sup>iv</sup>, 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 Selection criteria

The programme targets labour-constrained households that are also food poor. A household is defined to be food poor if the household members are living below the food poverty line<sup>v</sup> and are unable to meet their most urgent basic needs: they take only one or no meal per day, are not able to purchase essential non-food items such as soap, clothing, school utensils; live on begging or some piece work; have no valuable assets; and get no regular support from relatives, pensions, and other welfare programmes.

To be considered labour constrained, it has to either have no able-bodied household members aged 18-59 that are fit for work, have a high ratio of dependents (more than three children, chronically sick, or disabled members per one adult), or have a severely disabled or chronically sick member who requires intensive care. The criterion for labour constrained is used in order to focus on those households that are

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<sup>iv</sup> Department for International Development (DfID); the European Union (EU); Swiss Development Cooperation (SDC); Kingdom of the Netherlands, Embassy of Sweden/Sida; the Food and Agriculture Organization (FAO); and CASS

<sup>v</sup> A household is food poor when the total household expenditure is below the amount required to meet the minimal food energy requirements of the household members (2,100 kcal per adult equivalent). As households always have to spend some of their expenditure on non-food items, food poor households suffer from chronic hunger and are unable to meet basic needs.

not able to access or to benefit sufficiently from labour-based interventions such as public works or from piece work. A person is not fit for work when he or she is too weak to engage in income generating activities for more than 3 months.

## 2.2 Transfer amount

Eligible households receive unconditional cash payments every other month (paid in cash) that range from US\$10 to \$25 per month and are based on household size (Table 2.1.1). The grant amount schedule has remained the same since programme inception in 2013, with most households receiving \$25 per month, due to the high average household size among the target population. This translates to approximately \$5 a month per capita for a family of five, the median size household in the sample. The real value of the transfer amount (adjusted for CPI) and the transfer amount as compared to household consumption are discussed further in Sections 7.3 and 7.4.

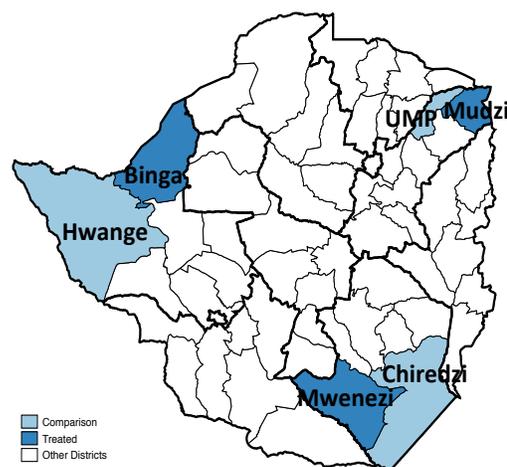
**Table 2.1.1: HSCT payment amount by household size**

Household size	Monthly grant amount
One	\$10
Two	\$15
Three	\$20
Four or more	\$25

## 2.3 Locations

The MPSLSW chose to start the Phase 2 rollout of the HSCT, which is the subject of this evaluation, in three districts: Binga, Mwenzi, and Mudzi (Figure 2.3.1).<sup>vi</sup> 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.

**Figure 2.3.1: Zimbabwe country map: Treatment and comparison districts**



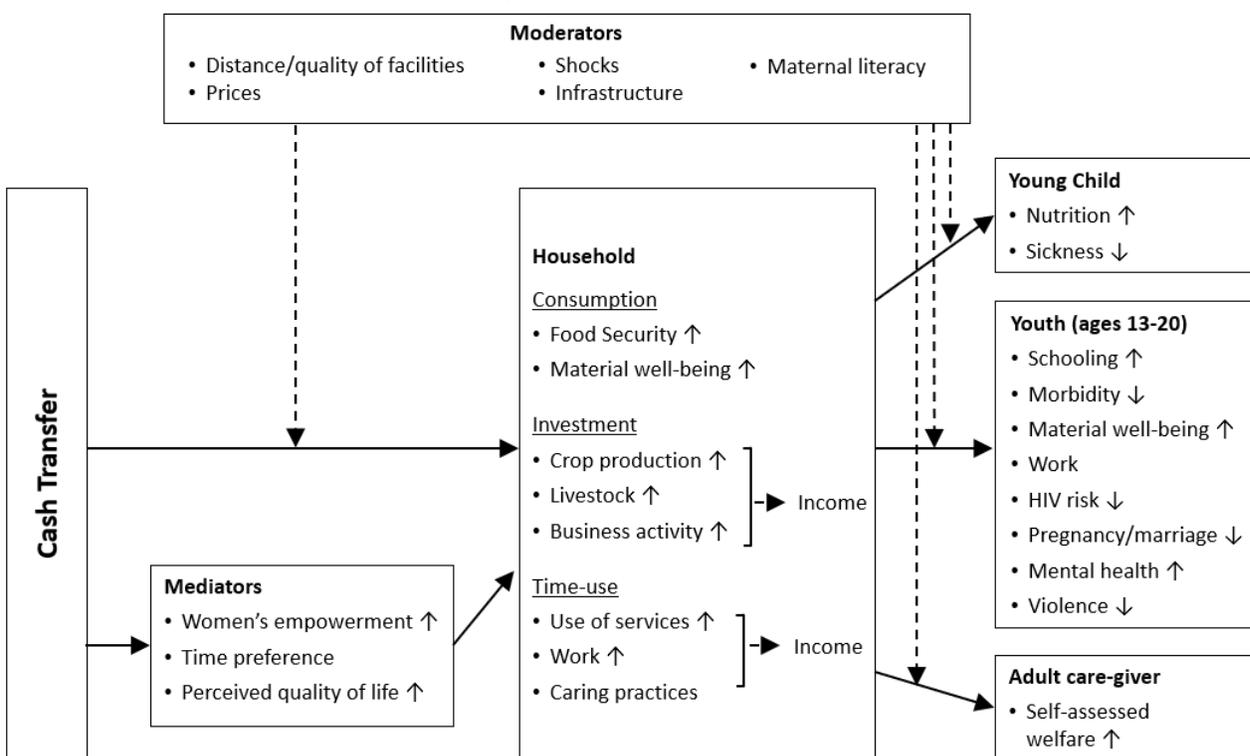
<sup>vi</sup> The MPSLSW has taken a phased approach to the rollout of the HSCT. Phase 1 represents the first 10 districts to receive the HSCT programme, which started prior to the commissioning of this evaluation.

### 3. Theory of change

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 3.1.1 brings together these ideas into a theory of change 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 (reducing food poverty, increasing 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.

**Figure 3.1.1: HSCT evaluation theory of change**



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.

In Figure 3.1.1, we list some of the key indicators along the causal chain that we analysed 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).

#### 4. Evaluation questions

The evaluation is focused on measuring these specific objectives in order to assist the Ministry to determine the programme's effectiveness. The main evaluation goals are therefore closely aligned, and are as follows:

1. What are the impacts of HSCT on consumption and non-consumption expenditures, including changes in food security? Have the treatment households' consumption and savings increased? Have food security and diet diversity improved?
2. What are the effects of the programme on both child and adult health, morbidity, and access to and use of health services?
3. Does receiving the transfer increase the households' children's enrolment and attendance of school?
4. What are the impacts of HSCT on productive activities? This includes the analysis of effects of receiving the transfer on the households' labour, ownership of assets and livestock, crop production, and other household enterprises.

Based on these core questions and the programme's logical framework, the following lead indicators for each of the evaluation areas have been developed with the implementing agency and development partners and are defined in Table 4.1. While these serve as the primary or lead indicators for the evaluation, as explained in Section 3, programme effects could literally be found anywhere depending on the constraints and preferences of individual households. This report (and the associated midline report) thus provides evidence on a wide range of indicators within each domain, to help us understand exactly what the constraints are that households face and where they choose to spend their money. This in turn provides insights in terms of complementary services that could enhance the effects of the cash transfer.

**Table 4.1: HSCT evaluation domain lead indicators†**

<b>Domain Lead indicator</b>	<b>Definition</b>
1.1 Total per capita consumption	The sum of all consumption including purchases, gifts and own-production, based on a detailed expenditure module covering over 200 individual items. Measured in US\$ per person per month.
1.2 Food security scale score	The Household Food Insecurity Access Scale (HFIAS), a widely used food comprehensive food security scale developed by the Food and Nutrition technical Assistance Project (FANTA). The ten item scale covers access, worry, type of food, and portions over a 4-week reference period and ranges from 0 (secure) to 24 (insecure).
2.2 Child morbidity	Whether child age 0-5 years was sick with diarrhoea/fever/cough in last two weeks
2.3 Disabled person accessed care	Whether person with a disability received any services for this disability
2.4 Chronically ill person accessed care	Whether person who was continuously sick for at least 3 months in the last 12 months received any external care or support for this illness
3.1 Primary school enrolment	Percentage of primary school age (7-12) children that are currently attending school.
3.2 Secondary school enrolment	Percentage of secondary school age (13-17) children that are currently attending school.
4.1 Value of crop production (\$)	Value of harvest of up to four crops in last agricultural season
4.2 Ownership of 6 main productive assets	Whether household owns any one of six of the most common productive assets (axe, sickle, chicken house, livestock kraal, ox plough and yoke)
4.3 Ownership of any livestock	Whether household owned any livestock

Notes: †All the log frame indicators will be indicated with this symbol when they first appear in the text.

## 5. Study design

The impact evaluation of Zimbabwe's HSCT is a four-year,<sup>vii</sup> mixed methods, quasi-experimental study. The quantitative baseline survey took place in 2013 and was followed a year later by a midline data collection comprising both quantitative and qualitative surveys. This document presents the findings of the endline evaluation, which only contained a quantitative component, and took place in summer of 2017 (two years than originally planned, due to delays in programme implementation).

The quantitative component of the impact evaluation is based on a prospective, difference-in-differences (DID) with matched comparison group study design. This design estimates program impact by comparing changes in outcomes of cash transfer recipient households from early-entry Phase 2 districts (specifically, Binga, Mwenzi, and Mudzi, which constitute our treatment group) to changes in outcomes of 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

<sup>vii</sup> AIR, together with UNC had a contract with UNICEF to conduct the baseline and 12-month follow-up rounds of data collection. UNC, with a grant from 3IE, conducted the endline 48-month follow-up round of data collection.

treatment districts by agro-ecological characteristics (they neighbour each other), culture, and level of development. Details of the matching process are provided in Appendix A1.

A major factor in the choice of a quasi-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 to full coverage 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 was not possible because all eligible households within a district must receive the programme at the same time. It was also not possible to randomize among districts given that the Ministry purposely identified the Phase 2 districts for the evaluation. The Ministry and UNICEF are aware that this design leaves open the possibility that 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, take-up is 100 per cent, and the treatment and comparison districts are neighbours in the same regions. In addition, the DID estimation approach we use in this study allows to control for pre-program differences between the treatment and comparison areas, and we will include control variables in the estimation model to account for observed differences between the treatment and comparison groups.

## 5.1 Analysis approach

This study is based on a difference-in-differences (DID) design using a matched comparison group and longitudinal data. We estimate programme impacts on individuals and households using a difference-in-differences statistical model that compares change in outcomes between baseline and endline and between treatment and comparison groups, controlling for differences in observed household characteristics and region-level fixed effects. The DID estimator is the most commonly used estimation techniques for impacts of cash transfer models and has been used, for example, in Mexico's PROGRESA program (Rawlings & Rubio, 2005), Kenya's Cash Transfer for Orphans and Vulnerable Children (Asfaw et al., 2012), and in the evaluation of Zambia's Child Grant Program. The validity of the impact estimates obtained by DID depends on what is called "the parallel trends assumption", which basically means that any changes in unobserved characteristics are the same in treatment and comparison areas. Under those conditions, the change in the comparison group, controlling for differences in observed characteristics between the groups, provides a good approximation of the change that would have occurred in the treatment (HSCT) areas if the program had never been implemented. Even though randomization of the HSCT treatment was not possible, support for the DID approach is provided by the fact that both treatment and comparison households were selected according to programme eligibility rules, and so all comparison households are in fact future programme recipients. A high degree of similarity was indeed achieved between the treatment and the comparison groups at baseline: we conducted balance tests in 56 primary outcome and background characteristics using OLS regressions with cluster-robust standard errors, and found that only 8 indicators were statistically significant (see Appendix A2). Furthermore, the difference in none of those eight indicators was meaningful because the observed difference was less than 0.25 standard deviation for each indicator. What could be a possible concern though is the fact that control wards come from areas that might have different trends. This risk was minimized by purposefully selecting comparison wards in neighbouring areas based on a set of characteristics including agroecological and socioeconomic variables.

To estimate the HSCT impact, we use the following DID equation:

$$Y_{ijt} = \beta_0 + \beta_1 P_j + \beta_2 T_t + \beta_3 P_j \cdot T_t + \beta_4 X_{ijt} + \lambda_j + \varepsilon_{ijt} \quad (1)$$

Where  $Y_{ijt}$  is the outcome of interest for individual or household  $i$  who lives in community  $j$  at time  $t$ .  $P_j$  is a binary variable set to 1 if community  $j$  is receiving the HSCT programme, and to 0 if it is not.  $T_t$  is a dummy (binary) variable for time of the observation, set to 1 if the observation is from the endline survey, and to 0 if it is from the baseline.  $P_j \cdot T_t$  is the interaction term of the programme variable and the time dummy.  $X_{ijt}$  represents a set of observed individual and household characteristics, such as household size, household demographic composition, and household head characteristics.  $\lambda_j$  represents a set of region dummies included in the model to control for unobserved characteristics of the region that do not change in the evaluation interval. And,  $\varepsilon_{ijt}$  is the usual error term. In this model, the coefficient of main interest is  $\beta_3$ , the coefficient of the interaction term, which is the DID programme impact at endline. Its estimated value ( $\hat{\beta}_3$ ) is interpreted as the additional change in the outcome achieved between baseline and endline as a result of the households receiving HSCT, relative to the change occurring in the comparison group, controlling for differences in the observed characteristics,  $X_{ijt}$ , and for fixed unobserved differences between regions. Model (1) is estimated with regression analysis methods applied on pooled data from the panel of households included in both the baseline and endline surveys. We use cluster-robust standard errors to account for the lack of independence across observations due to clustering of households within Wards (Liu, 1998). We also use inverse probability weighting to adjust the sampling weights to account for the 16 per cent attrition in the follow-up sample (Woolridge, 2010). We investigate differential impacts by household size for each outcome and present impacts by household size only when they are different. We also investigate differential impacts among households in the bottom 50 per cent of the baseline expenditure distribution (the poorest households), for whom the per capita transfer will be much larger. Where there are heterogenous effects, we highlight them in the text.

The issue of multiple hypothesis testing is relevant in this evaluation. Typically, the concern with multiple inferences has been that researchers perform many tests but may only report the ones that are statistically significant. As this study is guided by the principles of independence, impartiality, and credibility, we have addressed this by reporting on virtually all indicators deemed important and of interest to the programme openly and transparently, whether significant or not. This allows the reader to judge for themselves what the true effects are, and the degree to which they are affected by multiple inferences. In addition, prior to the evaluation, the HSCT log frame identified key programme objectives and associated indicators, which were then included in the evaluation survey. These ‘lead’ or ‘primary’ indicators are described in Chapter 4 and will be used in the programme’s logical framework. However as noted earlier, it is hard to predict ex-ante the precise constraints faced by households and how they will decide to channel the transfer, which is unconditional. It is thus informative from both a policy and academic perspective to report on a wide range of indicators within the stated domains that the programme aims to affect, in order to understand the behavioural response to the cash transfer. An ‘accounting’ exercise at the end of this report provides summarizes all the additional expenditures generated by the programme and compares this summary figure to the amount of the transfer to see if the two correspond.

## 5.2 Sampling design

The longitudinal impact evaluation enrolled 3,063 households in 90 wards across six districts at baseline, with 60 wards in the treatment sample and 30 wards in the comparison sample. This unbalanced design resulted from limited resources and time available to conduct targeting in the comparison districts. All wards receiving the HSCT in 2013 had to be targeted for the programme, regardless of the study, but the

comparison wards were included 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 per cent 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 5.2.1 lists the number of wards in each district.

**Table 5.2.1: 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

### 5.3 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.

## 5.4 Data collection instruments

The endline data collection was conducted with three instruments: a household questionnaire, a young person’s module asked of up to three household members aged 13-24, and a price questionnaire intended to explore differential price inflation across treatment and comparison districts (described further in Appendix C.6). The topics covered in the questionnaires are displayed in Table 5.4.1 below.

The evaluation team piloted all instruments in the field at all three study waves 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. Indicators for the impact evaluation were selected to address the research questions and also align with the log frame.

**Table 5.4.1: Topics in survey questionnaires**

<u>Household Survey</u>	<u>Young Person’s Survey (Age 13-24)</u>
Roster and Orphan Status	Personal Background
Health — All	Aspirations and Feelings
Education — 3+ years	Mental Health
Main Economic Activity — 5+ years	HSCT Programme Use
Labour — 10+ years	Sexual Experiences
Household Enterprises	HIV Knowledge
Household Transfers	Violence and Alcohol
Other Household Income	Menstruation
Household Credit	
Self-Assessed Poverty and Food Security	
Shocks and Social Networks	<u>Community/Price Survey</u>
Household Expenditures	Food
Agricultural Production	Sanitary and Self-care Items
Hired Labour for Crop, Livestock, and Non-agricultural	Fuel
Enterprise Activities	Livestock and Agricultural Tools and Wages
Livestock	
Operational Performance of the Programme	

## 5.5 Timing and process of data collection

This study is committed the UNEG ethical standards for evaluation, and as such all interactions with human subjects were guided by the principles of respect for dignity and diversity, right to self-determination, fair representation, compliance with codes for vulnerable groups, confidentiality, and avoidance of harm. Prior to any field activities taking place, this study received IRB approval from both the Medical Research Council of Zimbabwe Board (MRCZ/A/1854) and the UNC-CH Board (12-1299), which also address possible conflicts of interest.

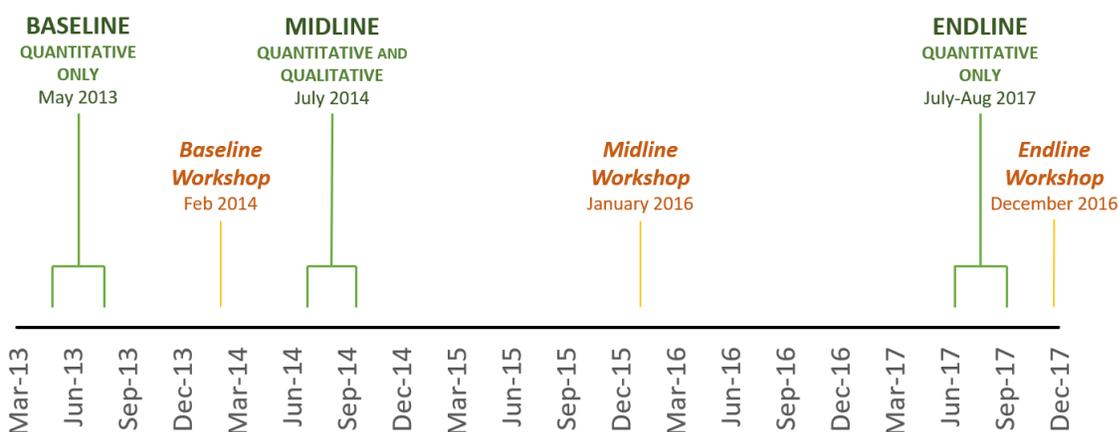
To ensure high-quality and valid data, we paid special attention to the process and timing of data collection, making sure that it was culturally appropriate, sensitive to Zimbabwe’s economic cycle, and consistently implemented. A team of Zimbabwe enumerators experienced in household and community surveys and fluent in the local language where they worked were trained on the quantitative 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 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 price questionnaire in every Ward to check for spatial price differences.

This round of data collection took place in July and August 2017, approximately 4 years after the baseline study in May 2013 and programme implementation start in June 2013, and 3 years after the midline in July 2014, meaning that households are being compared in approximately the same season at all three waves (Figure 5.5.1). It is important to note that the study takes place in 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. As a result, this may under-state the impacts of the programme on indicators such as food security and consumption.

Data entry was carried out as completed surveys came in from the field, in September 2017. 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.

**Figure 5.5.1: Study timeline**



## 6. Attrition

Attrition occurs when households from the baseline sample are missing in the follow-up sample. Events such as death, migration, dissolution of households, or any other event that makes it difficult to locate a household during the follow-up data collection are causes of attrition. The most frequent reasons reported by the field team for not interviewing a household were that the household had moved and could not be located, or the family was absent during the period of the enumeration. Actual refusals, when the household is located but refuses to be interviewed, is extremely rare.

It is important to examine attrition for estimating program impact because it not only decreases the sample size, leading to less precise impact estimates, but it could also introduce bias into the evaluation

sample. If attrition is selective, that is, that those leaving the sample are different than those who remain, it could lead to incorrect program impact estimates, and/or it might affect the representativeness of the sample.

We examine both overall and differential attrition from the baseline to the endline surveys. Overall attrition refers to the total share of observations missing at endline from the original baseline sample. Overall attrition can change the characteristics of the sample in the panel, making it non-representative of the population from which it was obtained. Overall attrition could affect our ability to generalize the evaluation results to the population of interest – the HSCT beneficiaries of the evaluation study area. Differential attrition occurs when the treatment and control samples differ in the types of households that leave the sample. We examine differential attrition in terms of affecting the balance between the treatment and comparison groups obtained at baseline. As indicated in section 5.1 above, we found a high degree of balance at baseline: we conducted balance tests in 56 outcome and background characteristics and found differences in the mean values of the groups in only 8 variables, and in those indicators, the difference was not meaningful as it was less than 0.25 standard deviations of the indicators.

Table 6.1 presents information on the number of households in the baseline sample, the panel (those also interviewed in the endline survey), and attrition. Overall attrition was at 16.2 per cent, with small variation between the treatment (15.0 per cent) and the comparison areas (18.6 per cent). There was also only a small and no significant difference in attrition between districts.

**Table 6.1: Households in the baseline survey, panel, and attrition**

Groups		2013 Baseline	In the Panel	Retained in Panel (%)	Attrition Rate (%)
Treatment		2,029	1,725	81.4	15.0
Control		1,034	842	85.0	18.6
Total		3,063	2,567	83.8	16.2
Districts	Status				
Mudzi	Treatment	612	509	83.2	16.8
UMP	Comparison	311	250	80.4	19.6
Binga	Treatment	816	706	86.5	13.5
Hwange	Comparison	417	337	80.8	19.2
Mwenezi	Treatment	601	510	84.9	15.1
Chiredzi	Comparison	306	255	83.3	16.7

We examined overall attrition by comparing the average baseline values of those in the panel to those lost to follow-up (attritors) on 146 indicators (Appendix B.1 provides results tables for overall attrition). We found that for 61 out of 146 indicators, that is, for 41.8 per cent, the baseline mean value of those in the panel was statistically different than the mean value of those attritors, at the 5% significance level (p-values of the difference of means for each indicator is presented in the last column of the Appendix B.1 tables.) These results indicate that overall attrition was selective in the analysis sample.

We then examined if differential attrition affected the balance between the treatment and control groups achieved at baseline. Using only the households in the panel, we compared the baseline mean values of those in the treatment group to the baseline mean values of those in the comparison group. We found that there were differences between the treatment and comparison groups, at the 5% significance level, in only 17 out of 146 indicators used (that is, in 11.6 per cent). These results indicate that attrition has largely not

affected the balance achieved between the treatment and control groups at baseline. (Appendix B.2 provides results tables for differential attrition).

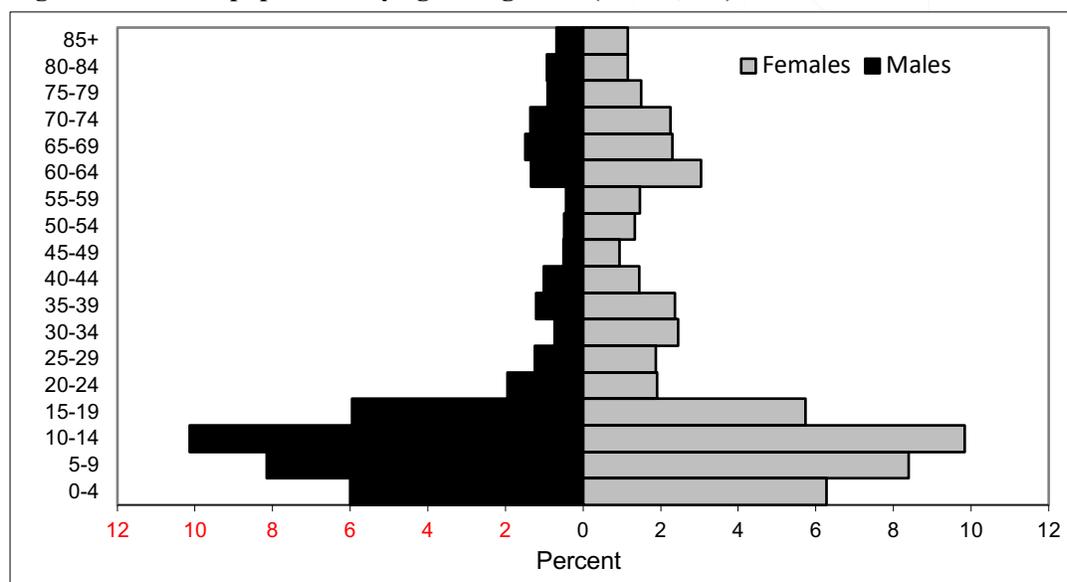
In order to deal with selective attrition we used an inverse probability weighting (IPW) procedure to adjust the sampling weights. To implement the IPW, we estimated a probit model of being in the panel using baseline household-level background characteristics and outcomes as explanatory variables, and then adjusted the sampling weights using the predicted probabilities of being in the panel obtained from the model (see Appendix A.1). Besides, we also included control variables in the impact estimation models to control for persistent differences between the treatment and control groups.

### Description of Sample

A detailed description of the evaluation sample and comparison to national samples is provided in the baseline report. We highlight a few of the essential characteristics of the HSCT sample in this section to allow for a better interpretation of the evaluation findings.

HSCT eligible households are food poor and labour-constrained, where the concept of labour-constraints is operationalized by the ratio of members who are not fit to work divided by the number of members who are fit to work. This targeting criteria leads to a unique profile of recipient households as depicted in Figure 6.1, which shows the age and sex structure of household members in HSCT eligible households. Larger bars indicate a higher count of members in that age group. The figure illustrates the ‘U’ shape age structure with prime-age adults largely missing, and a large number of adolescents and elderly. Note also that households have more women than men at virtually every single age group.

**Figure 6.1: HSCT population by age and gender (N = 14,575)**



The mean household size in the sample is 4.8, and 25 per cent of residents are disabled and 67 per cent are elderly. Household heads (or main respondents) are overwhelmingly female (68 per cent), with a mean age of 57, and only 56 per cent have attended school. HSCT households are much more likely to keep orphans relative to other poor rural households in Zimbabwe. Among children age 0-17 years, 39 per cent are orphaned through either their mother, their father or both parents, compared to just 27 per cent among all poor rural households in Zimbabwe (as measured by the poorest quintile in the Zimbabwe Demographic and Health Survey-ZDHS).

Finally, a comparison of monetary poverty rates between the HSCT sample and national samples as reported by the PICES show that beneficiary households are significantly poorer. Mean per capita monthly consumption expenditure is about half the all Zimbabwe rural average (\$25.5 versus \$50.5), and 81 per cent are below the food poverty line compared to just 30 per cent in the all rural sample (see row 3 of Table 6.2.1). The resulting poverty gap is also much higher among HSCT beneficiaries at 63 per cent compared to 43 per cent in rural Zimbabwe.

**Table 6.2.1: Consumption expenditures and poverty at baseline**

	HSCT	PICES 2011 Rural <sup>1</sup>
Per capita monthly consumption expenditure (median)	25.52	50.45
Poverty line headcount (people) (%)	97.36	84.3
Food poverty line headcount (people) (%)	81.40	30.4
Poverty gap (%)	63.21	42.8

<sup>1</sup> Median consumption taken from Figure 2.1 (multiplied by 1.06 to bring to \$2,013) and poverty counts taken from Table 2.4 of Zimbabwe Poverty Report 2011.

## 7. Operational analysis findings

### 7.1 Introduction

This section discusses the operations of the HSCT Programme based on an operations module that was included in the HSCT impact evaluation survey, as well as on payment records obtained from HSCT. The module contains information on a range of topics related to the administration of the HSCT Programme, including payment delivery, beneficiary satisfaction, targeting, and communication and information.

At the start of the operational module, the person most knowledgeable about HSCT in each of the 2,567 households was interviewed at endline. At the time of the survey, awareness of the program was high, but not universal, at 72 per cent, and was heavily concentrated in the treatment group: almost all treatment households (97.6 per cent) were aware of the HSCT Programme, but only 9.3 per cent of the comparison group have heard about it (Table 7.1.1).

Both T and C households that had knowledge of HSCT were then asked whether they had ever received a HSCT payment. Ninety-two per cent of the entire treatment sample reported ever receiving an HSCT transfer (which was, interestingly, lower than 95.6 per cent at midline, possibly owing to poor recall). Altogether, 7.7 per cent of households in the treatment group (who are supposed to be current or past programme beneficiaries according to initial programme records) reported that they had either never heard of the programme or had heard of the programme but have never received a HSCT payment. Finally, only 84.2 per cent of all treatment households self-reported being current beneficiaries of the programme. This was not reflective of any deliberate graduation or exclusion from the programme, as eligibility within this sample has not been re-evaluated by programme administration; rather, the grant receipt status is likely misreported, although there is some possible self-elimination of beneficiaries from the programme for various reasons, ranging from relocation to misperceptions of the programme's operations.

An encouraging aspect of the study is that there is little cross-contamination: only 0.2 per cent of the entire comparison group has reported ever receiving the transfer, and no C households reported currently receiving it.

**Table 7.1.1: Awareness of and self-reported beneficiary status of the HSCT Programme**

	Treatment	Comparison	Total
Ever heard of HSCT	97.6	9.4	72.0
Ever received payment from HSCT	92.3	0.2	65.5
Self-reported current beneficiary of HSCT	84.2	0	59.8
Total number of households	1,725	842	2,567

The operations module only asked detailed questions of HSCT households who considered themselves current recipients, so the majority of this section only uses data for those 1,451 current beneficiaries (84.2 per cent of the households in the treatment group).

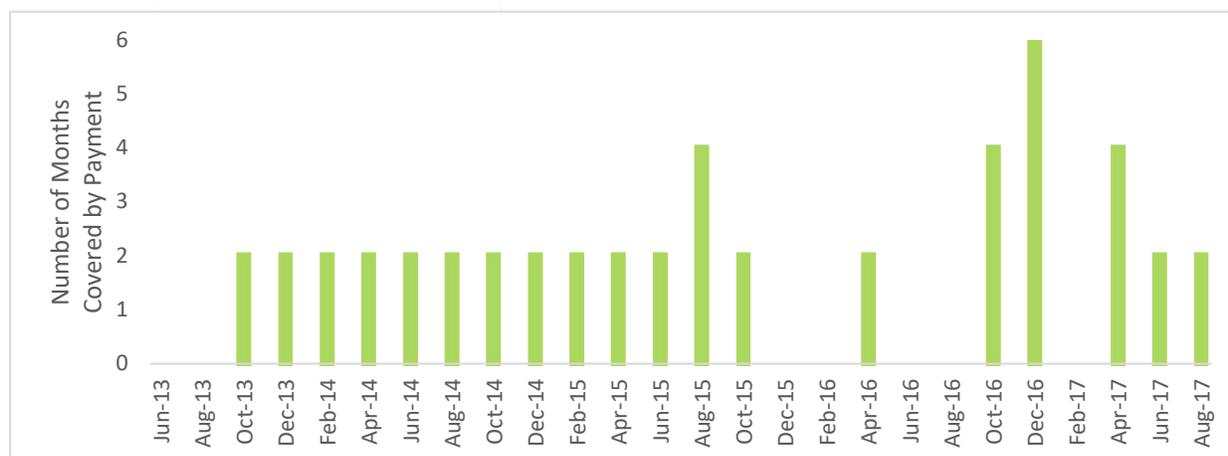
## 7.2 Timeline and coverage of payments

Timeliness and consistency of payments have been shown to be key to creating programme impacts in other similar settings, and thus it is important to address how often payments are received. In the field survey, respondents were asked about details of the last payment, such as the date of last payment received and payment amount, as well as about their expectations for the next payment. HSCT programme data was also obtained to provide the supply-side picture.

### 7.2.1 Programme payment records

The HSCT Programme has shared administrative information on transfer distribution for the treatment group with the researchers, including the payment dates and number of months each payment was intended to cover. During regular disbursements, we would expect to see a payment take place every two months. As seen in Figure 7.2.1, payment frequency and consistency not been completely stable since the inception of the programme. While payments were stable for most of 2014 and 2015, nearly half of the delivery dates were missed in 2016. However, in the past year the programme has caught up on missed dates and paid accumulated payments, as evidenced by double and triple payments in late 2016/early

**Figure 7.2.1: Timeline of payments**



2017, and regular distribution seems to have stabilized by mid-2017.<sup>viii</sup> Please note that the payment dates are approximate and are designed to represent one- to two- month periods.

### 7.2.2 Payment receipt and expectations

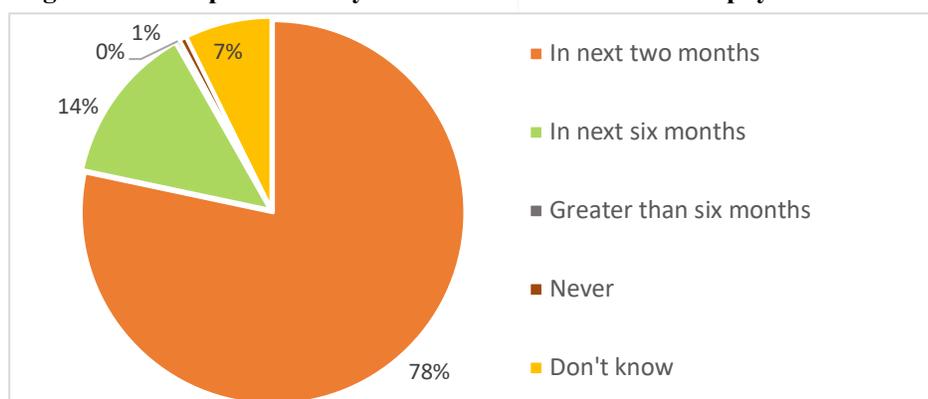
Despite the gaps in transfer disbursement throughout the life of the programme, the survey data confirms that the last payment was timely and recipients now have fairly high expectations for the timeliness of the next delivery. Nearly nine out of ten respondents (89 per cent) who consider themselves current beneficiaries reported receiving the latest HSCT payment in the past month before the survey, and an additional 6.7 per cent received the payment in the past two months (Table 7.2.1). In fact, only half a per cent of current beneficiaries has reported not receiving the payment yet in 2017.

**Table 7.2.1: Number of months since last payment was received (percentage)**

Months	Per cent
Within 1 month	89.3
2 months	6.7
3-6 months	3.4
More than 6 months (incl. before 2017)	0.7
Total	100.0
<i>N</i>	1,447

The timeliness of 2017 payments was reflected immediately in the beneficiaries’ expectations for the next payment. As seen in Figure 7.2.2, 78 per cent of recipients expected the next payment to arrive in the next two months, and an additional 14 per cent expected payment in two to six months. However, the grant has not quite come to be seen as a stable feature for all yet: while most beneficiaries expected payments to continue, with 64.1 per cent reporting that they expect to receive HSCT transfers for more than five years or the rest of their life, a full quarter of respondents said that they did not know how long they expected the transfer to last (Table 7.2.2). The grant also does not appear to be seen as a pension or an old age grant, as the proportion of respondents reporting that they expect to receive it for the rest of their life is similar across age groups. The stability of the grant is very important to its effectiveness, as beneficiaries can smooth their consumption better if they know they can count on bi-monthly income, and can also

**Figure 7.2.2: Expectations by current beneficiaries for next payment**



<sup>viii</sup> The payment data used for this report was provided by UNICEF-Zimbabwe and cover the payments for the three districts of the study only. Payments in some other districts have not been regular or have not taken place for several cycles in 2016/2017.

better plan their future spending and investment, allowing them to maximize benefits from the grant. This is therefore an important issue to address, both through communication about programme duration and through continuing to deliver payments in timely and consistent ways.

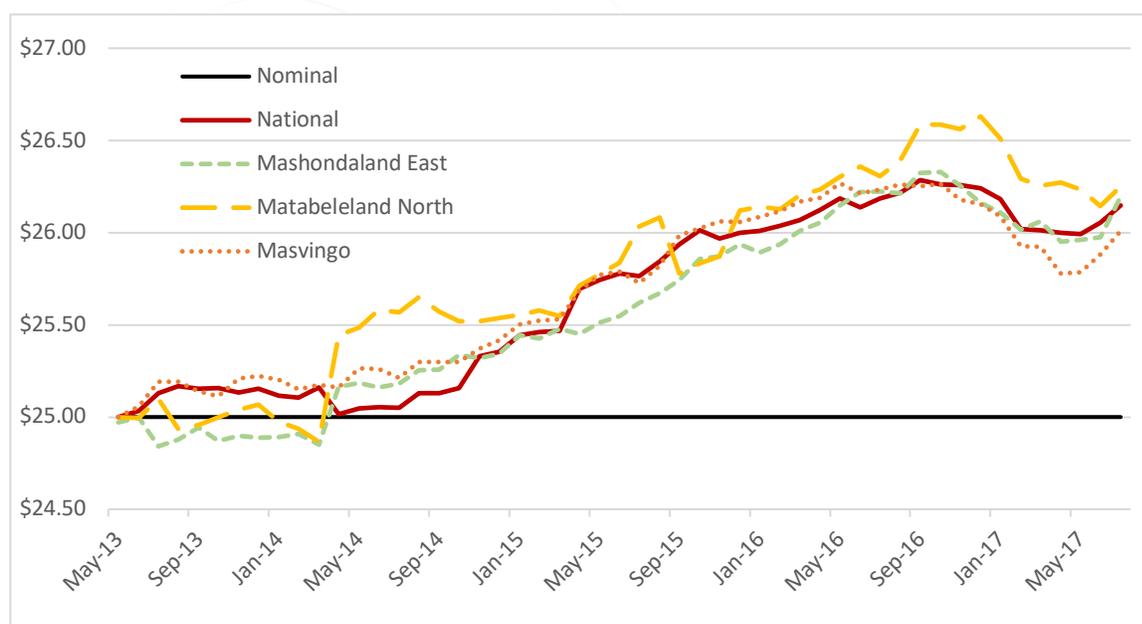
**Table 7.2.2: How long in the future current beneficiaries expect to continue receiving the grant**

Expected duration of grant	Age of main respondent (percent)				All
	< 45 yrs	45-59 yrs	60-74 yrs	75+ yrs	
0-6 months	1.87	2.91	1.42	2.28	1.9
6 months – 1 year	1.47	1.91	1.48	1.22	1.4
1-2 years	2.66	0.21	2.24	0.34	1.5
2-5 years	10.37	6.15	3.26	2.56	5.3
Longer/for the rest of life	60.73	66.1	67.89	60.81	64.1
Don't know	22.91	22.71	23.71	32.79	25.7
<i>N</i>	383	197	479	348	1412

### 7.3 Transfer amount

The transfer amount has remained steady in nominal terms since the 2014 evaluation of the grant, as seen in Figure 7.3.1, which shows the transfer amount for the average household in the survey. However, the real value of the transfer has fluctuated through the years, and varies slightly province by province. This, again, can be seen in Figure 7.3.1, which shows the Masvingo (programme district of Mwenzezi), Matabeleland North (programme district of Binga), and Mashonaland East (program district of Mudzi) provinces. Due to deflation after Zimbabwe switched to using US Dollars, the value of the grant has been on the rise nearly from the grant’s inception, and remains nearly 5 per cent higher than the initial value even after the recent slight dip. It is important to maintain the grant’s value, so the value should continue to be monitored, especially if the inflation pattern reverses.

**Figure 7.3.1: Real value of HSCT Transfer from 2013-2017 by province (indexed to May 2013)**



### 7.4 Transfer as a share of consumption

The value of the transfer as a share of households’ consumption at baseline has stayed fairly steady throughout the time of the study, with a mean of 23.4 per cent and a median of 21.3 per cent, which is just above the target of 20 per cent share of consumption (Davis & Handa, 2015). Both the mean and the median also remain fairly high compared to government cash transfer programmes in other countries (Figure 7.4.1).

**Figure 7.4.1: Transfer as a share of consumption across countries (mean)**

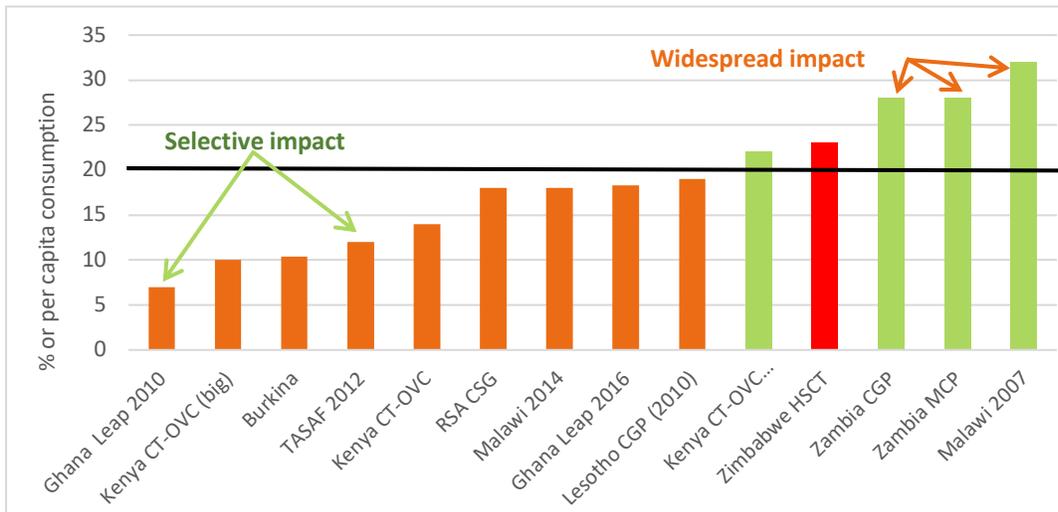
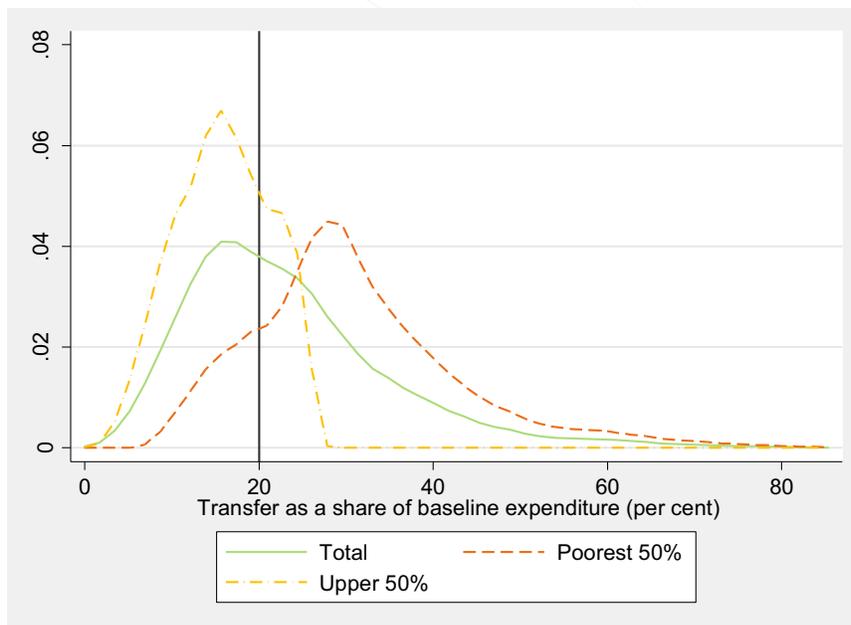


Figure 7.4.2 displays the distribution of the transfer share by the household’s baseline consumption level. Notice that for the poorest 50 per cent of households (dashed orange line) the graph is shifted noticeably to the right—the transfer share is much larger among these households. In fact, for approximately four out

**Figure 7.4.2: HSCT transfer as a share of baseline consumption levels**



of five of the poorest households (82.6 per cent) the transfer makes up at least the recommended 20 per cent share of consumption, although slightly less than half of the total sample is below the recommended level (46 per cent). Seventy four per cent of the less poor half of the sample is below the 20 per cent share goal.

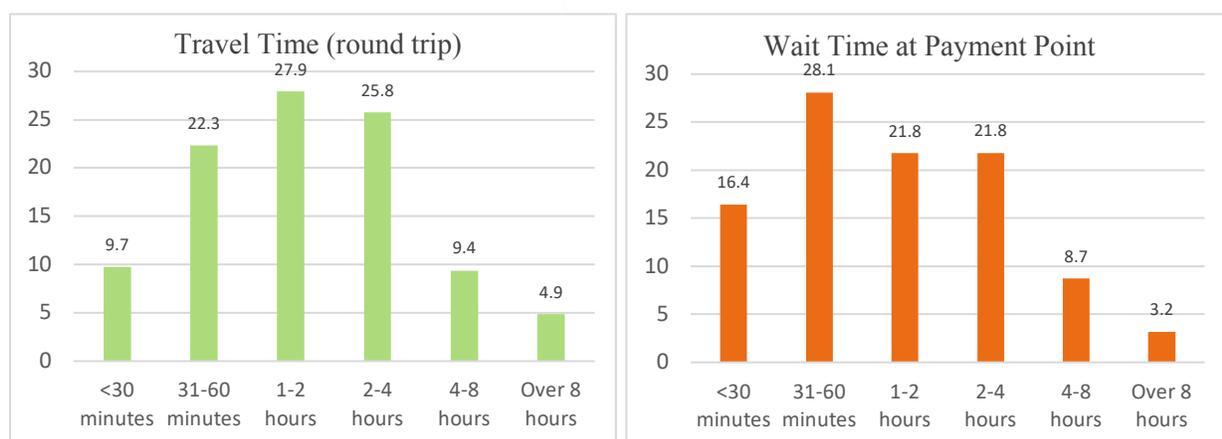
## 7.5 Programme administration

### 7.5.1 Payment collection time costs

It is important to take stock of any costs imposed upon the beneficiaries of the programme, as prohibitive travel distances or significant wait times can serve as barriers to collecting the transfer or undermine the grant’s effectiveness. Although the survey did not ask about costs of transportation, 87.4 per cent of respondents reported walking to the payment point, and a further 2.4 per cent reported coming by bicycle, so costs are non-existent or low for most of the sample. About five per cent of the sample indicated traveling by vehicle – such as a car, taxi, bus, kombi<sup>ix</sup>, or motorbike – suggesting that some respondents may still have to spend money to collect the grant.

However, even if respondents do not have to spend money to collect the grant, time costs can also be prohibitive. Here the programme performs less well: when round-trip travel and payment point wait times are added up, respondents report an average collection time of 6.2 hours. As shown in Figure 7.5.1, only 32 per cent of respondents spend less than one hour on the round trip, and more than half have to wait over an hour to collect the payment once they get to the payment point. Fourteen per cent face trips spanning over 4 hours (and about 5 per cent more than 8 hours), and nearly 12 per cent report having to wait for more than four hours at the payment point. Further, 17.6 per cent reported having to go back to the payment point more than once to receive the payment, introducing additional time costs.

**Figure 7.5.1: Travel and wait time costs of collecting most recent payment**



### 7.5.2 Payment collection practices

There are other important concerns to optimizing payment collection practices. One important measure is the safety of the beneficiaries. At endline, only 76.5 per cent of current recipients of the grant reported feeling safe during collection, and 75.2 per cent felt safe as they returned home from the payment point (as seen in Table 7.5.1). This may be related to some households experiencing long travel times for

<sup>ix</sup> Local term for a minibus

payment, as they could be moving to locations they are not familiar with to receive payments, or to a need for greater security at payment points.

**Table 7.5.1: Satisfaction with payment collection**

	<i>Percent</i>
Feel safe collecting money from payment point	76.5
Feel safe when return home from payment point	75.2
Feel happy with treatment at payment point by staff	94.9

One measure in which the transfer pick up experience appears almost universally positive is with HSCT personnel, as 94.9 of respondents at endline reported feeling happy with the treatment by payment point staff. Another excellent characteristic of the programme operations is almost no leakage of the transfer, especially to programme staff. Only 0.5 per cent of the respondents reported ever having to pay any money to the payment point staff and 0.6 per cent reported that someone at the payment point ever asked them for a money (or gift) before or after receiving the money, which is extremely low. Leakage to the wider community is very low as well: only 1.9 per cent reported ever being asked for money by someone in the community and 0.3 per cent described having to pay any money to someone in the community, for example a chief or an elder, when collecting the payment.

**Table 7.5.2: Leakages of the HSCT transfer payments**

	<i>Percent</i>
Ever had to pay any money (cash/in-kind) to Payment Point staff when collecting payment	0.5
Ever had to pay any money to anybody in community (e.g. elder/chief) when collecting payment	0.3
Anyone at payment point ever asked for money (gift), before or after transfer payment	0.6
Anyone in the community ever asked for money (gift), before or after transfer payment	1.9

### 7.5.3 Use of representatives

It is also important for HSCT success to allow for the transfer to be picked up by a beneficiary’s representative (or caregiver). Given the categories for selection into the programme, HSCT beneficiaries are vulnerable and potentially have limitations that could prevent them from collecting payments themselves. As such, the programme offers each beneficiary an opportunity to designate a representative who can collect the household’s payment if the primary beneficiary is sick, injured, or otherwise occupied. Only about a half of the beneficiaries have chosen to identify such a representative (55.9 per cent), and about 85 per cent of those selected a relative or family member. About thirty nine per cent of respondents who have selected a representative report sending him/her to pick up the transfer at some point in the past. One reason these numbers are so low is that respondents show thorough understanding of how missed payments are collected, with 94.2 per cent correctly identifying that if a payment collection is missed, the full amount of the payment will be added to the next one, and only 2.7 per cent labouring under the impression that the payment will be lost if it is not picked up on time.

### 7.6 Perception of the grant

All those who reported that they had ever received HSCT benefits were asked why they thought were selected to receive the transfer and whether they thought its eligibility criteria were clear. Current beneficiaries of the grant have a mostly positive view of clarity of the programme’s selection guidelines: as seen in Table 7.6.1, 89.4 per cent agree or strongly agree that the eligibility criteria are clear, including nearly three quarters of those no longer receiving the grant. While only 2.5 per cent of current beneficiaries disagree, this percentage goes up to 8.3 for former beneficiaries, which could indicate a need

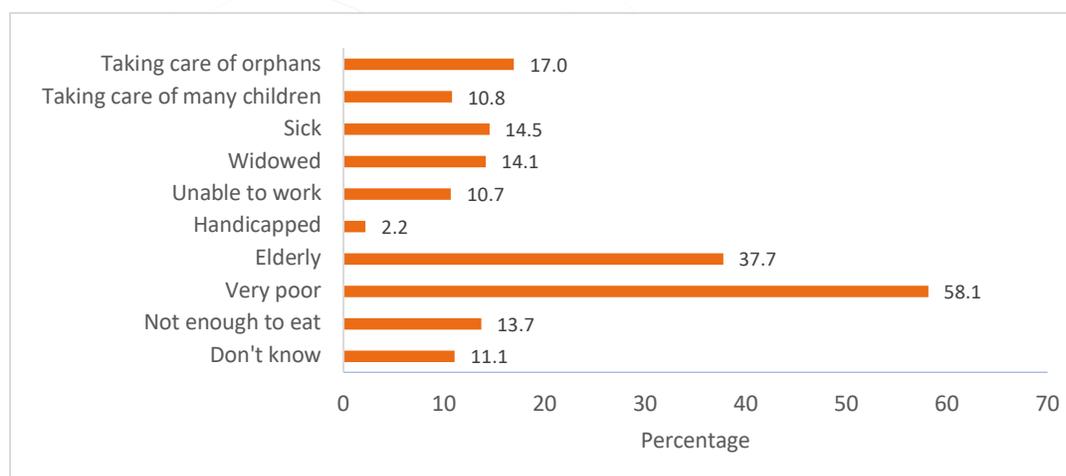
for better communication when suspending or terminating benefits. Unfortunately, we cannot establish using the available data whether the beneficiaries who consider themselves currently ineligible are accurate in their perceptions, or if they remain eligible.

**Table 7.6.1: Perceptions of the HSCT criteria clarity (percentage)**

	HSCT criteria are clear		
	Former beneficiaries (currently not receiving)	Current beneficiaries	Total
Strongly agree	50.3	72.2	70.3
Agree	22.9	17.2	17.7
Neither agree nor disagree	18.5	8.1	9.0
Disagree	4.9	0.9	1.3
Strongly disagree	3.4	1.6	1.8
<i>N</i>	26	1,450	1,574

As noted in Section 2.1 of this report, the programme targets labour-constrained households who are also food-poor. As seen in Figure 7.6.1, although current beneficiaries think the programme eligibility criteria are clear, most actually have an inaccurate perception of why they may have been selected to receive the grant. Only 11 per cent accurately identify “unable to work” as a criterion (although 38 per cent thought they got the grant because they were elderly, 15 per cent because they were sick, and 2 per cent because they were handicapped, which all feed into being labour constrained as per the programme’s definition), and only 14 per cent correctly identified food scarcity as a requirement. Further, 58 per cent think their household is receiving the grant because they are extremely poor, 17 per cent because they are caring for orphans, and 14 per cent because they are widowed, none of which directly contribute to eligibility. This indicates that some work remains to be done to make HSCT beneficiaries, communities, and the public at large fully familiar with transfer targeting.

**Figure 7.6.1: Perceived reasons for programme selection**



Another important feature of the HSCT is that it is unconditional – that is, it doesn’t require its beneficiaries to take any particular actions or spend the transfer in any specific ways in order to continue receiving it. However, only 31.4 per cent of respondents correctly identify that there are no rules to be followed for the programme, whereas 41.6 per cent incorrectly believe that there are conditions attached to the HSCT and 27 per cent more are not sure. Table 7.6.2 shows the most common “rules” that

beneficiaries believe they have to follow, which predominantly focus on enrolment and attendance in schools and purchase of school supplies (the three education-related “rules” were cited as most important by 30.8 per cent of respondents), investing in business, and providing children with adequate food and nutrition.

**Table 7.6.2: Perceptions of the HSCT criteria clarity (percentage)**

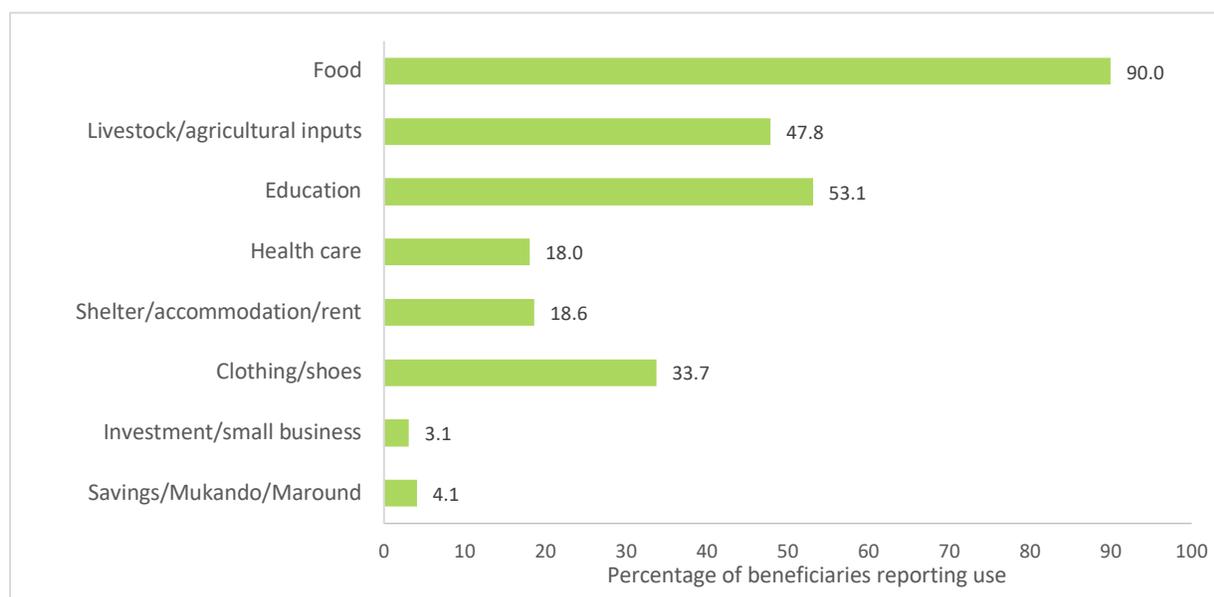
	Perceived “rules to follow”		
	Most important	2nd most important	3rd most important
None/no conditions			31.42
Don't know if there are conditions			27.01
Enrolment/attendance in primary schools	12.51	1.86	1.37
Enrolment/attendance in secondary schools	2.64	6.84	2.29
Purchase of school supplies	8.77	3.7	3.38
Attendance to health facility for immunizations or growth monitoring/obtaining under 5 health card	0.38	1.41	0.73
Adequate food and nutrition for children	4.61	11.14	3.92
Clean and appropriate clothing for children	0.73	2.22	4.46
Birth certificate for children	1.06	0.83	2.14
Investing in business	6.12	4.31	5.75
Paying off debt	0.4	0.52	0.61
Other/don't know specific 'rules'	3.8	1.31	1.52
Missing	0.54	7.43	15.41
N	1,451	1,451	1,451

Of the nearly half (45 per cent) of the beneficiaries who believe that some conditions exist, 54.3 per cent reported that they know the penalty for not following the rules; of these, 86.5 per cent believed that they would get kicked out of the programme, and 9.9 even said that they would go to jail. The majority of respondents who believe that such rules exist report learning about them at payment point or from HSCT programme representative, so better training for staff on clear communication may be useful to minimize misunderstanding of the programme by beneficiaries, especially ones that may cause distress or drop-out from the programme in fear of more severe penalties.

## 7.7 Use of transfers

The survey also asked about the main uses to which households put their HSCT payments. As seen in Figure 7.7.1, payments are overwhelmingly used for food (90 per cent of households), education (53.1 per cent), and livestock and agriculture (47.8 per cent, mostly driven by livestock). Other important items include clothing (33.7 per cent), health care (18 per cent), and shelter (18.6) per cent. Percentage reporting putting any transfer money towards savings or investment (other than livestock) is low, at three and four per cent respectively. Other items that were asked about but were too infrequently listed to report were cell phones/airtime, social occasions, and others. One caveat to interpreting these results is that many respondents (41.6 per cent) say that the payment from HSCT programme is not kept separate from the rest of the household’s sources of income, which may make it difficult to accurately account for its use.

**Figure 7.7.1: Main uses of transfer payments**



### 7.8 Coordination with other services

Another area of interest for the programme, as suggested by its name, is harmonisation, or integration, with other services – especially in child protection– to amplify impact. Therefore the endline instrument added a section on payment point service provision and about the perception of beneficiaries about exclusion from other services due to their participation in HSCT.

As Table 7.8.1 demonstrates, 64.1 per cent of the beneficiaries reported other services or information are provided at payment points. When asked about types of services provided, more than half of those who know of any services mentioned education and 37 per cent cited counselling. About one fifth of the respondents also were aware of health services, and of a child helpline for child abuse and exploitation. HIV, disability, and legal assistance services were mentioned by 8.7, 4.8, and 6.7 per cent of respondents respectively. Among those reporting services, approximately 97 per cent agree that they are useful and 79.2 per cent report having used those services.

However, despite the positive reports of connection to services at payment points, 60.5 per cent of beneficiaries report that they have been excluded from accessing other programs because they receive the HSCT. Interestingly, despite findings that HSCT and BEAM receipt are negatively related for secondary school-aged children (more on this in Section 12.2), only 4.3 per cent of those who reported being excluded from other programmes mention BEAM. Rather, three quarters of the respondents describe being excluded from NGO programmes, and a further 44.8 and 22.8 per cent from government drought relief and government farming input support respectively. There is also no way to verify whether these perceptions are accurate, and BEAM findings suggest that they are not entirely on point.

**Table 7.8.1: HSCT programme's harmonisation with other services**

	<i>Per cent</i>
Are there other services/information provided at payment points	
Yes	64.1
No	25.7
Don't know	10.3
<i>N</i>	<i>1,451</i>
Types of services	
Education	54.6
Counselling	37.0
Health service	22.4
Child helpline for child abuse/exploitation	21.5
HIV	8.7
Legal assistance	6.7
Disability	4.8
<i>N</i>	<i>871</i>
Have you been excluded from accessing other programmes because you are in HSCT?	
Yes	60.5
No	39.0
Don't know	0.5
<i>N</i>	<i>1,451</i>
If yes, which programmes?	
BEAM	4.3
Govt. Drought Relief	44.8
Govt. Farming Input Support	22.8
NGO programmes*	76.1
<i>N</i>	<i>919</i>

Notes: \*Livelihood support, Lean season support, etc.

## 7.9 Youth's perception of programme's operations

Although the perspectives of young persons residing in households in the survey are presented in more detail in Chapter 13, this section discusses the operations of the programme from the view point of the youth. Young members of the beneficiary households offer another perspective on the uses and usefulness of the programme, and an even more valuable insight on how well the programme is known and how it is perceived by household members outside the main beneficiary. To that extent, the survey asked up to three members of each household aged 13-24 a series of questions about HSCT, including whether they were aware of the household receiving the programme, and, if they were, some questions on how the cash was spent. More details on the design and protocols of the youth questionnaire and interviews are presented in Chapter 13.

### 7.9.1 Youth's awareness of the household's receipt of the programme

Fifty-eight per cent of all the interviewed youth report that their household receives cash from the HSCT programme. As seen in Table 7.9.1, none of the youth in the comparison group incorrectly believe their household receive a transfer; however, only 80.8 per cent of the youth in treatment households are aware that their household is in the programme, which suggests that some youth may be excluded from full knowledge of the household's financial matters. However, a look at the household's self-reported

beneficiary status clears the situation up, as there is a higher rate of knowledge among youth who are in households that actually consider themselves to be current beneficiaries: 95 per cent report that their household participates in the programme, and only 2.4 per cent thinks that they do not.

**Table 7.9.1: Youth’s awareness of their household’s receipt of the HSCT Programme**

	Treatment	Comparison	Total	Youth from self-reported current beneficiary HHs	Youth from self-reported non-beneficiaries
Does your household receive cash from HSCT/cash transfer programme?					
Yes	80.8	0	58.0	95.0	3.3
No	16.6	97.6	39.5	2.4	93.9
Don’t know	0.3	2.4	2.6	2.7	2.9
Total number of youth	1,597	713	2,310	1,319	991

### 7.9.2 Youth’s perception of programme’s cash use

The young persons interviewed were asked who makes decisions on how HSCT cash is used, whether any of the cash was spent on buying necessities for him/her (such as clothes, food, health items), and whether cash was routinely spent on someone outside the household.

When asked who in the household made decisions about how the cash from the programme was used, the youth module respondents primarily reported female heads of households (59.8 per cent), male heads of households (27 per cent), or household head and spouse jointly (5.3 per cent) as the decision-makers (Table 7.9.2). This is roughly equivalent to the gender breakdown of beneficiaries, suggesting that the decision on how to spend the cash is made by whomever receives it. However, 2.9 per cent reported that the spending decisions were made jointly by the entire family, and 1.7 per cent of the youth reported that he or she made decisions on how to use the HSCT cash.

Youth also perceived that the programme money has been spent on them at least partially in the past year. Almost the entire sample – 91.8 per cent – reported that the money has been used to help buy food for them. More than two thirds (68.2 per cent) reported money spent on clothing or shoes for them, 58.2 per cent said that money has been spent on their education, and 52.9 per cent described spending on health services or supplies. About a third of the sample also said the cash had been spent on them in other ways, such as purchasing airtime for their phones.

Youth also perceive the cash as primarily spent within the household, although some leakage is observed to take place: 9.4 per cent of youth report that the head of the household usually spends any of the HSCT cash on someone outside the household, with 83.6 per cent reporting that this doesn’t typically happen. Nevertheless, there is no way to tell due to limitations of the survey whether this diversion of funds is directed towards other family members outside the household (for instance, a child living away with a relative’s family or at a boarding school), and whether it’s perceived as positive or appropriate by the young person surveyed.

**Table 7.9.2: Youth's perception on use of cash from HSCT Programme**

	<i>Per cent</i>
Who makes decisions on how the HSCT cash is used?	
Male head of household	27.0
Female head of household	59.8
Jointly by head of household and spouse	5.3
Respondent (i.e. the youth)	1.7
Entire family	2.9
Other	3.4
In last 12 months, has HSCT cash been used to help buy the following for you?	
Food	91.8
Clothes/shoes	68.7
School fees or materials	58.2
Health supplies or medical services	52.9
Other materials (e.g. airtime)	34.8
Does the head of household usually spend any HSCT cash on someone outside the household?	
Yes	9.4
No	83.6
Don't know	7.0
N	1,282

## 7.10 Summary

The years since HSCT's beginnings have been marked by difficulties in its payments, with interruptions in the programme, a reduction in the number of districts covered, and inconsistent payments. However, the programme is now caught up on all of its payments from 2014, with nearly 90 per cent of current beneficiaries getting a payment in the past month, and only half a per cent reporting not yet receiving a payment in 2017. This seems to have fostered faith in the programme among beneficiaries, with four out of five respondents expecting to receive the next transfer within two months. Nevertheless, a full quarter of respondents said that they did not know how long they expected the transfer to last, so some work remains to be done if the programme is to be seen as a stable and continuing feature in the beneficiaries' lives, enabling it to maximize impacts.

A strong positive feature of HSCT is that the grant payments have risen slowly in real terms, and have continuously remained above the 20 per cent share of baseline expenditures recommended, for most households, especially for the poorest of the beneficiaries. The programme has many other positive features: there is a high level of satisfaction with staff and a negligible level of transfer leakages. However, some modifications to the transfer delivery would be beneficial, as respondents are spending an average of 6.2 hours picking up the transfer between travel and wait time, and a quarter do not feel safe while collecting the grant.

Finally, areas for programmatic improvement are that there is a fair amount of confusion about the programme's selection criteria and unconditionality. While most respondents believe that HSCT selection is clear, they could not correctly identify why they were chosen to receive the transfer. Even more disconcertingly, 41.6 per cent of current beneficiaries erroneously believe that they have to follow certain 'rules' to remain in the program (such as spending money only in certain ways, on education and investment), and many of them reported that they got this information from HSCT representatives or at a payment point. Therefore, it appears that as HSCT continues to steadily and predictably deliver transfers and build trust of the beneficiaries, it would profit from more awareness amongst transfer recipients and community members about the characteristics and requirements of the programme.

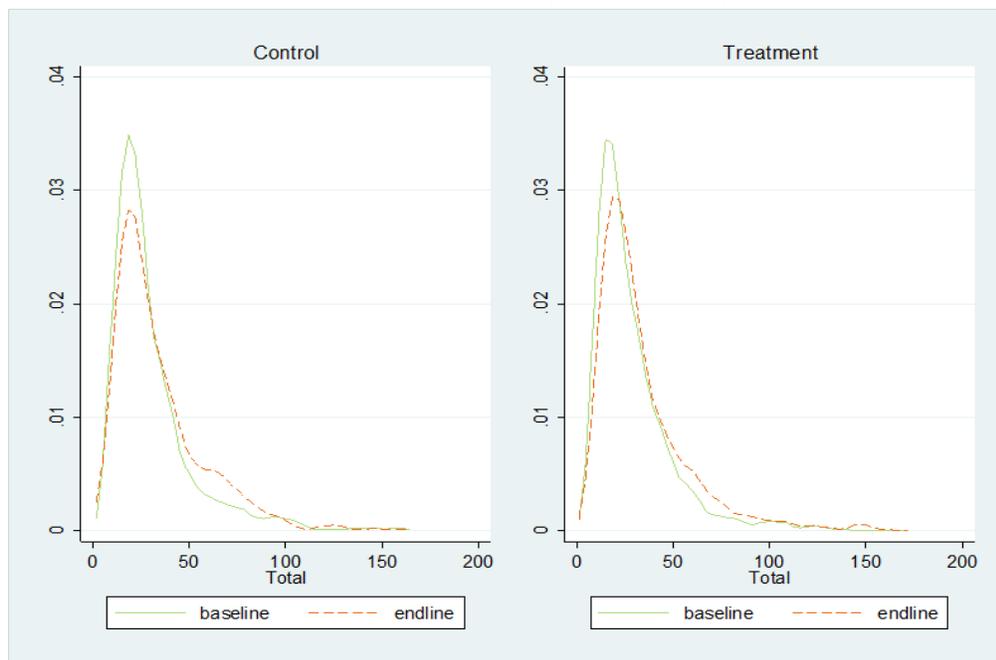
## 8. Impacts on consumption and well-being

### 8.1 Consumption levels

We investigate the impact of HSCT on a range of consumption indicators. We first examine total monthly consumption expenditure<sup>†</sup> and spending on broad categories such as food and education.<sup>x</sup> Since the bulk of expenditure is concentrated on food items, we next look at spending across several food groups such as cereals, and meat and fish. It is conceivable that apart from impacting expenditure levels, the HSCT transfer might also change the pattern of spending—for example, with an influx of cash, households might devote a smaller share of their expenditures to food and more to household items. We thus also probe effects on the share of consumption expenditure spent on specific goods. The expenditure figures that we analyse are computed by adding expenditure on purchases, and the valuation of goods received by households as gifts/transfers and those that they produce themselves. If these components of expenditure were to move in different directions (for example, if HSCT led to an increase in purchases but a decrease in gifts), we would fail to detect any changes in overall expenditure levels. Towards the end of the chapter, we thus investigate HSCT’s effects on purchases, gifts, and self-production of different consumption items. For all the outcomes we examine, we observe whether the effects vary for different sub-groups of households defined by size and baseline consumption levels.

Figure 8.1.1 shows graphically the distribution of monthly per person consumption expenditures by study arm at baseline and endline. Note that all expenditure is reported in 2017 dollars – that is, baseline values were adjusted to 2017 real terms using the consumer price index over the study period. The price index showed a small decline in prices, such that prices in 2017 were 95% of their value in 2013.

**Figure 8.1.1: Distribution of monthly consumption expenditures per capita**



<sup>x</sup> As differential price inflation across treatment and comparison districts between baseline and follow-up can be a cause for concern, we used price data on key consumption items to check for it. The detailed price analysis is provided in Appendix C.6.  
<sup>†</sup> Log frame (i.e. key) indicator

Mean consumption is extremely low at \$30 per person per month at baseline, and seems to have improved generally among all households, to approximately \$34 per person per month. The figures indicate small improvements at particular regions of the distribution for both groups. Among controls the improvements are between \$50-\$100 while among treatment there seems to be an overall parallel shift to the right (improvements) through the distribution up to about \$100. However, in neither case do the changes seem to be very large, suggesting that we are not likely to see significant impacts of the program.

Table 8.1.1 shows impacts of HSCT on monthly consumption expenditure levels per capita for all panel households. We find almost no detectable effects of the programme on any consumption item, except for a marginally significant negative impact on other (non-food) items.

**Table 8.1.1: Impacts on monthly consumption expenditures per person**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Total†	0.517 (0.32)	29.779	31.674	34.457	35.861
Food	-0.287 (-0.22)	19.301	20.096	20.004	21.093
Household items	0.720 (1.28)	7.281	7.759	9.913	9.685
Education	-0.010 (-0.07)	1.135	0.987	1.031	0.895
Health and hygiene	0.113 (0.41)	1.135	1.642	1.908	2.303
Transportation and communication	0.086 (0.38)	0.543	0.805	0.983	1.159
Clothing	0.001 (0.01)	0.304	0.346	0.422	0.463
Water	0.017 (0.72)	0.005	0.009	0.060	0.047
Other (non-food) items	-0.125* (-1.72)	0.074	0.030	0.134	0.215
N	5,095	1,718	837	1,710	830

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

When we look for heterogeneous effects across household type, we find some indication of positive impacts in households below median consumption at baseline (the poorest households), where there are significant increases in spending on education and clothing (see Appendix C.1).

## 8.2 Food consumption levels

We next turn to examine monthly food consumption expenditure levels per capita. For the sample of all panel households (Table 8.2.1), we find recipient households are spending about \$1 more on meat and fish, and roughly \$0.3 less on alcohol and tobacco.

**Table 8.2.1: Impacts on monthly food consumption expenditures per person**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Cereals	-0.490 (-1.06)	7.179	6.763	6.426	6.504
Roots and tuber	-0.311 (-1.09)	0.189	0.267	0.497	0.888
Pulses and legumes	0.067 (0.27)	1.402	1.492	1.544	1.572
Fruits and vegetables	-0.090 (-0.21)	4.926	5.158	3.927	4.252
Meat and fish	1.037* (1.91)	1.606	2.275	2.718	2.345
Dairy and egg	0.138 (0.72)	0.700	0.983	0.687	0.832
Fats	0.101 (0.82)	1.111	1.270	1.554	1.616
Sugar and sweet items	0.018 (0.23)	0.622	0.634	0.923	0.919
Non-alcoholic beverages	-0.471 (-1.24)	0.538	0.445	0.786	1.161
Alcohol & tobacco	-0.271** (-2.56)	0.526	0.308	0.405	0.454
Other food and beverage items	-0.015 (-0.13)	0.502	0.501	0.537	0.551
N	5,095	1,718	837	1,710	830

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

In looking at effects by different household type, we find similar trends in several sub-groups—small HSCT households increase meat and fish consumption and decrease expenditure on alcohol and tobacco, high baseline consumption households consume less alcohol and tobacco at endline, and low baseline expenditure households appear to consume more meat and fish. See Appendix C.2 for tables.

### 8.3 Consumption shares

Households receiving cash transfers might choose to alter the expenditure share they devote to different goods and items. We look for changes in monthly consumption shares in this section. Table 8.3.1 shows that there is little change in recipient households' monthly consumption shares allotted to different broad consumption items, except for a decrease in the share allotted to other (non-food) items. Though the effect size is tiny at around 0.3 per cent.

**Table 8.3.1: Impacts on monthly consumption shares**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Food	-0.014 (-0.98)	0.624	0.625	0.572	0.587
Household items	0.010 (0.71)	0.266	0.257	0.293	0.275

**Table 8.3.1: Impacts on monthly consumption shares (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Education	0.003 (0.86)	0.045	0.039	0.037	0.028
Health and hygiene	0.003 (0.72)	0.037	0.046	0.056	0.062
Transportation and communication	-0.001 (-0.17)	0.016	0.021	0.024	0.030
Clothing	0.002 (0.69)	0.010	0.011	0.013	0.012
Water	0.000 (0.44)	0.000	0.000	0.001	0.001
Other (non food) items	-0.003** (-2.01)	0.002	0.001	0.003	0.005
N	5,095	1,718	837	1,710	830

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

Among the sub-groups that we examine, we detect the most changes among low baseline expenditure households (Table 8.3.2), who at endline appear to be concentrating a lower share of their expenditure on food, but higher shares on education, health and hygiene, and clothing.

**Table 8.3.2: Impacts on monthly consumption shares in households with lower baseline PC expenditure (bottom half)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Food	-0.026* (-1.80)	0.600	0.608	0.574	0.608
Household items	0.006 (0.39)	0.293	0.271	0.288	0.260
Education	0.012** (2.50)	0.052	0.049	0.043	0.028
Health and hygiene	0.009* (1.93)	0.035	0.044	0.055	0.056
Transportation and communication	-0.002 (-0.49)	0.011	0.017	0.023	0.031
Clothing	0.006** (2.40)	0.009	0.011	0.014	0.009
Water	0.000 (0.23)	0.000	0.001	0.001	0.001
Other (non food) items	-0.004 (-1.49)	0.000	0.000	0.002	0.006
N	2,702	921	435	914	432

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

## 8.4 Food consumption shares

At endline, HSCT households appear to be devoting a larger share of their food expenditures on meat and fish, and on sugar and sweet items. In addition, they reduce the share allotted to cereals, suggesting an improvement in diet quality.

**Table 8.4.1: Impacts on monthly food consumption shares**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Cereals	-0.029* (-1.82)	0.411	0.378	0.353	0.348
Roots and tuber	-0.012 (-1.43)	0.008	0.009	0.021	0.035
Pulses and legumes	0.004 (0.43)	0.067	0.072	0.074	0.075
Fruits and vegetables	0.000 (0.02)	0.266	0.273	0.205	0.212
Meat and fish	0.017** (2.31)	0.069	0.074	0.108	0.095
Dairy and egg	0.009 (1.36)	0.030	0.042	0.033	0.035
Fats	0.006 (1.26)	0.053	0.062	0.078	0.081
Sugar and sweet items	0.005* (1.89)	0.029	0.029	0.047	0.043
Non alcoholic beverages	0.003 (0.60)	0.017	0.018	0.033	0.032
Alcohol & tobacco	-0.007 (-1.58)	0.021	0.015	0.019	0.019
Other food and beverage items	0.003 (1.50)	0.029	0.028	0.029	0.025
N	5,095	1,718	837	1,710	830

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

When analysing the different sub-groups we find a pattern of reduced shares on starch and increased shares on protein and sugars, though it is not statistically significant in all cases. For example, Table 8.4.2 shows that households with lower expenditure levels at baseline are spending less of their food share on roots and tubers, and more on sugar and sweet items, as well as more on other food items. On the other hand, smaller households see a significant increase in the budget share to meats (see Appendix C.4 for details).

**Table 8.4.2: Impacts on monthly food consumption shares in households with lower baseline PC expenditure (bottom half)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Cereals	-0.030 (-1.47)	0.453	0.417	0.363	0.356

**Table 8.4.2: Impacts on monthly food consumption shares in households with lower baseline PC expenditure (bottom half) - continued**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Roots and tuber	-0.022** (-2.05)	0.006	0.005	0.018	0.040
Pulses and legumes	0.000 (0.01)	0.063	0.066	0.074	0.077
Fruits and vegetables	0.015 (0.93)	0.269	0.288	0.210	0.214
Meat and fish	0.012 (1.28)	0.053	0.050	0.108	0.092
Dairy and egg	0.003 (0.42)	0.022	0.032	0.029	0.036
Fats	0.008 (1.05)	0.049	0.059	0.075	0.077
Sugar and sweet items	0.009** (2.13)	0.024	0.024	0.045	0.036
Non-alcoholic beverages	0.005 (1.36)	0.012	0.012	0.033	0.028
Alcohol & tobacco	-0.004 (-0.95)	0.018	0.014	0.017	0.017
Other food and beverage items	0.004* (1.72)	0.031	0.032	0.029	0.026
N	2,702	921	435	914	432

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

The analysis of consumption shares, particularly food consumption shares, suggested that the HSCT might have led to an improvement in diet diversity. We thus create a direct measure of diet diversity based on the number of different food groups consumed by the household. Table 8.4.3 shows that in fact the programme has led to an increase in diet diversity of 0.401, which represents a 7 percent increase over the baseline mean. This effect is slightly larger among smaller households. Further analysis indicates that this improvement derives primarily from increases in the number of treatment households now consuming fruits, eggs, pulses and legumes, fats and sweets.

**Table 8.4.3: Impacts of HSCT on diet diversity**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Diet Diversity Score (N=5134)	0.401* (1.95)	5.906	6.286	7.430	7.409
<b>Small households</b>					
Diet Diversity Score (N=2188)	0.439* (1.74)	5.540	6.127	7.143	7.291
<b>Large households</b>					
Diet Diversity Score (N=2946)	0.371* (1.70)	6.179	6.398	7.645	7.493

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

## 8.5 Consumption by source

As discussed in the introduction to this section, we might fail to detect consumption changes by looking at overall expenditure levels if purchases, gifts and self-production of items move in different directions. At midline, there was some evidence of crowding out, where purchases increased due to the transfer but gifts, especially gifts of food, decreased, resulting in an overall muted impact of the HSCT on total consumption. Thus, in this section, we look at how these components of consumption have changed at endline.

Table 8.5.1 presents a more nuanced picture of the effect of the HSCT on household consumption. Total consumption from own purchases is unambiguously going up due to the program, by \$3.8, as is food consumption, by \$2.8. However, these increases are offset by declines in total value of gifts received and a decrease in food gifts, and while the latter two are not statistically significant, total gifts is quantitatively quite large and likely dampens the overall impact of the program on consumption. There is also a clear decrease in food consumed from own production of \$2.01, which, combined with the decline in food gifts, almost completely offsets the increase in food purchases, leaving a net program impact that is basically zero.

**Table 8.5.1: Impacts on total monthly consumption expenditure by source**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Own Purchases</b>					
Total	3.818*** (2.90)	12.882	13.941	21.491	18.731
Food	2.787** (2.56)	4.305	4.568	9.133	6.609
<b>Own Production</b>					
Food	-2.011* (-1.89)	10.365	9.838	10.203	11.687
<b>Gifts</b>					
Total	-1.608 (-1.27)	12.301	13.908	3.652	6.867
Food	-0.525 (-0.56)	5.077	6.297	2.978	4.724

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

Further analysis shows that the decline in food production stems from cereals, roots and tubers, and fruits and vegetables. Meanwhile Table 8.5.2 indicates that increased food purchases are driven by fats (primarily cooking oil) by \$1.43, cereals and sugars/sweets.

**Table 8.5.2: Impacts on monthly food consumption expenditures per person - own purchases**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Cereals	0.672** (2.06)	1.641	1.885	2.139	1.711
Roots and tuber	0.278 (1.56)	0.052	0.065	0.397	0.131

**Table 8.5.2: Impacts on monthly food consumption expenditures per person - own purchases (cont'd)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Pulses and legumes	0.016 (0.55)	0.052	0.053	0.127	0.112
Fruits and vegetables	0.111 (1.07)	0.374	0.323	0.834	0.671
Meat and fish	0.045 (0.28)	0.433	0.347	0.785	0.655
Dairy and egg	-0.009 (-0.20)	0.072	0.074	0.185	0.195
Fats	1.434** (1.99)	0.588	0.707	2.377	1.062
Sugar and sweet items	0.167** (2.55)	0.410	0.471	0.844	0.739
Non-alcoholic beverages	-0.065 (-0.16)	0.136	0.184	0.556	0.668
Alcohol & tobacco	-0.084 (-1.34)	0.235	0.153	0.220	0.222
Other food and beverage items	0.223 (1.14)	0.310	0.306	0.671	0.444
N	5,134	1,725	842	1,725	842

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

Perhaps the most striking result is shown in Table 8.5.3 for households with low baseline expenditures (the poorest households). For these households, total purchases increase by \$4.93, which represents about 86 per cent of the per capita transfer value. The key components of consumption driving this are food, education, health and clothing. Moreover, there is a significant reduction in the total amount of gifts received by these households, of \$3.04 (see Appendix Table C.5.1), which again explains why the overall impact on consumption, even among the poorest households, is basically zero. This overall effect hides important dynamics in terms of gift giving, which appear to be declining, thus leaving HSCT households essentially in the same position they were prior to the program. However, the dynamic does suggest that their dependence on the goodwill of others is reduced, which may have an important positive psychological impact.

The effect of cash transfers on remittances has been explored in other studies. In Mexico's Progresa conditional cash transfer (CCT) there are conflicting results, with Teruel & Davis (2001) reporting no crowding out and Albarran & Attanasio (2001) reporting a significant crowding out (reduction in both the size and incidence of transfers). Neilson & Olinto (2007) find no effect on transfers of a CCT in Nicaragua, but closer to home, Strobbe & Miller (2011) do estimate crowding out (reduction in gifts) due to the Malawi Social Cash Transfer programme. In Zimbabwe, previous qualitative work commissioned by FAO indicated that HSCT beneficiaries were able to increase participation with social networks because they were in a better position to reciprocate contributions in the form of informal transfers to friends in family, funeral contributions, or church offerings (Oxford Policy Management, 2013).

**Table 8.5.3: Impacts on monthly consumption expenditures per person in households with lower baseline PC expenditure (bottom half) - own purchases**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Total	4.928*** (3.22)	7.407	7.413	18.024	13.102
Food	3.213** (2.30)	2.269	2.207	7.942	4.667
Household items	0.621 (1.63)	3.893	3.637	6.280	5.403
Education	0.335*** (2.72)	0.626	0.678	1.002	0.719
Health and hygiene	0.628** (2.55)	0.376	0.535	1.663	1.194
Transportation and communication	0.042 (0.28)	0.166	0.263	0.699	0.753
Clothing	0.177*** (3.53)	0.075	0.091	0.316	0.154
Water	0.001 (0.02)	0.000	0.000	0.041	0.040
Other (non-food) items	-0.089 (-0.86)	0.001	0.002	0.081	0.171
N	2,718	922	437	922	437

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

## 8.6 Summary

In this chapter, we explored the impacts of HSCT on consumption levels, shares and components. For overall expenditure levels devoted to broad consumption categories, we found little impact of the programme on beneficiaries. In looking at food expenditures, we find that at endline, recipient households spend more on meat and fish, and less on alcohol and tobacco. Turning to changes in expenditure shares, we observe little impact on broad consumption shares, but in viewing food shares, we see that HSCT households devote a larger share of their food expenditures on meat and fish, and on sugar and sweet items. In addition, households reduce the share allotted to cereals.

Since changes in purchases and gifts, if moving in different directions, might not lead to total expenditure changes, we next turn to look separately at these components of expenditure. We do find that HSCT households increase purchases of total and food items (particularly cereals, fats, and sugar and sweet items), while at the same time receiving less in gifts. This leads to a muted effect of the HSCT on overall consumption. This crowding out effect appears to be strongest among the poorest households, where the program leads to large and significant increases in overall purchases and purchases of food, which are almost completely offset by reductions in gifts. However, this pattern may well indicate that HSCT households are no longer dependent on the goodwill of their neighbours and relatives, which may itself increase dignity, self-esteem and subjective well-being. Indeed, the results on diet diversity suggest that with this improved self-reliance, households make different choices in terms of food consumption, which in turn improves diet diversity.

## 9. Impacts on poverty, food security and life satisfaction

This section looks at the impacts on poverty, food security and life satisfaction; the latter two indicators should be seen as complementary to the consumption indicators presented in the previous chapter.

### 9.1 Poverty

Poverty estimates are based on the official Zimbabwean poverty line and adjusted to July 2017 dollars. We look at the overall poverty line, as well as the food poverty line, since HSCT targeting is based on the more stringent food poverty line. Table 9.1.1 shows the impacts of the programme on summary poverty measures: poverty headcount, food poverty headcount, poverty gap and square poverty gap. The impacts on all these variables are null for the full sample. However, for small households at baseline (households with 4 or fewer members), there is an impact (decline) of 8 pp on food poverty headcount (Table 9.1.2).

These results should not be surprising. The analysis of consumption also showed overall null impacts, while the deeper analysis of consumption by source illustrated that in fact there are strong positive impacts on purchases that are dampened by an almost equal reduction in gifts. Since poverty estimates are based on consumption, we would not expect to see impacts when there were none on consumption.

**Table 9.1.1: Impacts on poverty measures**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Poverty headcount	-0.005 (-0.20)	0.922	0.895	0.880	0.857
Food poverty headcount	0.017 (0.52)	0.679	0.656	0.588	0.547
Poverty gap	0.000 (0.02)	0.552	0.531	0.489	0.467
Square poverty gap	-0.002 (-0.11)	0.368	0.348	0.311	0.292
<i>N</i>	5,095	1,718	837	1,710	830

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

**Table 9.1.2: Impacts on poverty measures (small households)**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Poverty headcount	-0.056 (-1.26)	0.842	0.768	0.789	0.769
Food poverty headcount	-0.085* (-1.87)	0.457	0.371	0.400	0.397
Poverty gap	-0.041 (-1.54)	0.410	0.362	0.382	0.373
Square poverty gap	-0.031 (-1.57)	0.240	0.200	0.225	0.215
<i>N</i>	2,162	745	338	744	335

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

## 9.2 Food security

As in previous waves, we measure food security through the ten item Household Food Insecurity Access Scale (HFIAS).<sup>†</sup> The items cover various dimensions of food access including a change in portions, change in the types of food, skipping meals altogether, and worrying about food. Higher scale scores indicate worse food security. We also measure the Household Hunger Scale<sup>xi</sup>, which is another measure of the depth of food deprivation in the household over the past 30 days suggested by the FANTA project.

Table 9.2.1 shows the programme impacts on various dimensions of household food security. The HSCT has a very large impact on the HFIAS, reducing the scale score by 2.6 points, an 18 per cent change from the baseline mean. Cut-offs or thresholds based on the HFIAS tell the same story—food security has greatly improved among HSCT households relative to the control group. These results are consistent across most sub-groups we examined. For illustrative purposes, we report results for smaller households, for whom the per capita value of the transfer is larger.

**Table 9.2.1: Impacts on food security**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
HH food insecurity access scale <sup>†</sup>	-2.550*** (-4.41)	14.053	13.955	8.882	11.334
HH hunger scale	-0.414** (-2.45)	1.315	1.283	0.998	1.380
HH with moderate/severe hunger	-0.144*** (-2.98)	0.378	0.367	0.254	0.387
Three or more meals a day	0.026 (0.76)	0.235	0.194	0.345	0.278
Likely food shortage in coming year	0.002 (0.04)	0.601	0.584	0.354	0.335
<i>N</i>	5,115	1,720	842	1,720	833

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

**Table 9.2.2: Impacts on food security (small households)**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
HH food insecurity access scale	-2.892*** (-3.89)	14.182	13.837	8.928	11.475
HH hunger scale	-0.426** (-2.03)	1.334	1.321	1.001	1.414
HH with moderate/severe hunger	-0.135** (-2.09)	0.374	0.374	0.251	0.385
Three or more meals a day	0.034 (0.84)	0.198	0.178	0.314	0.260
Likely food shortage in coming year	-0.001 (-0.03)	0.636	0.603	0.372	0.340
<i>N</i>	2,177	750	342	749	336

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

<sup>xi</sup> More information on the Household Hunger Scale can be found here:

<https://www.fantaproject.org/sites/default/files/resources/HHS-Indicator-Guide-Aug2011.pdf>

### 9.3 Life satisfaction and future outlook

We complement our indicators of material well-being with subjective measures of well-being. We administered an eight-item Quality of Life scale in prior waves to capture overall ‘evaluative’ life satisfaction, and also asked respondents whether they thought their life would be better in the future, whether they thought they would need financial assistance in the coming year, and whether they were likely to fall ill and be incapacitated in the coming year. We see strong impacts on the ‘evaluative’ quality of life scale, with the HSCT leading to a one point scale score improvement in the scale, representing an improvement of just over 10 per cent from baseline. There was also a 10 percentage point increase in the proportion of respondents saying they felt their life would be better in the next year. Nevertheless, there was no difference in terms of the perceived likelihood of needing financial assistance (likely because all households are extremely poor in the sample) nor in the perceived likelihood of falling ill and being incapacitated.

**Table 9.3.1: Impacts on life satisfaction and outlook**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Subjective well-being	1.000*** (2.71)	9.526	9.880	12.912	12.266
Positive future outlook	0.105*** (2.75)	0.131	0.128	0.524	0.416
Likely to need financial assistance in coming year	0.051 (1.01)	0.561	0.598	0.350	0.336
Likely to be incapacitated in coming year	0.011 (0.26)	0.335	0.302	0.301	0.257
<i>N</i>	5,103	1,717	840	1,716	830

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

### 9.4 Summary

We find that the HSCT has led to noticeable improvements in household food security and subjective well-being of respondents. These results are consistent with the hypothesis we proposed earlier around the consumption results. Those results showed that while overall purchases increased due to the HSCT, gifts from outside the household decreased, so that there is no overall change in consumption relative to the control group. However, we suggested that households were now less dependent on neighbours and friends, and were more self-reliant. This hypothesis seems to be borne out by the results in this section. Household food security has improved significantly, as has subjective well-being. So, while overall consumption has not increased, the stress and worry related to depending on others to survive seems to have been reduced, leading to more food security and an improved quality of life – important impacts for destitute households existing at the very edge of survival.

## 10. Impacts on assets, productive activities, safety nets, shocks and coping

This section examines the impacts of the HSCT on household asset ownership, productive activities, access to social safety nets, shocks and coping mechanisms to shocks. We begin with analysis with agricultural asset ownership and then examine the impacts on agricultural production. We follow with impacts on livestock production, non-farm enterprise operations, transfers and credits, and then shocks and coping strategies.

### 10.1 Impacts on agricultural assets

Ownership of agricultural assets is an important aspect of rural livelihoods. Since agriculture continue to be the predominant economic activity for most of the rural residents, ownership of these assets could impact agricultural productivity compared to the case of renting or sharing of these tools. When not in use, these assets could be rented to generate some income, and if it becomes necessary, these assets could be pawned to obtain short term loans to deal with emergencies. A total of eleven assets were considered, namely axe, panga/machete/slasher, sickle, watering can, chains, yokes, ox cart, ox plough, chicken house, livestock kraal and storage house/granary. Table 10.1.1 shows the impacts on the ownership of productive assets.

Overall, there is no impact on the ownership of at least one of these assets, with more than 90 per cent of households in both T and C households owning at least one of these assets. On the average, households own about four different assets, and there are no programme impacts on the different types of assets owned. Similarly, there are no programme impacts on the extensive and intensive margins on the purchase of these assets in the past 12 months. However, narrowing down to the six most used assets (axe, chicken house, sickle, livestock kraal, ox plough and yokes)†, we find significant programme impact of about 6 pp on the proportion of households owning at least one of these key assets, and a significant impact of 0.4 units on the variety of these six assets owned.

**Table 10.1.1: Impacts on productive assets**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Own any agricultural asset	0.037 (1.66)	0.891	0.902	0.951	0.925
No. diff assets owned	0.343 (1.54)	3.781	4.030	4.706	4.613
Purchased any asset	-0.001 (-0.02)	0.028	0.027	0.231	0.232
Expenditure on assets	2.386 (0.65)	1.082	1.211	11.520	9.263
Own any of 6 key assets†	0.055** (2.26)	0.869	0.886	0.940	0.901
No. of 6 key assets owned	0.403*** (3.35)	2.718	2.866	3.464	3.209
Purchased any of 6 key assets	0.015 (0.31)	0.024	0.020	0.195	0.177
Expenditure on 6 key assets	-0.043 (-0.01)	0.898	0.372	5.749	5.265
<i>N</i>	5,134	1,725	842	1,725	842

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

A closer look at the ownership of the specific assets shows that the impact is driven mainly by the ownership of sickle (impact of 13 pp) and axe (impact of 9 pp). The number of these two assets owned also witnessed significant differential increases of 0.18 and 0.15 respectively (Table 10.1.2).

**Table 10.1.2: Impacts on six key productive assets**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Owned Axe in last 12m	0.087*** (2.98)	0.738	0.719	0.789	0.684
Owned Chicken House in last 12m	0.084*** (2.77)	0.490	0.461	0.649	0.535
Owned Sickle in last 12m	0.134*** (3.47)	0.388	0.396	0.575	0.449
Owned Livestock kraal in last 12m	0.020 (0.56)	0.432	0.461	0.548	0.558
Owned Ox-plough in last 12m	0.028 (0.94)	0.346	0.431	0.445	0.502
Owned Yokes in last 12m	0.050** (2.07)	0.324	0.398	0.457	0.482
Number of Axe owned	0.154** (2.41)	1.081	1.042	1.152	0.959
Number of Chicken House owned	0.084** (2.42)	0.507	0.468	0.716	0.593
Number of Sickle owned	0.177*** (3.94)	0.485	0.503	0.697	0.538
Number of Livestock kraal owned	-0.022 (-0.54)	0.468	0.521	0.628	0.704
Number of Ox-plough owned	0.029 (0.79)	0.391	0.496	0.497	0.572
Number of Yokes owned	0.095 (1.49)	0.489	0.568	0.727	0.711
<i>N</i>	5,134	1,725	842	1,725	842

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

## 10.2 Impacts on agricultural production

Table 10.2.1 presents the programme impacts on agricultural production. While there is a null impact on the proportion of households engaged in agricultural production, this can be considered a positive outcome since it demonstrates the continual participation of beneficiary households in agricultural production and thereby discounts the conceptual notion that beneficiaries might work less. On the intensive margin, we find a significant programme impact of 67 kg on the total quantity of crop harvest, and a corresponding increase of \$32 on the value of crop harvest†. We find null impacts on crop sale, value of crop sale, use of hired labour for agricultural production and use of agro-chemicals (fertilizers and pesticides) in agricultural production (Table 10.2.1).

**Table 10.2.1: Impacts on agricultural production**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Agricultural HH	-0.019 (-0.64)	0.943	0.908	0.937	0.921
Total quantity of crop harvest (kg)	67.446** (2.53)	267.112	355.305	320.024	346.133
Value of total harvest (\$)†	32.344*** (2.94)	99.271	129.193	124.234	124.263
Any crop sale	-0.047 (-1.19)	0.048	0.023	0.154	0.176
Value of crop sale (\$)	1.475 (0.04)	28.677	32.393	93.186	115.983
Any hired labour	-0.007 (-0.20)	0.121	0.123	0.230	0.239
Use of agro-chemicals	0.010 (0.26)	0.229	0.247	0.493	0.501
<i>N</i>	5,134	1,725	842	1,725	842

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

Table 10.2.2 presents the impacts on the actual crops cultivated and the quantities harvested. The table reveals intensification in the cultivation of pearl millet among T households. The proportion of T households cultivating pearl millet increased from about 12 per cent in 2013 to 35 per cent in 2017 with corresponding figures of 7 and 15 per cent respectively among C households. The net effect is a positive programme impact of 16 pp. The quantity of pearl millet harvested also saw an impact of 67kg which is about the same magnitude as the impact on the total quantity of crop harvest.

In the other direction, the proportion of households cultivating finger millet declined by 12 pp on net. The quantity of harvests of finger millet, sorghum and maize also saw significant negative impacts. The production of groundnuts and roundnuts saw no impacts at both the extensive and intensive margins. Note that the price of pearl millet is significantly higher than finger millet, suggesting that households are switching to a higher value crop, which is borne out by the positive impacts on the total value of harvest.

**Table 10.2.2: Impacts on cultivation and harvest of key crops**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Cultivate finger millet	-0.122*** (-2.82)	0.219	0.156	0.161	0.221
Quantity of finger millet	-30.864** (-2.34)	29.714	23.697	28.089	53.476
Cultivate pearl millet	0.158*** (3.84)	0.117	0.071	0.348	0.154
Quantity of pearl millet	67.275*** (2.64)	20.305	10.471	119.635	47.178
Cultivate sorghum	-0.096 (-1.55)	0.409	0.476	0.450	0.617
Quantity of sorghum	-65.162** (-2.39)	53.276	69.361	111.323	195.382
Cultivate maize	-0.071 (-1.02)	0.531	0.558	0.754	0.839
Quantity of maize	-93.967*** (-2.69)	72.430	69.252	186.043	277.108

**Table 10.2.2: Impacts on cultivation and harvest of key crops (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Cultivate groundnuts	0.057 (1.07)	0.153	0.179	0.402	0.370
Quantity of groundnuts	3.565 (0.43)	15.883	20.406	27.277	27.955
Cultivate roundnuts	0.065 (1.48)	0.026	0.017	0.222	0.156
Quantity of roundnuts	6.169 (1.36)	1.415	3.247	13.764	9.965
<i>N</i>	4,209	1,338	605	1,536	730

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

### 10.3 Impacts on livestock ownership

Livestock production can act as an important source of income and food for households. Raising livestock alongside crop production is an indication of income diversification that could ultimately increase household resilience to shocks. Table 10.3.1 summarizes the impacts on the key aspects of livestock production. Overall, there are no impacts on the proportion of households raising any livestock†. We find a negative impact on the number of different livestock owned at the time of interview, expressed in terms of the composite indicator of total livestock units (TLU). There is also a null impact on the TLU consumed by the T and C households in the 12-month period preceding each survey.

However, we find positive impact on the purchases of livestock in the last 12 months as well as the total expenditure on livestock purchases. A detailed look at the specific livestock shows that there is increasing preference for raising goats among T households with no impacts on raising of other livestock. The negative impact on the TLU owned is contributed by the numbers of cattle and ox, and the calf and chicken/duck/geese to a lesser extent.

**Table 10.3.1: Impacts on livestock production**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Raise/own any livestock†	0.024 (0.65)	0.779	0.787	0.900	0.884
TLU owned	-0.388** (-2.29)	1.345	1.475	1.558	2.076
TLU consumed	0.025 (0.76)	0.059	0.065	0.143	0.125
Any livestock purchase in last 12m	0.136*** (4.14)	0.075	0.053	0.340	0.182
Total purchases (\$)	2.203* (1.68)	0.186	0.096	3.024	0.732
Any livestock sale	-0.004 (-0.11)	0.183	0.217	0.259	0.297
Raise/own chicken/duck/geese	-0.029 (-0.63)	0.639	0.655	0.801	0.846
Raise/own goats	0.090** (2.38)	0.451	0.481	0.677	0.617

**Table 10.3.1: Impacts on livestock production (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Raise/own cattle	-0.046 (-1.26)	0.380	0.402	0.432	0.500
Raise/own calves	-0.032 (-0.87)	0.243	0.267	0.338	0.393
Raise/own oxen	0.007 (0.27)	0.215	0.253	0.286	0.317
No. of chicken/duck/geese	-1.158* (-1.91)	5.681	6.348	9.065	11.072
No. of goats	-0.641 (-1.47)	4.152	4.443	4.378	5.276
No. of cattle	-0.556** (-2.12)	2.406	2.656	2.201	2.987
No. of calves	-0.428* (-1.92)	1.946	1.924	1.466	1.890
No. of oxen	-0.472** (-2.50)	1.952	1.819	1.556	1.896
<i>N</i>	1,297	353	211	463	270

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

## 10.4 Impacts on non-farm enterprise operations

Another avenue for income diversification and strengthening within the rural economy is the operation of non-farm household enterprises (NFE). Table 10.4.1 shows that overall, there are null programme impacts on the operation of NFE. Furthermore, there are no impacts on enterprise asset holdings, enterprise sales or enterprise profitability.

**Table 10.4.1: Impacts on non-farm enterprise**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Owens any enterprise	0.011 (0.42)	0.115	0.134	0.096	0.105
<i>N</i>	5,134	1,725	842	1,725	842
Enterprise owns assets	-0.039 (-0.46)	0.256	0.265	0.224	0.290
<i>N</i>	583	221	111	168	83
Value of enterprise assets	657.591 (0.92)	1,032.080	1,756.283	259.310	230.312
<i>N</i>	583	221	111	168	83
Sales by enterprise (\$)	787.540 (0.69)	3,779.686	4,732.484	88.106	149.327
<i>N</i>	583	221	111	168	83
Enterprise profit (\$)	1,051.141 (1.27)	2,433.187	3,486.981	39.846	38.519
<i>N</i>	583	221	111	168	83

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

## 10.5 Impacts on time use for household chores and economic activities

Shift in time use among household members is one of the potential ways that the programme could have impacts. As households get more income, they would become less likely to engage in casual laborious labour (locally referred to as *maricho* or ‘part-time’), and rather dedicate more time to their own economic activities such as farming or livestock activities. Children (aged 10-17 years) who previously engaged in economic activities to supplement household income could also give up such activities and dedicate more time to household chores or school work. These considerations necessitated collection of data on time use among all household members aged 10 and above.

Activities that household members allocate time to are categorized into two broad groups: household chores and economic activities. Table 10.5.1 provides the summary impacts on time use for household chores for cross-section of household members 10 years or older in each wave. Household chores include collecting water, collecting firewood, and taking care of children, cooking or cleaning. Responses are recorded for each eligible member for the day preceding the date of interview. We find no impacts on the proportion of household members participating in any of the activities, and we find a positive impact of 0.24 hours on the time spent collecting water.

The analysis at the intensive margin is presented for only household members who participated in the activity, but analysis using the full sample (having 0 for members who did not participate in the activity) gives the same impact conclusions.

**Table 10.5.1: Impacts on time use for household chores on individuals age 10+**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Spent time collecting water yesterday	0.015 (0.48)	0.441	0.434	0.434	0.411
N	18,910	6,065	3,029	6,618	3,198
Hours spent collecting water yesterday	0.240** (2.08)	1.083	1.189	1.541	1.418
N	7,848	2,637	1,255	2,771	1,185
Spent time collecting firewood yesterday	0.029 (0.86)	0.286	0.293	0.261	0.241
N	18,909	6,065	3,029	6,618	3,197
Hours spent collecting firewood yesterday	0.197 (1.53)	1.301	1.367	1.573	1.455
N	4,837	1,649	839	1,681	668
Spent time taking care of children, cooking or cleaning yesterday	-0.005 (-0.18)	0.421	0.397	0.426	0.406
N	18,909	6,065	3,029	6,617	3,198
Hours spent taking care of children, cooking or cleaning yesterday	-0.410 (-1.57)	2.676	2.613	2.417	2.770
N	7,581	2,493	1,192	2,701	1,195
Performed any household chores at all yesterday	0.005 (0.12)	0.564	0.541	0.583	0.555
N	18,951	6,085	3,035	6,629	3,202
Hours spent on household chores yesterday	0.049 (0.20)	3.492	3.605	3.601	3.699
N	10,436	3,361	1,635	3,755	1,685

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

Table 10.5.2 provides the summary of impacts on time use for economic activities. Economic activities covered include farming, household non-farm enterprises (NFE), livestock activity, time spent collecting nuts or wild fruits, time spent on casual labour (*maricho*) and time spent on wage labour. We find a 4-percentage point reduction in the share of household members participating in *maricho* while the share of household members participating in household NFE activities has gone up by 7 percentage points. However, the number of hours spent by a typical person engaging in household NFE activities has declined by about 4 hours.

**Table 10.5.2: Impacts on time use for economic activities on individuals age 10+**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Spent time on household farming activity in past rainy season	-0.025 (-0.92)	0.757	0.734	0.804	0.806
<i>N</i>	18,951	6,085	3,035	6,629	3,202
Days spent on household farming activities in last rainy season	-7.756 (-1.35)	57.846	59.650	74.684	84.776
<i>N</i>	14,335	4,567	2,229	5,149	2,390
Spent time on household NFE in last 7 days	0.070* (1.79)	0.155	0.189	0.154	0.119
<i>N</i>	18,903	6,065	3,029	6,611	3,198
Hours spent on household NFE in last 7 days	-3.920* (-1.79)	11.695	12.186	10.544	15.227
<i>N</i>	3,108	919	534	1,217	438
Spent time on household livestock activities in last 7 days	0.014 (0.40)	0.185	0.156	0.323	0.281
<i>N</i>	18,904	6,065	3,029	6,612	3,198
Hours spent on household livestock activities in last 7 days	-0.547 (-0.15)	22.019	25.285	6.347	10.389
<i>N</i>	4,201	1,032	484	1,927	758
Spent time collecting nuts or fruits in last 7 days	-0.010 (-0.48)	0.104	0.066	0.082	0.052
<i>N</i>	18,900	6,065	3,029	6,608	3,198
Hours spent on collecting nuts or fruits in last 7 days	-0.497 (-0.58)	3.736	3.979	3.064	3.739
<i>N</i>	1,563	655	200	575	133
Spent time on casual labour ( <i>maricho</i> ) last 7 days	-0.039** (-2.46)	0.093	0.092	0.064	0.101
<i>N</i>	18,900	6,065	3,029	6,608	3,198
Hours spent on casual labour ( <i>maricho</i> ) in last 7 days	-2.753 (-1.39)	18.292	20.590	11.132	16.005
<i>N</i>	1,404	546	223	390	245
Spent time on wage labour in last 7 days	-0.009 (-0.87)	0.020	0.020	0.024	0.032
<i>N</i>	18,866	6,062	3,029	6,595	3,180
Hours spent on wage labour in last 7 days	-0.416 (-0.07)	34.330	34.753	18.625	21.053
<i>N</i>	445	114	58	182	91

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

To explore the program impacts on time use with respect to the various age-sex groups within the households, Tables 10.5.3 and 10.5.4 present the disaggregated impacts on time use for household chores and economic activities for six broad age-sex groups. Three age groups are used: children (aged 10-17), adults (18-59) and the elderly (age 60+). Interacting these three age groups with sex creates the six categories presented in the tables.

Regarding the household chores, we find no impacts on any of the variables for female children, and we find a negative 0.6 hours impact on the hours spent taking care of children, cooking or cleaning by male children. We find positive impacts on the hours spent by female adults in collecting water and firewood, as well as positive impacts on the share of elderly females collecting firewood or taking care of children, cooking or cleaning. Also, there are negative impacts on the hours spent by elderly male taking care of children and on all household chores put together.

**Table 10.5.3: Impacts on time use for household chores by age-sex groups**

Dependent Variable	Female Children (10-17) (1)	Male Children (10-17) (2)	Female Adults (18-59) (3)	Male Adults (18-59) (4)	Female Elderly (60+) (5)	Male Elderly (60+) (6)
Spent time collecting water yesterday	0.063 (1.03)	0.046 (0.81)	-0.026 (-0.73)	0.040 (0.96)	0.033 (0.69)	-0.050 (-0.98)
<i>N</i>	3,727	3,887	4,110	2,733	2,825	1,628
Hours spent collecting water yesterday	0.338 (1.54)	0.185 (0.99)	0.412*** (2.70)	-0.135 (-0.60)	0.107 (0.77)	-0.158 (-0.55)
<i>N</i>	2,002	1,262	2,518	636	1,114	316
Spent time collecting firewood yesterday	0.041 (0.58)	0.041 (1.10)	0.052 (0.98)	-0.007 (-0.14)	0.080** (2.09)	-0.040 (-0.62)
<i>N</i>	3,727	3,887	4,110	2,733	2,824	1,628
Hours spent collecting firewood yesterday	0.144 (0.65)	0.010 (0.06)	0.367* (1.67)	0.365 (1.32)	0.054 (0.31)	-0.248 (-1.10)
<i>N</i>	1,104	652	1,584	451	722	324
Spent time taking care of children, cooking or cleaning yesterday	-0.017 (-0.37)	0.014 (0.35)	-0.011 (-0.28)	-0.030 (-0.64)	0.074* (1.81)	-0.005 (-0.12)
<i>N</i>	3,727	3,886	4,110	2,733	2,825	1,628
Hours spent taking care of children, cooking or cleaning yesterday	-0.417 (-1.32)	-0.603** (-2.03)	-0.453 (-1.51)	-0.117 (-0.25)	-0.388 (-1.23)	-0.808* (-1.95)
<i>N</i>	1,768	641	2,925	388	1,612	247
Performed any household chores at all yesterday	0.018 (0.29)	0.039 (0.59)	-0.011 (-0.33)	-0.022 (-0.35)	0.088** (2.07)	-0.044 (-0.55)
<i>N</i>	3,738	3,897	4,118	2,739	2,829	1,630
Hours spent on household chores yesterday	0.119 (0.27)	0.039 (0.16)	0.184 (0.52)	0.141 (0.28)	-0.224 (-0.70)	-0.563* (-1.72)
<i>N</i>	2,413	1,605	3,165	912	1,809	532

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

For the time use on economic activities, we find significant differential reduction on the days spent farming among female children and female adults, and male adults have seen a significant differential reduction on the number of hours spent on operating NFE. The reduction in participation in *maricho* occurred for female children, as well as male and female adults, but there is a differential *increase* in the proportion of elderly females participating in *maricho*, which is somewhat surprising. Hours spent on wage labour by female children is down by about 40 hours a week, an important finding.

**Table 10.5.4: Impacts on time use for productive activities by age-sex groups**

Dependent Variable	Female Children (10-17) (1)	Male Children (10-17) (2)	Female Adults (18-59) (3)	Male Adults (18-59) (4)	Female Elderly (60+) (5)	Male Elderly (60+) (6)
Spent time on household farming activity in past rainy season	-0.002 (-0.04)	-0.027 (-0.60)	-0.005 (-0.19)	-0.024 (-0.71)	-0.039 (-0.72)	-0.055 (-1.30)
<i>N</i>	3,738	3,897	4,118	2,739	2,829	1,630
Days spent on household farming activities in last rainy season	-8.950* (-1.90)	-6.072 (-0.87)	-12.469* (-1.69)	-3.911 (-0.42)	0.174 (0.03)	-6.876 (-0.82)
<i>N</i>	2,610	2,771	3,534	2,190	2,062	1,168
Spent time on household NFE in last 7 days	0.075* (1.75)	0.048 (1.42)	0.103 (1.50)	0.076* (1.68)	0.077 (1.62)	0.035 (0.78)
<i>N</i>	3,726	3,886	4,108	2,732	2,823	1,628
Hours spent on household NFE in last 7 days	-3.064 (-0.89)	0.950 (0.22)	-0.816 (-0.30)	-9.732** (-2.33)	-7.428 (-1.49)	-0.566 (-0.08)
<i>N</i>	462	426	1,017	469	477	257
Spent time on household livestock activities in last 7 days	-0.014 (-0.29)	0.066 (1.03)	-0.010 (-0.24)	-0.043 (-0.83)	0.081*** (2.83)	-0.028 (-0.45)
<i>N</i>	3,726	3,886	4,108	2,732	2,824	1,628
Hours spent on household livestock activities in last 7 days	-0.134 (-0.03)	-0.988 (-0.30)	1.654 (0.32)	-2.311 (-0.42)	-3.959 (-0.91)	-0.320 (-0.08)
<i>N</i>	482	1,563	541	864	317	434
Spent time collecting nuts or fruits in last 7 days	-0.011 (-0.43)	-0.000 (-0.00)	-0.026 (-0.65)	0.002 (0.09)	-0.001 (-0.06)	0.007 (0.38)
<i>N</i>	3,724	3,886	4,108	2,731	2,823	1,628
Hours spent on collecting nuts or fruits in last 7 days	3.348** (2.15)	-1.869 (-1.57)	-0.608 (-0.42)	-1.943 (-1.28)	-2.846 (-1.02)	2.586 (1.18)
<i>N</i>	346	451	302	209	165	90
Spent time on casual labour ( <i>maricho</i> ) last 7 days	-0.033* (-1.95)	-0.007 (-0.44)	-0.08*** (-2.74)	-0.09** (-2.28)	0.034* (1.81)	-0.018 (-0.80)
<i>N</i>	3,724	3,886	4,108	2,731	2,823	1,628
Hours spent on casual labour ( <i>maricho</i> ) in last 7 days	8.495 (1.37)	8.864 (1.25)	-7.971** (-2.39)	-2.464 (-0.60)	-1.718 (-0.33)	11.933 (1.31)
<i>N</i>	127	128	599	349	138	63
Spent time on wage labour in last 7 days	-0.006 (-1.14)	-0.004 (-0.36)	-0.009 (-0.66)	-0.024 (-0.84)	-0.002 (-0.17)	-0.002 (-0.11)
<i>N</i>	3,715	3,870	4,106	2,728	2,821	1,626
Hours spent on wage labour in last 7 days	-39.693*** (-5.52)	-23.542 (-1.61)	-0.806 (-0.09)	2.873 (0.27)	-20.876 (-1.23)	-8.628 (-0.73)
<i>N</i>	24	57	141	164	23	36

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

Finally, Table 10.5.5 gives the results of the heterogeneous impacts analysis on time use for economic activities with respect to baseline household characteristics such as poverty status, household size and baseline labour constrained status. We find that where there are impacts for the entire sample, the impact turns to show up in one or two of these categories only. It must however be noted that except for the small and large household size groups, the remainder of the groups are not mutually exclusive and therefore it is not meaningful to compare the impacts across the rows.

**Table 10.5.5: Impacts on time use for economic activities by household characteristics**

Dependent Variable	Full Sample (1)	Poor Households (2)	Labour Constrained HH (3)	Small HH (hhsiz<=4) (4)	Large HH (hhsiz>4) (5)	Top 50% by pc exp (6)
Spent time on hh farming activity in past rainy season	-0.025 (-0.92)	-0.028 (-1.10)	-0.022 (-0.64)	-0.071 (-1.29)	-0.008 (-0.36)	-0.071* (-1.88)
<i>N</i>	18,951	18,356	13,196	5,187	13,764	7,407
Days spent on hh farming activities in last rainy season	-7.756 (-1.35)	-7.784 (-1.32)	-6.590 (-1.11)	-5.776 (-0.87)	-8.436 (-1.28)	-10.713 (-1.36)
<i>N</i>	14,335	13,870	9,868	3,847	10,488	5,640
Spent time on household NFE in last 7 days	0.070* (1.79)	0.061 (1.56)	0.062 (1.54)	0.087* (1.98)	0.062 (1.42)	0.064 (1.38)
<i>N</i>	18,903	18,309	13,160	5,176	13,727	7,384
Hours spent on household NFE in last 7 days	-3.920* (-1.79)	-3.890* (-1.70)	-5.361** (-2.11)	-3.100 (-0.65)	-4.087 (-1.32)	0.214 (0.07)
<i>N</i>	3,108	2,984	2,060	937	2,171	1,277
Spent time on household livestock activities in last 7 days	0.014 (0.40)	0.009 (0.25)	0.033 (0.78)	0.032 (0.64)	0.008 (0.25)	0.022 (0.61)
<i>N</i>	18,904	18,310	13,161	5,176	13,728	7,384
Hours spent on household livestock activities in last 7 days	-0.547 (-0.15)	-0.472 (-0.12)	-2.819 (-1.01)	-5.901 (-1.37)	0.527 (0.15)	-0.339 (-0.11)
<i>N</i>	4,201	4,078	2,910	1,034	3,167	1,748
Spent time collecting nuts or fruits in last 7 days	-0.010 (-0.48)	-0.009 (-0.41)	-0.003 (-0.12)	-0.007 (-0.34)	-0.012 (-0.45)	0.004 (0.17)
<i>N</i>	18,900	18,306	13,157	5,176	13,724	7,384
Hours spent on collecting nuts or fruits in last 7 days	-0.497 (-0.58)	-0.350 (-0.40)	0.208 (0.23)	0.234 (0.17)	-0.684 (-0.68)	0.023 (0.02)
<i>N</i>	1,563	1,505	1,058	425	1,138	673
Spent time on casual labour ( <i>maricho</i> ) last 7 days	-0.039** (-2.46)	-0.039** (-2.46)	-0.027 (-1.24)	-0.001 (-0.04)	-0.052*** (-2.72)	0.004 (0.21)
<i>N</i>	18,900	18,306	13,157	5,176	13,724	7,384
Hours spent on casual labour ( <i>maricho</i> ) in last 7 days	-2.753 (-1.39)	-3.386* (-1.77)	2.798 (1.00)	-15.373*** (-2.86)	0.706 (0.35)	-7.932* (-1.70)
<i>N</i>	1,404	1,377	900	294	1,110	491
Spent time on wage labour in last 7 days	-0.009 (-0.87)	-0.010 (-1.01)	-0.006 (-0.98)	-0.008 (-0.73)	-0.010 (-0.77)	-0.009 (-0.58)
<i>N</i>	18,866	18,274	13,127	5,172	13,694	7,369
Hours spent on wage labour in last 7 days	-0.416 (-0.07)	2.977 (0.52)	-7.925 (-0.92)	1.354 (0.12)	1.858 (0.27)	4.105 (0.47)
<i>N</i>	445	419	270	100	345	217

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

## 10.6 Impacts on transfers, credit, debt and savings

As the name of the programme suggests, the cash transfer is intended to complement already existing sources of income, private and public social safety nets, and other survival techniques of the rural poor including peer-to-peer loans and purchases on credit. Programme benefits can only be realized if enrolment in the programme does not lead to a disruption or dilution of access to such established living arrangements. Evidence of increased resource sharing by beneficiary households or withdrawal of pre-existing support systems would only be a substitution rather than the intended complementarity. It is for this reason that we investigate programme impacts on household social exchanges. Table 10.6.1 shows that overall there are no programme impacts on in- and out- transfers of cash and other consumables from households both at the extensive and intensive margins. These results may appear inconsistent with the

findings from Section 8.5 on the significant reduction in gifts of food. That information is collected for each of over 150 items by individual item, and is much more reliable than the information collected on ‘general’ transfers over the last year due to recall bias, which is the source of the data in Table 10.6.1.

**Table 10.6.1: Impacts on household social transfers**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Receive transfers of cash or consumables <sup>12</sup>	0.059 (0.95)	0.566	0.667	0.378	0.420
Value of cash or consumables received (\$)	17.453 (0.94)	68.009	108.816	25.505	48.860
Send out cash or consumables	-0.012 (-0.42)	0.141	0.118	0.232	0.221
Value of cash or consumables sent out (\$)	-2.119 (-1.34)	7.350	2.553	8.456	5.778
Net transfers (In-Out) (\$)	19.571 (1.04)	60.659	106.264	17.049	43.082
<i>N</i>	5,134	1,725	842	1,725	842

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

Next, we examine programme impacts on household access to credit and household debt. We find a 5 pp decrease in the proportion of households with a household debt originating from more than 12 months prior to the survey round. Similarly, we find a \$6 reduction on the quantum of purchases on credit, and a \$7 decline in the outstanding debt on credit purchases. Since such an improvement in the credit situation could result from T households becoming more credit constrained, we examine the indicator of credit constraint and find no programme impacts. Thus, we can be a bit more confident in saying that the improved credit situation is not a result of an externally imposed barrier on the accessibility of credit among T households.

**Table 10.6.2: Impacts on credit and debt**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Still owes on loan from 12+ months	-0.047** (-2.35)	0.093	0.086	0.068	0.108
Outstanding debt from 12+ months	-4.161 (-1.21)	6.747	7.233	7.467	12.114
Taken loan in last 12 months	0.033 (0.87)	0.137	0.147	0.153	0.130
Total loan in last 12 months	0.047 (0.00)	14.662	15.103	77.681	70.181
Outstanding debt on loan with last 12 months	-9.420 (-0.35)	10.931	13.021	44.973	50.961
Any purchase on credit	-0.027 (-0.90)	0.190	0.209	0.156	0.202
Total purchase on credit	-5.538** (-2.41)	7.146	7.618	3.705	9.723

<sup>12</sup> Households are asked separately about “cash” and “food and other consumables”, and the answers are combined to comprise this item. Precise wording of questions can be found in Section 8 of the household survey, “Transfers Received and Made”, available on the [Transfer Project Website Instruments page](#).

**Table 10.6.2: Impacts on credit and debt (continued)**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Outstanding debt on credit purchases	-6.879*** (-2.95)	5.235	3.429	0.976	6.050
Credit constrained	0.016 (0.48)	0.389	0.413	0.269	0.277
<i>N</i>	5,134	1,725	842	1,725	842

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

At the endline, households were asked about whether they had any savings, and how much they have saved in the past month if any. The cross-sectional impacts are shown in Table 10.6.3. There is a 4-percentage point impact on households with any savings, and an impact of 28 dollars on households' annualized savings.

**Table 10.6.3: Impacts on savings**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Any savings	0.043*** (2.99)	0.096	0.048
Total annual savings	28.044** (2.05)	50.633	23.033
<i>N</i>	2,539	1,709	830

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

## 10.7 Impacts on shocks and coping mechanisms

The final part of this section examines households' experience of shocks and the coping strategies that households adopt to mitigate the negative effects of these shocks. Shocks are broadly classified into two types: covariate shocks that are more likely experienced by whole communities (such as floods, drought and water shortage) and idiosyncratic shocks that are specific to households (such as death of a bread winner or theft of valuables). Table 10.7.1 summarizes the impacts on various aspects of shocks and coping mechanisms.

Overall, we find no impacts on the proportion of households experiencing any shock or on the number of different types of shock experienced. There were also no impacts on the number of shocks leading to income loss by the households. However, we find a 9 pp decrease in the share of negative coping strategies adopted by households in response to these shocks. Negative coping strategies include changing eating patterns, reducing expenditure on health and/or education, obtaining credit, selling of assets (land/building/durable assets). Positive coping strategies on the other hand include relying on own savings or sale of livestock.

**Table 10.7.1: Impacts on shocks and coping strategies**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Experienced any shock	-0.015 (-0.47)	0.874	0.837	0.904	0.882
No. of shocks	-0.330 (-1.41)	2.386	2.192	2.972	3.108

**Table 10.7.1: Impacts on shocks and coping strategies (continued)**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Any shock led to decrease in income	-0.036 (-0.77)	0.801	0.769	0.778	0.782
No. of shocks leading to income decrease	-0.235 (-0.93)	2.092	1.993	2.061	2.197
Any covariate shock	-0.036 (-0.60)	0.567	0.527	0.583	0.580
Any idiosyncratic shock	0.022 (0.51)	0.742	0.730	0.707	0.673
Share of negative coping strategies	-0.088* (-1.82)	0.530	0.496	0.583	0.644
Share of positive coping strategies	0.059 (1.30)	0.375	0.359	0.352	0.270
<i>N</i>	3,968	1,336	623	1,391	618

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

## 10.8 Summary

This section examined the impacts of the HSCT on ownership of assets, household economic activities, household credits and debts, and shocks and coping strategies to shocks. We find positive programme impacts on the ownership of productive assets as well as the quantity and monetary value of crops produced. On labour use, we find that households are now less likely to participate in manual labour (*maricho*) and are rather more likely to dedicate labour to household NFE operations. There are also positive impacts on household finances with reductions in the share of households with a long-term loan, recent purchases on credit, and outstanding debt on credit purchases. When households experience shocks, T households are now less likely to respond with negative coping strategies. However, we find negative impacts on the aggregate stock of livestock owned, although there are positive impacts on recent purchases of livestock and the amount spent on such purchases. We also find no program impacts on non-farm enterprise operations.

## 11. Impacts on adult and child health, and child material well-being

In this chapter, we examine several indicators of morbidity and health seeking behaviour of adults, as well as health and well-being of children. Our expectation, as stated in the conceptual framework, is that the increased income from the transfer will increase utilization of health services and indicators of health. In the first two sections, we focus on adult household members. We first look at whether individuals are chronically sick or disabled, and whether they receive any care. We then look at morbidity, curative care seeking, and health care spending in the past 30 days.

### 11.1 Chronic illness and disability

As seen in Table 11.1.1, we find a significant increase in the incidence of chronic illness and disability among cash recipients at endline. This may be reflective of the composition of HSCT-eligible households, or of their increased ability to take on or care for chronically ill or disabled family members. The overall increase of incidence of chronic illness and disability in both the treatment and control groups is very likely

due to the aging of the people in the panel of households between baseline and endline. However, contrary to our initial expectations, we do not find an increase in chronic or disabled household members receiving care† when looking at the entire treatment group.

**Table 11.1.1: Impacts on adult chronic illness and disability**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Chronically ill	0.050* (1.82)	0.096	0.093	0.261	0.206
<i>N</i>	15,382	8,585	4,261	1,703	833
Chronically ill people receiving Home Based Care	-0.001 (-0.02)	0.030	0.018	0.070	0.057
<i>N</i>	1,850	796	420	447	187
Chronically ill people receiving some kind of care†	0.008 (0.13)	0.750	0.797	0.828	0.888
<i>N</i>	1,850	796	420	447	187
People with disability	0.061** (2.37)	0.061	0.060	0.295	0.231
<i>N</i>	15,418	8,593	4,263	1,721	841
Disabled population receiving care†	0.023 (0.40)	0.382	0.374	0.300	0.293
<i>N</i>	1,457	498	251	492	216

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

While generally similar trends appear when the results are disaggregated by sex and baseline per capita expenditure (shown in Appendix D.1), we find a large positive impact on disabled population receiving care in small households—those with disabilities are 16 percentage points more likely to receive care (Tables 11.1.2 and 11.1.3).

**Table 11.1.2: Impacts on adult chronic illness and disability by household size**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Small households</b>					
Chronically ill	0.063 (1.31)	0.180	0.175	0.303	0.235
<i>N</i>	3,848	1,907	857	745	339
Chronically ill people receiving home based care	0.018 (0.43)	0.039	0.026	0.077	0.053
<i>N</i>	801	336	159	218	88
Chronically ill people receiving some kind of care	0.023 (0.35)	0.751	0.804	0.864	0.919
<i>N</i>	801	336	159	218	88
People with disability	0.075** (2.11)	0.111	0.099	0.383	0.296
<i>N</i>	3,858	1,906	859	752	341
Disabled population receiving care	0.164** (2.21)	0.332	0.420	0.318	0.258
<i>N</i>	688	204	91	279	114

**Table 11.1.2: Impacts on adult chronic illness and disability by household size (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Large households</b>					
Chronically ill	0.042 (1.50)	0.074	0.072	0.230	0.186
<i>N</i>	11,534	6,678	3,404	958	494
Chronically ill people receiving home based care	-0.011 (-0.27)	0.024	0.013	0.063	0.062
<i>N</i>	1,049	460	261	229	99
Chronically ill people receiving some kind of care	-0.006 (-0.07)	0.749	0.793	0.793	0.859
<i>N</i>	1,049	460	261	229	99
People with disability	0.046* (1.70)	0.048	0.050	0.228	0.185
<i>N</i>	11,560	6,687	3,404	969	500
Disabled population receiving care	-0.074 (-0.87)	0.414	0.352	0.277	0.333
<i>N</i>	769	294	160	213	102

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

## 11.2 Recent morbidity and care seeking

This study also examined recent, non-chronic adult morbidity. Specifically, respondents were asked if any adults in the household have been sick or injured in the past 30 days. If anyone reported recent sickness or injury, we asked whether they sought any curative care, and whether they spent any money on treatment. Although there were no impacts on morbidity or care seeking, we saw a significant decrease in the likelihood that the sick pay to receive treatment (Table 11.2.1). This result does not account for the type or severity of the illness. Thus, if individuals in treatment households were affected by less severe illnesses, they may not need to spend as much on treatment. It is best to not read too much into the result on amount spent on treatment.

**Table 11.2.1: Impacts on adult recent morbidity and health care seeking – all individuals**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Morbidity (if sick/injured in last 30 days)	0.023 (1.12)	0.256	0.249	0.371	0.340
<i>N</i>	25,860	8,578	4,260	8,750	4,272
Sick/injured people who sought curative care	-0.034 (-0.86)	0.728	0.702	0.702	0.706
<i>N</i>	7,871	2,175	1,048	3,184	1,464
Sick/injured people who spent \$ for treatment	-0.164*** (-4.68)	0.319	0.242	0.273	0.358
<i>N</i>	7,923	2,175	1,048	3,234	1,466

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

## 11.3 Children's health and health care access

In addition to looking at adult health, the survey examined impacts of HSCT on children's health outcomes. We started by assessing whether the program had an effect on the incidence of diarrhoea or

fever or cough among those aged 0-5 years†. We then focused on the children who had experienced sickness to see whether care was sought for these children. Finally, the study looked at the children's connectivity to health system facilities by asking whether children have health cards. Results for all children 0-5 years old are shown in Table 11.3.1. We find that there are no detectable effects on child health, care seeking, or possession of health cards.

The lack of significant child health impacts persists among different sub-groups by sex of the child and household size (Appendix D.3). On a positive note, we do find that in households that had lower per capita expenditure at baseline, children are 12.6 percentage points less likely to be sick in the two weeks before the survey (Table 11.3.2).

**Table 11.3.1: Health and health care use of children aged 0-5**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Children who had diarrhoea/fever/cough in last two weeks†	-0.077 (-1.23)	0.496	0.529	0.633	0.757
<i>N</i>	2,723	1,051	514	755	403
Children who sought care for diarrhoea/fever/cough	-0.020 (-0.35)	0.589	0.558	0.540	0.517
<i>N</i>	1,507	506	266	456	279
Children who have health card	0.029 (0.66)	0.838	0.882	0.888	0.898
<i>N</i>	2,694	1,039	504	749	402

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

**Table 11.3.2: Children's health and health care use by baseline per capita expenditure**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Poorest 50% of sample</b>					
Children who had diarrhoea/fever/cough in last two weeks	-0.126** (-2.11)	0.500	0.524	0.651	0.799
<i>N</i>	1,870	772	377	468	253
Children who sought care for diarrhoea/fever/cough	-0.019 (-0.30)	0.567	0.544	0.514	0.491
<i>N</i>	1,042	373	196	286	187
Children who have health card	0.023 (0.58)	0.824	0.865	0.879	0.892
<i>N</i>	1,853	761	374	465	253
<b>Less poor 50% of sample</b>					
Children who had diarrhoea/fever/cough in last two weeks	0.039 (0.44)	0.486	0.548	0.608	0.681
<i>N</i>	853	279	137	287	150
Children who sought care for diarrhoea/fever/cough	0.021 (0.16)	0.641	0.604	0.580	0.573
<i>N</i>	465	133	70	170	92
Children who have health card	0.058 (0.83)	0.871	0.943	0.900	0.910
<i>N</i>	841	278	130	284	149

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

## 11.4 Children's material well-being

While health outcomes are difficult to move with simply improving the household's financial situation because so many other demand and supply factors are involved (for example, there may be low supply of health facilities in the communities or they may be of low quality, reducing health care use), we expect that an influx of cash would enable households to better provide for children's basic material needs. In this section, we look at whether children aged 5-18 years in HSCT households are more likely to have their basic needs met, defined as having a blanket, a pair of shoes, and two sets of clothing. We also examine each of these items in turn.

We find that HSCT significantly improves the likelihood that children have shoes and that they have all their needs met. Among all children, the program increases the likelihood of having shoes by 25 pp and HSCT children were 26 pp more likely to have all three items in the indicator.

**Table 11.4.1: Impacts on material wellbeing of children**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
All needs met	0.261*** (5.06)	0.365	0.380	0.752	0.507
<i>N</i>	12,345	4,109	1,992	4,270	1,974
Child has blanket	0.013 (0.44)	0.768	0.800	0.936	0.954
<i>N</i>	12,355	4,113	1,995	4,273	1,974
Child has shoes	0.251*** (5.03)	0.413	0.416	0.769	0.523
<i>N</i>	12,347	4,110	1,992	4,271	1,974
Child has two sets of clothing	0.027 (1.04)	0.776	0.805	0.918	0.921
<i>N</i>	12,351	4,110	1,994	4,272	1,975

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

The positive child material wellbeing impacts that we observe for all children exist for all the sub-groups that we examine separately, including those defined by gender, household size, and consumption levels (see Appendix D.4 for details). Additionally, we find that children in small HSCT households are also more likely to own two sets of clothing (Table 11.4.2).

**Table 11.4.2: Impacts on material wellbeing of children by household size – small households**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
All needs met	0.250*** (3.02)	0.320	0.416	0.704	0.552
<i>N</i>	2,299	688	298	944	369
Child has blanket	0.079 (1.60)	0.720	0.801	0.916	0.920
<i>N</i>	2,302	688	298	947	369
Child has shoes	0.217*** (2.63)	0.379	0.457	0.724	0.586
<i>N</i>	2,300	688	298	945	369
Child has two sets of clothing	0.107** (2.29)	0.772	0.850	0.895	0.876
<i>N</i>	2,301	688	298	946	369

**Table 11.4.3: Impacts on material wellbeing of children by household size – large households**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
All needs met	0.271*** (4.82)	0.374	0.373	0.765	0.495
<i>N</i>	10,046	3,421	1,694	3,326	1,605
Child has blanket	-0.002 (-0.05)	0.777	0.799	0.941	0.963
<i>N</i>	10,053	3,425	1,697	3,326	1,605
Child has shoes	0.267*** (4.85)	0.419	0.408	0.781	0.507
<i>N</i>	10,047	3,422	1,694	3,326	1,605
Child has two sets of clothing	0.011 (0.38)	0.777	0.796	0.924	0.933

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

## 11.5 Summary

This chapter presented the impacts of HSCT on the health status and treatment of adults and children, as well as on the material well-being of children. While we hypothesized that the receipt of cash through the programme would reduce adult morbidity, and increase the use of health services and health expenditures, we fail to detect positive health impacts. We find counterintuitive results, with an increase in the incidence of chronic illness and disability among cash recipients and a decrease in the likelihood of payment for treatment during illnesses and injuries. We do find, however, that disabled individuals in small households are more likely to received care.

The programme also failed to impact child health outcomes. It did, however, have significant and positive effects on the material wellbeing of children. Children aged 5-18 years in households receiving transfers through HSCT were more likely to own shoes and have three basic needs met (a blanket, shoes and two pairs of clothing).

## 12. Impacts on education

There are several reasons why we might expect HSCT to have an impact on education – there might be more money available for school fees, uniforms, and supplies, which might increase school enrolment, or less need to pull children out of school for supplemental labour, which might impact grade progression. In this chapter, we explore several of the potentially impacted indicators. We start by discussing the effects on school enrolment and grade progression. Then, we turn to the impact of HSCT on the receipt of BEAM scholarships. We examine outcomes separately for younger and older children, and define primary school enrolment as enrolment in school of children aged 7-12 and secondary school enrolment as enrolment in school of youth aged 13-17.

### 12.1 Enrolment and grade progression

As is shown in Table 12.1.1, we find no impacts on enrolment† and grade progression in the entire sample. While the effect on enrolment in secondary school is positively signed, the effect on primary school enrolment is in the opposite direction, although neither is significant. Note that at baseline, primary

enrolment is already at 94 percent in the treatment group, and remains higher (97 percent) than the control group at endline, but the control group started at a slightly lower baseline level, which explains the null result.

**Table 12.1.1: Impacts on enrolment and grade progression**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Enrolment in primary†	-0.028 (-1.18)	0.937	0.887	0.966	0.944
<i>N</i>	5,767	2,012	969	1,872	914
Enrolment in secondary†	0.011 (0.40)	0.709	0.653	0.706	0.639
<i>N</i>	4,580	1,493	703	1,636	748
Grade progression primary	0.026 (1.03)	0.940	0.923	0.953	0.911
<i>N</i>	4,904	1,621	779	1,690	814
Grade progression secondary	-0.010 (-0.50)	0.950	0.935	0.970	0.961
<i>N</i>	3,154	1,063	485	1,125	481

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

However, when we disaggregate the results by sub-groups defined by gender, household size and expenditure, we find significant effects on certain subgroups. Table 12.1.2 shows that there are increases in school enrolment and grade progression among primary school aged children in small families; both of these indicators increase by about 10 percentage points. Among girls and in large households, there appear to be negative program effects, but these are due to the so-called ‘ceiling effect’. Baseline enrolment is already at 95 percent for girls so little room for improvement, while baseline rates are lower in the control group, who subsequently ‘catch-up’ to the treatment group.

**Table 12.1.2: Impacts on enrolment and grade progression by gender, household size, and baseline per capita consumption**

Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Girls</b>					
Enrolment in primary	-0.069** (-2.42)	0.951	0.881	0.972	0.975
<i>N</i>	2,869	1,001	469	951	448
Enrolment in secondary	-0.000 (-0.01)	0.735	0.683	0.734	0.682
<i>N</i>	2,236	755	331	788	362
Grade progression primary	-0.007 (-0.25)	0.942	0.910	0.960	0.935
<i>N</i>	2,487	840	377	863	407
Grade progression secondary	-0.007 (-0.32)	0.966	0.963	0.973	0.977
<i>N</i>	1,610	560	239	558	253

**Table 12.1.2: Impacts on enrolment and grade progression by gender, household size, and baseline per capita consumption (continued)**

Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Boys</b>					
Enrolment in primary	0.011 (0.39)	0.924	0.892	0.958	0.914
<i>N</i>	2,898	1,011	500	921	466
Enrolment in secondary	0.022 (0.56)	0.681	0.625	0.680	0.598
<i>N</i>	2,344	738	372	848	386
Grade progression primary	0.059 (1.66)	0.939	0.935	0.947	0.886
<i>N</i>	2,417	781	402	827	407
Grade progression secondary	-0.016 (-0.42)	0.931	0.905	0.966	0.944
<i>N</i>	1,544	503	246	567	228
<b>Small households</b>					
Enrolment in primary	0.104*** (2.72)	0.908	0.953	0.965	0.907
<i>N</i>	1,050	329	145	397	179
Enrolment in secondary	0.087 (1.14)	0.680	0.722	0.712	0.661
<i>N</i>	914	267	111	395	141
Grade progression primary	0.107** (2.37)	0.925	0.960	0.957	0.888
<i>N</i>	913	270	124	361	158
Grade progression secondary	-0.013 (-0.27)	0.932	0.923	0.973	0.967
<i>N</i>	612	181	79	264	88
<b>Large households</b>					
Enrolment in primary	-0.053* (-1.82)	0.943	0.874	0.966	0.954
<i>N</i>	4,717	1,683	824	1,475	735
Enrolment in secondary	-0.003 (-0.12)	0.715	0.639	0.704	0.633
<i>N</i>	3,666	1,226	592	1,241	607
Grade progression primary	0.009 (0.35)	0.943	0.915	0.953	0.917
<i>N</i>	3,991	1,351	655	1,329	656
Grade progression secondary	-0.010 (-0.49)	0.953	0.937	0.969	0.960
<i>N</i>	2,542	882	406	861	393
<b>Poorest 50% of sample</b>					
Enrolment in primary	-0.049 (-1.62)	0.921	0.863	0.960	0.954
<i>N</i>	3,866	1,388	662	1,220	596
Enrolment in secondary	0.030 (1.01)	0.676	0.653	0.674	0.620
<i>N</i>	3,013	1,010	465	1,058	480
Grade progression primary	0.033 (1.12)	0.941	0.919	0.958	0.902
<i>N</i>	3,227	1,096	520	1,084	527

**Table 12.1.2: Impacts on enrolment and grade progression by gender, household size, and baseline PC consumption (continued)**

Dependent Variable	Programme Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Poorest 50% of sample (continued)</b>					
Grade progression secondary	-0.027 (-1.21)	0.953	0.934	0.960	0.964
<i>N</i>	2,021	694	316	706	305
<b>Less poor 50% of sample</b>					
Enrolment in primary	0.018 (0.67)	0.974	0.939	0.975	0.923
<i>N</i>	1,901	624	307	652	318
Enrolment in secondary	-0.024 (-0.36)	0.773	0.652	0.759	0.671
<i>N</i>	1,567	483	238	578	268
Grade progression primary	0.017 (0.52)	0.938	0.930	0.946	0.927
<i>N</i>	1,677	525	259	606	287
Grade progression secondary	0.017 (0.58)	0.945	0.936	0.984	0.957
<i>N</i>	1,133	369	169	419	176

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

## 12.2 Receipt of BEAM school fee scholarships

The Government of Zimbabwe aims at increasing access to schooling by paying school fees for poor children through the Basic Education Assistance Module (BEAM) programme, which HSCT is meant to complement (Oxford Policy Management, 2013). In the best-case scenario, participating in one government programme – HSCT – would facilitate access to others, like BEAM. However, as with other government programmes and social support discussed in earlier chapters, the concern is that HSCT may act as a substitute, rather than a complement, undermining effectiveness. It is therefore important to explore the effect receipt of the transfer has had on BEAM participation.

As shown in Table 12.2.1, we in fact do see a decrease in BEAM receipt among secondary school children of beneficiary households, although primary school scholarship receipt is not affected. This is consistent with past evidence from the HSCT programme—a previous process evaluation had indicated that many programme staff were under the impression that HSCT households should not receive BEAM in addition to the HSCT (AIR, 2014).

When the results are disaggregated by sub-group, we find that girls, children in large households and households with low baseline expenditure are less likely to receive BEAM scholarships in secondary school (Table 12.2.2). This result is similar to what was reported at the midline, and discussion at the midline workshop indicated that BEAM targeting is done by a separate committee at the Ward level, and village leaders attempt to ‘spread out’ benefits rather than concentrating them among the same households.

**Table 12.2.1: BEAM scholarship receipt**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Received BEAM primary	0.034 (1.39)	0.161	0.195	0.093	0.096
<i>N</i>	5,238	1,839	863	1,705	831
Received BEAM secondary	-0.063** (-2.25)	0.208	0.217	0.137	0.205
<i>N</i>	3,207	1,085	489	1,142	491

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

**Table 12.2.2: BEAM scholarship receipt, by gender, household size, and baseline PC expenditure**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Girls</b>					
Received BEAM primary	0.040 (1.34)	0.167	0.213	0.100	0.106
<i>N</i>	2,639	934	419	871	415
Received BEAM secondary	-0.133*** (-2.67)	0.217	0.206	0.128	0.236
<i>N</i>	1,625	565	240	565	255
<b>Boys</b>					
Received BEAM primary	0.029 (0.89)	0.154	0.178	0.086	0.085
<i>N</i>	2,599	905	444	834	416
Received BEAM secondary	0.008 (0.14)	0.197	0.228	0.145	0.171
<i>N</i>	1,582	520	249	577	236
<b>Small households</b>					
Received BEAM primary	0.071 (1.26)	0.270	0.321	0.142	0.128
<i>N</i>	955	298	133	364	160
Received BEAM secondary	0.045 (0.60)	0.306	0.344	0.187	0.198
<i>N</i>	627	185	80	270	92
<b>Large households</b>					
Received BEAM primary	0.022 (0.85)	0.141	0.169	0.081	0.087
<i>N</i>	4,283	1,541	730	1,341	671
Received BEAM secondary	-0.092*** (-2.85)	0.188	0.187	0.123	0.207
<i>N</i>	2,580	900	409	872	399
<b>Lower Baseline PC Expenditure (Bottom Half)</b>					
Received BEAM primary	0.028 (0.93)	0.150	0.175	0.098	0.094
<i>N</i>	3,459	1,247	578	1,093	541
Received BEAM secondary	-0.081** (-2.32)	0.228	0.205	0.132	0.186
<i>N</i>	2,054	710	320	714	310

**Table 12.2.2: BEAM scholarship receipt, by gender, household size, and baseline PC expenditure (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Higher Baseline PC Expenditure (Top Half)</b>					
Received BEAM primary	0.044 (1.16)	0.183	0.234	0.086	0.099
N	1,779	592	285	612	290
Received BEAM secondary	-0.017 (-0.28)	0.173	0.238	0.143	0.233
N	1,153	375	169	428	181

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

### 12.3 Summary

In this section, we examine the impacts of HSCT on school enrolment, grade progression and receipt of BEAM scholarships. While we are unable to detect any impacts on the first two indicators for the sample of all children, we do find some heterogeneous effects. For example, primary school aged children in small families receiving HSCT have a higher likelihood of school enrolment and grade progression. When it comes to the receipt of BEAM scholarship, which are supposed to complement HSCT receipt, we unfortunately find some negative impacts on scholarships for secondary school children in HSCT households. This is consistent with earlier evidence from the HSCT that indicated that beneficiaries were not included in the BEAM program as much as comparison households, and indicates need for more thorough cooperation with other government programmes, or at the very least, the need for outreach to other programmes' administrations, as well as school and medical facility administrations in HSCT areas, to educate them about HSCT's purpose.

### 13. Impacts on youth

The cash transfers provided through the HSCT programme could have different types of impacts on members of different demographic groups. It is particularly interesting to look at the effects on youths since experiences during this phase of transition to adulthood are likely to have long lasting consequences. To examine programme impacts on this group, a separate youth module was administered as a part of the HSCT evaluation surveys. Up to three youth were interviewed from every household. Youths surveyed at baseline were between 13 and 20 years old, and those at endline were 13 to 24 years old. The surveys were conducted in private and consent was sought from both parents and respondents for those aged 17 and below, and only from the youth for those aged 18 years and above.

The youth module collected information on the following categories: concerns about material needs; marriage and pregnancy; sexual debut and sexual behaviour; mental health and alcohol consumption; menstrual experiences; HIV; and experiences with physical violence. We present results on these outcomes in this chapter. The module also briefly collected information on the youth's knowledge and perceptions of the programme; these were presented in section 7.8 (in the Operations chapter).

### 13.1 Balance tests and estimation approach

Based on the household roster data (which lists all household members and the basic characteristics of these individuals, such as age and sex), there were 3,441 youth aged 13 to 24 years who were eligible for the youth module. We were able to survey 2,310 individuals, which equals an overall response rate of 67 per cent. In table 13.1.1, we compare the characteristics of all youth in the study households with those of the youth who were interviewed. There are several significant differences between the two groups. For example, the youth who were not surveyed were 0.8 years older on average and less likely to be in school than the youth survey respondents (40 versus 53 per cent). Those who were not surveyed also came from households that were larger and poorer, and the heads of which were about three years older on average. These differences indicate that the surveyed youth were a selected sample on several counts.

**Table 13.1.1: Balance tests for all youth (age 13-24) and youth respondents**

	All	Non- Respondents	Youth Respondents	P-value of diff.
Female	0.47	0.46	0.47	0.42
Age	17.17	17.65	16.84	0.00
Currently attending school	0.47	0.40	0.53	0.00
Highest grade completed or currently enrolled in	7.74	7.77	7.72	0.66
Currently married	0.08	0.07	0.09	0.09
<i>Household characteristics</i>				
Household size	7.62	8.23	7.21	0.00
Number of household members aged 13-24 years	2.95	3.40	2.65	0.00
Monthly per capita Household expenditure (\$)	26.52	23.70	28.47	0.00
<i>Household head's characteristics</i>				
Female (%)	0.68	0.68	0.68	0.98
Age (%)	54.61	56.64	53.21	0.00
Widowed (%)	0.31	0.34	0.29	0.05
Divorced or separated (%)	0.09	0.09	0.09	0.74
<i>N</i>	3,784	1,474	2,310	

Notes: P-values are reported from Wald tests on the equality of means for each variable. Standard errors are clustered. Weights applied.

When we compare respondents from the treatment and control groups, however, we find that the youth in these groups are fairly well balanced. We find significant differences between these two groups only for age of the respondent and only at 10 per cent significance level (those from C households were 0.4 years older than those from T households).

**Table 13.1.2: Balance tests for youth respondents in treatment and control groups**

	All	Control	Treatment	P-value of diff.
Female	0.47	0.49	0.47	0.28
Age	16.84	17.12	16.72	0.08
<i>Baseline household characteristics</i>				
Household size	6.50	6.64	6.44	0.58
Number of household members aged 13-24 years	1.73	1.68	1.75	0.46
Monthly per capita Household expenditure (\$)	24.47	25.03	24.25	0.50
<i>Household head's characteristics at baseline</i>				
Female (%)	0.68	0.66	0.69	0.33
Age (%)	52.84	53.23	52.68	0.69
Widowed (%)	0.28	0.29	0.28	0.78
Divorced or separated (%)	0.10	0.08	0.11	0.17
Attended school (%)	0.64	0.65	0.64	0.76
Highest grade completed or currently enrolled in (%)	3.81	3.83	3.80	0.90
<i>N</i>	2,310	713	1,597	

Notes: P-values are reported from Wald tests on the equality of means of T and C for each variable. Standard errors are clustered. Weights applied

A total of 798 youth were interviewed at baseline for a response rate of just 33 percent, so the response rate at follow-up was double that of the baseline. This large difference in the response rate, coupled with the fact that four years elapsed since baseline means that the likelihood of interviewing the same youth is small, and in fact, just 218 respondents were surveyed in both waves. Table 13.1.3 shows the mean characteristics of this panel at baseline compared to youth who were interviewed only once (either at baseline or at endline). Panel respondents are more likely to live in households with a younger head who is less likely to be widowed, and the panel respondents themselves are somewhat younger than those interviewed at baseline only, and are much more likely to be males.

**Table 13.1.3: Balance tests for Panel vs non-Panel Groups**

	Both Waves	Only Baseline	Only Endline
Female	0.37	0.53	0.49
Age	14.96	15.40	12.28
Baseline household characteristics			
Household size at baseline	6.59	6.79	6.19
Number of household members aged 13-24 years at baseline	2.21	2.39	1.59
Monthly per capita Household expenditure (\$) at baseline	22.44	23.41	24.03
Household head's characteristics at baseline			
Female (%)	0.74	0.66	0.68
Age (%)	48.78	52.98	53.93
Widowed (%)	0.28	0.33	0.29
Divorced or separated (%)	0.12	0.07	0.10
Attended school (%)	0.61	0.60	0.63
<i>N</i>	218	607	2,092

Due to the low response rate to the youth module at baseline, we present results in this chapter using data only from the endline survey. In other words, we estimate treatment-control differences using a cross-sectional approach with endline data. We can date the start of some of the behaviours/events we capture with the data (sex, pregnancy and marriage) since we also ask youth about the age at which they started the behaviour concerned (for example, sexual debut). For these outcomes, we restrict our analysis to youths who initiated the behaviours only after the start of the HSCT programme since we might expect to find treatment effects only for these individuals. This ensures that we have balance at baseline across treatment and control groups for these outcomes. This approach also allows us to include measures that were included at the endline only.

In the appendix, we also present results on the youth outcomes using a pooled cross-sectional framework for those indicators where we have both baseline and endline information. Naturally we do not estimate results for outcomes representing the initiation of sex, pregnancy and marriage using this approach, since we only look at endline treatment-control differences for these measures.

Since we do not have a complete response rate from all the youth who were to be surveyed, we estimate the probability of youth response to calculate weights for the youth. Note that these weights are adjusted with the household weights used for the other impact analyses conducted in the report. We use the same controls used in the household-level analysis, but we also control for the age and sex of the adolescents. Finally, we also present results by sex in the appendix and mention when there are differences by gender.

### 13.2 Concern with material needs

A pre-endline survey workshop in Nyanga focused on revising data collection instruments particularly around child protection indicators. The research team along with the MPSLSW, UNICEF<sup>13</sup>, and ZIMSTAT agreed to introduce a set of questions to the youth module to directly assess youth's material well-being, and their feeling of shame and abandonment and witnessing violence. The material well-being questions included: how many meals the youth had had the previous day, whether he/she was worried about dropping out of school, and how concerned he/she was about different spheres of life (food, clothing, money and relationships). Results presented in Table 13.2.1 suggest that treatment group youth are 4.5 percentage points (PP) more likely to eat three or more meals than the control group, but the estimates are not statistically significant. The former are, however, significantly less fearful that they might drop out of school. They are also significantly less worried than their control counterparts about money (19 PP), their relationships with people at home (19 PP), and their relationships with people they do not live with (25 PP).

**Table 13.2.1: Concern with material needs**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Had 3 or more meals yesterday	0.045 (1.03)	0.819	0.770
<i>N</i>	2,305	1,594	711
Feared dropping out of school	-0.082* (-1.78)	0.269	0.345
<i>N</i>	1,409	997	412
Worried about food: 5 = very worried, 1 = not worried	-0.028 (-0.18)	2.709	2.775
<i>N</i>	2,306	1,595	711
Worried about clothes: 5 = very worried, 1 = not worried	-0.189 (-1.51)	3.156	3.325
<i>N</i>	2,306	1,595	711
Worried about money: 5 = very worried, 1 = not worried	-0.193* (-1.90)	3.679	3.834
<i>N</i>	2,306	1,595	711
Worried about relationships at home: 5 = very worried, 1 = not worried	-0.191* (-1.89)	1.976	2.286
<i>N</i>	2,306	1,595	711
Worried about relationships outside home: 5 = very worried, 1 = not worried	-0.247** (-2.37)	2.036	2.396
<i>N</i>	2,306	1,595	711

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

### 13.3 Marriage and pregnancy

We now turn to examine marriage and pregnancy in the sample. The question on pregnancy was addressed to both males and females—for males the question was phrased as had they ever made anyone pregnant. While all the direction of the effects presented in table 13.3.1 indicate that the HSCT is protective for youth in beneficiary households, only two are marginally significant—ever married/cohabiting and age at first pregnancy. The latter is naturally only estimated on those who reported ever being pregnant or making someone pregnant.

<sup>13</sup> Dr. Debbie Fry of University of Edinburgh was an integral part of the discussion on these new indicators.

We next disaggregate these results by gender (Table 13.3.2). We find that among girls, the HSCT program significantly reduced the incidence of marriage and cohabitation (a six-percentage point decline) and decreased the likelihood of having ever been pregnant (a reduction of about 12 pp). Boys, on the other hand, experienced no significant changes on any of the marriage and pregnancy outcomes. However, due to extremely small sample sizes these results should be interpreted with caution.

**Table 13.3.1: Marriage and pregnancy**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Ever married/cohabiting	-0.031* (-1.86)	0.099	0.156
<i>N</i>	2,257	1,564	693
Age at first marriage/cohabitation	0.062 (0.31)	18.736	18.488
<i>N</i>	193	126	67
Ever been pregnant/impregnated anyone	-0.051 (-0.95)	0.569	0.547
<i>N</i>	373	213	160
Age at first pregnancy/impregnation	0.302* (1.74)	18.541	18.565
<i>N</i>	203	119	84

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

**Table 13.3.2: Marriage and pregnancy results disaggregated by gender**

Dependent Variable	Girls			Boys		
	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Ever married/cohabiting	-0.065** (-2.61)	0.177	0.262	-0.015 (-0.85)	0.033	0.060
<i>N</i>	1,047	717	330	1,210	847	363
Age at first marriage/cohabitation	0.274 (1.20)	18.259	17.793	-0.462 (-1.40)	20.142	20.350
<i>N</i>	139	91	48	54	35	19
Ever been pregnant	-0.118** (-2.08)	0.702	0.810	0.054 (0.64)	0.288	0.244
<i>N</i>	224	140	84	149	73	76
Age at first pregnancy/impregnation	0.180 (1.07)	18.281	18.255	0.355 (0.90)	19.928	19.780
<i>N</i>	163	98	65	40	21	19

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

### 13.4 Sexual activity

We look at several variables concerning sexual debut of the youth—whether they have ever had sex, age at first sex, whether it was consensual, whether a condom was used, and the age of the partner during this time. These results are based only on youth who had sex after the baseline in 2013 (or had never had sex at the start of the program). Youth in treatment households were eight PP less likely to have ever had sex, a significant and large effect—32 per cent lower than the control mean of 24.5 per cent. Age at first sex is 0.11 years higher among T youth but this effect is not statistically significant.

Girls in HSCT beneficiary households were likely to be older at sexual debut; boys were likely to be younger at first sex but this effect is only marginally significant (Table 13.4.2). These figures are lower than national figures reported in the ZDHS for adults age 25-49, where median age at debut is 18.7 and 20.5 for females and males respectively. Males in the HSCT groups were almost 12 percentage points less likely to have ever had sex than males in the control group. An unexpected finding is that girls were significantly less likely to report using a condom at the time of first sex.

**Table 13.4.1: Sexual debut**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Ever had sex	-0.079*** (-4.50)	0.137	0.245
<i>N</i>	2,216	1,548	668
Age at first sex	0.110 (0.75)	17.703	17.712
<i>N</i>	325	192	133
First sex consensual	-0.036 (-0.53)	0.735	0.795
<i>N</i>	326	193	133
Condom used first time sex	-0.067 (-1.27)	0.324	0.396
<i>N</i>	326	193	133
Age of partner at first sex	-0.251 (-0.41)	20.558	20.536
<i>N</i>	302	181	121

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

**Table 13.4.2: Sexual debut disaggregated by gender**

Dependent Variable	Girls			Boys		
	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Ever had sex	-0.046** (-2.16)	0.200	0.283	-0.119*** (-5.94)	0.085	0.210
<i>N</i>	1,035	710	325	1,181	838	343
Age at first sex	0.372** (2.38)	17.775	17.573	-0.467* (-1.90)	17.561	17.888
<i>N</i>	202	126	76	123	66	57
First sex consensual	-0.108 (-1.08)	0.641	0.768	0.042 (0.83)	0.918	0.828
<i>N</i>	202	126	76	124	67	57
Condom used first time sex	-0.136** (-2.42)	0.211	0.281	0.020 (0.20)	0.546	0.542
<i>N</i>	202	126	76	124	67	57
Age of partner at first sex	0.051 (0.06)	22.934	23.707	-0.384 (-1.32)	15.776	16.356
<i>N</i>	189	118	71	113	63	50

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

When looking at the recent sexual experiences of the youth (Table 13.4.3), we find no significant program impacts. Looking at girls and boys separately, we again find no statistically significant effects (see Appendix E, Table E.2.1).

**Table 13.4.3: Recent sex**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Number sex acts past 3 months	0.144 (0.05)	16.369	16.274
<i>N</i>	354	201	153
Had unprotected sex in past 3 months	-0.064 (-0.94)	0.431	0.490
<i>N</i>	402	228	174
Number of partners last 12 months	0.157 (1.57)	1.178	1.018
<i>N</i>	418	241	177
Most recent sex partner's age	-0.334 (-0.65)	23.900	23.326
<i>N</i>	342	200	142

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

The program appears to have significantly reduced treatment youths' lifetime experiences of undertaking transactions related to sex—these youth are 3 PP less likely to engage in this kind of behavior. There are no effects on ever being forced to have sex. When we look separately at the female and male sub-samples, we find statistically significant improvements on *both* measures for boys (see Table E.2.2 in Appendix E).

**Table 13.4.3: Risky sexual behaviour, Sexual violence**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Sexual transactions lifetime	-0.028*** (-2.50)	0.043	0.085
<i>N</i>	2,285	1,580	705
Ever forced to have sex	0.007 (0.46)	0.055	0.064
<i>N</i>	2,298	1,588	710

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

### 13.5 Mental health, alcohol consumption

Cash transfers, by improving living conditions and potentially enhancing access to human capital opportunities, could boost the mental health of youth in beneficiary households. We included questions in the youth module to calculate two mental health measures—the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1997) and the Hope Scale (Snyder et al., 1996). For the CES-D, youth were asked 10 items regarding their feelings and behaviours during the last week. The scores from these 10 questions were added. The sum could range from 10 to 40, with a *higher* score indicating *lower* mental health. We also created an indicator variable to capture high levels of depression (scores greater than 20). The Hope Scale tries to identify whether individuals have “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”.<sup>2</sup>

In Table 13.5.1, we note that youth in HST score higher on the Depression scale by 0.56 points, though the difference between the T and C groups is only significant at 10 per cent. Further analysis of the data indicates this increase occurs at lower values on the scale, and not above the threshold for depressive symptoms (which is at 20). On the other hand, HSCT youth are significantly less likely to have drunk alcohol (by 6 PP) in the reference period.

**Table 13.5.1: Mental health, alcohol consumption**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Depression index	0.561* (1.72)	18.140	17.615
<i>N</i>	2,282	1,576	706
Not depressed: CESD	-0.036 (-1.45)	0.649	0.679
<i>N</i>	2,282	1,576	706
Hope scale	0.169 (0.56)	20.437	20.552
<i>N</i>	2,302	1,591	711
Ever had drink of alcohol	-0.061*** (-3.19)	0.065	0.122
<i>N</i>	2,307	1,594	713

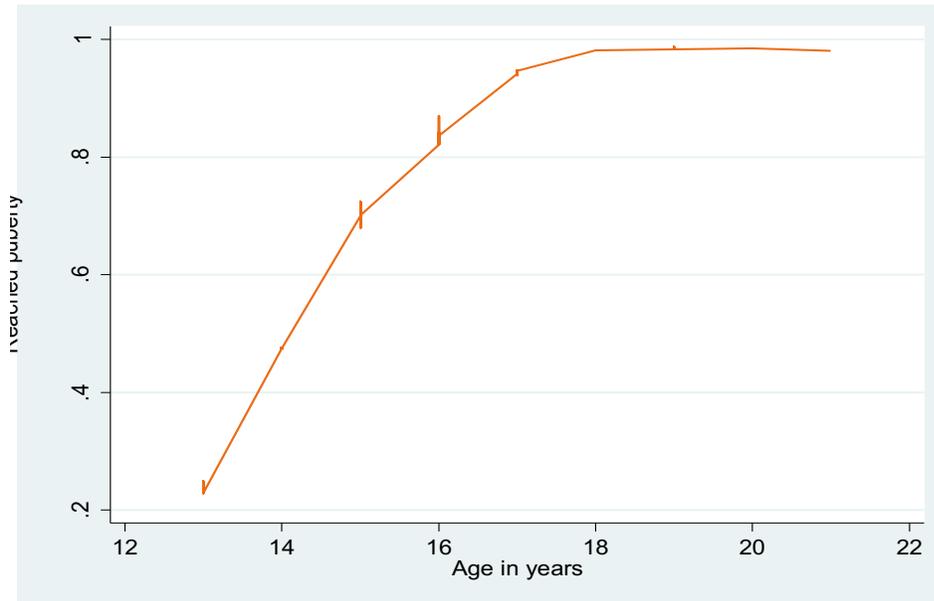
Notes: t stats in parentheses. \* 10% significance \*\* 5% significance; \*\*\* 1% significance

### 13.6 Menarche and menstruation

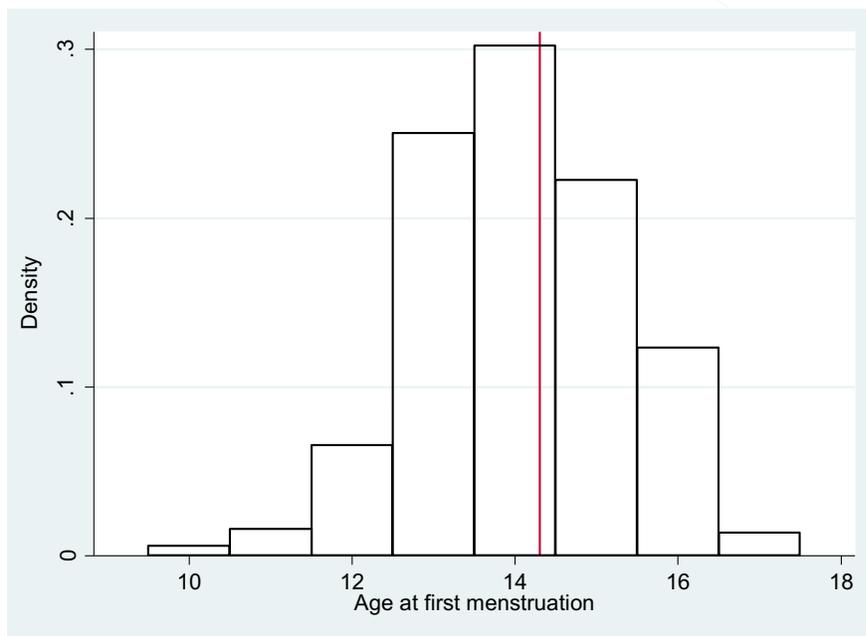
Girls, if they have started menstruating, were asked whether they had missed any social activities, school, or work days during their last menstrual cycle. Girls and women without access to proper sanitary products, soap for maintaining adequate levels of hygiene, or medications for pain management (if necessary) might be confined to their homes during their monthly cycle. With an influx of cash, treatment households might choose to spend more on sanitary products or other related goods, which might in turn might enable girls and women to continue with their regular activities during their cycles.

Figures 13.6.1 and 13.6.2 show some descriptive statistics for the information collected from females on whether or not they had started their period, and age of menarche. Seventy-five per cent of females in our sample had already reached puberty and virtually all females had reached puberty by age 18. Figure 13.6.2 shows the distribution of age at menarche—the median age is 14 and the mean 14.3 in the sample.

**Figure 13.6.1: Likelihood of having started menstruating by certain age**



**Figure 13.6.2: Age at menarche**



For those who had reached puberty we asked if they had ever missed an activity (school, work, etc) due to their period. About 21 per cent reported missing an activity, but there is no difference between T and C groups, as reported in Table 13.6.1.

**Table 13.6.1: Menstruation**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Missed activities during last menstruation	-0.009 (-0.21)	0.211	0.207
<i>N</i>	709	481	228

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

While there is no treatment effect on missing an activity, the proportion missing an activity—21 percent—is high and suggestive that menstrual hygiene might be affecting the ability of young women to fully reach their potential. Further evidence of this hypothesis is provided in Figure 13.6.3, which shows the highest grade attained (or currently attending, if still in school) for females who reached menarche early (by age 14) and those who reached menarche later (age 15+). The contrast is stunning. By age 22, females who began menstruating early had almost one full grade of schooling less than those who began menstruating after the age of 14. This is consistent with the observation that for younger girls especially, menstrual hygiene can be a real constraint in their ability to attend and succeed at school. Further analysis of the data did not indicate that the HSCT is protective of the negative effect of early menarche. Nevertheless, the evidence suggests that an important complementary activity in ultra-poor households would centre around menstrual hygiene to ensure girls have the same opportunities as boys to study, play and work.

**Figure 13.6.3: Highest grade attained by early/late menarche**



## 13.7 HIV

Youth were asked several questions about their knowledge and perceptions of HIV, and about HIV testing. Table 13.7.1 (first row) indicates that treatment youth might find themselves in less risky sexual relationships or situations, since they feel they are less likely to have a moderate or high chance of HIV infection (or of being HIV positive) than the control youth. This differential risk perception might also have prompted treatment youth to not be tested for HIV as much as the control group youths—we find statistically significant lower probabilities of being tested for HIV among HSCT youth at any time and in the last 12 months for the treatment group. Further analysis of the data in fact shows that believing one has high/moderate risk of HIV is significantly associated with a higher likelihood of being tested, whether in the last 12 months or ever.

**Table 13.7.1: HIV**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Believes HIV risk is moderate/high or has HIV/AIDS (versus low/no risk)	-0.053*** (-2.90)	0.086	0.146
<i>N</i>	1,902	1,298	604
Ever had HIV test lifetime	-0.153*** (-5.27)	0.462	0.644
<i>N</i>	1,899	1,296	603
HIV test past 12 months	-0.089*** (-3.37)	0.326	0.444
<i>N</i>	1,897	1,294	603
Got HIV results	-0.011 (-0.46)	0.871	0.874
<i>N</i>	912	549	363

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

## 13.8 Violence

We might expect to see effects of cash transfer receipt on violence experienced and witnessed by adolescents for various reasons. For example, given that there are links between parental stress and child abuse (Whipple & Webster-Stratton, 1991; Wolfe, 1985), an influx of cash might alleviate stress and that in turn may reduce the exposure of youths to violence perpetrated by household members. The enhanced availability of resources might also place adolescents in less dangerous work situations, and limit their exposure to other potentially abusive individuals.

### 13.8.1 Physical violence

The HSCT was originally formulated under the national Plan of Action for Orphans and Vulnerable Children (NAP), and child protection in general, and violence in particular, were always envisioned as key outcomes for the programme. The midline evaluation was conducted a mere 12-months after programme initiation, and child protection and other complementary plans had only just been initiated. Figures 13.8.1 shows that 48 percent of youth at baseline reported experiencing any physical violence, with the highest prevalence coming from the slapped or pushed category. Note also that rates tend to be slightly higher in the treatment group.

**Figure 13.8.1: Baseline lifetime measures of violence**

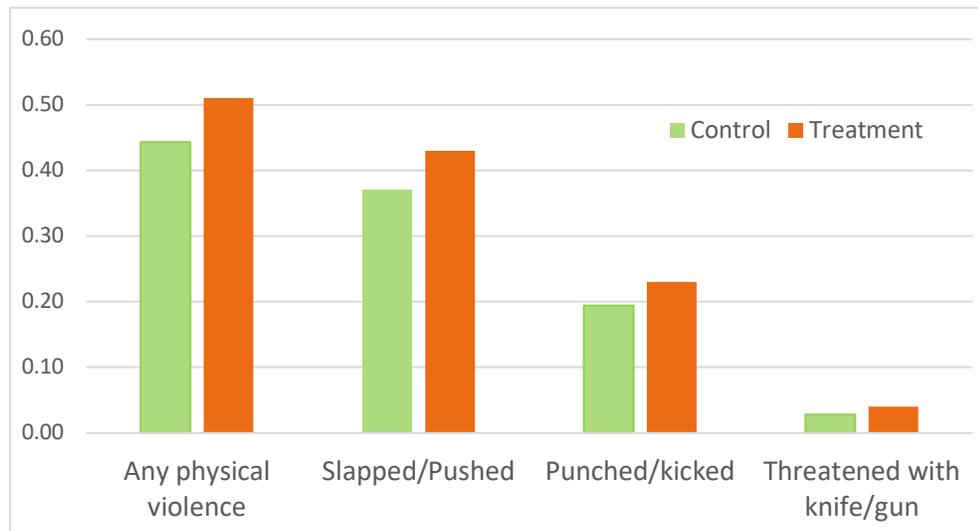


Figure 13.8.2 from the midline survey indicates that reporting of violence went up significantly in the treatment group, and rose significantly higher than the control group. During the midline stakeholder workshop, it was proposed that this trend was not uncommon in violence prevention programmes, where increased awareness and sensitivity at the beginning of an intervention can lead to increased reporting, which itself does not necessarily imply an increase in actual violence. Given that the child protection services were still very much in their infancy at the time of the midline, and absent any other obvious programmes or factors that differed across the two study areas, this seemed to be a reasonable explanation for the reported increases.

**Figure 13.8.2: Midline violence outcomes last 12 months**

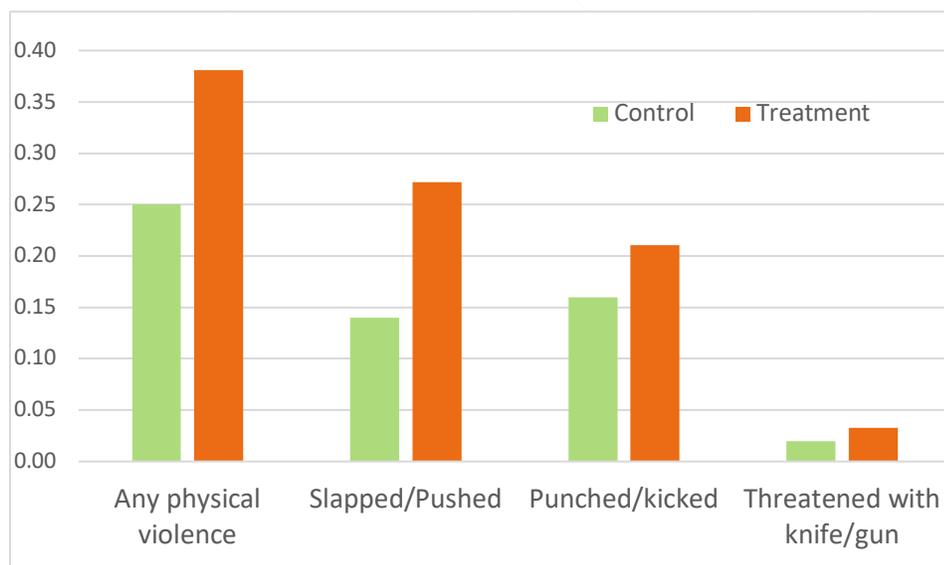


Figure 13.8.3 shows the results from the endline and indicate that there is now a significant decrease in violence reporting among the treatment group. This trend is consistent with the idea that violence prevention services have had time to take root in the communities and may have had an effect on violence.

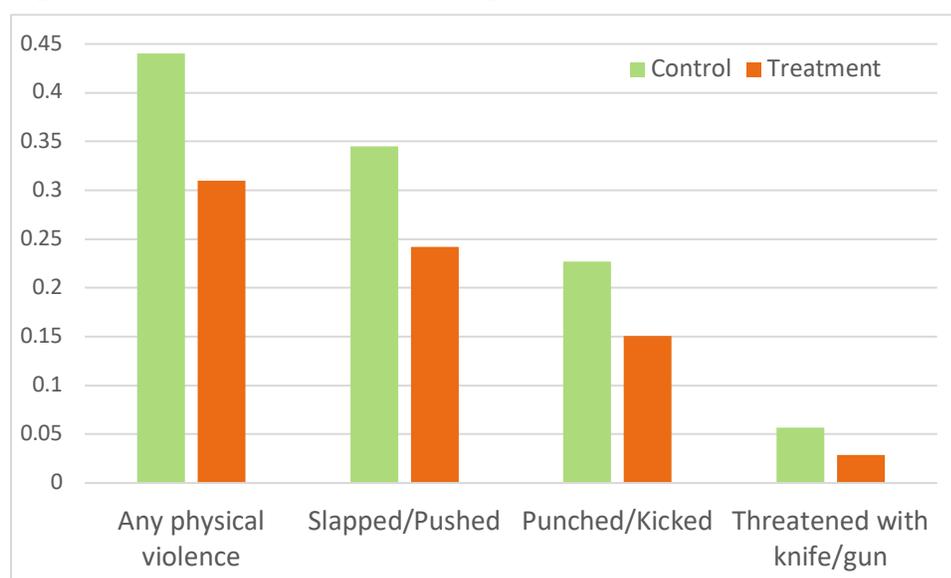
**Figure 13.8.3: Endline violence reporting last 12 months**


Table 13.8.1 shows impact estimates of the HSCT on three violence outcomes (we combine the severe categories of ‘threatened with a gun or knife or punched or kicked’). These are consistent with the figure and show that youths in HSCT recipient households are benefitting from protective effects of the cash grant—they are 13 percentage points less likely to experience any physical violence, which comprises of being slapped or pushed; hit with a fist, kicked, or beaten with an object; or attacked/threatened with a knife or weapon. Each of the individual violence categories also improve for treatment youth. Because there were differences at baseline between the two groups, we also pool the data from the baseline and endline and estimate DiD models to see if these results are robust to the differences found at baseline. Keeping in mind that the baseline measure is a lifetime one, Table E.1.5 in the Annex shows that there continues to be a negative impact of the HSCT on violence even after controlling for differences in the baseline lifetime prevalence of violence.

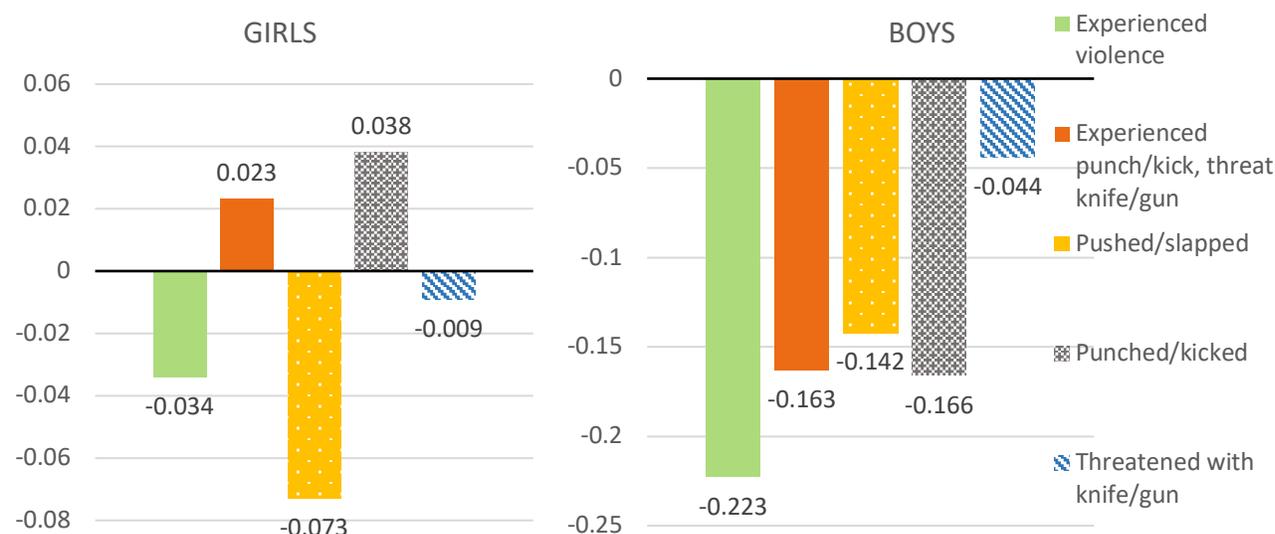
**Table 13.8.1: Experiences with physical violence**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Experienced physical violence-12 months	-0.132*** (-3.86)	0.308	0.440
<i>N</i>	2,308	1,595	713
Experienced severe violence (punched/kicked, threatened with knife/gun) -12 months	-0.072** (-2.07)	0.168	0.250
<i>N</i>	2,308	1,595	713
Pushed/slapped-12 months	-0.110*** (-4.14)	0.242	0.345
<i>N</i>	2,307	1,595	712
Punched/kicked-12 months	-0.067* (-1.77)	0.151	0.227
<i>N</i>	2,307	1,595	712
Threatened with knife/gun-12 months	-0.025** (-2.25)	0.029	0.057
<i>N</i>	2,303	1,591	712

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

Interestingly, most of the positive program effects on physical violence is driven by reductions in violence experienced by boys—boys experienced significant improvements in all the violence outcomes (see Figure 13.8.1 and Table E.2.3 in Appendix E.2). Girls in HSCT households reported a lower likelihood of being pushed or slapped, but all other outcomes did not significantly change.

**Figure 13.8.1: Experiences with physical violence results disaggregated by gender**



Notes: The graph indicates the program effect on the indicator, and when multiplied by 100, is interpreted as the percentage point change in the likelihood of experiencing the outcome. A negative effect indicates a reduction. Only the ‘pushed/slapped’ coefficient is significant for girls at the 10% level. All coefficients are significant for boys at the 1% level, except for being ‘threatened with a knife/gun’, which is significant at the 5% level.

For the young persons who reported experiencing physical violence, we asked about whether the perpetrator of the last incident of violence was a parent or adult relative, partner, authority figure (for example, a teacher), peer or classmate, or someone else (for example, a stranger). In Table 13.8.2 we find that among those who experienced physical violence in the last 12 months, treatment youth were less likely to report abuse from each category of perpetrator. For example, HSCT youth experienced a 6 PP decline in violence perpetrated by their peers, an effect that is statistically significant at the one per cent level. Further analysis, not shown in the tables, indicates that school enrolment significantly increases the risk of experiencing violence from an authority figure but not a peer. This is consistent with the hypothesis that school teachers are the primary authority figure perpetrators, and the main type of violence is ‘pushed or slapped’.

**Table 13.8.2: Perpetrators of physical violence**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Experienced physical violence by relative	-0.029* (-1.84)	0.079	0.111
<i>N</i>	2,308	1,595	713
Experienced physical violence by partner	-0.021** (-2.00)	0.031	0.060
<i>N</i>	2,308	1,595	713
Experienced physical violence by authority figure	-0.034* (-1.93)	0.097	0.131
<i>N</i>	2,308	1,595	713

**Table 13.8.2: Perpetrators of physical violence (continued)**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Experienced physical violence by peer	-0.062*** (-2.87)	0.101	0.153
<i>N</i>	2,308	1,595	713
Experienced physical violence by other perpetrator	-0.042*** (-3.32)	0.036	0.079
<i>N</i>	2,308	1,595	713

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

Again, girls did not experience any significant changes in violence perpetrated by different actors (Table 13.8.3). Boys faced significantly lower violence in the hands of relatives (this effect is marginally significant), authority figures, peers and other perpetrators.

**Table 13.8.3: Perpetrators of physical violence by gender**

Dependent Variable	Girls			Boys		
	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Experienced physical violence by relative	-0.001 (-0.06)	0.092	0.094	-0.053* (-1.97)	0.069	0.127
<i>N</i>	1,092	743	349	1,216	852	364
Experienced physical violence by partner	-0.029 (-1.38)	0.045	0.087	-0.011 (-0.93)	0.020	0.033
<i>N</i>	1,092	743	349	1,216	852	364
Experienced physical violence by authority figure	0.010 (0.42)	0.116	0.109	-0.080*** (-4.15)	0.080	0.153
<i>N</i>	1,092	743	349	1,216	852	364
Experienced physical violence by peer	-0.027 (-1.26)	0.068	0.085	-0.090*** (-3.06)	0.129	0.219
<i>N</i>	1,092	743	349	1,216	852	364
Experienced physical violence by other perpetrator	-0.006 (-0.56)	0.018	0.026	-0.081*** (-3.94)	0.052	0.131
<i>N</i>	1,092	743	349	1,216	852	364

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

As violence indicators were also collected at baseline, Appendix E presents pooled cross-section (i.e. difference-in-differences) models of the effects of the HSCT on violence reported. Most of the results are robust to the model specifications; in fact, the protective treatment effects become much larger, because violence reporting was actually higher among T youth relative to C youth. In the pooled models in the Appendix that account for baseline differences the decline in violence seems to come from peers and ‘other perpetrators’.

### 13.8.2 Witnessing violence and experiencing emotional violence

Another important aspect of youth’s transition into adulthood is learning to manage conflict and to communicate in a healthy manner. Witnessing arguments, and especially witnessing physical domestic violence (DV), can lead to learning an unhealthy pattern of interaction to be re-enacted later in life, perpetuating the cycle of violence, and contribute to experiencing a host of emotional and other health issues later in life (MacMillan & Wathen, 2014; VanderEnde, et al., 2016).

The endline asks four new questions on shame, abandonment and witnessing violence, which are reported in Table 13.8.4. Findings are encouraging: young people in the HSCT are significantly less likely to have ever seen their parent experience physical violence, and are significantly less likely (by 6.4 percentage points) to have been purposely humiliated in front of others in the past 12 months (which is a form of emotional violence). There are no statistical programme effects on the remaining two indicators though coefficients are negative. However, the overall prevalence of being made to feel unwanted (14 percent) and being threatened with abandonment (9 percent) or being purposefully humiliated (16 percent) is non-trivial, and suggests that the living conditions of these young people is indeed stressful.

**Table 13.8.4: Youth experiences with witnessing violence and emotional violence**

Dependent Variable	Program Impact (1)	Endline Treated Mean (2)	Endline Control Mean (3)
Have you ever seen or heard your parent being punched, kicked or being beaten?	-0.042*** (-3.02)	0.068	0.099
<i>N</i>	2,288	1,578	710
In the last 12 months, did any adult ever say or do something on purpose to humiliate you in public?	-0.064*** (-2.74)	0.138	0.207
<i>N</i>	2,288	1,578	710
In the last 12 months, did any adult ever make you feel unwanted?	-0.029 (-1.20)	0.131	0.166
<i>N</i>	2,295	1,584	711
In the last 12 months, did any adult ever threaten to abandon you or tell you to leave home?	-0.014 (-0.97)	0.083	0.100
<i>N</i>	2,295	1,584	711

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

### 13.8.3 Youth's perception of programme and intra-household conflict

While the overall experiences with violence are critical, it is also important to establish that the programme is not contributing heavily to unhealthy communication within the household in the view of the young person. In general, we do not expect to see negative impacts, as spontaneous discussions of the topic during qualitative investigations of other cash grant programmes suggest that the additional influx of cash relieves financial pressure on families, improving intra-household interactions and potentially reducing verbal and physical domestic violence.

As seen in Table 13.8.5, the youth do not much connect the cash from the programme with arguments and draw practically no connections between the cash transfer and physical fights in the household. In fact, 91.1 per cent of young persons report never witnessing any disagreements between members of the household that in their opinion relate to HSCT cash, and 5.6 per cent report only seeing one to three verbal disagreements in the past year and no physical altercations. Less than 2.5 per cent relay witnessing physical violence that they thought to be related to cash from the programme. Unfortunately, some witnessing of violence is to be expected given that 20% of women in Zimbabwe report experiencing physical and/or sexual intimate partner violence in the past year (ZIMSTAT & ICF International, 2015).

**Table 13.8.5: Youth’s observation of household disagreements related to HSCT Programme**

	<i>Per cent</i>
In the last 12 months, how many times have you witnessed disagreements between members of the household related to the cash received from the HSCT programme?	
Never	91.1
Verbal only, 1-3 times	5.6
Verbal only, every time	0.5
Physical, 1-3 times*	2.2
Physical, every time*	0.2
Don't know	0.5
N	1,282

\*Note: Questions about physical fights were only asked of youth reporting witnessing any disagreements, N=137

### 13.9 Summary

Results from this chapter suggest that the HSCT has had a positive effect on child protection outcomes on balance. We find a significant negative effect of the HSCT on sexual debut (by 8 pp) and a reduction in the likelihood of ever having engaged in sexual transactions. We also observe significant reductions in reporting of violence in the last 12 months among youth in the HSCT of 13 pp, driven by the category of ‘punched or slapped’. The main perpetrators of this violence are peers and authority figures, and school enrolment is a risk factor for reporting an authority figure as a perpetrator. A set of new questions introduced at endline show that protective environment of the young person is quite weak, with 14 percent of young people reporting that they were made to feel unwanted, and 9 percent threatened with abandonment. The HSCT appears to be strengthening the protective environment, with fewer HSCT young people reporting witnessing violence against their parents (by 4 percentage points), and fewer (by 6.4 percentage points) experiencing a form of emotional violence – being humiliated in public – themselves.

## 14. Comparison of midline and endline results

A comparison of results across all domains between the 12-month and 48-month follow-up reveal mostly similar patterns of effects, but with a few noticeable differences as well. Table 14.1.1 summarizes results across each major domain for midline (2014) and endline (2017), where a single asterisks (\*) indicates statistical significance at 10 percent confidence, two asterisks (\*\*) significance at 5 percent confidence, and three asterisks (\*\*\*) significance at 1 percent or better confidence. Some results are larger at endline, such as food security, children’s material needs and consumption purchases. Most results are stable though, such as in the productive domain, education, and youth. Among youth, the one big exception is the significant reductions in reported violence at endline, which contrasts with the increase reported at midline. The explanation here is that the child protection complementary services had only just started at the time of the midline, which might have resulted in an increase in reporting due to awareness of the issue of violence. The implementation of complementary services at paypoints around child protection in 2016 and 2017 explains the reductions seen by endline.

The comparison between midline and endline must be placed in the context of the operational performance of the HSCT. At the 12-month assessment households had only just entered the programme and received 5-6 payments. It is unlikely that their long-term beliefs about a permanent change in income had been fully altered. On the other hand, the programme suffered some operational setbacks in 2015-16 resulting in several missed payments, and there was even a missed payment in early 2017. While all beneficiaries have received their full entitlement of money, this has not occurred on a predictable bimonthly basis. A key factor in determining recipient response to a cash transfer is the belief or expectation of both the regularity of payment and the length of time they will continue to receive the payment—these beliefs determine whether the cash transfer is viewed as a permanent or transitory increase in income). Results from the operations module at 48-months suggest there is still some uncertainty about the regularity of payment and the length of time in the future that payments will continue. In other words, despite four years of programme participation, beliefs appear to be somewhat similar to what they were at 12-months, and this is probably why the pattern of results is essentially the same.

**Table 14.1: Midline and Endline HSCT impacts on selected indicators**

	Midline Impact (2014)	Endline Impact (2017)	Baseline T mean	Endline T mean	Endline C mean
<b>Consumption</b>					
Total consumption per capita (all sources) †	2.74**	0.52	29.78	34.46	35.86
Total consumption (purchases only)	3.93***	3.82***	12.88	21.49	18.73
Food consumption per capita (all sources)	1.56	-0.29	19.30	20.01	21.09
Food consumption (purchases only)	2.32***	2.79**	4.31	9.13	6.61
Diet diversity scale	0.70***	0.40*	5.91	7.43	7.41
HFIAS (Household Food Insecurity Access Scale) †	-0.11	-2.55***	14.04	8.88	11.33
Subjective well-being	1.13**	1.00***	9.53	12.91	12.27
Children have all material needs met	0.11*	0.26**	0.37	0.75	0.51
<b>Productive assets and activities</b>					
Any Livestock†	0.07***	0.03	0.78	0.90	0.88
Goats	0.09**	0.09**	0.45	0.68	0.62
Chicken/ducks/geese	0.05	-0.03	0.38	0.43	0.50
Any of six key agricultural assets†	0.03	0.06**	0.87	0.94	0.90
Axe	0.02	0.09**	0.74	0.79	0.69
Sickle	0.10**	0.14**	0.39	0.58	0.45
Value of harvest†	1.87	32.34**	99.27	124.23	124.26
Operates non-farm enterprise(s)	0.05**	0.01	0.12	0.10	0.11
Taken loan in last 12 months	-0.01	0.03	0.14	0.15	0.13
Any savings		0.04***		0.10	0.05
Share of negative coping strategies	-0.04	-0.09*	0.53	0.58	0.64
<b>Health</b>					
Chronically ill receiving care†	0.08	-0.00	0.75	0.83	0.89
Disabled receiving care†	-0.12**	0.02	0.38	0.30	0.29
Child (0-5 years) had diarrhoea/fever/cough in last 2 weeks†	0.15***	-0.08	0.50	0.63	0.76
Child (0-5 years) sought care for diarrhoea/fever/cough in last 2 weeks	-0.18**	-0.02	0.59	0.54	0.52

**Table 14.1: Midline and Endline HSCT impacts on selected indicators (continued)**

	Midline Impact (2014)	Endline Impact (2017)	Baseline T mean	Endline T mean	Endline C mean
<b>Education</b>					
Current school enrolment - primary†	0.01	-0.03	0.93	0.97	0.95
Current school enrolment - secondary†	0.03	0.01	0.71	0.71	0.64
Received BEAM - primary	0.00	0.03	0.16	0.09	0.10
Received BEAM - secondary	-0.06**	-0.06**	0.21	0.14	0.21
<b>Youth</b>					
Sexual debut (ever had sex)	-0.13***	-0.08***	0.08	0.14	0.25
Ever forced to have sex (all)	-0.03**	0.01	0.02	0.06	0.06
Experienced any violence in last 12 months (all)	0.16**	-0.14***	0.48	0.31	0.44
Ever had drink of alcohol	0.00	-0.02	0.08	0.07	0.12
Believes HIV risk is moderate/high or has HIV/AIDS (versus low/no risk)	-0.03	-0.09***	0.05	0.09	0.15
<b>Operations</b>			Midline Mean	Endline Mean	
Received payment in last 2 months (among self-reported current beneficiaries)			94%	96%	
Expect to receive next payment in next two months			91%	78%	
Know will still receive full amount of payment in future if cannot collect it on day of distribution			85%	94.2%	
Feel safe collecting payment			94%	76.5%	
Travel time to payment <1 hour round trip			43%	32%	

Notes: \* 10% significance \*\* 5% significance; \*\*\* 1% significance

## 15. Tracking the money

The comprehensive survey instrument covers spending on consumption (food), non-consumption (savings, debt reduction) and productive (fertilizer, seeds, labour) activities of the household, and the impact of the program on these different dimensions have been described through this report. In this chapter we summarize the impact in all spending due to the HSCT, and compare this to the total amount transferred to see whether the HSCT has enabled households to generate a ‘multiplier’—that is, to increase their overall spending by more than the net amount of the transfer. This multiplier is different from the multiplier estimated through the FAO LEWIE Model. The LEWIE includes spillover or secondary effects on non-beneficiaries (local economy effects) and so will lead to larger estimates (Taylor et al., 2014).

**Spending or Outflows:** All spending components documented in this report are aggregated together to create an aggregate outlay figure. The main components are consumption purchases, expenditure on agricultural assets and inputs, livestock, savings and debt reduction. Consumption outlays only contain cash purchases, since own-production would be captured in the increased agricultural production brought about by input purchases, and own-production of meat and poultry would be captured by spending on livestock, and thus lead to double-counting. The main spending components, measured in annual dollars per household are shown in Panel B of Table 14.1. The impact of the HSCT is to increase outlays by \$272 per year per household.

**Net in-flows:** For each treatment household we are able to simulate the exact value of transfer it receives based on HSCT rules. In addition, the HSCT has led to a large reduction in the value of in-kind gifts (mostly food) received by households, and has increased cash gifts by a small amount. These impacts are shown in Panel A of Table 14.1, and the net result of these impacts is an in-flow of \$185 per household per year.

A comparison of the outflows (\$272) and net in-flows (\$185) that can be ascribed to the HSCT suggests that the HSCT has generated a multiplier effect among beneficiary households of 1.47 (\$272/\$185). In other words, despite the decline in the value of in-kind gifts received by the household, HSCT beneficiaries have been able to improve their productive capacity in such a way as to put them at a level of spending that is much higher than the total net income received from the HSCT. Based on the results shown earlier in this report, the relevant productive activities appear to be agricultural and livestock production. The total multiplier estimated via the FAO LEWIE is 1.73, which as explained earlier, includes the secondary effects on non-beneficiaries. Note that the multiplier we calculate here is a net estimate because it nets out the reduction in the value of gifts received by the household. The gross multiplier, which does not account for the change in remittances and value of gifts is 1.03 (\$272/\$262).

**Table 15.1: Multiplier**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Panel A: Net In-flows					
Annual value of cash transfer	261.964*** (92.25)	0.000	0.000	261.964	0.000
Net transfers (In-Out) (\$)	19.571 (1.04)	60.659	106.264	17.049	43.082
Annual household gift consumption	-96.495 (-1.27)	738.085	834.486	219.128	412.025
Net in-flows	185.041** (2.40)	798.744	940.750	498.141	455.106
Panel B: Outlays					
Annual household purchases consumption	229.106*** (2.90)	772.905	836.447	1,289.439	1,123.875
Expenditure on agricultural assets	2.386 (0.65)	1.082	1.211	11.520	9.263
Expenditure on agricultural inputs	0.508 (0.32)	3.400	5.126	13.658	14.881
Expenditure on livestock	2.203* (1.68)	0.186	0.096	3.024	0.732
Total annual savings	28.953** (2.23)	0.000	0.000	52.103	23.157
Debt reduction	8.686 (1.24)	-22.913	-23.683	-15.355	-24.810
Total expenditure	272.091*** (3.35)	754.657	819.149	1,354.250	1,146.651
<i>N</i>	5,134	1,725	842	1,725	842

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

## 16. Conclusions

Results from the four-year follow-up survey suggest a nuanced and complex pattern of impacts of the HSCT on beneficiary households. After implementation issues in 2015-16, the programme was able to regularize payments towards the end of 2016, and payments had been on a regular cycle for approximately one year prior to the survey. Nevertheless, beneficiaries still seemed uncertain about when their next payment would arrive (22 per cent), and 25 per cent did not know how long they would continue to receive payments in the future.

Expectations about payments are crucial to allow beneficiaries to plan, and to make long term decisions. The lingering uncertainty likely explains the pattern of results that we see. For example, economic theory predicts that one-time or transitory increases in income will lead to lumpy expenditures such as paying down debt, or purchase of assets. On the other hand, perceived increases in permanent income will lead to increases in consumption. The pattern of results revealed in this report, as well as beneficiaries' own responses, suggests that the cash transfer is still viewed somewhat as a windfall or transitory increase in income. For example, there are important positive impacts on livestock purchases and holdings, on agricultural implements such as sickles, and a reduction in long term debt as well as short-term credit purchases.

The HSCT leads to a significant increase in purchases of total and food items (particularly cereals, fats, and sugar and sweet items). This in turn indicates that HSCT households are no longer dependent on the goodwill of their neighbours and relatives, and as a result, there are very large and positive effects on subjective well-being, food security, and optimism, all of which suggest that the HSCT may be increasing dignity and self-esteem by allowing households to be self-sufficient. There is some indication that the positive consumption effects of the HSCT are dampened by the crowding out of gifts, especially among the very poorest households. This leads to a muted effect of the HSCT on overall consumption. For example, among the poorest households, a large increase in purchases of \$4.2 (representing 86 per cent of the per capita value of the transfer) is almost completely offset by an equal reduction in the value of gifts received.

We also find that HSCT has enabled households to generate a 'multiplier'—that is, to increase their overall spending by more than the net amount of the transfer. When we aggregate the net in-flows and outflows caused by the HSCT, we arrive at a multiplier effect of 1.47. This is lower than the 1.73 multiplier computed through the FAO LEWIE simulation, but of course that analysis includes the total effect on the local economy, including spill over or secondary effects on non-beneficiaries.

The effects of the HSCT on social dimensions are somewhat inconsistent. In both health and education, for some indicators and for some sub-groups there are strong positive impacts. For example, morbidity among young children is reduced, and care-seeking among the disabled increases with the HSCT. In education, secondary school enrolment increases among the poorest households, and among males, even as access to BEAM continues to decline. Of course, the effects on health and schooling are very much dependent on the availability of services, and for these outcomes more assumptions are required for the cash transfer to have an effect. By contrast, there is a strong impact on the number of children with shoes, which highlights again that complementary infrastructure (in this case, markets) is key to conditioning the pattern of impacts of any cash transfer program.

A key strength of the HSCT is that it has recently been able to regularize payments and thus allow recipients to plan for the future. Triggering this type of forward-looking behaviour and outlook is important for a range of decisions that affect the long-term well-being of households (such as keeping children in school, investing in their own land or in livestock, and being able to re-integrate into and depend on social networks). The ramping up of complementary services at pay-points to directly address

child protection and vulnerability issues is also a key strength. The weakness of the programme continues to be the low coverage, and the low level of funding that comes directly from the government.

## 17. Recommendations

The recommendations provided in this section are derived from the evaluation team's assessment and interpretation of the data, and the feed-back and further contextualization provided at the stakeholder dissemination meeting in Harare on December 11, 2017.

**Overall:** The significant effects on food purchases and diet diversity, along with the strong multiplier effects generated by the programme, indicate that the HSCT is making an important positive difference in the lives of beneficiaries in both protective and productive domains. The programme thus represents a fruitful model for scale-up to achieve poverty mitigation and productive inclusion objectives of the Government of Zimbabwe.

**Operations:** There are a number of areas around programme operations that need to be strengthened based on the results. One area is around programme *communication*. Essential features of the programme are still not clearly understood by a large group of recipients, including when the next payment can be expected, how long recipients will remain in the programme, and whether or not there are rules or conditions to be followed for transfer receipt. The latter is particularly concerning, as recipients could be exploited if they believe they may be removed from the programme. A second area is around *payments*, as respondents spend over six hours collecting payments on average, and a quarter do not feel safe while collecting their payment. The actual timeliness and predictability of payments also has important consequences for programme impact insofar as they affect planning and forward thinking, so the Ministry should ensure these essential features of the programme are maintained. Finally, *coordination* with other poverty relief interventions should be improved, as HSCT recipients report being consistently excluded from NGO and other programmes, such as input support and drought relief.

**Coordination with BEAM:** Consistent with earlier evidence from midline study, HSCT beneficiaries are still systematically excluded from BEAM. The Ministry should reach out to the Ministry of Education, particularly at local level, to explain the purpose of the HSCT, and to coordinate the targeting of BEAM benefits at the Ward level. Ideally HSCT recipients would automatically qualify for BEAM, as is done in Ghana and Jamaica, for example, where cash transfer beneficiaries automatically qualify for free health insurance and school fee waivers respectively.

**Youth:** The ramping up of child protection services since the midline study appears to have paid dividends, with positive impacts on violence reduction and other child protection outcomes. These services should be continued, and possibly expanded to areas such as menstrual hygiene, which continues to be an important barrier for young women to fulfil their development potential.

**Process for Acting on Results:** The Ministry in collaboration with its development partners should develop an action plan, priority list and timeline for implementing the recommendations and acting on other results that stem from this evaluation. The process for developing the action plan should begin as soon as possible.

**Next steps:**

- It was proposed at the Endline Dissemination Workshop in December 2017 that the key findings of the evaluation be shared with beneficiaries and CCWs using existing platforms/forums such as the pre-distribution dialogue at HSCT payment points, with District and Provincial Social Welfare Officers leading this process at payment points. The idea is that the information about the impacts of the HSCT might serve as a source of motivation for service providers, local ministry staff and even beneficiaries themselves.
- A series of short, focused policy briefs should be generated from these findings. A proposed list of topics can be discussed and finalized with the CPF Steering Committee.
- Participants at the dissemination workshop also suggested adopting innovative advocacy practices from other countries in the region such as Zambia, Kenya and Ghana. These could include ideas of different stakeholders to target (such as Parliamentarians or media), different approaches (such as the social protection weeks utilized in Zambia and Kenya (see for example <http://spc.socialprotection.or.ke/>), and tailoring specific messages to different audiences. This will help efforts to disseminate the results to a wider set of people.

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## Appendix A.1. 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 quasi-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, controlling for differences in observed characteristics between the groups.

### A.1.1 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 A1.1).

**Table A.1.1: 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

### A.1.2 Selection of the comparison group

The comparison group is a sample of households of three districts drawn from Phase 4: Chiredzi, Hwange, and UMP. These districts were selected in terms of contiguity in administrative boundaries, geographical conditions, and community culture. A total of 60 wards were included from the treatment areas, and 30 (out of 58) wards were drawn from comparison areas (Table A1.2). The selection of these 30 wards is described below.

The Ruzivo Trust team carried out the ranking process for the respective wards in all six study districts. The steps followed in the exercise included these:

1. *District maps:* The 1:250000 scale maps were secured from the surveyor general's office which provided finer details of the spatial characteristics considered in the ranking exercise. In the absence of 1:50000 scale maps, which show clearly defined ward boundaries, the Ruzivo team utilised district reference maps from the OCHA website. We also obtained an updated ward map from Ntengwe based in Binga to aid in the analysis of the wards.
2. *Determination of variables:* The characteristics were determined based on the relevance of the characteristics to the community's livelihoods and well-being. The variables considered were forest cover, nearness to roads, resistance to shocks, nearness to business centres, and proximity to water sources. Reasons for selecting these variables was based on the following:

- **Forest cover**—Forest resources provide livelihoods in the form of energy (wood fuel), timber for household use, and non-forest produce (fruits, medicines, etc.) that are valuable for the household to resist shock; rated 1 (low), 2 (medium), 3 (high) forest cover.
  - **Nearness to a road**—Access to markets and services with a potential to reduce shocks; rated 1 (very close), 2 (relatively close), 3 (very far).
  - **Resistance to shocks**—Analysis of agricultural potential (based on agro-ecological regions) and overlaid across all indicators; rated 1 (low), 2 (medium), 3 (high) resistance.
  - **Nearness to a business centre**—Access to goods and services and therefore better management of risks; rated 1 (very close), 2 (relatively close), 3 (very far).
  - **Water sources**—Access to water as a basic requirement, in addition to livelihoods derived from water bodies such as fisheries, participating in water-related economic activities such as tourism and related services; rated 1 (close), 2 (relatively close), 3 (very far).
3. *Ward-by-ward ranking and scoring:* For each ward in the six districts, the team individually ranked the ward against the variables and entered the score before calculating the total score for the ward. Because the maps could not give much information on the extent of community resilience to shocks, the team relied on existing programming knowledge within Ruzivo Trust and its partners for the areas under evaluation. For each variable, a score range of 1–3 implying low–high was set.
  4. *Ward matching and pairing process:* The pairing of the wards was based on the total score for each ward. Because there are 60 treatment wards but the comparison has only 30 wards, the team first created 30 pairs in the treatment wards. The pairs were determined by matching the total scores for each ward in a respective district. Where there was not a perfect match, the variables were prioritised according to nearness to business centres, followed by resistance to shocks. For each pair created, colour coding was used to identify the pairs after which the 30 pairs were listed. These pairs were then matched with a similar comparison ward to come up with 30 wards (10 wards in each comparison district). For one comparison ward in UMP, wards 16 and 5 had the same scores in all variables, and it was difficult to choose one from the two using the same method applied to the other comparison wards. Therefore, three independent individuals were chosen to pick a number between the two (16 and 5) using the lottery method. From this, ward 5 was chosen by the majority. The precise list of treatment ward pairs and their respective matched comparison ward is provided in the baseline report available [here](#).

**Table A.1.2: 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 selected ward: 34 eligible households and 10 non-eligible households. The non-eligible households were used for a separate targeting analysis and not for the impact evaluation itself. The non-eligible households were only interviewed at baseline.

### A.1.3 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  $\alpha=1$  for Mwenezi and Mudzi districts; but for Binga district,  $\alpha$  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 endline survey had an overall household response rate of 83.8%, 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 endline survey using household background and outcome measures as explanatory variables, and corrected the baseline sampling weights using the predicted probabilities of remaining in the endline obtained from that model. The corrected weight for household  $i$  located in ward  $j$  is:

$$w_{ij}^c = \frac{w_j}{\text{Prob}(\text{Cont}_{ij} = 1 | X_{ij})}$$

Weights for the Youth module: The endline 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:

$$\text{Youth weight}_{ij} = (w_{ij}^c) \cdot (\text{Factor } Y_{ij})$$

Where,

$w_{ij}^c$  : These are the household weights corrected by overall attrition, described above.

$$\text{Factor } Y_{ij} = \frac{\text{Total \# Youth}_{ij}}{\text{\# Youth interviewed}_{ij}}$$

## Appendix A.2. Baseline balance

A comprehensive baseline report provided detailed information on the characteristics of the evaluation sample, and compares the HSCT population to national populations from the Zimbabwe Demographic and Health Survey (ZDHS). The baseline report also analysed the comparability of the treatment and comparison group, what is referred to as baseline balance. This is an important analysis because it assesses the degree to which the two samples are equivalent, and in particular, whether the comparison group provides a reasonable estimate of the counterfactual—the outcomes in the absence of the program. Such a counterfactual is essential for any serious impact evaluation.

Recall that households from the comparison wards were identified using the exact same targeting process as in the treatment wards, hence assuming that targeting follows clear, transparent guidelines, there should be no difference in the characteristics of households across the two groups, though there is always the possibility of differences due to the laws of chance.

The identification process appeared to have worked in terms of creating equivalent groups at baseline because the mean characteristics of groups were balanced between the treatment and comparison conditions. The study team (AIR, UNC, Ruzivo Trust) tested 56 primary outcome measures and control variables for statistical differences between the two groups, using OLS regression with cluster robust standard errors (to account for the nested nature of the data with households clustered in wards). Eight of the indicators were statistically significantly different at baseline. However, none of these eight indicators was meaningfully different because the observed difference was less than 0.25 standard deviation for that indicator. This evaluation included a large sample size with more than 3,000 households; the study was thus powered to detect very small differences that might not be meaningful. Note the range of domains that the indicators encompass, including health, nutrition, schooling, access to services, monetary poverty, child protection, and HIV behavioural risk. This range underscores the substantial complexity involved in designing and implementing the survey instrument. The full set of statistical tests for all indicators are shown in Table A2.1.

**Table A.2.1: Comparison of HSCT evaluation treatment and comparison groups at baseline**

Indicator	Mean [T]	Standard Dev. [T]	n [T]	Mean [C]	Standard Dev. [C]	n [C]	Mean Difference (T-C)	p-value
<u>Education</u>								
School Attendance Over 80% (Primary)	0.79	0.41	1663	0.68	0.47	981	0.11	<b>0.04</b>
School Attendance Over 80% (Secondary)	0.59	0.49	1379	0.49	0.50	693	0.10	0.09
Received BEAM (Primary)	0.15	0.36	2239	0.18	0.39	1125	-0.03	0.11
Received BEAM (Secondary)	0.16	0.37	1650	0.14	0.35	797	0.02	0.33
Enrollment Rate (Primary)	0.93	0.25	2234	0.92	0.28	1123	0.01	0.17
Enrollment Rate (Secondary)	0.72	0.45	1647	0.69	0.46	795	0.03	0.23
Grade Progression (Primary)	0.92	0.27	1840	0.92	0.27	922	0.00	0.83
Grade Progression (Secondary)	0.86	0.34	1293	0.86	0.35	601	0.00	0.89
<u>Adolescents</u>								
Ever had sex	0.08	0.27	644	0.10	0.30	281	-0.02	0.47
Age at First sex	15.38	1.73	52	14.78	2.67	27	0.61	0.32
Condom use at first sex	0.35	0.48	52	0.41	0.50	27	-0.06	0.56
First sex consensual	0.69	0.47	52	0.93	0.27	27	-0.23	<b>0.00</b>
Age of partner at first sex	17.31	3.43	45	17.36	3.92	22	-0.05	0.95
# partners last 12 months	1.44	2.36	52	1.04	2.24	27	0.41	0.45
# of sex acts last 3 months	4.03	16.62	29	7.08	23.13	13	-3.04	0.68
Unprotected sex acts last 3 months	0.31	0.48	13	0.14	0.38	7	0.16	0.40
Ever forced to have sex	0.03	0.16	644	0.01	0.08	281	0.02	<b>0.01</b>
Ever received/given gifts in exchange for sex	0.02	0.16	644	0.02	0.14	281	0.00	0.73
Center for Epidemiological Studies Depression Index	18.88	5.46	643	18.43	5.67	280	0.45	0.41
Hope Scale (Snyder)	0.62	0.49	643	0.64	0.48	280	-0.02	
Ever experienced physical violence	0.47	0.50	644	0.49	0.50	281	-0.02	0.58
Use of alcohol	0.08	0.28	644	0.08	0.27	281	0.01	0.82
Use of cigarettes	0.02	0.14	644	0.03	0.18	281	-0.01	0.40
<u>Expenditure</u>								
Per Capita Expenditure	31.69	21.42	1949	31.50	20.90	966	0.19	0.91
Per Capita Food Expenditure	20.49	16.03	1949	20.11	14.83	966	0.38	0.74
<u>Expenditure Shares</u>								
Food	0.63	0.12	966	0.63	0.13	1949	0.00	0.22
Education	0.04	0.05	966	0.04	0.07	1949	0.00	0.27
Health, Hygiene	0.05	0.04	966	0.04	0.04	1949	0.01	<b>0.00</b>
Clothing	0.01	0.02	966	0.01	0.02	1949	0.00	0.17
Household items	0.25	0.11	966	0.26	0.11	1949	-0.01	0.84
Transport/Comm	0.02	0.05	966	0.02	0.05	1949	0.00	0.06
<u>Diet Diversity &amp; Quality of Life</u>								
(Higher the better)								
More than one meal per day	0.88	0.33	2026	0.87	0.34	1034	0.01	0.50
Ate meat/fish last month	0.42	0.49	2026	0.47	0.50	1033	-0.05	0.05
Grain stores lasted >3 months	0.41	0.49	2025	0.48	0.50	1033	-0.07	<b>0.02</b>
Quality of life Scale (7-35)	14.52	5.29	2024	15.00	5.14	1031	-0.47	0.06
Not like to have food shortage	0.36	0.48	2021	0.35	0.48	1032	0.01	0.78
Not likely to seek financial help	0.42	0.49	2019	0.38	0.48	1031	0.04	0.16
<u>Individual &amp; Household Characteristics</u>								
Age (in years)	26.31	24.94	9643	27.27	25.46	4932	-0.97	0.32
Female	0.56	0.50	9653	0.54	0.50	4944	0.02	<b>0.04</b>
Disabled	0.06	0.24	9614	0.06	0.24	4930	0.00	0.44
Household Size	4.76	2.78	2029	4.78	2.70	1034	-0.02	0.90
Household is labor constrained	0.75	0.43	2029	0.77	0.42	1034	-0.01	0.52
Food Security Scale	23.22	6.09	2025	22.56	6.21	1034	0.66	<b>0.06</b>
Yes/No whether household was affected by any shocks	0.88	0.32	2026	0.85	0.35	1034	0.03	0.14
Yes/No whether household was affected by flood	0.04	0.21	2026	0.02	0.14	1034	0.03	<b>0.04</b>
Yes/No whether household was affected by drought	0.42	0.49	2026	0.37	0.48	1034	0.05	0.18

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Indicator	Mean [T]	Standard Dev. [T]	n [T]	Mean [C]	Standard Dev. [C]	n [C]	Mean Difference (T-C)	p-value
HH own or cultivate any land in the past 12 months	0.928	0.258	2,029	0.924	0.266	1,034	0.004	0.790
operated land, ha	1.37	1.72	1,883	1.37	1.54	955	0.00	0.980
irrigated operated land, ha	0.05	0.35	1,883	0.07	0.47	955	-0.01	0.514
operated land under erosion, ha	0.87	1.51	1,883	0.86	1.41	955	0.02	0.864
operated land in slight/steep slope, ha	0.62	1.22	1,883	0.61	1.19	955	0.00	0.956
operated land for maize, ha	0.53	0.86	1,883	0.55	0.79	955	-0.02	0.810
operated land for sorghum, ha	0.35	0.74	1,883	0.46	0.85	955	-0.10	0.266
operated land for groundnut, ha	0.09	0.40	1,883	0.09	0.31	955	0.00	0.886
HH planted crops in the last rainy season	0.880	0.325	2,029	0.873	0.333	1,034	0.006	0.738
HH completed harvest	0.821	0.384	1,785	0.748	0.435	903	0.073	0.121
HH harvested maize	0.635	0.481	1,785	0.715	0.451	903	-0.080	0.130
HH harvested sorghum	0.448	0.497	1,785	0.498	0.500	903	-0.051	0.389
HH harvested groundnut	0.146	0.353	1,785	0.175	0.380	903	-0.029	0.555
maize harvest, kg	124.93	447.72	1,465	126.39	946.50	675	-1.46	0.972
sorghum harvest, kg	58.34	165.97	1,465	70.48	247.46	675	-12.14	0.432
groundnut harvest, kg	24.93	156.09	1,465	28.55	112.53	675	-3.62	0.745
crop has been harvested	0.86	0.35	1,785	0.81	0.39	903	0.04	0.277
HH sold harvest	0.05	0.21	1,530	0.02	0.15	735	0.03	0.024
HH consumed harvest at home	0.76	0.43	1,530	0.81	0.39	735	-0.05	0.086
HH stored harvest	0.86	0.35	1,530	0.83	0.37	735	0.02	0.307
HH used crop production inputs	0.24	0.43	1,785	0.29	0.45	903	-0.04	0.336
HH used chemical fertilizers	0.10	0.30	1,785	0.17	0.37	903	-0.07	0.097
HH used organic fertilizers	0.17	0.38	1,785	0.16	0.36	903	0.02	0.487
HH used pesticides	0.03	0.16	1,785	0.02	0.14	903	0.01	0.426
HH purchased crop production inputs	0.07	0.26	1,785	0.10	0.30	903	-0.03	0.299
HH purchased chemical fertilizers	0.05	0.23	1,785	0.10	0.30	903	-0.04	0.131
HH purchased organic fertilizers	0.01	0.09	1,785	0.00	0.07	903	0.00	0.392
HH purchased pesticides	0.02	0.14	1,785	0.01	0.11	903	0.01	0.264
total hh expenses for crop production	2.97	13.09	1,785	6.40	27.28	903	-3.43	0.077
hhld owns livestock	0.74	0.44	2,029	0.79	0.41	1,034	-0.05	0.028
hhld owns cattle	0.52	0.50	1,497	0.54	0.50	814	-0.02	0.454
hhld owns goats	0.56	0.50	1,497	0.59	0.49	814	-0.03	0.418
hhld owns chickens	0.82	0.38	1,497	0.83	0.38	814	-0.01	0.633
hhld owns sheep	0.03	0.18	1,497	0.03	0.17	814	0.00	0.881
hhld owns pigs	0.05	0.21	1,497	0.03	0.18	814	0.01	0.272
# cattle	2.28	3.35	1,497	2.66	3.88	814	-0.39	0.050
# goats	2.33	3.39	1,497	2.61	3.78	814	-0.27	0.159
# chickens	4.59	4.83	1,497	4.88	4.87	814	-0.30	0.288
# sheep	0.15	1.11	1,497	0.16	1.50	814	-0.01	0.857
# pigs	0.13	0.69	1,497	0.11	0.75	814	0.02	0.663
total hh expenses for livestock production inputs	0.14	1.51	1,497	0.28	3.50	814	-0.14	0.278
HH operates non-farm business	0.12	0.32	2,029	0.13	0.33	1,034	-0.01	0.633
# businesses operated by HH	1.06	0.23	242	1.11	0.33	131	-0.05	0.178
months in operation last year (all businesses)	6.69	4.74	239	7.02	5.02	127	-0.33	0.520
HH reports asset ownership for enterprise	0.26	0.44	242	0.26	0.44	131	0.00	0.954
value of business owned assets, US\$	1543.20	10258.63	242	5278.63	37809.04	131	-3735.42	0.288
individual was engaged in domestic chores yesterday	0.50	0.50	8,244	0.50	0.50	4,215	0.00	0.950
individual involved in any farming activities last rainy	0.66	0.47	8,244	0.65	0.48	4,215	0.01	0.604
days worked in farming activities last rainy season	54.92	43.50	5,456	55.91	43.29	2,747	-0.99	0.723
individual worked in hhld non-farm business last week	0.13	0.34	8,244	0.16	0.37	4,215	-0.03	0.206
hours worked in hhld non-farm business last week	12.16	13.60	1,090	10.70	10.99	672	1.46	0.115
individual involved in livestock activities last week	0.16	0.36	8,244	0.14	0.35	4,215	0.01	0.308
hours worked in livestock activities last week	21.02	17.70	1,292	21.55	18.01	605	-0.53	0.776
individual engaged in maricho/casual labour last week	0.07	0.26	8,244	0.06	0.24	4,215	0.01	0.326
hours worked in maricho/casual labour last week	19.71	20.17	615	20.46	14.51	267	-0.75	0.732
individual in wage employment last week	0.02	0.13	8,244	0.02	0.13	4,215	0.00	0.865
hours worked in wage employment last week	32.26	22.25	144	32.51	20.15	71	-0.25	0.956
individual in wage employment last year	0.03	0.18	6,850	0.03	0.18	3,544	0.00	0.928
days of work in wage employment last year	152.83	105.03	233	143.90	105.94	122	8.93	0.470
total annual salary including inkind payments, USD	1166.77	1555.31	233	970.00	1339.34	122	196.76	0.301
individual in wage employment, agriculture	0.01	0.08	6,850	0.01	0.08	3,544	0.00	0.616
days of work in wage employment last year, agriculture	156.29	104.71	48	169.71	114.74	21	-13.42	0.657
individual in maricho labour last year	0.21	0.40	6,850	0.19	0.39	3,544	0.01	0.481
days of work in maricho last year	34.00	45.37	1,410	36.01	43.57	677	-2.01	0.465
wages for maricho labour	186.76	366.48	1,410	187.40	395.66	677	-0.65	0.978

## Appendix A.3 Survey questionnaires

All instruments are found on the Transfer Project’s website, [here](#). Specific instruments can be found at the links below:

**Table A.3.1: Survey questionnaire locations**

<b>Baseline Questionnaires (2013):</b>	
Household	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/10/Zimbabwe_HSCT_Household-Questionnaire_Baseline.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/10/Zimbabwe_HSCT_Household-Questionnaire_Baseline.pdf</a>
Community	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/10/Zimbabwe_HSCT_Community-Survey_Baseline.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/10/Zimbabwe_HSCT_Community-Survey_Baseline.pdf</a>
Business Enterprise	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/10/Zimbabwe_HSCT_Business-Enterprise-Questionnaire_Baseline.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/10/Zimbabwe_HSCT_Business-Enterprise-Questionnaire_Baseline.pdf</a>
Youth	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/Zimbabwe_HSCT_Youth-Module_Baseline.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/Zimbabwe_HSCT_Youth-Module_Baseline.pdf</a>
<b>Midline Questionnaires (2014):</b>	
Household	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/1.-Combined-HH-Survey-Zim-HSCT-2014-13May.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/1.-Combined-HH-Survey-Zim-HSCT-2014-13May.pdf</a>
Community	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/3.-ZIM-Community-2014_12may.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/3.-ZIM-Community-2014_12may.pdf</a>
Youth	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/2.-Young-Person-Module-2014-13May.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/2.-Young-Person-Module-2014-13May.pdf</a>
<b>Endline Questionnaires (2017):</b>	
Household	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/HSCT-2017-Endline-Evaluation-Household-Qsn.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/HSCT-2017-Endline-Evaluation-Household-Qsn.pdf</a>
Price (community)	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/HSCT-2017_Price-questionnaire_final.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/HSCT-2017_Price-questionnaire_final.pdf</a>
Youth	<a href="https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/HSCT-2017-Young-Person-Module_FINAL.pdf">https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/HSCT-2017-Young-Person-Module_FINAL.pdf</a>

## **Appendix A.4 Statement of Work and Terms of Reference (RFP/ZIMA/2011/003)**

### **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 lives below the Total Consumption Poverty Line, 55 per cent below the Food Poverty Line and 25 per cent of all children have been orphaned. 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. 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.

- 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).
  - 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 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**

<i>Term:</i>	<i>First level impact</i>	<i>Second level impact</i>	<i>Final level of impact</i>
<b>Definition:</b>	Measures activities or inputs in a short timeframe, including immediate needs of beneficiary households receiving cash transfers (such as food consumption and dietary diversity)	Measures changes in children and other beneficiaries’ lives over a longer period of time including expenditure in health and education (mediated by availability of schooling) and an	Measures longer term changes in the lives of beneficiaries such as changes in: nutritional status, use of health services and care seeking practices, child labour and HIV/AIDS behaviour change strategies

		investment in productive activities	
<p>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.</p>			

### **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:**

<b>Timeframe</b>	<b>External M&amp;E</b>
<b>Within 4 weeks of contract signing</b>	<p>Inception presentation to key stakeholders in Harare by key / lead named personnel. Inception presentation to include provisional M&amp;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).</p> <p>NOTE this Framework must include activities for three pillars of the CPF: Child Protection, Cash Transfers and Programme Management as noted above.</p> <p>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).</p>
<b>Within 8 weeks of contract signing (suggested)</b>	<p>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.</p>

<b>Within 10 weeks of contract signing (suggested)</b>	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.
<b>Within 12 weeks of contract signing</b>	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.
<b>Early 2012/ end 2011</b>	Data collection for baseline survey underway
<b>By March 2012 (to be confirmed by actual programme implementation)</b>	Baseline completed
<b>By April 2012 (to be confirmed by actual programme implementation)</b>	Initial findings from the baseline, including targeting analysis, shared in a preliminary report and presented to stakeholders in Harare
<b>By end April 2012</b>	Baseline survey report finalized and disseminated formally, including all comments from Government, UNICEF, donors and other stakeholders.
<b>By end 2012</b>	First follow up survey monitoring shorter term impacts conducted.
<b>Early 2013 (timeline to be finalized based on programme roll out)</b>	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.
<b>End 2013</b>	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
<b>First quarter 2014</b>	Final impact report published and disseminated based on discussions of earlier drafts and presentations to partners.
<b>Periodic</b>	Periodic visits to be defined by the consultants including programme management including mitigating and contextual factors
<b>Other dates</b>	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.

## Appendix B. Attrition analysis tables

### B.1 Overall attrition

**Table B.1.1: Individual-level characteristics (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Age (years)	30.840	1,693	25.544	12,898	-5.296	1.722	0.003
Children	0.560	1,693	0.598	12,904	0.037	0.012	0.003
Adult	0.230	1,693	0.245	12,904	0.015	0.013	0.271
Elderly	0.206	1,693	0.156	12,904	-0.050	0.015	0.001
Female	0.578	1,693	0.550	12,904	-0.028	0.014	0.058
Currently attending school	0.359	1,693	0.388	12,904	0.029	0.013	0.032
Sick or injured in last 30 days	0.279	1,693	0.247	12,904	-0.032	0.022	0.152
Chronically ill	0.122	1,693	0.091	12,904	-0.031	0.013	0.022
Overall health is good or better	0.735	1,693	0.769	12,904	0.034	0.021	0.109
Disabled	0.065	1,693	0.060	12,904	-0.005	0.009	0.609

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

**Table B.1.2: Household demographic characteristics (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Household size	3.673	496	5.335	2,567	1.662	0.152	0.000
Members aged 0-5 yrs	0.567	496	0.827	2,567	0.261	0.043	0.000
Members aged 6-17 yrs	1.491	496	2.360	2,567	0.869	0.082	0.000
Number of adults	0.846	496	1.306	2,567	0.461	0.068	0.000
Number of elderly	0.757	496	0.834	2,567	0.077	0.047	0.107
HH with chronically ill	0.365	496	0.368	2,567	0.003	0.031	0.934
HH with disabled	0.214	496	0.271	2,567	0.057	0.023	0.015
HH with elderly	0.658	496	0.623	2,567	-0.035	0.033	0.291

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

**Table B.1.3: Main respondent characteristics (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Female	0.720	496	0.670	2,567	-0.050	0.026	0.057
Age (years)	57.828	496	55.794	2,567	-2.035	1.161	0.083
Widowed	0.478	496	0.346	2,567	-0.132	0.034	0.000
Divorced/separated	0.121	496	0.083	2,567	-0.038	0.017	0.027
Ever attended school	0.560	496	0.575	2,567	0.015	0.024	0.531
Currently attending school	0.025	496	0.014	2,567	-0.011	0.008	0.171
Highest grade obtained	3.118	496	3.326	2,567	0.208	0.169	0.220

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

**Table B.1.4: Household total expenditure, poverty, food security and shocks (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
PC total expenditure	41.933	496	30.776	2,567	-11.157	1.964	0.000
PC food expenditure	27.140	496	19.811	2,567	-7.330	1.350	0.000
Poor	0.834	496	0.944	2,567	0.109	0.021	0.000
HH currently owes	0.089	496	0.092	2,567	0.003	0.022	0.889
Current debt	4.314	496	7.429	2,567	3.115	1.979	0.119
Food poor	0.560	496	0.726	2,567	0.166	0.027	0.000
Mild food insecure	0.023	496	0.023	2,567	-0.001	0.008	0.951
Moderately food insecure	0.290	496	0.349	2,567	0.059	0.024	0.017
Severely food insecure	0.654	496	0.609	2,567	-0.045	0.029	0.122
HFIA scale	14.107	496	14.010	2,567	-0.097	0.334	0.773
HH was affected by any shock	0.845	496	0.899	2,567	0.054	0.018	0.004
HH was affected by flood	0.035	496	0.038	2,567	0.003	0.012	0.774
HH was affected by drought	0.384	496	0.454	2,567	0.069	0.033	0.038

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

**Table B.1.5: Household well-being measures (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
One meal or less per day	0.137	496	0.128	2,567	-0.009	0.019	0.620
Grain last harvest lasted < 3 months	0.675	496	0.592	2,567	-0.083	0.027	0.003
Ate fish/meat last month	0.406	496	0.445	2,567	0.039	0.028	0.168
Satisfaction with Life score	9.606	496	9.637	2,567	0.031	0.232	0.895
Expect food shortage	0.586	496	0.598	2,567	0.012	0.034	0.729
Will likely need financial assistance	0.551	496	0.577	2,567	0.027	0.028	0.344
Expect to fall ill	0.379	496	0.318	2,567	-0.062	0.031	0.047

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

**Table B.1.6: PC household expenditure measures (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
Total household consumption expenditure	41.933	496	30.776	2,567	-11.157	1.964	0.000
Total household NON consumption expenditure	0.411	496	0.256	2,567	-0.155	0.108	0.152
Total household expenditure on food items	27.140	496	19.811	2,567	-7.330	1.350	0.000
Total household expenditure on non food items	14.793	496	10.966	2,567	-3.827	0.785	0.000
PC HH exp on cereal items	9.843	496	7.053	2,567	-2.791	0.568	0.000
PC HH exp on roots and tuber items	0.249	496	0.211	2,567	-0.038	0.057	0.514
PC HH exp on pulses and legumes items	2.012	496	1.585	2,567	-0.427	0.221	0.056
PC HH exp on vegetable items	5.839	496	4.478	2,567	-1.361	0.289	0.000
PC HH exp on fruit items	0.877	496	0.573	2,567	-0.303	0.103	0.004
PC HH exp on fish items	0.584	496	0.312	2,567	-0.272	0.130	0.039
PC HH exp on meat, poultry items	1.650	496	1.531	2,567	-0.120	0.271	0.660
PC HH exp on dairy and egg items	1.037	496	0.836	2,567	-0.201	0.219	0.361
PC HH exp on fat items	1.654	496	1.156	2,567	-0.498	0.125	0.000
PC HH exp on sugar and sweet items	0.952	496	0.612	2,567	-0.340	0.117	0.005
PC HH exp on non alcoholic beverage items	0.657	496	0.483	2,567	-0.174	0.175	0.323
PC HH exp on alcohol & tobacco items	0.669	496	0.483	2,567	-0.186	0.178	0.297
PC HH exp on non-frequent other food and beverage items	1.116	496	0.497	2,567	-0.619	0.290	0.035
PC HH exp on non-frequent household items	10.161	496	7.457	2,567	-2.704	0.577	0.000
PC HH exp on hygiene items	1.459	496	0.960	2,567	-0.499	0.108	0.000
PC HH exp on transportation items	0.946	496	0.501	2,567	-0.445	0.264	0.096
PC HH exp on communication items	0.228	496	0.155	2,567	-0.073	0.057	0.201
PC HH exp on other (non food) items	0.129	496	0.063	2,567	-0.066	0.059	0.266
PC HH exp on education items	1.021	496	1.147	2,567	0.127	0.145	0.383
PC HH exp on health items	0.379	496	0.340	2,567	-0.039	0.092	0.677
PC HH exp on water items	0.005	496	0.006	2,567	0.001	0.004	0.702
PC HH exp on clothing items	0.465	496	0.335	2,567	-0.130	0.048	0.008
PC HH exp on financial services and funerals	0.411	496	0.255	2,567	-0.157	0.108	0.149
PC HH exp on bribes	0.000	496	0.001	2,567	0.001	0.000	
PC HH other exp	0.000	496	0.001	2,567	0.001	0.001	0.263

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

**Table B.1.7: Asset ownership (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Own hoe	0.842	496	0.933	2,567	0.091	0.021	0.000
Own axe	0.675	496	0.742	2,567	0.068	0.036	0.064
Own sprayer	0.033	496	0.062	2,567	0.028	0.010	0.005
Own panga machete/slasher	0.112	496	0.199	2,567	0.087	0.021	0.000
Own sickle	0.300	496	0.407	2,567	0.107	0.026	0.000
Own treadle pump	0.009	496	0.003	2,567	-0.007	0.009	0.433
Own watering can	0.132	496	0.158	2,567	0.026	0.020	0.201
Own chains	0.186	496	0.313	2,567	0.127	0.022	0.000
Own yokes	0.210	496	0.373	2,567	0.163	0.025	0.000
Own rope	0.163	496	0.264	2,567	0.101	0.023	0.000
Own ox cart	0.093	496	0.169	2,567	0.076	0.020	0.000
Own ox plough	0.231	496	0.398	2,567	0.168	0.029	0.000
Own tractor	0.001	496	0.001	2,567	-0.001	0.002	0.677
Own ridger, planter or cultivator	0.016	496	0.011	2,567	-0.005	0.009	0.573
Own generator or motorized pump	0.001	496	0.002	2,567	0.000	0.002	0.899
Own water tank or ox tank	0.003	496	0.002	2,567	-0.001	0.003	0.704
Own grain mill	0.002	496	0.008	2,567	0.006	0.002	0.009
Own chicken house	0.374	496	0.502	2,567	0.128	0.039	0.002
Own livestock corral (kraal)	0.296	496	0.468	2,567	0.172	0.042	0.000
Own sotrage house/granary	0.183	496	0.329	2,567	0.146	0.028	0.000
Own barn	0.012	496	0.012	2,567	-0.000	0.006	0.987
Own pig sty/rabbit sty	0.008	496	0.025	2,567	0.018	0.005	0.001

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

**Table B.1.8: Access to social safety nets (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Benefit from CARE	0.117	496	0.137	2,567	0.020	0.016	0.197
Benefit from World Vision	0.012	496	0.018	2,567	0.006	0.007	0.376
Benefit from World Food Program	0.046	496	0.045	2,567	-0.001	0.011	0.903
Benefit from MOTSRUD	0.021	496	0.018	2,567	-0.004	0.003	0.258
Benefit from Catholic Relief Services	0.022	496	0.018	2,567	-0.004	0.005	0.448
Benefit from ADAF/AMTO	0.023	496	0.036	2,567	0.013	0.008	0.111
Benefit from Save the Children	0.057	496	0.062	2,567	0.005	0.009	0.580
Benefit from BEAM	0.085	496	0.130	2,567	0.045	0.023	0.051
Benefit from Other NGO/Church	0.066	496	0.072	2,567	0.006	0.012	0.600
Benefit from Other source	0.172	496	0.184	2,567	0.011	0.022	0.610
Benefit from any SSN	0.528	496	0.563	2,567	0.035	0.024	0.142
Value of benefit from SSN	78.568	496	74.222	2,567	-4.347	22.989	0.850

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

**Table B.1.9: Household social exchanges (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
Received cash	0.324	496	0.279	2,567	-0.045	0.031	0.146
Value of cash received	33.935	496	29.343	2,567	-4.592	6.143	0.457
Gave out cash	0.034	496	0.038	2,567	0.003	0.011	0.755
Value of cash given out	10.159	496	1.689	2,566	-8.470	4.960	0.091
Net of in and out cash	23.776	496	27.667	2,566	3.891	7.973	0.627
Received food or other consumables	0.610	496	0.532	2,567	-0.079	0.025	0.002
Value of consumables received	62.286	496	53.195	2,564	-9.091	11.310	0.424
Gave out food or other consumables	0.080	496	0.122	2,567	0.042	0.015	0.005
Value of consumables given out	2.903	494	4.171	2,565	1.268	1.852	0.495
Net of in and out consumables	59.291	494	49.029	2,563	-10.262	11.275	0.365
Received labour time	0.300	496	0.227	2,567	-0.074	0.024	0.003
Gave out labour time	0.090	496	0.128	2,567	0.038	0.016	0.020
Received agricultural tools	0.258	496	0.269	2,567	0.012	0.026	0.657
Gave out agricultural tools	0.043	496	0.059	2,567	0.016	0.014	0.259

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

**Table B.1.10: Economic activities (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
Has non-farm enterprise (NFE)	0.112	496	0.120	2,567	0.008	0.026	0.753
NFE profit in last month	294.111	496	384.230	2,567	90.120	95.791	0.349
HH raises livestock	0.654	496	0.806	2,567	0.153	0.034	0.000
TLU owned	0.928	496	1.627	2,567	0.699	0.199	0.001
Raise calf	0.137	496	0.273	2,567	0.136	0.024	0.000
Raise ox	0.177	496	0.236	2,567	0.059	0.025	0.021
Raise bull	0.087	496	0.116	2,567	0.029	0.020	0.157
Raise cattle	0.285	496	0.407	2,567	0.122	0.041	0.004
Raise goats	0.326	496	0.485	2,567	0.159	0.031	0.000
Raise chicken, duck or geese	0.504	496	0.672	2,567	0.168	0.034	0.000
Raise donkeys or mule	0.047	496	0.097	2,567	0.050	0.016	0.002
Owns land	0.883	496	0.942	2,567	0.058	0.019	0.002
Total land area (HA)	5.869	496	19.563	2,567	13.694	4.795	0.005
Farmed last rainy season	0.786	496	0.910	2,567	0.124	0.026	0.000
Any wage labour	0.125	496	0.101	2,567	-0.024	0.019	0.222
Any <i>maricho</i> labour	0.402	496	0.485	2,567	0.083	0.035	0.020
HH labour constrained	0.732	496	0.714	2,567	-0.018	0.023	0.427

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

**Table B.1.11: Education (Attriters versus Panel Households)**

Variables	Attriters		Panel		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Enrolment rate	0.818	626	0.825	5,173	0.006	0.023	0.793
Enrolment in primary	0.923	359	0.921	2,998	-0.002	0.020	0.911
Enrolment in secondary	0.668	267	0.688	2,175	0.020	0.048	0.674
Attendance at 80%	0.795	391	0.858	3,263	0.063	0.043	0.143
Attendance at 80% - primary	0.816	249	0.858	2,075	0.042	0.049	0.400
Attendance at 80% - secondary	0.751	142	0.858	1,188	0.107	0.064	0.097
Grade progression	0.913	471	0.939	3,940	0.026	0.020	0.189
Grade progression primary	0.902	287	0.935	2,416	0.033	0.027	0.221
Grade progression secondary	0.931	184	0.945	1,524	0.014	0.032	0.667

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

## B.2 Differential attrition balance tables

**Table B.2.1: Individual-level characteristics (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Age (years)	25.467	4,269	25.576	8,629	0.108	1.140	0.924
Children	0.592	4,275	0.600	8,629	0.008	0.014	0.570
Adult	0.252	4,275	0.242	8,629	-0.010	0.014	0.485
Elderly	0.155	4,275	0.157	8,629	0.002	0.016	0.883
Female	0.537	4,275	0.556	8,629	0.019	0.009	0.052
Currently attending school	0.366	4,275	0.397	8,629	0.031	0.014	0.033
Sick or injured in last 30 days	0.243	4,275	0.248	8,629	0.006	0.021	0.788
Chronically ill	0.089	4,275	0.092	8,629	0.003	0.010	0.771
Overall health is good or better	0.784	4,275	0.763	8,629	-0.021	0.021	0.307
Disabled	0.059	4,275	0.061	8,629	0.001	0.006	0.860

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

**Table B.2.2: Household demographic characteristics (Controls vs Treatment for Panel Households)**

Variables	Control		Treatment		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Household size	5.442	842	5.291	1,725	-0.151	0.237	0.525
Members aged 0-5 yrs	0.857	842	0.815	1,725	-0.041	0.084	0.624
Members aged 6-17 yrs	2.365	842	2.358	1,725	-0.007	0.133	0.960
Number of adults	1.371	842	1.280	1,725	-0.091	0.110	0.411
Number of elderly	0.842	842	0.831	1,725	-0.011	0.061	0.860
HH with chronically ill	0.379	842	0.363	1,725	-0.016	0.033	0.626
HH with disabled	0.285	842	0.266	1,725	-0.019	0.021	0.371
HH with elderly	0.622	842	0.623	1,725	0.001	0.039	0.976

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

**Table B.2.3: Main respondent characteristics (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Female	0.645	842	0.680	1,725	0.035	0.025	0.159
Age (years)	56.191	842	55.631	1,725	-0.560	1.424	0.695
Widowed	0.344	842	0.347	1,725	0.003	0.025	0.913
Divorced/separated	0.070	842	0.089	1,725	0.019	0.015	0.200
Ever attended school	0.609	842	0.561	1,725	-0.048	0.027	0.077
Currently attending school	0.012	842	0.014	1,725	0.003	0.006	0.614
Highest grade obtained	3.487	842	3.260	1,725	-0.227	0.184	0.221

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

**Table B.2.4: Household total expenditure, poverty, food security and shocks (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
PC total expenditure	31.782	842	30.364	1,725	-1.418	1.659	0.395
PC food expenditure	20.388	842	19.574	1,725	-0.814	1.207	0.502
Poor	0.927	842	0.950	1,725	0.023	0.014	0.092
HH currently owes	0.088	842	0.094	1,725	0.006	0.015	0.684
Current debt	7.870	842	7.249	1,725	-0.621	3.109	0.842
Food poor	0.711	842	0.732	1,725	0.021	0.029	0.467
Mild food insecure	0.017	842	0.025	1,725	0.009	0.007	0.236
Moderately food insecure	0.351	842	0.348	1,725	-0.004	0.030	0.905
Severely food insecure	0.609	842	0.609	1,725	-0.000	0.032	0.992
HFIA scale	13.947	842	14.036	1,725	0.089	0.434	0.838
HH was affected by any shock	0.871	842	0.911	1,725	0.040	0.023	0.086
HH was affected by flood	0.029	842	0.042	1,725	0.013	0.017	0.447
HH was affected by drought	0.413	842	0.470	1,725	0.058	0.040	0.149

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

**Table B.2.5: Household well-being measures (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
One meal or less per day	0.148	842	0.120	1,725	-0.029	0.022	0.198
Grain last harvest lasted < 3 months	0.575	842	0.599	1,725	0.024	0.036	0.502
Ate fish/meat last month	0.472	842	0.434	1,725	-0.038	0.030	0.208
Satisfaction with Life score	9.888	842	9.534	1,725	-0.354	0.202	0.083
Expect food shortage	0.585	842	0.604	1,725	0.019	0.049	0.701
Will likely need financial assistance	0.603	842	0.567	1,725	-0.036	0.043	0.403
Expect to fall ill	0.293	842	0.328	1,725	0.035	0.035	0.316

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

**Table B.2.6: PC household expenditure measures (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
Total household consumption expenditure	31.782	842	30.364	1,725	-1.418	1.659	0.395
Total household NON consumption expenditure	0.144	842	0.302	1,725	0.158	0.146	0.282
Total household expenditure on food items	20.388	842	19.574	1,725	-0.814	1.207	0.502
Total household expenditure on non food items	11.394	842	10.790	1,725	-0.604	0.705	0.394
PC HH exp on cereal items	6.772	842	7.168	1,725	0.396	0.420	0.348
PC HH exp on roots and tuber items	0.261	842	0.191	1,725	-0.071	0.092	0.443
PC HH exp on pulses and legumes items	1.547	842	1.601	1,725	0.054	0.296	0.857
PC HH exp on vegetable items	4.593	842	4.432	1,725	-0.161	0.295	0.586
PC HH exp on fruit items	0.698	842	0.523	1,725	-0.175	0.106	0.102
PC HH exp on fish items	0.362	842	0.292	1,725	-0.070	0.114	0.540
PC HH exp on meat, poultry items	1.946	842	1.360	1,725	-0.586	0.414	0.160
PC HH exp on dairy and egg items	1.065	842	0.741	1,725	-0.324	0.165	0.053
PC HH exp on fat items	1.281	842	1.104	1,725	-0.177	0.141	0.214
PC HH exp on sugar and sweet items	0.618	842	0.610	1,725	-0.008	0.091	0.926
PC HH exp on non alcoholic beverage items	0.425	842	0.507	1,725	0.082	0.164	0.617
PC HH exp on alcohol & tobacco items	0.315	842	0.551	1,725	0.236	0.107	0.029
PC HH exp on non-frequent other food and beverage items	0.505	842	0.494	1,725	-0.010	0.039	0.798
PC HH exp on non-frequent household items	7.597	842	7.399	1,725	-0.198	0.529	0.710
PC HH exp on hygiene items	1.061	842	0.919	1,725	-0.142	0.093	0.133
PC HH exp on transportation items	0.650	842	0.439	1,725	-0.211	0.143	0.143
PC HH exp on communication items	0.149	842	0.157	1,725	0.008	0.033	0.815
PC HH exp on other (non food) items	0.032	842	0.076	1,725	0.044	0.031	0.157
PC HH exp on education items	1.039	842	1.192	1,725	0.153	0.113	0.181
PC HH exp on health items	0.512	842	0.270	1,725	-0.242	0.088	0.007
PC HH exp on water items	0.010	842	0.005	1,725	-0.005	0.005	0.374
PC HH exp on clothing items	0.344	842	0.332	1,725	-0.013	0.063	0.843
PC HH exp on financial services and funerals	0.142	842	0.301	1,725	0.159	0.146	0.279
PC HH exp on bribes	0.000	842	0.001	1,725	0.001	0.000	0.359
PC HH other exp	0.002	842	0.000	1,725	-0.002	0.002	0.358

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

**Table B.2.7: Asset ownership (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Own hoe	0.923	842	0.937	1,725	0.014	0.023	0.562
Own axe	0.723	842	0.750	1,725	0.027	0.041	0.513
Own sprayer	0.062	842	0.062	1,725	-0.001	0.017	0.972
Own panga machete/slasher	0.261	842	0.174	1,725	-0.088	0.043	0.044
Own sickle	0.410	842	0.405	1,725	-0.005	0.037	0.889
Own treadle pump	0.007	842	0.001	1,725	-0.006	0.004	0.165
Own watering can	0.146	842	0.162	1,725	0.016	0.032	0.613
Own chains	0.347	842	0.299	1,725	-0.048	0.036	0.189
Own yokes	0.430	842	0.350	1,725	-0.080	0.041	0.057
Own rope	0.291	842	0.252	1,725	-0.039	0.033	0.244
Own ox cart	0.185	842	0.163	1,725	-0.023	0.024	0.344
Own ox plough	0.463	842	0.372	1,725	-0.092	0.036	0.014
Own tractor	0.000	842	0.001	1,725	0.001	0.000	0.126
Own ridger, planter or cultivator	0.006	842	0.013	1,725	0.007	0.005	0.135
Own generator or motrized pump	0.003	842	0.001	1,725	-0.002	0.002	0.238
Own water tank or ox tank	0.004	842	0.001	1,725	-0.003	0.003	0.244
Own grain mill	0.011	842	0.007	1,725	-0.004	0.005	0.405
Own chicken house	0.479	842	0.511	1,725	0.032	0.047	0.505
Own livestock corral (kraal)	0.491	842	0.459	1,725	-0.032	0.028	0.254
Own sotrage house/granary	0.309	842	0.337	1,725	0.028	0.040	0.487
Own barn	0.017	842	0.010	1,725	-0.007	0.006	0.262
Own pig sty/rabbit sty	0.016	842	0.029	1,725	0.014	0.009	0.109

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

**Table B.2.8: Access to social safety nets (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean Diff	Diff SE	p-value
	Mean	N1	Mean	N2			
Benefit from CARE	0.032	842	0.180	1,725	0.147	0.027	0.000
Benefit from World Vision	0.012	842	0.021	1,725	0.009	0.009	0.354
Benefit from World Food Program	0.074	842	0.033	1,725	-0.041	0.019	0.035
Benefit from MOTSRUD	0.059	842	0.001	1,725	-0.058	0.021	0.008
Benefit from Catholic Relief Services	0.017	842	0.019	1,725	0.002	0.008	0.794
Benefit from ADAF/AMTO	0.043	842	0.034	1,725	-0.009	0.012	0.457
Benefit from Save the Children	0.009	842	0.083	1,725	0.074	0.022	0.001
Benefit from BEAM	0.119	842	0.135	1,725	0.016	0.025	0.542
Benefit from Other NGO/Church	0.157	842	0.038	1,725	-0.119	0.039	0.003
Benefit from Other source	0.257	842	0.153	1,725	-0.104	0.047	0.030
Benefit from any SSN	0.611	842	0.543	1,725	-0.068	0.070	0.333
Value of benefit from SSN	98.326	842	64.340	1,725	-33.986	22.922	0.142

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

**Table B.2.9: Household social exchanges (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
Received cash	0.315	842	0.264	1,725	-0.050	0.036	0.167
Value of cash received	41.581	842	24.326	1,725	-17.255	11.549	0.139
Gave out cash	0.029	842	0.041	1,725	0.013	0.008	0.125
Value of cash given out	0.528	842	2.165	1,724	1.637	0.769	0.036
Net of in and out cash	41.053	842	22.176	1,724	-18.877	11.469	0.103
Received food or other consumables	0.602	842	0.503	1,725	-0.100	0.043	0.023
Value of consumables received	77.314	842	43.291	1,722	-34.023	14.387	0.020
Gave out food or other consumables	0.113	842	0.126	1,725	0.013	0.023	0.575
Value of consumables given out	2.048	841	5.042	1,724	2.994	2.265	0.190
Net of in and out consumables	75.306	841	38.245	1,722	-37.061	14.560	0.013
Received labour time	0.234	842	0.224	1,725	-0.011	0.022	0.622
Gave out labour time	0.130	842	0.127	1,725	-0.003	0.018	0.854
Received agricultural tools	0.269	842	0.270	1,725	0.001	0.047	0.980
Gave out agricultural tools	0.054	842	0.060	1,725	0.006	0.012	0.631

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

**Table B.2.10: Economic activities (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
Has non-farm enterprise (NFE)	0.136	842	0.113	1,725	-0.023	0.019	0.235
NFE profit in last month	493.516	842	339.429	1,725	-154.087	110.422	0.166
HH raises livestock	0.817	842	0.802	1,725	-0.016	0.024	0.516
TLU owned	1.573	842	1.649	1,725	0.076	0.255	0.767
Raise calf	0.292	842	0.265	1,725	-0.027	0.026	0.302
Raise ox	0.267	842	0.223	1,725	-0.043	0.022	0.050
Raise bull	0.129	842	0.111	1,725	-0.018	0.019	0.339
Raise cattle	0.428	842	0.398	1,725	-0.030	0.032	0.359
Raise goats	0.510	842	0.475	1,725	-0.035	0.028	0.216
Raise chicken, duck or geese	0.683	842	0.668	1,725	-0.015	0.026	0.559
Raise donkeys or mule	0.082	842	0.103	1,725	0.021	0.032	0.518
Owns land	0.920	842	0.951	1,725	0.031	0.023	0.175
Total land area (HA)	21.097	842	18.934	1,725	-2.162	9.245	0.816
Farmed last rainy season	0.883	842	0.920	1,725	0.037	0.023	0.114
Any wage labour	0.103	842	0.100	1,725	-0.004	0.016	0.826
Any <i>maricho</i> labour	0.503	842	0.478	1,725	-0.024	0.039	0.538
HH labour constrained	0.695	842	0.721	1,725	0.026	0.036	0.473

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

**Table B.2.11: Education (Controls versus Treatment for Panel Households)**

Variables	Control		Treatment		Mean	Diff	p-value
	Mean	N1	Mean	N2	Diff	SE	
Enrolment rate	0.790	1,675	0.839	3,498	0.049	0.019	0.012
Enrolment in primary	0.883	981	0.937	2,017	0.054	0.021	0.010
Enrolment in secondary	0.649	694	0.703	1,481	0.055	0.033	0.104
Attendance at 80%	0.786	1,132	0.890	2,131	0.103	0.040	0.012
Attendance at 80% - primary	0.783	746	0.894	1,329	0.111	0.040	0.007
Attendance at 80% - secondary	0.794	386	0.883	802	0.089	0.048	0.066
Grade progression	0.927	1,264	0.943	2,676	0.016	0.013	0.224
Grade progression primary	0.923	787	0.940	1,629	0.017	0.014	0.250
Grade progression secondary	0.935	477	0.949	1,047	0.014	0.017	0.399

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

## Appendix C. Disaggregated impacts on consumption

### C.1 Consumption levels

**Table C.1.1: Impacts on Monthly Consumption Expenditures per person in Small Households**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Total	4.180 (1.34)	41.083	45.975	43.157	43.951
Food	2.706 (1.09)	27.160	29.113	25.656	24.929
Household items	1.116 (1.13)	10.614	12.019	12.907	13.251
Education	-0.085 (-0.49)	0.855	0.876	0.640	0.744
Health and hygiene	0.303 (0.58)	1.526	2.459	2.388	3.024
Transportation and communication	0.250 (0.47)	0.473	0.991	1.001	1.267
Clothing	-0.101 (-0.77)	0.380	0.484	0.438	0.641
Water	0.008 (0.22)	0.007	0.008	0.060	0.052
Other (non-food) items	-0.017 (-0.28)	0.068	0.026	0.068	0.042
N	2,162	745	338	744	335

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

**Table C.1.2: Impacts on Monthly Consumption Expenditures per person in Large Households**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Total	-1.964 (-1.28)	21.412	21.629	27.983	30.190
Food	-2.312** (-2.05)	13.485	13.763	15.799	18.405
Household items	0.458 (0.88)	4.815	4.767	7.685	7.185
Education	0.044 (0.26)	1.342	1.066	1.323	1.000
Health and hygiene	-0.024 (-0.13)	0.846	1.067	1.551	1.798
Transportation and communication	-0.033 (-0.17)	0.595	0.674	0.970	1.084
Clothing	0.075 (1.01)	0.248	0.250	0.410	0.338
Water	0.024 (0.70)	0.003	0.010	0.060	0.043
Other (non-food) items	-0.197* (-1.72)	0.078	0.033	0.184	0.337
N	2,933	973	499	966	495

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

**Table C.1.3: Impacts on Monthly Consumption Expenditures per person in Households with Higher Baseline PC Expenditure (Top Half)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Total	0.140 (0.05)	44.961	47.281	41.066	43.275
Food	-0.173 (-0.08)	29.891	30.341	23.753	24.374
Household items	0.757 (0.76)	10.304	11.310	12.137	12.413
Education	-0.340 (-1.64)	1.438	1.143	0.967	1.017
Health and hygiene	-0.032 (-0.07)	1.773	2.581	2.290	3.130
Transportation and communication	0.165 (0.34)	0.925	1.321	1.224	1.455
Clothing	-0.167 (-1.41)	0.470	0.517	0.441	0.656
Water	0.021 (0.61)	0.006	0.009	0.070	0.052
Other (non-food) items	-0.091 (-0.79)	0.154	0.059	0.183	0.179
N	2,393	797	402	796	398

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

**Table C.1.4: Impacts on Monthly Consumption Expenditures per person in Households with Lower Baseline PC Expenditure (Bottom Half)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Total	0.397 (0.32)	15.960	16.650	28.395	28.737
Food	-0.774 (-0.88)	9.663	10.234	16.566	17.940
Household items	0.638 (1.32)	4.530	4.341	7.873	7.063
Education	0.289** (2.24)	0.859	0.837	1.090	0.778
Health and hygiene	0.234 (1.46)	0.554	0.738	1.557	1.509
Transportation and communication	-0.000 (-0.00)	0.196	0.308	0.762	0.876
Clothing	0.156** (2.20)	0.154	0.182	0.404	0.277
Water	0.014 (0.47)	0.004	0.009	0.052	0.043
Other (non-food) items	-0.159 (-1.42)	0.001	0.002	0.090	0.251
N	2,702	921	435	914	432

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

## C.2 Disaggregated food consumption levels

**Table C.2.1: Impacts on Monthly Food Consumption Expenditures per person by household size**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Small households</b>					
Cereals	-0.268 (-0.27)	10.166	9.588	8.357	8.070
Roots and tuber	0.232 (1.18)	0.216	0.467	0.648	0.667
Pulses and legumes	0.470 (1.18)	1.827	2.011	1.859	1.576
Fruits and vegetables	0.678 (1.01)	6.855	7.331	5.090	4.899
Meat and fish	2.228* (1.78)	1.995	3.956	3.180	2.898
Dairy and egg	0.140 (0.49)	0.936	1.102	0.830	0.853
Fats	0.540** (2.55)	1.636	1.848	2.146	1.827
Sugar and sweet items	0.117 (0.84)	0.888	0.964	1.247	1.214

**Table C.2.1: Impacts on Monthly Food Consumption Expenditures per person by household size (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Non-alcoholic beverages	-1.000 (-1.14)	0.936	0.707	1.009	1.772
Alcohol & tobacco	-0.611*** (-2.85)	0.947	0.379	0.556	0.595
Other food and beverage items	0.181* (1.76)	0.757	0.759	0.734	0.556
N	2,162	745	338	744	335
<b>Large households</b>					
Cereals	-0.603* (-1.79)	4.968	4.778	4.990	5.406
Roots and tuber	-0.698* (-1.73)	0.169	0.127	0.385	1.042
Pulses and legumes	-0.215 (-1.16)	1.087	1.127	1.309	1.568
Fruits and vegetables	-0.600 (-1.31)	3.499	3.632	3.062	3.798
Meat and fish	0.193 (0.73)	1.318	1.094	2.374	1.957
Dairy and egg	0.140 (0.66)	0.525	0.900	0.581	0.817
Fats	-0.211 (-1.42)	0.723	0.864	1.114	1.468
Sugar and sweet items	-0.054 (-0.82)	0.425	0.402	0.682	0.713
Non-alcoholic beverages	-0.095 (-0.39)	0.243	0.261	0.620	0.732
Alcohol & tobacco	-0.020 (-0.32)	0.215	0.259	0.292	0.355
Other food and beverage items	-0.150 (-0.87)	0.313	0.320	0.391	0.547
N	2,933	973	499	966	495

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

**Table C.2.2: Impacts on Monthly Food Consumption Expenditures per person by baseline PC expenditures**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Households with Higher Baseline PC Expenditure (Top Half)</b>					
Cereals	-0.963 (-1.30)	10.453	9.551	7.477	7.543
Roots and tuber	0.094 (0.48)	0.329	0.491	0.653	0.724
Pulses and legumes	0.169 (0.46)	2.215	2.300	1.808	1.729

**Table C.2.2: Impacts on Monthly Food Consumption Expenditures per person by baseline PC expenditures (continued)**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Fruits and vegetables	-0.166 (-0.27)	7.530	7.414	4.616	4.668
Meat and fish	1.595 (1.27)	2.718	4.061	3.117	2.856
Dairy and egg	0.315 (1.02)	1.207	1.613	0.872	0.959
Fats	0.188 (1.06)	1.774	1.932	1.936	1.912
Sugar and sweet items	-0.051 (-0.38)	1.032	1.035	1.150	1.209
Non-alcoholic beverages	-0.993 (-1.28)	0.981	0.771	0.957	1.733
Alcohol & tobacco	-0.429** (-2.27)	0.904	0.464	0.535	0.518
Other food and beverage items	0.070 (0.67)	0.747	0.710	0.632	0.525
N	2,393	797	402	796	398
<b>Lower Baseline PC Expenditure (Bottom Half)</b>					
Cereals	-0.155 (-0.38)	4.199	4.079	5.462	5.506
Roots and tuber	-0.701 (-1.60)	0.061	0.051	0.354	1.045
Pulses and legumes	-0.063 (-0.33)	0.661	0.713	1.302	1.421
Fruits and vegetables	-0.119 (-0.26)	2.556	2.987	3.296	3.852
Meat and fish	0.461* (1.67)	0.594	0.555	2.352	1.854
Dairy and egg	-0.052 (-0.31)	0.239	0.378	0.518	0.709
Fats	0.001 (0.01)	0.508	0.633	1.204	1.332
Sugar and sweet items	0.074 (0.92)	0.249	0.248	0.715	0.641
Non-alcoholic beverages	0.016 (0.13)	0.134	0.132	0.630	0.612
Alcohol & tobacco	-0.131 (-1.65)	0.182	0.159	0.285	0.392
Other food and beverage items	-0.105 (-0.54)	0.278	0.299	0.450	0.576
N	2,702	921	435	914	432

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

### C.3 Disaggregated consumption shares

**Table C.3.1: Impacts on Monthly Consumption Shares in Small Households**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Food	0.005 (0.28)	0.633	0.624	0.583	0.568
Household items	-0.003 (-0.18)	0.285	0.279	0.307	0.305
Education	-0.003 (-0.77)	0.026	0.023	0.021	0.021
Health and hygiene	0.002 (0.25)	0.036	0.046	0.056	0.064
Transportation and communication	0.002 (0.39)	0.009	0.016	0.019	0.025
Clothing	-0.002 (-0.70)	0.009	0.011	0.011	0.015
Water	0.000 (0.10)	0.000	0.000	0.001	0.001
Other (non-food) items	-0.000 (-0.29)	0.002	0.000	0.002	0.001
N	2,162	745	338	744	335

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

**Table C.3.2: Impacts on Monthly Consumption Shares in Large Households**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Food	-0.028 (-1.64)	0.618	0.626	0.564	0.600
Household items	0.018 (1.28)	0.253	0.242	0.283	0.254
Education	0.008 (1.57)	0.059	0.050	0.049	0.032
Health and hygiene	0.004 (1.02)	0.038	0.046	0.057	0.061
Transportation and communication	-0.003 (-0.48)	0.020	0.024	0.027	0.034
Clothing	0.004* (1.77)	0.011	0.011	0.014	0.010
Water	0.000 (0.43)	0.000	0.000	0.002	0.001
Other (non-food) items	-0.005** (-2.09)	0.002	0.001	0.004	0.008
N	2,933	973	499	966	495

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

**Table C.3.3: Impacts on Monthly Consumption Shares in Households with Higher Baseline PC Expenditure (Top Half)**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Food	-0.004 (-0.22)	0.651	0.643	0.571	0.565
Household items	0.016 (1.11)	0.237	0.243	0.299	0.290
Education	-0.006 (-1.15)	0.037	0.028	0.031	0.027
Health and hygiene	-0.002 (-0.34)	0.040	0.049	0.057	0.068
Transportation and communication	0.001 (0.14)	0.020	0.025	0.025	0.029
Clothing	-0.003 (-1.02)	0.011	0.011	0.011	0.014
Water	0.000 (0.52)	0.000	0.000	0.002	0.001
Other (non-food) items	-0.002 (-1.05)	0.003	0.001	0.004	0.004
N	2,393	797	402	796	398

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

## C.4 Disaggregated food consumption shares

**Table C.4.1: Impacts on Monthly Food Consumption Shares in Small Households**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Cereals	-0.033 (-1.65)	0.414	0.374	0.358	0.350
Roots and tuber	-0.003 (-0.36)	0.006	0.012	0.020	0.029
Pulses and legumes	0.012 (1.34)	0.058	0.069	0.067	0.066
Fruits and vegetables	-0.006 (-0.38)	0.270	0.271	0.206	0.214
Meat and fish	0.028** (2.41)	0.060	0.086	0.100	0.098
Dairy and egg	-0.000 (-0.02)	0.028	0.031	0.029	0.032
Fats	0.011 (1.36)	0.055	0.061	0.083	0.078
Sugar and sweet items	0.007* (1.74)	0.028	0.032	0.051	0.047
Non-alcoholic beverages	-0.001 (-0.19)	0.020	0.021	0.033	0.036
Alcohol & tobacco	-0.018*** (-2.65)	0.028	0.012	0.021	0.023

**Table C.4.1: Impacts on Monthly Food Consumption Shares in Small Households (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Other food and beverage items	0.003 (0.90)	0.033	0.031	0.033	0.028
N	2,162	745	338	744	335

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

**Table C.4.2: Impacts on Monthly Food Consumption Shares in Large Households**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Cereals	-0.026 (-1.21)	0.409	0.381	0.349	0.346
Roots and tuber	-0.019* (-1.79)	0.009	0.008	0.021	0.039
Pulses and legumes	-0.002 (-0.22)	0.074	0.074	0.079	0.081
Fruits and vegetables	0.005 (0.38)	0.263	0.274	0.203	0.210
Meat and fish	0.010 (1.14)	0.076	0.065	0.114	0.093
Dairy and egg	0.016* (1.81)	0.031	0.049	0.036	0.038
Fats	0.003 (0.56)	0.051	0.062	0.075	0.083
Sugar and sweet items	0.003 (0.93)	0.030	0.027	0.045	0.040
Non-alcoholic beverages	0.005 (1.07)	0.015	0.016	0.034	0.029
Alcohol & tobacco	0.002 (0.54)	0.016	0.017	0.017	0.017
Other food and beverage items	0.003 (1.44)	0.027	0.027	0.027	0.024
N	2,933	973	499	966	495

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

**Table C.4.3: Impacts on Monthly Food Consumption Shares in Households with Higher Baseline PC Expenditure (Top Half)**

Dependent Variable	Programme Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Cereals	-0.025 (-1.29)	0.365	0.337	0.342	0.339
Roots and tuber	-0.002 (-0.29)	0.010	0.014	0.023	0.030
Pulses and legumes	0.007 (0.69)	0.072	0.078	0.073	0.072

**Table C.4.3: Impacts on Monthly Food Consumption Shares in Households with Higher Baseline PC Expenditure (Top Half) (continued)**

Dependent Variable	Programme Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Fruits and vegetables	-0.015 (-0.88)	0.263	0.257	0.200	0.209
Meat and fish	0.022 (1.41)	0.086	0.098	0.109	0.099
Dairy and egg	0.014 (1.60)	0.039	0.051	0.037	0.034
Fats	0.005 (0.74)	0.057	0.064	0.082	0.085
Sugar and sweet items	0.001 (0.22)	0.034	0.034	0.051	0.049
Non-alcoholic beverages	-0.000 (-0.03)	0.022	0.024	0.034	0.036
Alcohol & tobacco	-0.009 (-1.55)	0.024	0.016	0.021	0.021
Other food and beverage items	0.002 (0.71)	0.027	0.025	0.029	0.025
N	2,393	797	402	796	398

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

## C.5 Consumption by source, disaggregated by baseline household expenditure

**Table C.5.1: Impacts on Monthly Consumption Expenditures per person in Households with Lower Baseline PC Expenditure (Bottom Half)-Gifts**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Total	-3.036** (-2.00)	6.334	6.598	2.790	6.090
Food	-0.980 (-1.46)	1.995	2.461	2.272	3.718
Household items	-1.710 (-1.25)	3.817	3.631	0.144	1.668
Education	-0.032 (-0.79)	0.233	0.158	0.096	0.053
Health and hygiene	-0.180** (-2.00)	0.179	0.204	0.114	0.319
Transportation and communication	-0.053 (-1.29)	0.030	0.044	0.058	0.126
Clothing	-0.025 (-0.65)	0.078	0.092	0.088	0.126
Water	0.013 (1.48)	0.003	0.008	0.010	0.002
Other (non-food) items	-0.069 (-0.93)	0.000	0.000	0.008	0.078
N	2,718	922	437	922	437

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

## C.6. Note on prices

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.

Available CPI data at the national level shows that prices have generally declined over time. The CPI for June 2013 (baseline) was 100.81 and this has declined to 96.51 as of July 2017 (endline). The respective deflators at the provincial level have already being used to adjust baseline expenditure values to make it comparable to end line values in the estimations of consumption expenditures.

Second, we checked to see if there had been any excess inflation/deflation in treatment wards compared to comparison wards. Table C.6.1 reports difference-in-difference estimates of the prices of key consumption items from baseline to endline. 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. The mean prices of the items are consistent with the overall declines in prices as indicated by the CPI values. Further, we find a negative impact on the prices of maize grain, and a positive impact on the price of cooking oil. There are however no impacts on the rest of the items.

**Table C.6.1: HSCT impacts on prices**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Maize grain	-1.163** (-2.32)	7.691	6.936	4.485	4.892
Rice	0.062 (0.96)	1.267	1.328	1.034	1.033
Bean	0.000 (0.08)	0.003	0.004	0.002	0.003
Beef	-0.050 (-0.20)	4.127	3.942	3.886	3.751
Salt	-0.094 (-1.17)	0.830	0.848	0.598	0.711
Sugar	0.142 (1.43)	1.319	1.343	1.131	1.012
Cooking oil	1.628** (2.51)	2.368	3.835	1.952	1.790
Soap	-0.167 (-1.45)	2.050	2.002	1.343	1.463
<i>N</i>	171	56	26	60	29

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

## Appendix D. Disaggregated impacts on adult and child health

### D.1 Disaggregated impacts on adult chronic illness and disability

**Table D.1.1: Impacts on adult chronic illness and disability by gender**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Females</b>					
Chronically ill	0.063** (2.03)	0.114	0.100	0.284	0.203
<i>N</i>	8,846	4,777	2,298	1,206	565
Chronically ill people receiving Home Based Care	-0.011 (-0.30)	0.026	0.007	0.073	0.065
<i>N</i>	1,212	518	240	333	121
Chronically ill people receiving some kind of care	0.013 (0.22)	0.769	0.796	0.841	0.874
<i>N</i>	1,212	518	240	333	121
People with disability	0.045 (1.59)	0.057	0.056	0.269	0.219
<i>N</i>	8,870	4,780	2,298	1,221	571
Disabled population receiving care	-0.046 (-0.64)	0.381	0.323	0.298	0.298
<i>N</i>	844	257	129	315	143
<b>Males</b>					
Chronically ill	0.004 (0.09)	0.075	0.085	0.206	0.214
<i>N</i>	6,536	3,808	1,963	497	268
Chronically ill people receiving Home Based Care	0.007 (0.15)	0.038	0.033	0.060	0.042
<i>N</i>	638	278	180	114	66
Chronically ill people receiving some kind of care	-0.013 (-0.12)	0.714	0.798	0.785	0.913
<i>N</i>	638	278	180	114	66
People with disability	0.101*** (2.85)	0.067	0.065	0.356	0.256
<i>N</i>	6,548	3,813	1,965	500	270
Disabled population receiving care	0.093 (1.00)	0.382	0.427	0.303	0.286
<i>N</i>	613	241	122	177	73

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

**Table D.1.2: Impacts on adult chronic illness and disability by baseline per capita expenditure**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Poorest 50% of sample</b>					
Chronically ill	0.038 (1.49)	0.082	0.076	0.231	0.185
<i>N</i>	9,653	5,597	2,715	907	434
Chronically ill people receiving Home Based Care	0.001 (0.02)	0.021	0.007	0.086	0.069
<i>N</i>	956	431	214	220	91

**Table D.1.2: Impacts on adult chronic illness and disability by baseline per capita expenditure (cont'd)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Poorest 50% of sample</b>					
Chronically ill people receiving some kind of care	-0.022 (-0.28)	0.752	0.740	0.830	0.843
<i>N</i>	956	431	214	220	91
People with disability	0.052* (1.89)	0.057	0.056	0.260	0.205
<i>N</i>	9,672	5,600	2,717	918	437
Disabled population receiving care	-0.013 (-0.14)	0.366	0.323	0.303	0.286
<i>N</i>	783	300	147	232	104
<b>Less poor 50% of sample</b>					
Chronically ill	0.062 (1.33)	0.121	0.124	0.294	0.229
<i>N</i>	5,729	2,988	1,546	796	399
Chronically ill people receiving Home Based Care	-0.003 (-0.10)	0.041	0.031	0.056	0.048
<i>N</i>	894	365	206	227	96
Chronically ill people receiving some kind of care	0.023 (0.38)	0.748	0.861	0.827	0.924
<i>N</i>	894	365	206	227	96
People with disability	0.068* (1.88)	0.069	0.069	0.332	0.258
<i>N</i>	5,746	2,993	1,546	803	404
Disabled population receiving care	0.060 (0.67)	0.405	0.450	0.298	0.299
<i>N</i>	674	198	104	260	112

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

## D.2 Disaggregated impacts on adult morbidity and health care

**Table D.2.1: Impacts on adult recent morbidity and health care seeking by gender**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Females</b>					
Morbidity (if sick/injured in last 30 days)	0.038 (1.63)	0.285	0.277	0.416	0.365
<i>N</i>	14,162	4,773	2,296	4,782	2,311
Sick/injured people who sought curative care	-0.105*** (-2.67)	0.732	0.680	0.697	0.749
<i>N</i>	4,764	1,339	615	1,944	866
Sick/injured people who spent \$ for treatment	-0.256*** (-6.10)	0.334	0.212	0.262	0.395
<i>N</i>	4,791	1,339	615	1,971	866

**Table D.2.1: Impacts on adult recent morbidity and health care seeking by gender (continued)**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Males</b>					
Morbidity (if sick/injured in last 30 days)	0.007 (0.29)	0.221	0.216	0.317	0.309
<i>N</i>	11,698	3,805	1,964	3,968	1,961
Sick/injured people who sought curative care	0.068 (1.27)	0.722	0.736	0.709	0.644
<i>N</i>	3,107	836	433	1,240	598
Sick/injured people who spent \$ for treatment	-0.027 (-0.64)	0.294	0.288	0.291	0.306
<i>N</i>	3,132	836	433	1,263	600

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

**Table D.2.2: Impacts on adult recent morbidity and health care seeking by household size**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Small households</b>					
Morbidity (if sick/injured in last 30 days)	-0.017 (-0.52)	0.405	0.372	0.440	0.422
<i>N</i>	6,241	1,904	859	2,420	1,058
Sick/injured people who sought curative care	-0.030 (-0.42)	0.732	0.729	0.697	0.718
<i>N</i>	2,577	761	329	1,041	446
Sick/injured people who spent \$ for treatment	-0.112 (-1.56)	0.238	0.219	0.260	0.349
<i>N</i>	2,595	761	329	1,058	447
<b>Large households</b>					
Morbidity (if sick/injured in last 30 days)	0.036 (1.66)	0.216	0.217	0.347	0.311
<i>N</i>	19,619	6,674	3,401	6,330	3,214
Sick/injured people who sought curative care	-0.036 (-0.85)	0.726	0.691	0.703	0.700
<i>N</i>	5,294	1,414	719	2,143	1,018
Sick/injured people who spent \$ for treatment	-0.192*** (-5.59)	0.360	0.253	0.279	0.362
<i>N</i>	5,328	1,414	719	2,176	1,019

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

**Table D.2.3: Impacts on adult recent morbidity and health care seeking by baseline per capita expenditure**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Poorest 50% of sample</b>					
Morbidity (if sick/injured in last 30 days)	0.041** (2.13)	0.221	0.219	0.362	0.319
<i>N</i>	16,287	5,594	2,715	5,382	2,596
Sick/injured people who sought curative care	-0.007 (-0.15)	0.714	0.680	0.704	0.672
<i>N</i>	4,564	1,230	595	1,891	848
Sick/injured people who spent \$ for treatment	-0.192*** (-4.24)	0.311	0.208	0.262	0.349
<i>N</i>	4,598	1,230	595	1,923	850
<b>Less poor 50% of sample</b>					
Morbidity (if sick/injured in last 30 days)	-0.002 (-0.05)	0.319	0.304	0.385	0.372
<i>N</i>	9,573	2,984	1,545	3,368	1,676
Sick/injured people who sought curative care	-0.075 (-1.31)	0.745	0.732	0.698	0.750
<i>N</i>	3,307	945	453	1,293	616
Sick/injured people who spent \$ for treatment	-0.132* (-1.76)	0.328	0.288	0.289	0.370
<i>N</i>	3,325	945	453	1,311	616

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

### D.3 Disaggregated impacts on children's health and health care use

**Table D.3.1: Impacts on children's health by gender**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Girls</b>					
Children who had diarrhoea/fever/cough in last two weeks	-0.024 (-0.35)	0.504	0.566	0.630	0.735
<i>N</i>	1,385	546	255	374	210
Children who sought care for diarrhoea/fever/cough	-0.009 (-0.11)	0.629	0.616	0.527	0.506
<i>N</i>	777	271	135	228	143
Children who have health card	0.003 (0.06)	0.863	0.888	0.888	0.900
<i>N</i>	1,368	540	249	369	210
<b>Boys</b>					
Children who had diarrhoea/fever/cough in last two weeks	-0.111 (-1.47)	0.487	0.492	0.636	0.780
<i>N</i>	1,338	505	259	381	193
Children who sought care for diarrhoea/fever/cough	-0.034 (-0.38)	0.543	0.491	0.553	0.528
<i>N</i>	730	235	131	228	136
Children who have health card	0.053 (1.31)	0.810	0.876	0.888	0.896
<i>N</i>	1,326	499	255	380	192

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

**Table D.3.2: Impacts on children's health by household size**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Small households</b>					
Children who had diarrhoea/fever/cough in last two weeks	-0.012 (-0.09)	0.535	0.501	0.659	0.672
<i>N</i>	386	105	44	161	76
Children who sought care for diarrhoea/fever/cough	-0.084 (-0.55)	0.618	0.554	0.544	0.496
<i>N</i>	230	59	20	102	49
Children who have health card	0.079 (1.14)	0.886	0.948	0.933	0.922
<i>N</i>	381	102	42	161	76
<b>Large households</b>					
Children who had diarrhoea/fever/cough in last two weeks	-0.103 (-1.56)	0.490	0.533	0.626	0.780
<i>N</i>	2,337	946	470	594	327
Children who sought care for diarrhoea/fever/cough	-0.030 (-0.52)	0.584	0.559	0.539	0.522
<i>N</i>	1,277	447	246	354	230
Children who have health card	0.023 (0.52)	0.831	0.875	0.876	0.891
<i>N</i>	2,313	937	462	588	326

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

## D.4 Disaggregated impacts on children's material well-being

**Table D.4.1: Impacts on material wellbeing of children by gender**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
<b>Girls</b>					
All needs met	0.266*** (4.04)	0.369	0.397	0.749	0.517
<i>N</i>	6,071	2,059	951	2,100	961
Child has blanket	0.029 (0.98)	0.768	0.813	0.931	0.950
<i>N</i>	6,078	2,061	954	2,102	961
Child has shoes	0.264*** (4.11)	0.422	0.438	0.771	0.529
<i>N</i>	6,072	2,059	951	2,101	961
Child has two sets of clothing	0.034 (1.15)	0.788	0.826	0.925	0.934
<i>N</i>	6,074	2,059	953	2,101	961
<b>Boys</b>					
All needs met	0.255*** (5.72)	0.361	0.363	0.754	0.498
<i>N</i>	6,274	2,050	1,041	2,170	1,013
Child has blanket	-0.003 (-0.10)	0.768	0.786	0.940	0.958
<i>N</i>	6,277	2,052	1,041	2,171	1,013

**Table D.4.1: Impacts on material wellbeing of children by gender (continued)**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Boys</b>					
Child has shoes	0.238*** (5.36)	0.403	0.395	0.766	0.518
<i>N</i>	6,275	2,051	1,041	2,170	1,013
Child has two sets of clothing	0.020 (0.65)	0.765	0.785	0.911	0.908
<i>N</i>	6,277	2,051	1,041	2,171	1,014

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

**Table D.4.2: Impacts on material wellbeing of children by baseline per capita expenditure**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
<b>Poorest 50% of sample</b>					
All needs met	0.297*** (4.71)	0.311	0.339	0.727	0.461
<i>N</i>	8,227	2,819	1,338	2,788	1,282
Child has blanket	0.043 (1.32)	0.739	0.814	0.930	0.962
<i>N</i>	8,235	2,823	1,341	2,789	1,282
Child has shoes	0.297*** (4.77)	0.348	0.370	0.746	0.474
<i>N</i>	8,228	2,819	1,338	2,789	1,282
Child has two sets of clothing	0.004 (0.09)	0.749	0.779	0.907	0.936
<i>N</i>	8,230	2,819	1,340	2,788	1,283
<b>Less poor 50% of sample</b>					
All needs met	0.190*** (3.89)	0.478	0.462	0.795	0.591
<i>N</i>	4,118	1,290	654	1,482	692
Child has blanket	-0.051 (-1.13)	0.828	0.770	0.945	0.940
<i>N</i>	4,120	1,290	654	1,484	692
Child has shoes	0.160*** (3.25)	0.546	0.509	0.808	0.612
<i>N</i>	4,119	1,291	654	1,482	692
Child has two sets of clothing	0.070 (1.33)	0.833	0.858	0.937	0.894
<i>N</i>	4,121	1,291	654	1,484	692

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

## Appendix E. Additional youth analyses

### E.1. Pooled cross-section youth analyses

**Table E.1.1: Marriage - pooled cross-section**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Ever married/cohabiting	-0.054 (-1.11)	0.040	0.120	0.099	0.156
<i>N</i>	3,076	569	250	1,564	693

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

**Table E.1.2: Recent sex - pooled cross-section**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Number sex acts past 3 months	-9.609 (-0.64)	8.713	18.747	16.369	16.274
<i>N</i>	394	27	13	201	153
Had unprotected sex in past 3 months	0.100 (0.80)	0.118	0.094	0.431	0.490
<i>N</i>	469	43	24	228	174
Number of partners last 12 months	0.163 (0.35)	1.070	0.683	1.178	1.018
<i>N</i>	493	48	27	241	177
Most recent sex partner's age	1.859 (1.13)	18.907	18.744	23.900	23.326
<i>N</i>	388	31	15	200	142

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

**Table E.1.3: Mental health, alcohol consumption - pooled cross-section**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Depression index	0.462 (0.65)	19.385	19.373	18.140	17.615
<i>N</i>	3,105	568	255	1,576	706
Not depressed: CESD	-0.025 (-0.50)	0.583	0.588	0.649	0.679
<i>N</i>	3,105	568	255	1,576	706
Hope scale	-0.337 (-0.40)	18.013	17.864	20.437	20.552
<i>N</i>	3,125	567	256	1,591	711
Ever had drink of alcohol	-0.021 (-0.45)	0.080	0.121	0.065	0.122
<i>N</i>	3,130	567	256	1,594	713

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

**Table E.1.4: HIV - pooled cross-section**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Believes HIV risk is moderate/high or has HIV/AIDS	-0.089*** (-3.21)	0.053	0.024	0.086	0.146
<i>N</i>	2,571	458	211	1,298	604
Ever had HIV test lifetime	0.012 (0.27)	0.154	0.342	0.462	0.644
<i>N</i>	2,568	457	212	1,296	603
HIV test past 12 months	-0.003 (-0.07)	0.121	0.226	0.326	0.444
<i>N</i>	2,565	457	211	1,294	603
Got HIV results	0.021 (0.36)	0.856	0.904	0.871	0.874
<i>N</i>	1,049	76	61	549	363

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

**Table E.1.5: Experiences with physical violence - pooled cross-section**

Dependent Variable	Program Impact (1)	Baseline Treated Mean (2)	Baseline Control Mean (3)	Endline Treated Mean (4)	Endline Control Mean (5)
Experienced physical violence-12 months	-0.141*** (-2.70)	0.480	0.475	0.308	0.440
<i>N</i>	3,131	567	256	1,595	713
Experienced punch/kick, threat knife/gun-12 months	-0.093 (-1.37)	0.242	0.229	0.168	0.250
<i>N</i>	3,131	567	256	1,595	713
Pushed/slapped-12 months	-0.121*** (-2.95)	0.409	0.392	0.242	0.345
<i>N</i>	3,130	567	256	1,595	712
Punched/kicked-12 months	-0.081 (-1.15)	0.221	0.217	0.151	0.227
<i>N</i>	3,130	567	256	1,595	712
Threatened with knife/gun-12 months	-0.044** (-2.04)	0.048	0.028	0.029	0.057
<i>N</i>	3,125	566	256	1,591	712

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

**Table E.1.6: Perpetrators of physical violence - pooled cross-section**

Dependent Variable	Program Impact	Baseline Treated Mean	Baseline Control Mean	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(4)	(5)
Experienced physical violence by relative	-0.040 (-0.99)	0.145	0.133	0.079	0.111
<i>N</i>	3,131	567	256	1,595	713
Experienced physical violence by partner	0.024 (0.71)	0.017	0.066	0.031	0.060
<i>N</i>	3,131	567	256	1,595	713
Experienced physical violence by authority figure	-0.034 (-1.00)	0.140	0.137	0.097	0.131
<i>N</i>	3,131	567	256	1,595	713
Experienced physical violence by peer	-0.120*** (-3.01)	0.207	0.151	0.101	0.153
<i>N</i>	3,131	567	256	1,595	713
Experienced physical violence by other perpetrator	-0.045** (-2.14)	0.036	0.033	0.036	0.079
<i>N</i>	3,131	567	256	1,595	713

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

## E.2. Youth results disaggregated by gender

**Table E.2.1: Recent sex results disaggregated by gender**

Dependent Variable	Girls			Boys		
	Program Impact	Endline Treated Mean	Endline Control Mean	Program Impact	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(1)	(2)	(3)
Number sex acts past 3 mo	-3.031 (-0.67)	16.469	21.994	6.034 (1.30)	16.122	8.686
<i>N</i>	221	137	84	133	64	69
Had unprotected sex in past 3 mo	-0.112 (-1.36)	0.432	0.571	0.023 (0.26)	0.427	0.381
<i>N</i>	250	152	98	152	76	76
Number of partners last 12 mo	0.070 (1.11)	0.960	0.865	0.213 (1.00)	1.667	1.227
<i>N</i>	260	160	100	158	81	77
Most recent sex partner's age	-0.101 (-0.12)	26.460	27.351	0.117 (0.33)	17.845	17.843
<i>N</i>	216	136	80	126	64	62

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

**Table E.2.2: Risky sexual behaviour, sexual violence results disaggregated by gender**

Dependent Variable	Girls			Boys		
	Program Impact	Endline Treated Mean	Endline Control Mean	Program Impact	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(1)	(2)	(3)
Sexual transactions lifetime	-0.014 (-0.60)	0.062	0.092	-0.042*** (-2.80)	0.025	0.077
<i>N</i>	1,086	741	345	1,199	839	360
Ever forced to have sex	0.033 (1.13)	0.102	0.087	-0.025** (-2.28)	0.014	0.043
<i>N</i>	1,086	741	346	1,211	847	364

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

**Table E.2.3: Experiences with physical violence disaggregated by gender**

Dependent Variable	Girls			Boys		
	Program Impact	Endline Treated Mean	Endline Control Mean	Program Impact	Endline Treated Mean	Endline Control Mean
	(1)	(2)	(3)	(1)	(2)	(3)
Experienced physical violence-12 months	-0.034 (-0.82)	0.308	0.354	-0.223*** (-5.63)	0.308	0.523
<i>N</i>	1,092	743	349	1,216	852	364
Experienced severe violence (punched/kicked, threatened with knife/gun) -12 mo	0.023 (0.76)	0.174	0.161	-0.163*** (-3.22)	0.164	0.338
<i>N</i>	1,092	743	349	1,216	852	364
Pushed/slapped-12 months	-0.073* (-1.96)	0.224	0.300	-0.142*** (-4.46)	0.257	0.388
<i>N</i>	1,092	743	349	1,215	852	363
Punched/kicked-12 months	0.038 (1.33)	0.163	0.138	-0.166*** (-3.01)	0.140	0.314
<i>N</i>	1,092	743	349	1,215	852	363
Threatened with knife/gun-12 months	-0.009 (-0.57)	0.025	0.029	-0.044** (-2.17)	0.033	0.084
<i>N</i>	1,088	739	349	1,215	852	363

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

Harmonised Social Cash Transfer Programme Endline Impact Evaluation

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