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Impact Evaluation Report
External Evaluation of the Mchinji Social Cash Transfer Pilot

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KUFUNA KUMVETSA
MCHINJI CASH TRANSFER

August 2008

This report was prepared by the Center for International Health and Development (CIHD) at Boston University for the Government of Malawi, USAID and UNICEF Malawi. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the funding agency.

Statement to Program Designers and Implementers:

We have the deepest respect and admiration for the ingenuity, focus, and determination required to design, launch, and implement the Social Cash Transfer Scheme. We have witnessed passionate professionals driven in their pursuit of poverty alleviation and human development. Their shared resolve inspires and humbles us.

Statement of Gratitude

We wish to express our profound appreciation to everyone who participated in the External Evaluation.

To everyone at the District Assembly and within the Social Protection Secretariat, we thank you for the hospitality that you have shown us, the frank and thoughtful interviews, and your openness and eagerness to share information about the SCTS. We applaud your efforts and commitment, despite the many challenges you encounter every day.

To all of the other stakeholders, from the villages of Mchinji to the Ministries of Lilongwe, we thank you for your insights, questions, and suggestions. We encountered candid and forthright individuals, intent on improving the SCTS and decreasing vulnerability, everywhere we went.

To our intervention and comparison households, you allowed us to witness your struggles and sorrows, your desperation, and for some, your relief. In all activities, we visited over 21,000 households in Mchinji. To you, children, grandmothers caring for many orphans, and people living with disabilities, AIDS, and other diseases, we strove to preserve your voices as we tell your stories.

To the entire Malawi and Boston-based research time, thank you. Regardless of the task, may we always either 'Find a way, or make one.'

Before you could find an old woman crawling to a mango tree to get something to eat and then crawling home…just imagine…This is really helping.

Community Worker in Mchinji

The Universal Declaration of Human Rights (Articles 22 and 25)

> *"Everyone, as a member of society, has a right to social security…. to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing, medical care and necessary social services"*

International Covenant on Economic, Social and Cultural Rights (Article 9)

> *"The States parties recognize the right of everyone to social security, including social insurance…"*

The Convention on the Rights of the Child (Article 26)

> *"States Parties shall recognize for every child the right to benefit from social security, including social insurance, and shall take the necessary measures to achieve the full realization of this right in accordance with their national law."*

Social protection has bearings in the Malawi Constitution under articles 30, 37 and 43. Malawi is also a signatory to the following:

The Millennium Development Goals
The Universal Declaration on Human Rights
The Convention on the Rights of the Child
The Convention on the Elimination and Discrimination against All Women and
The Livingstone Call for Action

Social Protection is the second theme in The Malawi Growth and Development Strategy (MGDS), Malawi's approach to poverty reduction through five thematic areas:

Economic Growth
Social Protection
Social Development
Infrastructure Development, and
Improved Governance

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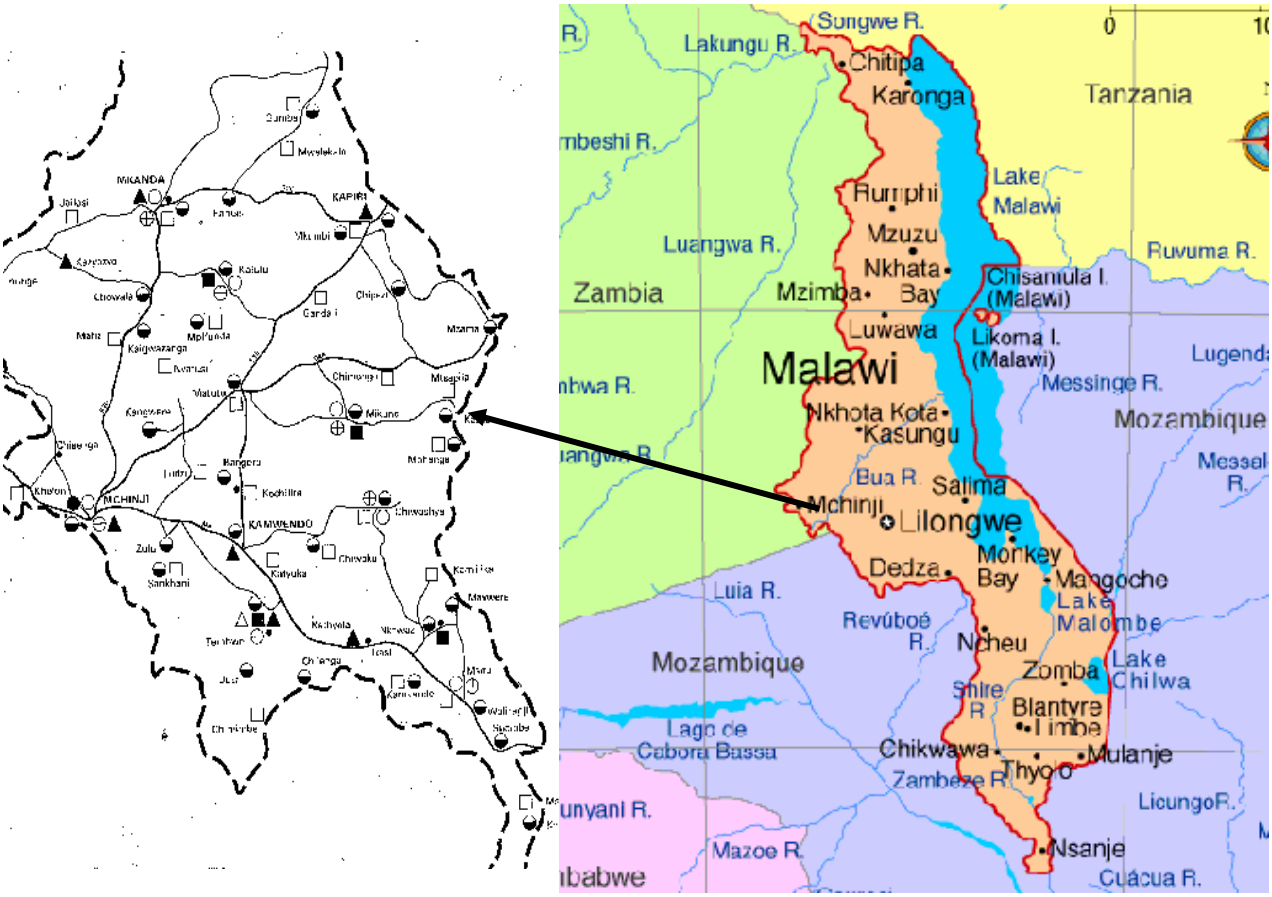
MAP OF MCHINJI

Mchinji District **Malawi**



ACRONYMS

ARV – Antiretroviral Treatment
CSPC – Community Social Protection Committee
CSR – Centre for Social Research
SCTS – Social Cash Transfer Scheme
DC – District Commissioner
DSPC – District Social Protection sub-Committee
DSWO – District Social Welfare Officer
EP&D – Economic Planning & Development
FGD – Focus Group Discussion
GDP – Gross Domestic Product
HHH – Household Head
IDI – In-depth Interview
IHS2 – Integrated Household Survey 2
KII – Key Informant Interview
ME – Monitoring and Evaluation
NAC – National AIDS Council
NSO – The National Statistics Offices
OVC – Orphans and Vulnerable Children
PI – Principal Investigator
RA – Research Assistant
SCTS – Social Cash Transfer Secretariat
SPSC – Social Protection Steering Committee
TA – Traditional Authority
UNICEF – United Nations Children's Fund
VDC – Village Development Committee

EXECUTIVE SUMMARY

Cash Transfer Scheme

Throughout the world, proponents of cash transfers argue that cash is a critical component of Social Protection in fighting poverty and responding to families that have been overwhelmed by disease, conflict, or other shocks (Barrientos and DeJong, 2004). Consequently, governments around the globe are increasingly using cash grants as an instrument of Social Protection for the poor. The Social Cash Transfer Scheme (SCTS) is positioned to become a major poverty reduction tool in the Government of Malawi's National Social Protection Policy, which is an effort to respond to widespread poverty, vulnerability and the "inability of households to deal with livelihoods shocks." Malawi's [Draft] National Social Protection Policy calls for programs and policies that confront poverty and vulnerability, directly provide transfers to the destitute, and strengthen human capital in order to break the poverty cycle (National Social Protection Technical Committee, 2008). Consequently, the Cash Transfer Scheme was designed to alleviate poverty, reduce malnutrition, and improve school enrolment among the poorest 10% of households in Malawi, by delivering regular and reliable cash transfers to ultra poor households that are also labour constrained.

Methods

The Impact Evaluation is one of three reports that comprise the External Evaluation of the Mchinji Social Cash Transfer Scheme (SCTS). From March 2007 to March/April 2008, Boston University and the Centre for Social Research at the University of Malawi conducted a longitudinal study using mixed quantitative and qualitative methods in order to examine the impact of cash on intervention and comparison households in Mchinji, Malawi. The main objective of this report is to describe the impact that cash has on intervention versus comparison or control households, in the following areas:

- Migration (inward and outward among adults and children)
- Health and hygiene (anthropometry, perceptions of health status, recent illnesses, health care seeking, health care expenditures)
- Education (enrolment, attendance, perceptions of performance, verification of enrolment)
- Child work and other activities
- Nutrition and Food Consumption (food security, satisfaction with consumption, food diversity, intake of complex proteins, food stores)
- Asset Ownership (basic necessities, durable goods, productive assets, livestock)
- Housing quality
- Household expenditures and use of cash transfer (food, assets, health, education, and other items)
- Household shocks (experience of shocks, loss of income, and children leaving school due to shocks)
- Well being and impact of cash transfer (only for recipients)
- Decisions about spending cash transfers (only for recipients)
- Jealousy and conflict in communities

Results

The Cash Transfer Scheme appears to be an effective instrument of social protection that, in the short term, allows beneficiary households to protect themselves from economic, demographic, and seasonal shocks; improve nutrition and food security; and increase asset ownership and expenditures on basic necessities. Beneficiary households in Mchinji used the SCTS to reduce poverty and hunger and improve school enrolment. Additional improvements in intervention versus control households include the following:

- Improved health with fewer reported sicknesses among adults and children
    - 7.9 percentage point difference in reported sicknesses per month in adults

    - 10.9 percentage point difference in reported sicknesses in children
    - 2.2 percentage point difference in wasting; 4.2 percentage point difference in stunting; and 10.5 percentage point difference in underweight
- Greater demand for healthcare for children and adults and higher healthcare expenditures
- Greater demand and increased expenditures on schooling and children's education, resulting in higher enrolment and fewer absences
    - MK333 per child and MK1,049 per household difference in monthly school expenditures
- Reduction in child labour
    - 10.7 percentage point difference in children that work in someone else's home
- Significant accumulation of household assets and basic necessities
- Accumulation of productive assets and livestock
- Increased agricultural production, with greater food stores
- Improved food security, including higher food expenditures, fewer missed meals, fewer days without adequate food, and greater food diversity
    - Difference in food diversity of three food groups consumed per week
    - MK3,125 difference in monthly food expenditures
- Improved housing quality and ability to handle household shocks

In addition to household head reports of these improvements, which were corroborated by children; these findings were also confirmed by community members, local extension workers in health, education, and agriculture, Community Social Protection Committees (CSPCs), members of the Social Cash Transfer Secretariat, and a wide range of officials from the District Assembly. Additionally, our team witnessed the improvements in the lives of beneficiaries. They observed the accumulation of basic necessities, livestock, and household items; the building of new houses; and the tilling of fields yielding substantial food stores. They also witnessed a transformation in the well-being and general appearance of beneficiaries and their children.

Given the lack of consistency in the targeting of the SCTS, we were unable to create a true counterfactual control group. The intervention and comparison households were not demographically identical at baseline, as CSPCs appear to have prioritized elderly households in the comparison Village Development Groups (VDCs) and households with more children in the intervention VDCs. Still, households were the statistically the same in terms of monthly expenditures, food insecurity and asset ownership at baseline. It is not clear whether the level of impact would be the same if the comparison households received the transfer, rather than the intervention households. However, regardless of the exact level of impact, the scope and depth of positive changes that occurred in beneficiary households was confirmed in qualitative interviews and focus groups throughout the 29 VDCs in Mchinji where the scheme was operational. Consequently, while impacts may vary based on the type of households receiving the cash, and the amount per month that beneficiaries receive, providing regular and reliable cash grants to ultra poor and labour constrained households in Malawi creates profound changes in the lives of children, sick and disabled adults, caregivers with many dependents, and the elderly.

RECOMMENDATIONS

Improve Operations and Targeting *(See Operations and Targeting Evaluation Reports)*

The range and depth of impacts provide powerful motivation to prioritize improvements in the SCTS operations beginning with the following:

- Improving the overall management of the scheme, including automating all files
- Building capacity at District and Community levels to implement the SCTS
- Making adjustments in the program design so that the targeting and approval processes completely captures ultra poor and labour constrained households, and

- Following through on SCTS activities including administering changes, monitoring and evaluation and linking beneficiaries to additional services

Approach Retargeting Efforts with Caution

According to SCTS Manual of Operations, household retargeting should occur after one year. During retargeting, households may be removed and new households may be added to the scheme. However, it is not clear whether some households will be removed because they no longer meet the ultra poor criteria after receiving the transfer for a year or more. In Mchinji, retargeting activities have been postponed since November 2007 as policymakers decide the best way to retarget and which households to remove, and the District Social Cash Transfer Secretariat (SCTS) focuses on scaling up throughout the nine Traditional Authorities (TAs). However, it is unclear what the trajectory of households will be if removed from the SCTS. Although a small portion of beneficiaries have started businesses and many own productive assets, it is unclear whether these households have the ability to avoid or withstand further shocks; or if their investments are enough to smooth consumption throughout the year so they remain food secure and children stay in school. Given that the average age of household heads is 63 years; 61% of people in beneficiary households are children, and 60% of children are orphaned, we strongly recommend approaching retargeting efforts with caution. We expect that ultra poor and labour constrained households that are removed from the SCTS may revert back to the same socio-economic position they were in prior to the SCTS. The District, through extension workers or partnerships with NGOs, CBOs or others, must provide beneficiaries with adequate advance notice, assist them with savings plans, and help households devise a strategy to avoid falling back into destitution if they are ever to be removed from the SCTS. The best plan might be for children to age out of the SCTS, and ultra poor elderly to be covered until death, as is common in most developed countries, as well as Botswana, Lesotho, Namibia and South Africa (Miller, 2007).

Consider the Size of the Cash Transfer

Additionally, the size of the cash transfer is an issue that requires discussion and should be considered by policymakers. The average transfer (MK2,000) creates significant benefits within households; however, rather than raising beneficiary households to an economic position just above the lowest quintile, it elevates these households beyond the average household in Mchinji, particularly during the rainy season when incomes decline. The level of cash must be monitored because of the incentives it creates for corruption among CSPCs and village leaders, and the jealousy that it incites within communities. Further examination is required to determine the optimum size of the transfer versus the number of beneficiaries on the SCTS.

Continue to Follow Beneficiary Households to Understand Longer Term Health, Human Development and Economic Impacts of Cash

Finally, while we measured a series of indicators and domains, it is not clear what additional impacts exist that were not captured in this evaluation. It is also still unclear what the longer-term impacts of cash are among the ultra poor. For example, will the number of sicknesses among beneficiaries continue to decline? Will the percentage of underweight children continue to decline? What are the longer term health and human development gains among children? Will school enrolment rates remain at 95% throughout the year? Will girls in cash transfer households be more likely to attend secondary school? Will fewer absences lead to greater performance? Will girls and young women be less likely to marry early or have an unplanned pregnancy? Will youth be less likely to contract HIV or other sexually transmitted diseases? Will the rate of AIDS deaths decline in Districts where the SCTS is operational? Will SCTS households become increasingly cushioned from seasonal and other shocks? Longer-term follow-up of the Mchinji cash transfer beneficiaries is essential to answering these questions.

INTRODUCTION

Background to the Mchinji Social Cash Transfer Pilot Scheme

The Mchinji Social Cash Transfer Pilot Scheme (SCTS) is positioned to become a major poverty reduction tool in the Government of Malawi's National Social Protection Policy, which is an effort to respond to widespread poverty, vulnerability and the "inability of households to deal with livelihoods shocks." Malawi's [Draft] National Social Protection Policy calls for programs and policies that confront poverty and vulnerability, directly provide transfers to the destitute, and strengthen human capital in order to break the poverty cycle (National Social Protection Technical Committee, 2008). Consequently, the Cash Transfer Scheme was designed to alleviate poverty, reduce malnutrition, and improve school enrolment among the poorest 10% of households in Malawi, by delivering regular and reliable cash transfers to ultra poor households that are also labour constrained.[1]

Proponents of cash transfers argue that Social Protection in the form of cash transfers is a critical component in fighting poverty and responding to families that have been overwhelmed by disease, illnesses, conflict, war or other shocks (Barrientos and DeJong, 2004). In fact, governments throughout the world use cash grants as an instrument of Social Protection for the poor. For example, the governments of Mexico, Brazil, India, and South Africa have schemes that provide cash to poor households. This support is improving the financial standing of vulnerable households (Chronic Poverty Research Centre, 2005). In the short term at the household level, cash transfers may stimulate demand for healthcare and education, influence the accumulation of assets and livestock, and increase agricultural production through the purchase of fertilizers or farm labor, (Farrington, Holmes, Slater, 2006). Long-term economic growth may occur through multiple mechanisms. For instance, greater human development among children may occur as nutrition, healthcare and schooling needs are met (Fiszbein & Schady, et. al., 2008; and Bourguignon, Ferreira, & Leite, 2002).

The first cash transfers to recipient households were made in June 2006. By April 2008, 2,878 households were receiving transfers on a monthly basis with total program expenditures at MK6.1 million (US$43k) per month. Current plans involve scaling up to 11,400 households at MK26 million per month (US$185k) throughout Mchinji by June 2009. On average, beneficiaries receive monthly transfers of MK2,000 (US$14) depending on the size of the household and the number of school aged children in the household (a MK200 top-up is paid for primary school aged children and MK400 for secondary aged youth) (Table 1).

Table 1. Size of Cash Transfer

Number of household members	MK per month	US$ per month
1	600	$4.30
2	1000	$7.14
3	1400	$10.00
4	1800	$12.85

Objectives of the Impact Evaluation Report

The Impact Evaluation is one of three reports that comprise the External Evaluation of the Cash Transfer Scheme (SCTS). The Operations Evaluation examines the implementation of the Mchinji Cash Transfer, while the Targeting Evaluation assesses the targeting approach designed to identify ultra poor and labour constrained households. The main objective of this report is to better understand the impact of the cash

[1] The Scheme was conceived of by United Nations Children's Fund (UNICEF) technical consultant, Dr. Bernd Schubert. Through ongoing consultations between UNICEF, the Department of Poverty & Disaster Management Affairs, and the District. The scheme was launched in September 2006.

transfer by assessing the differences between beneficiary households (intervention) and non-recipient households (comparison or control) between March 2007 and March/April 2008, in the following areas:

- Migration (inward and outward among adults and children)
- Health and hygiene (anthropometry, perceptions of health status, recent illnesses, health care seeking, health care expenditures)
- Education (enrolment, attendance, perceptions of performance, verification of enrolment)
- Child work and other activities
- Nutrition and Food Consumption (food security, satisfaction with consumption levels, food diversity, consumption of complex proteins, food stores)
- Asset Ownership (durable goods, productive assets, livestock)
- Housing quality
- Household expenditures and use of cash transfer (food, assets, health, education, and other items)
- Household shocks (experience of shocks, loss of income, and children leaving school due to shocks)
- Well being and impact of cash transfer (only for recipients)
- Decisions about spending cash transfers (only for recipients)
- Jealousy and conflict

Round 1, 2 and 3 surveys contained 46-48 pages of questions each covering more than 40 topics. This is the first report describing the impacts of cash transfer after one year in Mchinji, and will be followed by additional articles and two- page summaries in order to document the variety of impacts that occurred. In this report, we present average changes in intervention versus comparison households and difference-in-differences impact estimates for selected outcomes. In further documents, we will present regression analyses where we examine determinants of outcomes (i.e. The size of the transfer, household size, etc). and potentially intervening factors (i.e. age and gender of children or adults etc.) to explain the differential impacts that occurred. We will also examine outcomes in different types of households, such as households headed by People Living with HIV/AIDS, elderly only, elderly with orphans, female-headed, and child headed households.

METHODS

The Boston University Institutional Review Board and the Malawian Health Research Council at the Ministry of Health approved the study protocols submitted for the quantitative and qualitative portions of the evaluation.

Sample Selection

By March 2007, approximately 29 Village Development Groups (VDCs) within four out of nine Traditional Authorities (TAs) in Mchinji District were included in the SCTS. VDCs contain multiple villages so that the combined number of households per VDC is approximately 1000. Among these, the poorest 10% of households (approximately 100 households) per VDC are identified to receive the SCTS. However, not all VDCs within the four TAs had been reached by the SCTS in March 07, given that the scheme was scaling up through the district as time and human resources allowed.

The SCTS implemented the SCTS's multi-stage, community participatory targeting process in both intervention and control VDCs for the Impact Evaluation study. The targeting process entails the following: *The District Secretariat trains a Community Social Protection Committee (CSPC) to help implement the scheme. The CSPC makes a list of ultra poor and labor constrained households. The CSPC then visits the*

households to fill out an application for each household, and the local Village Headman signs off on the applications, verifying their accuracy.. Next, the CSPC ranks households and chooses the 10% poorest households. A community meeting occurs where the CSPC and community members discuss the household ranking. Then Village and District Committees approve the list of eligible households.

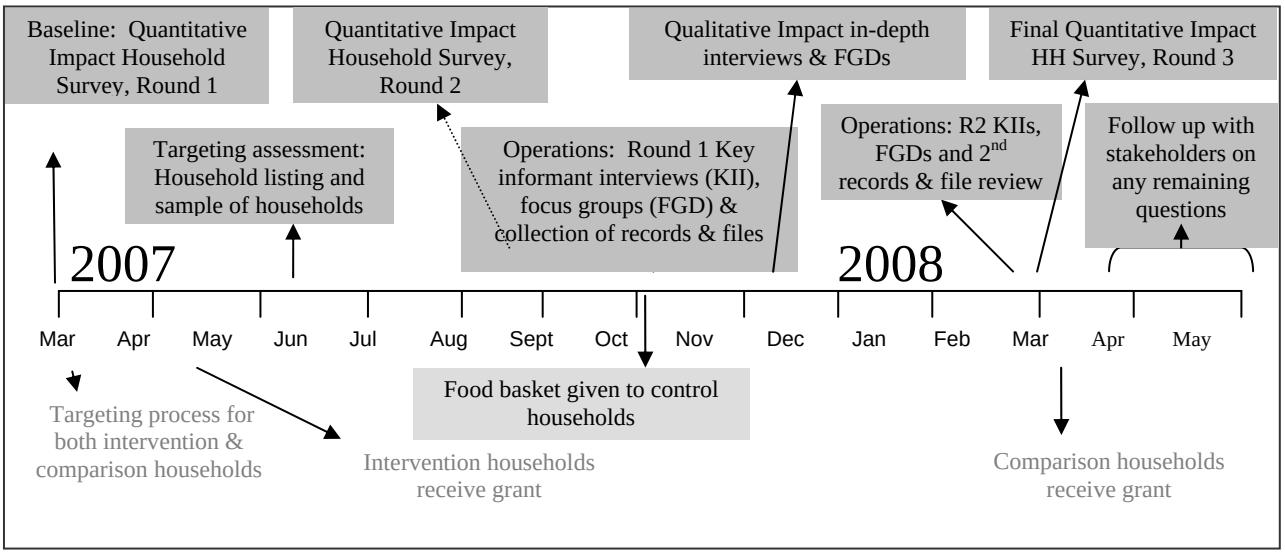
In February and early March 2007 and prior to the Impact Evaluation, the Social Cash Transfer Scheme (SCTS) Secretariat identified four intervention and four comparison VDCs within the TAs where the SCTS was operational. With approximately 100 households in each of four intervention and four comparison VDCs, this yielded about 800 households to be included in the Impact Evaluation. The two sampling frames include a roster of all cash transfer approved or eligible households in the (1) recipient (408 households) VDCs and (2) non-recipient (411 households) VDCs. Although the district did not have demographic and economic data specifically available to compare the intervention and comparison areas *(as no data existed)*, they did believe that these areas were similar with regards to key socio-demographic and economic indicators. However, we present and discuss some of the differences between the intervention and comparison groups. In the Targeting Evaluation of the Mchinji Social Cash Transfer, we demonstrate how CSPCs often use different criteria for choosing beneficiaries in different VDCs. We expect that the criteria for choosing beneficiaries also differed between VDCs in the intervention and comparison households. Thus even if intervention and comparison VDCs were socio-demographically and economically identical, the way that beneficiaries were chosen may explain some of the differences between the two groups that we found in this study.

We visited respondents at their homes and interviewed the head of household registered to receive the grant, or the deputy appointed by the household head in both intervention and comparison households.

Data Sources for the Impact Evaluation

Data collection to examine the impact of the Mchinji Social Cash Transfer occurred between March 2007 and April 2008 (Figure 1). The study included a longitudinal household survey, consisting of three rounds of data collection with a panel of intervention and control households in cash transfer recipient and non-recipient VDCs. We also collected qualitative data, including 106 in-depth interviews (IDI) with recipients and non-recipients; 18 focus groups discussions (FGD) with children; 20 FGDs with community members living in communities where the SCTS was operational; 33 FGDs with Community Social Protection Committees (the groups responsible for targeting and approving households); and more than 100 key informant interviews (KII) with stakeholders at the community and district levels. Our Field Team consisted of 25 to 32 professionals in any given month from Boston University and the Centre for Social Research (CSR). All supervisors and research assistants (RAs) had prior experience working on similar studies, were graduates with Malawi Secondary Certificates (MSCE) or beyond, and were fluent in Chichewa and English.

Figure 1. Timeline for data collection



Intervention households received their first payment after the baseline survey in April 2007. Unfortunately, the District did not inform comparison households that they would only be receiving transfers the following year. Due to this and because we were witnessing absolute destitution in these households, in September 2007, we presented control households with a food bucket paid for by UNICEF following each interview. The bucket contained one liter of cooking oil, two kg of sugar, 500 grams of tea, one kg of salt, two bars of sunlight clothing soap, two bars of body soap, and one kg of beans. The value of the food bucket was MK1,230, which in some cases exceeds the value of the cash transfer. However, given the poverty in households, the length of time households still had to wait for the transfer, and the minimal impact that we expected the food bucket to have, we decided that it was worth giving to households. We did not give cash so that the Evaluation would not be confused with the SCTS. The bucket did not impact Round 2 findings, and it is unlikely that it impacted Round 3 findings given that six months passed before Round 3 data collection. Finally, control households received the transfer after the final survey was completed and the District was able to include them in the SCTS in May 2008.

Quantitative Household Survey

First, we developed structured questionnaires in English, which were translated into Chichewa and back-translated into English. Our instrument was based on the following surveys: The Malawi Integrated Household Survey II, Demographic and Health Surveys from Measure DHS, Income and Expenditure Surveys from the World Bank, Instruments from the Kalomo Cash Transfer Study in Zambia, and surveys from the Amajuba Orphan Study in Kwa Zulu Natal South Africa. In Mchinji, we trained the team of research assistants (RAs) over one week prior to each round of data collection in order for RAs to become familiar with the instrument, discuss translations, conduct mock interviews, and pilot the instrument. Training also consisted of the following modules:

- Introduction to the study or presentations of data from previous rounds of the study
- Anthropometric methods (collecting accurate heights and weights for children and adults, checking measurements against height/weight charts by age, practice)
- Interview methods, including managing difficult interviews, probing, and being aware of non-plausible or contradictory data
- Qualitative versus quantitative methods (classroom instruction and discussion, mock interviews, pilot interviews)
- Data management (including collection, entry, cleaning, security)
- Roles and responsibilities of team members
- Human Subjects Protection (with 3 rounds of follow up training)

After pilot testing, we revised the instruments and administered them to intervention and comparison households. Surveys were checked on a daily basis by study supervisors for consistency, plausibility, and completeness. Next, supervisors handed surveys over to Data Entry clerks to enter into the Census and Survey Processing System (CSPRO) database. If Data Entry clerks found missing data or illegible markings, surveys were returned to supervisors to discuss with RAs. If necessary, RAs returned to the household to fill in missing data or clarify responses. Data from the CSPRO database was examined in batches to check for missing or outlying data.

In Boston, quantitative household surveys were transferred from the CSPRO database into Statistical Analysis Software (SAS 9.1) for data cleaning and analysis. Tabulated data was sent or brought to Malawi, where field staff assisted in data cleaning by comparing electronic files with written surveys for all anthropometric and expenditure data, and in cases where there was missing data or outliers. We created a data analysis plan in order to utilize all relevant data and then systematically calculated univariate and bivariate statistics. Next, we computed difference-in-differences estimates by calculating the mean difference between outcome values in the intervention and comparison groups at round one (March 2007, prior to the transfer in both groups) and at round three (March/April 2008, when intervention households received the transfer for one year) (Ravallion, 2003). The difference between the two mean differences is the estimate of the program impact.[2]

Qualitative Interviews, Focus Groups, Photos

We developed structured questionnaires for in depth interviews (IDI), key informant interviews (KII) and focus group discussions (FGD) in order to understand the positive and negative impacts of the SCTS on beneficiary households and in communities. In addition to the training described for the quantitative portion of the study, we also conducted training in qualitative methods over one week and provided ongoing instruction as interviews and focus groups were completed. The RAs participated in mock and pilot interviews KIIs, IDIs, and FGDs. These activities were followed by reflective discussions and training and instruments were revised as needed. RAs conducted IDIs and FGDs in pairs or individually, depending upon their level of experience and took handwritten notes of all interviews and FGDs in Chichewa. FGDs were taped using digital voice recorders. RAs followed a schedule of conducting two interviews or focus groups per day and transcribing Chichewa notes and recordings into English on the second day. These transcripts were then typed. Field supervisors observed RAs and reviewed all Chichewa and English reports to ensure accuracy and consistency between transcripts, as well as to verify translations, obtain clarifications as needed, check interviewer performance, and identify emerging themes. The Principal Investigator (PI) and Co-PI conducted daily debriefing sessions as well. RAs were also given disposable cameras and instructed to first gain consent, and then take photos of intervention and comparison households in order to document the situation of these households over time.

In Boston, we read and reread transcripts from qualitative key informant interviews, focus group discussions, district reports, and reports compiled from observations. Next, we identified key impact areas to guide development of codes for categorizing data in order to conduct a content analysis, which is a thorough review to identify salient themes and patterns of ideas related to study topics. The categorization of codes allows a rich and in-depth focus on specific concepts. We coded community key informant transcripts and focus groups using NVIVO 8 software. In all transcripts, we identified deviations from common themes and

[2] *In further documents, we will present regression analyses where we examine determinants of outcomes (i.e. The size of the transfer, household size, etc.) and potential intervening factors (i.e. age and gender of children or adults etc.) to explain the differential impacts that occurred. We will also examine outcomes in different types of households, such as households headed by People Living with HIV/AIDS, elderly only, elderly with orphans, female-headed, and child headed households.*

explanations for atypical responses; as well as anecdotes that provided insight into the broader study questions. We assessed corroborating and divergent views between study participants until we categorized all relevant concepts. We also organized photos according to content and matched them to conceptual areas in order to corroborate respondent reports. We present them to illustrate the situation of households.

Verification of Schooling Data

Finally, we also verified the schooling data that respondents provided. We created rosters, by school, for all children between the ages of 6 and below 18. Study supervisors took the rosters to the corresponding school to confirm enrolment with the Head Master/ Head Teacher. In some schools, the official could verify enrolment on the spot, while in other schools the official held onto the roster for several days to fill it out completely. In one school, the teachers gathered and called an assembly to identify the children listed on the roster. The field team was able to determine whether the child was attending the school, was attending another school, or was unknown in the area, indicating that the child was possible a 'ghost'. The verification of student enrolment was complicated because many children use different names at home and in school (e.g., Beatrice Phiri at home and Janis January at school). Nevertheless, we were able to determine enrolment among the majority of children.

Sample Sizes for Rounds 1, 2 and 3

Table 2 displays the sample size, by intervention comparison household status during the three rounds of data collection as well as reasons for loss to follow up. The numbers in each category are too small to perform statistical analyses; however death and hospitalizations were the most common reasons for loss to follow-up. Study vehicles returned to households at least three times (*and sometimes more often if the vehicle passed the house regularly*) in order to conduct interviews. While there were more deaths in comparison than intervention households, we do not have medical tests or other evidence to determine the health status of household heads prior to baseline study.

Table 2. Survey Sample Sizes

	Round 1			Round 2			Round 3		
	Total	**C**	**I**	**Total**	**C**	**I**	**Total**	**C**	**I**
The original roster of households from the DA included 830 houeholds	Number of Households per round								
	819	411	408	789	394	395	766	392	374
Reasons lost to follow-up									
Death		1	0		7	3		9	4
Migration		0	0		0	4		0	4
Hospitalized		3	0		4	1		0	1
Refused		0	0		0	0		1	0
Removed from scheme		0	0		0	6		0	5
Could not be found		1	0		0	0		0	0
Not available		0	3		2	2		2	5
Mentally ill/too sick		2	0		0	0		0	1
Duplicate		0	1		0	0		0	0
Fake household		0	0		0	1		0	1

Key: C= Comparison/control household; I = Intervention household
Note: Round 3 includes households that were unavailable for interview during round 2

Ghost household members

One challenge we encountered in getting accurate Household Panel data was that the SCTS created the incentive for households to exaggerate the number of adults or children living in the house in order to receive more money. In some cases, we learned that CSPCs encouraged households to inflate numbers, while in other cases, the households operated on their own (*See Operations and Targeting Evaluation)*. Nevertheless, in all cases we found that 'ghost' members were only listed for the purpose of the SCTS or the evaluation and so 'ghosts' did not actually live in the house. For this reason, we did not measure changes in these 'ghost' children or adults health status, anthropometric measurements, schooling or labor because (1) they were either not real people or (2) they lived elsewhere and did not directly benefit from the cash transfer. In all cases where we found ghosts, we removed them from the household panel and did not count them in the household size calculations. We generally found that children used as ghosts were not informed that their names were being used, and they were not told to misrepresent their true living situation, which facilitated our ability to identify them as ghosts. The field team was able to identify ghosts through a series of steps:

(1) First, children often followed field staff as they conducted interviews allowing RAs to develop a rapport with them. As RAs approached new households to interview, they asked children if the beneficiary households had any children and were able to get accurate information.
(2) Before or after interviews, the field staff asked the children at each household where they lived and slept, where their parents were, and if parents were away, when they would be returning.
(3) RAs told children that anthropometry measures would be taken at the child's home. Children would run home to be measured, preventing "ghosts" from remaining at the study household.
(4) Using household panel data from previous rounds, RAs would probe if HHH gave different names or date of births for children, or if there was an impossible or dramatic difference between height and weight measurements from previous rounds.
(5) Some beneficiaries politely told the field staff that the children were ghosts and the CSPC member told them to register such children so the household would receive more money.
(6) The field staff also spoke to neighbors to determine if the children belonged to the beneficiary household. The field staff used their best judgment to determine if the neighbors were reporting misinformation because they were jealous of beneficiaries.

Finally, during the Impact Evaluation, by returning to households between three and five times over one year, we learned that some households listed as many as 5 'ghost' children and 2 'ghost' adults (Table 3). *(While we did not use ghosts in the analyses we always protected the confidentiality of all households and did not report any ghosts to the District or other officials.)*

Table 3. Number of Ghosts found in Impact Evaluation (n=766 households)

	Number of ghost members	Percentages of ghosts
Adults	26 (1 to 2 per household) in 22 households	26/1234 adults = 2% of adults
Children	110 (1 to 5 per household) in 53 households	110/1,857 = 6% of children
Total Ghosts	136 ghosts in 66 households	66/766= 8.3% of households

RESULTS

Demographics

Characteristics of Household Heads

The average age of the household head (HHH) in intervention households was slightly older than those in comparison households (61 years vs. 65 years in Round 3, $p<0.001$) (Table 4). The largest proportion of HHH fell into the age category of 65+ years, while an elderly person aged 75 years or older headed a quarter

of households. Comparison households contained more heads above 65 years old than intervention households (63% vs. 50%, p<.01), which is likely due to CSPCs prioritizing elderly headed households in comparison households during the targeting and approval procedures, while CSPC in intervention households may have prioritized households with orphans (see Operations Evaluation and Targeting Evaluation Reports).

The majority of household heads (65%) were women in both intervention and comparison households. At least half of HHH had no education although comparison households had more heads with no education (61% vs. 48% in intervention households, p<0.01). The majority of HHH (88.6% of control and 78% of intervention HHH) had no schooling or less than a standard four education. Consequently, comparison households contained more illiterate HHH than intervention households, (76% vs. 60% of heads could not read any part of a sentence.) Finally, there were no differences in marital status between intervention and comparison HHH. The majority of all HHHs were widowed (54%), followed by married HHH (28%), and divorced HHH (16%).

Table 4. Demographics - Household Heads

	Round 1				Round 2				Round 3			
	Total N=805	**C n=406**	**I n=399**		**Total n=778**	**C n=395**	**I N=383**		**Total n=754**	**C n=387**	**I n=367**	
	%	**%**	**%**		**%**	**%**	**%**		**%**	**%**	**%**	
Age												
<= 24 years	1.4	1.2	1.5		1.7	1.3	2.1		1.6	1.8	1.4	
25-64 years	42.3	37.1	47.6	*	42.5	38.8	46.2		41.8	35.1	48.9	**
65+ years	56.3	61.7	50.9	*	55.8	59.9	51.7		56.6	63.1	49.7	**
>=75 years	25.9	29.5	22.3	*	25.2	27.7	22.7		29.4	33.1	25.4	*
Mean age in years	62.4	64.0	60.8	**	62.3	63.7	60.9	*	63.2	65.2	61.0	***
Gender (Female)	64.4	65.5	63.2		64.5	68.4	60.6		65.4	67.4	63.2	
Education Level												
No schooling	54.8	64.2	45.3	***	57.4	67.9	46.6	***	55.4	62.3	48.0	**
Standard 1 to 4	27.3	22.9	31.8	**	27.1	22.1	32.1	**	28.5	26.3	30.1	
Standard 5 to 8	13.7	9.3	18.2	**	12.1	6.4	17.9	**	12.7	8.8	16.9	**
Above standard 8	4.2	3.7	4.7		3.5	3.6	3.4		3.4	2.7	4.2	
Literacy												
Cannot read at all	68.1	75.9	60.2	***								
Can read only part of a sentence	3.7	2.9	4.4									
Able to read whole sentence	26.3	19.0	33.7	***								
Marital status												
Married	27.0	26.1	27.8		28.4	25.8	31.1		27.6	24.8	30.5	
Divorced	16.4	15.3	17.5		14.8	14.9	14.6		15.7	15.0	16.4	
Widowed	54.4	56.2	52.6		54.5	57.0	52.0		54.2	57.4	51.0	
Other	2.2	2.5	2.0		2.3	2.3	2.4		2.5	2.8	2.2	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Adults in Intervention vs. Comparison Households

In a comparison of all adults within intervention and comparison households (*including household heads*), intervention households contained more adults under 25 years than comparison households (18% vs. 14% of adults are under 25, $p<0.05$) and more elderly household members aged 75 years and older. The mean age for all adults was 52 years in intervention vs. 57 years in comparison households ($p<0.001$).

There were no differences in the percentage of men and women in intervention and comparison households, although the majority (64%) of adults in both types of households were women. Again, there were minimal differences in marital status between adults in intervention and comparison households. Adults in intervention households were more likely to have a higher level of education than adults in comparison households, although the majority of adults (76.3% of comparison and 77% of intervention adults) had no schooling or only up to a Standard 4 education (Table 5).

Table 5. Demographics – All Adults

	Round 1				Round 2				Round 3			
	Total n=1332 %	**C n=637 %**	**I n=695 %**		**Total n=1337 %**	**C n=641 %**	**I n=696 %**		**Total n=1234 %**	**C n=597 %**	**I n=637 %**	
Age												
<= 24 years	16.4	14.3	18.3	*	19.7	18.1	21.3	*	16.0	14.1	17.8	*
25-64 ears	41.3	37.0	45.2	***	40.8	36.7	44.6	**	42.4	36.7	47.8	***
65+ years	42.3	48.7	36.5		39.4	45.2	34.0		41.6	49.2	34.4	*
>=75 years	19.0	22.5	15.7		17.4	20.4	14.6		20.5	24.7	16.6	**
Mean age in years	53.8	56.5	51.4	***	52.0	54.4	49.7	***	54.3	57.3	51.6	***
Gender (Female)	63.4	64.7	62.3		63.2	65.6	61.0		63.9	66.3	61.6	
Education Level												
No schooling	48.2	63.3	44.4	***	49.5	67.6	45.2	***	47.7	61.2	48.0	**
Standard 1 to 4	24.7	21.2	27.8		24.4	21.5	27.0		26.6	25.1	29.0	
Standard 5 to 8	17.7	14.3	20.8	***	17.0	12.1	21.5	***	16.6	13.6	19.3	**
Above standard 8	9.5	6.3	12.4	**	9.2	6.6	11.5	**	9.3	6.2	12.0	**
Marital status												
Married	33.2	33.8	32.7		34.6	33.3	35.8		34.4	32.6	36.1	
Divorced	12.2	11.9	12.4		12.3	12.1	12.4		12.3	12.1	12.4	
Widowed	36.2	38.3	34.2		35.3	38.9	31.9		35.7	39.9	31.7	
Other	18.5	16.0	20.7	**	17.8	15.7	19.9	*	17.7	15.4	19.8	*

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Children in Intervention vs. Comparison Households

The demographic differences between children under the age of 18 were minimal and limited to a larger percentage of girls in comparison households versus intervention households (54% vs. 49%, $p<0.05$). Overall, by Round 3, about 19% of children were under five years, 31% between the ages of six and 10 years, 30% aged 11 to 14 years, and 20% between 15 and 18 years (Table 6).

The percentage of children that were orphaned (maternal, paternal, double orphan) in intervention and comparison households is striking. In each round, nearly three out of five children had survived their mother, father or both parents. The differences between intervention and comparison households were minimal however. On average, in Round 3, 10% of children were maternal orphans, 28% paternal orphans, 21% double orphans; and only 40% had both parents still living.

Table 6. Demographics – All Children

	Round 1			Round 2			Round 3		
	Total n=2003 %	**C n=791 %**	**I n=1212 %**	**Total N=1910 %**	**C n=785 %**	**I n=1125 %**	**Total n=1857 %**	**C n=770 %**	**I n=1056 %**
Age									
0-5 years	21.9	23.6	20.7	20.4	22.0	19.2	19.0	19.7	18.1
6-10 ears	35.7	35.2	36.0	34.0	33.6	34.2	30.6	29.4	31.6
11-14 years	29.2	28.7	29.5	28.7	27.1	19.9	30.2	30.4	30.0
15-<18 years	15.8	15.7	15.8	16.2	16.3	16.1	20.5	20.8	20.4
Gender									
% Female	50.4	53.8	48.1 *	50.5	53.9	48.3 *	50.6	53.6	48.5 *
Orphan Status									
Maternal	8.1	10.2	6.8	8.9	10.7	7.6 *	10.1	11.2	9.7
Paternal	31.0	30.9	31.0	28.4	28.9	28.0	27.8	28.6	27.3
Double	22.8	20.4	24.3 *	20.4	18.0	22.0 *	21.3	20.5	22.3
Non orphan	37.4	37.7	37.2	39.8	39.1	40.4	40.5	39.5	40.5
Any type of orphan	61.9	61.4	62.1	57.7	57.6	57.8	59.2	60.3	59.2

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Household Composition

Intervention households were slightly larger than comparison households during each round. However, the size of households by intervention status only varied slightly, with the greatest reported growth between Rounds 1 and 2 (Table 7). This growth must be further assessed however, because we believe that the some of the growth (between Rounds 1 and 2) and subsequent loss (between Rounds 2 and 3), was due to the addition of ghosts. Our greatest efforts at eliminating ghosts occurred during the final round, and we may not have eliminated all ghosts from Round 2. (*Subsequent analysis for changes in adult and child outcomes is based on children that were in the household during all three rounds.)*

A larger proportion of intervention households contained orphans than comparison households, which might indicate the CSPCs preference for households with orphans in intervention areas versus households with elderly members in comparison households (*again, see Operations and Targeting Evaluation Reports)*. Nevertheless, about half of all households contained orphans and one out of five households was caring for a member that had been ill for more than one month in the previous year (Table 8).

Table 7. Household size

	Round 1 Total n=818			Round 2 Total n=787			Round 3 Total n=766		
	C	**I**		**C**	**I**		**C**	**I**	
Number of Households	411	407		398	389		392	374	
Average HH size (min, max)	3.5 (1, 11)	4.7 (1, 14)	***	3.7 (1, 11)	4.9 (1, 14)	***	3.5 (1, 11)	4.5 (1, 13)	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Table 8. Household Composition

	Round 1				Round 2				Round 3			
	Total	C N=411	I n=407		Total	C n=398	I n=389		Total	C n=392	I n=374	
	%	%	%		%	%	%		%	%	%	
Caring for orphans	50.0	45.0	56.7	***	47.1	43.7	50.6	*	48.2	43.3	53.2	*
Caring for any members that were sick for one month+	34.7	31.6	37.3	*	26.5	27.0	26.0		21.9	24.7	20.1	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Household Deaths

When we first visited households, we asked the HHH if there had been any deaths among household members in the five years preceding our visit. About one third of households reported at least one death and more intervention than comparison households had lost at least one household member (36% vs. 26%, p<0.01) since 2002. The percentage of households that experienced a death between Rounds 1 and 2 (~3%) and Rounds 1 and 3 (~6%) were not different based on intervention status (Table 9).

Table 9. Household Deaths

	Round 1				Round 2			Round 3		
	Total n= %	C n=411 %	I n=407 %		Total n= %	C n=398 %	I N=389 %	Total n= %	C n=392 %	I n=374 %
Deaths in past 5 years	30.9	26.3	35.6	**						
Deaths in past 6 months					2.9	3.5	2.3			
Deaths in past year								6.0	6.6	5.3

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Affected by HIV/AIDS

We asked respondents a series of questions to determine whether their household had been impacted by HIV/AIDS. The differences between households were not statistically significant (Table 10.) Note that this is the respondent's report of whether they have been affected by HIV, which may be an underestimate due to the stigma surrounding AIDS. Given that 30% to 40% of households have had a death in the past five years and half of households care for orphans, the true percentage affected by AIDS is likely higher.

Table 10. Affected by HIV/AIDS

According to Household Heads in March/April 2008	C n= 392 %	I n=374 %
• One or more member of the household is living with HIV/AIDS	3.8	6.2
• Of PLWHA, number of household members taking ARVs	n=15 (66.7)	n=19 (82.6)
• Death of a household member due to HIV/AIDS in the past 10 years	12.8	9.6
• Household have absorbed children or adults from other households because caregivers or others died of HIV/AIDS	7.9	8.3
• Households lost financial support due to the death of someone who had AIDS before March 07	4.9	2.9

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Migration

Migration of Adults and Children

The purpose of examining inward and outward migration among households receiving cash is to determine whether cash 'pulls' people in. Prior to receiving the transfer, households that were cash strapped, might have sent members (mainly children) to relatives or other households as a coping mechanism. With the cash, some of these children might return. In addition, adults seeking to benefit from the regular transfers might try to join the household. By receiving cash on monthly basis, households gain a higher economic status so that their poorer relatives might send family members to beneficiary households to take advantage of the regular transfers. However, there was relatively minor inward and outward migration; and HHH reported that only 18 adults entered intervention households and 12 adults entered control households during March 2007 and March/April 2008. The majority of adults entering the household came from villages within Mchinji. Additionally, only 33 adults left intervention households and 23 adults left comparison households (Table 11). This may be because many households lack extended family members, which partly explains their high level of destitution prior to the transfer.

Twice as many children (45 vs. 23) joined intervention households, but still only 3.6% of intervention and 2.6% of comparison households had a child join (Table 9). Death or the divorce of a parent were the most common reasons for children joining. Similarly to adults, most joining children came from within Mchinji. Fewer comparison households had children leave compared to intervention households (5.2% vs. 7.8) and overall only 45 children left comparison and 97 children left intervention households (Table 12).

Table 11. Migration of Adults

Data collected in March 2008 for Migration during the past year.	**C n=659 %**	**I n=704 %**
Percentage of households that had an adult join	**1.8 (n=12)**	**2.6 (n=18)**
Was Ill/ Illness	0.0	5.6
To care for children/adults	16.7	0.0
Marriage or Divorce	41.3	66.7
Return from work elsewhere	8.3	0.0
School	0.0	11.1
Because of cash transfer	16.7	0.0
Other	16.7	16.7
Percentage of households that had an adult leave	**3.5 (n=23)**	**5.1 (n=33)**
Migrated for work	8.7	3.0
Change in marital status	21.7	33.3
Financial reasons	43.5	42.4
Deserted the household	13.0	3.0
To receive care	8.7	9.1
Don't know	0.0	3.0

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05; +Percentages are presented but sample sizes are small

Table 12. Migration of Children

	C n= 770 %	I n= 1056 %
Percentage of households that had a child join	2.6 (n=23 children joined HH)	3.6 (n=45 children joined HH)
Reasons		
School enrollment	0.0	13.3
Death of parent/caregiver	21.7	24.4
Divorce of parents	13.0	20.0
To help with care giving	13.0	2.2
To help with other household chores	17.4	2.2
To help with fields	4.4	0.0
Because of cash transfer	0.0	2.2
Other	17.4	31.1
Percentage of households that had a child leave	5.2 (n=45 children left HH)	7.8 (n=97 children left HH)
Reasons +		
Parental Employment	2.2	2.1
School Enrollment	4.4	13.4
Death of parent/caregiver	75.6	50.5
Family economic situation	0.0	6.2
To help with care giving	17.8	23.7
To help with other HH chores	0.0	1.0

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05; +Percentages are presented but sample sizes are small

Additionally, when asked about inward and outward migration (Table 13) only 16% of intervention HHH thought that it was more likely that people would join the household because of the transfer, while 3% thought that it was more likely that people would leave because of the transfer.

Inward and outward migration is one area that should continue to be assessed over time as it is expected that households will change behaviors and decisions about household composition due to the transfer. Given that households did not know how long the transfer would last, they may have avoided adding people to the household during the first year of receiving money.

Table 13. Intervention HHHs perceptions of whether migration occurs when receiving cash transfer

Type of Event/ Activities (n=374)	More Likely %	No Change %	Less Likely %
Family members / people joining household	16.4	49.1	33.7
Family members / people leaving household	3.2	47.2	48.0

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Health and Hygiene

Adult Health

According to HHH in March/April of 2008, there were significant changes in the health status of intervention versus comparison household adults, such that 73% of adults in intervention and 7% of comparison adults experienced improvements in their health status ($p<0.001$) (Table 14). Likewise, 84% of intervention adults were more likely to get healthcare when sick vs. 10% of adults in comparison households ($p<0.001$).

Table 14. Changes in Adult Health from March 2007 to March 2008

	C n=596 %	I n=637 %	
Health Status			
Improved	6.7	73.2	***
Stayed the Same	62.8	18.2	***
Worsened	30.4	8.3	***
Health Seeking Behavior			
More likely to get care when sick	9.9	84.1	***
No change in getting care when sick	62.8	6.8	***
Less likely to get care when sick	24.3	3.3	***
Reasons more/less likely to seek care			
More Likely			
Able to buy medicine	3.2	22.8	
Now have money or cash transfer	0.2	49.8	***
money	2.9	6.3	***
Able to get transport to hospital			
Less likely			
Lack money	12.3	2.0	
No one to provide support	6.2	0.0	*
No transport	2.9	0.0	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Among those HHH that were present in all three rounds of the study, there were important changes in the percentage of adults that HHH reported having a sickness in the past month. Between Rounds 1 and 3, the percentage of adults that had any sickness in the past month dropped from 80% to 59% in intervention households versus 81% to 73% in comparison households (Table 15). While both households experienced decreases in the percentage of adults with illnesses, 20.2% of intervention adults went without illnesses versus only 7.3% of comparison adults (p<0.001). There were also declines in the percentage of adults in both intervention and comparison households that were reported to have chronic illnesses (*mostly malaria)* and disabilities. However, further investigation into the data is needed to understand how there could be declines in these disabilities and other illnesses (*the datasets do contain information on who has the illness/disability and the type of chronic illness and disability allowing for further analyses.)*

Table 15. Health status among all adults from March 2007 to March 2008

	Round 1			Round 2				Round 3			
	Total n=1233	C n=596	I n=637	Total n=1233	C n=596	I n=637		Total n=1233	C n=596	I n=637	
Health status	%	%	%	%	%	%		%	%	%	
Sick in past month	80.8	81.4	80.2	64.6	72.5	57.0	***	65.9	73.1	59.0	***
Chronic illness	26.7	25.5	28.3	19.0	20.0	17.9		15.6	18.3	13.1	*
Disabled	20.2	20.3	20.1	14.8	17.1	12.6		12.9	14.1	11.8	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

The difference-in-differences impact estimate for the number of reported sicknesses in adults in the past month between March 2007 and April 2008 is 7.9 percentage points, indicating that intervention adults had a greater reduction in sicknesses than comparison adults.[3]

In a comparison of expenditures on healthcare for illnesses among adults, HHH from intervention households reported spending more than comparison households (Table 16). In fact, 63% of comparison HHH reported

[3] Further regression analysis is needed to parcel out the determinants of illnesses, such as age of adult, size of transfer, etc.

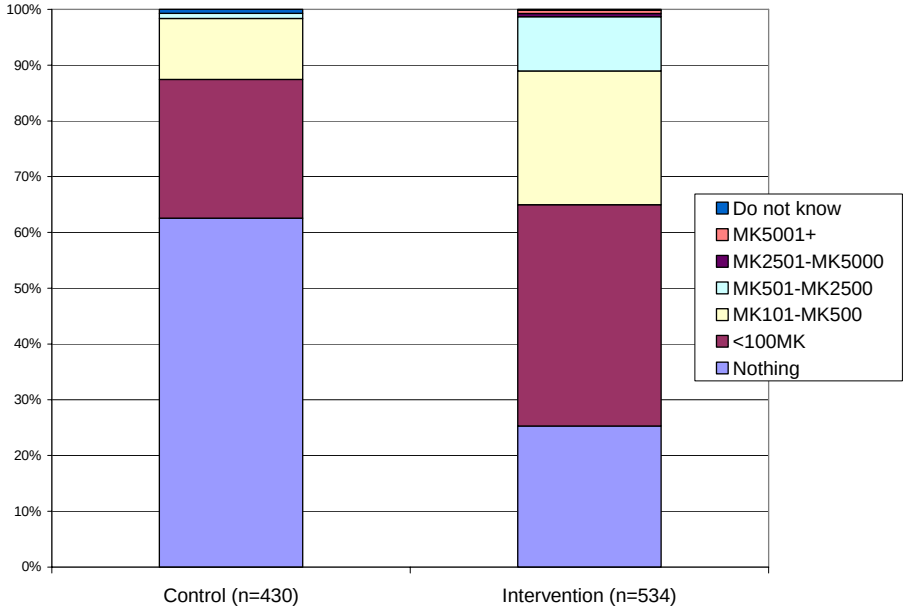
spending nothing on healthcare for adult illnesses versus only 25% of intervention households that did not spend any money on illnesses (Figure 2).

Table 16. Household Expenditure on Each Adult Illness

	C n=430 %	I n=534 %	
Nothing	62.6	25.3	***
<100MK	24.9	39.7	***
MK101-500	10.9	24.0	***
MK501-2500	0.9	9.7	***
MK2501-5000	0.0	0.6	
MK5001+	0.0	0.6	
Do not know	0.7	0.2	

Key: C= Comparison/control household; I = Intervention household;
*** p<.001, ** p<.01, * p<.05

Figure 2. Expenditures on adult illnesses



If I cannot get to the hospital, I just buy medicine from local grocery shops available in the village. In the past it was not like this. It was not easy to afford medicine when I got sick. [Elderly Headed Household]

Before the cash transfer I often got sick; every week in bed with different types of disease like headache, malaria, stomach ache but since the cash transfer, life status has changed. I am on ARV treatment now. [PLWHA Household].

With the cash transfer money they (parents) are able to pay medical bills at Kapiri mission hospital and they also use the money for transport. In the past one could spend the whole month on the mat in pain. They were just sleeping because they did not have enough money to go to the hospital. (12 year old girl)

BMI

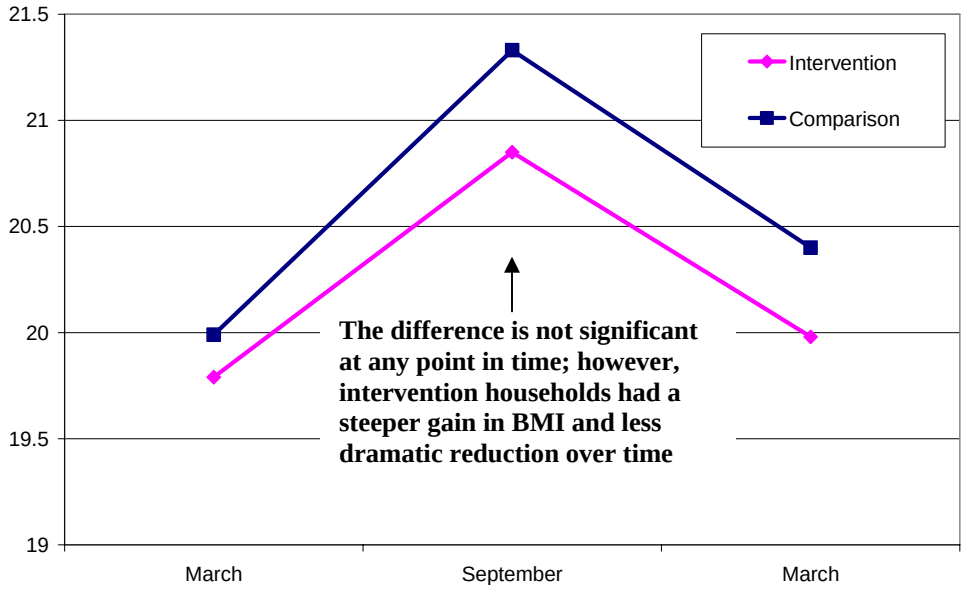
Both intervention and comparison HHH appear to follow a seasonal pattern by which they are at their lowest weight at the end of the rainy season (March) and higher weights in September, as winter ends (Figure 3). During all three rounds, there were no significant differences in the percentage of household heads that were underweight, normal weight, overweight or obese; only a pattern by which all HH gained and lost weight according to the time of year (Table 17). Mean BMI scores were not significantly different over time, although during each data collection round, intervention households had higher average BMI scores (not significant). The amount of cash that households received was important however. Interestingly, in longitudinal models where gender, age and time was held constant, BMI among HHH did not decline during the year *only* when households received more than MK1,800 per month (model not shown).

Table 17. BMI among Household Heads

n=589	Round 1		Round 2		Round 3	
	C %	I %	C %	I %	C %	I %
Under weight	36.2	31.4	24.2	20.6	33.7	28.8
Normal weight	58.8	64.6	65.4	66.4	60.0	65.3
Overweight	4.1	3.3	8.5	10.3	4.4	5.2
Obese	0.6	.07	1.6	2.2	0.3	0.3

The difference-in-differences impact estimate for the percentage of adults whose BMI score classifies them as underweight [between March 2007 and April 2008] is 2.5 percentage points, indicating that intervention adults had a greater reduction in the percentage that were underweight compared to control adults.

Figure 3. BMI among Household Heads



Children's Health

Similarly to adults, intervention HHH reported significant differences in child's health status as compared to comparison households (Table 18). The health of 31% of children in intervention households vs. 13% of

children in comparison households was rated as excellent (p<0.001) while the health of 13% of intervention and 33% of comparison children was rated as poor or fair (p<0.001). Intervention HHH reported that the health of 81% of intervention children improved (vs. 15% of comparison children) and more than 80% of children were more likely to get care when sick (vs. 8% of comparison children) (p<.001).

Table 18. Health Status and Changes in Child Health from March 2007 to March 2008

	C n=770 %	I n=1056 %	
Childs Health as of March/April 08			
Excellent	12.9	30.6	***
Good	54.4	55.9	
Fair	27.5	12.1	***
Poor	5.2	1.4	***
Since, March 07, has health status			
Improved	14.5	81.4	***
Stayed the Same	71.6	15.8	***
Worsened	13.8	2.8	***
Since, March 07, Health Seeking Behavior for child			
Less likely to get care when sick	20.0	4.9	***
No change in getting care when sick	68.0	6.1	***
More likely to get care when sick	7.8	79.9	***
Since, March 07, reasons More likely to seek care			
Able to buy medicine	1.6	30.5	*
Now have money or cash transfer	0.4	42.9	***
Able to get transport to hospital	2.7	2.9	***
Since, March 07, reasons Less likely to seek care			
Lack money	13.3	1.1	***
No one to provide support	3.8	0.0	**
No transport	1.7	0.2	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Moreover, during Round 3, HHH reported that intervention children experienced fewer sicknesses in the past month versus comparison children (42% vs. 55%, p<0.001) (Table 19, Figure 4). Between March 2007 and March/April 2007, there was a 23.4% reduction in the percentage of intervention children experiencing illnesses in the past month versus 12.5% reduction in comparison children (p<0.001).

The difference-in-differences impact estimate for reported sicknesses among children in the past month [between March 2007 and April 2008] is 10.9 percentage points, indicating that intervention children had a greater reduction in sicknesses than comparison children.

Figure 4. HHH reported sicknesses among children in past month

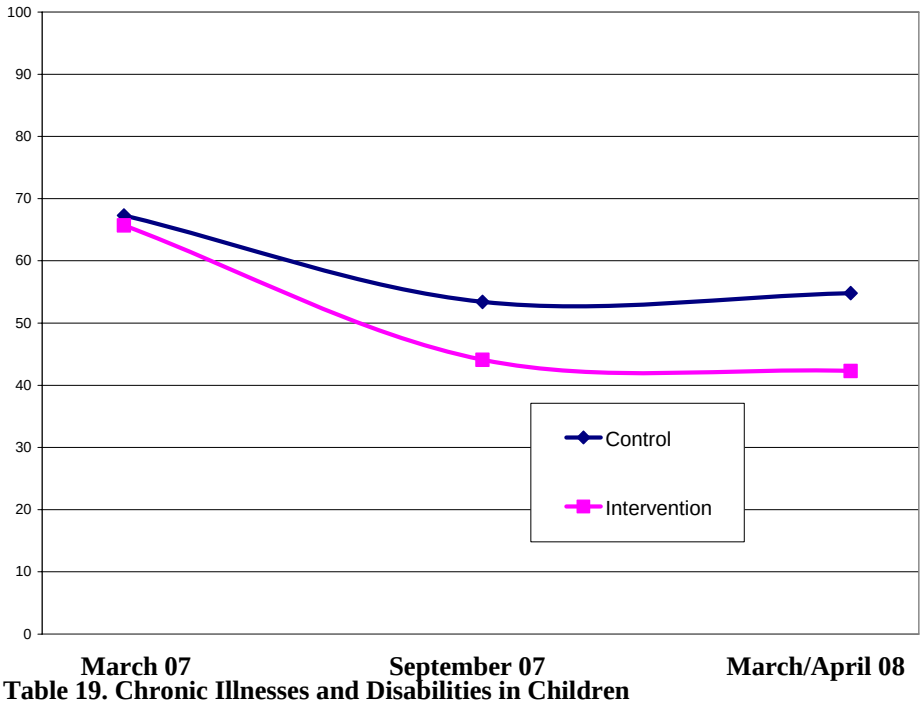


Table 19. Chronic Illnesses and Disabilities in Children

	Round 1			Round 2			Round 3		
	Total n=1578 %	**C n=673 %**	**I n=905 %**	**Total n=1578 %**	**C n=673 %**	**I n=905 %**	**Total n=1578 %**	**C n=673 %**	**I n=905 %**
Health status									
Chronic illness (ill for >1 month in past year)	7.8	8.2	7.6	3.5	3.4	3.3	3.2	3.9	2.6
Disabled	3.7	4.2	3.4	3.1	3.8	2.5	3.2	3.3	3.2

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

According to HHH, 79.6% of intervention children receive just enough or more than enough healthcare when children were ill versus 20.4% of comparison children (p<0.001) (Table 20).

Table 20. Healthcare for Children according to HHH

	C n=392 %	**I n=374 %**	
Healthcare household receives			
Less than enough	79.6	20.3	***
Just enough	20.4	76.7	***
More than enough	0.0	2.9	***

Key: C= Comparison/control household; I = Intervention household;
*** p<.001, ** p<.01, * p<.05

The children too have benefited a lot. If it was not for the scheme, I could be dead by now. They would have nobody ... (41 year old male caring for 5 orphans)

To these children [her grandchildren], they now take porridge each morning and they are in good health as you can see them unlike the past. To me it has helped me a lot because I use the money for ARV drugs while in the past I used to go on foot waking up 4 am and back around 8 pm each month but now that is history. (65 year old female PLWHA with 2 grandchildren)

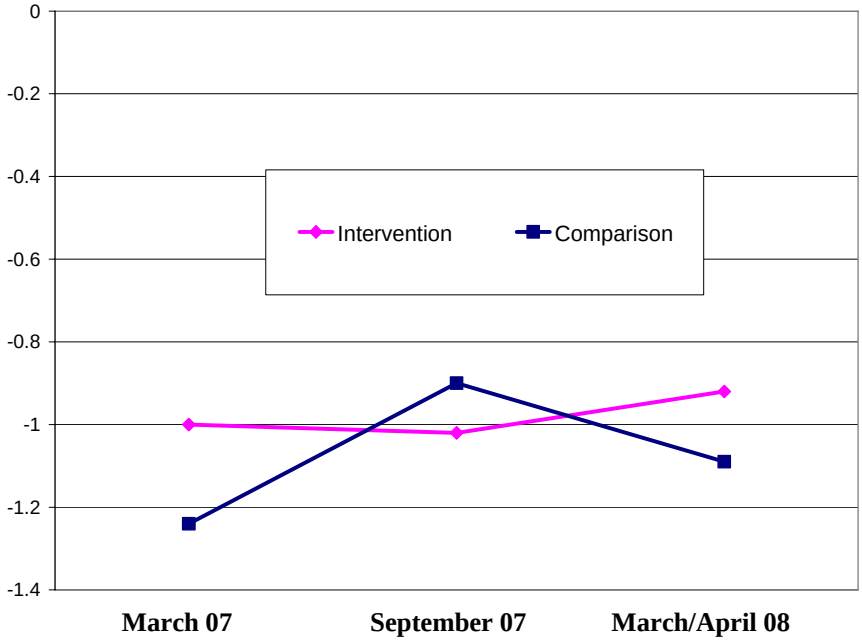
They [parents] make good decisions because they buy food for the family and we are having a healthy life. We are now eating three times a day which is very different with the past when we were only eating once, or sleeping without taking food. (Girl)

We now have what we usually lacked… food. We are free to eat what we want because our parents now have the money …. Before the cash transfer we were always hungry as parents did not even have a tambala to buy food. (12 year old)

Child Anthropometry

The impact of cash on weight for age scores of children under five years old is somewhat complicated in that intervention children begin with slightly higher weight for age scores than comparison children (although not significantly different.) (Figure 5) By September, comparison children appear to gain more weight than intervention children, (again the difference is not significant); but while comparison children have lower weight for age scores by March/April 2008, intervention children have slightly higher, although not significantly higher weight-for-age scores. Intervention children appear to have more stable weight for age scores over time and the difference between underweight scores between Rounds 1 and 3 are not significant.

Figure 5. Average underweight scores for children under five (n=170)



However, when the percentage of children that are categorized as underweight are compared over time, there is a reduction in the percentage of intervention children that are underweight versus comparison children (Table 21). In March 2007, 35% of intervention and comparison children were underweight. By March/April 2008, 26% of comparison children, and only 15% of intervention children were underweight ($p<0.08$).

Table 21. Percentage of children wasted, stunted, underweight

n=170	Round 1		Round 2		Round 3		
	C	I	C	I	C	I	
Wasted	9.6	8.3	4.1	6.4	6.9	3.4	
Stunted	55.8	53.8	50.7	44.5	58.4	52.2	
Underweight	35.1	34.8	23.4	27.2	26.0	15.2	~

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05, ~p <.08;

The difference-in-differences impact estimate for wasting, stunting, and underweight among children [between March 2007 and April 2008] is

- **2.2 percentage points for wasting,**
- **4.2 percentage points for stunting, and**
- **10.5 percentage points for underweight**

indicating that intervention children had a greater reduction in the percent that were wasted, stunted and underweight than comparison children.

Hygiene Practices

While there were no significant differences at baseline, by March/April 2008, intervention HHH were more likely than comparison HHH to report that they (65% versus 12%, p<0.001) and children in the household bathed on a daily basis (91% vs. 67%, p<0.001) (Table 22).

> *With … money I can now buy bathing soap for the children, the children have stopped doing casual work, I can buy school uniforms and I can now pay school fees. I now have enough food to last for a year. The children have mats to sleep on and blankets. I have also managed to buy fertilizer and chickens for my household. (38 year old female who cares for 6 orphans)*

Table 22. Hygiene Practices of Household Heads

Household Heads	**C n=392 %**	**I n=374 %**	
Frequency HHH uses soap when bathing			
Daily	11.7	64.7	***
4-6 times per week	14.0	16.3	
1-3 times per week	45.4	17.1	***
Never	28.8	1.9	***
Frequency HHH brushes teeth			
Daily	29.6	57.2	***
4-6 times per week	4.9	4.0	
1-3 times per week	7.1	7.2	
Never	58.2	31.6	***
Households with children	**C n=291 %**	**I n=317 %**	
Frequency children bath			
Daily	66.7	90.9	***
4-6 times per week	11.3	4.4	**
1-3 times per week	15.8	1.6	***
Never	1.0	0.3	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Education

School Enrollment and Attendance

The analyses of schooling was completed for all children aged 6 to <18 who were in households during all three rounds of data collection.

Children in intervention households experienced important improvements in school enrolment and class attendance. (Table 23) Between March 2007 and March/April 2008, 8.3% of children in intervention households were newly enrolled in school versus 3.4% of comparison households (p<0.001). By March/April 2008, 96% of all intervention children versus 84% of all comparison children were enrolled in school (p<0.001). In addition, while there were no significant differences in the number of days that HHH reported that children were absent in the month prior to the survey *(Feb 07)*, by March/April 2008, intervention children were absent 1.3 fewer days than comparison children (p<0.001).

Table 23. School Enrolment for 6-<18 year olds

	Round 1				Round 2				Round 3			
All Children ages 6 - <18 present in Rounds 1-3	**Total n=1320 %**	**C n=555 %**	**I n=765 %**		**Total n=1320 %**	**C n=555 %**	**I n=765 %**		**Total n=1320 %**	**C n=555 %**	**I n=765 %**	
Percent enrolled	84.5	80.7	87.3	**	85.1	79.4	89.3	***	90.2	84.1	95.6	***
Mean number of days absent per month	2.9	3.2	2.8		2.0	2.7	1.6	**	1.6	2.4	1.1	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

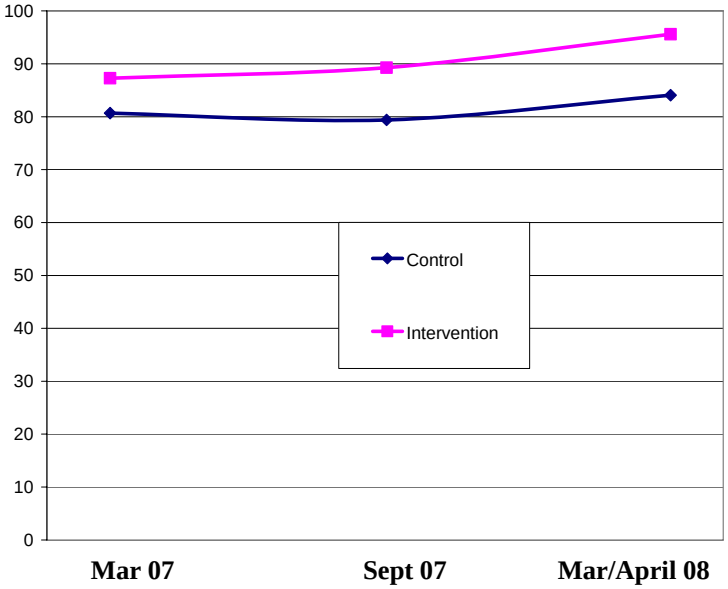
The difference-in-differences impact estimate for enrolment and attendance among children [between March 2007 and April 2008] is

- **4.9 percentage points for enrolment**
- **0.9 percentage points for mean number of days absent**

indicating that intervention children had better enrolment rates and fewer days absent than comparison children.

The analysis below is based on all children in Round 3 (excluding ghosts), regardless of whether they were in Round 1 or 2 (Table 24). The reports by HHH on school enrolment confirm data presented earlier, but also indicate that more comparison children dropped out of school than intervention children (5% vs. 2%, p<0.01) (Figure 6). Additionally, HHH reported that more comparison children were absent the same or more days per week versus intervention children who were absent fewer days per week since March 2007. HHH were more likely to rate intervention children's school performance as excellent versus comparison children (14% vs. 10%, p<0.05) and less likely to rate performance as poor (5% vs. 9%, p<0.01). *(We could not confirm performance with school officials because of inadequate data at schools.)*

Figure 6. School Enrolment between March 07 and March/April 08



Concentration was difficult then because we went to school while hungry and could only see darkness on the chalk board because of hunger, but now we go to school with full stomachs. [Children FGD].

We are only two in this household, I and my 15 year old sister. She is now able to have breakfast before going to school. She is also going to school regularly. She no longer wastes school time by doing ganyu as she is assured of money every month. [Child Headed Household].

Most children that were being sent to do ganyu in order to get food have stopped doing ganyu. They are now concentrating on school. There is great improvement indeed. Children and orphans are abused if a household does not have resources. With cash, a household is able to get their needs. I have interviewed some orphans on how they are staying … and they all tell me that they are staying well… they tell me that they eat enough food and they have soap for bathing. [Extension Worker, Mduwa]

Table 24. Household Head Reports of Children's Schooling

	C n=648 %	I n=909 %	
Change in School Enrolment from March 2007 to March 2008			
Started school	7.6	6.7	
No change, still in school	76.4	85.6	***
No change, still not in school	10.7	5.3	***
Dropped out of school	4.9	2.1	**
Change in Absenteeism from March 2007 to March 2008			
Absent fewer days per week	32.7	60.5	***
Absent same number of days per week	29.0	12.5	***
Absent more days per week	12.7	3.0	***
Not absent school since March 2007	8.0	15.2	***
School Performance	(n=649)	(n=912)	
Excellent	10.2	14.1	*
Good	42.4	47.7	*
Fair	28.8	25.3	
Poor	9.2	5.0	**
Change in School Performance from March 2007 to March 2008			
Improved	39.9	59.3	***
Same	37.8	28.2	***
Worsened	7.1	2.5	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

School Expenses

Among households that reported spending any money on school expenses, the average annual expenditure per child aged 6 to <18, grew by MK454 among intervention children versus MK121 among comparison children between March 2007 and March/April 2008 (p<0.001). At the household level, annual reported

school expenditures grew by MK1,285 in intervention households versus MK236 in comparison households ($p<0.001$) (Table 25).

Table 25. Yearly School Expenses of Children and Households

	Round 1			Round 2			Round 3		
	C	I		C	I		C	I	
Total school expenses per child, C (n=448) I (n=829)									
Mean in MK	217	314	**	298	541	***	338	768	***
Total school expenses per household C (n=212) I (n=292)									
Mean in MK	478	896	***	682	1,756	***	714	2,181	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

The difference-in-differences impact estimate for school expenses [between March 2007 and April 2008] is

- **MK333 per child**
- **MK1,049 per household**

indicating that intervention households are spending more on schooling than comparison households.

Enrolment Verification

In the verification of student enrolment, we found that 96% of children that were reported by HHH to be in school were actually in school (Table 26). School officials in the eight primary schools visited by RAs confirmed attendance of most children; however among the 4% of children not in school, about 20% (or 0.8% of all children) were completely unknown and are likely 'ghost' children.

Table 26. Verification of School Enrolment by Primary School

VDC	Number of children going to school as reported by household head	Children not in school (%)	Children are unknown in the school (child may be a ghost) (%)
Kalulu Kalulu	294	8.5	0.0
Kalulu Pitala	35	2.9	0.0
Mkunda Kangwere	9	0.0	77.8
Mkunda Ludzi	90	7.8	26.7
Mkunda Mponda	34	2.9	11.8
Panye Kapiri	89	5.6	13.5
Panye Masenga	40	7.5	30.0
Panye Mkoma	13	0.0	0.0
Total	604 children	4.4% not in school	Of the 4.4%, 19.8 may be ghosts

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Before the transfer, we had no money for school fees, pens and exercise books so we would be absent from school. We also had no shoes and we could not go to school because we were ashamed of ourselves but now we have shoes and proudly go to school. [Children FGD]

In the past these children were not coming to school due to lack of care at home. The children are now coming to school without many absences. Enrollment has also increased because of the transfers. In the past there used to be a low number of children especially in the third term. Out of a number that was over 1,000 in the first term, the number was coming up to 600 plus by the third term. This year in the first term we had 1060 pupils and now the number is at 997. This is a great improvement on the number of children attending school.[School Teacher]

Comparison children dressed in rags at school

Child Employment and Time Use

HHH were asked how children aged 6 to <18 years spent their time. HHH reported that 35% children help with caring for children or adults in the household and 72% help with household chores (Table 27). While there were no differences in March 2007, by March/April 2008, fewer intervention children did chores or caregiving at someone else's home versus comparison children (4.1% vs. 14%, p<0.001) but more intervention children did other family work, such as selling goods (39.4% vs. 32.4%, p<0.01). HHH reported that children in both intervention and comparison households spent about 2 hours per week on family work. Overall, comparison household children worked 3.3 hours per week versus intervention children who reportedly worked 3.2 hours per week.

Table 27. Child work among 5-<18 year olds

.8 yrs; Total n=1857 C (n=770); I (n=1056)	Round 1		Round 2		Round 3		
	C %	I %	C %	I %	C %	I %	
Help with caring for other children or adults in the household	41.5	43.9	40.0	35.2	33.8	35.9	
Average number of hours per week					1.8	2.0	***
Help with chores	71.6	75.5	69.1	72.3	69.7	73.7	
Average number of hours per week					1.6	1.7	
Chores or caregiving in someone else's home	10.3	11.2	9.7	8.6	13.9	4.1	***
Average number of hours per week					2.8	2.1	
Income generating activities	4.7	4.0	5.1	2.2	1.8	2.3	
Average number of hours per week					2.5	2.6	
Other family work (on a farm, in a business, or selling goods in the street)	27.4	28.3	26.9	36.4	32.4	39.4	**
Average number of hours per week					2.1	2.1	
Leisure activities	85.2	85.0	85.4	90.3	90.6	90.4	
Average number of hours per week					0.9	0.9	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

The difference-in-differences impact estimate for the percentage of children that work doing chores or caregiving in someone else's home [between March 2007 and April 2008] is 10.7 percentage points, indicating that cash transfer had an important impact on child work outside the home.

When asked directly whether children aged 6 to <18 worked to get money or food, 55% of control versus 16% of intervention HHH reported that children in the household did work (p<0.001). This conflicts however with the above date, which was collected by child rather than by household. When child level data is summarized, only 10% of households report that children worked 0 hours per week. However, the question below specifically asks whether children worked for food, so it is possible that the additional work reported for children by HHH is for money spent on items other than food.

> *In most of the cases we were doing ganyu for the bigger part of the year. We could not produce our own crops because we did not have food or money to buy fertilizer.*
> *[Children FGD]*

HHH also reported that more intervention children than comparison households worked fewer hours in March/April 08 than in March 2007 (89% vs. 12%, p<0.001). Among children in intervention households who worked more hours, the main reason for the change included more household chores (Table 28, 29). Among intervention children who reportedly worked fewer hours per week, the most common reasons for working less included that the child was no longer doing ganyu (34%), the child was now in school (21%) and parents were at home more (19%).

Table 28. Time Children spend on work

	C n=648 %	I n=909 %	
Amount of time spent on any type of work			
More hours	20.6	23.2	
Stayed the Same	66.8	47.3	***
Fewer hours	11.5	28.7	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

> *Before the scheme I could stay at home because we did not have anything to eat or sometimes I had to work in order to feed my siblings. Now I always come to school* *[Child Headed Household]*

Table 29. Reasons for changes in hours Children worked since March 2007

	C %	I %	
Worked *more* hours because:	n=136	N=212	
Livestock	0.7	0.0	
Growing Cash Crop	1.5	8.0	
IGA	12.5	7.6	**
HH Chores	22.1	35.4	
Fewer people in the HH	11.0	3.8	**
Sick member of the HH	11.0	7.1	**
Other	40.4	35.9	
Worked *less* hours because			
Employed Workers	0.0	0.8	
Now in School	10.8	21.1	*
No longer doing ganyu	0.0	34.1	***
Have become lazy	9.5	0.8	***
Parents at home more	8.1	19.2	*
Other	67.6	20.7	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Nutrition and Food Consumption

Adequacy of Food

Between March 2007 and March/April 2008, 93% of intervention HHH and 11% of comparison HHH reported that food consumption had improved ($p<0.001$) while 36% comparison versus 1.3% of intervention HHH reported that food consumption had worsened over that time (Table 31). In March/April 2008, four out of five intervention households versus one out of five comparison households reported that their food consumption was just enough over the past month ($p<0.001$); while four out of five versus a little more than one out of ten intervention households reported that food consumption in the past month was less than enough ($p<0.001$) (Table 31). According to HHH, the average number of days in the past month that households did not have enough food was 1.2 in intervention households versus 5.2 in comparison households ($p<0.001$). Additionally, while 44% of intervention households had taken three meals in the day prior to the survey only 8% of comparison household had taken three meals (Table 31). Consequently, 37% of comparison HHH reported being somewhat or very hungry after taking meals while 77% of intervention HHH reported feeling satisfied after taking meals (Table 30).

Table 30. Adequacy of food consumption since March 2007

	Total n=766	C n=392	I N=374	
Since March 2007, has the food intake in the household?	**%**	**%**	**%**	
Improved	51.0	10.7	93.3	***
Stayed the same	30.0	53.1	5.4	***
Worsened	19.2	36.2	1.3	***
How many meals did this household take yesterday?				
No meals	2.5	4.3	0.5	*
One meal	25.5	43.6	6.4	***
Two meals	46.1	44.4	47.9	
Three meals	25.6	7.7	44.4	***
Four meals	0.4	0.0	0.8	
In the past week, how do household members usually feel after a meal?				
Too full	3.3	9.4	15.8	**
Satisfied	31.9	53.8	76.7	***
Somewhat hungry	56.1	31.9	6.4	***
Very hungry	8.4	4.8	1.1	**

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Among comparison households where food intake worsened, reasons included poor harvest (55%), the household had less money than usual (27.5%), and they had less help from family or friends (10.6%).

There is some change. Before the scheme started, three-quarters of the malnourished children that were coming to Chipumi Health Center were coming from Kalulu area. I was busy following up such malnutrition cases. These days, it has changed; there are few malnourished children from this area. In fact, I rarely make follow up visits these days. The children are now healthy. Their families are now buying good food. They at least eat meat, fish, as well as vegetables. *[Health Worker Kalulu]*

Food at household and even village level is no longer a problem because these people are able to buy fertilizer, and have improved seeds, and therefore, be able to harvest more (dimba farming) [winter cropping] *[Agriculture Extension Worker]*

These (beneficiaries) used to shy away from any meetings that I had with farmers. They were shying away because they had nothing to support their farming. These days, they are not shying away because they have the necessary agricultural inputs; so they need the technical support. In my section, I offer a number of agricultural programmes like livestock programme, crop programme, and irrigation programme. The beneficiaries are now growing maize and tobacco and have also bought livestock. Some are even practicing irrigation farming. Because of this, they now come to me. We are now friends. *[Agriculture Extension Worker/Kalulu]*

Food Diversity

Intervention households experienced dramatic gains in their ability to eat a diverse variety of foods between March 2007 and the week prior to the survey in March/April 2008. While the only differences between intervention and comparison households in March 2007 was that more intervention households consumed salt and oil, by 2008, a large percentage of intervention households were consuming foods from every food group (Table 21). While comparison households consumed foods from 4.9 food groups on average, intervention hosueholds consumed foods from 8.1 groups (p<0.001).

Table 31. Household reported eating type of food product during one week period

	Round 1		Round 2			Round 3		
	C n=411 %	I n=407 %	C n=392 %	I n=374 %		C n=392 %	I n=374 %	
Cereals/Grains	99.5	99.8	100.0	100.0		99.5	100.0	
Roots/Tubers	41.6	36.9	55.0	82.3	***	32.9	58.3	***
Pulses	67.2	66.8	68.6	89.7	***	513	92.0	***
Vegetables	98.8	99.5	99.5	100		99.5	100.0	
Meat/Fish	19	24.1	19.1	86.4	***	18.6	82.1	***
Dairy (Eggs/Milk)	5.1	5.4	5.8	41.7	***	4.6	44.9	***
Fruit	70.1	70.5	35.7	75.6	***	49.0	82.1	***
Sugar	36	37.4	48.2	67.9	***	29.6	75.7	***
Cooking Oil	4.6	9.1*	7.8	73.0	***	9.7	73.3	***
Salt	89.8	95.3*	91.0	95.9	**	93.6	96.8	*
Average number of food groups (max-10)	5.3	5.4	5.3	8.1	***	4.9	8.1 ***	8.1 **

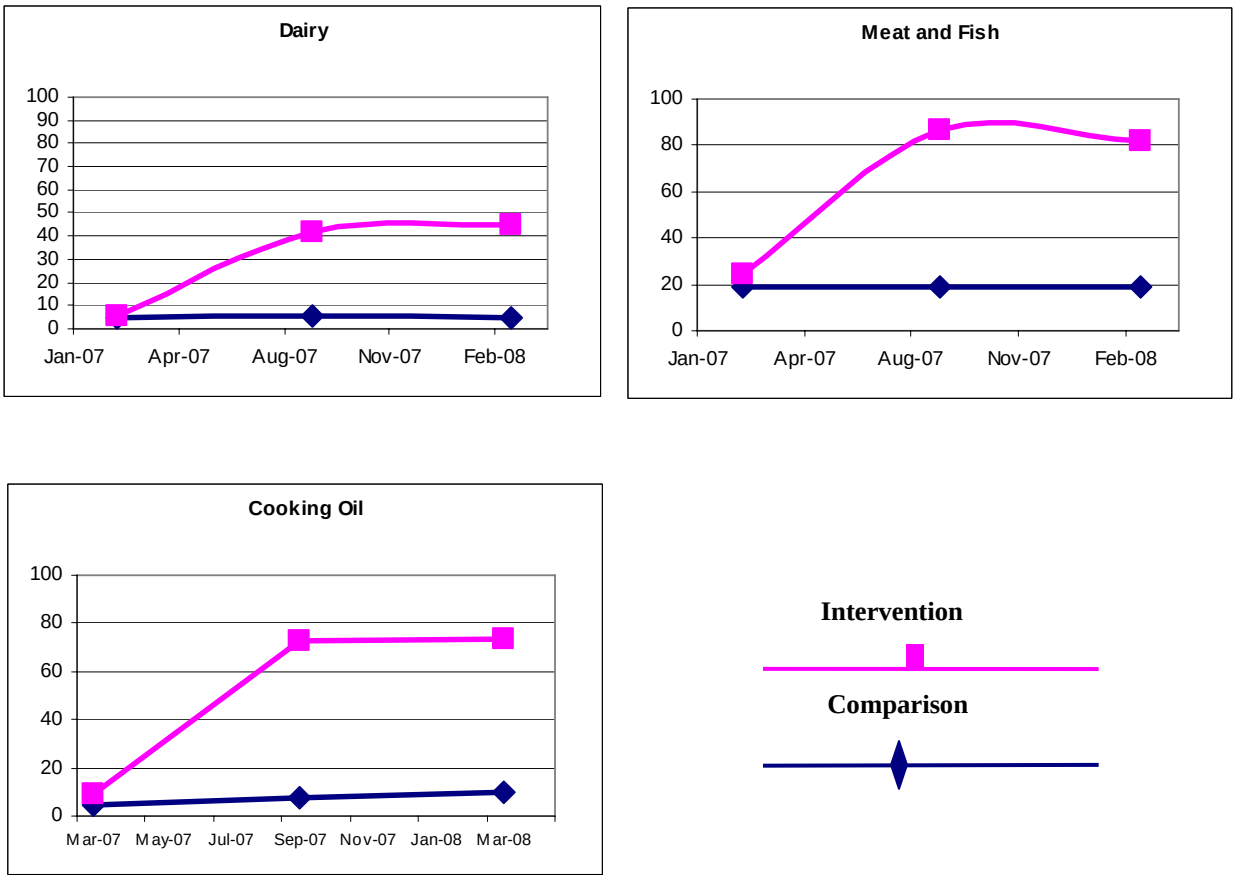
Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

On average, intervention households ate meat, fish, or chicken with meals on 2.1 days versus 0.3 days in comparison households (p<0.001) (Figure 7).

The difference-in-differences impact estimate for average number of food groups consumed [between March 2007 and April 2008] is 3.1 percentage points, indicating that the cash transfer has an

important impact on the ability of households to consume a diverse diet. On average, intervention households consume foods from three more food groups than comparison households.

Figure 7. Percentage of HH that eat selected food groups



Food Stores

In March/April 08, 88% of intervention versus 57% of households had food stores ($p<0.001$). Among households with food stores, intervention households had more stores (Table 32). Figure 8 depicts the percentage of intervention versus comparison households with food stores lasting for each amount of time.

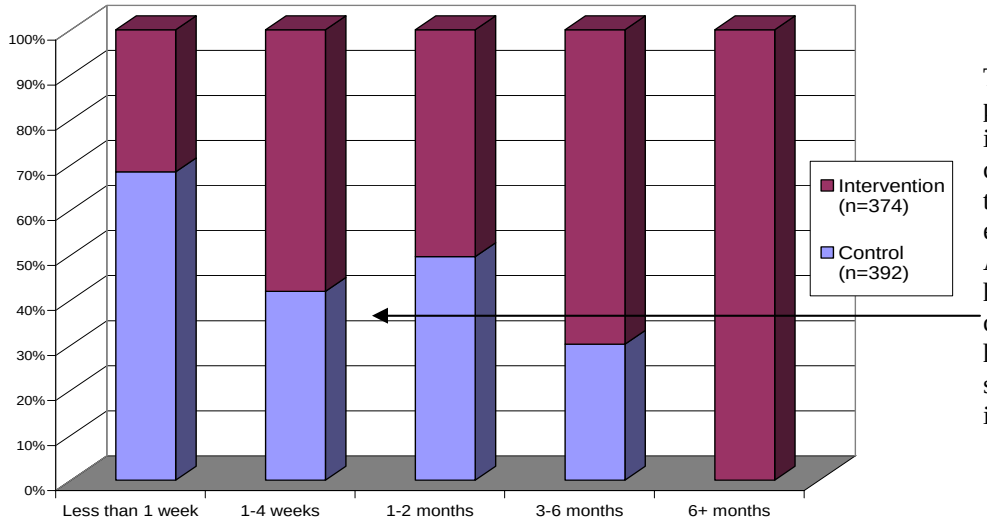
> *Now we don't frequently get ill since we are eating different types of food that make our bodies strong [Children FGD]*
>
> *I can now have my garden cultivated because the money I receive from the scheme enables me to pay for labor. So nowadays, I am able to have at least half of my field cultivated….Generally, the frequency of falling sick has dropped now since the receiving of the transfers because I have something for food and painkillers. Now I fall sick less often. (Female PLWHA with 2 children -age unknown)*

Table 32. Food Stores in March/April 08

Among households with food stores, length of time stores will last	Total n=766 %	C n=392 %	I n=374 %	
Less than 1 week	32.7	48.2	22.2	***
1-4 weeks	40.5	32.9	45.6	**
1-2 months	13.6	13.5	13.7	
3-6 months	9.6	5.4	12.5	**
6+ months	3.5	0.0	5.8	**

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Figure 8. Share of households and length of time that food stores are projected to last by household



This figure shows the proportion of intervention versus comparison households that have food stores for each length of time. Among households that have food stores, comparison households have stores lasting a shorter time than intervention households.

Yes we now eat thrice a day with tea in the morning. This has really helped especially to my sister [ ] who is advised to eat good food as she is on ARV treatment ... Each and every month I try my best to buy meat, fish, and cook vegetables with cooking oil. Sometimes eggs this has made her health to improve, she does not sick often as she used to be. [Child Headed Household]

We are now able to eat good food. I buy meat at least once and fish twice every month. I am advised at the hospital to eat good food, which helps body building as am on ARV treatment. [PLWHA Household]

Household Assets

Intervention households amassed a range of assets during the one year that they received the cash transfer. Assets include household items, productive farm assets, bicycles, and livestock including chickens, goats, and pigs (Table 33). The only differences between intervention and comparison households at baseline was that more intervention households owned sickles than comparison households (26% vs. 17%, p<0.01); however by March/April 2008, more intervention households owned every type of asset and some households owned multiple assets per category.

Table 33. Household Assets

	September 07 (n=766) Round 2			March/April 08 (n-766) Round 3		
	C n=401 %	I n=387 %		C n=401 %	I n=387 %	
Metallic plates	56	91	***	64.1	96.5	***
Pounding mortar	31	52	***	35.4	59.6	***
Pails, buckets	59	90	***	62.6	92.6	***
Hoes	84	92	**	81.8	95.2	***
Axes	28.5	32.5	***	19.0	51.9	***
Sickles+	13 (17**)	54 (26**)	***	17.0	56.9	***
Knifes (panga)	9	38	***	11.3	46.8	***
Metallic pots	72.7	91.2	***	90.0	97.3	***
Bicycle	1.6	13.4	***	2.6	13.0	***
Mats	72.5	95.7	***	79.2	95.5	***
Chickens	10.1	63.4	***	10.3	71.0	***
Goats	1.6	45.2	***	1.3	52.7	***
Pigs	0	17.5	***	0.3	15.2	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05
+Among all of these items, sickles are the only item that intervention households were more likely to own at baseline.

Intervention household with newly built house, drying tobacco leaves.

Intervention household woman with new bicycle

In addition to the above household and productive assets, intervention households were more likely to own blankets (Table 34). More than half of intervention households owned three or more blankets, while nearly one third of comparison households owned no blankets and half of comparison households only owned one blanket. Furthermore by March/April 2008, intervention HHH had more changes of clothing than comparison HHH (3.9 vs. 1.8 changes of clothing, p<0.001).

Table 34. Assets that contribute to Wellbeing

	C n=392 %	I n=374 %	
Number of Blankets in HH			
0	29.1	4.0	***
1	47.5	16.0	***
2	17.1	26.2	**
3	3.3	16.6	***
4	2.0	13.9	***
5 or more	1.0	23.3	***
Household Sleeps on			
Bed and mattress	1.0	1.9	
Bed and mat	2.0	3.2	
Mattress on floor	0.3	1.6	
Bed alone	0.3	0.0	
Mat (grass) on floor	82.1	90.6	
cloth/sack on floor	13.6	2.4	***
Floor (nothing else)	0.5	0.0	***
Other	0.3	0.0	
Average number of changes of clothes for the household head	1.81 (sd 1.1)	3.88 (sd 1.8)	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Household Expenditures

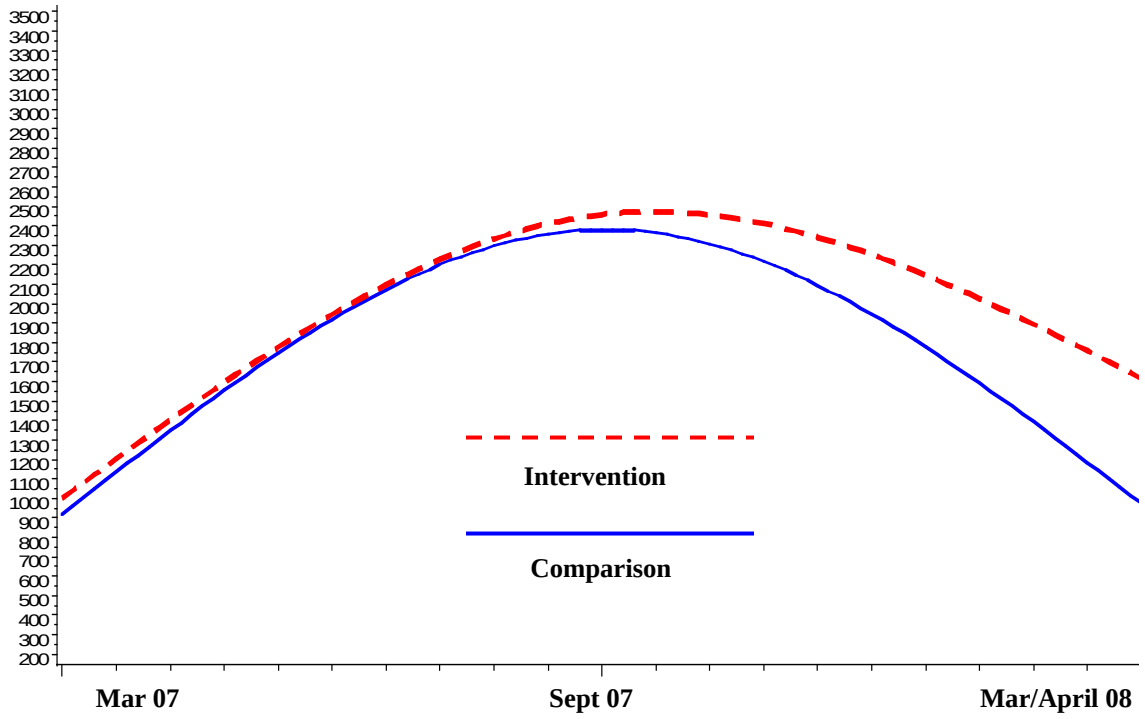
Overall, nearly nine out of ten intervention HHH reported that their economic situation was better in March/April 08 compared to baseline, while less than 5% of comparison households had a better economic situation (Table 35). At baseline, which occurred at the end of the rainy season, monthly food expenditures in comparison households were MK185 higher than intervention households at MK645 versus MK460 ($p<0.001$). By Round 2, household expenditures in intervention households were MK3,560 higher than comparison households at MK7,416 versus MK3,683 per month. Finally by March 2008, food expenditures in comparison households dropped below baseline to MK369 per month and expenditures in intervention households receded to MK3,310. Food expenditures in intervention households were MK2,940 higher than comparison food expenditures at Round 3 and MK2,480 higher than expenditures in the same households at baseline ($p<0.001$) (Figure 9).

Table 35 Household Expenditures

	C n=392 %	I n=374 %	
Economic situation since March 2007			
Better	4.3	86.9	***
Same	45.2	11.8	***
Worse	50.5	1.3	***

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Figure 9. Monthly food expenditures for Intervention and Comparison households



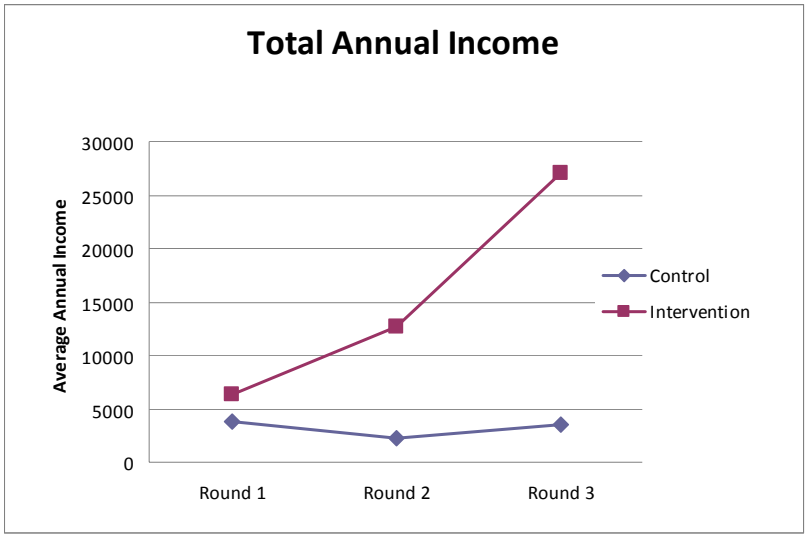
The difference-in-differences impact estimate for the <u>monthly</u> food expenditures [between March 2007 and April 2008] is MK3,125, indicating that the cash transfer had an important impact on monthly food expenditures.

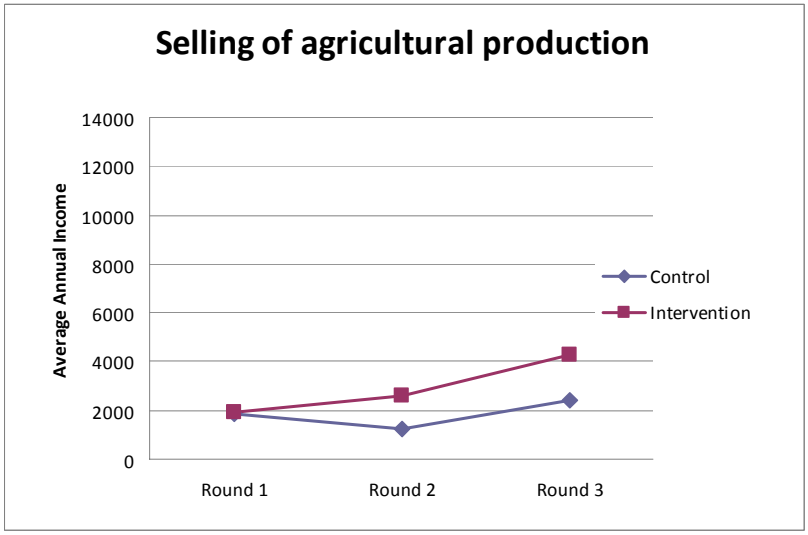
The difference-in-differences impact estimate for the <u>annual</u> non-food expenditures [between March 2007 and April 2008] is MK15,103, indicating that the cash transfer had an important impact on annual food expenditures.

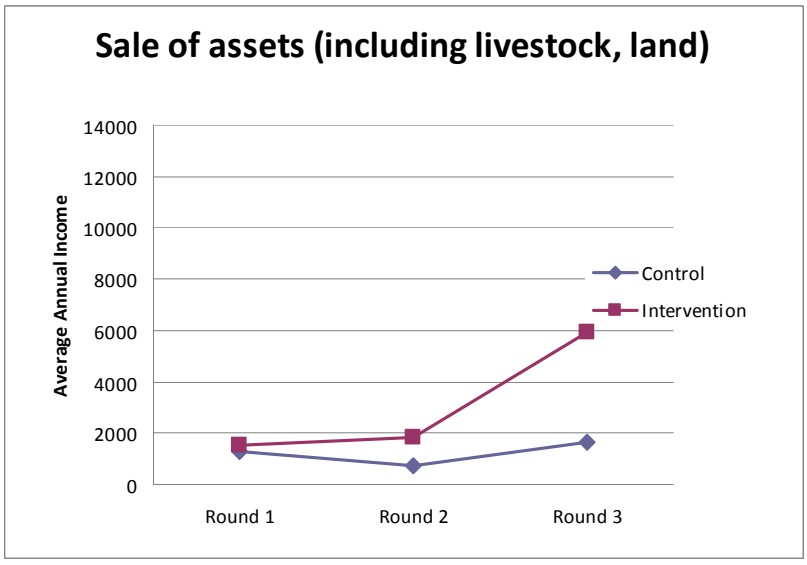
Household Income

Total annual income, from all sources, was higher in intervention versus comparison households in Round 1 (MK6,374 vs. MK3,855, p<.04). By Round 2, the gap was much greater (MK12,679 vs. MK2,185, p<.0001). In Round 3, the difference continued to grow (MK27,079 in intervention vs. MK3,528 in comparison households, p<.0001) (Figure 10.) Obviously, the cash transfer itself partly explains the differences in household income. There are other explanations as well: At Round 1, income from selling agricultural production in intervention households was MK1,1915 versus MK1,879 in comparison households (p=0.94). By Round 3, the difference was significant such that income from selling agricultural production rose to MK6,577 in intervention households versus MK2,397 in comparison households (p=0.004). While few households sold assets, the sale of assets (including livestock and land) also changed over time. In Round 1, intervention households reported receiving MK1,545 per year from the sale of assets compared to MK1,308 in comparison households (p=0.82). By Round 3, income from the sale of assets rose to MK5,958 in intervention households versus MK1,657 in comparison households. SCTS reported that they purchased assets with the intent to sell, rather than responding to households shocks.

Figure 10. Total annual income, income from selling agricultural production, and income from the sale of assets







Use of Cash Transfer by Beneficiary Households

In round three, we asked intervention households whether they spent their money on various items in the past month, and if so, how much they spent per item (Table 36). The majority of households reported spending cash on food (MK903). Household items, savings, school and healthcare also ranked among the most common expenditures.

Table 36. Use of the Cash Transfer for Beneficiary Households in the last month

Item (n=374)	**(%) spent transfer on item**	**If purchased, average spent (MK)**
Household items	54.7	486
Savings	39.8	596
School /education	27.8	470
Healthcare: Medications	24.6	296
Animals	6.5	590
Labour (paying workers, ganyu)	6.2	470
Agricultural inputs	5.2	915
Business or Income generating activity	3.5	569
Transport (not for Health Care)	3.2	369
Housing	2.9	673
Entertainment (video shows)	1.1	583
Alcohol and tobacco	1.1	45
Lending money to others	0.5	950
Gambling	0	0

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

We never used to have household utensils but now we have six plates, two pots, and two basins; one for drawing water and the other one is used for bathing…We also bought a table. [Cash Transfer Recipient]

Yes in my case my mother saves money [now K2000] to buy fertilizer she bought 2 goats, clothes. Since we have a lot of problems the money ends in the, middle of the month and then we struggle up to the month when we receive another money. [Children FGD]

We have a field at where we employ casual labourers to assist us in farming and paying them. This has helped us to manage harvesting two ox-carts full of maize this year unlike the previous years when we could only harvest two bucket full (pails). [Cash Transfer Recipient]

I bought one bag of fertilizer with this money at the price of K950; that was on January. As of now I am keeping K1800 for 2 bags of fertilizer for preparing to apply on my maize field, I kept this money for four months. [Cash Transfer Recipient]

We asked community members whether they thought cash recipients were using their money wisely. Except for rare cases where recipients were said to have spent money on alcohol or too much food, the vast majority thought recipients were making good choices. In fact, in all FGDs, community members reported that most beneficiaries were using their money wisely based on what they could see them purchasing and the improvements they had made to their houses and in their fields:

These people are using the money wisely. In the past they used to lack a lot of things, but now they are able to buy them with money from the scheme… they use it for things that are so helpful to them and their children. The things that they buy are maize flour and relish. [Kalulu VDC]

These people use the money wisely because they usually plan for it before they actually get it. The make a program on how to spend it like buying goats. Most of the households have goats and this makes us to say that they use the money wisely. [Chimongo VDC]

Just to add on what others have already said, before the scheme we buried many HIV+ people who had died. Since the implementation of the scheme, most of them have been saved because they are able to buy food. Since they need foods that are nutritious, they are able to buy them and their bodies are looking healthy. [Chimwala VDC]

This group has tried to make the most out of the scheme. [Panye VDC]

There is change because these households used to have a lot of problems in the past, but now the problems have been reduced because of the transfers. The problems that they were facing in the past were those of hunger, lack of soap and clothes. A lot of children were lacking clothes a thing that caused them to miss many classes. [Chankhanga VDC]

What is happening in the recipient households is so pleasing. [Nthema VDC]

The scheme is helping to fight poverty and it has improved the lives of people in our area. [Chapkama VDC]

Quality of Housing

By March/April 2008, three out of five intervention HHH versus two out of five comparison HHH reported that their housing quality was adequate or more than enough (Table 37). Furthermore, 47% of intervention versus 11% of comparison HHH said that their housing conditions had improved over the past year.

Table 37. Quality of Housing

	C n=392 %	I n=374 %	
Housing Accommodation/Structures			
Less than enough	58.2	39.0	***
Just enough	40.1	54.8	***
More than enough	1.8	6.2	**
Changes in housing	n=392	n=374	
Improved	11.5	47.3	***
Same	59.4	42.0	***
Worsened	28.8	10.7	***
Housing Improvements	n=45	n=177	
Built new home	2.0	14.2	
New door, window or other house fixture	0.8	4.3	
Roof (new/improvement	6.6	24.1	
Housing Deterioration	n=113	n=40	
House fell down	4.3	1.6	
Roof damage (rain, wind, etc)	17.6	4.6	*
Walls damaged	4.1	0.5	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

At first I made efforts to mould the bricks with help from my children. But spending started when I hired the brick layer to do the work for me. So the bigger house I was charged K1000 and other smaller one I was charged at K750 and currently there is the other house which is at a window level. I intend to leave the other hoses for my children since they are many. Imagine seven of them!]

Damage to a house – March 2008

Household Shocks from March 2007 to March 2008

Nearly half of all households reported experiencing a large rise in food prices since the baseline, however while intervention and comparison households reported that this shock resulted in a loss of income, 6% of control versus 1% of intervention households said that the shock forced children to leave school for more than one week ($p<0.001$) (Table 38). In addition, nearly one out of three comparison and one out of five intervention HHH reported that damage to the house was a serious shock to the household that lead to loss of income. Again, 6% of comparison versus 0% of intervention HHH reported that this shock lead to children needing to leave school for one week or more ($p<0.001$). Interestingly, 4% of comparison and 0.3% of

intervention (p<0.001) HHH said that they lost outside remittances during the year. Further analyses is needed to explore why households that did not yet receive cash lost outside support.

Table 38. Household Shocks

	Experienced Shock in the past year			Households that experienced particular shock - resulted in loss of income		Households that experienced particular shock - Children had to leave school for more than one week		
	C n=392 %	I n=374 %		C %	I %	C %	I %	
Large rise in price of food	48.0	56.7	*	54.3	59.4	6.4	0.9	**
Illness or accident of household member	33.9	32.9		73.67	72.4	20.3	20.3	
Damage to house	31.1	18.5	***	37.7	43.5	5.7	0.0	***
Lower crop yield drought/ floods	20.9	18.7		59.8	64.3	11.0	2.9	**
Crop disease or crop pests	11.5	16.8	*	71.1	81.0	0.0	0.0	
Livestock died or were stolen	8.7	27.3	***	82.4	84.3	0.0	0.0	
Death in household	6.6	5.4		69.2	60.0	42.3	30.0	
End of regular remittances from outside HH	3.8	0.3	***	66.7	100.0	6.7	0.0	

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Decision making and beneficiaries' use of cash transfer

In order to determine whether women made better or different decisions about how to use money than men, we asked HHH to report who made decisions about money in the household. In the majority of households there was no spouse, and HHH made financial decisions on their own, with no significant differences between intervention and comparison households. Likewise, there were no differences in the gender of the decision maker based on intervention status. Women alone made financial decisions in more than 60% of households (Table 39). *In future analyses, we will examine spending choices by gender of HHH and who the decision maker is.*

Table 39. Decisions about how money is used

	C n=392 %	I n=374 %
Decisions about how money in the household is spent is made by:		
Household head only	14.0	19.5
Household head only (no spouse in household)	65.8	61.0
Spouse only	1.5	0.8
Decisions made together (whole HH)	8.7	4.6
Head and spouse only	7.9	11.8
Others outside the household	1.0	1.9
Other	1.0	0.5
Gender of person who makes household monetary decisions		
Male	20.9	23.3
Female	64.0	61.2
Both Male and Female together	15.1	15.5

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Impact of cash transfer on likelihood of events

In Round 3, we also asked HHH whether the likelihood of certain events would change as a result of the cash transfer. On average, HHH reported that positive events (children being enrolled in school, seeking healthcare when sick, eating higher quality foods, tilling fields, improving housing, and planning and saving for the future) were more likely as a result of the cash transfer (Table 40). Nearly half of HHH reported that negative events, such as arguing or fighting about money were less likely and 5% of households reported that arguments were more likely.

Table 40. Beneficiary Household Head Reported Likelihood of Events

Type of Event/ Activities n=374	More Likely %	No Change %	Less Likely %
Children not missing days of school	72.0	6.7	4.0
Children being enrolled in school	46.4	29.4	3.2
Seeking healthcare when an adult is sick	80.9	4.9	12.7
Seeking healthcare when a child is sick	69.5	1.9	12.7
Eating higher quality foods	88.4	8.1	3.5
Attending parties	10.5	59.8	28.6
Improving housing condition	50.4	16.7	5.9
Tilling fields	48.0	36.1	15.1
Planning for future	76.8	14.0	8.63
Saving for future needs	69.5	17.8	12.1
Arguments or fights in household over money	4.6	43.9	48.5

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

They[our parents] make good decisions because they buy food for the family and we are having a health life. We are now eating three times a day, which is very different with the past when we were only eating once, or sleeping without taking food. [Children FGD]

We are also eating better. Now, when I need maize or groundnuts, I just go ahead and buy it without any sort of problem, which is very contrary to the past when I had little money for food. [Elderly headed household]

Some times we take porridge in the morning when money is available while before the transfer we could wait for lunch. [Elderly headed household]

To be honest enough this money is not enough. I stay with two kids but by the time the committee members were registering our names, they did not include them. The K600 I receive is for one person so that is why a lot of change is not seen in my household. I bought school uniform for one child, I cook porridge for them; I buy fish once per month. I wish could buy at least one goat before our time expires. [Elderly headed household]

Psychological Well Being among Household Heads

Not surprisingly, cash appears to be a psychological boost for those that receive it. Nearly four out of five intervention HHH versus one and a half out of five comparison HHH reported that they were hopeful that the situation of their household would improve. This is surprising given that comparison HHH were told in March 2008 by the District that they would be receiving transfers in by May 2008, although HHH may not have believed the officials. Furthermore, four out of five intervention versus one out of five comparison

HHH reported that they were satisfied or very satisfied with their lives (p<0.001) *(there were no differences in this measure at baseline*). Additionally, more intervention than comparison HHH reported having friends outside the household, having someone to turn to if they experienced a shock, and feeling accepted in the community (Table 41). Finally, while there no differences in households at Round 1, by Round 3, there was a significant reduction in the percentage of HHH that reported begging to get enough food in intervention households versus comparison households (28% vs. 8%, p<0.001).

Young girl and her grandmother in front of their new home. Before the family lived in a one room mud hut with a dilapidated door. [March 2008]

Table 41. Psychosocial well-being of Household

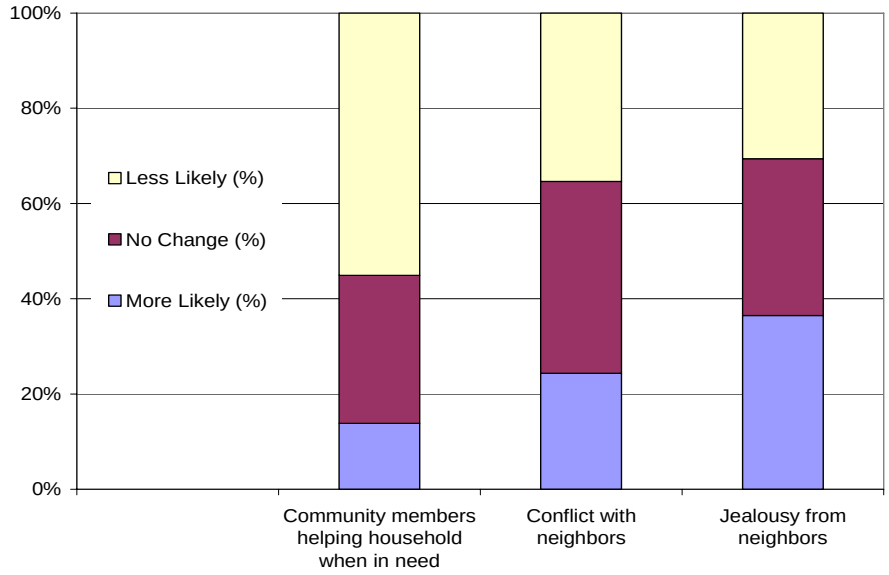
	C n=392 %	I n=374 %	
HH head hopeful household situation will improve			
No	21.4	3.8	
A little	19.4	9.4	***
Yes	28.6	79.4	***
Do not know	30.6	7.5	***
HH head Satisfaction level with their life			
very unsatisfied	17.1	3.5	***
unsatisfied	44.6	7.5	***
neither unsatisfied or satisfied	17.1	9.6	**
satisfied	19.6	56.7	***
very satisfied	1.5	22.7	***
Household head has close friends outside of the house	66.1	80.5	***
Average number of close friends the household head has	1.86	2.07	*
Household head would have some to go to borrow food if there was a sudden shock	39.8	53.7	***
Household is accepted in the community			
No	5.4	3.2	
A little	11.2	6.4	*
Yes	82.9	89.6	**
Household members experience discrimination because of poverty, HIV/AIDS or other reasons	20.2	13.9	*

Key: C= Comparison/control household; I = Intervention household; *** p<.001, ** p<.01, * p<.05

Impacts at the Community Level

Despite the psychological impacts from receiving cash, intervention HHH still reported that they were more likely to feel jealousy from other households in their communities and, on average, community members were less likely to help them since receiving the cash transfer. Twenty-two percent of intervention HHH reported that they experienced more conflict in the community since receiving the transfer (Figure 11).

Figure 11. Cash Recipients reports of experiences with community members

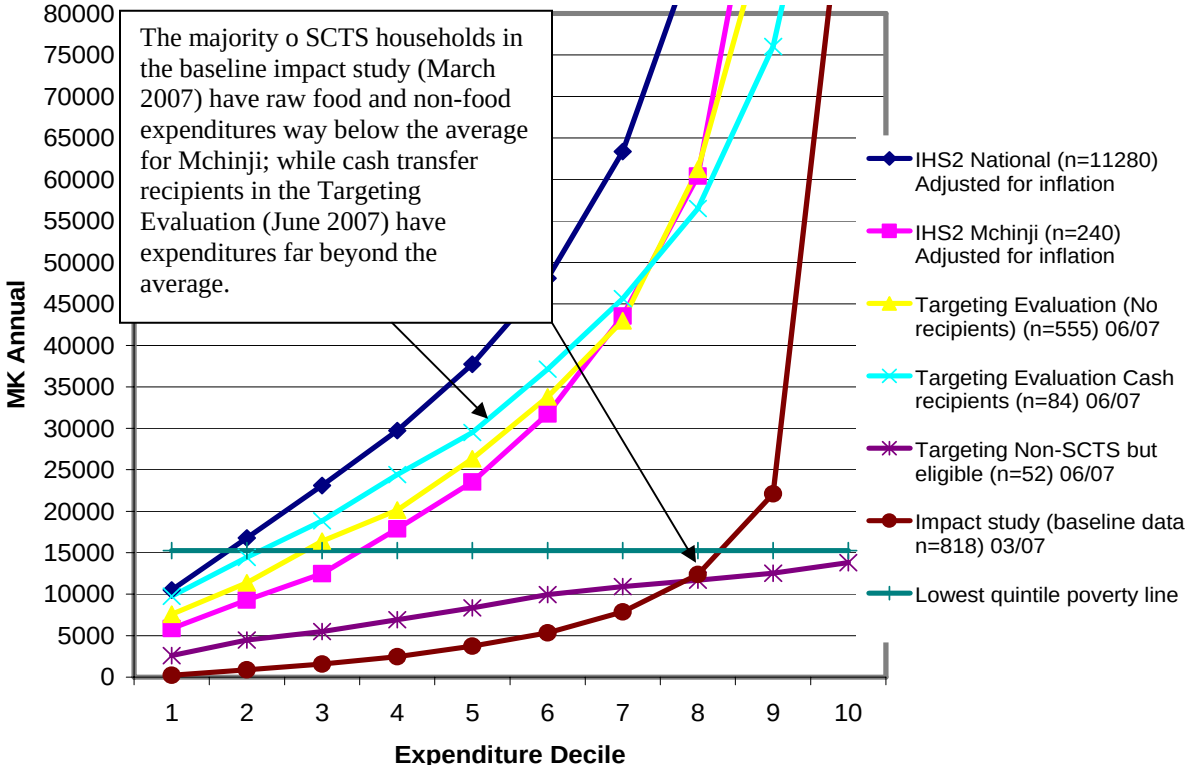


Given the widespread poverty in Mchinji and throughout Malawi, it is not surprising that these households would be the object of jealousy or conflict. Figure 11, from the Targeting Evaluation compares raw food and non-food expenditures among

- non-recipient households (n=555) in the Mchinji Targeting Evaluation
- recipient households (n=84) in the Mchinji Targeting Evaluation
- households in the IHS2 from Mchinji (n=240) (adjusted for inflation); and
- comparison households in this Impact Evaluation at baseline

The figure illustrates the low level of expenditures in comparison households (which were not significantly different from intervention households at baseline). The cash transfer boosts expenditures beyond the average for all Mchinji residents (Figure 12).

Figure 12. Annual household raw food and non food expenditures for various households



According to community members, the impact of the cash transfer on the community is mixed (Table 42). While some community members report feeling improvements and overall reduction in poverty due to the scheme (15/18 non-recipients and people in 10/15 FGDs thought the SCTS impacts community development); while others (1/3 of people in FGDs) explain that there are just too few people receiving the money for anyone but recipients to feel an impact. While there was some dissatisfaction in the choice of beneficiaries, 32% of HHH thought the Targeting process was unfair (See Targeting Report); there were no negative reports of the impact of the SCTS in any interviews of FGDs.

Table 42. Perceptions of impact of SCTS on community by community members in FGDs and IDIs

Positive	*When we have bills at the mission hospital we borrow money from beneficiaries and pay our bills. [Kakunga VDC]*
	The bicycles which they have bought help to take patients to hospital and we also borrow from them for our own use. [Kakunga VDC]
	These people are using the money wisely since they help us when we beg from them things like food. [Chimwala VDC]
	If someone receives money from the scheme, we are able to go and ask him for soap. If they receive the transfers, it is like we too have received. [Ndooka VDC]
	These households that are receiving the transfers used to depend on other people. Now they are self supportive because they are getting the transfers. This has helped those that were assisting them in a way that their burden of looking after many people has been made lighter. [Chankhanga VDC]
	The scheme has brought in business in the community. Recipients of the transfer are now doing small-scale businesses. Selling bananas and 'mandasi' (fritters) Selling vegetables, buying maize at wholesale price and sell it at retain price. For example, the sugarcane that is found next to Mkunda CBCC belongs to a beneficiary who is doing this business. [Nkunda VDC]
	In addition to that when you have a chicken for sale, instead of going to Kapiri to sell it, you sell it within the community. Recipients buy them because when they have received the money they eat meat. [Chimwala VDC]
	Money comes to this area and it is used within this area. Those who own grocery shops are making more profits and it is like they are benefiting too from the scheme [Chapakama VDC]
	There is change in the local economy. When these people receive their money they buy chickens and groundnuts from us. In so doing, the money is kept in circulation in the community. [Kalulu VDC]
	It brings development in this area because some beneficiary households bought goats, pigs and maize while other beneficiaries buy goods e.g. salt soap, sugar from local traders within the village. With that the community is developing little by little.
	this has really changed the community. Since they started receiving the money the beneficiary households have purchased important goods, for example goats, pigs, building a house in other VDCs. Another one's managed to buy cattle with the Cash Transfer money. If this scheme continues it will help develop our community.
No impact	*For beneficiaries there is some change. But for the rest who are not receiving there is no change. [Chalunda VDC]*
	When we talk of the change of the community, there is no noticeable change that has taken place so far. This is so because the people that are in the scheme are few as compared to the ones who are not. The change that has been noticed so far is that of recipient households. [Chimwala VDC]
Negative impact	*There are some few recipients that are marrying with the money. This is especially common among female heads of households who are either divorced or widowed. There are men that want to have a share of the money; so, they marry women from the beneficiary households. There are also recipients that are engaging in beer drinking. This mainly applies to few male beneficiaries. [CDA Mduwa]*
	There are some children whose parents died and are staying with their grandparents. These grandparents also have their children who are old people having their own households, but are poor. So, it happens that when the grandparents have received the money, they share it among their children leaving the orphans they are staying with. [School Teacher]
	The bad impact is very minimal. The non-beneficiaries who feel that they also deserve the cash refuse to participate in community development activities. Some refused to make bricks for school blocks; others refused to be part of committees for other NGOs. Such people put the blame on their village head that he sidelined them from benefiting from the Scheme. However, such people are mainly being greedy because most of the beneficiaries are real poor people. [Agriculture Extension Worker Mkunda]

CONCLUSION

Proponents of transfers argue that Social Protection in the form of cash is a critical component in fighting poverty and responding to families that have been overwhelmed by disease, illnesses, and other shocks (Barrientos and DeJong, 2004). Indeed, in Mchinji, Malawi, between March 2007 and March/April 2008, compared to control households, intervention households receiving the Social Cash Transfer demonstrated significant impacts including:

- Improved health with fewer sicknesses among adults and children
- Greater demand for healthcare for children and adults and higher healthcare expenditures
- Greater demand and increased expenditures on schooling and children's education, resulting in higher enrolment and fewer absences
- Significant accumulation of household assets and basic necessities
- Accumulation of productive assets and livestock
- Increased agricultural production, with greater food stores, through the purchase of fertilizers and/or farm labour
- Improved food security, including higher food expenditures, fewer missed meals, fewer days without adequate food, and greater food diversity
- Improved housing quality and ability to handle household shocks

In addition to HHH self reports of these improvements, which were corroborated by children; these findings were also confirmed by community members, local extension workers in health, education, and agriculture, Community Social Protection Workers, trainers and members of the Social Cash Transfer Secretariat, and a wide range of officials from the District Assembly. Additionally, our team of RAs witnessed the improvements in the lives of beneficiaries between March 2007 and March/April 2008. They observed the accumulation of basic necessities, livestock, and household items; the building of new houses; and the tilling of fields yielding substantial food stores. They also witnessed a transformation in the well-being and general appearance of beneficiaries and their children.

Given the lack of consistency in the targeting of the SCTS however; we were unable to create a true counterfactual or clean control group. The intervention and comparison households were not exactly the same at baseline, as CSPCs appear to have prioritized elderly households in the comparison VDCs and households with more children in the intervention VDCs. It is not clear whether the level of impact would be the same if the comparison households received the transfer, rather than the intervention households. Regardless of the exact level of impact though, the scope and depth of positive changes that occurred in beneficiary households were confirmed throughout the 29 VDCs in Mchinji where the scheme is operational and we conducted qualitative interviews and focus groups. So while impacts may vary based on the type of household receiving the cash, and the amount per month that beneficiaries receive, providing regular and reliable cash grants to ultra poor and labour constrained households in Malawi creates profound changes in the lives of children, sick and disabled adults, caregivers with many dependents, and the elderly. The range and depth of impacts provide powerful motivation to prioritize improvements in the SCTS operations beginning with:

- Improving the overall management of the scheme, including automating all files
- Building capacity at District and Community levels to implement the SCTS
- Making adjustments in the percentage of households that can be covered so that the targeting and approval processes completely captures ultra poor and labour constrained households, and
- Following through on SCTS activities including administering changes, monitoring and evaluation and linking beneficiaries to additional services (See Operations and Targeting Evaluation Reports).

According to SCTS Manual of Operations, retargeting should occur in each VDC after one year. Households would be removed if they are no longer among the poorest households in their geographic location or if they

are no longer labour constrained. During retargeting, new households can be included into the SCTS. Retargeting activities have been postponed in Mchinji since November 2007 as policymakers decide the best way to retarget and which households to remove. Meanwhile,, the District Social Cash Transfer Secretariat (SCTS) has focused on scaling the SCTS up throughout the nine Traditional Authorities (TAs). However, it is unclear what the trajectory of households will be if removed from the SCTS. Although a small portion of beneficiaries have started businesses and many own productive assets, it is unclear whether these households have the ability to avoid or withstand further shocks; or if their investments are enough to smooth consumption throughout the year so they remain food secure and children stay in school. Given that the average age of the household head is 63 years; 61% of people in beneficiary households are children, and 60% of children are orphaned, we strongly recommend approaching retargeting efforts with caution. We fully expect that ultra poor and labour constrained households that are removed from the SCTS will revert back to the same socio-economic position they were in prior to the SCTS. The District, through extension workers or partnerships with NGOs, CBOs or others, must provide beneficiaries with adequate advance notice, assist them with savings plans, and help households devise a strategy to avoid falling back into destitution if they are ever to be removed from the SCTS. The best plan might be for children to age out of the SCTS, and ultra poor elderly to be covered until death, as is common in most developed countries, as well as in Botswana, Lesotho, Namibia and South Africa (Miller, 2007).

Additionally, the size of the cash transfer is an issue that requires District attention and should be considered by policymakers. The average transfer (MK2,000) creates significant benefits within households; however, rather than raising beneficiary households to an economic position just above the lowest quintile, it elevates these households beyond the average household in Mchinji, particularly during the rainy season when incomes decline. The level of cash must be monitored because of the incentives it creates for corruption among CSPCs and village leaders, and the jealousy that it incites within communities. Further examination is required to determine the optimum size of the transfer versus the number of beneficiaries on the SCTS.

Finally, while we measured a series domains using various indicators, it is unclear what impacts the evaluation did not capture. It is also still unclear what the longer term impacts of cash are among the ultra poor. For example, what are the longer term health and human development gains among children? Will girls in cash transfer households be more likely to attend secondary school? Will school enrolment rates remain at 95%? Will girls and young women be less likely to marry early or have an unplanned pregnancy? Will youth be less likely to contract HIV or other sexually transmitted diseases? Will the number of sicknesses continue to decline? Will the percentage of underweight children continue to decline? Will the annual rate of AIDS deaths decline? Will these households become increasingly cushioned from seasonal and other shocks? When will improvement level off? Longer term follow up of the Mchinji cash transfer beneficiaries is essential to answering these questions.

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