THE IMPACT OF CASH TRANSFERS ON FOOD SECURITY

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THE TRANSFER PROJECT

Results from eight large-scale evaluations of Government cash transfers through the Transfer Project show large impacts on food security, not only through increased consumption, but also through improved quality of diets and less severe experiences of food security.

AVAILABILITY	Physical availability of food, determined by food production, stock levels and trade
ACCESS	Households' economic and physical access to food
UTILIZATION	Proper uptake of nutrients in the body through consumption of safe and nutritious diets as well as good care and feeding practices
STABILITY	Stability in availability, access and utilization over time

INTRODUCTION

Social cash transfers (SCT) have increasingly become an important component of social protection programmes in sub-Saharan Africa. The purpose of many poverty-targeted programmes is to improve the food security situation among beneficiary populations. Vulnerable populations in sub-Saharan African countries often face high levels of food insecurity, which disproportionately affect households living in poverty. Children are particularly vulnerable to food insecurity, as adequate diet and nutritious foods are crucial for child development.

Food security can be defined as "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life" (World Food Summit, 1996). For this to be fulfilled, the four dimensions of food security have to be met: availability, access, utilization and stability.[1]

SCTs can potentially have an impact on all four dimensions of food security. Through increased purchasing power, households may invest in their agricultural practices and increase household level production. Households with increased economic access to food are able to purchase more food and more diversified products. Finally, a regular household income may stabilize food consumption across time and reduce food gaps over the year.

There is currently no single food security measure that captures all dimensions of food security, instead, a number of different measures that complement each other have to be used in order to capture the different elements of food security. Common measures of food security are: spending on food, dietary diversity and food frequency, consumption behaviours and experience of food insecurity as well as self-assessed measures.[2]

This research brief brings together evidence of cash transfers impacts on food security from eight impact evaluations of social cash transfer programmes in sub-Saharan Africa. All evaluations include some component of food security and together capturing several dimensions of food security.

EVALUATIONS REVIEWED

Results summarized here are obtained from impact evaluations of SCT programmes that form part of the Transfer Project (follow-up survey years in parentheses): Ethiopia SCTP (2014), Ghana LEAP (2012), Kenya CT-OVC (2009), Lesotho CGP (2013), Malawi SCTP (2014), Zambia MCTG (2014), Zambia CGP (2014) and Zimbabwe HSCT (2014). All evaluations include a baseline and at least one follow-up and a comparison group; an overview of the sample sizes and design of the evaluations are presented in Table 1.

The Transfer Project
transfer@unc.edu
https://transfer.cpc.unc.edu/

Table 1: Overview of cash transfer programmes and evaluations

Country	Cash Transfer Programme	Baseline survey	Follow-up survey(s)	Household sample size	Design
Ethiopia	Tigray Social Cash Transfer Programme (SCTP)	2012	2013; 2014	3351	Longitudinal Propensity Score Matching
Ghana	Livelihood Empowerment Against Poverty (LEAP)	2010	2012	1614	Longitudinal Propensity Score Matching
Kenya	Cash Transfers for Orphan and Vulnerable Children (CT-OVC)	2007	2009; 2011	1913	Randomized Controlled Trial
Lesotho	Child Grant Programme (CGP)	2011	2013	1486	Randomized Controlled Trial
Malawi	Social Cash Transfer Programme (SCTP)	2013	2014	3500	Randomized Controlled Trial
Zambia	Multiple Categorical Grant Programme (MCTG)	2011	2013; 2014	3078	Randomized Controlled Trial
Zambia	Child Grant Programme (CGP)	2010	2012; 2013; 2014	2519	Randomized Controlled Trial
Zimbabwe	Harmonized Social Cash Transfers (HSCT)	2013	2014	3063	District Matched Case Control

FOOD SECURITY ANALYSIS

All evaluations included collect information on food and non-food consumption expenditure. This information can be used to evaluate if SCTs increase spending on food, what food items households spend more on and the share of the total budget that is spent on food. In addition, this information may also be used to calculate caloric intake. Although increased spending on food does not necessarily equal improved food security, considering SCT programmes often target the poorest households, increased spending on food and increased food consumption is likely to have a positive impact on food security status.

In addition, most evaluations include some element of frequency and/or diversity of foods consumed. Dietary diversity scores count the number of food items from different food groups that are consumed over a certain time period, most commonly over 24 hours. Food consumption scores are calculated based on the nutrient content of food and the number of days over a week food items were consumed. Another approach used in the evaluations is to directly ask how many times over the past week or month a food item from a certain group was consumed (for example high protein or vitamin rich foods).

Evaluations commonly include questions on food consumption behaviours or experiential food security. The ways in which households experience and cope with food insecurity gives an indication of the severity of the situation and the consequences of food insecurity that households experience. Households are normally asked a number of questions related to their experience of the food security in the household and how they cope (for example by reducing the number of meals eaten in a day) when they do not have enough food in the house. These questions are either analysed separately or used to construct food security scales, such as the household food insecurity access scale (HFIAS) which was used in the Zambia MCTG, Zambia CGP and the Zimbabwe HSCT evaluations. Some evaluations include questions regarding coping strategies specifically related to children as in the example of the evaluation of Lesotho's Child Grant Programme where households were asked if any child (0-17 years) had to: eat smaller meals or fewer meals or go to sleep hungry because there was not enough food.

Lastly, a few evaluations also cover food gaps over the year, an important aspect considering the need for stability over time for a household to be considered food secure.

IMPACT ON SPENDING ON FOOD AND QUANTITIES CONSUMED

Per capita food expenditures

In the evaluations reviewed, in general results show that as households receive cash transfers, they increase expenditures on food. In three evaluations, Zambia MCTG, Zambia CGP and Kenya CT-OVC[3] , a significant impact on increased total food expenditure was found. In the case of Lesotho a weak impact ($p<0.1$) on increased food expenditures and in Malawi a significant increase in food expenditure was found among the poorest 50% of the evaluation sample. As shown in Table 3, cash transfers also have a positive impact on health and education expenditures in a number of countries which may have an indirect positive impact on food security.

In some evaluations, positive impacts of the cash transfer can be seen on specific food groups. In Ghana, there was a decrease in expenditures on starches and meat and increased expenditures on fats and food eaten outside the home. Increased expenditures on specific food items were also found in Malawi (vegetables), Zambia MCTG (cereals, meat and sugars), Zambia CGP (meat, dairy and cereals) and Zimbabwe (sugar and fats).

Kilocalories consumed

Per capita caloric consumption can be calculated in all evaluations, however is currently only included in one of the main evaluation reports reviewed (Ethiopia SCTP). However, additional research using the same evaluation data have shown large and significant positive impacts on caloric consumption in Malawi SCTP[4].

IMPACTS ON DIETARY DIVERSITY AND FREQUENCY OF FOOD CONSUMPTION

Positive impacts on number of meals consumed per day were registered in three of the four studies where indicators were included (see Table 4).

Table 2: Food security measures included and analysed in impact evaluations

	Ethiopia SCTP	Ghana LEAP	Kenya CT-OVC	Lesotho CGP	Malawi SCTP	Zambia MCTG	Zambia CGP	Zimbabwe HSCT
SPENDING ON FOOD AND QUANTITIES CONSUMED								
Per capita food expenditures	✓	✓	✓	✓	✓	✓	✓	✓
Per capita expenditure, separate food items	✓	✓	✓	✓	✓	✓	✓	✓
Kilocalories per capita	✓							
FREQUENCY AND DIVERSITY OF FOOD CONSUMPTION								
Number of meals per day					✓	✓	✓	
Dietary diversity/food consumption score	✓		✓	✓				✓
Consumption of nutrient rich food items			✓			✓	✓	
FOOD CONSUMPTION BEHAVIOURS								
Coping strategies	✓	✓		✓	✓			
Coping strategies specific to children	✓	✓		✓	✓			
Food insecurity access scales						✓	✓	✓
SEASONALITY AND PRODUCTION								
Food gaps over the year	✓			✓				
Food stocks					✓			

In addition, significant impacts on diet quality were found in Kenya, Zimbabwe and Ethiopia where dietary diversity scores were used. The only insignificant effect on diet quality was reported in Lesotho, where a food consumption score examined. In the Zambia MCTG and GCP evaluations, significant increases were found on expenditures of nutrient rich food items, including meat and dairy.

IMPACT ON FOOD CONSUMPTION BEHAVIOURS AND EXPERIENCE OF FOOD SECURITY

In the Zambia CGP and Zambia MCTG evaluations, results from the HFIAS showed an improved situation, with both a decrease of the actual scale points and a reduction in proportion of households classified as food insecure. In Zimbabwe, there was a small increase in households classified as food secure according to the HFIAS although only statistically significant at the 10% level. However, additional research using Zimbabwe evaluation also found a decrease in the HFIA score.[5] Findings from the LEAP evaluation in Ghana show improved levels of household food security as well as child specific food security. However, these indicators were not measured in the comparison group and only reflect changes among LEAP beneficiaries over time. In Lesotho, Malawi and Ethiopia, questions regarding the behaviour and experience of food security were analysed separately. In Lesotho, there was a weak impact ($p<0.1$) on decrease of households where an adult member had to go to sleep hungry and no reduction in households eating smaller or fewer meals. In Malawi there was a reduction in the proportion of households worrying about not having enough food among the poorest 50% of the evaluation sample.

Coping strategies related to children

In Lesotho, SCT programme has shown an impact on coping strategies related to children with a decrease in the proportion of households where children had to eat smaller or fewer meals. Coping strategies related to children were also included in the evaluation of the Malawi SCTP, but no significant impacts were identified.

IMPACT ON COPING WITH SEASONALITIES

In most settings, the food security situation is not constant over the year but fluctuates seasonally. In the Lesotho CGP evaluation and the Ethiopia SCTP evaluation, households were asked about the number of months over the year that they were not able to cover their food needs. In Lesotho, there was an impact of the cash transfers on reducing the average number of months with extreme food shortage; however no impact on the same was found in Ethiopia.

Table 3: Cash transfer programmes with impact on consumption expenditure, by expenditure group

	Ethiopia SCTP	Ghana LEAP	Kenya CT-OVC	Lesotho CGP	Malawi SCTP	Zambia MCTG	Zambia CGP	Zimbabwe HSCT
Total	-	-	*	-	-	*	*	*
Food/Beverage	-	-	*	-	-	*	*	-
Health	-	-	*	-	*	*	*	-
Education	-	-	-	*	*	-	-	-

* = significant impact of cash transfer programme ($p<0.05$); - = no impact of cash transfer programme; empty cell if indicator not measured

Table 4: SCT programmes with impact on food frequency and dietary diversity

	Ethiopia SCTP	Ghana LEAP	Kenya CT-OVC	Lesotho CGP	Malawi SCTP	Zambia MCTG	Zambia CGP	Zimbabwe HSCT
Number of meals per day	-				*	*	*	
Dietary diversity/food consumption score	*		*	-				*
Consumption of nutrient rich food			*			*	*	

* = significant positive impact of cash transfer programme (p<0.05); - = no impact of cash transfer programme; empty cell if indicator not measured

Table 5: SCT programmes with impacts on food consumption behaviours and experience of food security

	Ethiopia SCTP	Ghana LEAP	Kenya CT-OVC	Lesotho CGP	Malawi SCTP	Zambia MCTG	Zambia CGP	Zimbabwe HSCT
Use of coping strategies	-	*[a]			-			
Use of coping strategies related to children	-	*[a]		*	-			
Food Insecurity Access Scale						*	*	*

* = significant negative impact of cash transfer programme (p<0.05); - = no impact of cash transfer programme; empty cell if indicator not measured
[a] only available for treatment households, measuring food security levels before and after the programme start

DISCUSSION

This review of eight SCT programme evaluations has shown that cash transfers have an impact on several different dimensions of food security. All evaluations show a positive impact on at least one food security measure. The two evaluations from Zambia show an impact on several measures: increase in expenditure of food, increase in number of meals per days, increased consumption of nutrient rich food items as well as increased proportion of food secure households according to the HFIAS.

A limitation of the current evidence is that food security measures are mainly measured at the household level, which leaves a gap in knowledge regarding the intra-household distribution of food consumed and the food security situation among children. A few evaluations include child-specific questions, however to improve the knowledge of food consumption among children and to make stronger links between food security and nutrition status, we need individual-level indicators.

In the cases where there are few or weaker results, these may be related to a number of different factors, such as:

1. The amount of time between the last transfer and time period captured in the survey. If households are asked about their consumption the previous week and the transfer was given months earlier, the effect is likely to be smaller compared with if households were asked about the previous month. For example, in the case of Lesotho, the last transfer was made on average three months before the survey and the respondents were asked about their food consumption seven days before the survey.
2. The predictability of the transfers. This affects whether households view the cash as a permanent change in their income or a windfall. The latter perception tends to yield lumpy spending such as paying down debt or investing in livestock as in Ghana, for example.
3. The value of the transfer. For example in Malawi and Zimbabwe impacts on food security are positive and much stronger among the poorest households for whom the value of the transfer is much larger. In Ghana the initial value of the transfer was only 7% of consumption and raised significantly after the evaluation. In Zambia, where food security impacts are strongest, the transfer as a share of beneficiary consumption is also one of the largest.

Despite limitations across countries, results point to the conclusion that SCTs have a large impact on food security, not only through increased consumption, but also through improved quality of diets and less severe experiences of food security.

Written by Lisa Hjelm, Social Policy Officer at the UNICEF Office of Research—Innocenti

[1]FAO 2008. An introduction to the basic concepts of food security. [2]Maxwell, Coats and Vaitla (2013). How do different indicators of household food security compare? Feinstein International Center 2013. [3]The Kenya CT-OVC Evaluation Team (2012): The impact of Kenya's Cash Transfer for Orphans and Vulnerable Children on human capital, Journal of Development Effectiveness, 4:1, 38-49. [4]Burgh K., Angeles G., and Handa, S. (2015) Impacts of an Unconditional Cash Transfer on Household Food and Nutrition Security in Malawi. Paper presented at APPAM 2015 Fall Research Conference: ***The Golden Age of Evidence-Based Policy.*** https://appam.confex.com/appam/2015/webprogram/Paper14636.html [5]Bhalla G., and Handa, S. (2015). Comparing Objective and Experiential Indicators of Household Food Insecurity in Zimbabwe. Paper presented at APPAM 2015 Fall Research Conference: ***The Golden Age of Evidence-Based Policy.*** https://appam.confex.com/appam/2015/webprogram/Paper14633.html
All impact evaluation reports reviewed can be found at https://transfer.cpc.unc.edu/