

Addressing Food Insecurity in Sub-Saharan Africa: The Role of Cash Transfers

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Food insecurity is one of the international community's priorities in sub-Saharan Africa (SSA). This article investigates the role played by cash transfers (CTs), the social protection scheme with the largest coverage, in enhancing food security in this region. First, it offers an innovative conceptual framework for explaining the channels through which CT programs can affect food security. Second, based on this conceptual framework, it provides a comprehensive review of evidence of the effects of CTs on different components/indicators of food security in low-income countries in SSA. The article shows that CTs offer great potential for reducing monetary poverty and enhancing households' access to food, as long as they take full account of important aspects related to their design and implementation. On the other hand, CTs alone cannot influence nutrition knowledge and practice, and are proved to have limited or no effects on food security outcomes, such as diet diversification or child anthropometrics. In order to enhance all the different aspects of food security in the medium to long term, CTs should be integrated with other, social and economic, interventions.

KEY WORDS: food security, cash transfers, social policy, poverty, sub-Saharan Africa

解决撒哈拉以南非洲的粮食不安全问题：现金转移的作用

粮食不安全是国际社会在撒哈拉以南非洲的优先关注之一。本文探讨了现金转移(CTs)这一覆盖范围最大的社会保障计划在加强该地区粮食安全方面的作用。第一,它提供了一个创新的概念框架,用以解释CT方案可以影响粮食安全的渠道。第二,基于这个概念框架,它全面分析了有关现金转移对撒哈拉以南非洲地区低收入国家粮食安全不同组成部分/指标影响的证据。研究表明,只要充分考虑设计和实施的重要方面,现金转移在减少货币贫困和增加家庭获得食物的机会方面具有巨大的潜力。另一方面,单靠现金转移并不能影响营养知识和实践,并且被证明对食物安全的结果(如饮食多样化或儿童人体测量)影响有限或毫无影响。为了加强粮食安全中长期阶段的所有不同方面,现金转移应与其他社会和经济干预措施相结合。

关键词: 粮食安全, 现金转移, 社会政策, 贫困, 撒哈拉以南非洲

Introduction

Food security has been one of the highest priorities on the international development agenda at least since the hike in international food prices in 2007–2008.¹ This is borne out by the huge amount of interest that the international community took in the issue during the making of the 2030 Agenda, the international agenda where the set of Sustainable Development Goals (SDGs) was agreed upon; SDG 2, in fact, concentrates entirely on food security, recognizing much of its complex, multifaceted nature.

Based on the latest estimates from the Food and Agriculture Organization (FAO), about 800 million people in the world suffer from hunger, that is, lack of necessary calorie intake. This corresponds to about 11 percent of the entire population (FAO, IFAD, & WFP, 2015). The vast majority of those affected live in low-income and middle-income countries. The macro-region with by far the highest prevalence of hunger is sub-Saharan Africa (SSA; 23.2 percent), followed by Southern Asia (15.7 percent).

The numbers increase dramatically if we embrace the comprehensive concept of food insecurity, which includes malnutrition in addition to hunger. Micronutrient deficiency, in particular iron and vitamin A deficiency, is widespread around the world, and has severe consequences for nutritional balance and health. Some indirect measures indicate that about 50 percent of pregnant women and about 40 percent of preschool children in developing countries are anemic (a proxy for low iron intake), and nearly 250 million preschool children are vitamin A deficient.²

Despite increasing concerns about food insecurity in urban and peri-urban areas, it still affects predominantly rural areas, especially in SSA. Therefore, improving agriculture could potentially be an effective means of alleviating food insecurity in the region. Policies supporting small-holder farmers may boost agricultural productivity and, as a consequence, income from agriculture, which constitutes rural households' main source of revenue (FAO, IFAD, & WFP, 2015). However, in most cases, the effects are not felt until the medium to long term. Most food-insecure households live in poverty, have few or no assets, have no land or just a very small plot of land, and often have a high dependency ratio. Moreover, they are highly vulnerable to external shocks: when they experience such shocks, they often have to adopt "negative" coping strategies (FAO, 2015).

Raising the living standards of these households is likely to make the biggest contribution to alleviating hunger and, broadly speaking, food insecurity. This opens ample scope for social protection, that is, "policies and actions which enhance the capacity of poor and vulnerable people to escape from poverty and enable them to better manage risks and shocks" (OECD, 2009). It can have both a "preventional function," that is, preventing households just above the poverty line from falling into the poverty trap by helping them to better manage risks and deal better with shocks, and a "protective function," that is, lifting households above the poverty line.

This article focuses on one important type of social protection scheme, that is, *cash transfers* (CTs), and their role in alleviating food insecurity in SSA (Barrett & Palm, 2016). CT programs can alleviate short-term deprivations, regularize consumption, and reduce the adoption of negative coping strategies. Moreover, they also foster long-term improvements in human capital because most of the money is spent on child education, health, and nutrition, thus reducing the intergenerational transmission of poverty (Devereux, 2016; Hanlon, Barrientos, & Hulme, 2010). At the same time, CTs can incentivize investments in productive assets and facilitate a more systematic engagement in productive activities, both on-farm and off-farm. This can occur for beneficiary households—through the direct income effect—as well as for the future potential beneficiaries—through the insurance effect.

After their relative success in Latin America during the 1990s, CTs were subsequently launched in other emerging and developing countries, including those in SSA. However, unlike in the case of Latin American programs, most of them do not impose any conditionality on beneficiaries. This article seeks to investigate in depth the relationship between CT programs and food security. It starts by providing a comprehensive conceptual framework for explaining the channels through which CTs can affect the various components of food security. It also illustrates how specific issues in the design of these policies as well as their combination with other policies can ensure a bigger impact on food security.

Second, we provide a comprehensive review of evidence of the effects of a large number of CTs on various aspects and indicators of food security in SSA. A rigorous overview is missing from the literature, as most studies to date have concentrated on specific effects of these policies on monetary poverty, human capital accumulation, and food consumption. The ultimate objective is to understand how effective CT programs are in alleviating food insecurity, and on which indicators they have a relatively big impact. Finally, we set out some initial findings regarding the main design and implementation features that are likely to be the drivers of success (and failure).

The remainder of the article is structured as follows. The next section introduces the concept of food security and explains the theoretical framework linking CT programs to food security. Using this framework as our guide, in the third section we review the evidence in SSA. In the fourth section, we discuss the importance of *how* these policies are designed and implemented. The final section sets out our main findings and policy recommendations.

Conceptual Framework

Food security is a multidimensional, multifaceted phenomenon. Its definition and conceptualization have changed significantly in recent decades (Burchi & De Muro, 2016a). While during the 1970s food security was a synonym for food availability, during the 1980s and 1990s, there was a radical shift in its conceptualization, reflected by the widely accepted definition given at the 1996

World Food Summit. This definition was slightly revised in 2001, when food security was defined as:

A situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. (FAO, 2001)

Based on this definition, most studies break down the concept of “food security” into four components:

1. **Food availability:** This refers to food production and, at a national level, to the trade in food commodities. The availability of a sufficient amount of food is a necessary, but not sufficient, condition for household food security.
2. **Access:** This refers first of all to the economic means by which people and households are able to obtain food, through the market or through production. Income, agricultural production, and employment are the most important instruments for gaining access to food. It is also important to take account of the problem of physical access to food alongside the economic dimension. Access to other items, such as drinkable water, adequate sanitation, and health services, is just as important as access to food to enhance food security (Burchi & De Muro, 2016a; Drèze & Sen, 1989). Their role is often underrated.
3. **Food utilization:** This dimension is about dietary choices (a high-quality and varied diet is required), knowledge of nutritional issues and cooking methods, as well as hygienic and healthy practices.
4. **Stability:** Food security should be analyzed in a dynamic framework in which food availability, access, and utilization need to be guaranteed “at all times.” If people have seasonal jobs, produce food only at certain times of the year, and have difficulty storing their food stocks, and if the price of the commodity they offer fluctuates widely, they may encounter serious problems in accessing high-quality, varied foods throughout the year.

Holmes and Bhuvanendra (2013) provide a simple conceptual framework that describes the potential channels through which CTs can influence the four dimensions of food security.³ However, in our view, a characterization of food security based on the four above dimensions is not especially helpful when it comes to identifying its linkages with social protection schemes. The four dimensions are in fact interdependent and not independent, and are analyzed at different levels. For example, an individual/household cannot have adequate food utilization without having access to an adequate amount of food/calories.

In line with this view, the diagram in Figure 1 is a non-exhaustive illustration of the impact pathways of CT programs on the dynamic concept of food security. This conceptual framework builds on the framework provided by Burchi and De

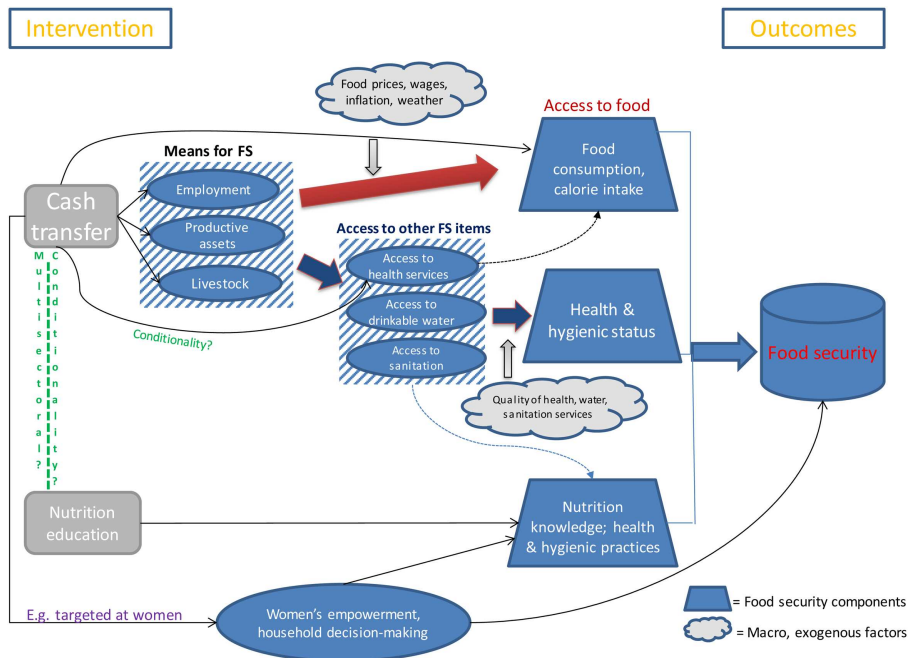


Figure 1. Conceptual Framework: Pathways of Impact of Cash Transfers on Food Security.

Muro (2016a) for the analysis of food security, but revises it in order to identify the scope for public policies. This framework focuses on the household- and individual-level effects of CTs, but does not examine the effects on food availability at national and local levels (e.g., agricultural production, food demand, food prices). It is important to stress that this framework is meant to be a theoretical one, which helps to investigate *all* potential pathways through which CTs—alone or together with other programs—can potentially affect food security. We first recognize the validity of the framework per se, and only later do we try to operationalize it by looking at the existing empirical evidence in SSA. As the reader will notice, some pathways have been little explored, or not explored at all, in the impact evaluations, which does not allow for a full implementation of the framework. We do not regard this as a problem because this way we can also highlight where research gaps exist.

While this framework could be applied anywhere, we have rural SSA areas mainly in mind. These areas are characterized by a relatively high proportion of agricultural employment, poor market, and social infrastructures and low local administrative capacities, among other things.

First of all, CTs can immediately boost economic access to food. They provide extra income to targeted individuals that could be used directly to increase food consumption, and in particular calorie intake (see direct arrow connecting CTs to food consumption). This is a virtually automatic result of a well-planned CT, as poor individuals allocate a very high proportion of their income to food. All the rest being the same, household food security will improve.

CTs can also boost food consumption indirectly, by impacting on other means for food security. Having a regular, predictable income may influence decisions taken by household members about their participation in the labor market, as well as their labor productivity. This effect may be negative if household members decide not to work in order to remain in the program (Woolard & Klasen, 2005). This potential disincentive effect clearly calls for a careful appraisal of the transfer value during the CT design stage and of the provision of the right incentives in order to graduate out of the program. However, it is important to point out that there is no evidence of this disincentive effect in low-income and lower-middle-income countries outside sub-Saharan Africa (e.g., Banerjee, Hanna, Kreindler, & Olke, 2017).

At the same time, CTs may have a positive effect on the quality of employment by relaxing liquidity constraints (Samson, 2009). With a regular cash inflow, workers can spend more time searching for a better job, and not feel obliged to accept any kind of low-quality work. A more stable and better remunerated job is a key to sustainable graduation out of food insecurity. Of course, this is possible only if CTs target households with at least one able-bodied person.

CTs also affect agricultural and other income-generating activities. They often represent a significant share of household income, and most beneficiaries live in rural areas, where they depend on subsistence agriculture and where markets for financial services (e.g., loans and insurance), labor, goods, and inputs are either nonexistent or do not function well. For these reasons, when CTs are made in a regular fashion, they may help households to overcome obstacles they encounter in accessing loans and thus improve the accumulation of productive assets (Asfaw, Davis, Dewbre, Handa, & Winters, 2014). The presence of more and better agricultural assets helps in turn to raise productivity in the sector, and hence to give households access to more food, either directly (through production) or indirectly (through the market).⁴ This can also form the basis for a sustainable graduation out of food insecurity.

So far, we have focused on the direct “income effect” of the CTs on actual program beneficiaries. However, reliable CTs can have important “insurance effects,” especially for those who do not benefit from the program but have socioeconomic conditions only slightly better than CT beneficiaries. Knowing that they could rely on the program in case of a deterioration of their living standards, these households could take riskier choices and engage in more productive businesses or adopt more advanced practices in agriculture. Given the complexity of Figure 1, this important channel is not included in the diagram. Moreover, the empirical evidence of CTs’ effect for potential beneficiaries is extremely difficult to generate: as the primary purpose of this conceptual framework is to guide the overview of the empirical evidence presented in the next section, we decided not to concentrate much on the insurance effect.

The lack of variety in crop production and, more broadly, in income-generating activities remains a big problem in SSA (Sen, 2013). CT recipients could engage in activities other than agriculture to diversify their incomes and

hence reduce their vulnerability to external shocks. The resultant additional income could be used to purchase livestock and off-farm productive assets. The feasibility of this type of strategy depends, however, on all sorts of socioeconomic household characteristics and again on the design features of the CT.⁵

As we stressed at the beginning of this section, promoting food security requires an analysis of people's access to items other than food, such as health services, drinkable water, and sanitation. Greater use of health facilities, better access to safe sources of potable water, and improved sanitation significantly reduce the risk of disease, including waterborne diseases such as diarrhea, which have a detrimental effect on metabolism and lower the body's capacity to absorb food. If parasitic diseases are prevalent, for example, access to sufficient amounts of high-quality food does not automatically mean that people are adequately nourished. As a core pillar of human capital, health is also an important driver of productivity and hence food consumption.

Households receiving CTs can decide to use the extra cash in order to increase their expenditure on health and—where needed—make more frequent use of health services, without waiting for the illness in question to become chronic. Similarly, the money could be used to access better hygienic or sanitation services and materials. In countries such as Ghana and Tanzania, which operate public health insurance schemes, CTs may increase enrollment in these schemes. However, their ability to improve people's health status depends tremendously on their quality. Clearly, an improvement in health status and the prevention of diseases, in turn, can impact on labor supply and, therefore, food consumption.

Thus far, we have assumed that CTs can impact only on the quantity of food consumed and not on its quality. However, if people consume food with a low nutritional value for purely economic reasons, the availability of additional income may lead them to purchase food of a higher quality, thus improving their diet. However, monetary poverty is only one of the causes of poor diet. The problem is often due to a lack of nutritional knowledge and poor nutritional and hygienic practices, key drivers of food insecurity.⁶

When not anchored to conditionalities, CTs have hardly any direct impact on the utilization dimension of food security. However, they may have an indirect effect through access to health services: if people use health services more often thanks to the CTs they receive, they are exposed to more information on nutrition and health (see the dashed line in Figure 1). In short, CTs alone are unlikely to influence all the multiple aspects of food security. To achieve these objectives, they need to be integrated with a broader set of policies.

The final channel through which CTs can influence food security outcomes is women's empowerment and an improvement in household decision-making processes. Women's larger access to economic resources can ensure more investments in productive activities, thereby increasing household income. Even more important may be the impact of women's economic empowerment on the intra-household distribution of resources (Van den Bold, Quisumbing, & Gillespie, 2013). There is indeed substantial evidence in support of the hypothesis that women are more likely than men to spend money on resources for childcare,

food, health, and other basic needs (Bassett, 2008). This helps to improve not only individual access to these commodities but also the food security and nutritional status of all household members. However, an unconditional CT is unlikely to affect directly women's empowerment: this happens only if it is targeted at mothers or possibly at children, in which case it is received and managed by their mothers. However, the size and even the sign of the CT's effect on women's empowerment depend on the social context, in particular on the existing gender norms: in highly patriarchal societies CTs may put further burden on women, without de facto increasing their decision-making power.

The above conceptual framework differs from other frameworks proposed in the literature. In particular, it has a few advantages compared to the one recently developed by Tiwari et al. (2016) in an empirical article estimating the effects of CTs on food security in four African countries: (i) it has a comprehensive view of food security, rather than a narrow one, mostly focusing on hunger; (ii) it looks at the whole causal chain that links CTs to final food security outcomes, such as child and women anthropometrics rather than at a shorter chain, where self-reported measures of "access to enough" food are regarded as key outcomes; (iii) it emphasizes the role of intra-household distribution of food and related items, and does not concentrate only on household-level outcomes; (iv) it points to the importance of access to health care, water, and sanitation, which is often neglected; and (v) it highlights the relevance of nutrition knowledge and practice, which, despite the fact that it can be hardly affected by CTs, might help one to understand why these programs may not generate improvements in food security outcomes and point to the possible integration with other interventions.

The conceptual framework guides the review of the empirical evidence in the following section. We consider all studies analyzing the effects of CTs on various aspects of food security in SSA. We examine the evidence of impacts on (i) indicators of means for food security; (ii) indicators of access to food (mainly related to calorie intake); (iii) indicators of access to other food security-related items; and (iv) indicators of nutrition knowledge and practices; (v) outcome indicators of food security, such as children's and women's anthropometric status.

A Review of the Empirical Evidence of the Impact of CTs on Food Security in SSA

Since the beginning of the twenty-first century, many countries in SSA have piloted CT programs (Gentilini & Omamo, 2011), nowadays making CTs the main form of social protection in the region. Now, some 15 years since they first appeared in the region, the time is ripe to undertake a comprehensive review of the effects of CTs on the various components (and indicators) of food security. Given that we are looking at CTs exclusively through a food security lens, we are interested only in CTs that have one of the following features:

- a specific focus or objective relating to hunger, food security, or nutrition (or possibly poverty);

- beneficiaries are targeted on the basis of nutritional indicators;
- evaluations are based on their effects on these indicators.

The first two points are, in fact, regarded as fundamental elements of a nutrition-sensitive social protection scheme (FAO, 2015). Where less attention is paid to food security and nutrition in the planning stage, this is likely to indicate that these issues are not central to the implementation of the CTs. For this reason, we cannot expect such schemes to have a big, direct impact on food security and nutrition.

Our sample of countries includes only low-income and lower-middle-income countries, as their social protection systems usually differ significantly from those of upper-middle-income countries. In upper-middle-income countries, including some in SSA such as South Africa and Namibia, CT schemes often take the form of cash grant programs planned with a long-term horizon and are usually nationally owned; that is, they are (largely) managed by government institutions and are domestically funded (World Bank, 2018). Conversely, low-income and lower-middle-income countries in SSA often lack the capacity to collect taxes and so have limited scope for extended redistributive policies. As a consequence, their CT schemes often take the form of targeted interventions to combat food insecurity and extreme poverty within a relatively short time frame. The CT schemes in question are partially or fully funded by donors, with a weak national political commitment (Garcia & Moore, 2012; Niño-Zarazúa, Barrientos, Hickey, & Hulme, 2012).

As most of the CT schemes were launched around 2005, we used that year's World Bank country classification as our starting point. The seven countries used in this study were classified as low-income countries, with Malawi and Ethiopia being the poorest. Other countries, such as South Africa and Lesotho, were classified as middle-income countries and were therefore excluded from the present study. Finally, we did not include fragile states, as these countries only operate emergency CT schemes and have performed only very small-scale pilot projects.

In our search for relevant studies, we tried to select all those reports and journal articles that employed a rigorous quantitative methodology to assess the causal effect of CT programs in the countries in question. A small number were incorporated as part of other, quantitative studies that did not assess causal relations, but provided information on aspects not explored by impact evaluations. This was necessary, as only very few studies did look at several parts of the causal chain. Mixing evidence from studies that, in some cases, have different focus calls for some caution in interpreting the results. However, in this case, this should be a minor problem for two reasons: (i) integration of different studies occurs with regard to the same CT program and (ii) 11 out of the 15 studies used in the article have at least one food security outcome indicator, and for all programs, there is at least one study that focuses on food security outcomes.

In Table 1, we report the main findings of the various studies we examined, by country, name of CT program, and direction and intensity of the effects on the

different components of food security. It is important to note that it is not always easy to include indicators for certain categories. For example, the dietary score—generally measured as the proportion of food groups consumed at least in a minimum quantity—could be interpreted both as an indicator of food access (especially at the household level) and as an outcome indicator of food security (Burchi & De Muro, 2016b; Hoddinott & Yohannes, 2002). Having a varied diet depends both on access to a sufficient amount of food and on nutritional knowledge and practices, but is not directly affected by access to other items that are relevant to food security. By contrast, anthropometric indicators are the outcome of access to food and other food security–related items, and food utilization.

The first country analyzed is Ghana, which launched the Livelihood Empowerment Advancement Programme (LEAP) in 2008. This program is domestically financed from debt relief and combines transfers to households in extreme poverty (Niño-Zarazúa et al., 2012). Moreover, some of the transfers are conditional on children's school attendance, basic health care utilization, and registration. According to two rigorous studies by Handa et al. (2013) and Tiwari et al. (2016), the program has not had any impact on food (and total) consumption, employment, and the use of productive inputs. Nevertheless, Handa et al. (2013) found a reduction in the use of extreme coping strategies due to food insecurity, such as eating less food and cutting the number of daily meals. Being a LEAP beneficiary was found to increase the likelihood of enrollment in the Ghanaian national health insurance scheme; however, the program has not increased health care utilization in case of need (Agbaam & Dinbabo, 2014) and has not improved health conditions. Participating in the LEAP slightly reduces the likelihood of 6–17-year-old children experiencing illness, but actually increases the likelihood of disease among 0–5-year-old children. Finally, this CT scheme does not generate improvements in the quality and diversity of the diet (Tiwari et al., 2016).

In Zambia, five pilot social transfer schemes have been introduced since 2004. One of the flagship programs, the Child Grant Programme (CGP), was launched in 2010 in three of the poorest districts and was targeted at households with at least one child less than three years old. The evaluations suggest that it has had a large impact on food consumption, the number of meals consumed, and the ownership of agricultural inputs and livestock (American Institutes for Research, 2013; Daidone et al., 2014). The CGP is thought to have reduced the severe poverty headcount rate by 5.4 percentage points after 24 months. There is also some evidence of a small effect on crop production, mostly driven by groundnut production. No effect was detected on curative or preventive health-seeking behavior. Finally, the CGP was found to make a small contribution to diets, as measured by the household dietary score. The impacts on child height-for-age, weight-for-age, and weight-for-height are statistically insignificant.

Last but not least, the study of Bonilla et al. (2017) analyzed the impact of the program on women's empowerment. The authors find that the program—which

Table 1. Evidence of the Impact of CTs on Food Security in SSAaaaaa

Author and year	Country	Programme	Means for FS	Access to food	Access to other FS items	Effects on...		
						Health and sanitary conditions	Nutrition knowledge and practices	Women's empowerment
Agbaam and Dinbabo (2014)	Ghana (1 rural district)	LEAP	Satisfaction after meals (++++)	Frequency of utilization of healthcare facilities (++++)				
Handa et al. (2013)	Ghana	LEAP	Food expenditure (0); household coping strategies: cutting meals (+++), less food (+++); paid work (0); input use (0)	Use of curative health services (0); preventive care (0); enrolment in health insurance (++)	Child (0-5) illness (6-17) illness (+)			
Tiwari et al. (2016)	Ghana	LEAP	Food expenditure (0)	Meals/day (++); FANTA food security scale (++)	Curative/preventative health-seeking behavior (0)			Household dietary diversity (0)
American Institutes for Research (2013)	Zambia	Child Grant Programme	Food consumption (+++); poverty headcount (+); poverty gap (++)	use of agricultural inputs (++)				Household dietary diversity (p); children's foodconsumptionscore (0);mothers' BMI (0); children's (6-59months) HAZ (0);WAZ (0), WHZ

Table 1. Continued

Author and year	Country	Programme	Means for FS	Effects on...								
				Access to food	Access to other FS items	Health and sanitary conditions	Nutrition knowledge and practices	Women's empowerment	Hood security outcomes			
Bonilla et al. (2017)	Zambia	Child Grant Programme	Productive assets (+); food consumption									
Asfaw et al. (2014)	Kenya	CT for OVC	(++); total HH employment (0)									HH dietary diversity (+++)
Merttens et al. (2013)	Kenya (North)	Hunger Safety Net Programme	Consumption expenditure (++)		Seeking health care when needed (0); expenditure on health (+)	Illness (0)						HH dietary diversity (0); child stunting (0); wasting (0); underweight (0)
Berhane et al. (2011)	Ethiopia	PSNP: Direct Transfers	consumption (++)									HH dietary diversity (+++)
Berhane et al. (2015)	Ethiopia (Tigray region)	SCT pilot programme in Tigray region	poverty (0); livestock (+); productive assets (0)	Food gap (-); months of food security (++)								HH dietary diversity (++)
Covarrubias et al. (2012)	Malawi (Mchinji District)	SCT pilot scheme	Productive assets (+++)	Food gap (-); household calories (+)								HH dietary diversity (++)
			Agricultural tools and livestock (+); selling assets (+++)									child height (0), stunting (0), weight (0), wasting (0), mother's BMI (0)

Table 1. Continued

		Effects on...							
Author and year	Country	Programme	Means for FS	Access to food	Access to other FS items	Health and sanitary conditions	Nutrition knowledge and practices	Women's empowerment	Hood security outcomes
Miller et al. (2008); Miller et al. (2011)	Malawi (Mchinji District)	SCT pilot scheme	Household livestock (++)		Adults and children seeking health care (+++)	Adult and child illness (++)			HH dietary diversity (+++); underweight children (0); HH heads' BMI (0)
Abdoulayi et al. (2016)	Malawi (districts of Salima and Mangochi)	SCT programme (scaled up)	Food expenditure (+++); ultra-poverty (+++); livestock (+++); crop production (+++); agricultural assets (+++); paid work (++)	Meals/day (++)	Curative care (+++)	For people older than 9; health status (0), chronic illness (0), recent illness (++)			Child WAZ (0); HAZ (0); WHZ (0); stunting (0), underweight (0), wasting (++++)
Evans et al. (2014)	Tanzania (two districts)	Community-based CCT	Food expenditure (0); total expenditure (0); livestock (++)		Health clinic visits (-); participation in public health insurance (+++)	HH member sick last month (++) child sick last month (++) no. of days child was sick (0)			Child (0-4) height (0), weight (0), middle-upper-arm circumference (0)

Table 1. Continued

Author and year	Country	Programme	Means for FS	Effects on...					
				Access to food	Access to other FS items	Health and sanitary conditions	Nutrition knowledge and practices	Women's empowerment	Hood security outcomes
Veras Soares and Teixeira (2010)	Mozambique	Food Subsidy Programme (PSA)	Food expenditure (+++); adult labour supply (0); child labour (+++)	Meals/day (++)	Health (0)				Child wasting (+++), stunting (0), underweight (0)

Notes: “+” indicate positive effects in light of food security objectives; “-” indicates negative effects in light of food security objectives. The larger is the number of “+” (“-”) the more significant (and larger in magnitude) are the positive (negative) effects on food security components.

targets women—has a statistically significant effect on women's likelihood to participate in household decision making, but the size of this impact is small.

The introduction of a pilot program and progressive scaling-up are also features of Kenya's CT scheme for orphans and vulnerable children (OVC), which is targeted at ultra-poor households. After starting life as a pre-pilot in 2004, it was extended in 2005, and by the end of 2014 reached nearly 240,000 households (World Bank, 2015). Despite remaining an unconditional CT, it involves "social messaging" (Asfaw et al., 2014): the program sends out a clear signal about the areas in which money should be invested, namely, health and nutrition, especially in relation to children. The program consists of both money transfers and services. According to Asfaw et al. (2014), it has had a significant positive impact on food consumption, mainly through an increase in home production and the accumulation of productive assets. Moreover, the CT has enabled families to be more flexible in terms of their decisions on labor allocation, lowering their dependency on agriculture and fostering their engagement in other forms of business. The household dietary score has improved remarkably as a result, as confirmed by the study of Tiwari et al. (2016). Although we have no information on the specific contribution provided by the educational component of the project, that is, social messaging, it is possible that this has played a role in improving access to nutrition-related services, nutrition knowledge, and diet.

Another important CT scheme operated in Kenya is the Hunger Safety Net Programme (HSNP). This was launched in 2008 with the goal of reducing poverty and food insecurity, and increasing asset accumulation in the arid and semi-arid regions in the north of the country. Its impact evaluation, conducted by Oxford Policy Management, shows that the program has increased both total and food consumption, although it has not succeeded in significantly reducing income poverty and raising household accumulation of productive assets (Merttens et al., 2013). HSNP beneficiaries did not show health-seeking behavior and health status different from non-beneficiaries. Finally, the project did not generate any benefits in terms of food security outcomes, that is, household diet and child anthropometrics.

Despite being a low-income country and one of the poorest in our samples, Ethiopia's social protection system is very advanced. As part of the wider Food Security Programme, in 2005 the Government of Ethiopia launched the Productive Safety Net Programme (PSNP), a scheme characterized by strong domestic support and ownership. The PSNP targets food-insecure households in chronically food-insecure (rural) districts and seeks to bridge food gaps, prevent asset depletion at the household level, and create assets at the community level. Excluding South Africa, Ethiopia's PSNP is currently the largest social transfer scheme in SSA, reaching around 7.6 million beneficiaries by 2012 (World Bank, 2013).

This program consists of two main components: (i) the public work (PW)—which at the moment covers about 80 percent of program participants—which targets chronically food-insecure households with able-bodied adults; and (ii) the direct transfer (DT), which provides food-insecure, labor-constrained households with cash or, to a lesser extent, food. Several evaluations found a positive effect of

the PSNP on some measures of food access (Berhane, Gilligan, Hoddinott, Kumar, & Taffesse, 2014; Gilligan, Hoddinott, & Taffesse, 2009); however, most of these studies focused on the PW component. To the best of our knowledge, only the study by Berhane et al. (2011) examined the specific contribution of the DT component, even though it did not break them down into CTs (which would have been of direct interest to this article) and food transfers. The authors reported that the value of the transfer received and the number of years of involvement—two measures of the duration of participation in the program—had a positive impact on several indicators of food access and the accumulation of productive assets, as well as on a household's dietary diversity score.

Another important program in Ethiopia is the Social Cash Transfers Pilot Programme, launched in 2011 with the support of UNICEF. This CT targets labor-constrained and ultra-poor households in the Tigray region, with the objective of alleviating poverty and hunger among OVCs, elderly people, and people with disabilities. A comprehensive evaluation of this CT revealed that the pilot had generated certain benefits in terms of access to food, slightly increasing the household calorie intake and reducing the food gap,⁷ and in terms of household diet diversity (Berhane et al., 2015). However, it proved to be ineffective in improving the diet and nutritional status of children and the nutrition of mothers.

Some social protection schemes have also been active in Malawi during the past few years, including PW, CT, and input subsidy programs. However, they are not as well integrated as the Ethiopian programs are. In 2006, with funding from the Global Fund through the National AIDS Commission, Malawi launched a pilot Social CT scheme in the district of Mchinji. Since 2009, this scheme has gradually been extended, reaching nearly 56,000 households (UNICEF, 2014). It targets ultra-poor (i.e., the 10 percent lowest-income households in each district) and labor-constrained households.

The pilot project has been extensively studied by international scholars. The first evaluation study revealed positive effects on livestock ownership and, above all, very large positive effects on health-seeking behavior and the health status of children and adults (Miller et al., 2008, 2011). Their qualitative research indicated that the additional money was used mostly to buy food, school uniforms, and soap. The introduction of the CT resulted in a remarkable improvement in the beneficiaries' diet. As in many other countries and programs, however, the program was not found to have had any significant effects on children's and adults' anthropometric status. Covarrubias, Davis, and Winters (2012) concentrated on the CTs' economic effects. They found that the program had both an important productive function, as it boosted investments in agricultural assets and household food consumption thanks to own production, and a protective function, as it significantly reduced the adoption of negative coping strategies, such as selling productive assets and taking children out of school.

Thanks to its gradual extension to other districts, the Malawi Social CT scheme offers an ideal opportunity to investigate the causal effects of the program. A recent, in-depth evaluation of the scheme following its extension to two new districts found that it made a large, positive contribution to food access

in the short term (i.e., higher food consumption, more meals, and lower ultra-poverty) and a probable contribution in the medium to long term, thanks to an increase in livestock, agricultural assets, crop production, and paid work (Abdoulayi et al., 2016). Again, however, the program did not help to improve children's nutrition. Out of the nine indicators employed, only wasting (or low weight-for-height) changed significantly and in the desired direction (reduction).

In 2010, Tanzania launched one of the very few CCT schemes in SSA, the Tanzania Community-Based Conditional Cash Transfer program. Designed as a randomized control trial, the program provides transfers to poor households, depending on the number of vulnerable children and elderly members, in three districts. These households have to satisfy the following conditions:

1. for preschool children: visit a health clinic at least six times a year;
2. for 7–15-year-old children: enroll in school and achieve at least 80 percent attendance; and
3. for the elderly: visit a health clinic at least once a year.

Evans, Hausladen, Kosec, and Reese (2014) did not detect any effect of the program on food and overall expenditure, although they did find positive effects on livestock ownership. On the other hand, the program was found to have had a significant impact on different measures of health-related behavior and health status. As in the case of Ghana, the extra income from the CTs enabled many households to enroll in the health insurance scheme. In accordance with the program conditions, there was a significant rise in the frequency of visits to health clinics among CCT recipients until mid-2011; however, such frequency declined again afterward. Finally, no short-term effects were detected on any of the anthropometric indicators for 0–4-year-old children, that is, height, weight, and middle-upper-arm circumference.

Finally, Mozambique was actually one of the first countries in the region to implement a CT scheme, which it did in the early 1990s. The Food Subsidy Programme (PSA) targets poor households headed by labor-constrained people. The program has increased both its coverage and transfer size significantly in the course of time. An evaluation by Veras-Soares and Teixeira (2010) indicated that the PSA had had a large, positive effect on food expenditure and the number of meals consumed. They found that, although it had not changed the adult labor supply, it had helped to reduce child labor. Finally, the PSA has not had any effects on health, although it has reduced one of the three anthropometric indicators employed for preschool children, that is, wasting (or low weight-for-height).

Design and Implementation Features

The results presented in the previous section point to the frequent positive effects of CTs on different indicators of means for food security and access to food.⁸ This is particularly true in countries like Zambia, Malawi, Ethiopia (but only for the PSNP), and Kenya (for the CT scheme for OVC). The only obvious

exceptions are Ghana and Tanzania, where not even monetary indicators such as food expenditures were affected by the introduction of CTs. The contribution of these programs toward the improvement of other components of food security is, instead, lower.

Now, why did some programs fail to improve even indicators related to asset accumulation, number of meals, and food consumption? Do these limited cases undermine the logic that CTs *normally* influence these variables, or point to the importance of *how* they are designed and implemented? We cross-checked our results on the effectiveness of CTs in terms of food access against the available studies on the strengths and weaknesses of these programs' design and operational features. The objective is to verify whether the design features that are crucial for CTs' performance measured in terms of poverty reduction and human capital accumulation are also important from a food security perspective. This comparison revealed the importance of certain key characteristics of these programs:

1. **Targeting:** Reaching the target population is a prerequisite for a CT scheme to affect food insecurity. CTs use very different targeting mechanisms, and there is no predetermined ideal solution. In particular, in the context of SSA, most of the schemes heavily involve the local communities in the selection of the beneficiaries. Whether community-based targeting works depends on local institutional arrangements and social cohesion. While interventions seem to have reached the target population in Ghana (Tsimpo & Wodon, 2012) and Tanzania (Evans et al., 2014), certain problems were identified in the other two countries where results were not positive from a food security perspective, that is, Kenya (HSNP) and Mozambique. A study by Cosgrove, Hannigan, Kidd, and McPherson (2011) revealed that the community targeting used for the HSNP in Kenya was effective in reaching the poorest, but often failed to properly identify the other poor. The dependency ratio criterion was problematic because it failed to reach the poor with a low dependency ratio (exclusion error) and incorporated the non-poor with a high dependency ratio (inclusion error). Despite generally acceptable targeting outcomes (Handa et al., 2012), the CT in Mozambique did not include a sufficient number of vulnerable children, was biased toward smaller households, and featured a number of unclear implementation rules, resulting in more arbitrary interpretation (Cunha et al., 2013).
2. **Regularity of payments:** Only if people feel confident that they will receive cash on a regular basis will they make long-term plans about consumption, saving, and investment (Lagarde, Haines, & Palmer, 2009). Irregularity in payment is a big problem in Ghana, where it was reported that the next transfer after the cash disbursement in May 2011 was 8 months later (Handa et al., 2013; UNICEF-ESARO, 2015). In Mozambique, a complicated disbursement system involving a number of different actors led to frequent delays in payment (World Bank, 2009). In Kenya, on the other hand, payments to HSNP beneficiaries have been fairly regular (Oxford Policy Management and Institute

of Development Studies, 2012). CT programs that have had a bigger impact on food security, primarily in Zambia (UNICEF-ESARO, 2015) and Kenya (CT programs for OVC; Ward et al., 2010), are characterized by timely payments to beneficiaries.

3. **Transfer size:** The monetary value of the transfer should be big enough to change the life of the beneficiaries, but not so big as to generate negative incentives to work and cause inequality and conflicts between those just below the eligibility threshold and those just above it (Handa et al., 2012). There is now some evidence about the necessary minimum threshold: 20 percent of the consumption of the poor. The size of transfers in countries like Malawi, Zambia, Tanzania, and Kenya (both programs) is above this threshold (UNICEF-ESARO, 2015). The threshold in the case of the LEAP in Ghana is only about 11 percent (African Development Bank and Bill & Melinda Gates Foundation, 2015; Handa et al., 2013). The PSA in Mozambique was supposed to pay 30 percent of the minimum wage. However, not only was the minimum wage not updated in the following years but, more importantly, there was a high rate of inflation, which reduced significantly the real value of the transfer (Cunha et al., 2013). The transfer size was raised substantially, first in 2011 and later in 2014. However, these increases were made after the impact evaluations examined in this article.
4. **Political support:** In order to have a long-lasting effect on food security, CT programs and social protection schemes in general need to have strong political support (Devereux & White, 2010). This means that at least the different ministries of a national government and the ruling party should be committed to the design and implementation of a CT, as well as to the financing of the scheme, though not necessarily since the very initial phase. However, in order to ensure long-run sustainability of the programs, it would be important that also the opposition parties understand the value of these policies: only in this way can they be institutionalized. Moreover, ideally, CT schemes should form part of a broader, national anti-poverty strategy. The best example in low-income countries of SSA is found in Ethiopia, with the PSNP. The government also played a vital role in Ghana in developing the National Social Protection Strategy, which encompasses LEAP, among other interventions, in favor of the extreme poor. Similarly, government ownership of the PSA in Mozambique does not seem to be a problem. It is, in fact, in line with the government's commitment to ensure a basic minimum standard of living for the marginalized groups (ODI, 2013). A lack of political support is a particularly important problem in Kenya, where the HSNP has been perceived to date as strongly donor-driven. The government did not play an active role in the first phase of the programs, that is, 2009–2013 (Garcia & Moore, 2012). Interestingly, the great benefits generated by the CT in Zambia risk being undermined in the long term by the absence of strong political support from the national government and local elites (Niño-Zarazúa et al., 2012).

Less attention has been devoted to another design feature: selection of the main CT recipients. While in other parts of the world women are often the direct

beneficiaries, that is rarer in SSA. In one of the few cases in which women were the targeted beneficiaries, in Zambia, the evaluation reported a small increase in the likelihood for them to participate in decisions at the household level (Bonilla et al., 2017). In other countries, like Malawi and Kenya (for OVC), female-headed households invested more in productive assets (Covarrubias et al., 2012; Evans et al., 2014), which may have contributed to the CTs' positive contribution to food security. These seem to be good arguments to stress this further design feature of CTs. However, as appears evident in Table 1, more research is needed in SSA to identify the effects of CTs on women's control over resources and, through there, on intra-household distribution.

Finally, should the next CTs contain conditionalities or not? In general, the empirical literature has not yet provided a final answer to the value added of "hard" conditionalities. Moreover, this design option might be less suitable in areas like nutrition, where the linkages between the final objectives (e.g., improved child nutrition) and desirable behavioral changes (e.g., improved nutrition and hygienic practices) are not straightforward (Pellerano & Barca, 2017). With regard to the specific context of SSA, it is often argued that this option is not feasible due to the poor institutional arrangements and limited administrative and monitoring capacities. Only two of the nine CTs examined have "hard" conditionalities (Ghana and Tanzania)—though not directly related to food security—and both have provided poor benefits on food security. On the other hand, the positive CT scheme for OVC in Kenya had "soft" conditionalities: implementers were required to send clear "messages" to the beneficiaries that part of the cash should be spent on specific food products (e.g., micronutrients).

Conclusions and Policy Recommendations

Alleviating food insecurity is one of the priority goals of the international development community, especially in rural SSA. The main problem in this region is not food availability but hunger, that is, access to food. Carefully calibrated social protection interventions are required in order to reach chronically food-insecure households, many of which include a number of labor-constrained members and own either no land or very small plots of land. In this respect, we need to examine the potential of the rapidly expanding CT programs in the region and identify the evidence of their impact to date.

This article first proposes a conceptual framework that links CTs to the different components of food security in the short to medium term. We then used the framework to summarize the evidence in SSA, bearing in mind the differences between programs in terms of stated objectives and target groups. Our analysis shows that CTs have a significant, positive impact on households' means to achieve food security—in particular on the accumulation of productive assets—and on direct measures of access to food. A subsequent analysis emphasizes that when CTs did not reach these basic results, they suffered from major problems in design and implementation.

The evidence on the effects of CTs on access to health services and direct measures of health and hygienic status is more mixed. The programs were found to affect these parameters especially in Malawi. In contrast, no effect was found in Ghana, Zambia, and Kenya (for the HSNP). As clarified in the section on the conceptual framework, there is no theoretical reason to expect CTs alone to have an impact on issues such as nutritional knowledge and practice. None of the empirical studies we examined even made an attempt to focus on these dependent variables. As appears clear from Table 1, women's empowerment has been neglected, too, as a dependent variable.

Finally, did the CTs affect food security outcomes? There is some evidence of a positive impact on household dietary variety in Ethiopia, Malawi, and Kenya (i.e., the programs for OVC). No effects were identified in Zambia and Kenya (for the HSNP). CTs were not found to have an impact on children's and women's anthropometric status. The only small exceptions are the CT programs in Mozambique, where scholars have found some minor positive effects on certain indicators, and the one in Malawi, where a reduction in child wasting was registered. One note of caution is needed with regard to the interpretation of the findings for child anthropometrics: while weight reacts quickly to external interventions/shocks, height requires more time to change. This should not be a major problem since all the impact evaluations on these variables refer to at least two years after the beginning of the programs (even more in Tanzania and Malawi).⁹

Based on this extensive review, we can draw a number of conclusions that are of direct relevance to policymakers:

1. CTs have great potential for alleviating hunger, that is, lack of access to an adequate amount of food. Their actual success depends, however, on whether the programs are properly conceived and implemented.
2. CTs alone cannot impact on nutritional knowledge and practices, as clearly highlighted in our conceptual framework. In other words, they can directly affect food security outcomes only in specific cases, where the lack of an adequate, varied diet is due predominantly to economic hardship. An integrated approach and nutrition-sensitive social protection is required in order to enhance the multiple, dynamic components of food security. In short, CT schemes should form part of a broader package of interventions. The simple combination of CTs with nutritional education—often minor components of multisectoral interventions—has great potential for affecting nutritional outcomes, as was illustrated by the results of a recent experiment in Bangladesh. Here, IFPRI and the WFP found that CTs had a substantially larger impact on child stunting when combined with a nutritional education component (Ahmed et al., 2016).

This rationale is also evident in the success of the CT program for OVC in Kenya and in the plan for the new stage of the PSNP in Ethiopia. Given the clear evidence of the positive effects on access to food, but the limited evidence of effects on nutrition, the PSNP is planned to be closely connected to the

existing National Nutrition Programme, in particular the Community-Based Nutrition Programme (World Bank, 2014).

3. In many low-income countries in SSA, the use of “hard” conditionalities does not seem to be a practical option. However, the possibility of introducing conditions relating to the attendance of basic courses in nutritional education should not be rejected outright. This is because these are fairly simple interventions, requiring neither a large budget nor great implementation and monitoring capacities. In the medium to long term, it would be important that such courses are provided within existing health posts or hospitals.
4. Finally, CT programs, especially those subject to conditionalities, should be accompanied by supply-side interventions. As the rise in beneficiaries’ purchasing power may place further pressure on economic infrastructures, health clinics, and schools, interventions aimed at improving services in these areas are required (African Development Bank & Bill & Melinda Gates Foundation, 2015; Maluccio, Murphy, & Regalia, 2010). While these complementary investments are commonplace in Latin America, they are almost absent in SSA. The PSNP is again an interesting example. In addition to linking CTs with public works, and to nutritional services in its fourth phase, it is directly linked to a productivity-enhancing component, called the Household Asset Building Program. By facilitating access to credit, agricultural inputs, and other services, it links beneficiaries to the economic system, thereby laying the foundations for a sustainable graduation from poverty and food insecurity. This increasing complexity in the design of comprehensive social protection systems requires considerable institutional capacity, however. Empirical studies showed that the implementation of this last component of the PSNP varied significantly across Ethiopia’s regions (Berhane et al., 2013), and graduation has generally been limited so far (Devereux, Sabates-Wheeler, Tefera Taye, & Sima, 2014). In conclusion, in Ethiopia as well as in other low-income countries in SSA, there is considerable scope for donors and international organizations to undertake capacity-building activities in order to improve the public sector’s ability to supply these services, as has occurred in Bangladesh, Cambodia, and Mexico (Fiszbein et al., 2009).

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Notes

1. Between 2007 and the beginning of 2008, in particular, the world prices of rice and wheat rose significantly.
2. Source: <http://www.who.int/nutrition/topics/vad/en/>.
3. Interestingly, Holmes and Bhuvanendra (2013) use “crisis prevention and management” as the fourth dimension of food security, rather than the internationally accepted “stability” dimension.
4. Amartya Sen (1981) refers to these as “direct food entitlements” and “exchange food entitlements,” respectively.
5. CTs can have a big impact on education, as suggested by the experience in Latin America. Education, in turn, plays a crucial role in enhancing employability and productivity, in improving household allocation of resources, and in expanding nutritional knowledge. However, as the potential impact is on children’s education, which could have only a long-term, intergenerational effect on food security, we did not include education in Figure 1.
6. Good nutrition knowledge and practices are, indeed, essential in converting an adequate amount of food into adequate food security.
7. The food gap is a subjective measure of access to food. Households are asked during how many of the past 12 months they have had difficulty meeting their food needs.
8. Positive effects of CTs on access to food are found also in the recent systematic review of qualitative studies in SSA conducted by Owusu-Addo et al. (2018).
9. Interestingly, in the only case of a shorter-term evaluation—Mozambique, after 12–14 months from policy introduction—the effect is statistically significant, though only for wasting.

References

- Abdoulayi, S., G. Angeles, C. Barrington, K. Brugh, S. Handa, K. Kilburn, . . . S. Zietz. (2016). *Malawi Social Cash Transfer Programme: Endline impact evaluation report*. Chapel Hill, NC: Carolina Population Center, University of North Carolina. Retrieved from https://www.unicef.org/evaldatabase/files/Malawi_Social_Cash_Transfer_Programme_Endline_Impact_Evaluation_Report_Malawi_2016-005.pdf
- African Development Bank & Bill & Melinda Gates Foundation. (2015). *How to use natural resource revenues to enhance demand for public services through social protection*. Flagship Report Paper Series, Paper 5.
- Agbaam, C., & M. F. Dinbabo. (2014). “Social grants and poverty reduction at the household level: Empirical evidence from Ghana.” *Journal of Social Science*, 29(3), 293–302.
- Ahmed, A. U., J. Hoddinott, R. Shalini, E. Sraboni, W. Quab, & A. Margolies. (2016). *Which kinds of social safety net transfers work best for the ultra poor in Bangladesh? Operation and impacts of the Transfer Modality Research Initiative*. Dhaka, Bangladesh: International Food Policy Research Institute, World Food Programme.
- American Institutes for Research. (2013). *Zambia’s child grant program: 24-month impact report*. Washington, DC: Author. Retrieved from http://www.air.org/sites/default/files/Zambia_Child_Grant_Program_Report_20131.pdf
- Asfaw, S., B. Davis, J. Dewbre, S. Handa, & P. Winters. (2014). “Cash transfer programme productive activities and labour supply: Evidence from a randomised experiment in Kenya.” *Journal of Development Studies*, 50(8), 1172–1196.
- Banerjee, A. V., R. Hanna, G. E. Kreindler, & B. A. Olken. (2017). “Debunking the stereotype of the lazy welfare recipient: Evidence from cash transfer programs.” *World Bank Research Observer*, 32(2), 155–184.

- Barrett, C., & C. Palm. (2016). "Meeting the global food security challenge: Obstacles and opportunities ahead." *Global Food Security*, 11, 1–4.
- Bassett, L. (2008). *Can conditional cash transfer programs play a greater role in reducing child undernutrition?* Social Protection Discussion Papers No. 46687. Washington, DC: World Bank.
- Berhane, G., S. Devereux, J. Hoddinott, J. Hoel, K. Roelen, K. Abay, . . . T. Woldu. (2015). *Evaluation of the Social Cash Transfers Pilot Programme: Tigray region, Ethiopia (Endline Report)*. Washington, DC: International Food Policy Research Institute. Retrieved from http://www.fao.org/fileadmin/user_upload/p2p/Publications/UNICEF_Tigray_Endline_Report.pdf
- Berhane, G., D. O. Gilligan, J. Hoddinott, N. Kumar, & A. S. Taffesse. (2014). "Can social protection work in Africa? The impact of Ethiopia's Productive Safety Net Programme." *Economic Development and Cultural Change*, 63(1), 1–26.
- Berhane, G., J. Hoddinott, N. Kumar, A. S. Taffesse, M. S. Diressie, Y. Yohannes, . . . F. Sima. (2013). *Evaluation of Ethiopia's food security program: Documenting progress in the implementation of the Productive Safety Nets Programme and the Household Asset Building Programme*. ESSP II—EDRI Report. Washington, DC: International Food Policy Research Institute. Retrieved from http://essp.ifpri.info/files/2013/05/ESSPII_EDRI_Report_PSNP.pdf
- Bonilla, J., R. C. Zarzur, S. Handa, C. Nowlin, A. Peterman, H. Ring, & D. Seidenfeld. (2017). "Cash for women's empowerment? A mixed-methods evaluation of the government of Zambia's child grant program." *World Development*, 95, 55–72.
- Burchi, F., & P. De Muro. (2016a). "From food availability to nutritional capabilities: Advancing food security analysis." *Food Policy*, 60, 10–19.
- Burchi, F., & P. De Muro. (2016b). "Measuring human development in a high-income country: A conceptual framework for well-being indicators." *Forum for Social Economics*, 45(2–3), 120–138.
- Cosgrove, C., L. Hannigan, S. Kidd, & A. McPherson. (2011). *A qualitative review of targeting methodologies in the Kenya Hunger Safety Net Programme (HSNP)*. Report for Department for International Development (DFID), United Kingdom.
- Covarrubias, K., B. Davis, & P. Winters. (2012). "From protection to production: Productive impacts of the Malawi social cash transfer scheme." *Journal of Development Effectiveness*, 4(1), 50–77.
- Cunha, N., L. Pellerano, J. Mueller, V. Lledo, Y. Xiao, & P. Gitton. (2013). *Towards a Mozambican social protection floor: Consolidating a comprehensive social protection system in Mozambique: Analysis of policy alternatives and costs*. ESS Paper, 41. Geneva: International Labour Office. Retrieved from <http://labordoc.ilo.org/record/459732?ln=en>
- Daidone, S., B. Davis, J. Dewbre, M. Gonzales-Flores, S. Handa, D. Seidenfeld, & G. Tembo. (2014). *Zambia's Child Grant Programme: 24-month impact report on productive activities and labour allocation. Zimbabwe country case study report*. Rome: Food and Agriculture Organization.
- Devereux, S. (2016). "Social protection for enhanced food security in sub-Saharan Africa." *Food Policy*, 60, 52–62.
- Devereux, S., R. Sabates-Wheeler, M. Tefera Taye, R. Sebates, & F. Sima. (2014). *Graduation from the Food Security Programme in Ethiopia: FAC Ethiopia final report*. Future Agricultures Working Paper 080. Retrieved from <http://www.future-agricultures.org/publications/research-and-analysis/1864-graduation-from-the-food-security-programme-in-ethiopia-fac-ethiopia-final-report/file>
- Devereux, S., & P. White. (2010). "Social protection in Africa: Evidence, politics and rights." *Poverty & Public Policy*, 2(3), 53–77.
- Drèze, J., & A. Sen. (1989). *Hunger and public action*. Oxford: Oxford University Press.
- Evans, D. K., S. Hausladen, K. Kosec, & N. Reese. (2014). *Community-based conditional cash transfers in Tanzania: Results from a randomised trial*. Washington, DC: World Bank.
- FAO. (2001). *The state of food insecurity in the world*. Rome: Author.
- FAO. (2015). *Nutrition and social protection*. Rome: Author.
- FAO, IFAD, & WFP. (2015). *The state of food insecurity in the world 2015. Meeting the 2015 international hunger targets: Taking stock of uneven progress*. Rome: Food and Agriculture Organization.

- Fiszbein, A., N. Schady, H. G. F. Ferreira, M. Grosch, N. Kellehr, P. Olinto, & E. Skoufias. (2009). *Conditional cash transfers: Reducing present and future poverty*. World Bank Policy Research Report. Washington, DC: World Bank.
- Garcia, M., & C. M. T. Moore. (2012). *The cash dividend: The rise of cash transfers programs in sub-Saharan Africa*. Washington, DC: World Bank.
- Gentilini, U., & S. W. Omamo. (2011). "Social protection 2.0: Exploring issues, evidence and debates in a globalizing world." *Food Policy*, 36(3), 329–340.
- Gilligan, D., J. Hoddinott, & A. S. Taffesse. (2009). "The impact of Ethiopia's Productive Safety Net Program and its linkages." *Journal of Development Studies*, 45(10), 1684–1706.
- Handa, S., C. Huang, N. Hypher, C. Teixeira, F. V. Soares, & B. Davis. (2012). "Targeting effectiveness of social cash transfer programs in three African countries." *Journal of Development Effectiveness*, 4(1), 78–108.
- Handa, S., M. Park, R. O. Darko, I. Osei-Akoto, B. Davis, & S. Daidone. (2013). *Livelihood empowerment against poverty impact evaluation*. Chapel Hill, NC: Carolina Population Center, University of North Carolina.
- Hanlon, J., A. Barrientos, & D. Hulme. (2010). *Just give money to the poor: The development revolution from the South*. Sterling, VA: Kumarian Press.
- Hoddinott, J., & Y. Yohannes. (2002). *Dietary diversity as a food security indicator*. Food Consumption and Nutrition Division Discussion Paper Briefs No. 136. Washington, DC: International Food Policy Research Institute.
- Holmes, R., & D. Bhuvanendra. (2013). *Social protection and resilient food systems: The role of cash transfers*. Research Reports and Studies, GIZ.
- Lagarde, M., A. Haines, & N. Palmer. (2009). "The impact of conditional cash transfers on health outcomes and use of health services in low and middle-income countries." *Cochrane Database of Systematic Review*, 4(4), D008137.
- Maluccio, J., A. Murphy, & F. Regalia. (2010). "Does supply matter? Initial schooling conditions and the effectiveness of conditional cash transfers for grade progression in Nicaragua." *Journal of Development Effectiveness*, 2(1), 87–116.
- Merttens, F., A. Hurrell, M. Manzi, R. Attah, M. Farhat, A. Kardan, & I. MacAuslan. (2013). *Kenya Hunger Safety Net Programme monitoring and evaluation component. Impact Evaluation Final Report, 2009–2012*. Oxford: Oxford Policy Management Limited.
- Miller, C., M. Tsoka, & K. Reichert. (2008). *Impact evaluation report: External evaluation of the Mchinji Social Cash Transfer Pilot*. Boston, MA: Center for International Health and Development.
- Miller, C. M., M. Tsoka, & K. Reichert. (2011). "The impact of the social cash transfer scheme on food security in Malawi." *Food Policy*, 36(2), 230–238.
- Niño-Zarazúa, M., A. Barrientos, S. Hickey, & D. Hulme. (2012). "Social protection in sub-Saharan Africa: Getting the politics right." *World Development*, 40(1), 163–176.
- ODI. (2013). *Beneficiary and community perspectives on the Basic Social Subsidy Programme in Mozambique*. Transforming Cash Transfers Series, Country Briefing. London: Author.
- OECD. (2009). *Promoting pro-poor growth: Social protection*. Paris: Author.
- Owusu-Addo, E., A. M. N. Renzaho, & B. J. Smith. (2018). "The impact of cash transfers on social determinants of health and health inequalities in sub-Saharan Africa: A systematic review." *Health Policy and Planning*, 33(5), 675–696.
- Oxford Policy Management, & Institute for Development Studies. (2012). *Kenya Hunger Safety Net Programme: Monitoring and evaluation component (impact analysis synthesis report)*. Oxford: Author.
- Pellerano, L., & V. Barca. (2017). "The conditions for conditionality in cash transfers: Does one size fit all?" In D. Lawson, D. Hulme, & L. K. Ado-Kofie (Eds.), *What works for Africa's poorest?* (chap. 13). Rugby, UK: Practical Action.
- Samson, M. (2009). "Social cash transfers and employment: A note on empirical linkages in developing countries." In OECD (Ed.), *Promoting pro-poor growth: Employment* (pp. 43–59). Paris: OECD. Retrieved from <https://www.oecd.org/dac/povertyreduction/43280571.pdf>

- Sen, A. K. (1981). *Poverty and famines: An essay on entitlement and deprivation*. Oxford: Clarendon Press.
- Sen, A. K. (2013). *Why is there so much hunger in the world?* Twenty-eighth McDougall memorial lecture. Retrieved from http://www.fao.org/fileadmin/user_upload/newsroom/docs/mg856e.pdf
- Tiwari, S., S. Daidone, M. A. Ruvalcaba, E. Prifti, S. Handa, B. Davis, . . . D. Seidenfeld. (2016). "Impact of cash transfer programs on food security and nutrition in sub-Saharan Africa: A cross-country analysis." *Global Food Security*, 11, 72–83.
- Tsimpo, C., & Q. Wodon. (2012). "Ghana's livelihood empowerment against poverty." In Q. Wodon (Ed.), *Improving the targeting of social programs in Ghana* (pp. 122–133) Washington, DC: World Bank. Chapter 14. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/13082/9780821395936.pdf?sequence=1&isAllowed=y>
- UNICEF. (2014). *UNICEF annual report 2014: Malawi*. Retrieved from http://www.unicef.org/about/annualreport/files/Malawi_Annual_Report_2014.pdf
- UNICEF-ESARO. (2015). *Social cash transfer and children's outcomes: A review of evidence from Africa*. Retrieved from http://www.unicef.org/esaro/Social_Cash_Transfer_Publication_ESARO_December_2015.pdf
- Van den Bold, M., A. R. Quisumbing, & G. Gillespie. (2013). *Women's empowerment and nutrition: An evidence review*. IFPRI Discussion Paper 01294. Washington, DC: International Food Policy Research Institute.
- Veras Soares, F., & C. Teixeira. (2010). *Impact evaluation of the expansion of the Food Subsidy Programme in Mozambique*. Research Brief No. 17. Brasilia: IPC-UNDP.
- Ward, P., A. Hurrell, A. Visram, N. Riemenschneider, L. Pellerano, C. O'Brien, . . . J. Willis. (2010). *Evaluation report Kenya: Cash Transfer Programme for Orphans and Vulnerable Children (CT-OVC), Kenya: Operational and impact evaluation, 2007–2009*. Oxford: Oxford Policy Management Limited.
- Woolard, I., & S. Klasen. (2005). "Determinants of income mobility and household poverty dynamics in South Africa." *Journal of Development Studies*, 41(5), 865–897.
- World Bank. (2009). *A brief on the current state of social protection in Mozambique*. Washington, DC: World Bank.
- World Bank. (2013). *Ethiopia's Productive Safety Net Programme (PSNP): Integrating disaster and climate risk management*. Working Paper 80622. Washington, DC: World Bank.
- World Bank. (2014). *Project appraisal document. Productive Safety Net Project 4. Social Protection and Labor Global Practice. Eastern Africa 1 Africa Region*. Retrieved from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/09/11/000470435_20140911143122/Rendered/PDF/PAD10220PAD0P1010Box385319B00OU090.pdf
- World Bank. (2015). *Kenya cash transfer for orphans and vulnerable children (P111545). Implementation Status and Results Report*. Retrieved from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/AFR/2015/02/10/090224b082a864bd/1_0/Rendered/PDF/Kenya00Kenya00Report000Sequence012.pdf
- World Bank. (2018). *The state of social safety nets 2018*. Washington, DC: World Bank.