

The impact of cash transfers on nutrition in emergency and transitional contexts A review of evidence

Sarah Bailey and Kerren Hedlund

January 2012

On behalf of

BMZ

Federal Ministry
for Economic Cooperation
and Development



About the authors

Sarah Bailey is a Research Officer in the Humanitarian Policy Group (HPG) at the Overseas Development Institute (ODI).

Kerren Hedlund is an independent consultant.



Humanitarian Policy Group Overseas Development Institute 111 Westminster Bridge Road London SE1 7JD United Kingdom

Tel: +44(0) 20 7922 0300 Fax: +44(0) 20 7922 0399 Website: www.odi.org.uk/hpg Email: hpgadmin@odi.org.uk

ISBN number: 978-1-907288-62-3 © Overseas Development Institute, 2012

Readers are encouraged to quote or reproduce materials from this publication but, as copyright holders, ODI requests due acknowledgement and a copy of the publication. This and other HPG Reports are available from www.odi.org.uk/hpg.

Contents

Acronyms	1
Acknowledgements	3
Chapter 1 Introduction	5
1.1 Scope, methodology and structure	5
Chapter 2 How cash transfers might affect nutrition	7
2.1 Income, poverty and malnutrition	7
2.2 The UNICEF Conceptual Framework on causes of malnutrition	8
2.3 Understanding the impact of emergency interventions on nutrition	8
2.4 Causal pathways: how cash might impact nutrition	9
Chapter 3 Evidence on the impact of humanitarian cash transfers on nutrition	13
3.1 Evidence on nutritional status	1/
3.2 The impact of cash on causes of malnutrition	15
3.3 Cost-efficiency and cost-effectiveness	19
3.4 Conclusion	20
Chapter 4 Evidence from long-term conditional cash transfer programmes	21
4.1 Conclusion	24
Chapter 5 Conclusion	25
Annex 1 Key nutrition terms and definitions	27
Annex 2 Cash transfer interventions included in this review	29
References	41

Acronyms

ACF Action Contre la Faim

BCC behaviour change communication

BMZ Federal Ministry for Economic Cooperation and Development

BRCS British Red Cross Society

CaLP Cash Learning Partnership

CCT conditional cash transfer

CDC Centers for Disease Control and Prevention

CRS Catholic Relief Services
CSI coping strategies index

DECT Dowa Emergency Cash Transfer Project **DFID** Department for International Development

DRC Democratic Republic of Congo

ECHO European Commission Humanitarian Aid and Civil Protection

ENN Emergency Nutrition Network

FANTA Food and Nutrition Technical Assistance **FAO** Food and Agriculture Organisation

FCS Food consumption score

FFV Fresh food voucher

GAM Global acute malnutrition

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

HDDS household dietary diversity score

HFIAS household food insecurity access scale

IDDS individual dietary diversity score

IFPRI International Food Policy Research Institute

IYCF infant and young child feeding

KAP knowledge, attitudes and practices

LEGS Livestock Emergency Guidelines and Standards

MAM moderate acute malnutrition

MUAC mid upper arm circumference

NFI non-food item

OFDA Office of US Foreign Disaster Assistance

OTP outpatient therapeutic programme

RPS Red de Protección Social

RUTF ready-to-use therapeutic food

SAM severe acute malnutrition

USSCN UN Standing Committee on Nutrition

SCUK Save the Children UK

HPG COMMISSIONED REPORT

SFP supplementary feeding programme

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund

UNSCN United Nations Standing Committee on Nutrition

USAID US Agency for International Development

VSF Vétérinaires Sans Frontières

WFP World Food Programme

W/H weight-for-height

WHO World Health Organisation

ZECT Zimbabwe Emergency Cash Transfer Project

Acknowledgements

We would like to thank all those who gave their time to be interviewed for this review, attended the roundtable on cash and nutrition in London in June 2011 and provided comments on the initial draft of the report. Thanks to Gabriella Wass for her background research and Susanne Jaspars for her valuable input and suggestions. Thanks as well to Rachid Boumnijel, Gabrielle Smith and Jenny Aker for their insightful information on Concern Worldwide and Tufts University research in Niger, and to Matthew Foley for his editing. Thanks to GIZ, particularly Nicolas Lamadé and Johanna Fischer, for their constructive engagement, and to BMZ for funding the study. Particular thanks to Simon Levine for his guidance and feedback.

The views expressed in this report are the authors' alone and the authors accept sole responsibility for any factual inaccuracies.

Chapter 1 Introduction

Cash transfer programming is now widely accepted as a way to meet a variety of needs in humanitarian and transitional settings.1 Where appropriate, cash enables people to buy goods and services according to their own priorities, and supports markets. Although the literature on cash transfers has grown exponentially over the last few years, as has their use in humanitarian interventions, the relationship between cash transfer interventions in crisis contexts and malnutrition has received little attention. This is surprising given that many cash transfers have nutritional objectives, such as improving access to an adequate quantity and quality of food. One reason for this may be that food security and nutrition tend to exist as separate sectors within emergency and transitional operations, though several agencies are now working on better linking the two (Levine and Chastre, 2011). Nutrition, food security and health actors all could consider cash transfers as a way of addressing the multiple causes of malnutrition. This leads to a series of important questions. How far can cash responses go in addressing malnutrition? What can we reasonably expect them to achieve? Given the many cash responses to date, what do we know (and not know) about their impact on malnutrition?

The purpose of this paper is to explore evidence on the nutritional impact of cash transfers in emergency and transitional settings. It has been commissioned by the German government (Federal Ministry for Economic Cooperation and Development BMZ) through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). It builds on previous cooperation between BMZ and the Humanitarian Policy Group at the Overseas Development Institute, which resulted in the paper Food Aid and Food Assistance in Emergency and Transitional Contexts: A Review of Current Thinking. Two priorities identified by the paper are particularly relevant to this study: the need to expand the use of cash as a food assistance tool, and the importance of considering the nutritional outcomes of food assistance (Harvey et al., 2010).

Analysing the impact of cash transfer programming on nutrition is a complex task. The biggest challenge is evidence. Ideally this paper would draw from robust research from different interventions showing that cash did or did not have a positive impact on nutrition outcomes (e.g. anthropometric indicators, micronutrient deficiencies), and why. However, such evidence is not available in these settings, at least not yet. Attributing nutritional impact to humanitarian interventions is notoriously difficult in general (Hall et al., 2011; SCUK, 2009; Dunn, 2010;

Shoham, 2004).² In addition, cash transfers are mostly used to address food and other basic needs and rarely have the explicit objective of improving nutrition; as a result, these interventions have not commonly monitored changes in nutritional status. Research is planned on the impact of different types of food assistance (e.g. food aid, cash transfers and vouchers) on nutrition, as well as comparing cash with more traditional interventions to address moderate acute malnutrition (e.g. supplementary feeding programmes), but generating findings will take time.

1.1 Scope, methodology and structure

This study looks at how cash interventions affect the immediate and underlying causes of malnutrition. Where agencies have monitored changes in nutritional status (e.g. using anthropometric indicators), these examples are discussed, including the challenges of attributing impact. The paper also examines findings on the impact of conditional cash transfer programmes on nutrition in development contexts, where abundant research has been conducted which could potentially be applied to other settings.

The paper does not compare cash with in-kind assistance. It considers the use of cash in preventing acute malnutrition and as a complement to the treatment of moderate and severe acute malnutrition. The paper considers chronic undernutrition (stunting) only in reviewing the studies on conditional cash transfers in development settings. For a brief summary of key nutrition terms and definitions used in this paper, see Annex 1.

The study is based on a review of 54 evaluations and documents from humanitarian programmes since 2004 (see Annex 2). Only projects that have nutrition and nutrition-related objectives (e.g. improvements in food security, care practices and health status) were included. It should be kept in mind that evaluations of the effectiveness and impact of humanitarian assistance are generally not rigorous by academic research standards and are done with limited time and resources. Literature on cash transfer programmes was obtained via web searches, the CaLP D-Group³ and correspondence with aid agencies; the paper also relies on evaluations that have been used and cited in previous reviews of emergency cash transfer programming (e.g.

¹ The term 'cash' includes both cash and vouchers (coupons, tokens or electronic cards that provide recipients with access to specified commodities).

² There is substantially more evidence on the effectiveness of interventions (e.g. promotion of breastfeeding, provision of micronutrients) in non-crisis contexts. For example, a 2008 *Lancet* series reviews evidence-based interventions that could significantly reduce the effects of maternal and child undernutrition if implemented at scale. The series notes that 'there is little published information on the effect of humanitarian response on nutrition outcomes or, more specifically, on the effect of nutrition interventions in emergencies' (Morris et al., 2008).

³ The Cash Learning Partnership D-group is an electronic forum for sharing information and discussing cash transfers in emergencies.

Harvey and Bailey, 2011). A roundtable was held in June 2011 in London to discuss evidence and key challenges in obtaining it. Key informant interviews were also done with a small number of donors, practitioners, researchers and nutritionists.

The paper is structured as follows. Chapter 2 begins by examining the immediate and underlying causes of mal-

nutrition and how, in theory, cash transfers could address them. Chapter 3 examines humanitarian cash transfer interventions and whether there is evidence for these impacts in practice. Evidence from social protection programming and its applicability to the study question are explored in Chapter 4. Chapter 5 provides conclusions and discusses what is needed to move forward.

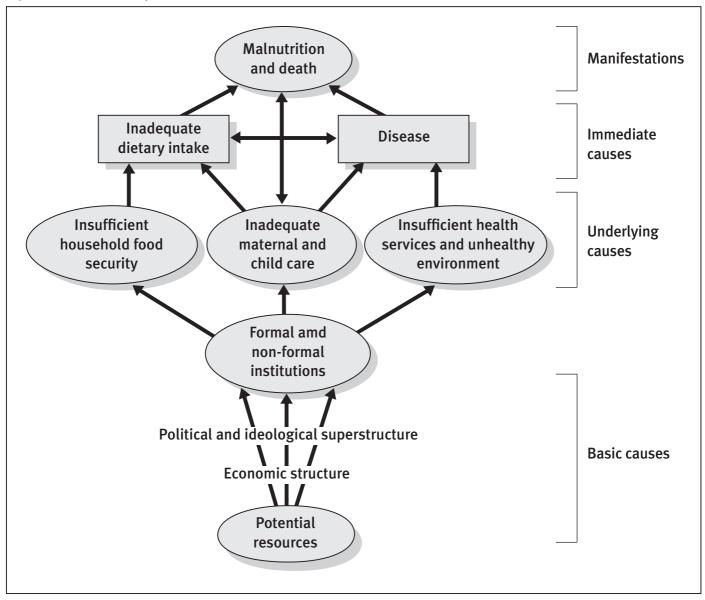
Chapter 2 How cash transfers might affect nutrition

This chapter provides an introduction to key issues in understanding the impact of cash transfers on nutrition – the causes of malnutrition, how cash transfers might impact on these causes and challenges in obtaining evidence of nutritional impact in humanitarian and transitional settings.

2.1 Income, poverty and malnutrition

Poverty is generally acknowledged to be a root cause of malnutrition. A number of studies in non-emergency contexts examine the relationship between malnutrition and poverty, some of which show significant associations. However, poor children are not necessarily malnourished, and malnourished children are not necessarily poor (Harriss et al., 1990; Jaspars and Young, 1995). The relationship between poverty and malnutrition in humanitarian crises or famine situations is even more complex. For example, studies in Sudan and Somalia showed that malnutrition was linked to social and political marginalisation rather than wealth or income (Jaspars and Young, 1995). Cash may therefore have a direct or indirect impact on some of the causes of malnutrition, but like the relationship between income (or poverty) and malnutrition, this impact is likely to vary according to the nature and severity of the crisis, the types of livelihoods affected and the level of poverty of the target population before the crisis. Hence understanding the pre-emergency and emergency-specific causes of malnutrition is essential.

Figure 1: UNICEF Conceptual Framework on causes of malnutrition



2.2 The UNICEF Conceptual Framework on causes of malnutrition

Efforts to improve nutrition require a good causal analysis of malnutrition and a good understanding of how interventions can influence the immediate, underlying and basic causes of malnutrition. The direct determinants of malnutrition are dietary intake and disease, which in turn are determined by food security, care practices and the health environment. Figure 1 demonstrates these relationships through the widely accepted UNICEF Conceptual Framework. Although there have been a number of adaptations of the UNICEF framework, the original is presented here, with a brief explanation of the immediate, underlying and basic causes of malnutrition.

2.2.1 Immediate causes of malnutrition4

Inadequate food intake and disease are the two immediate causes of malnutrition. Health and nutrition are closely linked, as malnutrition makes an individual more susceptible to disease, while disease contributes to malnutrition. The four childhood killers which are common in emergency settings – measles, malaria, diarrhoeal disease and acute respiratory infections – may all contribute to malnutrition through loss of appetite, the poor absorption of nutrients and loss of nutrients through diarrhoea or vomiting, or through altered metabolism.

2.2.2 Underlying causes of malnutrition: food, care and health

Household food security

Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food for a healthy and active life (FAO, 1996). The emphasis of household food security is on a family's capacity to produce and acquire food, along with nutritional quality; people need sufficient energy, as well as protein, fat, vitamins and minerals. Food security is increasingly being viewed in relation to people's livelihoods. In periods of food insecurity, households adopt a range of 'coping' strategies to manage the risks they face. While these strategies may provide some protection against food insecurity, they may also incur nutritional risk. For example, common strategies include cutting back on the number of meals and switching to cheaper but less nutritious food. For people who depend on an annual harvest, access to food is highly seasonal.

Maternal and child care

The UNICEF framework refers to maternal and child health, but in emergency contexts this can also be taken to refer to the wider cultural and social context that shapes caring behaviours within the household and the local community. In stable contexts, appropriate childcare, including sound feeding practices (especially optimal infant and young child feeding), hygiene, emotional support and appropriate health-related practices may be the most important caring behaviours in terms of their impact on nutrition. Often, the care of children

 $4\, The\ sections$ on the different causes of malnutrition and their relationships are adapted from Young and Jaspars (2005).

is closely linked with cultural and gender issues. Emergencies can generate further constraints that limit or restrict care and therefore contribute to malnutrition. Displacement or forced migration causes severe social disruption and the break-up of communities and even families, with the loss of social networks that would normally support the household in the care of its children, sick and elderly.

Health environment

The health environment, including adequate supplies of clean water, sufficient sanitation and appropriate shelter and clothing, is critical in terms of exposure to disease. Prevention and control of disease through public health programmes, for example immunisation, are also crucial in protecting and supporting nutrition. In emergencies, public health problems are often concentrated where people are displaced, and there is subsequently severe overcrowding and pressure on existing amenities.

2.2.3 The relationship between different underlying causes It is important to note that, in the UNICEF framework, the different underlying causes overlap. For example, food insecurity may increase women's workload and so may limit the time available for childcare. The same applies if water sources or health care are far from people's homes (UNICEF, 1990). Young and Jaspars (2009) propose that the relationship between the different underlying causes changes with the severity of food insecurity. They argue that, where the population is generally food secure, health and care are on a par with each other, and each is necessary – but on their own insufficient - for addressing malnutrition. When acute food insecurity increases, it influences the health and care environment (i.e. coping strategies limit care-giving behaviour and loss of income reduces people's ability to access health care). Finally, in the most extreme emergencies or famines, all underlying causes of malnutrition are extremely elevated, resulting in the highest levels of malnutrition and mortality. The impact of cash transfers will thus be highly dependent on the severity of the crisis at the time the transfers are introduced.

Most underlying causes of malnutrition are a function of people's resources. What people produce is determined by a range of social, economic and political factors, such as property relations, the division of labour and power relations. According to UNICEF, institutions are the interface between underlying and basic causes as they provide basic services and control access to resources; as power relations change, institutions change or cease to function, community and household assets are destroyed and access to land, markets and employment may be restricted.

2.3 Understanding the impact of emergency interventions on nutrition

Malnutrition is not linked simply to income or food security; there are many inter-related causes. However, agencies often

respond to malnutrition by only addressing one possible cause – food insecurity – with distributions of food aid and supplementary feeding programmes. In some settings these interventions have struggled to bring down acute malnutrition. This has resulted in an increasing appreciation by aid agencies that acute malnutrition is not simply a result of lack of access to food, but that caring and feeding practices, disease and access to health services are equally important (WFP, 2011; ACF, 2011; FEWSnet, 2006). Thus interventions that seek to impact upon nutrition must be based on sound causal analysis and see nutrition as much more than food. A combination of different approaches is often required.

Unlike development situations, where there is solid evidence on 'what works' in addressing maternal and child undernutrition, there is very little published information on the impact of humanitarian interventions on nutrition, including cash transfers. Attributing nutritional impact to humanitarian interventions is enormously challenging. Hall et al. (2011) describe the practical and conceptual difficulties involved in obtaining valid evidence on the impact of emergency interventions on nutrition. It is difficult to show what would have happened in the absence of an intervention. Evaluations look at malnutrition rates before and after the intervention, which provides a snapshot of malnutrition at two points in time, but does not show what would have happened in the absence of the intervention. This leaves a huge margin for interpreting impact. For example, if the prevalence of acute malnutrition is measured before and after an intervention, changes in prevalence can be mistakenly attributed to the intervention when other factors were responsible, such as changes in the price of food. Similarly, if no change in prevalence takes place or prevalence worsens, this cannot be interpreted as the intervention not 'working', since prevalence could have been worse still without it. The benefits of an intervention can be underestimated or overestimated if acute malnutrition rates would have increased or decreased irrespective of the intervention (ibid.).

Because before and after comparisons are insufficient to attribute impact to interventions, comparison groups are needed to show what changed as a direct result of the intervention. In order to get valid findings this would require randomly selecting people who receive the intervention and comparing them with those who did not, which is not appropriate in crisis settings (ibid.). It would also be almost impossible to control for the other factors that could potentially influence nutrition. In addition, while randomised control trials are the 'gold standard' for evidence in clinical research, random trials are less appropriate for decisionmaking in public health interventions because interventions lead to outcomes in numerous and complex ways (Victora et al., 2004). Furthermore, no matter how robust the evidence on impact such research generates, the intervention in question might be ineffective in a different context (ibid.). These shortcomings would equally apply to public nutrition.

Researchers and aid agencies are experimenting with other methods of understanding the relationship between an intervention and a change in nutritional status. These include 'plausibility studies', where plausibility is defined as apparently true or reasonable or 'common sense' (Hall et al., 2011); plausibility depends on judgement and is open to interpretation. Similarly, Action Contre la Faim (ACF) is experimenting with 'process tracing', a method borrowed from political science that 'attempts to uncover what stimuli the actors attend to; the decision process that makes use of these stimuli to arrive at decisions; the actual behaviour that then occurs; the effect of various institutional arrangements on attention, processing, and behaviour; and the effect of other variables of interest on attention, processing, and behaviour' (George et al., 1985). However, these are newer methods and no studies were available to include in this review.

Given the challenges, it is unsurprising that evidence on the nutritional impact of cash transfers in emergency and transitional settings is lacking. To respond to this gap, research initiatives are currently underway to help generate evidence on how cash transfers compare with other interventions in impacting on nutrition. The Emergency Nutrition Network (ENN) has set up a study to look at the costs per nutritional outcome of alternative interventions addressing moderate acute malnutrition, including cash transfers. The World Food Programme (WFP) and International Food Policy Research Institute (IFPRI) have designed a study to compare the impact of cash, vouchers and food in five contexts, including their impact on nutrition. Table 1 (page 8) outlines current research initiatives (research on long-term conditional cash programmes is detailed in Chapter 4). All of the studies were on-going at the end of 2011.

Generating context-specific evidence will help donors and aid agencies determine the most cost-effective interventions in particular settings. However, the challenges of undertaking rigorous, ethical research on programme impact are numerous. For example, the ENN study has spent 18 months establishing and gaining consensus on the methodology; there are difficulties in locating study sites because of the constraints presented by humanitarian settings, including insecurity, and there are limitations on the extent to which findings from such research initiatives can be exported to different contexts. Given these challenges and the dearth of evidence on nutrition outcomes, a first step is understanding the ways in which cash transfers could affect nutrition by looking at the potential impacts of cash on the determinants of malnutrition.

2.4 Causal pathways: how cash might impact nutrition

In theory, cash interventions could have an impact on most, if not all, immediate and underlying causes of malnutrition. When households have more money they can buy more food, take children to health centres, spend more time with them, invest in agricultural production (and thus have more income

Table 1: Research initiatives on cash transfers and nutrition in emergencies

Emergency Nutrition Network⁵

In 2009, OFDA funded the ENN to conduct research into alternative methods of addressing moderate malnutrition in emergencies. The study aims to assess the cost- effectiveness of a range of interventions such as cash transfers, blanket supplementary feeding programmes (SFPs) and modified general food distributions to prevent moderate malnutrition in emergencies. Given the difficulties of conducting randomised control trials or any research involving control groups within the context of an emergency, the ENN with help from SCUK and CDC has invested considerable time in developing a method for the study which does not involve traditional control groups. The study will implement a combination of methods including interrupted time series and nested controls using longitudinal cohorts of non-malnourished children who may or may not be exposed to the intervention.

IFPRI/World Food Programme⁶

A five-country study funded by WFP will examine the effectiveness and efficiency of cash and vouchers as alternatives to food aid in improving household food security and other measures of well-being, including nutrition. The countries selected for the pilot are Ecuador, Niger, Timor Leste, Uganda and Yemen. In each of the five countries, interventions will be implemented according to randomised study designs to enable comparison of the food, cash and vouchers. It will compare different outcomes (including nutrition) and the efficiency of the different modalities.

Tufts University and Concern Worldwide, Niger

Following drought in 2009, Concern Worldwide piloted the use of mobile money to provide cash transfers in Niger. Combined with other activities, the overall aim of the programme was to prevent increases in child malnutrition, mortality and asset depletion during the hungry period. Concern Worldwide, in collaboration with Tufts University, engaged in research examining the impact of cash transfers on well- being (e.g. food security, nutritional status) and compared distributing transfers manually in envelopes or via mobile phones. The first phase of the research was unable to determine the impact of the intervention on nutrition, but gleaned substantial evidence and insight on the use of mobile transfers (Aker et al., 2011) (see Box 4). A second phase has been designed to better understand impact on nutrition.

and food) ... the list of possibilities is long. To explore these potential impacts, it is useful to think in terms of 'causal pathways': ways of explaining direct and indirect links between interventions and outcomes. Cash transfers could have an impact on the immediate causes of malnutrition directly or by influencing aspects of food security, the social and care environment and the health environment. For example:

- Food security: a cash transfer might increase household food intake through increased expenditure on food, as well as preventing negative responses to food insecurity, for instance skipping meals. This could include improved quality and/or quantity of food and more frequent meals – all factors in an 'adequate diet'. Cash might be spent on seeds to grow more food, or a goat to provide milk which can be consumed or sold for additional income.
- Care: a cash transfer might free carers' time by reducing the need to pursue income-generating activities outside of the home or to move in search of work. Some agencies have provided cash for training and information sessions,

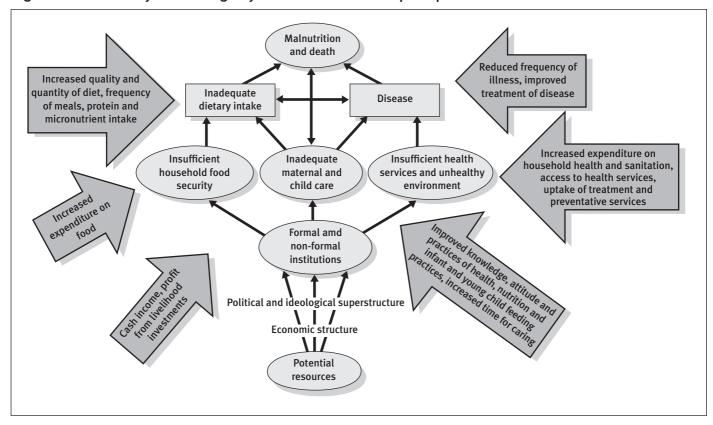
- including nutrition education. Here the cash has two functions, both as an incentive to attend health and nutrition promotion sessions and to enable carers to act on their new-found knowledge (by providing them with money to buy nutritious food, access health services, etc).
- Health: a cash transfer might increase household expenditure on healthcare, as well as on soap and hygiene products. This could in turn reduce the incidence, duration or severity of disease, and cash could be used directly to pay for health treatments. Improved health leads to higher productivity, which in turn affects other immediate determinants of malnutrition.

How people actually prioritise spending and the goods and services available to them would need to be understood in assessments and verified in monitoring. Some of the indicators we might choose to look at when determining whether cash transfers affect the underlying and direct determinants or 'pathways' of good nutrition include increases in the quality and quantity of diet, expenditure on food, expenditure on health services, time spent caring and reduced frequency of illness. Sample indicators are shown in Figure 2.

⁵ http://www.ennonline.net.

⁶ http://www.ifrpi.org.

Figure 2: Potential ways that emergency cash transfers could impact upon causes of malnutrition



Chapter 3 Evidence on the impact of humanitarian cash transfers on nutrition

To date, the majority of humanitarian cash transfers have aimed to meet basic needs, primarily food needs. Indeed, cash is increasingly considered by donors as a form of food assistance (Harvey et al., 2010). This is positive in that donors are thinking beyond food aid as a way of helping households to meet food needs. Yet it is also limiting in that there is a tendency to see cash and vouchers only as a substitute for food aid, when they can replace and complement almost any form of assistance. While cash transfers, as well as vouchers, have been enthusiastically piloted to replace in-kind food distributions, cash programming can influence nutrition in other ways. There are numerous guidelines on cash-based interventions, but these say little about nutrition. Neither UNICEF nor the global nutrition cluster has published guidance on using cash to address nutrition in emergencies. However, looking at the possible ways in which cash might influence the causes of malnutrition, it seems clear that cash could be used to protect, and potentially improve, nutritional status.

Some nutrition actors are now considering how cash transfers can be used in nutrition programming, either as an alternative to in-kind assistance and services or as a complement to more traditional interventions. As an alternative, cash is being explored as a replacement for supplementary feeding rations. As a complement, cash is being provided alongside interventions such as outpatient therapeutic feeding, to incentivise participation and increase the availability of food at the household level to reduce sharing of therapeutic foods, which are meant only for malnourished children.

Most of the cash interventions reviewed provided unconditional cash transfers. Unconditional cash transfers have no restrictions on how money is spent and no actions are required of beneficiaries in order to receive them. Objectives ranged from improving access to food and other necessities (including health care) or access to nutritious food or an adequate quality and quantity of food; preventing a reduction in the number of meals or quality of food; improving dietary diversity; improving consumption of fresh food or protein-rich foods; providing nutritional support; and improving nutrition or preventing malnutrition. While unconditional, several interventions accompanied transfers with messages meant to encourage people to buy food and even certain types of food (Poulsen and Fabre, 2011; Devereux et al., 2007). No interventions reviewed provided unconditional cash transfers with the explicit objective of reducing the other direct

7 WHO, UNICEF, WFP and UNHCR Consultation on the Programmatic Aspects of the Management of Moderate Acute Malnutrition in Children under five years of age, 24–26 February 2010, WHO, Geneva.

determinant of malnutrition – disease; however, some did monitor changes in health expenditures. With all of these objectives, it is easy to lose sight of the fact that households spend cash on what they need. For better or worse, agencies have in many cases tried to influence this in the belief that households will make better choices with some 'advice' (Box 1).

Box 1: Messages on how to spend cash (from Concern's DECT programme in Malawi)

Beneficiaries recalled receiving several messages on how they should – and should not – spend the cash they received from DECT. Most of these messages emphasised the well-being of the family: 'Don't play with this money. If a child is sick – yes. If you have no maize – yes. No salt – yes. No fertiliser – yes, so that you can harvest more next season.' 'Children should not be malnourished. Don't buy clothes, don't use it for tea, and don't undermine your husband just because the card is in your name.' 'They said we should spend it well because "it is money meant to save you from hunger". Our children should not be hungry.' 'This money is not for fun. This is why it is being given to women, to ensure that they cater for the needs of the whole family.' 'Concern staff gave us some advice about not being greedy with this money. "Do not let your children become malnourished".' 'When budgeting, do it together with your husband.' 'Concern did not want to give this money to men because they normally drink it off, forgetting their families.'

Source: Devereux et al., 2007.

In contrast, conditional transfers require that recipients do something in order to receive the transfer (e.g. attend an information session, have children vaccinated), with the intention of changing how households take care of and invest in their children. Conditional transfers are rare in emergencies because behaviour change objectives are not often appropriate in the midst of a crisis, and conditions create additional requirements for already stressed households. That said, the more explicit the dietary or nutritional objective, the more conditionality appears to increase, with the assumption that applying conditionalities can achieve greater impact (Meyer, 2007). The most common conditions include participation in nutrition, health and breastfeeding education and counselling,8 which fall under the broad rubric of behaviour change communication (BCC), and participation in therapeutic and supplementary feeding programmes (Brewin, 2010; Dunn, 2010).

8 ACF, 2010a; Sibson, 2010; Dunn, 2010; SCUK, 2010a, 2010b, 2010c; CRS,

Of the 54 projects reviewed, 23 used vouchers,9 in eight instances provided in combination with cash. Vouchers, when used to ensure an adequate diet, have been justified over the use of cash when agencies want to limit the range of food products that beneficiaries can buy, sometimes on the assumption that beneficiaries might have other priorities if given cash (FAO, 2011; Barrett et al., 2011). Vouchers have been used to encourage the purchase of animal-source foods (meat, dairy and eggs) and other fresh foods (fruit and vegetables) when these are at risk of being eliminated from the diet (Bazin, 2010; Dunn, 2010; Creti, 2010; Hedlund and Glintchy, 2009). Fresh food vouchers (FFV) have been used to improve micronutrient consumption among refugees in the Dadaab camps in Kenya, the occupied Palestinian Territories and Bolivia (Cortes and Otter, 2011; SCUK, 2011; Dunn, 2010).10 Vouchers for non-food items (which include soap) as well as health vouchers have also been tried. These interventions may in turn improve nutritional status, though little evidence exists and this is clearly an area where more investigation would be useful.

As discussed, understanding the impact of an intervention on nutritional status is very complicated. Rather, humanitarian interventions attempt to measure their more proximate outcomes (e.g. purchasing and consuming an adequate diet) and assume that this will have an impact on nutritional status as measured by anthropometric indices. The relative efficacy of humanitarian interventions is rarely assessed through cohort or case control studies (Hall et al., 2011). In the case of dietary intake, however, there have been efforts to compare types of transfers, vouchers, cash and in-kind, and their relative impact on consumption. Drawing from the projects reviewed, this section examines:

- Evidence from cash transfer interventions where impact on *nutritional status* was measured (i.e. projects using anthropometric indicators as outcome indicators).
- Evidence on how cash transfers affect the *immediate and* underlying determinants of malnutrition (i.e. measurements of dietary intake and disease, and food security, caring practices and the health environment).

3.1 Evidence on nutritional status

One-fifth of the programmes reviewed measured changes in global acute malnutrition (GAM). All of the cash transfer activities below were part of a more holistic nutrition inter-vention. Bearing in mind the challenges of attribution, improvements in nutritional status were observed in interventions in Haiti, Kenya, Myanmar, Niger and South Sudan.

 GAM declined during the implementation of two FFV programmes in the Dadaab refugee camps in Kenya (from

9 Vouchers are coupons, tokens or electronic cards that provide recipients with access to commodities.

10 Meat, dairy, eggs and iron-rich vegetables in the case of anaemia, and vitamin A, vitamin C or calcium-rich foods in the case of diets low in these essential vitamins and minerals.

11.4% to 7.3%) (UNHCR, 2010). The first programme utilised FFV as an incentive to attend supplemental feeding programmes (2008–2009). The second programme (2009–2010) distributed FFV as both an incentive to attend nutritional promotion sessions and to increase access to fresh foods (SCUK, 2011). In the latter programme there was a significant decrease in acute malnutrition among the target group (6–12-month-old children) (see Box 2).

- In Myanmar, cash transfers were provided to families with moderately malnourished children. The transfers were coupled with Plumpynut (for severely malnourished children), training and education on caring practices and general food distributions. GAM rates declined from 6.6% to 2.6% in Middle Island and from 7.5% to 4.7% in Mawlamingyun (SCUK, 2010) (see Box 3).
- In Niger, the provision of unconditional cash transfers, coupled with nutrition education and food distributions, were followed by an initial decline from 21.3% to 13.6% GAM. Later, malnutrition rates increased after a malaria epidemic (SCUK, 2009).
- In Warrap State, South Sudan, after targeting the families of malnourished children with business grants, 64% of children from beneficiary households had MUAC measurements of 135mm or above, indicating that they were well nourished, compared to 24% at the time of the baseline (Pietzsch and Sloan, 2010). In Bahr Al Gazal and Upper Nile, a decline of 6% GAM coincided with the distribution of meat and milk vouchers (Farawo, 2009).

Evaluations of these programmes cited other factors that

Box 2: Using Fresh Food Vouchers to reduce malnutrition due to poor infant and young child feeding practices (Dadaab refugee camps in Kenya)

SCUK implemented a Fresh Food Voucher programme for fruits, vegetables, meat and eggs in the Dadaab refugee camps, following an ACF pilot project the year before that had contributed to increased dietary diversity among targeted households. In its assessment and analysis SCUK noted disproportionate malnutrition among 6-12-month-old children. SCUK then modified the ACF project to address poor weaning practices and consumption of complementary food. SCUK targeted all households with children aged 6-12 months with Fresh Food Vouchers and tailored education on infant and young child feeding. The number of 6-12-month-old children consuming more than four food groups and iron-rich foods significantly increased. Surveys showed that beneficiaries were three times more likely to eat eggs and twice as likely to eat iron-rich foods than non-beneficiaries. GAM rates among this age group declined in proportion to all under-5s, from 16% (against 11.4% for all under-5s) in 2007 to 4.5% (vs. 7.9%) in 2010. This is an example where strong causal analysis was used to determine an intervention for a particular target group and indeed this appears to have yielded significant benefits for that group.

Sources: Hedlund, forthcoming; SCUK, 2011; UNHCR, 2010.

may have contributed to changes in nutritional status, such as disease outbreaks, changes in food prices and other humanitarian interventions. Cash interventions are usually done on a smaller scale than other types of assistance. This makes it tenuous to connect such programmes to changes in global acute malnutrition rates. Furthermore, GAM may fluctuate according to seasonal changes in food security, the health environment and care practices (Young and Jaspars, 2009), and the pitfalls of before and after snapshots have been discussed. Finally, nutritional statistics rarely met minimum standards for reporting, e.g. 95% confidence intervals or tests for significant change (p-values) (SCN, 2011d). These issues pose obvious implications for drawing conclusions on impact.

There are also examples of programmes that have used cash transfers as an explicit complement to supplementary feeding programmes (which provide moderately malnourished children under five with rations containing fortified food) and outpatient therapeutic feeding programmes (which provide ready-to-use therapeutic food to severely malnourished children with no medical complications). Below are examples where cash appears to improve the effectiveness of these interventions.

- In Niger, households received cash or food to increase the likelihood that the SFP ration would be consumed by children under five years of age in the household, versus being shared amongst all members as was the common practice. Sharing of the SFP ration was reduced among both groups of households (cash and food recipients) (Poulsen and Fabre, 2011).
- Fresh Food Vouchers (meat, eggs, fresh fruit and vegetables) were provided to families with children in targeted supplementary feeding programmes in the Dadaab camps (Dunn, 2010). The coverage of these programmes increased from 30% to over 50%, and GAM rates remained stable during the implementation period despite an influx of refugees and an increase in programme admissions.
- In an SCUK Somalia programme, children whose families were given cash were discharged from outpatient therapeutic programmes 38% quicker than those from non-recipient households, and they put on weight 45% faster than non-beneficiary counterparts (Brewin, 2010). The evaluator attributed this to increased food availability at the household level and reduced sharing of the therapeutic foods provided through the outpatient programmes.

Initial evidence on the use of cash to complement feeding programmes is promising, possibly when acting as an incentive to participate but more importantly by reducing sharing of specialised food. The impact of cash on feeding programme performance would be better understood if Sphere reporting standards were used.

3.2 The impact of cash on causes of malnutrition

The previous section gave examples of the causal pathways through which cash transfer interventions could impact on malnutrition. This section explores evidence of the effects of cash transfers on each of these causal pathways.

3.2.1 Adequate diet

Children (and adults) risk becoming malnourished when they do not consume a diet that is adequate in both quantity (kilocalories) and quality (micro and macronutrients) compared to their requirements. While the range of food diversity is more easily recalled by subjects, recalling the actual amounts of food consumed is imperfect and complicated. Three studies attempted to measure the kilocalorie consumption of cash recipients, and in two instances they reported a significant impact (increase from 15% to 90% of beneficiaries consuming adequate kilocalories (SCUK, 2010a; 2010b; 2010c)). In a fourth study, findings were complicated by a change in consumption patterns during the holidays (Sharma, 2006).

Usually, a number of proxy measures are used for food intake. These include individual and household dietary diversity and food consumption scores, including measuring the consumption of specific food groups that are high in desirable macro and micro nutrients. Even less perfect, humanitarian agencies measure changes in the frequency of meal consumption or in expenditure on food as a percent of total expenditures.¹¹ These indicators are simultaneously used as indicators of food security. Other indicators of food insecurity include the Household Food Insecurity Access Scale (HFIAS), the Coping Strategies Index (CSI) or simply asking people if they 'felt hungry' during the reporting period (Devereux and Jere, 2008).

Individual dietary diversity

Household dietary diversity is often used as an indicator of household food access, but it hides the distribution of food within the household and infant and young child feeding practices. Rather, the dietary intake of individuals at risk of malnutrition in an emergency is better analysed by individual dietary diversity scores (IDDS) (ACF, 2010b). This is often not done. Only four studies measured the impact of cashbased interventions on IDDS, and all of them found positive impacts on at-risk groups (Otter and Cortes, 2011; SCUK, 2011; Sibson, 2010; Devereux et al., 2007).

Household dietary diversity

Increasingly, evaluations of cash transfer programmes measure household dietary diversity as an indicator of adequate dietary intake and food security. The quality of diet declines during emergencies and there may be a correlation¹²

- 11 Several studies have demonstrated that staple food expenditure is least elastic during emergencies, i.e. it is less likely to be compromised, while fresh food expenditure and non-food expenditures such as health, education, clothing and entertainment are highly elastic (Skoufias, et al., 2011; IFPRI, 2008; Hoddinot et al., 2002).
- 12 A 1% increase in dietary diversity is associated with households experiencing between a 0.65% and 1.11% increase in household per capita consumption; a 0.37% to 0.73% increase in household per capita caloric availability; a 0.31% to 0.76% increase in caloric availability from staples; and a 1.17% to 1.57% increase in caloric availability from non-staples (Hoddinott et al., 2002; Ruel, 2002).

between dietary diversity and caloric consumption and, 'plausibly', nutritional status.

Almost without exception, all types of cash programmes (cash transfers, vouchers, with and without conditions) improved household dietary diversity. When the dietary diversity of cash-recipient households is compared to a baseline or to households receiving food aid, cash recipients consistently consume diets of a better quality and greater diversity, specifically increasing the amount of fresh foods, animal proteins and fats (SCUK, 2010a, 2010b, 2010c; Tchatchua et al., 2008; Devereux, 2007; Devereux and Mhlanga, 2008; Adams, 2007; Concern Universal, 2006; Adams and Kebede, 2005). Obviously, vouchers that limit purchases to fresh foods and animal proteins increase consumption of fresh food and animal proteins (Hedlund, forthcoming; ACF, 2010a; Creti, 2010; Dunn, 2010; Hedlund and McGlintchy, 2009).

That households receiving cash have greater dietary diversity than those receiving food aid may seem unsurprising given that food aid only adds two or three 'categories' of food. However, providing a staple food ration releases income that could be spent on food items not provided. While logical, the impact on dietary diversity, or relative lack thereof of a general ration, is worth noting.

There are some exceptions. Concern Worldwide's urban unconditional cash transfer project in Nairobi did not substantially improve dietary diversity (MacAuslan and Schofield, 2011). Focus group discussions with beneficiaries revealed that they wished to increase the variety of items but not the diversity of food groups in order to 'eat like rich people ... by buying real bread and spreading Blue Band [margarine] on it' (MacAuslan and Schofield, 2011). An evaluation of a Concern Worldwide programme in Zimbabwe found that dietary diversity did not improve with cash transfers compared to people receiving food, as food aid recipients had more beans in their diet while cash recipients

chose not to buy protein-rich foods (Kardan et al., 2010). However, these findings were exceptional and further analysis of why dietary diversity improves in some instances and not others would be useful (e.g. differences in contexts, poverty levels).

WFP Food Consumption Score

WFP's Food Consumption Score (FCS) is similar to the household dietary diversity score. It measures the frequency of consumption of 12 food groups and thresholds for 'poor', 'borderline' and 'adequate' food consumption. 13 There are ongoing debates on refining this indicator. 14 Regardless, cash transfer beneficiaries have consistently improved their FCS compared to baselines and in comparison to people receiving only food rations or combinations of food and cash (Table 2). There are exceptions that are largely the result of households privileging the purchase of staple foods, which was the case in interventions in Afghanistan and Niger (Poulsen and Fabre, 2011; Sandstrom, 2010). Markets influence the range of foods available. For example, Bolivian villages with relatively lower rates of increase in dietary diversity also had lower access to markets as measured by distance and time travelled (Cortes and Otter, 2011).

Micronutrient intake

With the exception of Fresh Food Voucher programmes, evaluations rarely looked at likely impact on micronutrient intake. The UN Standing Committee on Nutrition (UNSCN) and Sphere guidelines recommend using locally available resources when trying to meet micronutrient requirements, for reasons of cost-efficiency, support to local economies and sustainability (UNSCN, 2011; Sphere, 2011; Dunn,

Table 2: Food Consumption Scores pre- and post-intervention

Intervention	% with adequate FCS baseline	% with adequate FCS after intervention
Fresh Food Vouchers in oPT,	55%	89% (voucher) 53% (food aid only); 47% (no aid)
Gaza (Oxfam/WFP)		
Cash transfers and cash transfers +		57% (cash transfers); 33% (cash + food); 18%
food aid, Zimbabwe (Concern)		(food aid only)
Cash transfers + food aid, Swaziland	33% children	80% (cash + food); 60% (food aid only)
(SCUK/WFP)		
Cash Transfers in Sri Lanka (Oxfam/WFP)		Increase in 50% (cash); increase in 20% (food aid)
Cash transfers, Myanmar,	25% children	94%
West Delta (SCUK)		
Fresh Food Vouchers in oPT,	47%	83%
West Bank (ACF/CRS/WFP)		
Vouchers in Afghanistan (WFP)	33.9 (FCS)	33.6 (FCS)

Note: The final four examples are before and after snapshots, subject to all of the weaknesses that have been previously mentioned.

¹³ For more information on FCS see WFP, 2008.

¹⁴ According to IFPRI, the FCS improves on HDDS; however, IFPRI notes that the thresholds used by WFP are too low and thus can underestimate food insecurity (Wiesmann et al., 2008). The issue of different cut-offs for different cultures has also been raised in evaluations, such as African compared to Middle Eastern populations (Hedlund and McGlintchy, 2009; ACF, 2010b). FCS is discussed at length in ACF, 2010b.

2010; Hedlund and McGlintchy, 2009). In general, however, humanitarian agencies specialising in nutrition are cautious about recommending cash to address significant micronutrient deficiencies and note the cost-effectiveness of supplements (ACF, 2011; SCUK, 2011; SCUK, 2009).

That said, interventions using cash and Fresh Food Vouchers have consistently demonstrated measurable increases in children's consumption of protein-rich foods, particularly animal-source foods (ASF) which are also rich in vitamin A, vitamin B12, riboflavin, vitamin C (in the case of camel milk), calcium, iron, folate and zinc (Dunn, 2010; SCUK, 2009; Sadler, 2009; Devereux et al., 2007). SCUK observed an increase in vitamin A-rich foods in Niger where cash transfers were accompanied with nutrition education (SCUK 2010a, 2010b, 2010c). ACF and SCUK noticed similar increases in ASF, iron and vitamin A-rich foods for Fresh Food Voucher beneficiaries in Bolivia (Otter and Cortes, 2011; SCUK, 2011; Dunn, 2010). In Kenya and Nepal, increased demand resulted in increased supply for food that vouchers could be used to purchase, ultimately benefiting non-beneficiaries (SCUK, 2011; Dunn, 2010).

Expenditure on food and meal frequency

When provided with cash transfers, households typically increased the total amount of money they spent on food. In the evaluations reviewed, households receiving cash spent 45–90% of the money on food (less when the cash is accompanied with a food ration). Meal frequency also increased in several projects compared to before the intervention (Creti, 2005; Mattinen and Ogden, 2006; Ali et al., 2005; Roman, 2010; MacAuslan and Schofield, 2011; Devereux et al., 2007). However, 'meals per day' is a crude proxy for actual dietary intake. Families could, for instance, adjust the size of their portions while continuing to eat as often (i.e. same meal frequency but smaller portions), or, as in the case of the Concern project in Nairobi, eat less nutritious foods (Devereux et al., 2007; MacAuslan and Schofield, 2011).

Household Food Insecurity Access Score, self-reported hunger and Coping Strategies Index

Finally, FANTA and others have used indicators such as the Household Food Insecurity Access Score (HFIAS), self-reported hunger and the Coping Strategies Index (CSI) - a composite score based on progressively negative coping strategies. There is very little research on the correlation between these indicators and nutritional status, but some have shown consistency in findings between subjective indicators of food insecurity, quantitative indicators of food consumption and nutritional status. For example, in DECT and ZECT programmes in Malawi and Zimbabwe, cash beneficiaries reported not only an increase in meals per day and dietary diversity, but also a decline in negative coping strategies and malnutrition (Devereux et al., 2007; Roman, 2010). In Malawi, dietary diversity for children increased at the same time that self-reported hunger decreased dramatically for 'cash and food' recipients (from 70% to 22%) compared to 'food only' recipients (from 79% to 61%) (Devereux and Jere, 2008). Cash transfers to mothers of children in

outpatient therapeutic programmes in South Sudan reported similar reductions in coping strategies that can have a negative impact on nutrition, and in some areas a decline in self-reported hunger (Sloan and Pietzsch, 2010).

Preliminary conclusions on the impact of cash on dietary intake With few exceptions, the evidence for cash transfers contributing to improved dietary intake is positive, and cash therefore presumably has an impact on malnutrition in these instances even if this cannot be measured as a change in nutritional status. Beneficiaries spend cash on food and often consume more and better-quality food, contributing to improved diet for children in the few instances where this was measured. There are other factors that also need to be in place for this benefit to be realised, namely that quality foods are available and people prioritise them. The evidence suggests that this is often the case. This is in many respects a 'common sense' finding – cash increases access to food, so if inadequate access to food is a cause of malnutrition cash could be an appropriate way to address this. Again, when analysing the impact of cash on dietary intake, confounding factors have to be taken into account and reported in evaluations.

Cash-based interventions that seek to improve nutrition through improved dietary intake and access to food should be more consistent in monitoring indicators of food security, food intake and malnutrition. Coupled with a sound nutrition causal analysis, this would help to demonstrate a stronger link between cash transfers and nutrition.

3.2.2 Caring practices

Influencing caring or social and cultural practices is not a common objective of cash transfer programmes. Fewer than half of the programmes reviewed had complementary programmes that included health and nutrition education. Projects also seldom included pre- and post- Knowledge, Attitudes and Practices (KAP) tests, which are used to understand caring practices and other behaviours related to public health and nutrition. Importantly, KAP analysis rarely goes a step further to look at whether poor caring practices are a result of poor knowledge or the result of underlying problems, such as women's workload, their position in society and cultural norms.

Infant and young child feeding (IYCF) practices have only more recently been the focus of emergency nutrition interventions. These interventions largely focus on education and the provision of services. Where these interventions did include a cash or voucher component, there was a measurable improvement in knowledge, attitudes and practices (SCUK, 2011; Sibson, 2011; Khin Maung Aye et al., 2010; SCUK, 2009; SCUK, 2007; SCUK, 2004). For example, when Fresh Food Vouchers were coupled with education in the Dadaab refugee camps, there was a 75% increase in the proportion of mothers employing four key behaviours for improved child nutrition and health (preparing balanced/diversified food, personal hygiene, breastfeeding/proper and frequent feeding of the

child, proper food storage and handling) (SCUK, 2011). In an SCUK intervention providing cash to breastfeeding mothers after Cyclone Nargis in Myanmar, at the time of the first transfer 28% of mothers did not exclusively breastfeed their children. By the fourth payment, the figure was less than 2% (Khin Maung Aye et al., 2010). In both cases, cash or vouchers were used as an incentive to participate and as an income transfer, providing access to fresh foods or time to breastfeed. Box 3 describes how the various benefits of the Myanmar programme were measured. However, the added value of cash and vouchers in obtaining these improvements, compared to other programming components, is not known.

It is also relevant to analyse how cash transfers might negatively impact nutrition, for example by creating negative incentives and negatively influencing the care environment. CARE and UNHCR were concerned that, by using vouchers as an incentive (even inadvertently) to participate in supplementary feeding programmes in the Dadaab camps, mothers might purposefully neglect their children in order to be eligible. Providing Fresh Food Vouchers might encourage mothers to cease breastfeeding sooner (Dunn, 2010; Lung'aho and Oman, 2009). These risks are not unique to cash. Agencies should consider how any programme might negatively affect a child's nutritional status, and programmes should be designed in such a way as to minimise these risks. For example, if cash or voucher transfers involve spending time away from home, for education, waiting in line or going to designated shops, can the cash or voucher be delivered through mobile phones and can more vendors be

Box 3: Save the Children UK in Myanmar targeting breastfeeding mothers and mothers of children with MAM

After Cyclone Nargis in Myanmar, Save the Children UK provided breastfeeding mothers and mothers of malnourished children with a cash transfer, nutrition education and Plumpynut for severely malnourished children. In this case the cash transfer was used by SCUK both as an income transfer to increase food availability at the household level and an incentive to participate in the programme. The end of project evaluation demonstrated that caring practices of malnourished children improved during the project. Among the target population, more than 90% of mothers were feeding their children according to international standards of appropriate infant and young child feeding practices; with significant increases in early initiation of breastfeeding, exclusive breastfeeding, and feeding frequency and dietary diversity for young children, including more meat, offal, vegetables and dairy. Furthermore, 85% of mothers reported that they were also eating more balanced diets. Performance indicators improved over the life of the project considering that during 1st payments, 72% of mothers reported exclusive breastfeeding, which increased to and remained above 95% for the second, third and fourth payments.

Source: Khin Maung Aye et al., 2011; Sibson, 2011.

included to increase the likelihood that a designated shop is close to people's homes?

Cash can reduce women's workloads or reduce the need to earn income outside the home. In theory this could increase the time spent with children and improve the care practices mothers provide. Several evaluations of interventions in Ethiopia, Mali and Niger found that recipients of cash transfers reduce the time spent away from home doing piecework, searching for wild foods and migrating for work (Aklu and Haile Kiros, 2005; Oxfam, 2005; Harvey and Savage, 2006). The SCUK intervention in Niger observed that 'a 200,000 CFA transfer did not translate to a 200,000 CFA increase in income'; instead, care-givers reduced livelihood strategies that have a high social cost, such as migration (SCUK, 2009). In Malawi, transfers were used to pay for milling, reducing women's workloads at home and allowing them to spend more time on domestic activities, including caring for children (Devereux et al., 2007). However, monitoring and evaluation has yet to include 'time use' analysis to assess whether having more time actually translates into increased care, and whether increased time for care in turn leads to improved child nutrition.

Overall there is some evidence that cash transfers could improve caring practices, but there is limited experience and it is difficult to draw any firm conclusions. Cash eases economic constraints, if only temporarily, that might pose an obstacle to care. Save the Children UK, both a proponent of cash transfers and a recognised expert in emergency nutrition, contends that improved knowledge and awareness are insufficient to improve nutrition, given the prohibitive costs of a healthy diet, the opportunity costs of staying at home and caring for children and the costs of preventing and treating illness (SCUK, 2009; Chastre et al., 2007; SCUK, 2003). There is therefore debate between those who see knowledge as the primary obstacle to improved nutrition and those who emphasise the importance of economic obstacles, and thus which types of interventions should be prioritised.

This is likely to depend on context, and in stable contexts where the prevalence of malnutrition is low, knowledge could be the limiting factor. In emergency contexts with high levels of acute malnutrition, causes are more likely to be linked to social disruption, acute food insecurity (including loss of income) and deterioration in the health environment. A rise in high levels of acute malnutrition cannot plausibly be attributed to a change in mothers' knowledge. Where cash has been used in behaviour change programming, the role that it played is not clear compared to nutrition education. More research is needed on how cash transfers may affect the social and care environment in emergency contexts.

3.2.3 Health

Disease is an immediate cause of malnutrition. Preventable or curable disease, compounded by malnutrition, is the primary cause of mortality in humanitarian emergencies (Young and Jaspars, 2006). There are only a handful of examples of cash being used in emergencies to prevent disease by improving the health environment (e.g. water, sanitation) or improving access to health care. In the Democratic Republic of Congo (DRC), agencies are beginning to experiment with providing beneficiaries with the option to purchase 'health vouchers' that they can use to obtain services at local health facilities, but results have yet to be documented. Also in DRC, non-food item (NFI) vouchers include soap and other hygiene items, and 23% of households opted to purchase soap (S. Michel, pers. comm.).

In several programmes, the provision of cash resulted in increased expenditures on health care and hygiene (SCUK, 2010c, SCUK, 2008, Devereux et al., 2007). In programmes in Niger household spending on health care tripled, while spending on soap increased by 25%. In these same households, there was also a notable increase (69%) in spending on potable water (SCUK, 2010c; SCUK, 2009). However, limitations in the availability and quality of local health services in these contexts make it difficult to assume that increased expenditures on health care result in improved health.

Cash-based interventions may have potential benefits when the receipt of transfers is made conditional on participation in health programmes, such as health education (Dunn, 2010). Other projects have distributed cash and vouchers through health centres. The Catholic Relief Services (CRS) Kenya Drought Emergency Response increased usage of health facilities and pushed up the immunisation rates of children of beneficiaries (CRS, 2006). In Myanmar, midwives and nurses who distributed grants at clinics observed that beneficiary women expressed increased interest in children's growth and growth monitoring (Sibson, 2011). However, the same evaluation noted the inadequacy of counselling, in part due to combining distribution and counselling in the same visit.

There are too few studies to draw firm conclusions on how cash transfers could impact nutrition through addressing disease. Evidence suggests that cash and health programmes could be complementary, for instance by providing transfers at health centres or in conjunction with health sensitisation activities, increasing access to existing health services and making sure that people have money so that they can pay transport costs to get to health centres. However, cash alone is unlikely to have major impact through this pathway beyond situations where access to quality healthcare is limited only by economic constraints. In contexts where health services are of poor quality, which is the norm in humanitarian settings, complementary interventions to address the supply and quality of healthcare would probably be needed.

3.3 Cost-efficiency and cost-effectiveness

Making blanket statements about the cost-efficiency and costeffectiveness of cash assistance in meeting nutrition objectives is impossible because these calculations are specific to individual

Box 4: Concern Worldwide's research on the impact and cost-effectiveness of cash transfers in Niger¹⁵

In 2009, Niger experienced a severe drought resulting in deteriorating food security in several regions. Concern responded with a package of interventions to prevent malnutrition and support food security in Tahoua region. One of these interventions was an unconditional cash transfer of \$215 over five months given to about 10,000 households to support their food security during the 'hunger season' and ensure that they did not need to sell assets to meet food needs. A notable innovation was that Concern provided some of the recipients with the transfers via mobile phones, to see if this was a cost-effective way of delivering money. Concern partnered with Tufts University to conduct operational research, comparing the impact of transferring the money through phones (m-transfers) with providing cash manually in envelopes. The research examined impact on recipients' well-being, including food security status, coping strategies and nutritional status.

The study generated several findings that will be useful in guiding choices about how best to transfer money (detailed in Aker et al., 2011). Providing the cash via mobile phones reduced costs for Concern because the agency did not need to pay for transport and security, or undertake the time-consuming task of stuffing the cash into envelopes. It considerably reduced costs to recipients, who travelled shorter distances to obtain cash at mobile phone agents compared to receiving it at a distribution. The m-transfer also provided additional food security benefits. Compared to those receiving cash in envelopes, households that received the money via mobile phones saw greater increases in diet diversity, sold fewer assets and produced more diverse agricultural goods. Aker et al. suggest that this could be due to the privacy afforded by the mobile transfers and their reduced cost to recipients, but the precise reasons are not known. These findings highlight the underexploited potential of mobile transfers, and suggest that agencies should consider not just what they provide, but also how they provide it.

Concerntookaway severallessons on undertaking operational research in humanitarian settings. Research must be more than an 'add-on' to a programme. Research design should be planned in advance of the intervention, and the research should be integrated into programme objectives. Because aid agencies often lack research expertise, partnership with universities offers significant opportunities for collaboration. Finally, the short timeframes of humanitarian funding are a challenge for research; dialogue with donors who fund humanitarian interventions and research is important.

contexts. A more useful approach would be to build up evidence on the cost-effectiveness of different interventions in different contexts, but this is difficult given the limited evidence on impact. The outcome and impact being measured to date has

¹⁵ This information comes from Concern Worldwide and the 2011 case study on the impacts of mobile cash transfers (Aker, Boumnijel, McClelland and Tierney, 2011).

been limited to changes in dietary adequacy and food insecurity, not changes in other direct or underlying determinants of acute malnutrition. Cost calculations from different evaluations are not comparable - they are context-specific and consider different costs (e.g. costs to beneficiaries, staff time). Furthermore, the effectiveness of interventions is influenced by the project design and the quality of implementation, including an accurate nutritional causal analysis and programme logic, good targeting, adequate transfer size, timely implementation, complementary activities and in some cases the availability of services. Despite these challenges, context-specific evidence could be gathered from interventions over time to inform decision-making for future programmes. Studies discussed in Chapter 2 aim to provide comparisons on cost-effectiveness between cash and other food assistance tools (cash vs. vouchers vs. food aid), and with other possible interventions to address moderate acute malnutrition. It is important that agencies consider cost-effectiveness when determining the most appropriate intervention, rather than only looking at this issue in the evaluation, if at all.

3.4 Conclusion

Evidence from humanitarian cash interventions makes a plausible case that cash transfers can, and in some cases do, impact upon nutrition by improving dietary intake and access to food. There are some positive indications, but overall limited evidence, that cash improves caring practices, and very little evidence on the impact of cash transfers on disease. This is almost certainly due to the lack of cash-based interventions in the health sector. There is also evident potential, and a handful of promising examples, that cash can complement supplementary feeding programmes and outpatient therapeutic programmes.

There are several ways in which the relationship between cash interventions and nutrition can be explored and further documented. Problem analysis is obligatory, so that agencies can properly understand the causes of malnutrition. Where malnutrition is likely to be caused by inadequate diet or ill-health through loss or lack of income, there may be a justification for using cash. If interventions are based on good causal analysis and include strong monitoring on how cash affects the causes of malnutrition in a particular context, the likely impacts on nutrition can be understood, even if they cannot be proved.

However, because cash programming is rarely used with the explicit objective of improving nutritional status, this analysis is missing. Given the plethora of examples where cash is used to improve food security it seems a lost opportunity that the links between improved food access, dietary diversity and nutrition have not been further explored. Furthermore, cash may influence other causes of malnutrition in ways that cannot be predicted, thus limiting the utility of logframes and monitoring indicators. Agencies could consider a combined approach, thinking through the ways that cash is likely to contribute to nutrition and monitoring changes in key food security and health indicators, and possibly nutritional status

Cash transfers should not be viewed in isolation, but rather as a tool that can be usefully combined with other interventions to impact nutrition. It is crucial not to lose sight of the fact that cash transfers enable households to meet other important needs, such as household items, school fees, debt repayments and livelihood assets, all of which have other benefits and may indirectly contribute to nutrition.

Chapter 4 Evidence from long-term conditional cash transfer programmes

Cash and vouchers are widely used as a social protection and poverty reduction tool. They are ubiquitous in the developed world – welfare programmes, unemployment benefits and food stamps, to name just a few examples. They are also becoming more common in middle-income countries. The largest and most numerous are conditional cash transfers (CCTs). Governments and donors have invested significant resources in understanding what CCTs can achieve, including whether they impact on nutrition. If they do and research shows why, lessons might be drawn about the use of cash in humanitarian and transitional settings. It is important to keep in mind that these contexts are very different from crisis and post-crisis situations, and that the programmes involved seek to address chronic (as opposed to acute) malnutrition.

In 2008, 28 countries had CCT programmes, mostly in Latin America (Fiszbein and Schady, 2009). They range from small-scale projects to programmes in Mexico and Brazil that reach several million households. These programmes transfer cash

to poor households on the condition that they do certain things, typically related to health, nutrition and education. For example, health and nutrition conditions require checkups and vaccinations for children, prenatal care for mothers and their attendance at health information talks. Education conditions require that children enrol and attend school. The theory is that CCTs increase investment in children to improve their health and educational status, thus ultimately reducing poverty (Fiszbein and Schady, 2009).

CCT programmes have been heavily researched and evaluated. Understanding nutrition outcomes is a priority because many of them include health and nutrition conditions and all of them seek to improve children's well-being. As Manley et al. note, 'nutritional status is a crucial, summary measure of overall child health and development potential' (2011: 3). In the last few years, several articles and reviews have been published on the nutrition and health outcomes of CCTs, focusing mainly on programmes in Latin America. These resources are summarised in Table 3.

Table 3: Research on social protection programmes examining nutrition and health outcomes

Title	Description	Key findings on health/nutrition
Conditional Cash Transfers: Reducing Present and Future Poverty (Fiszbein and Schady, 2009)	Book summarising experience of CCTs worldwide	Households that receive CCTs spend more on food and on higher-quality sources of nutrients than other households of comparable income. Households make more use of health services, but evidence on improvements in final health outcomes is variable
Conditional Cash Transfer Programs and Nutrition in Latin America: Assessment of Impacts and Strategies for Improvement (Hoddinott and Bassett, 2008)	Working paper examining whether four CCT programmes in Latin America improved pre-school nutritional status	Programmes in Mexico and Nicaragua showed marked improvements in child height, but ones in Brazil and Honduras showed essentially no effects on preschool nutritional status. Improvements in iron status were observed in Mexico, but not in the other countries where this outcome was studied (Honduras and Nicaragua)
Can Conditional Cash Transfer Programs Play a Greater Role in Reducing Child Undernutrition? (Bassett, 2008)	Discussion paper examining how CCTs can have a greater impact on undernutrition	Where utilisation of nutrition interventions is low, there is significant potential for CCTs to play a greater role in reducing undernutrition by encouraging groups at high risk of undernutrition to utilise effective nutrition services and by encouraging improved quality of these services

(continued)

Table 3: (continued)

Title	Description	Key findings on health/nutrition
Conditional Cash Transfers and Health: Unpacking the Causal Chain (Gaarder et al., 2010)	Article examining health and nutrition impact of CCTs and extent that evidence can explain causal chain and programming assumptions	Cash transfers, accompanied by information, social support, weight monitoring and micronutrient supplementation, can stimulate healthier feeding practices and improve young children's nutritional status dramatically, particularly the incidence of stunting. CCTs increase utilisation of services and consumption, but outcomes – vaccination, nutritional status, morbidity and mortality – are mixed. This suggests that encouraging utilisation when services are of poor quality may not produce the expected effects
Conditional Cash Transfers for Improving Uptake of Health Interventions in Low- and Middle-Income Countries (Lagarde et al., 2007)	Systematic review assessing the effectiveness of six CCTs in improving the use of health services and health outcomes in low- and middle-income countries.	Programmes impact health-related behaviour and, to some extent, health outcomes. Transfers appear successful in increasing use of health services and improving nutritional and anthropometric outcomes, but the overall effect on health status is less clear
The Impact of Conditional Cash Transfer Programmes on Child Nutrition: A Review of Evidence Using a Programme Theory Framework (Leroy et al., 2009)	Article reviewing evidence on the nutrition impact of five CCTs in Latin America	CCTs can improve child anthropometry but very little impact was found on micronutrient status. Finds a large gap in knowledge about the mechanisms by which CCT programmes improve nutrition, and concludes that there is a need to better understand impact pathways and the role of contextual factors in reducing or enhancing programme effectiveness
How Effective Are Cash Transfer Programs at Improving Nutritional Status? (Manley et al., 2011)	Justification and research background for a systematic review on the nutrition impact of cash transfers (including unconditional ones)	The protocol justifies the review on the nutrition impact of cash transfers and outlines the systematic reviews and other resources on cash transfers that inform it. Unlike those reviews, which focus nearly exclusively on CCT data from five programmes in Latin America, this review will include data from unconditional cash programmes. The study will examine why programmes have had different effects on nutritional status

The findings from these studies consistently demonstrate that households receiving transfers increase food spending and consumption. Reviewing programmes from around the world, Fiszbein and Schady (2009) found that households participating in CCTs spend more on food and on food with higher-quality sources of nutrients than other households of comparable income. In Mexico, data from PROGRESA suggests

that a 10% increase in income translates into a 3–4.5% increase in available calories for the household (Hoddinott and Bassett, 2008; Hoddinott and Weismann, 2008).

Households participating in CCTs also make more use of health services (a predictable outcome given that this is often a condition for receiving the money). In Honduras, the programme

is thought to have increased the use of health services by 23% for infants and 42% for children aged one to five years; it also increased prenatal care and growth-monitoring (Lagarde et al., 2007). In Mexico, beneficiaries visited health facilities twice as frequently as non-beneficiaries. Findings from a programme in Nicaragua showed an increase in health visits for children under three years from disadvantaged families, and preventative health visits increased for children under four years in the Colombia programme.

Whereas there are positive findings on food consumption and utilisation of health services, outcomes on nutritional status are mixed (Manley et al., 2011; Gaarder et al., 2010; Fiszbein and Schady, 2009; Hoddinott and Bassett, 2008). There are some clear examples of impact on nutrition: in Mexico and Nicaragua, conditional programmes drove significant improvements in children's height for age (Hoddinott and Bassett, 2008). In Nicaragua, stunting fell by 5.3 percentage points among children under five years in treatment communities (*ibid.*). However, the role of different programming components in contributing to these results is not clear:

Frustratingly, however, our conclusions about why these positive effects emerge must be much more tentative. While PROGRESA [in Mexico] and RPS [in Nicaragua], as well as Colombia's Familias en Acción demonstrate positive and sizeable impacts on child height, the pathways by which this is attained remain unclear. All three programs incorporate regular growth monitoring, the provision of information about nutrition and good childcare practices, sizeable monetary transfers to mothers (equivalent to approximately 20 per cent of household consumption levels in Mexico), and, in Mexico, nutritional supplements directly targeted to children (Hoddinott and Bassett, 2008: 16).

Some programmes show limited or no impact on nutrition. An evaluation from Brazil found no impact on height for age (Lagarde et al., 2007). This reportedly could have occurred because beneficiaries mistakenly believed that they needed to have one malnourished child to stay in the programme, but this claim is not easily verified (Hoddinott and Bassett, 2008). A programme in Honduras had no discernible impact on the nutritional status of young children, probably because it provided less cash compared to other programmes and growth monitoring and counselling reached only 18% of recipients (Hoddinott and Bassett, 2008). Even where programmes show improvements in anthropometric outcomes, these may be limited to some beneficiary subgroups (Lagarde et al., 2007).

The mixed results on nutrition lead to an important question: what programming components and contextual factors ultimately determine if children do or do not have better nutritional status? Even amidst the large amount of research on CCTs, no study has yet been able to answer this question. The list of factors that could improve nutrition is long – for example

through increased use of preventative and prenatal care services, increased food consumption, the receipt of nutritional supplements, increased knowledge of topics covered by health information lectures (e.g. proper hygiene and food preparation, best practices for breastfeeding and treatment of diarrhoea) and increased coverage of vaccinations (Gaarder et al., 2010). It is very difficult to isolate the role of any individual component of a CCT programme (*ibid.*).

Similarly, there are many reasons why effects on nutrition could be modest. If the quality of local health services is poor, using them more might not yield significant benefits (Fiszbein and Schady, 2009). Health and nutrition education might not lead to changes in knowledge, attitude and practices; evaluations have rarely looked at this issue (Gaarder, 2010). The quality of programme implementation, communication and targeting also influences the effectiveness of CCTs.

Given these gaps in knowledge, it is unsurprising that the precise role of conditionality in CCTs is not well understood. There is no conclusive evidence on whether the positive benefits of CCTs result from conditions placed on the grant or simply from the fact that households have more money with which to buy food, pay for education and go to health centres. Arguments for and against placing conditions on grants are abundant and also specific to each context (Adato and Bassett, 2008). By attaching conditions to the receipt of money, conditional programmes assume that money alone will not be enough to drive major changes in how households support their children (Gaarde et al., 2010). On the other hand, unconditional programmes assume that easing financial constraints will result in increased utilisation of health services, education and food consumption. It is generally held that conditions relating to use of health services, such as preventative healthcare, are less appropriate in settings where services are of poor quality and in short supply. Examining how long-term cash transfer programmes could play a stronger role in addressing undernutrition, Bassett (2008) notes that applying conditions would only be appropriate where quality nutrition programmes are available (or can be supported/created) but are underutilised – thus necessitating incentives for people to use them.

Conditional cash and safety net programmes using unconditional transfers are now being piloted in Sub-Saharan Africa (e.g. Malawi, Kenya, Zimbabwe, Niger) and other regions where crises are more common. Programmes in Niger and Ethiopia have demonstrated that predictable seasonal declines in acute malnutrition, which historically have been addressed by emergency interventions, can be prevented in part through predictable cash transfers (World Bank, 2011; SCUK, 2009). There might be opportunities for short-term cash transfer projects to provide a starting point for longer-term social protection approaches, such as programmes by Oxfam and Concern Worldwide in Kenya that began in response to high food prices, but also have sought to influence the government's social protection policy (Mohanty, 2010).

4.1 Conclusion

There are numerous reasons why evidence on nutrition from long-term cash transfers cannot be directly applied to short-term programming - most notably the differences in contexts (chronic poverty vs. disaster/conflict/transitional context), objectives (long-term poverty reduction vs. saving lives/immediate alleviation of suffering) and the types of malnutrition they address (chronic vs. acute). There are, however, applicable lessons. The first is the importance of understanding the pathways through which assistance achieves impact. Compared to humanitarian programmes, the research on CCTs offers strong evidence that these programmes can, and in many cases do, have direct impacts on nutrition. However, this impact is mixed, and precisely why and through what pathways these impacts take place is unclear. Only by understanding the ways in which impacts are achieved can programmes be more effectively designed and changed to maximise their outcomes. Otherwise we might know what occurs - whether or not nutrition improves for certain groups — but not why. This limits the likelihood that results can be improved and repeated.

A second lesson is that cash is more likely to achieve impact when it is part of an integrated approach. CCTs never use cash on its own; rather, they employ cash transfers as part of a holistic approach to address the many constraints that households face and promote investments in children. In humanitarian and transitional settings, cash is often thought of only as an alternative to something else (e.g. cash as opposed to food), without considering how complementary programming could maximise impact. Similarly, programme design needs to correspond with the desired impact of the project. For example, if cash programmes seek to improve health outcomes, then interventions to support the quality and supply of health services are necessary. Transfer values also need to be sufficient to achieve the intended aims. Finally, the piloting of cash-based social safety nets in contexts where humanitarian crises occur could afford opportunities to forge links between longer-term cash programmes and shorter-term emergency responses.

Chapter 5 Conclusion

Cash transfers are increasingly being used in emergency and transitional settings so that people can buy the goods and services that they need most. Theoretically there are a variety of ways that cash transfers could help protect and improve nutritional status by addressing immediate and underlying causes of malnutrition – people could buy more and betterquality food, have more time to care for children in the household, take children to health clinics and use cash in other 'nutrition friendly' ways. Recent experiences with cash transfers show that some of these possibilities have evidence to back them up. There are very positive indications that transfers improve dietary intake, but too little evidence to determine how cash improves care practices and health environment.

While it is not possible to say one way or another that cash is responsible for improved nutritional outcomes in emergency and transitional settings, cash clearly could have positive effects on nutrition in certain circumstances. Cash first and foremost improves access. Where inadequate dietary intake and food insecurity is an access problem, meaning that the goods and services people need and prioritise are available but they cannot purchase them, cash is likely to be effective. Similarly, where care practices and health status are limited by economic constraints and loss of income, cash can address these constraints, at least temporarily. Where access is not the only constraint, complementary programmes are essential, and cash might not be an appropriate response. Aid agencies and donors should consider cash as one possible tool in an integrated approach to address malnutrition.

Understanding whether cash is likely to achieve improvements in nutrition, and whether it is the most appropriate tool to achieve nutrition and nutrition-related objectives, requires a causal analysis of malnutrition and a response analysis determining the most appropriate interventions and their likely impacts. Most cash transfers are used for food security and basic needs, and these interventions rarely make such analytical linkages. There are several ways they could: by incorporating a causal analysis of malnutrition, developing programming logic that includes how cash can address determinants of malnutrition, and selecting indicators and undertaking monitoring to determine whether these impacts are happening. When cash has been used with explicit nutrition objectives these linkages are clearer, such as cash transfers to incentivise nutrition education which at the same time enable participants to buy appropriate foods. Agencies may need increased capacity in nutrition to undertake such analysis.

More research is needed on how cash could complement health and nutrition interventions. There are several positive examples on which to draw, such as using cash as an incentive to access health services and nutrition education. As a complement to outpatient programmes and supplementary feeding programmes, cash can support the basic needs and livelihoods of households with malnourished children and compensate carers for the time required to participate in programmes. In order to use cash to increase access to health care quality services must be available, and complementary interventions to improve the supply of health care might be needed.

There is a temptation to conclude that the lack of 'hard' evidence on nutrition outcomes means that we need more evidence. This is only partly true. Evidence on the nutrition impact and cost-effectiveness of different cash interventions would be valuable in contexts with persistently high rates of MAM and where more traditional interventions, like general food rations and supplementary feeding programmes, have fallen short in reducing malnutrition rates. Such research is already planned, but faces the generic challenges inherent in conducting research in humanitarian and transitional settings and the difficulty of attributing nutritional impact to interventions. An important lesson from conditional cash transfer programmes is that research, and programme design in general, needs to consider the pathways through which impacts are likely to take place, otherwise impacts on nutrition might be determined without knowing the precise reasons why they occur. Evidence on nutrition outcomes, aside from being difficult and costly to obtain, also risks being of limited applicability to other contexts.

At the same time, there is already a decent amount of evidence — and common sense — for decision-making. We know the following. If there is a sudden drop in access to food, cash is often an appropriate and effective response, if markets are functioning and quality food is available. In such instances households spend the majority of the cash on food, consume more and often have more diverse diets. They also meet other needs like buying household goods and paying school fees. Cash also eases economic constraints, which could in turn affect care and access to health care. Finally, we know that cash alone is unlikely to meet micronutrient deficiencies, but that vouchers could be appropriate if the right foods are available locally. The appropriateness of cash responses is always dependent on context, needs and objectives.

With these issues in mind, this paper identifies ways forward on the question of whether and how cash transfers impact nutrition. These are relevant to the donors that fund responses, and the aid agencies that design them.

1) Strengthen causal and response analysis in humanitarian and transitional programming in general, and include

- strong nutritional causal analysis in all cash programmes that seek to influence nutrition.
- 2) Explore further the potential for cash transfers to act as a complement to more traditional nutrition and health interventions, and whether this is a cost-effective way of improving the impact of feeding programmes.
- 3) Support context-specific research on cost-effective approaches to address MAM, including the potential for using cash and vouchers.
- 4) Routinely consider the appropriateness of cash-based responses and fund/programme cash-based responses where they are appropriate.

The dramatic increase in cash programming in the past few years is an important advance in assistance in humanitarian and transitional settings: aid agencies and donors are turning to innovative ways to meet needs. Evidence on the nutritional outcomes of cash interventions might be lacking, but there is an overwhelming body of evidence that cash transfers, where appropriate, are very effective in meeting food and other needs. Donors and programmers should carefully consider whether cash alone is likely to impact upon the causes of malnutrition in any particular setting, and regard cash as one of their many programming options to address malnutrition and its causes.

Annex 1 Key nutrition terms and definitions

Malnutrition	A range of clinical disorders resulting from an inadequate intake of energy and protein as well as other nutrients, including micronutrients. People are malnourished if their diet does not provide adequate calories and protein for growth and maintenance or they are unable to fully utilise the food they eat due to illness ('undernutrition'). Malnutrition is a broad term commonly used as an alternative to 'undernutrition', though technically it also refers to overnutrition (consuming too many calories). ¹⁶
Acute malnutrition	Also known as wasting. Wasting occurs as a result of recent rapid weight loss or a failure to gain weight within a relatively short period of time. Wasting occurs as a result of deficiencies in macronutrients (fat, carbohydrate and protein) and some micronutrients (vitamins and minerals) (Young and Jaspars, 2005).
Indicators of acute malnutrition	Clinical symptoms of deficiency, for example growth failure and nutritional or anthropometric indices. Weight-for-height (W/H) is a widely used nutrition index, and is a calculation of two measures (weight and height) into a single value so that children of different ages can be compared. Mid Upper Arm Circumference (MUAC) measures the muscle mass of the upper arm. It is also an indicator of wasting but not adjusted for age or height. MUAC is a rapid and effective predictor of risk of death in children aged 6 to 59 months. The presence of bilateral pitting oedema also indicates severe acute malnutrition.
Infant and young child feeding (IYCF)	Interventions to protect, promote and support safe and appropriate feeding practices for both breastfed and non-breastfed infants and young children (UNSCN, 2011).
Classification of acute malnutrition (children 6–59 months)	Nutritional indices include cut-off points to determine the level below which children aged 6–59 months are considered malnourished. Standard deviations, usually referred to as Z-scores, are used to describe how far a measurement is from the median, or average. • Moderate acute malnutrition (MAM): W/H between –3 and –2 Z-scores. • Severe acute malnutrition (SAM): W/H <-3 Z-score or the presence of bilateral pitting oedema. • Global acute malnutrition (GAM): moderate and severe acute malnutrition.
Micronutrient deficiencies	A lack or shortage of a substance, such as a vitamin or mineral, which is essential in minute amounts for proper growth and metabolism (includes vitamin A deficiency, iron deficiency anaemia, iodine deficiency disorders and scurvy).
Outpatient therapeutic programme (OTP)	For children with severe acute malnutrition without complications. Home-based treatment and rehabilitation with a specially formulated Ready-to-Use Therapeutic Food (RUTF) provided on a weekly or two-weekly basis, medical treatment using simplified medical protocols and regular follow-ups (Grobler-Tanner and Collins, 2004).
Supplementary feeding programme (SFP) 16 See www.unicef.org	SFPs aim to rehabilitate individuals with MAM or to prevent a deterioration in the nutritional status of the most at-risk groups by meeting their additional nutritional requirements through a food supplement (i.e. take-home ration). In practice, SFPs focus on young children and pregnant and lactating women, due to their nutritional vulnerability (UNSCN, 2011).

16 See www.unicef.org.

(continue

Annex 2 Cash transfer interventions included in this review

Programme	Objectives	Transfer details (type, amount, frequency, duration)	Location, target group	Complementary activities and/or conditions	Indicators used/ evaluation
Cash Transfers					
1. CRS, Mercy Corps, Oxfam and Save the Children; Cash Transfer Programs in West Sumatra, Indonesia, 2009	Families engage in their own temporary shelter construction; meet immediate food and livelihood needs	500,000–1,500,000 IDR grant for rebuilding shelter	Indonesia, Sumatra; 6,000 households		Expenditures (Aspin, 2010)
2. Concern Worldwide Kenya Kerio Valley Cash Transfer Pilot, April–June, 2008	To offer transient relief to some of the households affected by the post-election violence in the Kerio Valley	KSh 620 per household member in each transfer (cash sufficient to purchase 50% of one month's minimum caloric requirements); 2 transfers in May 2008. Total transferred KSh 2,876,480	Kenya, four Sub- locations in Baringo North and Pokot East Districts, Kerio Valley; 571 households whose livelihoods had been damaged by post- election violence	45 handsets and 60 solar chargers provided to beneficiaries to enable the cash transfer via mobile phones	Expenditures, HH food security, market prices; community dynamics and gender relations (Brewin, 2008)
3. Save the Children Canada, Cash-Based Emergency Livelihood Recovery Programme, Isiolo District, Kenya, May–November 2006	To address drought; enable families to restock livestock, invest in other productive uses and meet immediate needs	One-off cash payment of KSh 30,000 (£230) to 750 households in 22 communities	Kenya, Isiolo District; poorest families		Dietary diversity, reliance on food aid, herd size, school attendance, social status of recipients (0'Donnel, 2007)
4. SCUK and VSF- Swiss, Reducing the Impact of Drought (RID), Kenya, June 2009–May 2010	Improve child health and nutrition, through direct support, increased access, livelihoods and nutrition education; specifically increase access, availability and consumption of protein including ASP for targeted settlements	Complementary food distributions through vouchers (2kg beans 2l milk and 2kg meat weekly)	Kenya, Mandera Triangle; pastoralist settlements, mothers of children in SFP/OTP	Nutrition education, cooking demonstrations	Knowledge of IYCF, hygiene, cooking practices, protein consumption, milk production (Shuria, 2010)
5. Concern Worldwide, Kenya Korogocho Emergency and Cash Transfer Initiative, 2009–2010	To offer immediate relief (access to food) to communities affected by increase in food prices	Ksh 1,500 monthly over 8 months	Kenya, Nairobi, Korogocho and Mukuru slums; 2,400 beneficiaries	Nutrition education for caregivers	HDDS, IDDS, CSI, W/H, MUAC; respondents were asked about their well-being (MacAuslan and Schofield, 2011)

Programme	Objectives	Transfer details (type, amount, frequency, duration)	Location, target group	Complementary activities and/or conditions	Indicators used/evaluation
6. World Vision, Cash and Food Transfers in Lesotho, 2007–2008	To provide access to basic food for vulnerable households through the 'hunger period' until the next harvest; to build World Vision's capacity in cash transfer programming	Cash (~ M355.62), cash (~M174.73) plus food and full food rations; every month for six months	Lesotho, Maseru and Mohale's Hoek Districts; 41,200 beneficiaries: cash to 2,676 households; 'cash plus food' combination to 2,676 households; full food rations to 2,672 households	Promotion of keyhole gardens, dissemination of information on nutrition and HIV/AIDS at distributions	Vulnerability and food insecurity, coping strategies, assets and livelihood, impact on markets and community (Devereux and Mhlanga, 2008)
7. WFP, Cash and Food for Livelihoods Pilot (CFLP), Malawi, 2008–2009	To prevent acute hunger and invest in disaster prevention and preparedness measures	Cash, food (50kg of cereal and 5kg of pulses) and mixed cash/food transfers in exchange for participation in the construction of community assets; monthly; value of transfer based on WFP food basket; 8 months duration (October 2008–May 2009)	Malawi, Chikwawa and Machinga; 11,000 households (3,542 for cash, 3,552 for food and 4,006 for the mix)	Supplementary and therapeutic feeding programmes, school feeding programmes, working with the Malawi Government on public policy, HIV/ AIDS activities	HDDS, food quality and protein and micronutrient content, food consumption, (based on nutritional analysis of food basket), child nutrition (mortality, underweight prevalence, stunting, wasting, maternal health — in conjunction with SFP evaluation, school enrolment (Audsley et al., 2010)
8. Concern Universal, Dedza Safety Nets Pilot Project, Malawi, 2001–2002	Enable lessons to be learnt about different transfers (cash, vouchers and in- kind) in a chronically food insecure area of Malawi	3 entitlements to different groups: cash MK550 (\$5) per household per month, vouchers worth about the same amount, in-kind transfers (including maize flour and household goods)	Malawi, Dedza, vulnerable and disadvantaged people		Dietary diversity, expenditure; basic necessities met (e.g. clothing), ability of market to meet demand (Concern Universal, 2006)
9. Concern Worldwide, Dowa Emergency Cash Transfer Project (DECT) in Malawi, 2006–2007	Enable beneficiaries to cover their 'missing food entitlement' (MFE) through food purchases	Voucher tied to local food prices and family size, each household received an average of MK 1,540 each month for 5 months	Malawi, Dowa; 11,000 households	Sensitisation messages delivered on pay days (while people waited to collect money) by community liaison officers, government officials and local drama groups on topics including safe-keeping of smart-cards, how to use cash, HIV/AIDS awareness, nutrition, family planning and winter cropping	Meals per day, food expenditures, HDDS, time/labour savings; health expenditure/impacts, admission rates to nutritional rehabilitation units (Devereux et al., 2007)

School attendance, coping strategies (Harvey and Savage, 2006; Savage and Umar, 2006, Mtonda, 2006)	Expenditure, dietary diversity, coping mechanisms (Concern Worldwide, 2006; Devereux et al., 2006)	HDDS, FCS, expenditure (Chuzu and Viola, 2006; Cole, 2006; CARE, 2005)	Household expenditures (Adams and Winahyu, 2006)
Agricultural inputs, irrigation systems, water, sanitation and hygiene projects, homebased care support projects for the chronically ill, food aid distribution		Food provided in addition to cash and vouchers	Grants conditional on participation in the maintenance of the Child Centre, in Child Centre management meetings and in awareness raising forums on child abuse and exploitation
Malawi; chronically poor farm families with chronically ill, disabled members or orphans; 6,000 households in 30 villages	Malawi; vulnerable people such as OVCs and elderly; 5,050 households	Indonesia, Aceh; people displaced by the earthquake/tsunami; 4,825 beneficiaries	Indonesia, Aceh; separated/ unaccompanied children and care givers; 1,700 children and their 1,300 caregivers
MK 2,500 per month (US\$20) to households, November 2005–March 2006	A package of food plus cash (based on package of food at local prices) each month for 4 months; cash transfer varied from 350 MK (US\$10) for small households to 2,450MK for large; cash adjusted each month to allow for food price variation	Food vouchers and cash for 3 months; monthly vouchers were provided for rice, sugar and oil; 50,000 rupiah cash (~US\$5) per beneficiary/month	IDR 400,000 per month per family for 3 months
Protect livelihoods and enhance resilience to shocks	Nutritional support to households overlooked by the government's emergency response and temporary safety net to minimise need for destructive coping strategies and assure immediate consumption needs	Food consumption to meet acceptable standards of quality/quantity	Family support – caring for a child in Aceh (food, health, hygiene, clothing, education, transportation, games and recreation)
10. Oxfam, Cash Transfer Programme, Malawi, 2005–2006	11. Concern Worldwide, Food and Cash Transfers Project (FACT), Malawi, 2005–2006	12. CARE and SCUK, Market-based Food Assistance (MBFA), Indonesia, 2005–2006	13. UNICEF, Aceh, Cash for Orphans, 2005

(continued)

Programme	Objectives	Transfer details (type, amount, frequency, duration)	Location, target group	Complementary activities and/or conditions	Indicators used/evaluation
14. Save the Children, Burma Humanitarian Assistance Programme (BHAP) and Livelihoods Trust Fund (LIFT), Myanmar, 2010	Improve food security, reduce number of malnourished children under five, prevent malnutrition, ensure households are able to meet their basic food and income needs, ensure income and food are utilised in the best interest of child, increase exclusive breastfeeding	Conditional cash grants with: 1) breastfeeding counselling – Ks. 95,000 per person to maintain exclusive breastfeeding; 2) child feeding practice counselling – Ks. 126,000 plus Plumpynut to SAM children Ks 63,000 to MAM children. Some received no transfer but education, cooking demonstrations and screening (MUAC)	Myanmar, East and West Delta; mothers from landless and asset-poor households with infants up to 5 months and malnourished children 6–59 months	Obligatory: counselling, cooking, demonstrations, nutrition education	IYCF and breast feeding practices, MUAC, W/H, East (Khin Maung Aye et al., 2010), West (Sibson, 2010)
15. Save the Children, Cash transfer in Tassaoua, Aguie and Magaria, Niger, 2010	Provide multi-sector assistance to reduce malnutrition and mortality in vulnerable populations, particularly under-5 children and P/L women by protecting livelihoods enabling households to satisfy their food needs without negative coping strategies; guaranteeing access to a healthy and adequate diet for under-5 children	20,000 FCFA/month for 9 months (3 months in Aguië), 25,000 FCFA/month for 6 months in Magaria	Niger; Tessaoua and Aguié 12,914 households; Magaria 2,683 households	Education in IYCF, hygiene and malaria prevention/ treatment	Kcal consumption, income and expenditures, source of food, dietary diversity (without HDDS scores), sales of productive assets (SCUK, 2010a; 2010b)
16. Unicef, Cash Transfer for Protection of Blanket Feeding, Maradi and Tahoua Regions, Niger, 2010. Care in Tahoua and SCUK in Tessaoua	Ensure proper use of blanket feeding for targeted children	20,000 FCFA per month corresponding to the value of the protection ration (size of the protection rations adequate to cover the food needs of an average household of 7), September–December 2010	Niger, Tahoua and Tessaoua, Maradi region; households with children under 2 years and receiving blanket feeding; pregnant and breastfeeding women; 35,000 households	Awareness raising during the cash distribution on BCC to improve acute malnutrition (e.g. breastfeeding, bednets, hygiene, complementary feeding)	SFP utilisation, meal frequency, expenditure, CSI, MAM/SAM, 'understanding' of BCC messages (not KAP) (Poulsen and Fabre, 2010)

17. Concern, Cash Transfers and Emergency Response in Niger, 2010	Prevent increases in child malnutrition, mortality and excessive asset depletion during the hungry period	Cash transferred via mobiles and in envelopes; beneficiaries could chose between 5 monthly distributions of 20,000–25,000 CFA or cash (45,000 CFA) plus seeds	Niger, Tahoua, Maradi; vulnerable households in 116 villages	Provision of supplementary rations for children under five, pregnant women and breastfeeding mothers; distribution of agricultural inputs	GAM (W/H), expenditures, dietary diversity, coping strategies, crop yield (Concern, 2010)
18. SCUK, Tessaoua, Maradi region, Niger, Conditional cash grants, 2008	Offset the seasonal loss of purchasing power, enable households to meet basic needs, protect livelihoods from depletion of assets, and contribute to preventing undernutrition	60,000 CFA, split into three distributions	Niger, Tessaoua, Maradi region; 1,500 very poor or food-insecure households	Women received transfer on condition of participation in nutrition awareness sessions and community public health activities	FCS, Nutritional status (W/H), TFP admissions, micronutrient intake (SCUK, 2009)
19. British and Nigerien Red Cross, Tanout Cash Transfer Project, Niger, 2005	Increase food access, household food security, community resilience to future food security shocks	Unconditional one-time grant of 120,000 FCFA (approximately US\$240) (estimated to equal the subsistence rate needed to feed a family of seven for 40 days)	Niger, vulnerable communities received blanket targeting; 5,000 households in 88 villages and three pastoral settlements	Cereal banks	Expenditure, FCS HDDS (University of Arizona, 2005 and 2006)
20. WFP, Cash Transfer Pilot Project, Buner District, KPK, Pakistan January, 2010	Humanitarian assistance for Pakistani IDPs	4,000 PKR per month (US\$48) for 2 months	Pakistan, Buner District; 12,000 IDP households	Community sensitisation	Expenditure, FCS, HDDS, (Glombitza, SDC)
21. CRS, Swat Valley, Pakistan, CFW, 2009	Cash grants, asset vouchers and CFW to restart livelihood activities for returnees and other vulnerable households		CTP (US\$50), CFW, vouchers (US\$150)	Pakistan, Swat Valley. 6,000 IDP households.	Expenditure, recipients' perceptions of benefits (Hagens, 2009)
22. Save the Children, Hiran Food Security and Livelihoods Project, 2010	To enable households at risk of food insecurity to cover their basic food and nonfood needs and avoid the sale of productive assets	3 instalments of US\$85; March-October 2010	Somalia, 5 districts of Hiran Province; 2,500 households at high risk of food insecurity	Therapeutic feeding programmes for severely malnourished children	Expenditure, meals per day, dietary diversity, weight gain in children (success of therapeutic feeding programmes on children between CTP and non-CTP groups); dependence on coping strategies, debt, school enrolment (Brewin, 2010)

Programme	Objectives	Transfer details (type, amount, frequency, duration)	Location, target group	Complementary activities and/or conditions	Indicators used/evaluation
23. Horn Relief and Norwegian People's Aid, Emergency Cash Relief Program, Somalia, 2003–2004	Slowing down the destitution of pastoral livelihoods and reviving the local economy	One-off unconditional grant of US\$50	Somalia, Sool Plateau; 14,000 pastoralists at risk of destitution, (including elderly, FHH and the disabled)		Expenditures, meal frequency (Mattinen and Ogden, 2006; Ali et al., 2005)
24. ACF, Cash Grant Supported Income Generating Activities, Southern Sudan, August 2008	To contribute to the prevention of malnutrition	300 SDG (US\$141) per group member in two instalments. A small number of 'especially promising' groups received an additional third round of 150 SDG (US\$65.80) per person	South Sudan, Warrap State; 301 households. Target group: people at risk of malnutrition (households with children involved in ACF's Outpatient Therapeutic Feeding Programmes, IDPs/returnees, vulnerable hosting households)	Part of an integrated approach to nutrition	Income, expenditures, food expenditures by item, HDDS, CSI, self-reported hunger (but not of children). MUAC of beneficiaries' children, readmissions to OTP (Sloane and Pietszch, 2010)
25. WFP with Oxfam, Cash Transfer Pilot Project, Sri Lanka, 2005	To compare the impact of cash and food assistance, improve food and livelihood security and build local economy	Rs150 per person per week (about US\$1.50) (about Rs6,631 per household for the entire pilot); value of cash transfers equal to the market value of the food ration also being distributed	Sri Lanka		HDDS, FCS, nutritional analysis (kcal intake), expenditure (Sandström and Tchatchua, 2010; WFP, 2006; Mohiddin, et al., 2006)
26. SCUK and WFP, Cash Transfer Plus Food Aid, Emergency Drought Response in Swaziland, 2007–2008	Ensuring access to food for drought-affected families	Half ration of food (maize, beans and oil) and the equivalent in cash, every month for six months from November 2007 until the harvest of April 2008	Swaziland, 6,200 households (40,000 people)	Training for all beneficiaries (accessing financial services, investment and savings, bank accounts, making a will and inheritance rights)	Food security, HDDS, coping strategies, child nutrition, income, expenditure, assets, impact on women and markets (Devereux and Jere, 2008)

		IIFG COMMISSIO		
Meal frequency and portion size, expenditure, food allocation to children, consumption 'smoothness' HDDS (Roman, 2010) (Kardan et al., 2010)		HDDS, food expenditure, subjective health status, mortality reduction (Danida, 2005; Hofmann, 2005; WFP, 2005; Jones, 2004)	Expenditures	Expenditures, care practices (inc. health- seeking behaviour), ICFP, FCS, HDDS (Kebede, 2006; Adams and Kebede, 2005)
			Conditional on two members of each beneficiary family providing a labour contribution for community asset creation, non-labour social contributions (e.g. child-care), or participation in training	Wealth-creation promoted through loans, lactating women paid cash to attend nutrition BCC sessions rather than participate in employment-generating schemes
Zimbabwe, Gokwe north, Gokwe south and Nyanga		Afghanistan, Panjao, Waras, Lal and Dai Kundi, Hazarajat; 1,643 chronically poor and vulnerable beneficiaries	Ethiopia, acutely food insecure families	Ethiopia, chronically poor households, 40,000 beneficiaries
In each of the three districts, one ward received cash only, one a mix of food and cash and remainder received food as normal; transfers provided approximately 80% of a person's monthly food needs; transfers distributed monthly for 4–5 months		Non-skilled labourers 2 euros per day; skilled labourers – 4 euros; building water reservoirs and flood protection walls, tree planting, fodder collection and planting and a women's embroidery project; 70 days of work	Monthly cash provision of 20 birr (US\$2.25) per beneficiary per month (average family of 6 members \$13.50 per month)	ETB 25 (US\$2.85) per person per month over 7 months (maximum of nine people per household)
To address short-term acute vulnerability and transient poverty		Survival and living conditions are maintained over the winter and improved and sustainable livelihood options are established over the longer term	Provide access to a nutritionally adequate food basket, allow retention of food aid, improve domestic hygiene, improve health conditions, ensure school attendance, reduce environmentally harmful practices	To assist chronically poor households, protect and increase livelihood assets, enable experimentation with new livelihood strategies, enable mothers to remain at home for longer periods of time and (together with the BCC) promote breastfeeding
27. WFP and Concern, Zimbabwe Emergency Cast Transfers (ZECT), November 2009–March 2010	Cash for Work	28. CFW Transfers, Afghanistan, 2003–04, Oxfam, other NGOs and government agencies	29. CARE, Cash for Relief Project, Ethiopia, 2003	30. Save the Children-UK, Cash for Relief, Ethiopia, 2001–2004

Programme	Objectives	Transfer details (type, amount, frequency, duration)	Location, target group	Complementary activities and/or conditions	Indicators used/evaluation
31. Oxfam, Livelihoods Programmes, Mapou and Cape Haitian, Haiti, 2005	Improve food security and re-engagement in economic activities	Multiple types/amounts of transfers: 4,025 Haitian Gourdes grant for women, 3 months CFW at 50 Haitian Gourdes (~US\$7.1) per halfday (250 Gourdes per week), paid in cash (120 Gourdes) and in rice vouchers for livestock at specific fairs	Haiti, Mapou and Cape Haitien. Flood-affected households. Cape Haitien: 2,000 beneficiaries (one per vulnerable household). Mapou: 1,150 households (5,750 persons), with particular attention to female-headed HH	Conditionality: work (vouchers) Complementary: support for those unable to work and seed and livestock fairs	Expenditures, meals consumed, school attendance levels, dependence on negative coping strategies (Creti, 2005)
32. Concern Worldwide, CFW and Cash Transfers, Haiti, 2010	Addressing loss of credit since earthquake	CFW (rubble collection, canal clearing and lighter tasks such as bin-cleaning), cash transfer (one-time transfer of \$105 to 7,500 women)	Haiti, Port au Prince; vulnerable people in La Gonave, Saut D'eau, Martissant and St. Martin. CFW 58,190 beneficiaries. Cash transfers 37,150 beneficiaries	Women provided with business skills training, GFD, baby tents, nutrition education and referral for CMAM	Expenditures (Featherstone, 2011)
33. Oxfam CFW, Calang, Aceh, 2005	Enhance food security and livelihoods by improving purchasing power; create/rehabilitate assets	CFW, mainly focused on rehabilitating agricultural land; May–December, 2005; most projects lasted 3–4 weeks; total of \$878,540 disbursed	Indonesia, Aceh, Calang; 8,335 workers in 45 affected villages	Food rations	Expenditures (Winahyu, 2006)
34. Oxfam, CFW, Lamno, Aceh, 2005	To enable people to meet their basic needs and promote economic and social recovery	CFW	Indonesia, Aceh, Lamno; 3,000 IDPs in more than 30 communities	Food rations	Expenditures (Brocklebank, 2005)
35. Mercy Corps, CFW, Aceh, 2005	Mobilise idle labour, inject cash into the local economy, empower individuals and households, provide people with work opportunities	CFW, average US\$276 per month, January–July 2005	Indonesia, Aceh; 60 tsunami-affected communities in four districts, average of 10,905 participants a month		Expenditures, meals per day, household savings and assets (Doocy et al., 2005)

Expenditures, HDDS (ECHO, 2010)	FCS, CSI, expenditures (ECHO, 2010; WFP/CRS, 2010)	Expenditures, access to essential items, livelihood protection (Latif and Besaiso, 2009)	Expenditures (BRCS/SLRCS, 2005)	Expenditure, HDDS, FCS, nutritional analysis of consumption, frequency of child feeding (Devereux et al., 2005; Bwalya and D'Souza, 2006; Harvey and Marongwe, 2006; Harvey and Savage, 2006; Saudubray et al., 2006)
Nutrition education, small business training	Training on land rehabilitation		Government food rations	
Niger, Goure; 1,200 households who are livelihood deficit (food, productive assets)	Niger; food-insecure 4,080 households	oPT, Gaza; 1,533 beneficiaries (of which 219 had temporary jobs)	Sri Lanka, Matara district; 246 workers from vulnerable households	Zambia; 13,500 vulnerable/food-insecure households; 80% of beneficiaries were participants in public works activities and remainder received cash unconditionally
50,000 FCA per household (equivalent of covering food needs for 1 to 2 months), given in two transfers of 15,000 and 35,000 FCA in July and August	1,000 FCA per person per day for 20 days/month (~70,000 FCA per person)	60 days of work (400 euros total payment)	CFW: excavating blocked agricultural canals, draining flooded fields, clearing stagnant water, removing rubble from communal land and digging coir pits; March, 2005; 11-day project with 5 hours' work per day for \$2; average total earning LKR5,343; paid weekly	90,000 ZK (US\$20) per household per month (equivalent to WFP food ration) for four months
Meet immediate needs, protection of assets, land rehabilitation, DRR and hygiene	Food security and soil conservation	Alleviating hardship conditions and meeting basic needs	Supporting vulnerable tsunami-affected households	Enable avoidance of negative coping strategies through access to sufficient food
36. CFW, ACF-E, Niger, 2010	37. CFW, WFP/CRS, Niger, 2010	38. CFW, Islamic Relief, Gaza Strip, 2009	39. CFW, BRCS, Sri Lanka, 2005	40. Oxfam GB, Emergency Cash Transfer Programme, Zambia, 2005–2006

(continued)

Programme	Objectives	Transfer details (type, amount, frequency, duration)	Location, target group	Complementary activities and/or conditions	Indicators used/evaluation
Vouchers					
41. ACF, Fresh Food Vouchers, drought-affected families in Bolivia, 2009– 2010	Prevent deterioration in food security and in nutritional status; gender empowerment	FFV; 150–250Bs. Per month (depending on household size); voucher exchangeable in certain shops for fruit, vegetables, milk cheese, eggs, yoghurt and meat; 3 months' duration	Bolivia, Chaco; 7,600 families	Water, GFD, seeds, training on food preparation, diet and vegetable gardening	Expenditure on food types, nutritional status, gender empowerment. knowledge of food and nutrition (Otter and Cortez, 2011)
42. WFP vouchers in Burkina Faso, 2009	Compensate people for lost purchasing power due to higher food prices and fewer employment opportunities	Amount based on family size, up to \$18/month	Burkina Faso, Ouagadougou and Bobo-Dioulasso, 200,000+ beneficiaries		Programme being evaluated in 2011, previous data on beneficiary perceptions on access to food and nutrition status (Ouattara and Sandström, 2010)
43. ACF, Fresh Food Vouchers, Haiti Earthquake, 2010	To mitigate the risk of under- nutrition through improved access to diversified foods and nutrition education; to support and stimulate local markets	Value voucher for specific commodities from contracted vendors (meat, fish, vegetables, fruit)	Haiti, IDP camps; 15,000 families	Health/nutrition education; supplementary food distribution (SFD); simultaneous WASH interventions	HDDS, nutritional status (MUAC) (ACF, 2010)
44. ACF, Fresh Food Vouchers, Somali Refugees in Dadaab, Kenya, 2007– 2009	Reduce the risk of infant mortality in malnourished children under five through diversifying the diet of refugee families	Fresh food value voucher to families with malnourished children with contracted vendors in camps; KSh600 per month; once a month; September 2007 to April 2009	Kenya, Dadaab; 3 refugee camps; 17,850 families of malnourished children	WFP providing GFD; Health/Nutrition Education including cooking demonstrations; SFP for <5 children w/MAM	HDDS; Nutritional Status (W/H); Behaviour change ¹⁷ SFP coverage rates (Dunn, 2010)

17 No baseline so not verifiably improved.

(Longley, 2008)	Expenditures, immunisation rates, frequency of use of health facilities (CRS, 2006)	Expenditures, effect on local economy (Pietzsch, 2005)	FCS, HDDS, expenditure on food (Creti, 2011)	FCS, HDDS (Hedlund and McGlintchy, 2009)
hygiene promotion; through (anecdotal, not quantified) a separate programme (Longley, 2008) — 23,000 households participating in food for assets and 8,000 households receiving GFD	Nutrition education, health Exp	20% of beneficiaries (elderly and disabled) received free ecovouchers	FCS food	PCS McC
Districts, 1,350 beneficiaries	Kenya; pregnant and lactating women and households with malnourished children under five	Niger and Mali, Sahel region; vulnerable and destitute households; Gao, 10,098 households; Dakoro and Tillaberi districts, 15,677 households	oPT, Gaza; until April 2011, 313,000 beneficiaries; from May onwards 295,000	oPT, West Bank; 6,000+ 'at-risk' households in urban areas, proxy income indicators used for targeting
2,000 per month over 6 months (sugar, rice, maize, beans, oil, tea, salt, wheat flour, soap, paraffin)	Value vouchers (corresponding to specific local food prices); KSh540 (US\$7.50) to pregnant and lactating women; KSh1,080 to households with malnourished children under five; over 5 months	Voucher for Work; work on community infrastructure works (dykes, traditional water holes, tree plantations, support to destocking); fortnightly voucher; 2,250 CFA voucher per 9 hours of work; total value of 657,000; 20% voucher limit on non food items; 3 months from December 2004	Value vouchers for range of 10 food commodities, 256 NIS per household per month	Vouchers for specific food commodities (bread, eggs, dairy); 200 NIS per household per month
food access to the most vulnerable households (plus other objectives related to the complementary interventions)	Supplement diets with additional nutritious food by improving household access to food and improving knowledge of good nutrition	Access to food in reaction to the Sahel regional food crisis	In short term meet urgent needs and improve food consumption; in medium term maintain enrolment levels of schoolchildren at pre-crisis levels	Prevent deterioration in household dietary diversity (protein intake) resulting from rising food prices
ECHO-funded Cross-Sectoral Emergency Response in Moyale District, northern Kenya, June 2009–April 2010	46. Catholic Relief Services, Kenya Drought Emergency Response (KDER), Kenya, 2006	47. Oxfam, Vouchers, Phase I, Sahel Food Crisis, 2003–2005, Niger, July 2005	48. Oxfam, Fresh Food Vouchers, Improve food consumption of conflict- affected people, Gaza, oPT, 2011	49. ACF, Fresh Food Vouchers, West Bank, oPT, 2009

Programme	Objectives	Transfer details (type, amount, frequency, duration)	Location, target group	Complementary activities and/or conditions	Indicators used/evaluation
50. ACF, Fresh Food Vouchers, Food-insecure families affected by floods in Pakistan, 2011	Prevent food insecurity through improved dietary diversity and protect/ increase assets and contribute to recovery of local economy	FFV (6,200PNK) monthly for 2 months redeemable for staple and fresh foods in 'food fair'	Pakistan; 5,300 families	Small grants to 100 vendors to restart businesses	HDDS, FCS (Hedlund, unpublished)
51. VSF, Somali Livelihood and Food Security Assistance (SOLAFA), 2006	Contribute to the minimum food basket through food distribution, cash and income generation through asset protection	Food distribution and vouchers for food commodities	Somalia, Mudug (Jariiban, Goldogob) and Nugal (Garowe, Burtinle and Eyl), Puntland; destitute and IDPs		
52. VSF, Meat and Milk Voucher Project (IMPACT I and II), Bahr al Gazal, South Sudan	Increase dietary diversity of IDP families, some with malnourished children	Voucher for 1kg meat and 2l milk per week for 12 weeks	South Sudan, Nyamal; 1,100	Referrals to CMAM in Phase I	HDDS, protein intake, GAM, income of milk and meat suppliers and butchers (Clarke and Fison, 2009; Jenet, 2009; Farawo, 2009)
53. WFP, Food Vouchers, Syria, 2009	Pilot testing vouchers as a new modality for food assistance in Syria, testing electronic delivery through text messages and testing an electronic system for managing voucher distribution and reporting	US\$34 (provided twice) covering 2 months of food, based on the local market value of the in-kind distribution ration	Syria, Damascus; 909 Iraqi refugees	Rice distribution complemented first cycle of vouchers	Expenditure patterns, beneficiary satisfaction (Elguindi, 2010)
54. Oxfam GB, Food Voucher System, Zimbabwe, 2005–2006	Assuring food consumption by supplementing income for the purchase of essential food items	Food vouchers (maize, wheat meal, beans, kapenta, salt, oil, peanut butter) of US\$14 per month (expected to supplement food needs for a household of 5 people) for 4 months	Zimbabwe; IDPs from urban 'clean-up' programme		(Oxfam, 2006)

References

Adams, L. (2007) Learning from Cash Responses to the Tsunami: Final Report. London: ODI.

Adams, L. and E. Kebede (2005) *Breaking the Poverty Cycle: A Case Study of Cash Interventions in Ethiopia*. HPG Background Paper. London: ODI.

Adato, M. and L. Bassett (2008) What Is the Potential of Cash Transfers To Strengthen Families Affected by HIV and AIDS? A Review of the Evidence on Impacts and Key Policy Debates. Submitted to the Joint Learning Initiative on Children and AIDS (JLICA). Washington DC: International Food Policy Research Institute (IFPRI).

Aker, J. C. (2011) Operational Research Report. Cash Transfers and Emergency Response in Niger: The Impact of Mobile Cash Transfers on Household Well-Being. Concern Worldwide.

Aker, J. C. et al. (2011) Zap It to Me: The Short-Term Impacts of a Mobile Cash Transfer Program. Working Paper 268. Centre for Global Development.

Ali, D., F. Toure and T. Kiewied (2005) *Cash Relief in a Contested Area: Lessons from Somalia*. Network Paper 50. London: ODI.

Aspin, M. (2010) *Inter-Agency Impact Assessment of the Cash Transfer Programs in West Sumatra*. Catholic Relief Services, Mercy Corps, Oxfam GB and Save the Children.

Barrett, C. B. et al. (2011) *Misconceptions about Food Assistance*. Policy Brief No. 2. Cornell University and Global Public Policy Institute.

Bassett, L. (2008) Can Conditional Cash Transfer Programs Play a Greater Role in Reducing Child Undernutrition? World Bank.

Bazin, A. (2010) Document de capitalisation: Programme de Coupons Produits Alimentaires Frais, dans le cadre de la réponse d'urgence au séisme, Port-au-Prince, Haïti. ACF International.

Bhutta, Z. et al. (2008) 'What Works? Interventions for Maternal and Child Undernutrition and Survival'. Maternal and Child Undernutrition Series Paper 3. *Lancet*; 371: 417–40.

Black, R., et al. (2008) 'Maternal and Child Undernutrition: Global and Regional Exposures and Health Consequences'. Maternal and Child Undernutrition Series Paper 1. *Lancet*; 371: 243–60.

BRCS/SLRCS (2005) Cash for Work Projects in Devinuwara Division, Matara. Impact Assessment Report, May 2005. BRCS Sri Lanka.

Brewin, M. (2010) An Evaluation of the Hiran Food Security and Livelihoods Project. Save the Children.

Chastre, C. et al. (2007) The Minimum Cost of a Healthy Diet: Findings from Piloting a New Methodology in Four Study Locations. Save the Children UK.

Clarke, N. and T. Fison (2009) Report of a Consultancy To Review VSF's 'Meat and Milk'. Food Aid Project in South Sudan and Suggest a Future Strategy. VSF Germany and VSF Suisse.

Concern Universal (2006) Lessons from a Direct Welfare Transfer Intervention: A Pilot Project. Blantyre: Concern Universal.

Creti, P. (2005) Evaluation of the Livelihood Programmes in Mapou and Cap Haitian, Haiti. Oxfam GB.

Creti, P. (2010) The Impact of Cash Transfers on Local Markets. CaLP.

CRS (2006) CRS Kenya Drought Emergency Response: Rapid Assistance Program. Nairobi: Catholic Relief Services.

Devereux, S., J. Marshall and J. MacAskill (2005) *Making Cash Count: Lessons from Cash Transfer Schemes in East and Southern Africa for Supporting the Most Vulnerable Children and Households.* Save the Children UK, HelpAge International and Institute of Development Studies.

Devereux, S., P. Mvula and C. Solomon (2006) After the FACT: An Evaluation of Concern Worldwide's Food and Cash Transfers Project in Three Districts of Malawi. Institute for Development Studies for Concern Worldwide.

Devereux, S. et al. (2007) An Evaluation of Concern Worldwide's Dowa Emergency Cash Transfer Project (DECT) in Malawi 2006/2007. Concern Worldwide.

Devereux, S. and P. Jere (2008) 'Choice, Dignity and Empowerment': Cash and Food Transfers in Swaziland: An Evaluation of Save the Children's Emergency Drought Response, 2007/08. Save the Children Swaziland.

Devereux, S. and M. Mhlanga (2008) *Cash Transfers in Lesotho: An Evaluation of World Vision's Cash and Food Transfers Pilot Project.*World Vision and World Food Programme.

DFID (2011) Cash Transfers Evidence Paper. DFID.

Doocy, S. et al. (2005) *The Mercy Corps Cash for Work Program in Post-Tsunami Aceh*. Mercy Corps.

Dunn, S. (2009) External Evaluation: Fresh Food Voucher Project by Action Against Hunger, Dadaab Refugee Camps, Kenya. ACF.

FAO (1996) Rome Declaration on World Food Security and World Food Summit Plan of Action. World Food Summit 13–17 November 1996. Rome.

Farawo (2009) Household and Nutrition Impact Assessment Survey, ECHO Funded Support to Local Livestock Production for Food Aid and Reintegration Assistance of Returnees and Vulnerable Residents, Malakal and Aweil 2008. Vétérinaires sans Frontières Germany and Suisse.

Fiszbein, A. and N. Schady (2009) *Conditional Cash Transfers: Reducing Present and Future Poverty.* Washington, DC: The International Bank for Reconstruction and Development/World Bank.

Featherstone, A. (2010) Evaluation of Concern's Response to the Haiti Earthquake. Concern.

FEWSnet (2006) Understanding Nutrition Data and the Causes of Malnutrition in Niger: A Special Report by the Famine Early Warning Systems Network. FEWS NET.

Gaarder, M., A. Glassman and J. Todd (2010) 'Conditional Cash Transfers and Health: Unpacking the Causal Chain'. *Journal of Development Effectiveness*, vol. 2, No. 1, March.

Grobler-Tanner, C. and S. Collins (2004) *Community Therapeutic Care (CTC): A New Approach to Managing Acute Malnutrition in Emergencies and Beyond.* FANTA Technical Note No. 8.

Hall, A., B. Blankson and J. Shoham (2011) *The Impact and Effectiveness of Emergency Nutrition and Nutrition Related Interventions: A Review of Published Evidence 2004–2010.* Emergency Nutrition Network.

Harriss, B., S. Gillespie and J. Pryer (1990) 'Poverty and Malnutrition at Extremes of South Asian Food Systems'. *Economic and Political Weekly*, 22 December.

Harvey, P. and S. Bailey (2011) *Cash Transfer Programming in Emergencies*. Good Practice Review 11. London: ODI.

Harvey, P. and K. Savage (2006) *No Small Change: Oxfam GB Malawi and Zambia Emergency Cash Transfer Programme: A Synthesis of Key Learning.* London: ODI.

Harvey, P. and N. Marongwe (2006) *Independent Evaluation of Oxfam GB Zambia's Emergency Cash-Transfer Programme*. ODI for Oxfam.

Harvey, P. et al. (2010) Food Aid and Food Assistance in Emergency and Transitional Contexts: A Review of Current Thinking. London: ODI.

Hedlund, K. (forthcoming) *Meta-evaluation of ACF's Emergency Food Voucher Programmes in 5 Countries*. ACF.

Hedlund, K. (2011) Review of Fresh Food Vouchers, ACF, Food Insecure Families Affected by Floods in Pakistan. Unpublished.

Hedlund, K. and M. McGlintchy (2010) *Midterm Review of Urban Voucher Project in the oPT*. World Food Programme.

Hoddinott, J. and D. Weismann (2008) 'The Impact of Conditional Cash Transfer Programs on Food Consumption in Honduras, Mexico, and Nicaragua in Conditional Cash Transfers' in M. Adato and J. Hoddinott (eds) *Latin America: A Magic Bullet To Reduce Poverty.* Washington, DC: IFPRI.

Hoddinott, J. and Y. Yohannes (2002) *Dietary Diversity as a Food Security Indicator*. FCND Briefs 136. IFPRI.

Jaspars, S. and P. Harvey (with C. Hudspeth and L. Rumble) (2007) A Review of UNICEF's Role in Cash Transfers to Emergency-Affected Populations. EMOPS Working Paper.

Jenet, A. (2009) 'Can Humanitarian Food Aid Assistance Serve the Community?', Tropentag, 6–8 October 2009, Hamburg: *Biophysical and Socio-economic Frame Conditions for the Sustainable Management of Natural Resources*, Vétérinaires Sans Frontières Germany (VSFG).

Jones, B. (2004) Evaluation of Oxfam GB's ECHO Funded Cash for Work project in Hazarajat. Oxfam GB.

Kardan, A., I, MacAuslan and N. Marimo (2010) *Evaluation of Zimbabwe's Emergency Cash Transfer (ZECT) Programme: Final Report*. Oxford Policy Management, Concern Worldwide and World Food Programme.

Kebede, E. (2006). 'Moving from Emergency Food Aid to Predictable Cash Transfers: Recent Experience in Ethiopia'. *Development Policy Review*, vol. 24, no. 5.

Khin Maung Aye, S., T. T. Oo and K. S. Linn (2011) *Final Evaluation Lift Project Report: Strengthening Livelihood and Food Security in Nargis Affected Communities.* Save the Children.

Lagarde, M., A. Haines and N. Palmer (2007) 'Conditional Cash Transfers for Improving Uptake of Health Interventions in Lowand Middle-Income Countries'. *Journal of the American Medical Association*, vol. 298, no.16.

Latif, M. and M. Besaiso (2009) External Evaluation – Cash For Work Project Funded by Disasters Emergency Committee. IRPAL.

Leroy, J. L., M. Ruel and E. Verhofstadt (2009) 'The Impact of Conditional Cash Transfer Programmes on Child Nutrition: A Review of Evidence Using a Programme Theory Framework'. *Journal of Development Effectiveness*, vol. 1, no. 2, June.

Levine, S. and C. Chastre (2011) *Nutrition and Food Security Response Analysis in Emergency Contexts.* HPG Commissioned Paper. FAO and ODI.

Leyland, T. (2011) The Use of Cash Transfers in Livestock Emergencies and Their Incorporation into Livestock Emergency Guidelines and Standards. FAO.

Longley, K. (2008) Concern Worldwide's ECHO-funded Cross-Sectoral Emergency Response in Moyale District, Northern Kenya. Concern Worldwide.

Longley, K. (2010) *End Evaluation of the Moyale Cross-Sectoral Emergency Response Programme*. Concern Worldwide.

Lothike, E. (2005) *Cash for Work in Emergencies Experiences from Turkana* 2001 & 2003. Nairobi: Oxfam.

Lung'aho and Oman (2009) Postscript to 'Fresh Food Vouchers for Refugees in Kenya'. *Field Exchange*, Issue 36, July 2009.

MacAuslan, I. and L. Schofield (2011) Evaluation of Concern Kenya's Korogocho Emergency and Food Security Cash Transfer Initiative, Final Report. Concern Worldwide and Oxford Policy Management.

Manley J., S. Gitter and V. Slavchevska (2011) *How Effective Are Cash Transfer Programs at Improving Nutritional Status?*. DFID.

Mattinen, H. and K. Ogden (2006) 'Cash-based Interventions: Lessons from Southern Somalia'. *Disasters*, vol. 30, no.3.

Meyer, J. (2007) The Use of Cash/Vouchers in Response to Vulnerability and Food Insecurity Case Study Review and Analysis. Special Initiative for Cash and Voucher Programming United Nations World Food Programme Southern Africa.

Mohanty, S. (2010) Nairobi Urban Social Protection Programme. Oxfam.

Mohiddin, L., M. Sharma and H. Haller (2007) 'Comparing Cash and Food Transfers: Findings From a Pilot Project in Sri Lanka'. *Field Exchange* 30.

Morris, S., B. Cogill and R. Uauy (2008) 'Effective International Action Against Undernutrition: Why Has It Proven So Difficult and What Can Be Done To Accelerate Progress?' Maternal and Child Undernutrition Series Paper 5. *Lancet*; 371.

O'Donnell, M. (2007) Project Evaluation: Cash-Based Emergency Livelihood Recovery Programme, May to November 2006, Isiolo District, Kenva. Save the Children Canada and DFID.

Otter, T. and M. Cortez (2011) Evaluation Report Fresh Food Voucher. ACH Santa Cruz, Bolivia. ACF.

Pietzsch, S. (2005) *Voucher For Work – An Option For Emergencies?* A Programme Evaluation in Mali & Niger. Oxfam GB.

Poulsen, L. and D. Fabre (2011) Cash Transfer For Protection of Blanket Feeding Maradi and Tahoua Regions: Independent Final Evaluation. UNICEF.

Roman, E. R. (2010) Zimbabwe Emergency Cash Transfer (ZECT) Pilot Programme: Monitoring Consolidated Report, November 2009 to March 2010. Concern and WFP.

Sadler, K. et al. (2009) *Milk Matters: A Literature Review of Pastoralist Nutrition and Programming Responses.* Feinstein International Center, Tufts University and Save the Children Addis Ababa.

Sandström, S. and L. Tchatchua (2010) 'Do Cash Transfers Improve Food Security in Emergencies? Evidence from Sri Lanka' in S. W. Omamo, U. Gentilini and S. Sandström (eds) (2010) *Revolution: From Food Aid to Food Assistance – Innovations in Overcoming Hunger.* World Food Programme.

Saudubray, V. et al. (2006) *Real-time Self-evaluation of the Response to the Food Crisis in Zambia*, 2005/06. Lusaka: Department for International Development, Zambia.

Savage, K. and E. Umar (2006) *Independent Evaluation of Oxfam GB Malawi's Cash Transfer Programme*. London: ODI.

SCUK (2004) Global Impact Monitoring Guidelines 2004. London: Save the Children UK.

SCUK (2005) Impact of a Cash for Relief Programme on Child Caring Practices in Meket Woreda. Addis Ababa: Save the Children UK.

SCUK (2009) How Cash Transfers Can Improve the Nutrition of the Poorest Children: Evaluation of a Pilot Safety Net Project in Southern Niger. Save the Children UK.

SCUK (2010a) Midterm Evaluation of Save the Children's Cash Transfer Project in Tassaoua and Aguie. Save the Children UK.

SCUK (2010b) Midterm Evaluation of Save the Children's Cash Transfer Project in Magaria, Niger. Save the Children UK.

SCUK (2010c) Rapport de l'évaluation finale de cash Transfert dans les Départements de Tessaoua et Aguié. Save the Children UK.

SCUK (2011) Fresh Food Vouchers For Refugees in Dadaab Refugee Camps: Garissa District. Project No. 2010-VI-Ken-004. End of Project Narrative Report. Submitted to the French Embassy.

Sharma (2006) An Assessment of the Effects of the Cash Transfer Pilot Project on Household Consumption Patterns in Tsunami-Affected Areas of Sri Lanka. Rome: International Food Policy Research Institute for the World Food Programme.

Sibson, V. (2011) Review of the Impact of Cash Transfers on Child Nutrition in the Delta of Myanmar: April 2011. Save the Children UK.

Skoufias, E, S. Tiwari and H. Zaman (2011) *Can We Rely on Cash Transfers To Protect Dietary Diversity During Food Crises? Estimates from Indonesia*. Policy Research Working Paper 5548. World Bank.

Sloane, E. and S. Pietzsch (2010) *Cash Grant Supported Income Generating Activities: Twic and Gogrial West Counties, Warrap State, Southern Sudan Programme Evaluation.* Action Against Hunger International.

Sphere Project (2011) *Humanitarian Charter and Minimum Standards in Disaster Response*. Sphere.

UNICEF (1990) Strategy for Improved Nutrition of Children and Women in Developing Countries. A UNICEF Policy Review.

University of Arizona (2006) *Phase IV Monitoring: Tanout Cash Distribution Project. Report for the IFRC-Niger.* Tuscon, AZ: University of Arizona.

UNSCN (2011) Harmonised Training Package for Nutrition in Emergencies, Global Nutrition Cluster. Geneva: IASC.

USAID (2006) Understanding Nutrition Data and the Causes of Malnutrition in Niger. USAID.

USAID (2011a) Reporting Note: Roundtable on Responding to Emergency Food Insecurity through Cash Transfer and Food Voucher Interventions, Convened by the United States Agency for International Development, Bureau of Democracy, Conflict, and Humanitarian Assistance, Office of Food for Peace, March 8-9, 2011. USAID.

USAID (2011b) Delivering Improved Nutrition Recommendations for Changes; April 2011, Food Aid Quality Review Report to the United

States Agency for International Development. Tufts University and USAID.

Victora, C. G., J.-P. Habicht and J. Bryce (2004) 'Evidence-based Public Health: Moving Beyond Randomized Trials'. *American Journal of Public Health*. 94.

Watson, F. (2011) Improving Linkages Between Nutrition and Food Security Information and Analysis. Support to the EC Programme on Linking Information and Decision_Making To Improve Food Security for Selected Greater Mekong Sub_Regional Countries, January 2011, Myanmar. EC.

Webb, P. et al. (2011) *Delivering Improved Nutrition: Recommendations* for Changes to US Food Aid Products and Programs. Boston, MA: Tufts University.

Weise Prinzo, Z. and B. de Benoist (2002) 'Meeting the Challenges of Micronutrient Deficiencies in Emergency-affected Populations'. Department of Nutrition for Health and Development, World Health Organization, Proceedings of the Nutrition Society. Vol. 61.

Wekesa, M., H. Banda, E. Mugabi and V. Gondwe (2005) We're In This Together. Evaluation of Concern Worldwide's Livehood Security Programme in Malawi, January 2004–December 2005. Concern.

WFP (2008) Food Consumption Analysis: Calculation and Use of Food Consumption Score in Food Security Analysis. Technical Guidance Sheet. VAM.

WFP (2009) Emergency Food Security Assessment Handbook. World Food Programme.

WFP (2011) Project Activities: Food for Work and Assets, Programme Guidance Manual. Online.

WHO (2008) Indicators for Assessing Infant and Young Child Feeding Practices; Part 1: Definitions. WHO.

WHO, UNICEF, WFP and UNHCR (2010) Consultation on the Programmatic Aspects of the Management of Moderate Acute Malnutrition in Children Under Five Years of Age. WHO.

Wiesmann, D. L. Basset, T. Benson and J. Hoddinot (2008) *Validation of Food Frequency and Dietary Diversity as Proxy Indicators of Household Food Security*. International Food Policy Research Institute for the Food Security Analysis Service, World Food Programme.

Young, H. and S. Jaspars (1995). *Nutrition Matters; People, Food and Famine*. Intermediate Technology Publications

Young, H. and S. Jaspars (2006) *The Meaning and Measurement of Acute Malnutrition in Emergencies: A Primer for Decision-makers*. Network Paper 56. London: ODI.

Yimer, T., A. M. Mayer and A. Duffield (2006) *Difficulties of Impact Assessment in 'Semi-emergencies'*. Save the Children UK.

