

## **Cost and cost-efficiency of unconditional cash transfers in Tahoua, Niger**

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# Cost and cost-efficiency of unconditional cash transfers in Tahoua, Niger

Unconditional cash transfers (UCTs) are increasingly used in humanitarian assistance instead of in-kind aid and are promoted as being more cost-efficient. However, evidence on their comparative cost-efficiency remains inconclusive. The objectives of this costing study were to evaluate the costs and cost-efficiency of a ‘standard’ four-month UCT typically implemented by humanitarian actors during the June-September lean season in the Tahoua Region of Niger compared to a longer six-month ‘modified’ UCT initiated two months earlier than the standard, each with the same total transfer value.

We found the standard UCT to be more cost-efficient based on all metrics, including cost per beneficiary and total cost-transfer ratio. It cost comparatively less to provide \$1 of benefit to a household delivered through the standard UCT modality compared to the modified UCT. Costs to beneficiaries were unevenly distributed due to programmatic decisions related to cash delivery mechanisms, which partly eroded the net transfer value more for some beneficiaries than for others.

Given the dearth of detailed and transparent cost analyses published on cash transfer programming, we present our findings, recognising that they are primarily descriptive. By sharing the details of our analysis and results, however, we aim to contribute to current conversations on standardising cost analyses within the humanitarian community of practice.

Keywords: cost analysis; cost-efficiency analysis; cash transfers; cash and nutrition; Niger

## 1. Introduction

While still forming a relatively small proportion of overall humanitarian assistance, unconditional cash transfers (UCTs) are increasingly common as an assistance delivery modality (Gentilini 2014; Harvey and Bailey 2011; Austin and Frize 2011; ODI and Center for Global Development 2015). UCTs have the potential to reduce child malnutrition and contribute to achievement of Sustainable Development Goal 2: to end all forms of acute malnutrition by 2030;

however, the pathways to reducing child malnutrition via cash transfer programming remain unclear, particularly in humanitarian settings.

The potential advantages of UCTs compared to in-kind aid include greater dignity and choice for beneficiaries trying to meet their specific needs, improved financial inclusion, faster response times, and support to local market systems (Harvey and Bailey 2011; ODI and Center for Global Development 2015; Gentilini 2016). One argument supporting the use of cash-based transfers is that they are often more cost-efficient than in-kind distributions, measured in terms of cost per beneficiary, cost per transfer, or total cost-transfer ratio (Gentilini 2014; Margolies and Hoddinott 2015; Harvey and Savage 2006; ECHO et al. 2016).

Despite these claims, there are few published studies on the cost-efficiency of UCTs and even fewer on their cost-effectiveness, and there is little consensus in the results among the limited number of published studies (ODI and Center for Global Development 2015; ECHO et al. 2016; REFANI Consortium 2015; Bailey and Hedlund 2012). Moreover, the nature of cash as an inherently flexible resource that can be used according to recipient priorities means it is difficult to attribute the measured changes in outcomes of interest directly to the provision of cash, thereby confounding conclusions regarding the cost-effectiveness of cash transfer programmes.

Nonetheless, cost, cost-efficiency, and cost-effectiveness analyses have the potential to provide valuable information to decision-makers at distinct levels to influence policy choices and programme design. Such analyses can highlight how costs are shared among programme stakeholders including programme beneficiaries; identify the most impactful avenues to improve operational efficiency by identifying key cost drivers; or demonstrate how a particular programme may be more costly to implement but more effective than a comparable programme,

making it a more attractive option (Hidrobo et al. 2014; Schwab, Margolies, and Hoddinott 2013).

Despite a strong demand for policy and programme recommendations to improve value for money in humanitarian spending, there are several factors that limit the generalizability of conclusions. Differences in the costing methods used and analytical choices made; poor quality data; vague or opaque reporting; variation in the modalities or mechanisms of cash transfers assessed; large differences in the transfer value; and variations in implementation and context among other factors, make it difficult to generalise findings (Gentilini 2014; Gentilini 2016; ECHO et al. 2016; Doocy and Tappis 2016; Pozarny 2016; Bastagli et al. 2016; Harvey 2005; Bailey 2014; Caldes, Coady, and Maluccio 2006). Consequently, more high-quality and well-reported evidence on cost, cost-efficiency and cost-effectiveness of cash-based transfers is still required to guide humanitarian action and policy in a climate of increasingly constrained financial resources.

This study was part of the Research on Food Assistance for Nutritional Impact (REFANI) project designed to investigate the effectiveness and cost-effectiveness of UCTs on nutrition outcomes in three humanitarian settings<sup>1</sup>. In Niger, a cluster randomized controlled trial carried out in parallel with this costing study tested the hypothesis that a ‘modified’ monthly UCT, initiated two months in advance of the expected lean season, would be more effective at preventing child acute malnutrition compared to the ‘standard’ monthly UCT typically provided by humanitarian actors June to September (Sibson et al. 2015). We compared the cost, cost drivers, and cost-efficiency of the standard UCT against the modified UCT and provide a detailed description of the methods, analysis, and results. This costing study was originally designed to determine which of the two programmes was more cost-effective. However, because

there was no statistically significant difference in effectiveness outcomes between the two programme designs (Sibson et al. 2018), we focused the analysis on calculating and comparing the cost-efficiency of the two interventions.

## **2. Methods**

### ***2.1 Context and programmes***

Located in the Sahel region of central-western Africa, Niger has experienced recurrent episodes of drought, food shortages, high food prices and livelihood losses. Consequently, its population experiences chronic food insecurity and a high prevalence of undernutrition. In 2014, the prevalence of global acute malnutrition (GAM) in Tahoua Department, southern Niger, was 14.7% and the prevalence of severe acute malnutrition (SAM) was 2.2% (INS-Niger, WFP, and UNICEF 2014). Starting in 2009, Concern Worldwide (Concern hereafter) provided support to the Ministry of Health of Niger to integrate an ongoing community management of acute malnutrition (CMAM) programme into the standard package of services provided by health facilities in Tahoua. To better address the underlying causes of acute malnutrition, Concern and other humanitarian actors have implemented UCTs during the annual lean season in southern Niger since 2008. Supplementary food for children aged 6-23 months and pregnant and lactating women has often been included in this package of assistance since 2013.

All households with acutely malnourished children were eligible for treatment via CMAM services, regardless of wealth status. Households receiving the UCT and supplementary food were identified through a community-based selection process guided by a set of poverty criteria that were standardised across humanitarian actors in Niger (WFP 2015; Food Security Alliance in Niger 2014). Concern staff undertook village selection based on vulnerability

indicators, and an external consultancy team undertook beneficiary selection, supervised by Concern. The cash and food transfer programme reached a total of 7,954 households in 2015, the year of the study.

Cash transfers were implemented with the assistance of a local microfinance institution, Asusu SA, who provided the cash, armoured vehicles, and staff as part of their cash delivery service. The World Food Programme (WFP) provided the supplementary foods to Concern including the procurement, transportation, and storage costs up to the point of handover in Tahoua.

While the cash-transfer programme was unconditional, soft conditioning was done via behaviour change communication sessions conducted as part of the distributions. These sessions covered topics such as breastfeeding, complementary feeding, handwashing, and use of bed nets. Cooking demonstrations were also conducted onsite at each monthly supplementary food distribution.

As per agreed upon norms among humanitarian actors and Government of Niger, the monthly cash transfer value per household was fixed and did not vary according to household size, seasonal variations in purchasing power, or inflation. The cash transfer value was set at the cost of purchasing a food basket on the local market that was intended to meet 75% of daily energy needs for a household of seven people in early 2015. The amount and kind of supplementary foods provided varied according to the number and type of eligible recipients in the household.

The REFANI study was designed as an operational research study carried out on an unconditional cash and supplementary food transfer programme implemented by Concern in the Tahoua Department. The programme was implemented in the same manner in both study arms

and delivered the same the total transfer value. They differed only in the timing and amount of each monthly cash transfers. Details of the study design of the two study arms, the four-month standard UCT and the six-month modified UCT are summarised in **Error! Reference source not found.** and Table 2. Additional details on the impact study design and results are reported elsewhere (Sibson et al. 2015; Sibson et al. 2018).

## ***2.2 Costing methods***

Employing methods developed for economic analysis of humanitarian interventions (see Puett 2019), costing was conducted from a societal perspective whereby the costs to all main programme stakeholders were included. These costs included the direct financial and indirect economic costs to the main implementing organisation, other institutional partners, programme participants and other local community members.

Stakeholders were all those who contributed direct or indirect resources to the realisation of the programmes, namely Concern, WFP, Asusu, beneficiary households, and other community members. Data sources included accounting ledgers and budgets, key informant interviews, semi-structured group interviews and a survey of programme beneficiaries (Table 3).

We collected cost data in Tahoua in August and September 2015, and accounting data was provided by Concern in early 2016. WFP provided cost data in the form of budget lines and unit costs in early 2016. We derived most of the cost data from the accounting records provided by Concern using a ‘program experience approach’. Whenever accounting data were non-specific or unclear, we used an ‘ingredients approach’ to activity-based costing, whereby unit costs were multiplied by estimated usage of the various components comprising an activity.

The Comité Consultatif National d’Ethique in Niger (ID number 021/2014/CCNE) and the University College London Research Ethics Committee (project ID 6543/001) granted ethical

approval. The study was registered in the ISRCTN registry (ISRCTN25360839). Informed written consent was obtained from all participants. Prior to the collection of cost-related data, a standardised script was read out to respondents informing them of the purpose of the study, how the data would be treated and their rights. Since most respondents were not literate, they were asked to verbally indicate that they understood the information provided, and their consent to participate was recorded with a digital recorder; none refused to participate.

We conducted key informant interviews with community members and staff members of Concern, WFP, and Asusu. These interviews focused primarily on staff time allocation to the activities within the programme but were also designed to gather data used to determine proration values for certain categories of cost (e.g., transportation, joint costs). Community key informant interviewees were the community volunteers from each of the villages visited for the beneficiary group interviews.

We estimated costs to programme beneficiaries based on group interviews undertaken in nine of the 20 villages enrolled for this study; six to nine beneficiaries attended each interview. To ensure a varied sample, we purposively selected villages for the group interviews, taking into consideration village size, distance from Tahoua city, and geographic distribution. We then used convenience sampling to select individuals in the group interviews. Discussion topics included direct costs, such as transportation fares, and indirect costs, such as the opportunity cost of time spent accessing the programme. Given the relative homogeneity of livelihoods and incomes among the beneficiary population, we used the same local daily wage in the calculation of beneficiary costs. 0

We used the monthly exchange rates from West African CFA franc to US dollar used by Concern in their accountancy. Costs were not adjusted for inflation since the programmes were



implemented within one year. Vehicles were rented not purchased, and other capital items such as computers and phones were amortised using standard tables with an assumed useful life of five years and discounted at a rate of 3%. All costs are expressed in 2015 US dollars.

Once we assembled all the costs using the above-described methods, we used information from staff interviews and programme documentation to determine appropriate proration of various costs including jointly shared resources. For most cost categories we prorated costs according to the proportion of households in the villages enrolled in the REFANI study compared to total households enrolled in the cash and food transfer intervention implemented by Concern<sup>2</sup>. The total estimated cost for each programme was then analysed by both stakeholder cost categories and by activity cost categories.

The stakeholder cost categories were Concern, WFP, Asusu, beneficiary households, and other community members. To avoid double counting, we made a distinction between the financing agent (the stakeholder that spent the funds) and the financing source (the stakeholder that donated the funds) (WHO 2017; O'Brien 2014). In this case, Concern was the financing source of the expenditures incurred by Asusu, in that Concern paid Asusu for the distribution services rendered.

Institutional costs from Concern, WFP, and Asusu were organised into five mutually exclusive cost categories: 1) programme transfers; 2) personnel – technical; 3) personnel – support; 4) programme transportation; and 5) support. The category of support included running costs of the capital and base offices and transportation costs for support staff. For the purposes of this study, we defined ‘operational costs’ as all institutional costs excluding the cost of the cash or food, which were identical in both study arms.

The activity-based cost categories were the primary activities undertaken to implement the programme by which the total cost was divided (Table 4). Programme start-up activities, such as office set up, contract negotiations, programme design and planning etc., were not included in the costing since they had been carried out years before this study and reliable estimates were not possible to tabulate.

Stakeholder cost categories and activity cost categories were analysed in terms of total cost and operational costs separately. The analysis was undertaken in these two ways for two reasons: first, including the value of the cash can have a distorting effect that limits internal and external comparability; and second, analysis of the operational cost better represents the distribution of effort across the stakeholders contributing to the programme activities.

Analysis of costs and cost-efficiency of the programmes was done using the assembled and prorated cost data. Comparative cost-efficiency was calculated based on mean programme cost per beneficiary household and total cost-transfer ratio. The mean programme cost per beneficiary household was the estimated total cost of each programme divided by the number of beneficiary households at the start of implementation. The total cost-transfer ratio (TCTR), a metric often used in assessing the efficiency of cash-based transfers, is the total cost of each programme divided by the value of cash distributed to the beneficiary households<sup>3</sup>. The closer the ratio is to parity, the more cost-efficient the programme is.

### **3. Results**

#### ***3.1 Cost analysis***

##### *Stakeholder costs*

Total costs for each programme broken down by stakeholder group are shown in Table 5. The

largest proportion of the total cost of both programmes was the value of the cash transferred to beneficiaries, followed by the operational cost to Concern.

As the primary implementing partner, Concern bore most of the operational costs in both programmes. The costs charged to Concern by Asusu for distribution services rendered by the bank was disaggregated from the operational cost to Concern to highlight the proportion of the cost of this service compared to the total cost. The cost share to beneficiary households as a percent of the operational total was similar to the cost share of Asusu and the operational cost to WFP, ranging from 7-10%.

The standard UCT total cost was slightly more, overall, than the six-month modified cash programme because there were approximately 18% more beneficiary households in the standard UCT. The largest single cost driver in both programmes was the value of the cash transfer, accounting for 53-61% of total programme costs. The value of the cash and food transfer for the 173 additional beneficiary households in the standard UCT was higher than the operational cost of the two additional monthly distributions in the modified cash programme. The standard UCT disbursed nearly \$41,000 more in cash and food than the modified UCT. On the other hand, the modified UCT cost just over \$30,000 more in operational costs than the standard programme.

The cost to beneficiaries was a sum of the estimated opportunity cost and the direct cost for transportation. Based on our interviews, we estimated the total time contribution by each beneficiary during the beneficiary selection process was two days; time at the distributions ranged from 2-7 hours; and travel time ranged from 0-3 hours. We then calculated the opportunity cost by multiplying the beneficiary time spent engaging in the programmes by our estimate of the average daily agricultural labour wage of \$2.12 for women, based on interviews with beneficiaries during the data collection. Approximately 9% of those who attended a

distribution in another village also incurred an average cost of \$1.70-2.12 for one-way transportation. The highest possible total transportation cost was \$12.72 for six distributions and the lowest was \$0 for those who received the transfer in their own village.

The average cost incurred by beneficiaries in both programmes during targeting and distribution was modest in terms of absolute value and as a percentage of the gross transfer (Table 6); yet, this cost burden was unequally distributed across beneficiary households. Beneficiaries who received the transfer in their own village spent an average of 4.5 hours participating in the programme, while those who travelled to another village to receive their transfer spent an average of 8.0 hours. Although a smaller proportion of the modified UCT beneficiaries travelled to another village to receive the transfer, they all attended two more distributions than those in the four-month standard cash programme.

The mean total opportunity cost was \$10 for the standard UCT beneficiaries and \$14 for the modified UCT beneficiaries. The estimated maximum opportunity cost was up to \$17 for a beneficiary in the modified UCT attending six distributions in another village, while the estimated minimum beneficiary opportunity cost was \$7 for a beneficiary in the standard UCT attending four distributions in their own village. The difference between the estimated highest and lowest opportunity cost was \$10, or just over 4% of the transfer value.

#### *Activity-based cost categories*

Distribution activities made up the largest single component of operational costs (**Error! Reference source not found.**7). Preparation and distribution of cash and food together comprised nearly half of the total operational cost in both programmes, while support made up just over a third of operational costs. Included in the category of support were costs for management, finance, logistics and other support staff, along with office running costs,

transportation for support staff, and other ancillary costs.

### ***3.2 Cost-efficiency analysis***

Two cost-efficiency metrics - total cost per beneficiary household and total cost-transfer ratios - are presented in **Error! Reference source not found.**8. The standard UCT was more cost-efficient than the modified UCT by all cost-efficiency metrics.

## **4. Discussion**

The modified UCT cost one-fifth more than the standard UCT because of the additional two months of distributions. Yet, the modified UCT did not confer a greater reduction in the prevalence of GAM in children aged 6-59 months (Sibson et al. 2018). The modified UCT carried higher operational costs and was therefore less cost-efficient in delivering the same transfer value because of the two additional months of cash distribution. Had the modified UCT shown greater effectiveness in reducing the prevalence of GAM, as hypothesised, selecting a less cost-efficient modality could have been justified as a matter of policy or programme choice.

The results presented here reflect the estimated costs of a mature programme implemented by an NGO with an established presence in the intervention area.

### ***4.1 Cost drivers and factors influencing cost and cost-efficiency***

Based on the proportion of cost shares, the primary cost driver for the total programme cost was the value of the cash transfer itself at 61% and 53% for the standard and modified UCTs, respectively.

The one-off beneficiary targeting process cost approximately 11-15% of the total operational expenditure. The current selection process that has been coordinated among multiple

aid organisations working in Niger appears robust, but options could be explored to simplify the beneficiary targeting mechanism, if they could generate cost savings without compromising programme quality. It was, however, beyond the scope of this study to assess the appropriateness or quality of the targeting process.

Amounting to approximately 50% of total operational costs, the preparation and execution of the cash and food transfers constitute the largest activity-based cost driver, as might be expected for any distribution-type programme, especially one conducted in a vast area of low population density. A value for money analysis of cash transfer programming in Iraq implemented by a consortium of partners demonstrated a similar proportion of total cost dedicated to preparations and execution of cash distributions (Betzler and Westerman 2018).

The relatively large size of the value transferred to beneficiaries as well as the experience of the Concern Niger team in implementing cash transfers contributed towards better cost-efficiency of the UCT overall. This was the fifth consecutive year that Concern implemented such a cash transfer programme, meaning that minimal set-up costs were incurred. Conversely, the short duration and relatively small scale of the operation spread out over a large geographic area, may have decreased cost-efficiency. ECHO et al. (2016) and Tulloch (2019) note a similar effect on cost-efficiency of such contextual factors that are exogenous to the programme.

#### ***4.2 Cost to beneficiaries***

The most important factor influencing beneficiary cost related to the lost wages associated with the time spent engaging in the programme, a cost that was unevenly shared across the beneficiary population. Time spent in beneficiary selection was relatively uniform and was therefore not a differentiating factor. However, those who received the modified UCT incurred higher opportunity costs on average compared to those receiving the standard UCT because of the time

required to attend two additional rounds of cash and food distribution.

Beneficiary opportunity cost was also affected by the location of the distribution points, whereby the cost was higher for those who had to travel to another village to receive the transfers. The higher opportunity cost was because of the travel time but also because it was common for beneficiaries to leave for the distribution village as soon as they had completed their morning domestic tasks even if the distribution was scheduled for the afternoon out of a perceived fear that they might miss the distribution. Transportation costs were zero for most beneficiaries because even those who travelled to another village typically did so by foot.

Overall, the number of transfers was a greater factor in opportunity cost than the location of the distribution point relative to the beneficiary's village<sup>4</sup>. The average cost to each beneficiary was equivalent to more than three days of income loss for standard UCT beneficiaries who collected the transfer in their own village and up to 12 days of income loss for a modified UCT beneficiary who used a moto-taxi each month to travel to the distribution point. All beneficiaries lost an estimated two working days to participate in the beneficiary selection process alone, with the balance of the cost to beneficiaries attributable to participation in the monthly distributions. On average, beneficiaries in the standard UCT ultimately retained more of the transfer value than those in the modified UCT because of the greater opportunity cost associated with the additional distributions in the longer programme.

This analysis demonstrates the degree to which the transfer value was unintentionally undercut, and how those costs were unequally distributed across the beneficiary population. These results underscore the potential importance of assessing how programme design impacts net transfer values and how programme design can affect equity. Furthermore, consideration of

costs to programme beneficiaries, including the seasonal variation of opportunity costs in agrarian contexts, is critical to maximising programme impact.

### ***4.3 Total cost-transfer ratios***

We found that the TCTRs of the two programmes ranged from 1.55 to 1.90. These results are similar to those of a meta-analysis of cash, voucher, and in-kind transfer programmes, where the inter-quartile range of TCTRs was between 1.28 and 1.95 (ECHO et al. 2016). Using the same costing methods and analytical approach, a parallel study in Pakistan estimated the TCTRs of three cash-based transfers as ranging from 1.62 to 2.20 (Trenouth et al. 2018).

Comparisons of TCTRs to assess relative cost-efficiency should be approached with great caution. Even among studies that use similar costing methods, TCTRs are also affected by project- and context-specific factors that are unrelated to operational efficiency such as: the number of beneficiaries; the size, frequency and duration of the transfers; distribution modality (e.g. electronic or manual); type of emergency (e.g. refugee response, post-natural disaster); remoteness of programme location; local financial and physical infrastructure; and local operating costs (ECHO et al. 2016; O'Brien, Hove, and Smith 2013). Higher TCTRs, connoting lower cost-efficiency, are common among programmes that are small-scale, provide small transfer values, provide cash in-hand rather than via electronic means, respond to a sudden onset emergency, or are implemented in sparsely populated areas (ECHO et al. 2016). TCTRs can therefore provide an indicative assessment of efficiency, but programmes should be evaluated within a broader implementation context and with due consideration of policy choices around equity<sup>5</sup>.

Furthermore, costs to beneficiaries are not routinely assessed in costing studies and therefore are not reflected in TCTRs. At the time of writing, we are unaware of other studies that



explicitly deduct the cost to beneficiaries from the value of the transfer and therefore use a net transfer rather than a gross transfer in the TCTR estimation. Using the gross transfer value in the calculation of a TCTR underestimates the true cost to deliver a unit of cash to a recipient, since a dollar delivered is not necessarily a dollar retained.

#### ***4.4 Limitations of the study***

A variety of approaches were used during interviews to help programme beneficiaries and community members best estimate the time they spent engaging in the programmes. However, it was often a challenging exercise for some respondents. For this reason, there was greater uncertainty around point estimates of average beneficiary opportunity cost than there was around some of the other cost components. Direct observation to determine opportunity cost was not deemed feasible or necessary. Additionally, it was not possible to include start-up costs because these costs were incurred years before the interventions in this study, and therefore the cost structure described represents a mature programme. Finally, overhead or indirect costs in support of the headquarters of Concern or WFP are not included in the total cost<sup>6</sup>.

We did not estimate any additional demand on services such as health or education, which may have been incurred because of the UCT, nor did we estimate any multiplier effects in the local market economy due to the cash injected into the local economy since these fell outside the scope of the research objectives. While we originally anticipated undertaking a cost-effectiveness analysis, the absence of a statistically significant difference detected in impact on GAM prevalence between the two programmes (Sibson et al. 2018) meant it was not possible to assess their relative cost-effectiveness.

## ***4.5 Conclusions***

This study has shown that the standard UCT implemented over four months was more cost-efficient for institutional stakeholders and beneficiaries alike than the modified UCT implemented over six months. The difference in cost-efficiency was due in large part to the two additional distributions in the modified UCT, which was to be expected. However, contrary to the REFANI study hypothesis, the additional costs were not commensurate with a greater level of effectiveness as measured by child nutrition outcomes.

Our results underscore the importance of considering cost to beneficiaries, the variable implications of programme design on beneficiary costs, and how the cost burden may be differentially shared across the beneficiary population. A more systematic valuation of beneficiary costs, including opportunity costs, and implications thereof could provide evidence to improve humanitarian programme design and implementation.

While the shorter, four-month UCT may have been comparatively more cost-efficient than the six-month UCT, there may be appropriate justifications to initiate the assistance programme before the start of the lean period and thereby extend the duration of a cash transfer programme. Maximising cost-efficiency is just one element to be considered when making decisions on resource allocation, policy, and programme design. Other salient considerations may include sustainability of programming, longer-term outcomes that extend beyond the typical timeframes for programme monitoring, equity in programme delivery, and accountability to beneficiary populations, among others.

Finally, a comment on the generalisability of these results is warranted. Comparisons of cost or cost-efficiency estimates should be done with the greatest of caution given the sensitivity of these estimates to differences in context including where, when and how a programme is

implemented; differences in programme objectives; the value and frequency of the cash transfer; accessibility to the beneficiary population; and programme scale, among others; as well as important methodological variations in costing studies themselves (Gentilini 2014; ECHO et al. 2016; Pozarny 2016; O'Brien, Hove and Smith 2013; Fiedler and Puett 2015; Tulloch 2019). Given the general lack of published, high quality cost analyses in the humanitarian sphere, it is risky to generalize since conclusions may be influenced by unacknowledged methodological, programmatic, or contextual differences among the studies included in the comparison, which may confound comparisons.

We consider that the primary contribution of this study lies with the transparent and detailed reporting of the cost aggregation and analysis rather than the reported values of cost and cost-efficiency for this case study. Such a thorough depiction of the costing of humanitarian programming is uncommon despite strong demand for such information among donors, policy makers and practitioners alike.

## Notes

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1. The other two studies were conducted in Pakistan and Somalia.
2. Some costs of programme implementation were jointly shared across all households that received the cash and supplementary food distributions, but only a sub-set of this population was enrolled in the study. Therefore, proration of joint costs was done to more accurately represent the value of resources provided to the beneficiary population enrolled in the REFANI study for which an assessment of impact was also being undertaken.
3. A similar metric, the cost-transfer ratio (CTR) is also frequently used, which measures the same relationship but is calculated as the total cost of the program minus the value of the cash transfer divided by the value of the cash transfer. Conversion between the TCTR and CTR is done by subtracting 1 from the TCTR or adding 1 to the CTR.
4. Slightly more beneficiaries in the standard UCT had to travel to another village (36%) compared to the modified UCT (27%).

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5. For instance, delivering life-saving services to a highly dispersed, remote population will be less cost-efficient than the same program delivered to an urban population but the choice to provide such services may be more influenced by concerns of equity than cost-efficiency.

6. Such indirect costs are typically in the range of 5-15% of total grant value.

## **Acknowledgements**

The authors acknowledge and thank the REFANI study participants, the Concern Worldwide team in Niger, and the REFANI consortium members for their support and contributions.

Maranatha Padonou, Souleymane Karidio Mainassara, and especially Julia Lewis of Concern Worldwide in Niger offered significant support during data collection. We extend our thanks to the members of the REFANI research consortium who provided support and feedback during the data collection and analysis process either through bilateral discussions or via the periodic REFANI meetings, and especially to Ellyn Yakowenko for her overall management of the REFANI study. The authors would also like to thank Kwanli Kladstrup and Chris Pain of Concern Worldwide for their review of an early draft of this manuscript. Our sincere gratitude to an anonymous reviewer who provided particularly insightful and detailed comments.

## **Disclosure statement**

The authors report there are no competing interests to declare.

## **Funding**

This work was supported by the UK Department for International Development (PO6433); the European Commission's Humanitarian Aid and Civil Protection department (ECHO/ERC/BUD/2015/91001); the European Commission's Humanitarian Aid Office

(ECHO/-WF/BUD/2015/91005); and the World Food Programme (056/CREN/CONCERN/2015). The funding agencies were not involved in the design or conduct of the study, including the collection, analysis, and interpretation of the data or the preparation of the manuscript.

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