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THE MAM’OUT PROJECT: SEASONAL MULTIANNUAL CASH TRANSFERS FOR THE PREVENTION OF ACUTE MALNUTRITION IN TAPOA
In response to alarming rates of acute malnutrition, Action Against Hunger (ACF) initiated a project to strengthen and evaluate the prevention of acute malnutrition of children younger than 36 months in the Tapoa province, Burkina Faso. Using seasonal and multiannual unconditional cash transfers, ACF’s objective was to contribute to the strengthening of the purchasing power of the poorest households and to the sustainable prevention of undernutrition, with solutions adapted to the context and needs of the local populations. Unconditional cash transfers via mobile phones were thus implemented, allowing simultaneous action on several underlying causes of undernutrition and leaving the choice to households on how to use the money they received. This intervention was scientifically evaluated through a research project aimed at increasing the knowledge about cash transfer programs while promoting locally adapted responses.
Humanitarian context

Undernutrition issues at the global level
With 52 million children suffering from acute malnutrition in the world (Black, 2013), acute malnutrition is considered to be a major public health problem. Although curative treatments for severe acute malnutrition are available and have proven their efficacy (Bhutta, 2008; OMS, 1999), they remain very costly (USAID, 2011). Moreover, surprisingly few prevention plans for acute malnutrition are known. Recent prevention trials in humanitarian settings have focused mainly on food products distribution strategies, especially ready-to-use foods (Isanaka, 2009; Hendricks, 2010; Imbad, 2011; Huybregts, 2012). However, the causes of undernutrition are numerous and are also linked to inadequate health or care practices, lack of dietary diversity, or food insecurity (Black, 2013). Given the paucity of data on alternatives to food products and context-adapted strategies to prevent acute malnutrition, research projects should be developed to provide evidence on the efficiency, reproducibility, and cost-effectiveness of these approaches (Cattaneo, 2008).

Context of intervention
With almost 17 million inhabitants (UNDP, 2011) and 274,000 km², Burkina Faso is one of the poorest countries in the world, ranking 183rd (out of 187) on the Human Development Index (HDI) of 2013 (UNDP, 2013). The country is landlocked, and road infrastructure is insufficient; some locations are cut off from the rest of the country during the rainy season. This situation is an obstacle to an efficient delivery and payment mechanism, in relation to the intervention context (socio-economic, social, cultural, security and political) as well as the facilities and activities already implemented (Agriculture, health, education, etc.) to enhance population food security. The province of Tapoa (eastern region of the country) has a mainly rural population using livestock breeding and farming as main livelihoods (more than 80% of household income) (ENIAM, 2009). The eastern region registers the lowest rate of accessibility to health structures, 42.7% of the population lives more than 10 km away from a health center, as compared to 21.2% at the national level (Ministry of Health, 2011). Tapoa is also considered a priority zone for the fight against undernutrition. The results of a nutrition survey (SMART²) conducted by ACF in April 2012 revealed a global prevalence of acute malnutrition of 17.3% (95% CI: 15.2 – 19.7) among children of 6 to 59 months of age (WHO Growth Standards 2006). In this area, access to sanitation and safe water is insufficient, while children experience inappropriate feeding practices: non-exclusive breastfeeding, low diet diversity after one year of age, insufficient number of meals per day... In addition, the annual hunger gap (from May/June to August/September) often exacerbates the nutritional and humanitarian vulnerability of the population. In fact, during this critical period for health and food expenses, households face the depletion of their grain stocks and depend on commercial markets for basic food, at a time when prices are at their highest level.

Initial assessments
To design a preventive strategy adapted to local needs and context, two initial assessments were conducted in the Province of Tapoa at the end of 2012: an analysis of the causes of undernutrition (Nutrition Causal Analysis, NCA) and a feasibility study for the proposed cash transfer intervention.

The NCA conducted in November 2012 aimed at identifying direct and indirect causes of acute child malnutrition in this specific area. Results showed that access to good-quality water and sanitation was a real issue in the province. Two additional hypotheses suggested as potential causes of undernutrition were validated as “major” by the NCA: insufficient birth spacing and lack of financial resources for women to buy diversified food and to access basic services. And last, the heavy workload of pregnant and lactating women was also agreed as one of the main causes of child undernutrition in the province.

During the feasibility study, a detailed methodology for implementation of social transfers for the prevention of acute malnutrition was developed, taking into account the intervention context (socio-economic, social, cultural, security and political) as well as the facilities and activities already implemented by ACF in Tapoa. This study was conducted between October and November 2012 and was based upon three complementary approaches: a literature review, interviews with key stakeholders who had a role in social transfers in Burkina Faso, and discussion groups with men and women from poor and very poor households in six towns of the province. The feasibility study led to the defined of the transfer type, periodicity, amount, and payment mechanism, in relation to the intervention context.

1 “National Social Protection Policy” Action plan 2012

Links between cash transfers and prevention of acute malnutrition
Cash transfers can act on several underlying causes of undernutrition. They support the removal of financial barriers to access health centers (Lagarde, 2009; Leray, 2009), contribute to reduce poverty, and they have positive effects on food security (Fiszbein, 2009), food consumption (Wall, 2006) and child health (Lagarde, 2009). Studies have also suggested benefits in maternal mental health (Fenn, 2014) and child behavior (Ozer, 2009). However, the pathways through which cash transfers help prevent undernutrition remain unclear and not supported by enough evidence. Consequently, specific studies and the use of a theoretical action model are necessary to link nutrition effects to specific processes and to understand how different elements can interact (Gentilini, 2011; Gaarder, 2010).
In addition, previous studies, such as a Household Economic Analysis (HEA) conducted in 2011, were used to identify the level and sources of revenue and food, as well as the households’ expenses. A seasonal calendar was also established for the province. These preliminary multi-sectoral evaluations confirmed the need for a mitigation intervention aimed at tackling several causes of undernutrition, and targeting young children. The response intervention proposed consisted of seasonal, multiannual, cash transfers.

**Conceptual model of cash transfers impact on the pathways of undernutrition**

Based on the evaluations conducted and available documentation, a conceptual model of how cash transfers impact the pathways of undernutrition was elaborated. A simplified version is presented in figure 1.

**Programme overview and rationale**

Due to their multi-sectoral nature, cash transfers can act at different levels, from increasing household purchasing power, to protection of the productive assets, through improving psychosocial wellbeing of the family or increasing women’s decision power, all of which can influence positively child undernutrition.

Reflecting this model, the MAM’Out intervention consisted in seasonal, multiannual cash transfers, aimed at ensuring protection of household’s resources, at the right time. The underlying hypothesis of the project was the following: at certain periods of the year, the poor and very poor households’ expenses are higher than their revenues, leading to erosive coping strategies which in turn increase the risk of child malnutrition in these households. In addition to the direct income support provided by the transfer, it is also believed that the guarantee of receiving assistance during these key periods may help prevent such negatives strategies, and even lead to medium-term investments in productive goods and/or adopt positive practices.

**Project objectives**

The aim of the operational part of the project was to prevent child acute malnutrition, through an economical support to poor and very poor households during the hunger gap period.

The objective of the research component of the MAM’Out was to evaluate the effectiveness and cost-effectiveness of seasonal and multiannual cash transfers, comparable to a social safety net, in preventing acute malnutrition in children younger than 36 months. The final objective of this research was to strengthen evidence that social transfers was an effective strategy to prevent undernutrition and to promote context-specific evidence-based responses to local issues of undernutrition.
Implementation

Identification and targeting of beneficiaries
The inhabitants of the northern part of Tapoa province were the target population of the project. Among selected villages, all the households fulfilling the two criteria listed below and willing to participate in the MAM’Out study were selected:
- Classified as poor or very poor according to HEA criteria;
- Having at least one child younger than one year of age as of June 2013, regardless of his or her nutritional status.

A targeting committee composed of at least six members (village chief, village development counselor, village municipal councilor, neighborhood leaders, and religious authorities) was constituted in each targeted village. Its role was to help selecting the beneficiaries and to ensure transparency in the inclusion of participants. Further, a grievance committee, generally constituted of the same members, was also set up prior to the cash transfer activities. Its role was to facilitate the mobilization of beneficiaries and to relay to ACF any complaints related to cash distribution in the village.

Thirty two villages were initially selected. In line with the requirements of the MAM’Out study, the 16 villages to benefit from cash transfers were selected randomly, the other 16 villages were identified as a control group.

Cash transfer value and frequency
The intervention consisted in seasonal cash transfers, provided monthly from July to November, over two years (2013 and 2014). This is a key period with decreased food availability, a strong dependency on the markets, and increased physical activity for agricultural work (and, consequently, increased nutritional needs), as well as a higher prevalence of certain diseases beginning in October. Each month, 10,000 FCFA (around 15 Euros) were transferred to mothers as primary recipients, since they are usually in charge of childcare. Over a year, the total amount transferred (50,000 FCFA) allowed to cover on average the survival gap and 85% of the livelihoods gap for the very poor households, and the entire livelihoods gap of poor households⁴.

Transfer modalities
The transfers were made using mobile phones, in partnership with a mobile phone company operating in the country. This mode of transfer was chosen for operational and security reasons in the area. In practice, the payment mechanism of the MAM’Out project included the following steps:
1. ACF topped up its operational account by the mobile operator through a bank transfer;
2. The mobile operator credited the electronic accounts of the beneficiaries;
3. The beneficiaries received a text message indicating that their accounts had been credited;
4. The beneficiaries went to a withdrawal point to show their beneficiary card, mobile phone, and SIM card;
5. The electronic account of the beneficiary was debited;
6. The beneficiary received the full amount transferred on his electronic account in cash.

Community mobilization and raising awareness to the project
The provincial authorities were informed of the project after validation by the ethics committee of Burkina Faso. Following approval from provincial authorities, a mass communication campaign in the villages was developed by the ACF field teams in order to inform communities about the project and to invite them to participate. This activity was conducted at the same time that beneficiaries were selected and involved local authorities (village chiefs, neighborhood leaders, village development councilors…). In some villages with high commercial activity, ACF teams used radio messages in order to raise awareness.

Project monitoring and evaluation
From an operational standpoint, ante- and post-distributions evaluations were undertaken at the beginning and at the end of each period of cash transfers in order to document food security and livelihoods indicators, as well as to monitor and adjust practical organization of the distributions. Monthly market prices monitoring livelihoods threshold corresponds to the threshold below which an intervention is necessary to maintain the livelihoods.

A randomized controlled study
The study design was a two-arm randomized controlled trial: a group of 16 villages benefited from cash transfers, and another group of 16 villages was used for comparison. Each village was randomly allocated to one of the 2 groups. In an official ceremony, each village chief drew a paper indicating whether his village would benefit from the intervention.

In order to reduce the risk of abandoning the project and to thank the participants of the comparison group for the time they devoted to the study, in kind compensations were distributed every 6 months.
Program outcomes and impacts

According to the project monitoring findings, all the beneficiaries received the cash transfer they were entitled to every distribution month.

The post-distribution evaluations were conducted on a random sample of 200 households. The majority of beneficiaries (98%) were from “poor” and “very poor” households with an average size of 9 members. The remaining 2% were “average” households, included by mistake during the selection process and which were not verified during the validation visits.

The main areas of investment for the cash transfers received were for food and health. On average, 40% of the amount received was entirely dedicated to children. The beneficiaries’ appreciation of the amount of the cash transfer varied: for 74% of them the amount was considered reasonable, insufficient for 5.5%, and substantial for 3.5%. From a socio-community point of view, the evaluation showed feelings of jealousy (12% of the beneficiaries interviewed) but also strengthening of solidarity (78.5% of the beneficiaries interviewed). Cases of sharing goods or cash were also reported, and were considered to contribute to social cohesion. Market prices monitoring over 2 years showed similar annual trends for staple food prices, with a slight improvement in the second year, which could indicate a recovery from the 2012 food crisis.

5 According to HEA categorization

The quantitative data from the research study is to be analyzed end of 2015. This section thus presents only the qualitative results collected during the two periods of cash transfer and should be triangulated with and/or confirmed by the quantitative results. In total, over 300 individual or group interviews were conducted with different categories of people: female beneficiaries, household chiefs, and key community or household members.

Participants reported that they invested the money mainly in food and health care. Hygiene, clothing and kitchen utensils were also mentioned, but to a lesser extent, as well as agricultural inputs and livestock. Portions of the cash transfer were also shared in cash or goods - within and outside the household - promoting social cohesion. An unexpected expense directly linked to the project was also highlighted: the costs of recharging (in credit or electricity) or repairing the mobile phone.

In terms of changes induced by cash transfers in the daily lives of women, a greater autonomy and increased participation in the decision making regarding the management of the received money (or part of it) were mentioned. Generally, women were well accepted as recipients of the money at the community level and by heads of household. Nevertheless, cases of tension between husband and wife or between beneficiary and non-beneficiary co-wives were reported. No changes were mentioned in terms of utilization of traditional health providers.

The effect of granting a phone to the women recipients was also studied. First of all, the mobile phone seemed to belong to the woman who received it. She used it principally to receive the project money and to communicate with her sometimes distant family. The security aspect linked to the mobile phone was also appreciated, as well as the entertainment activities it offered. However, tensions could appear in the household if the woman was called by another man.

Globally, the positive effects of the project as described by the participants were related to the increase in purchasing power, improvement of husband-wife relationships, and that “the poorest households no longer bother the richer households”. No conflicts appeared between beneficiary and non-beneficiary villages. However, some negative aspects were also mentioned by the participants, such as the small amount of the cash transfer in relation to the size and vulnerability of the household. In addition, some beneficiaries did not understand that the transfer scheme would end after 2 years and had a wait-and-see attitude regarding future payments; and some women became pregnant in order to benefit from future cash transfers.

References

15. United Nation Development Program. Human development index. 2013
16. USAID. Delivering improved nutrition: recommendations for changes to US food aid products and programs. April 2011
Key lessons learned

**Implementation of social transfers**
- Targeting the hunger gap period for cash transfers was pertinent in the light of the needs of beneficiaries.
- The implementation of selection and complaint committees and their commitment to the success of the project were helpful in achieving the objectives of the program.
- The existence of vulnerability criteria, the adjustment of selection criteria for greater inclusion in relation to operational needs, and the transparency of those who implemented the program facilitated its acceptance and increased the number of beneficiaries.
- The creation of a single card for the two components of the program (operational and research) facilitated identification of the beneficiaries. It illustrates the integration of the operational and research aspects of the MAM’Out project.
- The amount of the transfers was perceived by the beneficiaries as too low to permit investment in income generating activities or generally to increase the livelihoods of the household. However, the amounts permitted priority investments in food and health care, alleviating two of the main causes of acute child malnutrition.
- Targeting women as recipients of the cash transfers was well accepted by the communities and helped to improve the women’s status within the households.
- Mobile phone transfer system was very basic and did not allow the accumulation of savings in the electronic accounts of the beneficiaries.
- The short battery life of the mobile phones provided to the beneficiaries and their desire to have communication credits led to regular recharging expenses.
- The high illiteracy level of the beneficiaries did not facilitate proper use of the tools and mechanisms of electronic payments (difficulties to read text messages in French, difficulties in using the mobile phone, etc.).

**Program monitoring and evaluation**
- Qualitative data permitted to identify unintended effects that would not have been observed in a classical quantitative evaluation and revealed certain undesirable effects of the project.
- Flexibility in data collection allowed gradual update and introduction of new topics of interest as new questions were raised.
- The involvement of village chiefs and village development committees and regular communication with participants were essential for the good acceptance by the communities of a study that included randomization and a control group.
- The random selection of the villages in the intervention and of the control group during a public ceremony uniting all village chiefs facilitated a good acceptance by the control group and, thus, the implementation of a robust effectiveness study.

**Recommendations**

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<th>Implementation of social transfers</th>
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<td>- Allocate sufficient time for exhaustive verification of selection criteria in all targeted households through systematic home visits, in order to limit selection errors.</td>
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<td>- Anticipate, as much as possible, all undesirable and unexpected effects which could appear following the implementation of a project, and think of possible mitigation actions.</td>
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<td>- From the time of conception of the project, work in a multi-sectorial manner to identify the monitoring indicators.</td>
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<td>- Provide the beneficiaries with mobile phones with a unique SIM card and that are less energy-consuming in order to reduce the cost of recharging.</td>
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<td>- Take into account, during negotiations with the phone operator, the need for transcription of the electronic text messages into local languages or into voice messages.</td>
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**Program monitoring and evaluation**
- Formulate clear nutritional objectives to interventions which target prevention of undernutrition.
- From the conception of the project onward elaborate the theoretical framework of the intervention pathways in order to help understand how the intervention impacts the nutritional status of beneficiaries.
- When relevant, associate quantitative and qualitative data collection in order to understand better the quantified results of the program.
- Document other interventions implemented in the studied area and monitor contextual indicators.

Contact details and further reading:

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For more detailed information, please refer to:
- Capitalization report on the qualitative data collection and analysis “Usage and effects of cash transfers”, 2015
- Research protocol article: “The MAM’Out project: a randomized controlled trial to assess multiannual and seasonal cash transfers for the prevention of acute malnutrition in children under 36 months in Burkina Faso” (http://www.biomedcentral.com/1471-2458/15/762).

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This document is part of a series of case studies on ACF nutrition sensitive interventions, aimed at reducing and/or preventing undernutrition. These case studies are developed by the ACF “Nutrition Security” Working Group in order to share experiences and lessons learned on the topic.

All the existing case studies can be downloaded in English and in French here: http://www.actioncontrelafaim.org/fr/content/aligning-casestudies

The objective of the Nutrition Security Working Group is to promote and strengthen nutrition sensitive interventions, within ACF and partner organizations. The Working Group supports these operations through collecting and disseminating lessons learned, conducting research, developing tools and guides, and capacity building.

For more information on the ACF Nutrition Security approach, refer to the Nutrition Security Policy document: A common understanding and approach to address undernutrition.

http://www.actioncontrelafaim.org/en/content/acf-international-nutrition-security-policy