SAVING LIVES CHANGING LIVES



N NEWSTRA



World Food Programme

Addressing food insecurity: Does the choice of transfer modality matter?

Study comparing voucher, cash and multipurpose cash in El Salvador

Addressing food insecurity: Does the choice of transfer modality matter? Study comparing voucher, cash and multipurpose cash in El Salvador. November 2016 - June 2017.

Acknowledgements

Ministry of Governance and Territorial Development Departmental Governors of La Unión, Morazán, San Miguel and Usulután.

Regional Bureau Panamá Alessandro Dinucci, Chiara Dara, Elena Ganan, Francesca de Ceglie, Giorgia Testolin & Rossella Bottone.

Country Office El Salvador Andrew Stanhope, Marco Selva & Nils Grede Monitoring & Evaluation (M&E): Carlos Martínez, Claudia Sáenz, Johanna Constanza & Luis Penutt Vulnerability Analysis and Mapping (VAM): Javier Mejía, Keny Navarrete & Mario Gómez Protracted Relief and Recovery Operation (PRRO): Ana Ruth Sandoval, Cristina Gálvez, Fernando Tamacas, Henry Montano, Jaime Hernández, Josiel Medinilla & Roberto Rafaelano

Study coordinator and consultant Pantaleo Creti

Photo credits WFP/Rein Skullerud Editorial design Paola Castaneda & Gabriela Cladellas

Addressing food insecurity: Does the choice of transfer modality matter?

Study comparing voucher, cash and multipurpose cash in El Salvador



Abstract

In 2016, within PRRO 200490 framework, WFP decided to conduct an operational study to compare the impact of vouchers, cash and multipurpose cash (MPC)¹ on the food security of drought-affected households in the Salvadoran Dry Corridor. The study found that, at the end of the project, the three types of assistance brought about substantial improvements in the key food security indicators. Quantitative and qualitative findings concur to show that MPC brought about a longer lasting impact on the food security situation of beneficiary households. The longer lasting effects of MPC assistance may contribute to more effective synergies in the relief, recovery and development continuum. However, higher MPC transfer values may represent a difficult compromise in terms of coverage when resources are limited. Further studies are necessary to determine the cost-effectiveness of MPC to generate durable food security outcomes.

¹ Multipurpose cash transfers are aimed to cover household essential needs and/or recovery (total or partial). The amount is calculated deducting from the total Minimum Expenditure Basket (MEB) what the household can afford to cover without falling in negative coping mechanisms, i.e. the MEB gap. (UNHCR 2015)



Introduction

Context

In 2016, 80% of the 2 million people affected by the 2014 drought in Honduras, El Salvador and Guatemala still suffered from severe to moderate food insecurity. In this context, WFP implemented a regional protracted relief and recovery operation (PRRO 200490) to support households most vulnerable to food insecurity. Within the PRRO framework, WFP decided to conduct an operational study to compare the impact of vouchers, cash and multipurpose cash (MPC) on the food security of households affected by the drought in the Salvadoran Dry Corridor. **The aim of the study was to understand whether the use of MPC could increase the impact of cash-based responses**² **by allowing beneficiaries to cover not only food but also multiple essential needs**.

² WFP defines three assistance modalities (food, cash and vouchers), and divide cash-based transfers (vouchers and cash) in 4 distribution models (immediate cash; cash account, paper voucher and electronic voucher).







Study Design

2.1 Study groups

For the comparative purposes of the study, the target population was divided into four study groups: three treatment groups and a control group. Treatment groups received three monthly transfers in December 2016, January and March 2017. The value of the transfers was of USD 75 for households receiving cash or voucher transfers aimed at covering the cost of a recovery phase food basket for an average 5-member household (equivalent to USD 0.5/person/ day)³, and of USD 115 for households receiving multipurpose cash aimed to cover both food and non-food essential needs⁴. The control group did not receive any assistance.

Vouchers were electronic (e-vouchers) and implemented through the supermarket chain Super Selectos. They worked as a debit card connected to the supermarket database and could be used monthly on the pre-established date to buy healthy food chosen by beneficiaries. Both cash and MPC transfers were distributed through Puntoxpress, a financial multiservice network. In order to receive their entitlements, beneficiaries had to present a valid ID document at any predetermined network branch.

2.2 Targeting

In order to define the study population, a three-level geographical targeting exercise was carried out, starting with department, then moving down to municipality and community selection. Criteria included levels of poverty and hunger, number of smallholder farmers, crop production, and coverage by other support programs and services. Eventually, 28 communities were selected. For the selection of households, a general register was set up and a questionnaire was applied to all households in the selected communities. Based on the information collected, the application of an algorithm allowed for identifying and selecting 1,121 vulnerable households to take part in the study.

The final step consisted of allocating the selected households to the four study groups. Clusters with approximately 165 households each were formed. Each cluster included households living in the same or neighbouring communities. Two clusters were randomly allocated to each type of assistance (voucher, cash and MPC) and to the control group. This choice was dictated by programmatic reasons. The aim was not to mix different types of assistance and different transfer values, to prevent bias and conflicts. While this choice guaranteed homogeneity within the clusters, it also resulted in statistically significant differences between clusters regarding food security indicators.

³ This was the transfer value established in the regional PRRO 200490.

⁴ Value calculated based on information from ENAPM 2015, according to which moderately and severely food insecure households spend on average 65% of their total expenditures on food.

Value of transfers:

USD 75 for households:

Cash

USD 115 for households





Financial multiservice network Puntoxpress



Source: Authors' elaboration

2.3 Study methods

Quantitative and qualitative data were collected in field visits taking place before (baseline), at the end and three months after the end (ex-post) of the cash-based intervention. Post-distribution monitoring (PDM) interviews were also conducted with a smaller sample of beneficiaries after the first and second round of transfers.







Supermarket chain

Quantitative analysis:

Three household surveys were conducted.



Baseline (November 2016) End-of-project (March 2017) Ex-post (May 2017)

2.3.1 Quantitative analysis

Three household surveys were conducted at baseline (November 2011), endof-project (March 2017) and ex-post (May 2017). In total, 1,121 households (100% of the study population) were interviewed at baseline, 1,035 (93%) at the end-of-project and 1,008 (91%) at the ex-post survey. To study the impact on households' food security, quantitative analysis first focused on the behaviour of key WFP food security indicators: food consumption score (FCS) and its nutritional quality analysis (FCS-N), and reduced coping strategy index (r-CSI). The heterogeneity of the study groups regarding their food security situation at baseline led to the presentation of the findings in percentage values only. To compensate for this limitation, a panel analysis was conducted. The panel analysis consisted of following households with a similar food security situation at baseline in order to gauge their capacity to graduate to an improved food security situation during the study timeframe. Among the indicators explored, meat consumption (proxy of protein consumption) and reduced coping strategy index (r-CSI) presented the most significant results and were therefore retained for the panel analysis.

Quantitative analysis:

Was used to provide an in-depth analyse about how the households manage food security in normal times and in shocks.

7 Representative's communities by group

Technics:

- Focus groups
- Key informant interview
- Semi-structured interviews

2.3.2 Qualitative analysis

Qualitative analysis was used to provide in-depth and detailed descriptive answers to questions on how households manage food security and consumption in normal times and the effect of seasonality on food security outcomes. Focus groups discussions and key informant interviews were conducted within all study groups. Separate focus group discussions were conducted with men and women to gather gender-sensitive information. Semi-structured interviews were conducted with key informants, including local government, community and church representatives, schoolteachers and health promoters, market actors and service providers. Themes discussed included food access, consumption and diversity, coping strategies, beneficiaries' perceptions and preferences, and intra-household decisions.









Study Population

3.1 Characteristics of the population



Figure 1. Sex of head of household per study group⁵

3.2 Sources of income

Several productive activities contribute to the study households' income, and some factors, such as geographical differences and seasonality influence households' economy and production.

⁵ Data from ex-post survey





Source: Authors' elaboration

Grain production (mostly maize and beans) and day labour represent the main sources of income, and their relative importance changes according to the season. Households relying on day work as main livelihood are the most vulnerable, as their income opportunities are seasonal and precarious.

During the lean period, agricultural day labour conducted in the fields of big landowners or better-off farmers nearby the community is the main source of income. The demand for day labour is not the same in all communities. Some of them are favoured by a shorter distance to big farms, where there is labour demand in different periods of the year.

Chart 4. Proportion of study households per main income source



Domestic day labour in the community and neighbouring towns is a vital source of income for women, particularly single mothers. This type of activity, however, is paid less than fieldwork. For men, it is more difficult to find this type of work, either because they do not have the skills required, or because it can be lifethreatening for them to work out of their communities.

Income sources:

Grain production and day labour represent the main sources of income.

Households relying on day work as main livelihood are the most vulnerable.

Domestic day labour in the community and neighbouring towns is a vital source of income for women, particularly single mothers.

Sale of eggs and small animals are the main income source for 20% of the single mothers. An extra source of income for women is the sale of hand-made products, with a minor percentage of single mothers and women heads of household relying on these activities as their main source of income. Other income sources such as sale of eggs and small animals represent the main source of income for 20% of single mothers.





Source: Authors' elaboration

Food sources:

Subsistence agriculture (mostly maize and beans) is the most important food source.

Purchase at the local market is the second one most important food source

3.3 Sources of food

Among the study population, subsistence agriculture (mostly maize and beans) is the most important food source, followed by purchase at the local market. Differences are observed regarding the relative importance of these two main food sources, depending on the geographical location of the community. There are a few minor food sources worth mentioning. In some cases food can be accessed through bartering or as an in-kind retribution to day labour. The national school-feeding program represents a proportionally small food source, but its importance should not be underestimated, as it ensures a daily meal consisting of beans and rice plus a weekly glass of milk to all school children. Animal rearing can be an important source of protein intake. Chickens are mainly used for eggs production, which contribute to the local population's daily diet.

Chart 6. Food production indicators per study group (at baseline)



Source: Authors' elaboration

3.4 Food security and nutrition

In 2014, moderate and severe stunting affected 14% of Salvadoran children under five years of age, an improvement of 5% compared to 2008⁶. At national level, 9% of the first-graders have a moderate or severe delay in height for their age and sex. There is a trend of greater delay as age increases, with the lowest prevalence among 6-year-old girls (5%) and the highest among 9-year-old boys and girls (28%)⁷. Bad food habits are reflected in the high overweight and obesity prevalence at national level, which reached 6% among children under 5 years of age during the period 2008-2015. At school, overweight and obesity affect 23% of children and 39% of adolescents. The same problem affects 60%⁸ of women in reproductive age. At baseline, between 7% and 1% of households reported their children had had diarrhoea, and more than 30% that their children had suffered from ARI in the previous 15 days.

3.5 Household and community dynamics

Women of the study population play a traditional role and are responsible for housekeeping, cooking and childcare. They are also responsible for breeding and selling small animals and cultivating the family garden. Men are usually responsible for the main agricultural activities, but can be helped by women and youth during periods of high demand. Men are also responsible for cutting and selling firewood. Single mothers can be engaged in agricultural or domestic day labour as cleaners or carers in nearby towns. In periods of crisis also married women can get involved in domestic day labour. Men and women handle their own earnings within the household, but men usually give part of their earning to their wives, who deal with daily food and house expenditures.

Education of the head of household		Study groups							
		Voucher (N=295)	MPC (N=281)	Cash (N=276)	Control (N=157)				
Literate		55 57 53	40 32 43	47 42 51	68 57 69				
Level of education		34 20 0 47	27 11 0 62	30 17 0 53	34 31 1 34				
Control over resources (gender)		53 22 8	52 16 6	49 18 7	52 17 4				
Main incoming sources		49 28	48 23	53 24	56 22				
Households with grain reserves (%)		36 70	43 58	34 67	34 67				

Women are responsible for:

Housekeeping Cooking and childcare Breeding and selling animals Cultivating the family garden

Men are responsible for:

Main agricultural activities Cutting and selling firewood

Source: Authors' elaboration

Table 1. Household Characteristics

⁶ Multiple Indicator Cluster Survey (MICS 2014)

⁷ IV National Census of Height and I National Weight Census in girls and boys from 6 to 9 years (2016)

8 FLACSO 2016





Findings

4.1 Contribution on food security and nutrition

Three food security proxy indicators have been used to gauge the contribution of the different types of assistance on households' food security: food consumption score (FCS), its nutritional quality analysis (FCS-N⁹), and reduced coping strategy index (r-CSI).

Table 2. Key food security indicators for each study group at baseline, end and ex-post surveys

	MPC		India		(3)			CONTROL				
	Base			Base			Base			Base		
	30%	13%	11%	17%	6%	10%	18%	8%	10%	10%	9%	11%
	81%	31%	60%	80%	36%	64%	77%	41%	62%	78%	63%	5%
	16%	3%	3%	12%	4%	6%	7%	4%	7%	5%	6%	6%
r-CSI (average)	13	6	6	11	4	7	12	5	7	11	11	8

Source: Authors' elaboration

4.1.1 Food consumption

Quantitative and qualitative findings concur in suggesting that assistance, independently of its type, brought about significant improvement to households' food consumption at the end of the project. The panel analysis suggests that voucher assistance results in the highest graduation rates from poor to borderline/good FCS categories. According to discussions with beneficiaries, assistance (independently of its type) was considered enough to cover the food needs of an average household of five people. Assistance also allowed households to increase the consumption of items such as milk, meat, vegetables and fruits. Influenced by project sensitizations, beneficiaries from all assistance groups reported to have made a more parsimonious use of sugar, oil and other fat-rich food products. In general the control group maintained the same level of food consumption compared to baseline, with a small (3%) proportion of households having migrated from the borderline to the poor food consumption group.

⁹ FCS-N is a validated indicator for showing nutrient adequacies of three main nutrients; vitamin A, heme iron and protein. Additional information and full guidelines can be found at: http://www.wfp.org/content/food-consumption-score-nutritional-quality-analysis-fcs-n-technical-guidance-note

Three months after the end of the project, MPC was the study group to best maintain food consumption gains. While seasonal factors have probably contributed, qualitative findings suggest that the positive trend found in the MPC group is most likely linked to the greater liquidity propitiated by MPC assistance. This seems to have helped households endure the critical period between the end-of-project and ex-post surveys, which coincided with the preparation of the main cropping season, after two years of consecutive droughts. At that point, households had accumulated a high level of debts and had to incur in the highest expenditures of the year.





Food consumption:

The assistance independently of its type, brought about significant improvement to households' food consumption at the end of the project

Three months after the end of the project, households receiving MPC were more likely to have graduated to the acceptable food consumption group



Corroborating these findings, the panel group analysis¹⁰ found that three months after the end of the project, households receiving MPC were more likely to have graduated to the acceptable food consumption group (86%) as compared to vouchers (80%) and cash (77%).





Source: Authors' elaboration

¹⁰ A panel analysis followed all households classified in the poor and borderline food consumption groups at baseline (N=193), to gauge their capacity to graduate to the acceptable food consumption group during the study timeframe.

4.1.2 Food consumption score nutrition quality analysis (FCS-N)

At the end of the project, heme iron consumption significantly increased in all assistance groups. These gains were partially lost three months after the end of the assistance. The MPC group experienced the sharpest increase in heme iron consumption and the best capacity to maintain gains over time. At baseline, more than three quarters of the study population reported not having consumed any *heme* iron-rich food¹¹. Such low consumption reflects a national nutritional concern in El Salvador, where 10% of women in reproductive age and 26% of children from 6 to 59 months had iron deficiency anemia in 2008¹². Non-consumption of heme iron rich foods decreased more evidently in the MPC group (from 81.2% to 30.7%), than in the voucher group (from 80.4% to 35.9%) and the cash group (from 77% to 41%). After three months, assistance groups lost part of their gains but still maintained a better level of *heme* iron-rich foods consumption compared to baseline and the control group.

Chart 9. HHs not consuming heme-iron at baseline graduating to consuming it at least one day at different studies rounds



Source: Authors' elaboration

The panel analysis followed the behaviour of households that did not consume foods rich in heme iron at baseline in order to understand their capacity to graduate to some level of heme iron rich foods consumption. At the end of the project, the proportion of households graduating to heme iron consumption was higher in all assistance groups compared to baseline. The sharpest increase was found in the MPC (71%) compared to voucher (60%) and cash (57%) groups. Three months after the end of the project, the proportion of households graduating to heme iron consumption was lower than at the end of the project, with the highest graduation rates again found among MPC households (39%) compared to voucher (33%) and cash (30%) households.

¹¹ Heme iron-rich foods include: flesh meat, organ meat, fish and shellfish.

¹² El Salvador National Family Health Survey (FESAL 2008)

Heme-iron rich foods consumption:

The assistance independently of its type, brought about significant improved.

The MPC group experienced the sharpest increase in heme iron consumption and the best capacity to maintain gains over time.

Three months after the end of the project, HHs not consuming hemeiron at baseline graduating at consuming it at least one day:

39% MPC 33% Voucher

🗿 30% Cash

All assistance groups improved the consumption of vitamin A rich foods at the end of the project. The MPC group presented the sharpest improvements and the best capacity to graduate households from not consuming vitamin A rich foods at baseline to consuming them at least once a week. The consumption of vitamin A rich foods is highly correlated with seasonality. At baseline FCS-N showed a small proportion of households not consuming vitamin A-rich foods¹³ in all study groups. This proportion ranged from 5% in the control group to 16% in the MPC group. At the end of the project, the proportion of households not consuming vitamin A-rich foods substantially decreased in all assistance groups, with the sharpest decrease in the MPC group. This is mostly attributable to the assistance, since the end of the project period (March) is characterized by low availability of fresh produce. Improvements were partially maintained three months after. This is likely associated with the higher availability of fresh vegetables and fruits when the ex-post survey was conducted.

A panel analysis followed households reporting not having consumed any Vitamin A rich foods (N=104) at baseline, in order to understand their capacity to graduate to consuming Vitamin A rich foods at least one day. At the end of the project, all MPC (100%) and most of voucher and cash households (91%) graduated. Three months after, MPC households maintained the highest graduation rates (98%) against voucher (91%) and cash households (87%). The high proportion of graduation in the control group (83%) signals a strong seasonal influence in the improved consumption in vitamin A food.

Chart 10. Households not consuming vitamin A at baseline and graduating to consuming it at least on one day



Vitamin A rich foods consumption:

All assistance groups improved the consumption of vitamin A rich foods at the end of the project

Three months after the end of the project, HHs not consuming Vitamin A at baseline graduating at consuming it at least one day:



End of the project Ex-Post (3 months after)

Source: Authors' elaboration

¹³ Vitamin A-rich foods include orange vegetables and fruits, green leaves, organs meat, eggs and dairy products.

At the end of the project:

Voucher and cash presenting higher percentages of households graduating to low rCSI.

4.2 Reduced coping strategies index (rCSI)

At the end of the project, all assistance groups decreased the severity and frequency of food coping strategies, with voucher and cash groups presenting higher percentages of households graduating to low rCSI at the end of the project. Three months after, graduation rates started dropping in voucher and cash groups, while kept increasing in the MPC group.

The panel analysis followed the behaviour of the households with moderate to high use of coping strategies at baseline (N=459¹⁴⁾ to understand their capacity to graduate to low or no use of coping strategies. At the end of the project, 72% of these households (N=334) had graduated to either low or no use of coping strategies. Voucher and cash households experienced greater graduation rates (78% and 80% respectively), compared to MPC households (70%). Three months after the end of the project, 68% of households (N=312) had graduated to either low or no use of coping strategies. This time, however, MPC seems to have had the most positive influence in the households' capacity to graduate to low or 'no' use of coping strategies (74%) compared voucher (70%) and cash (63%).

Chart 11. HHs with 'moderate to high use of coping strategies' that graduated to 'low to no use of coping strategies'



The MPC group had the choice to cover other immediate needs, as well as to invest in a longer-term strategy, like purchasing productive items, reducing debts or anticipating expenditures. This may have been done in detriment of a more immediate decrease of food coping strategies, which in the long run, may have relieved the expenditure burden on MPC households or even provided them with some extra income allowing them to reduce food coping strategies more effectively.

Ex-post:

Graduation rates started dropping in voucher and cash groups, while kept increasing in the MPC group.



🚯 70% Voucher

👩 63% Cash



4.3 Impact of household characteristics on food security outcomes

A panel analysis was carried out to understand which household characteristics influenced households' graduation to a better food security situation. For this purpose, two proxy indicators¹⁵ were used: consumption of meat and reduced coping strategy index (rCSI).

How decisions on the use of cash were taken – if by a man, by a woman or jointly – was analysed to see if this aspect had an impact on meat consumption and coping strategy graduation rates. In the MPC group, households where women were decision makers showed slightly better meat consumption and coping strategy graduation rates at the end of the project. In the longer term, households where decisions were taken jointly were better able to maintain higher meat consumption and coping strategy graduation. This may suggest that having women as MPC recipients while sensitizing households to take decisions jointly may bring about good food security outcomes.

The food security outcomes of the two main livelihood groups in the study area were also compared. In general, households living on basic grains benefited more of the assistance (independently of its type) than those living on agricultural day labour, in terms of both increased meat consumption and reduced coping strategies. The better asset base of households living on basic grains has probably allowed them to take better advantage of the assistance.

The analysis of the dependency ratio does not show marked patterns with regard to meat consumption graduation. However, it seems that low dependency ratio households may have made better use of the assistance to decrease the use food coping strategies in the short term, but were not able to maintain improvements. Households with low dependency ratio have higher working force availability and are often smaller in size. This may have translated in lower household's food needs, which would justify their better ability to reduce food coping strategies, at least in the immediate term.



Deciding on the use of cash:

Households where decisions were taken jointly were better able to maintain higher meat consumption and coping strategy graduation.

¹⁵ While other food security indicators were captured (for e.g. WFP's FCS, CARI), the sample was too small to allow for meaningful analysis.

4.4 Use of the transfer

Both cash and MPC groups spent around USD 65 to cover food needs. This represents 87% of the cost of the food basket (USD 75) calculated by WFP.

The MPC group counted on a higher transfer value and could decide to use an average of USD 50 to cover non-food expenditures, mainly: savings, health and payment of debts.

Priority given to savings reflects households' preoccupation with the upcoming agricultural season and the heavy burden that it represents on their economy. By saving or clearing debts, MPC households were able to reduce the use of coping strategies, like borrowing money or selling grain reserves during the agricultural season. Health was the second most important non-food expenditure category for both groups.



Chart 12. Use of the transfer after the last round of payments (in USD)

The panel analysis explored the correlation between how households spent the cash and food security outcomes. In the MPC group, it was found that the higher the level of cash spent on food, the more likely the meat consumption graduation at the end of the project and three months after. On the other hand, high level of expenditures on health and debts were associated with non-graduation.

The panel analysis also tried to understand whether households' decision to spend the cash transfer immediately or over time bring about different food security outcomes. Findings seem to suggest that, in the MPC group, households spending cash rapidly achieve better coping strategy graduation at the end of the project, while households spending cash gradually time (2-4 weeks) achieve better meat consumption graduation three months after. In the cash group, no relevant differences were found in meat consumption or coping strategy graduation rates regardless of how long the household took to spend the transfer.

Source: Authors' elaboration

The ex-post survey investigated how the different modalities contributed on households' investments and whether these investments produced some level of income in the short term. Although investment was not one of the objectives of the assistance, this analysis can help understand different short-term food security outcomes. The MPC group had a higher proportion of households investing and making gains out of it. This was linked to the higher value of the MPC transfer. Almost half of the investments represented the anticipation of costs of agricultural inputs. This alleviated the burden of the major expenditure of the year and may have positively affected the maintenance of the food security outcomes over time (ex-post).

4.5 Beneficiaries' preferences and perception

At baseline, women were more inclined towards vouchers, men and elderly people towards cash. Women justified their initial preference for vouchers saying they feared the temptation associated with cash.

At the end-of-project, most beneficiaries preferred their own modalities, but cash and MPC beneficiaries had a higher preference for cash (83%) than voucher beneficiaries had for vouchers (66%). Women, who tended to raise criticisms around cash in the baseline, changed their opinion after having received cash .

Chart 13. Preferred modalities at the end of the project



Source: Authors' elaboration

Cash and MPC beneficiaries tended to prefer cash because of its flexibility in terms of what to buy, where and when to spend the money, taking into account proximity, quality, price, and the household's needs. The MPC group particularly appreciated the possibility to do some savings, meet other essential needs and make investments. Voucher beneficiaries justified their preference for their own modality saying that vouchers allowed them to choose their preferred food, access better quality and more varied products. At the same time, they perceived the monthly voucher redemption as an obstacle to access perishable items. Elderly people pointed out problems like distance and unfamiliarity with the supermarket and the difficulty to read prices.

Cash and MPC beneficiaries tended to prefer cash

Its flexibility in terms of what to buy, where and when to spend the money, taking into account proximity, quality, price, and the household's needs.



Conclusions

The study found that, at the end of the project, the three types of assistance brought about substantial improvements in the key food security indicators (FCS, FCS-N and rCSI), with some minor differences between groups. The voucher group obtained the highest graduation rates to good food consumption. The MPC group presented the best diet diversity results in terms of heme iron and vitamin A consumption. Cash and voucher groups presented the highest graduation rates to low food coping strategies.

Findings from both quantitative and qualitative analysis concur to show that MPC brought about longer lasting improvements to the food security situation of beneficiary households. Three months after the end of the project, the MPC group tended to keep and in some cases further improve their food security situation, while voucher and cash groups tended to lose, at least partially, the gains obtained at the end of the project. Qualitative findings suggest that the greater liquidity propitiated by MPC assistance helped households endure the critical period of the main cropping season, after two consecutive years of drought.

Voucher and MPC assistance were able to lift the worse-off livelihood group (day labourers) to the same food security level of the better-off one (basic grains producers) at the end of the project. Cash assistance did not achieve the same results, probably because of the difficult trade-off between food and other essential needs, faced particularly by the worse-off livelihood group. This suggests that MPC and voucher may be more efficient than 'cash' to attain immediate food security improvements when dealing with households with precarious livelihoods. Such conclusion is corroborated by the panel analysis, where a strong correlation was found between high level of expenditures on debts and non-graduation to a better food security situation (lower coping strategies and higher meat consumption).

Cash and MPC beneficiaries tended to prefer cash because of its flexibility in terms of what to buy, where and when to spend the money, taking into account proximity, quality, price, and the household's needs. The MPC group, particularly, appreciated the possibility to meet other essential needs, make savings and investments. By saving or clearing debts, MPC households were able to reduce the use of coping strategies, like borrowing money or selling grain reserves during the agricultural season. The higher proportion of investments found in the MPC group contributed to alleviate the burden of seasonal agricultural expenditures and to maintain food security improvements over time.

The key finding of the study lies in the capacity of MPC assistance to produce long-lasting improvements to the food security situation of beneficiary households. In this sense, MPC may contribute to more effective synergies in the relief, recovery and development continuum. However, higher MPC transfer values may represent a difficult compromise in terms of coverage when resources are limited. Further studies are necessary to determine the costeffectiveness of MPC to generate durable food security outcomes. SAVING LIVES CHANGING LIVES

