SOMALIA

STUDY ON SHORT TERM IMPACT OF MPCA

A Case Study of Beneficiary Households With Severe Acute Malnutrition in Deynile District Banadir Region

MARCH 2025

FUNDED BY:

Funded by European Union Humanitarian Aid

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ABBREVIATIONS AND ACRONYMS

CARI	Consolidated Approach to Reporting Indicators
CHW	Community Health Worker
COOPI	Cooperazione Internazionale
CRM	Complaints and Response Mechanism
CWG	Cash Working Group
DRC	Danish Refugee Council
DSAG	Data Saturation and Analysis Grid
ECHO	European Civil Protection and Humanitarian Aid Operations
ECMEN	Economic Capacity to Meet Essential Needs
GAM	Global Acute Malnutrition
FCDO	Foreign, Commonwealth and Development Office
FCS	Food Consumption Score
HDDS	Household Dietary Diversity Score
HH	Household
ICU	Intensive care Unit
IDP	Internally Displaced Person
IPC	Integrated Food Security Phase Classification
KII	Key Informant Interview
LCSI	Livelihood Coping Strategies Index
M&E	Monitoring and Evaluation
MAM	Moderate Acute Malnutrition
MEB	Minimum Expenditure Basket
MoE	Margin of Error
MPCA	Multipurpose Cash Assistance
NGO	Non-Governmental Organisation
NFI	Non-Food Item
NRC	Norwegian Refugee Council
ODK	Open Data Kit
OTP	Outpatient Therapeutic Program.
PDM	Post-Distribution Monitoring
rCSI	Reduced Coping Strategies Index
SAM	Severe Acute Malnutrition
SCC	Somali Cash Consortium
SCI	Save the Children International
TV	Transfer Values
USD	United States Dollar
WHZ	Weight-for-Height Z-score

ABOUT IMPACT

IMPACT Initiatives (IMPACT) is a Geneva based think-and-do-tank, created in 2010. IMPACT is a member of the ACTED Group.
IMPACT's teams implement assessment, monitoring & evaluation and organisational capacity-building programmes in direct partnership with aid actors or through its inter-agency initiatives, REACH and Agora. Headquartered in Geneva, IMPACT has an established field presence in over 30 countries. IMPACT's team is composed of over 300 staff, including 60 full-time international experts, as well as a roster of consultants, who are currently implementing over 50 programmes across Africa, Middle East and North Africa, Central and South-East Asia, and Eastern Europe.

ABOUT SOMALI CASH CONSOTIUM (SCC)

The Somali Cash Consortium is led by Concern Worldwide and includes ACTED, COOPI, DRC, IMPACT, NRC and SCI as partners. Through the Somali Cash Consortium (SCC) humanitarian aid has been provided through multipurpose unconditional mobile money transfers to Somali communities since 2018, reaching over 1.8 Million Somalis to date. The consortium with its partners aims at improving the ability of vulnerable HHs to meet their basic needs and reduce consumption gaps through life-saving humanitarian unconditional cash transfers (UCTs) in the most in need regions in Somalia.

EXECUTIVE SUMMARY

The Somali Cash Consortium (SCC) was formed in late 2017 in response to the continued threat of famine. It seeks to provide vulnerable populations in the worst-affected districts in Somalia with monthly unconditional multi-purpose cash assistance (MPCA). The consortium comprises Concern Worldwide as the leading partner, along with ACTED, COOPI, DRC, NRC, SCI, and IMPACT Initiatives, serving as the independent monitoring and evaluation partner.

In June 2024, the SCC activated a response in Deynile district of Banadir region of Somalia to support households with children under 5 years suffering from Severe Acute Malnutrition (SAM).[1] The activation primarily focused on households with children receiving treatment for SAM with complications at stabilization centers, following the "on-rolling basis" modality. Over a period of three months, the targeted beneficiary households received three rounds of MPCA (each round worth 180 USD). The cash transfer amounts were set in line with the harmonized super-region transfer values recommended by ECHO based on each region's Minimum Expenditure Basket (MEB)[2,3]. However, the response was later expanded to include households with children diagnosed with SAM without complications, bringing the total number of beneficiary households—both with and without complications—to 700 households.

ECHO, through SCC, therefore commissioned a study led by IMPACT to assess the short-term impact of cash assistance on households with children under 5 declared to have SAM with and without complications. This study integrated other relevant nutrition-related data points, such as food security, coping mechanisms, socio-demographic and economic characteristics, and accountability, using information gathered through Baseline and endline surveys of cash transfers from both groups. In addition, the study will provide insights for programming purposes under the direct nutrition referral implementing modalities to build more accessible and responsive systems to the needs of beneficiaries.

At the time of data collection, an estimated 1.6 million children aged 6 to 59 months were projected to experience acute malnutrition and urgently required treatment between August 2024 and July 2025 in the whole of Somalia.[4] This included around 403,000 cases of SAM and 1.2 million cases of Moderate Acute Malnutrition (MAM). Significantly, 66% of the total burden was concentrated in southern Somalia. Banadir was among thirteen regions classified as Integrated Phase Classification (IPC) 4, indicating a critical level of acute malnutrition, with approximately 70,960 children identified as having SAM in the region. In Banadir, the burden of acute malnutrition among internally displaced persons (IDPs) was significant, contributing to 27% (approximately 446,950 individuals) of the national estimate. The overall prevalence of Global Acute Malnutrition (GAM) based on weight-for-height z-scores (WHZ) was reported at 14.7%, indicating a serious nutrition situation in Somalia. However, the situation in Mogadishu (Banadir) remained concerning, with a GAM prevalence of 16.8%, highlighting the continued vulnerability of the population.

Intended impact

This research was intended to assess the short-term impact of cash assistance on households with children under the age of 5 suffering from SAM, comparing those with complications to those without, against a Baseline and identifying improvements after the three cycles of cash assistance. Additionally, the study aimed at analyzing the effects of cash transfers on household food security and coping mechanisms across both groups. This will contribute to a deeper understanding of the advantages, key challenges, and lessons learned from the direct nutrition-based approach.

[1] Severe acute malnutrition (SAM) results from insufficient energy (kilocalories), fat, protein and/or other nutrients (vitamins and minerals, etc.) to cover individual needs. It is a condition where a person doesn't have enough nutrients to meet their needs and can lead to serious health problems, including metabolic issues and weakened immunity.

[2] Identifying Gaps in Households Economic Capacity to Meet Essential Needs (food and non-food) and the New Cash and Voucher Assistance (CVA) Transfer Value Recommendations

[3] A Minimum Expenditure Basket (MEB) is a tool used by cash and vouchers assistance (CVA) actors to support the calculation of the transfer amount of a multipurpose/multisectoral cash grant, contribute to better vulnerability analysis and monitoring, and improve collaboration.

[4] Integrated Acute Food Insecurity Malnutrition (July-December 2024) Somalia.

KEY FINDINGS

Financial behaviour before and after receiving MPCA

- Income sources shifted after receiving MPCA, with reliance on casual labour and humanitarian aid decreasing in both groups. Households with complications struggled more with securing stable contracted work, while those without complications diversified income more successfully. Expenditure patterns reflected different priorities: both groups increased food spending, **but medical expenses remained a major burden for households with complications**. Debt repayment also increased across both groups, with those without complications showing greater financial flexibility.

- **Financial resilience remained a challenge, especially for households with complications, as only 17% had savings compared to 36% of those without.** While MPCA helped more households meet essential needs, those with complications struggled more. MPCA reduced negative coping strategies, but financial challenges persisted for those managing severe medical conditions.

Food security indicators

- Based on the consolidated approach to reporting indicators (CARI), food security improved for both groups, with severe food insecurity dropping (80% to 15% for complications; 75% to 5% without. **Households with complications remained more vulnerable due to persistent financial strain and healthcare costs. These findings highlight the need for integrated food security and health interventions.**[5]

Protection index score

- The protection index score measured by the ECHO key performance indicators declined from **79% at Baseline to 71% at endline** for both groups. Complaint Response Mechanism (CRM) engagement was low (10% for households with complications, 13% without), with trust, awareness, and access as key barriers. Satisfaction varied, with only 40% of households with complications satisfied versus 100% without.

- Only 5% of households with complications (Group 2)[6] reported that they were consulted about their needs and how they could best be supported compared to 40% without (Group 1). Despite respectful treatment, improved CRM awareness, trust-building, and inclusive consultations are needed to better support vulnerable households.

Stabilization centers (SCs) challenges

- The MPCA program played a role in contributing to improved healthcare access and reducing financial stress. A majority of Key Informants (8 out of 12) reported that cash assistance enhanced health-seeking behavior, allowing caregivers to seek earlier medical intervention for children with SAM, thereby reducing default rates in treatment. Furthermore, 6 out of 12 Key Informants noted an increasing demand for psychosocial support services, with caregivers previously overwhelmed by financial pressures now being able to focus on their child's recovery while at the SCs.

[5] As shown in Annexe 1, there is a statistically significant association (p = 0.0151, at the 95% confidence level) between food security status, as defined by CARI, and household classification. Specifically, households with SAM cases without complications were mostly categorised as "food secure" or "marginally food secure.
[6] Nutrition-based approach relies on enrollment via referrals, which limits opportunities for early consultation.

INTRODUCTION

The humanitarian landscape in Somalia is marked by persistent food insecurity and malnutrition, exacerbated by climate shocks, displacement, and protracted conflict. An estimated 1.6 million children aged 6 to 59 months are projected to suffer from acute malnutrition between August 2024 and July 2025, including approximately 403,000 cases of SAM and 1.2 million cases of Moderate Acute Malnutrition (MAM).[7] In Banadir, a region classified as Integrated Food Security Phase Classification (IPC) 4, malnutrition rates are critical, with 70,960 children affected.[8] The burden is particularly severe among internally displaced persons (IDPs), who make up 27% of Somalia's acutely malnourished population.[9]

In response to these alarming conditions, the SCC implemented a Multi-Purpose Cash Assistance (MPCA) program targeting households with children under five suffering from SAM in the Deynile district of Somalia's Banadir region. This initiative aimed to enhance food security, dietary diversity, and overall well-being through three cycles of unconditional cash transfers. However, gaps remain in understanding the effectiveness of cash transfers in improving nutritional outcomes, particularly in distinguishing between children with and without complications[10] related to SAM.

The SCC, with funding from the ECHO, commissioned an end-term evaluation—the Deynile Nutrition Study—to assess the short-term impact of MPCA on household resilience and child nutrition. IMPACT assessed the short-term impact of cash assistance on households with children suffering from SAM without complications (Group 1) versus those with complications (Group 2) and identified improvements in their nutritional status in Deynile district. The assessment sought to address the following research questions:

1. What are the household's expenditure patterns after receiving three cycles of MPCA from SCC?
2. What are the household's food security and livelihood levels before and after receiving MPCA from the SCC?
3. What are the household's experiences with protection issues and NGO accountability to beneficiary populations?
4. What are the patterns in how children under the age of 5 complete the program in the Stabilization Center (discharge patterns) and track the rate at which they leave without returning (default rates)?
5. What methods can be used to monitor cases of recurring issues amongst children who were admitted to the SC (relapse) after completing the program in the SC and what are the frequency of new admissions (new children added to the SCs)?

METHODOLOGY

This assessment employed a **mixed-methods approach**, with qualitative data collected through semi-structured Key Informant Interviews (KIIs) (using purposive sampling) and quantitative data (the Baseline and endline assessment[11]). The qualitative component aimed to capture contextual insights from stakeholders, while the quantitative component focused on measuring household-level outcomes through Baseline and Endline surveys.

The **Baseline household survey** was conducted from **10 to 12 June 2024**, before the first cycle of cash assistance, and the **PDM** took place from **20 to 21 November 2024**, following the third and final cash transfer. Qualitative

[7] Integrated Acute Food Insecurity Malnutrition (July-December, 2024) Somalia.
[8] ibid
[9] ibid
[10] The complications include, Pitting oedema extending from the lower limbs up to the face; Anorexia (observed during appetite test); Other severe complications: persistent vomiting, shock, altered mental status, seizures, severe anaemia (clinically suspected or confirmed), persistent hypoglycaemia, eye lesions due to vitamin A deficiency, frequent or abundant diarrhoea, dysentery, dehydration, severe malaria, pneumonia, meningitis, sepsis.
[11] The endline assessment is widely referred to as the Post distribution monitoring (PDM).

data collection occurred later, between **25 November and 6 December 2024**, with KIs from Banadir Health Center and Concern Worldwide.

Qualitative Component- Key Informant Interviews (KIIs)

The KIIs comprised 12 purposively selected stakeholders from the Banadir health facility and programme staff working at the SCs from Concern Worldwide. These interviews gathered insights from health practitioners on relapse rates, admissions, discharges, default rates, and the short-term impact of cash assistance on the surge of needs at SCs.

The participants consisted of 4 KIs from Banadir Health Center, one each from Siinkadheer and Eldacas Health facilities, and 6 KIs from Concern Worldwide who had sufficient knowledge of humanitarian cash support implementation and the on-rolling basis approach as applied for the direct-nutrition referral implementation approach. This component was designed to provide a deeper understanding of operational challenges and programmatic effectiveness from the perspective of experienced practitioners working at SCs.

Quantitative Component[12]

The quantitative component consisted of Baseline and Post-Distribution Monitoring (PDM) to evaluate the end-term outcomes for 700 beneficiary households in Deynile district. The Baseline[13] and PDM[14] involved remote phone-based household surveys with MPCA beneficiaries whose households had children under 5 with SAM, designed to be representative of the 700 MPCA beneficiary households in Deynile district.

1) For baseline, IMPACT randomly sampled from the entire 700-household caseload, without stratifying based on SAM with or without complications. Upon verifying the baseline samples against the list provided by Concern, it was found that 129 households included cases of SAM, 30 with complications and 99 without. As such, the data under baseline is only representative at the main caseload level and not at the group level (SAM with and without complications). All data findings from baseline at SAM with and without complications are indicative. To ensure that only households that were maintained in the programme were either SAM with or without complications, IMPACT and Concern Worldwide checked the beneficiary lists maintained after deduplication checks conducted during the second line response. The second line response follows after the first round of cash transfer, where a more in-depth beneficiary verification is conducted, resulting in HHs being removed from the programme for not meeting the vulnerability criteria. These requirements are set by the Consortium Management Unit (CMU). New households that fully met the requirements were added to the programme to replace the dropped households

2) However, for the PDM 95% confidence level and a 7% margin of error was used to draw PDM samples from SAM without complications and SAM with complications, defined as Groups 1 and 2, respectively, in this study. To account for non-response amongst the beneficiaries, a buffer of 10% was added.

Sampling strategy for the quantitative component

A simple random (probability) sampling approach was used to achieve a 95% confidence level with a 7% margin of error. For the baseline, the sample included all 700 beneficiary households. For the endline, the sample focused on households with SAM, both with and without complications. A buffer of 10% was added to the sample size to allow for follow-up even with the expected drop-out and non-participation of some households. To ensure a random selection of respondents, IMPACT generated random samples using an R-script. Daily data cleaning was conducted

[12] For the Baseline and PDM, the phone numbers were obtained through the beneficiary household registration lists shared by Concern Worldwide, which was used to select households for the assessment randomly.

[13] The Baseline was conducted with MPCA beneficiaries before receiving the MPCA. However, the PDM was conducted with same beneficiaries covered in the Baseline but after receiving the 3rd MPCA

[14] ibid

with the respective field supervisors to ensure that accurate information was collected from the respondents. This was followed by descriptive and inferential data analysis, which was conducted using R software.

The survey questionnaire underwent testing by field supervisors, including the precision and clarity of translations from English to Somali before its deployment to prevent any issues or misunderstandings during data collection. The questionnaire including the accuracy and clarity of translations from English into Somali, was extensively tested by field officers before roll-out to ensure the reliability and validity of the data collection survey. All data was collected via smartphone using Open Data Kit (ODK collect) or Kobo Collect. To limit the burden on respondents who voluntarily dedicated their time to participating in the assessment, the survey was designed to take a maximum of 35 minutes to complete.

Table 1: Baseline Sample Frame

Banadir district	Total Households (Beneficiary Population)	Minimum Sample Size	Sample Size with 10% buffer	Surveys completed
Baseline assessment	**700**	**153**	**169**	**129**[15]

Table 2: PDM Sample Frame

Banadir district	Total Households (Beneficiary Population)	Sample Size	Sample Size with 10% buffer	Surveys completed
PDM Group 1 SAM without complication	500	141	155	145
PDM Group 2 SAM with complication	200	99	109	101

Analysis

Qualitative data analysis:

The qualitative data analysis followed an inductive and iterative approach, beginning with debriefing notes to identify gaps and key areas of focus. **A Data Saturation and Analysis Grid (DSAG)** was developed to synthesize themes and patterns from the interviews. DSAG approach aimed to explore perceptions of multipurpose cash assistance in supporting households with children under five suffering from malnutrition. Thematic analysis was conducted using DSAG, facilitating the identification, examination, and reporting of patterns within the data. The DSAG framework comprised three analytical layers: **Discussion topics, Discussion sub-topics, and data points. Discussion topics were aligned with the qualitative tool's questions, while discussion sub-topics and data points were generated inductively based on emerging themes from the transcripts.**

Quantitative data analysis:

The baseline data analysis utilized descriptive statistical methods and was performed using R software. The analysis covered various aspects, including food security and livelihood indicators, demographics, environmental components, ECHO KPIs, vulnerability questions, and income, and it included a section dedicated to comments and feedback from the respondents.

The PDM analysis employed both descriptive and inferential methods to evaluate differences between households with SAM with and without complications. This report includes comparisons between baseline and endline results for both groups (SAM with and without complications) to assess changes over time. Additionally, endline comparisons between the two groups were conducted for selected indicators. These endline comparisons were

[15] Upon verification against the list shared by Concern Worldwide, IMPACT retained 129 households with SAM cases—30 with complications and 99 without.

subjected to statistical testing at the 95% level of significance to determine whether observed differences were statistically significant. To compare these two groups:

1) The **Wilcoxon test**[16] was used for continuous variables such as household income and food security indicators. This test was chosen because the data was not normally distributed, as confirmed by the Shapiro-Wilk test. The use of non-parametric tests like the Wilcoxon test ensures that the statistical inferences are reliable despite the non-normal distribution of the data.

2) For categorical variables, such as coping mechanisms, the **Chi-square test**[17] was applied to determine if there was a significant association between the presence of complications and key outcomes like food security and health status.

The result of these tests indicates whether the presence of complications in SAM households affects their socio-economic and health-related outcomes differently compared to households without complications.

3) Additionally, **Levene's test** was conducted to assess the homogeneity of variances across different groups, which is crucial for parametric tests like the t-test and ANOVA.[18] This test helps ensure that the variances are equal, reinforcing the validity of the analysis

Overall, these tests provide robust insights into how complications in SAM households impact various outcomes, guiding effective interventions and policy decisions. Wilcoxon and Chi-square tests are outlined in Annexe 1.

Challenges and Limitations

- **Phone interviews:** Due to the length and in-depth nature of this survey, some respondents experienced survey fatigue.
- **Normality of data:** The Shapiro-Wilk test indicated the data was not normally distributed, leading to the use of non-parametric tests for statistical analysis.
- **Respondent bias**: Certain indicators may be under-reported or over-reported due to subjectivity and perceptions of respondents (in particular "social desirability bias" - the tendency of people to provide what they perceive to be the "right" answers to certain questions). Households may sometimes try to give answers they feel will increase their chances of getting more assistance.
- **Recall period:** Data on household expenditure was based on a 30-day recall period; a considerable duration due to which it may be difficult for households to remember their expenditures accurately and to such a degree of detail; hence it might have negatively impacted the accuracy of reporting on those indicators.
- **Timelines:** The short evaluation period restricted the ability to assess the long-term impacts of cash assistance on household food security and child health outcomes.
- **Indicative data:** The baseline data will be indicative while comparing the baseline and endline results between the two groups (SAM with and without complications). However, the Baseline results are representative for the entire 700 beneficiary households. The PDM data is representative of the households with SAM with complications and those without complications.
- **The statistical tests are only based on the endline quantitative data,** assessing the differences between groups 1 (SAM without complications) and group 2 (SAM with compilations). This approach was taken because, at endline, samples were independently drawn for each group using a 95% confidence level and a

[16] The Wilcoxon test is a non-parametric statistical test used to compare two related or independent groups when the data does not follow a normal distribution. It is commonly applied in situations where the assumption of normality required for parametric tests (like the t-test) is violated.
[17] The Chi-Square test is a non-parametric statistical test used to examine whether there is a significant association between two categorical variables. It determines whether the observed frequencies in different categories differ significantly from expected frequencies under the assumption of independence.
[18] If the p-value from Levene's test is greater than the chosen significance level (e.g., 0.05), it suggests that variances are equal across groups, supporting the use of the t-test. However, if the p-value is below the threshold, it indicates unequal variances, which may require using a modified version of the t-test (e.g., Welch's t-test) that does not assume equal variances.

7% margin of error. The purpose of these tests was to evaluate group differences with a predefined level of statistical significance.

FINDINGS

FINANICAL BEHAVIOR BEFORE AND AFTER RECEIVING MPCA

This section compares income sources at baseline and after three months (PDM) for households with children suffering from SAM with and without complications, revealing divergent trajectories. The baseline data is based on 129 targeted beneficiary households before receiving MPCA. While the endline data is based on 246 targeted beneficiary households after receiving 3 rounds of MPCA.[19]

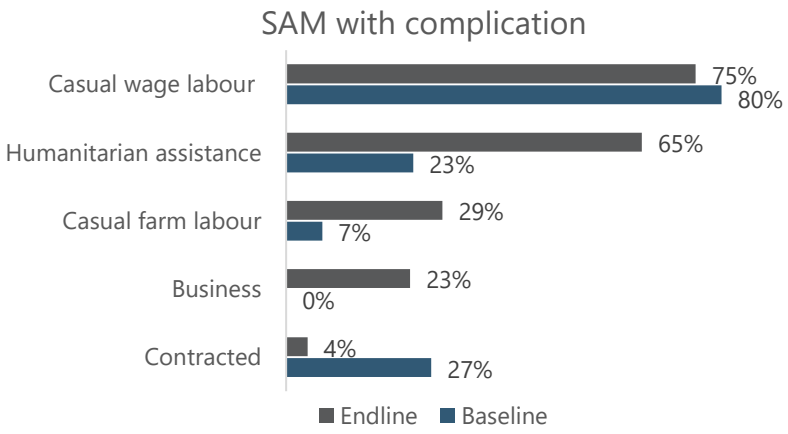
Of the 246 households from the endline survey, 82% were conducted directly with the self-reported head of household. The remaining 18% were conducted with a different member of the household who answered the questions on behalf of the head of the household.[20]

Beneficiary households' income pattern

At Baseline, the beneficiary households with children suffering from SAM with complications (Group 2), reported an average monthly income of 89.53$, while those with SAM but without complications (Group 1), reported a slightly lower average of 87.53$. By the endline, both groups experienced a notable increase in their reported household income. Beneficiary households with SAM complications had an average income of 227.92$, marginally higher than the 224.33$ reported by beneficiary households without complications.

Statistical analysis at the 95% confidence level (p = 0.355)[21] indicated no significant difference in average monthly income between the two groups. Given that all beneficiary households received multi-purpose cash assistance for three months, the increase in income suggests that the financial support contributed to overall economic improvement. However, the lack of a significant difference between households with and without complications implies that both groups experienced similar financial benefits from the assistance. **This suggests that while the cash support may have alleviated some economic pressures, underlying financial challenges persisted across both groups.**

Figure 1: Top 5 main source income used by beneficiary households (with complication)



For beneficiary households with children suffering from SAM with complications (Group 2), the period following MPCA (baseline) saw a slight reduction in reliance on casual wage labour, declining from 80% at the Baseline to 75% during the endline**. This shift coincided with a sharp increase in dependency on humanitarian assistance**, which dropped from 65% at the baseline to 23% during the endline. However, these households faced challenges in sustaining formal employment, as contracted work decreased from 27% at the Baseline to just 4% during the

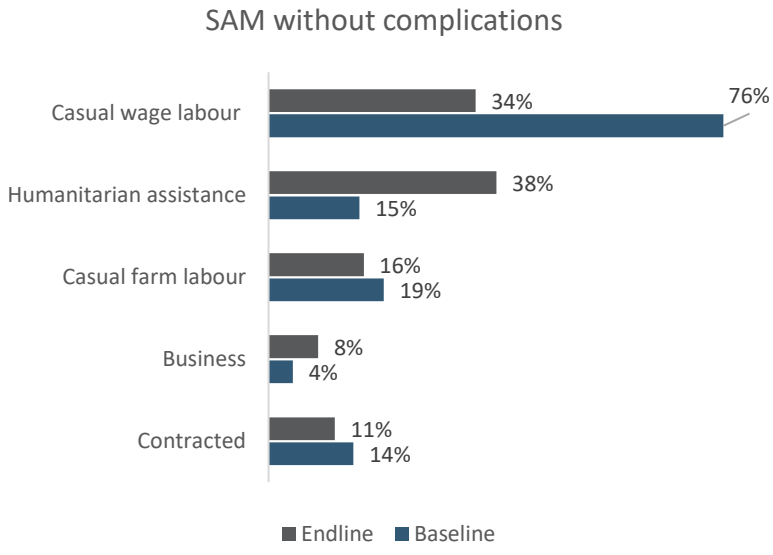
[19] All 129 targeted beneficiary households from the baseline study were included in the endline study.
[20] In all surveys, regardless of whether the respondent was the self-reported head of household or not, the gender and age of the reported head of household were collected for disaggregation purposes.
[21] If the p-value is less than 5%, it indicates a statistically significant relationship between the variables, allowing for meaningful statistical inferences.

endline. Strikingly, business income that was absent at the endline increased to 23% during the Baseline, highlighting a pre-existing reliance on informal economic activities that dissolved after the intervention.

In contrast, households with SAM without complications (Group 1) demonstrated more transformation. The households' engagement in casual wage labour halved at the endline, falling from 76% at the Baseline to 34% during the endline. Reliance on humanitarian assistance also increased from 38% to 15% during the same period. Unlike the households' with complications (Group 2), these households maintained a level of engagement in contracted work (11% at the Baseline to 14% during the endline) and saw a modest rise in business income (8% at the Baseline to 4% during the endline). **This indicates that MPCA may have enabled them to stabilize labour market participation while preserving informal income streams, albeit at reduced levels.**

Endline comparisons between Group 1 and Group 2 reveal distinct patterns in livelihood reliance and economic vulnerability. Households with children under five suffering from SAM with complications (Group 2) were highly dependent on casual wage labour (75%) and humanitarian assistance (65%) as their primary income sources, indicating limited income diversification. This heavy reliance underscores the critical role of external aid and unstable labour in sustaining these households. In comparison, households with children suffering from SAM without complications (Group 1) also relied on humanitarian assistance (38%) and casual wage labour (34%), but to a lesser extent. These differences suggest that Group 2 households are in a more financially vulnerable position, with fewer sustainable or stable sources of income. Statistical analysis at the 95% confidence level confirmed a significant association ($p = 0.00701$) between the main source of livelihood and group classification. Further analysis revealed that livestock sales and livestock product income ($p = 0.0118$) were significantly more common among Group 1 households, reflecting greater income diversity. In contrast, casual labour ($p = 0.0232$) and humanitarian assistance ($p < 0.001$) were more prevalent in Group 2, highlighting their dependence on less stable income streams. Business income was also more frequently reported by Group 1 ($p = 0.00256$), further emphasizing their relative financial resilience. No statistically significant differences were observed in the use of contracted labour ($p = 0.0784$), indicating that these sources did not substantially differentiate the economic profiles of the two groups.

Figure 2: Top 5 main source income used by beneficiary households (without complications)



These findings align with qualitative insights from KIs where most (10 out of 12) KIs **highlighted that cash assistance enabled families to purchase nutritious food and meet other essential needs, such as school fees or food for other children, ultimately improving household living standards.** Additionally, key informants emphasized that MPCA alleviated financial stress, allowing caregivers to focus on treatment adherence rather than worrying about food and daily expenses. Some also noted that caregivers can now afford high-nutrient foods, further supporting long-term recovery and overall well-being.

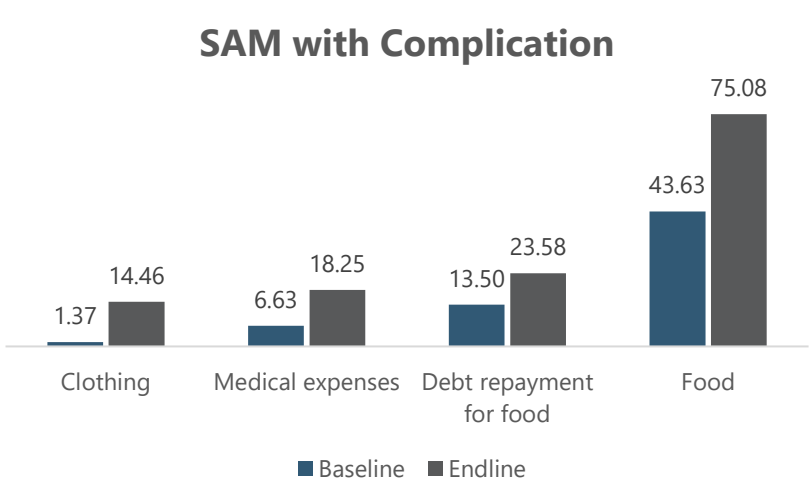
The MPCAs influence on income patterns diverged between assessed groups. Households with SAM complications shifted toward humanitarian assistance, likely due to health-related constraints. And showed a notable increase in

businesses (0% to 23%). In contrast, households without complications reduced depended on casual labor but did not fully transition to alternative livelihoods, reflecting more diversifications strategy. Qualitative insights from KIs reinforce this divergence: households with complications prioritized stability to manage health burdens, while others leveraged MPCA to experiment with modest livelihood shifts. However, both groups demonstrated reduced reliance on casual farm labor, underscoring MPCA role in mitigating income shifts.

Beneficiary households' expenditure pattern

Post-MPCA expenditure trends further highlight the short-term impact of the MPCA on beneficiary households. Beneficiary households with SAM with complications exhibited notable shifts in spending patterns after receiving multi-purpose cash assistance (MPCA). Food expenditure increased from 43.65$ at the Baseline to 75.08$ during the endline, reflecting improved access to essential nutrition. Meanwhile, expenditures on medical care and clothing slightly increased compared to food expenses growth pre- and post-MPCA, suggesting that families may have been able to somehow meet urgent health and clothing needs earlier in the intervention period, reducing the necessity for continued spending in these areas. Additionally, an increase in debt repayment indicates that beneficiary households were able to allocate resources toward financial obligations, reducing their overall economic vulnerability. **An endline comparison between Group 1 (SAM without complications) and Group 2 (SAM with complications) highlights that** the average reported household expenditure showed a slight variation, with households of children suffering from SAM with complications averaging 172.53 USD and those without complications averaging 179.72 USD. **At the 95% confidence level, there were no statistically significant differences between the two groups in expenditures on food (p=0.0673), debt repayment for non-food items (p = 0.729), and total household expenditure (p = 0.647).**

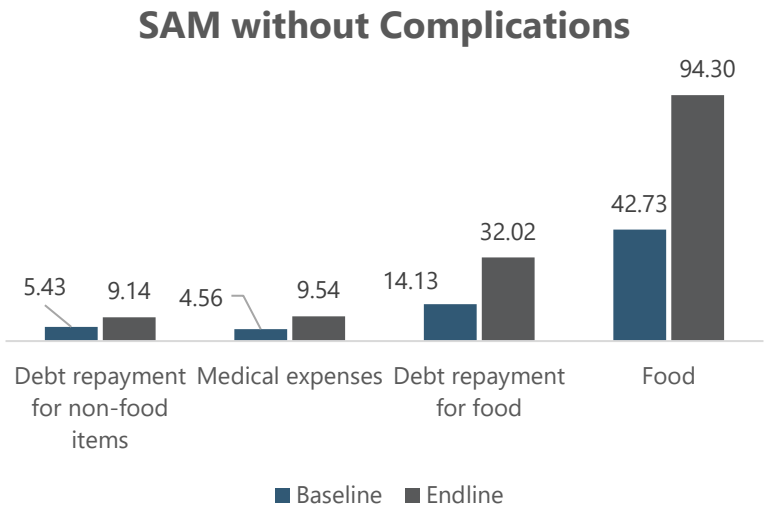
Figure 3 : Average expenditure in USD ($) by beneficiary households (with complication)



These trends suggest that MPCA provides beneficiary households with improved liquidity, reducing their need to prioritize immediate survival costs. The financial buffer created by the MPCA likely allowed families to shift spending while ensuring better access to food and essential goods. Households without SAM complications demonstrated a stronger focus on food security, with expenditure nearly doubling from 42.73$ to 94.30$ during the endline. Debt repayment surged from 14.13$ to 32.02$, indicating efforts to stabilize their financial standing. Medical and clothing expenses saw an increase (Figure 4), reflecting fewer competing health costs and greater flexibility to prioritize nutrition and debt relief. **At the 95% confidence level, there was a statistically significant difference between the two groups in medical expenditure (p < 0.001), with Group 2 spending more compared to Group 1. (Figure 4 and 5).**

The disparities in expenditure patterns reveal that MPCAs liquidity enabled both groups to shift from immediate survival spending toward addressing the short-term priorities during the cash transfer period. However, households with SAM complications showed to an extent that while cash assistance alleviated some pressures, high medical costs limited their capacity to fully capitalize on the immediate program benefits.

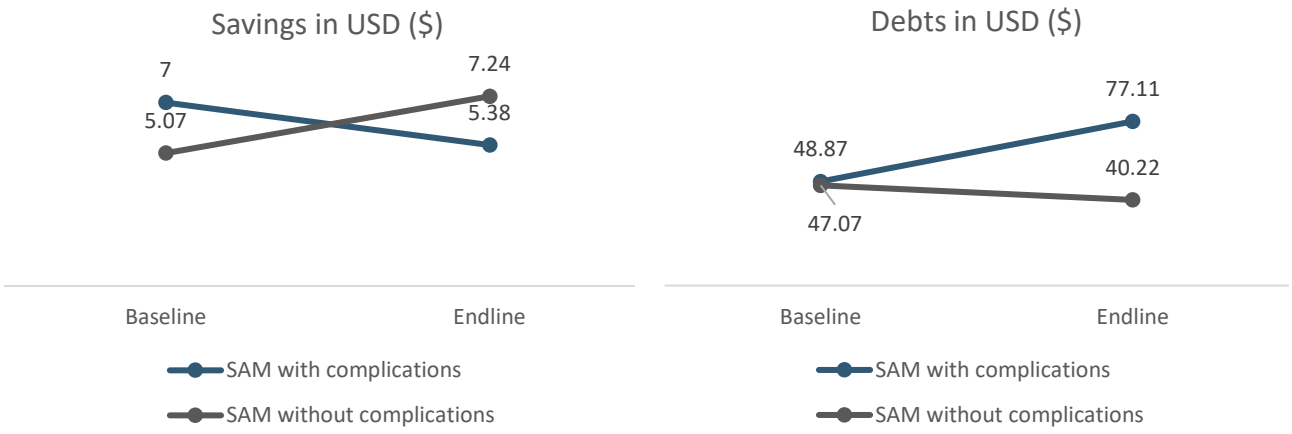
Figure 4 : Average expenditure in USD ($) by beneficiary households (without complication)



Savings and debts pattern

By the endline, only 17% of households with complications reported having any savings, compared to 36% among those without complications. This disparity highlights the persistent financial strains faced by households dealing with medical burdens, as they were less able to retain cash reserves. Meanwhile, 97% of households with complications remained in debt at endline, compared to 69% among those without complications. This further reinforces those medical expenses that forced many households into a cycle of borrowing, making it more difficult for them to stabilize financially despite the MPCA.

Figure 5: *Average household debt and saving in USD ($)*

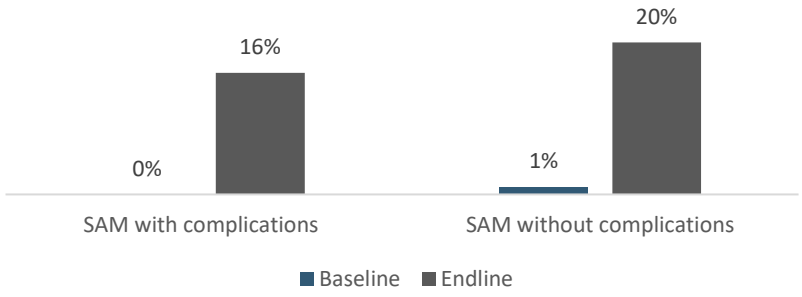


Moreover, the financial conditions of beneficiary households evolved if we compared Baseline with endline findings, reflecting the impact of MPCA on savings, debt, and overall financial resilience. Among households with SAM complications, savings declined from 7$ at Baseline to 5.38$ at endline, while households' debt burden increased from 48.87$ to 77.11$. This suggests that despite receiving cash assistance, financial pressures, particularly medical expenses, constrained the household's ability to save and led to greater reliance on borrowing. In contrast, households without complications experienced an increase in savings from 5.07$ to 7.24$, while the households' debt levels decreased from 47.07$ to 40.22$, indicating greater short-term financial stability. **An endline analysis highlights a statistically significant ($p = 0.00229$) difference in savings between the two groups, with households without complications demonstrating higher mean savings. Conversely, the average debt amount was substantially higher in households experiencing complications. At a 95% level of significance, there is a significant difference in debt levels ($p < 0.001$), showing the greater financial burden faced by households dealing with SAM-related complications.**

Economic Capacity to Meet Essential Needs (ECMEN)

The ECMEN value was calculated using the minimum expenditure basket (MEB) cost from January and March 2023[22]. [23]In general, findings from Baselines and endline show that there was a percentage point increase in the ECMEN for both groups, but the increase was greater amongst households without complications. At Baseline, no households with SAM complications reported being able to meet their essential needs, yet by endline, 16% were able to do so. For households without complications, ECMEN increased from 1% at Baseline to 20% at endline, demonstrating a strong recovery trend. These improvements suggest that MPCA played a role in alleviating immediate financial pressures, though progress was notably limited for those facing high medical costs (SAM with complications).

Figure 6: Proportion of households identified being able to meet their basic needs (ECMEN) between Baseline and endline period, by targeted groups



Overall, the findings from the quantitative analysis align to a certain extent with the qualitative analysis. MPCA has significantly influenced household decision-making patterns, particularly in how families prioritize healthcare, manage finances, and allocate caregiving responsibilities. "**Almost all KIs (11/12)" reported that cash assistance improved financial security**, enabling households to seek healthcare services without delays. This finding aligns with quantitative food security indicators, where households receiving MPCA demonstrated higher FCS and were less reliant on negative coping strategies, such as reducing meal portions or skipping meals altogether. The ability to maintain better food security also meant that caregivers could focus on their children's health without having to make difficult trade-offs between buying food and seeking medical care.

In addition to improving financial security, **"a few KIs (3/12)"** emphasized that MPCA empowered families to prioritize healthcare, leading to better recovery rates for SAM-affected children. The improved economic stability allowed households to allocate more resources toward medical expenses, reducing the financial barriers that often prevent caregivers from completing their child's full treatment cycle. This is reflected in household expenditure data, where families receiving MPCA spent more on healthcare services (18.25$ for those with complications vs. 9.54$ for those without complications), ensuring better adherence to treatment plans and lower relapse rates.

Moreover, the short-term impact of MPCA extended beyond financial security and healthcare access to shifts in household roles and caregiving responsibilities. Only two KIs noted that fathers took on more responsibilities at home, allowing mothers to remain at SCs for the full duration of their child's treatment. This transition not only improved treatment adherence but also contributed to greater household stability, as caregiving duties were more

[22] The Somalia MEB costs were updated by the Cash Working Group in 2024. However, for this assessment, January 2023 MEB costs were used to calculate ECMEN, as the transfer value of 180 USD in Banadir was based on the 2023 rates.
[23] The calculation of whether households can meet their essential needs is based on Minimum Expenditure Basket (MEB) values. If households report spending above the MEB cost, they are able to meet their essential needs. Conversely, if households report spending below the MEB cost, they are unable to meet their essential needs.

evenly distributed. Additionally, one KI highlighted that reducing financial strain improved parental well-being, allowing caregivers to focus on their child's recovery rather than worrying about economic pressures.

In the below section, findings on the food security indicators will be explored to better understand the impact of the food security and livelihood levels after receiving MPCA from the SCC.

FOOD SECURITY INDICATORS[24]

To better understand the impact of MPCA on household food security and livelihoods, this below section will provide a databased analysis to compare Baseline and endline trends for key food security indicators across the two groups: households with children suffering from SAM with complications and households with SAM without complications. The analysis below will evaluate changes in food source, food consumption scores (FCS), reduced coping strategy index (rCSI), household dietary diversity score (HDDS), livelihood coping strategy (LCS), and the consolidated approach to reporting indicators of food security (CARI).

Primary sources of food

To provide context on household spending decisions and food security outcomes, and to better understand the use of certain coping strategies, households were asked about their main food sources in the 7 days prior to data collection.

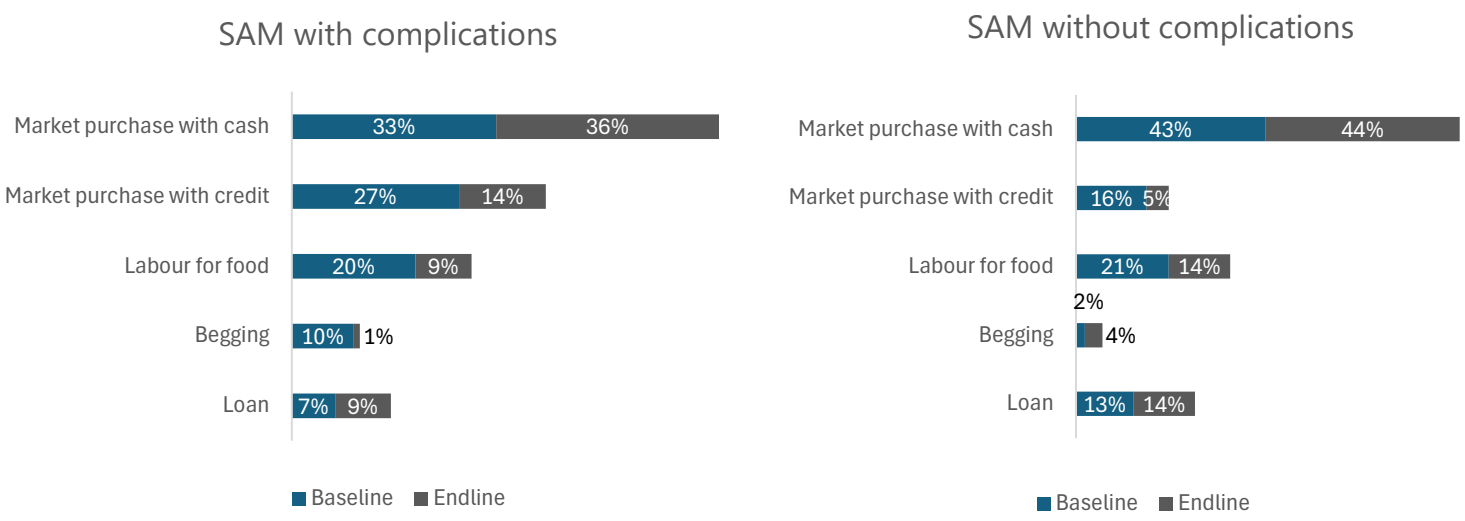
Beneficiary households, without complications (Group 1), reduced reliance on credit-based purchases (16% to 5% from the baseline to the endline) **and maintained stable cash-based market purchases** (43% to 44% from the baseline to the endline), **indicating improved financial autonomy**. In contrast, households with complications (Group 2) saw a decline in credit use (27% to 14% from the baseline to the endline) but only a modest increase in cash purchases (33% to 36% from the baseline to the endline), suggesting persistent liquidity constraints. **While both groups reduced begging and labour for food exchanges, households without complications retained slightly higher reliance on labour (Check figure 7), likely due to medical expenses diverting cash from food budgets.**

A considerable proportion of households engaged in labour for food, with 21% of those with complications relying on this strategy compared to 14% of those without. **This suggests that food-insecure households, particularly those with complications, were more likely to exchange labour for sustenance, reflecting economic vulnerability.**

At a 95% confidence level, the p-value of 0.00701 confirms a statistically significant association between the main food source and the household group being analyzed. This suggests that households with SAM complications are more likely to rely on negative coping mechanisms, such as labour for food, market credit purchases, and food gathering, while those without complications have relatively better access to cash purchases and loans.

[24] The indicators included in this section align with the 'Recommended Indicators' developed by the Somalia Cash Working Group to standardize the way in which household-level food security is measured across assessments. All the results presented have been weighted at the district level by the proportion of SCC beneficiary households per targeted district.

Figure 7: Main food source in the 7 days prior to data collection used by beneficiary households by group



In general, findings show that SAM without complications achieved dietary outcomes, while SAM with complications faced competing priorities, necessity health-cost subsidies to unlock MPCAs nutritional potential.

Reduced Coping Strategies Index (rCSI)[25]

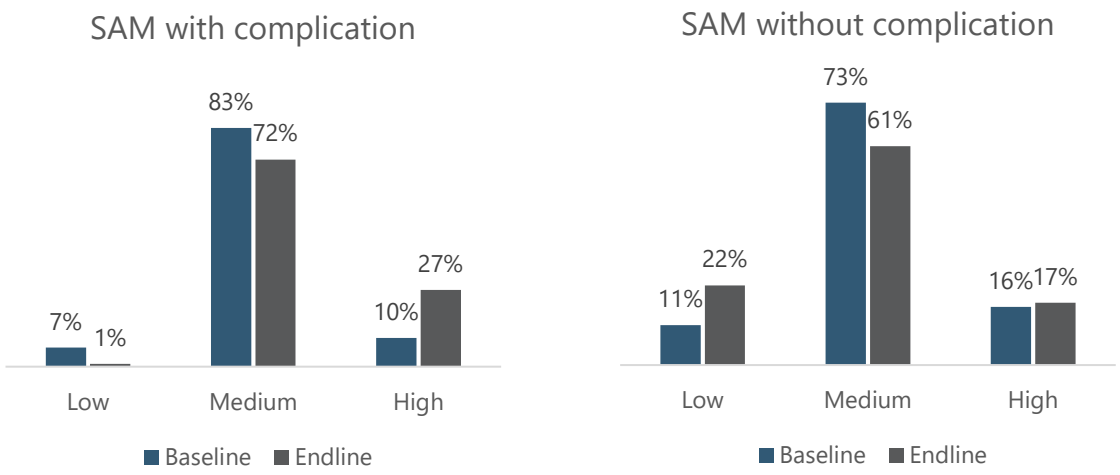
The rCSI measures the frequency at which households rely on certain negative coping strategies (related to food consumption in the household) within the 7 days prior to data collection to cope with food insecurity.[26] This indicator is used to compare the hardship faced by HHs due to a shortage of food. The index measures the frequency and severity of the food consumption behaviors the HHs had to engage in due to food shortage in the 7 days prior to the survey. The rCSI was calculated to better understand the frequency and severity of changes in food consumption behaviors in HH when faced with a food shortage.

Beneficiary household with SAM complications experienced a 17% rise in "high" rCSI (10% to 27%), indicating heightened reliance on severe coping mechanisms. Conversely, households without complications reduced "medium" rCSI (73% to 61%) and increased "low" rCSI (11%to 22%). This divergence underscores the compounded vulnerability of managing health crises. **While MPCA mitigates immediate financial stress for both groups, households with complications faced persistent trade-offs. For example, medical expenses often necessitate cuts to food budgets, forcing caregivers to adopt measures like meal skipping. Such coping behaviors exacerbate malnutrition cycles, particularly for children with SAM. In contrast, households without complications utilized MPCA to stabilize food access, reducing the need for extreme coping strategies.**

[25] It combines both the frequency of using coping strategies and their respective severity. Possible rCSI values range from 0 (no coping strategies applied) to 56 (all listed coping strategies are applied every day), with any score above 10 generally being considered to indicate frequent use of severe coping strategies. A higher score suggests a more severe level of food insecurity. The rCSI includes coping strategies such as relying on less preferred, less expensive food (1), borrowing food or relying on help from friends or relatives (2), reducing the number of meals eaten per day (1), reducing portion size of meals (1) and restricting consumption by adults in order for young children to eat (3).

[26] The rCSI includes coping strategies such as relying on less preferred, less expensive food (1), borrowing food or relying on help from friends or relatives (2), reducing the number of meals eaten per day (1), reducing portion size of meals (1) and restricting consumption by adults in order for young children to eat (3).

Figure 8: rCSI category by beneficiary households by group

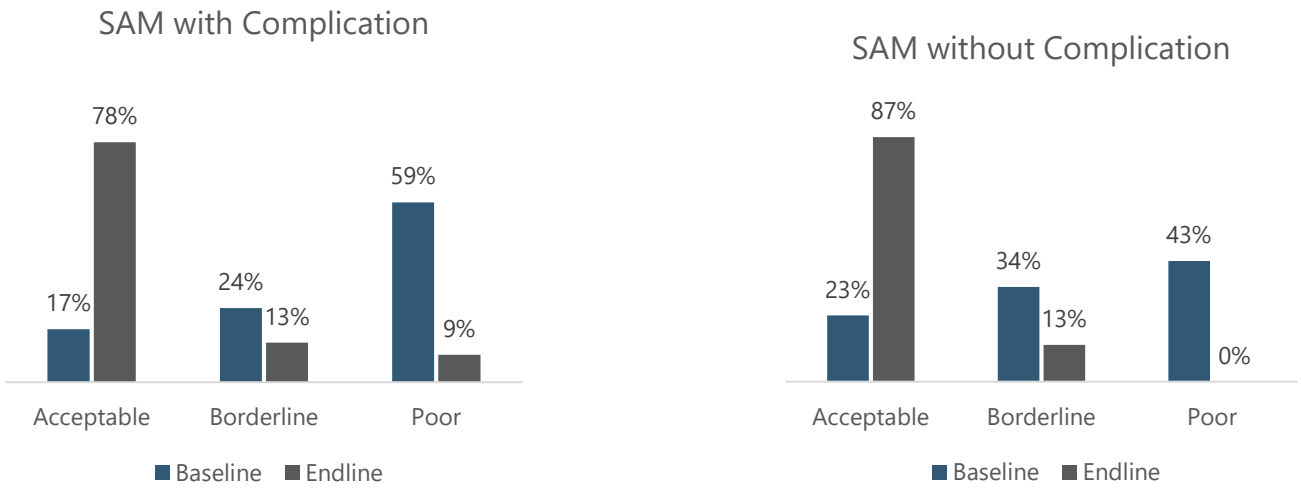


Food Consumption Score (FCS)[27]

The FCS is a composite score based on the dietary diversity and frequency of consuming certain food groups and the relative nutritional value of foods consumed by a household in the 7 days prior to data collection.

Beneficiary households with SAM complications reduced the proportion classified as having "poor" FCS from 59% to 9%, while those without complications eliminated this category entirely (43% to none). The "borderline" FCS category persisted at higher rates among households with complications (24% to 13%) compared to the household with SAM without complications (34% to 13%). Meanwhile, "acceptable" FCS increased sharply for both group (17% to 78% and 23% 87%, respectively).

Figure 9: FCS category by beneficiary households by group



The presence of poor food consumption exclusively among households with complications highlights that malnourished individuals with additional health complications are more likely to suffer from inadequate food intake. Further suggest that food security interventions should prioritize households with SAM complications, as they are at higher risk of malnutrition, inadequate dietary intake, and potential

[27] Find more information on the food consumption score here. The cutoff criteria utilized for Somalia were as follows: HHs with a score between 0 and 28 were categorized as "poor," those with a score above 28 but less than 42 were considered "borderline," and HHs with a score exceeding 42 were classified as "acceptable." These categorizations were determined based on the high consumption of sugar and oil among the beneficiary HHs. High average FCS values are preferred since low average values indicate a worse food situation as shown by the FCS cut-off points.

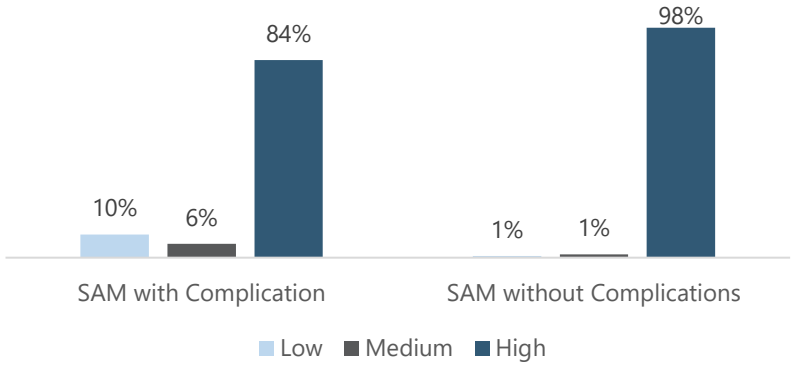
worsening health conditions. In addition, the slower decline in "borderline" FCS among households managing SAM with complications reflects persistent challenges in achieving consistent dietary quality. Qualitative insights from this study reinforce this observation, noting that caregivers in these households frequently redirected cash assistance to cover urgent medical expenses, leaving fewer resources for diverse or nutrient-rich foods. In contrast, households without complications demonstrated greater capacity to optimize MPCA for nutritional investments, as they faced no competing health-related financial pressures.

Endline comparison between Groups 1 and 2 indicates that FCS continue to highlight significant disparities with approximately 9% of households with SAM complications had a poor FCS, compared to 0% among households without complications. The proportion of households with an acceptable FCS was also lower among those with complications (78%) compared to those without (87%). **These findings suggest that while some households are experiencing improved access to food, those with SAM complications remain at higher risk of food insecurity.**

Household Dietary Diversity Score (HDDS)[28]

The HDDS is used to gain a more comprehensive understanding of household food security by considering the diversity of the food consumed per household in the 7 days prior to data collection. While households may be satisfying their caloric needs by consuming considerable amounts of dense staple foods, including wheat or rice, their diets may be lacking in more nutritious foods. Hence, by scoring households based on the number of diverse food groups consumed, the HDDS attempts to capture the overall quality of food consumption more than the quantity of foods consumed. A higher HDDS is preferred, as it indicates better dietary diversity and nutritional adequacy. The classification used in this study defines low dietary diversity (≤4), medium (5–6), and high (>6).

Figure 10: HDDS category[29] by beneficiary households by group



The findings from endline indicate a statistically significant association ($p < 0.001$) between dietary diversity and household groups, confirming that households with SAM complications have notably lower dietary diversity compared to those without complications. Specifically, 84% of households with SAM complications fall into the "High" dietary diversity category, while 6% are in the medium category and 10% in the low category, highlighting that a portion of this group still experiences deficiencies in dietary variety. In contrast, households without SAM complications overwhelmingly (98%) score in the High HDDS category, with only 1% in the medium and low categories, demonstrating significantly better access to diverse and nutritious foods.

The substantial difference in dietary diversity between the two groups suggests that households with SAM complications face additional barriers in accessing a nutritionally balanced diet, despite potential food availability. The presence of 10% in the low HDDS category for this group further emphasizes the risk of inadequate micronutrient intake, which could exacerbate malnutrition and poor health outcomes. This is

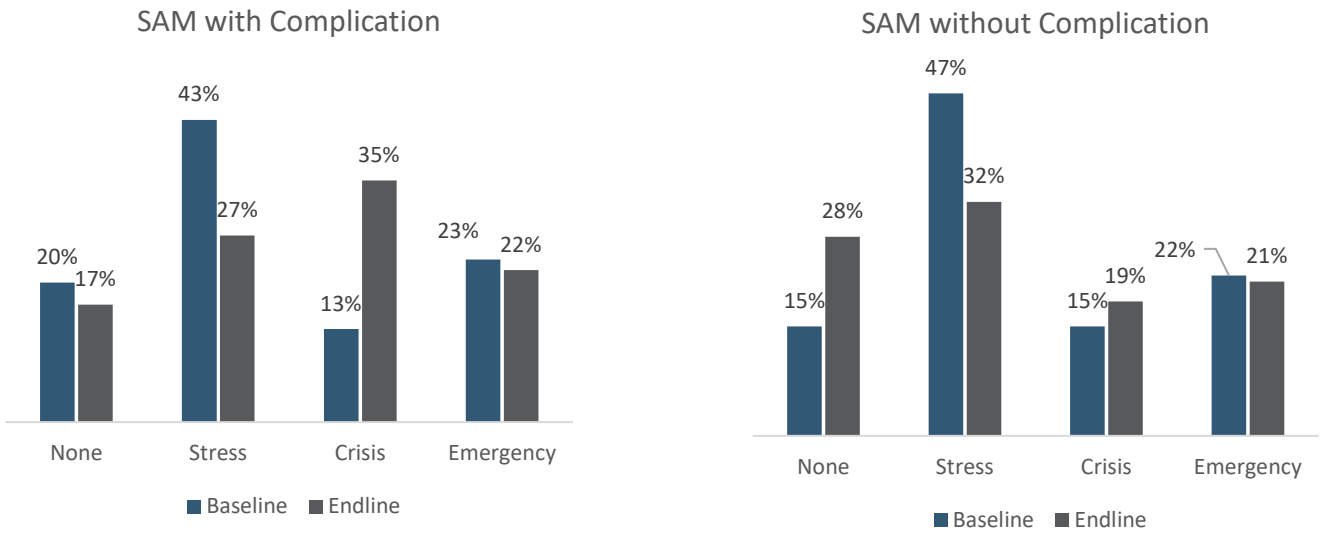
[28] HDDS was collected only during the endline assessment.
[29] The average HDDS is classified as: ≤4 "low", ≥5 ≤ 6 "medium" and >6 "high".

likely associated with higher financial strain, increased medical expenses, and reliance on negative coping mechanisms

Livelihood Coping Strategies Index (LCSI)[30]

The LCSI is an indicator used to understand the medium and long-term coping capacity of HHs in response to a lack of food or money to buy food and their ability to overcome challenges in the future. The indicator is derived from a series of questions regarding the HHs' experiences with livelihood stress and asset depletion to cope with food shortages.[31] Low average LCSI values are desired; low values show a better food security situation within the assessed HHs. The LCSI Stress category includes: selling HH assets/goods, purchasing food on credit or borrowing food, spending savings and selling more animals while the crisis category comprises selling productive assets or means of transport, selling productive and non-productive animals, consuming the seed stocks held for the next harvest, withdrawing children from school and reducing health and education expenditures and the emergency category comprises of selling house or land, begging, selling the last female animal and livelihood activities terminated (entire HH has migrated in the last 6 months or plans to migrate to the new area within the next 6 months).

Figure 11: LCS category by beneficiary households by group



At Baseline, SAM without complications households were slightly more resilient, with 15% not using any coping strategies compared to 20% among SAM with complications households. After MPCA, the number of households that did not resort to any coping strategies rose to 28% in the SAM without complications group, while it slightly declined from 20% to 17% among SAM with complications households. Households with complications saw a sharp increase in crisis coping strategies, from 13% to 35%, whereas SAM without complications households experienced a smaller increase from 15% to 19%.

The persistence of emergency and crisis coping strategies among SAM with complications households suggests that MPCA, while helpful, was not sufficient to stabilize their livelihoods fully, indicating the need for complementary interventions.

[30] LCSI scores are used to classify households into the categories of 'stress', 'crisis', and 'emergency'. Those households who do not report having employed any of the coping strategies considered within the LCSI are classified as 'none'. All livelihoods-based coping strategies employed by households in the previous 30-day period were reported on. For analytical purposes, however, each household's LCSI severity was classified based on the most severe coping strategy employed in the 30 days prior to data collection. Whether a household had already exhausted a particular coping strategy and could no longer continue to employ it was also considered.
[31] Read more here.

Triangulating these findings with qualitative insights from the 12 KIs highlights the critical role of MPCA in reducing financial stress and improving food security. A majority of KIs emphasized that cash assistance reduces economic pressure, allowing caregivers to prioritize treatment adherence instead of worrying about daily survival. Some KIs noted that caregivers can now afford high-nutrient foods, supporting long-term health and recovery for children with SAM. Additionally, most KIs observed a shift in health-seeking behavior, where households receiving MPCA seek medical care earlier, preventing complications and improving overall health outcomes.

Beyond financial relief, MPCA has also influenced household dynamics and community trust in healthcare services. Some KIs reported a shift in caregiving roles, where fathers are more involved in household responsibilities, allowing mothers to stay at SCs with their children for the full course of treatment. Moreover, more households are utilizing stabilization centers after learning about MPCA-supported services, indicating growing trust in healthcare facilities. These findings highlight the importance of integrating MPCA with long-term food security and health interventions to enhance household resilience and break the cycle of severe coping strategies.

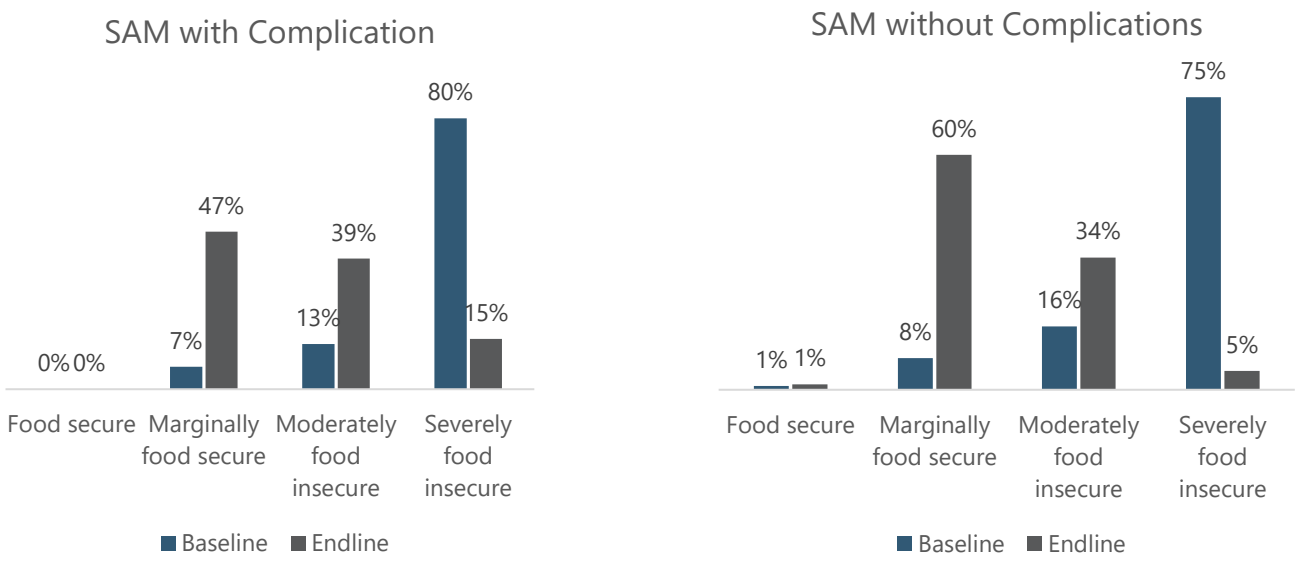
Consolidated Approach to Reporting Indicators (CARI) Index[32]

CARI analyses primary data from a single household survey and classifies individual households according to their level of food security. The approach culminates in a food security console which supports the reporting and combining of food security indicators systematically and transparently, using information collected in a typical food security assessment. Central to the approach is an explicit classification of households into four descriptive groups: Food Secure, Marginally Food Secure, Moderately Food Insecure, and Severely Food Insecure. The classification provides a representative estimate of food security within the target population whether it is calculated at the national, district, regional or livelihood zone level.

From Figure 12 below, the CARI Food Security Index findings indicate that food insecurity was a critical issue, particularly for households dealing with and without SAM complications. At Baseline, severe food insecurity was prevalent, affecting 80% of SAM with complications households and 75% of SAM without complications households.

[32] HHs are classified as food secure if they are able to meet essential food and non-food needs without depletion of assets or marginally food secure if they have a minimally adequate food consumption, but are unable to afford some essential non-food expenditures without depletion of assets or moderately food insecure if they have food consumption gaps, or, marginally able to meet minimum food needs only with accelerated depletion of livelihood assets and severely food insecure if they have huge food consumption gaps, or extreme loss of livelihood assets that will lead to large food consumption gaps. More information can be obtained here.

Figure 12: CARI Food Security Index by beneficiary households by group



After three cycles of MPCA, severe food insecurity declined to 15% among SAM with complications (Group 2) households and to just 5% among SAM without complications (Group 1) households. Meanwhile, marginal food security increased from 7% to 46% among SAM with complications households, and from 8% to 60% among SAM without complications households, indicating improved resilience. Despite these improvements, no households reached full food security, suggesting that while MPCA mitigated food insecurity, additional support mechanisms may be required for full stabilization.

Beyond food security, 8 out of 12 KIs emphasized that MPCA improved healthcare-seeking behavior, as more caregivers were able to seek medical attention earlier, preventing complications that could worsen their child's condition. Furthermore, 6 out of 12 KIs observed a growing demand for psychosocial support services, particularly counselling for caregivers who were previously overwhelmed by financial stress. The financial relief provided by MPCA allowed caregivers to focus on their children's recovery while also addressing their emotional well-being, further enhancing treatment adherence and long-term health outcomes.

Findings show that MPCA enhanced households' liquidity, enabling beneficiary households to prioritize food access leading to better FCS scores and reducing debt burden. Beneficiary households without complications achieved progress in financial stability and food security, underscoring the program's effectiveness in contexts with fewer health-related burdens. In addition, the rise in medical spending among households with SAM complications illustrates a systematic challenge: Cash transfer alone cannot fully offset the financial strain of managing severe health conditions. These households remained trapped in a cycle where health costs diverted resources from food and debt repayment, perpetuating vulnerability.

In conclusion, while MPCA contributed to significant improvements in food security, households with complications remained more vulnerable with 15% still severely food insecure at endline compared to just 5% among those without complications. The household continued reliance on severe coping mechanisms (27% rCSI), crisis-level livelihood strategies (35% LCS), and lower dietary diversity highlights the lasting impact of medical costs on food security. In contrast, households without complications leveraged MPCA more effectively, achieving better food access, improved livelihood stability, and greater overall resilience.

PROTECTION INDEX SCORE

The Protection Index Score[33] serves as a proxy indicator for the percentage of beneficiary households reporting that humanitarian assistance is delivered in a "safe, accessible, accountable, and participatory manner".[34] At the Baseline, 79% of households with children affected by SAM, both with and without complications, reported positive experiences aligned with these protection principles. However, by the endline assessment, the score declined to 71% for both groups. This decrease coincided with some gaps in accountability and participation, particularly in how households engaged with compliants mechanisms and were consulted about their needs. A gap was the underutilization of Compliant and Response Mechanisms (CRM). Only 10% of households having SAM with complications and 13% of those without complications reported raising concerns about the assistance provided by the NGO (Concern). Satisfaction with CRM outcomes varied between two groups. While all households with SAM without complications who raised concerns were satisfied with the response, only 40% of those with SAM with complications felt similarly. This disparity suggests that households facing compounded medical challenges encountered systemic barriers in resolving their serious issues, potentially related to insufficient support or resource limitations for their issue.

Among dissatisfied or partially satisfied households (10% of household with SAM with complications), fear of retaliation surfaced, with some worrying that voicing concerns might limit their access to future cash assistance (n=5). Others lacked awareness of how to navigate compliant mechanisms or contact the NGO directly (n=18). Notably, a majority reported having no complaints at all, though this could reflect resignation or a normalization of issues rather than satisfaction (n=69).

Gaps in participation were also raised. By the endline, 40% of households with SAM without complications and 5% of those with complications felt their needs ad been adequately consulted during program design. This clear differences reflects a poor system in involving beneficiaries during the design phase of the program, especially those having complex health burdens.

Despite these challenges, the findings also highlighted some strength, all households from both groups reported being treated with respect during program activities such as registration and surveys.

STABILIZATION CENTERS (SCs) CHALLENGES

The SCs face significant challenges in managing SAM cases. A majority of key informants highlighted that infrastructure limitations—such as the lack of intensive care unit (ICU) units and essential medical supplies propose major barriers to effective treatment. Overcrowding remains a pressing issue, especially at Banadir Hospital, where an increasing number of SAM cases strain available resources. Staffing shortages were also raised as a concern, requiring the reallocation of medical personnel to meet patient demand.

[33] The Protection Index Score is calculated according to the DG ECHO Protection Mainstreaming Guidance document provided by the Somali Cash Consortium.
[34] This score measures the % of beneficiary households giving a positive answer [at least one positive answer? Or answering positively to all questions?] to the following seven questions:

- Do you know of anyone in your community having been consulted by the NGO on what your needs are and how the NGO can best help?
- Was the cash assistance you received appropriate to your needs or those of members of your community?
- Do you feel safe when going through this programme's selection process, surveys, and accessing your cash?
- Did you feel you were treated with respect by NGO staff during the intervention so far?
- During the selection process, do you think there were households that were unfairly selected for cash distributions over other households more in need?
- Have you or anyone you know in your community ever raised any concerns on the assistance you received to the NGO using one of the above mechanisms?
- If yes, are you satisfied with the response you have received?

'Yes' is considered a positive response to all questions, except for question 5, for which a positive response would be a 'no' answer.

Beyond infrastructure, financial constraints affect both facilities and caregivers. A few informants noted that many caregivers struggle to afford transport and other costs associated with hospital stays, leading some to default on treatment before completing the full recovery process. Additionally, referral mechanisms remain inefficient, with delays in admitting children worsening their health outcomes. Some caregivers also lack awareness of home treatment guidelines, resulting in non-adherence to medical recommendations, often leading to higher default rates and early termination of treatment. Poor referral systems and delays in seeking treatment were another key issue, with five KIs mentioning that late hospital arrivals increase health risks for children. Some caregivers, as noted by two KIs, also default on treatment due to dissatisfaction with services or lack of understanding of home treatment procedures.

> *"Due to the financial strains, households sometimes may not afford money to pay the Bajaj (Tuk Tuk) services to bring the children from rural areas."*
>
> ***Male KI, staff from Concern who worked in the Banadir Hospital SCs***

To improve the quality of care at SCs, informants suggested investing in medical infrastructure, particularly by expanding ICU units and ensuring a steady supply of essential medications. Strengthening referral pathways and increasing community awareness about early treatment were also highlighted as necessary improvements.

The surge of SAM cases has led to overcrowding in SCs, with a few (3 out of 12) KIs noting that this has resulted in shortages of beds, medical supplies, and trained personnel to manage the growing caseload. The demand for healthcare workers has also increased significantly, as highlighted by more than half of the (7 out of 12) KIs, who emphasized the need for staff reallocation and additional personnel to meet the rising number of patients.

> *"Some facilities have been forced to reassign staff from other departments, which has impacted on the overall service efficiency"*
>
> ***Female KI, from Concern who worked in health and nutrition programmes.***

To address critical cases, a few KIs (5 out of 12 KIs) reported that healthcare facilities have implemented triage systems[35] to prioritize children with severe complications, ensuring they receive immediate care. However, other KIs (4 out of 12 KIs) pointed out that extended hospital stays and discharge delays have become a significant issue, with some caregivers hesitating to leave the SCs in the hope of receiving continued financial and nutritional support. This has resulted in prolonged hospital stays, further limiting bed availability for new admissions. Additionally, the increased demand for medical equipment and ICU facilities remains a pressing challenge, as noted by almost half of the KIs (5 out of 12 KIs).

Measures implemented to the SCs

The facilities have implemented several strategies to manage the increasing patient load effectively. To address overcrowding, a few KIs (3 out of 12 KIs) reported that the SCs have restructured patient flow by allocating more beds and treatment areas specifically for children affected by SAM with complications. Additionally, slightly more KIs (4 out of 12 KIs) highlighted the adoption of phased treatment models. In these models, stable children transition from intensive care to outpatient therapeutic programs (OTPs), which helps free up space for new admissions.

Improved referral pathways have also been a necessary adaptation. Half of the KIs emphasized the importance of enhancing coordination with other health facilities to ensure the smooth transfer of critical cases (SAM with complications, etc.). Furthermore, almost half of KIs noted that Community Health Workers (CHWs) have been mobilized to assist with patient monitoring, early detection of SAM, and follow-up care to prevent unnecessary hospital readmissions.

[35] The triage system is a patient prioritization method used in healthcare to assess and classify individuals based on the severity of their condition. It ensures that critical cases receive immediate care while less urgent cases wait in order of priority. system optimizes resource allocation, reduces emergency room overcrowding, and enhances patient survival outcomes.

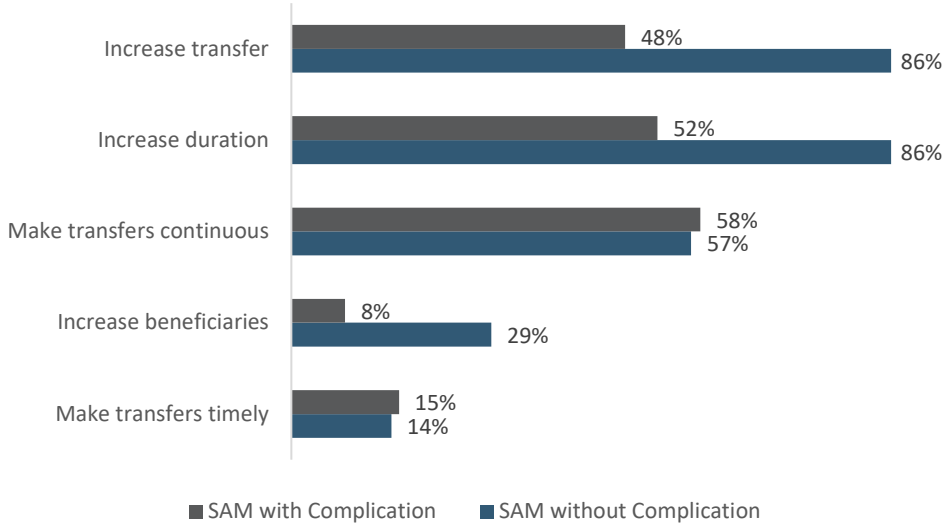
These adaptive measures have been instrumental in improving patient management and maintaining service delivery despite ongoing challenges. The restructuring of patient flow, phased treatment models, enhanced referral pathways, and mobilization of CHWs collectively contribute to a more efficient and effective healthcare system. These efforts not only alleviate the immediate pressure on facilities but also ensure that children receive timely and appropriate care, ultimately leading to better health outcomes.

Recommendations raised by MPCA beneficiary households

> *"SCC and Caafimad Plus[1] are doing well in the referral pathway, this can get to the nutrition cluster"*
>
> ***Female KI, from Concern who worked in health and nutrition programmes.***

- Most KIs and beneficiary households recommended extending the MPCA duration from three to five cycles and making cash transfers continuous to ensure families have adequate financial support during and after treatment.
- Several KIs emphasized the importance of integrating nutrition education with cash assistance programs to support households maintain healthy dietary habits during and after the cash transfers end.
- A few KIs (5/12) highlighted the need for better coordination between healthcare service providers and partners providing MPCA, suggesting that aligning these interventions would improve treatment adherence and reduce relapses.
- Enhance community outreach and health education was recommended by a majority of the KIs, with a focus on health education and establishing follow-up mechanisms with the caregivers to support continued treatment adherence to treatment even after leaving the SCs.
- To address overcrowding at stabilization centers, informants recommended increasing bed capacity, reallocating medical staff, and enhancing triage systems to prioritize critical cases. Strengthening partnerships with community health workers could also improve early identification and referral of at-risk children.

Figure 13: Recommendations flagged by beneficiary households during the endline, by group



CONCLUSION

The Deynile Nutrition Study underscores the transformative short-term impacts of MPCA on beneficiary households managing SAM with and without complications. Post-MPCA, households with SAM-complicated children shifted markedly toward humanitarian assistance as their primary income source (65% endline vs. 23% Baseline), reducing reliance on casual wage labour (75% vs. 80%). Conversely, households without complications diversified income streams, halving dependence on casual labour (34% vs. 76%) while increasing humanitarian aid uptake (38% vs. 15%). Both groups saw growth in business and farm labour participation (23% vs. 0% for SAM with complications; 8% vs. 4% without), **reflecting MPCA's role in stabilizing livelihoods.**

Expenditure patterns diverged sharply. **Beneficiary households without complications prioritized food security, doubling food spending (**94.30$ vs. 42.73$ Baseline), **while those with complications allocated significantly more to medical expenses** (18.25$ vs. 6.63$ Baseline), **highlighting the financial strain of managing SAM-related health issues**. Debt repayment surged in both groups (32.02$ vs. 14.13$ for non-complications; 23.58$ vs. 13.50$ for complications), signalling improved financial capacity. **However, households with complications spent 25% less on food than non-complication households** (75.08$ vs. 94.30$), **prioritizing urgent medical needs.**

Food security indicators revealed some disparities. Beneficiary households without complications achieved 98% HDDS post-MPCA, compared to 84% for those with complications. The FCS improved, with "acceptable" FCS rising to 87% (non-complications) vs. 78% (complications). The rCSI showed heightened reliance on severe coping mechanisms among households with complications (27% high rCSI vs. 22% low rCSI for non-complications), **underscoring persistent vulnerabilities.**

Qualitative insights from majority of KIs emphasized MPCA's important role in alleviating financial stress and enabling access to nutrient-dense foods, critical for child recovery. Caregivers redirected savings to essential needs (e.g., school fees, clothing), fostering long-term stability. Stakeholders noted reduced strain on stabilization centres, linking cash support to fewer relapses and improved default rates.

Overall, **MPCA strengthened food security, stabilized livelihoods, and mitigated acute financial pressures, particularly for households navigating SAM complications**. The convergence of quantitative and qualitative data underscores the intervention's adaptability in addressing basic and nutritional needs, offering a scalable model for balancing immediate relief with sustainable recovery in crisis-affected settings.

Annex 1 : Statistical Inferences

Wilcoxon and Chi-Square tests.