



Case study

Managing children with moderate acute malnutrition through the Tom Brown program in Northeast Nigeria

November 2024



Save the Children

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Acronyms

| | |
|-------|--|
| BHA | Bureau for Humanitarian Assistance |
| CTR | Cash-transfer ratio |
| CVA | Cash & voucher assistance |
| FBF | Fortified blended food |
| FGD | Focus group discussion |
| FMOH | Nigerian Federal Ministry of Health |
| IMAM | Integrated management of acute malnutrition |
| IYCF | Infant & young child feeding |
| KII | Key informant interview |
| LGA | Local government area |
| MAM | Moderate acute malnutrition |
| MMC | Maiduguri Metropolitan Council |
| MUAC | Mid-upper arm circumference |
| NE | Northeast |
| NGN | Nigerian Naira |
| PDM | Post-distribution monitoring |
| PPP | Purchasing power parity |
| RUSF | Ready-to-use food |
| TSFP | Targeted supplementary feeding program |
| USAID | United States Agency for International Development |
| USD | United States Dollar |
| WASH | Water, sanitation, and hygiene |
| WHZ | Weight-for-height z-score |

Introduction

Since 2009, the BAY states of Northeast (NE) Nigeria—comprised of Adamawa, Borno, and Yobe states—have been negatively affected by a protracted conflict, due to an insurgency led by non-state armed groups. This has led to significant displacement and food insecurity. The conflict compounded by economic instability with severe currency destabilization has contributed to high rates of acute malnutrition among children 6-59 months, with a global acute malnutrition prevalence of 6.7% in Borno and 32.9% in Yobe (Unicef 2024). Save the Children has been supporting the Nigerian government with the assistance of the United States Agency for International Development's (USAID's) Bureau for Humanitarian Assistance (BHA) through multi-purpose cash assistance programming, including food assistance with supplementary nutrition interventions in Borno state since 2016 (previously under Food for Peace until 2020) and Yobe state since 2023. Within this programming, Save the Children implements nutrition activities aimed at preventing and treating acute malnutrition among children 0-59 months.

In 2020, Save the Children began implementing the Tom Brown targeted supplementary feeding program (TSFP) in four local government areas (LGAs) of Borno state (Maiduguri Metropolitan Council [MMC], Jere, Mafa, and Konduga) to fill critical gaps in treatment coverage for children 6-59 months with moderate acute malnutrition (MAM). A 2019 report found that coverage of treatment for children 6-59 months with MAM in Borno was poor (30%), with significant supply chain challenges affecting the availability of commercially-manufactured nutrition supplements (e.g. ready-to-use supplementary food [RUSF], fortified blended food [FBF]). Because the Tom Brown program utilizes locally produced foods that are accessible at local markets rather than a manufactured nutrition supplement, it was seen as a way to improve treatment coverage for MAM children, while also supporting local markets.

The aim of this case study is to contribute to the evidence base around Tom Brown programming and discuss lessons learned.

Overview of Tom Brown programming at Save the Children Nigeria

The Tom Brown TSFP at Save the Children Nigeria is designed to treat children 6-59 months of age with MAM (defined as weight-for-height z-score [WHZ] between <-2 and ≥-3 SD and/or a mid-upper arm circumference [MUAC] 115- <125 mm) without complications and prevent their deterioration to severe acute malnutrition (SAM). Program activities are integrated within Nigeria's Integrated Management of Acute Malnutrition (IMAM) platform. Demonstrating the Nigeria Federal Ministry of Health's (FMOHs) commitment to this programming, the Tom Brown TSFP is included in Nigeria's National Guidelines for Integrated Management of Acute Malnutrition (Nigeria Federal Ministry of Health, 2022) as a recommended treatment option for children 6-59 months with MAM.

Program design

The program utilizes Tom Brown powder, which is a supplement made from nutritious, locally-available and -sourced ingredients and typically served as a porridge. The powder is comprised of roasted grains (e.g. millet, sorghum, and/or maize), soya beans, groundnuts, and cloves for flavouring. Additional spices or other ingredients may be added to enhance its flavour and/or nutritional content. Tom Brown is intended to serve as a supplement to the child's diet, rather than a replacement.

The Tom Brown program uses a community-based support group model to deliver its activities, with 10-12 caregivers of children 6-59 months with MAM enrolled in each group. Each group is facilitated by a lead mother, who is trained by Save the Children in IMAM, infant and young



Photo credit: Save the Children Nigeria

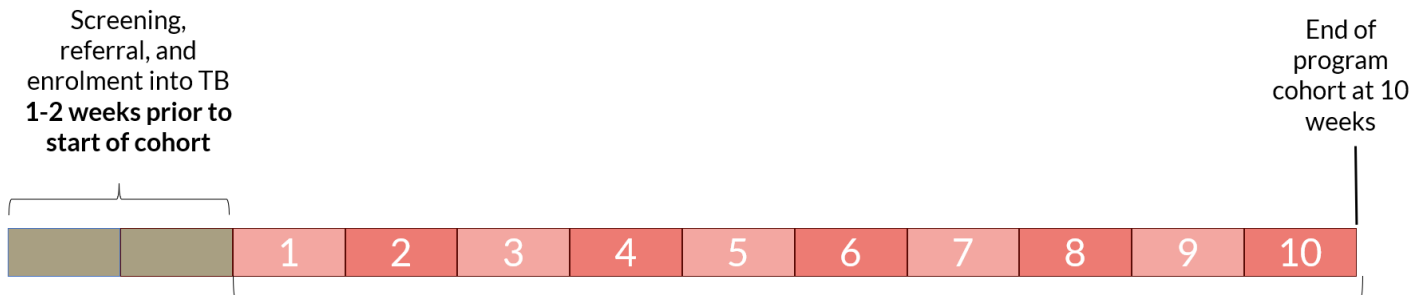
child feeding (IYCF), and Tom Brown. The enrolment cycle for a Tom Brown group is 10 weeks in duration, and the Tom Brown support package includes:

1. Community-based screening and referrals;
2. Ten weeks of supplemental feeding with the Tom Brown powder;
3. Hands-on education on how to prepare the Tom Brown powder;
4. IYCF counselling;
5. Weekly MUAC monitoring and re-assessments of the enrolled child;
6. Support group meetings; and
7. Referrals to other services, including health, nutrition, food security & livelihoods, and WASH.

For the procurement of the ingredients needed to produce the Tom Brown powder, Save the Children utilizes a cash and voucher assistance (CVA) delivery modality. The lead mothers receive an electronic commodity voucher (e-voucher) for use at local markets. This type of voucher restricts the quantity and quality of specified goods to items needed to be purchased for Tom Brown. Additionally, the lead mothers receive cash to cover their transportation costs to and from the market and are provided with cooking utensils needed for the processing of Tom Brown powder and its preparation.

Each Tom Brown cohort cycle starts with screening and referrals, which are conducted over the course of 1-2 weeks prior to the start of each Tom Brown group (See Figure 1). Each week for the 10-week enrolment cycle, Save the Children provides the lead mothers with e-vouchers to procure the Tom Brown ingredients; Tom Brown group meetings are held; the enrolled caregivers facilitated by the lead mothers process together the Tom Brown ingredients and receive the Tom Brown powder; the enrolled children receive MUAC measurements and re-assessments; and the enrolled caregivers receive IYCF counselling.

Figure 1. Tom Brown Cohort Cycle



10 week cohort cycle with weekly:

- Voucher delivery (to group facilitators)
- Tom Brown group meetings
- Tom Brown ingredients processing and provision to caregivers
- MUAC measurements and re-assessment
- IYCF counseling

Lead mothers undergo a 3-day training on Tom Brown—which also includes topics on IYCF and IMAM, in addition to the Tom Brown program—to equip them with the skills to carry out Tom Brown group activities. They also

receive supportive supervision and routine mentoring by community mobilizers and nutrition officers.

Responsibilities of the lead mother include:

- Procuring Tom Brown commodities each week at the market and transporting them to the support group site
- Providing hands-on education to enrolled mothers/caregivers about how to prepare the Tom Brown powder
- Facilitating support group meetings with enrolled mothers/caregivers
- Providing IYCF counselling to enrolled mothers/caregivers
- Conducting weekly nutritional re-assessments with MUAC measurements for enrolled children
- Recording and submitting all Tom Brown enrolment and outcomes data for program monitoring

Lead mothers are chosen by community nutrition mobilizers in collaboration with the nutrition officers and community leaders. A lead mother must be a well-respected member of her community, including by community leadership. Additionally, lead mothers should:

- Be within reproductive age (15-49 years)
- Be able and willing to participate in a 3-day training for lead mothers
- Be able and willing to voluntarily lead groups of 12 caregivers for 10 weeks at a time at her home compound
- Be interested in supporting the health and nutrition outcomes of her community
- Have access to water at her home
- Be able to travel to the local market(s) to purchase Tom Brown powder ingredients
- Be able to conduct home visits for participants enrolled in the Tom Brown program

Tom Brown Program Adaptations

Since starting Tom Brown implementation, Save the Children Nigeria has made some program adaptations to strengthen its programming. The two notable program adaptations are described below.

Increase in enrolment cycle duration

When Save the Children Nigeria began implementing Tom Brown, an 8-week enrolment cycle was used. However, due to concerns over suboptimal rates of relapse and progression from MAM to SAM, Save the Children Nigeria increased its enrolment cycle to 10 weeks in November 2022 with the hope of improving recovery rates. Comparison of nutrition outcomes between the 8-week vs 10-week enrolment cycle durations will be discussed in the Findings section of this report.

Change in delivery modality of Tom Brown ingredients

Save the Children Nigeria initially used an in-kind delivery modality for Tom Brown ingredients. Although the program was procuring ingredients for the Tom Brown powder locally and contributing to local markets, there were concerns over the financial and operational efficiencies of the in-kind delivery modality. The in-kind modality for Tom Brown programming required significant support from, and budget for, Save the Children operations teams, including the logistics, supply chain, fleet management, and warehouse teams to procure, store, and distribute the commodities.

Under the in-kind delivery modality for Tom Brown, Save the Children's logistics team led supplier identification, vetted the suppliers per Save the Children policy, and coordinated with suppliers to directly deliver the commodities to the Save the Children rented warehouse. Save the Children did not utilize framework agreements with suppliers, but the agency directly procured the commodities from selected suppliers and then led the contracting process for selected suppliers to deliver the commodities to Save the Children's warehouse. Through the course of the project Save the Children did not record any delays in supplier delivery.

Suppliers were assessed and chosen based on whether they could provide commodities that met the nutritional and quality standards set forth by the humanitarian nutrition cluster. During supplier/vendor identification, commodity samples were provided to the supply chain and nutrition team, and the nutrition team reviewed the commodities against minimum quality standards. This quality review happened during contracting and also during intake of goods following delivery.

For storage of Tom Brown ingredients, Save the Children utilized a rented, temperature-controlled warehouse. Save the Children takes the warehouse rent across all projects in Borno and charges proportionally across the projects based on storage needs for each project. Save the Children, in line with the Nutrition Cluster recommendations utilized the Action Contre la Faim (ACF) International food storage procedures and protocols for Tom Brown commodities. In order to mitigate waste and spoilage, Save the Children's warehouse team treated the commodities as sensitive commodities. Extra care included:

- Maintaining the warehouse temperature within a specific range with use of temperature logs
- Limiting exposure to weather (excessive heat/moisture)
- Limiting the total duration the commodities sat in the warehouse and the dispatch timeframe to just 2-3 days. Save the Children ensured that commodities were received from suppliers, processed for intake and quality control in line with ACF's food storage procedures, dispatched to the distribution site, and distributed to program participants in 2-3 days.
- Limiting dispatch quantity: To avoid commodities sitting outside in high temperatures, distribution/dispatch sizes were purposely limited to smaller quantities.

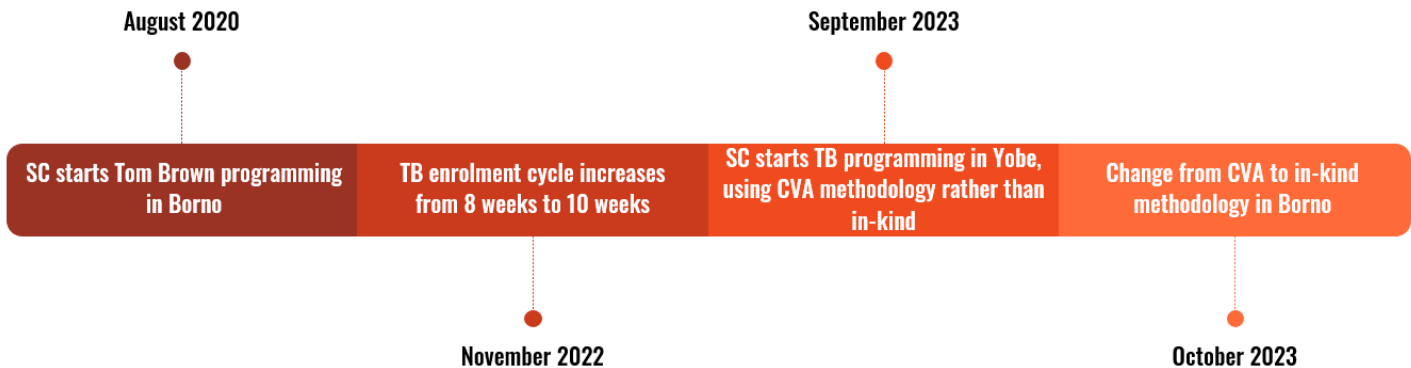
To address concerns over the operational inefficiencies of Tom Brown commodity procurement, storage, and distribution and related costs, Save the Children Nigeria, in September 2023, changed from an in-kind provision of Tom Brown ingredients to using CVA. The lead mothers receive an e-voucher for purchase of the ingredients at local markets and cash to cover the costs of transportation to and from the market. When Save the Children transitioned to using CVA for Tom Brown ingredients, Save the Children's CVA, supply chain, and nutrition teams coordinated to vet vendors who were identified as having the required commodities at the quality standards needed and with the technical capacity to receive e-voucher payments in their stores. Once suppliers were identified and vetted, Save the Children's supply chain team led the vendor contracting process.

A financial analysis comparing the cost-efficiency between the in-kind vs CVA modalities is discussed in the Findings section. Qualitative data from focus group discussions (FGDs) and post-distribution monitoring (PDM) data to assess the operational effects of this change in modality and any effects on the lead mothers are also included in the Findings section.

Timeline of Tom Brown implementation

A timeline of Tom Brown implementation can be visualized in Figure 2.

Figure 2. Timeline of Tom Brown Implementation



Study Purpose

The purpose of this study was to better understand the effects of Save the Children's two main Tom Brown program adaptations— 1) increased cohort cycle duration from 8 weeks to 10 weeks; and 2) change in delivery modality from in-kind to CVA—on nutrition outcomes and cost and operational efficiencies, respectively. Additionally, Save the Children sought to understand perceptions of and experiences with Tom Brown by the households it supports and whether there were any intended negative effects of changing from in-kind to CVA on the lead mothers. Specifically, Save the Children sought to answer the following study questions:

1. Does the 10-week cycle of Tom Brown improve child outcomes compared to the 8-week enrolment: (recovery, non-recovery, relapse, progression to SAM)?
2. Which delivery modality is more cost-efficient for implementing Tom Brown at Save the Children: in-kind or CVA?
3. How are lead mothers affected by the transition from the in-kind delivery modality of Tom Brown commodities to providing CVA to the lead mothers to procure the commodities?
4. What are the perceptions and experiences of enrolled mothers/caregivers of Tom Brown?
5. What are male household members' (spouses/fathers/heads of household) perceptions of the Tom Brown program as mothers dedicate time on a weekly basis to this intervention?
6. How does the change from in-kind to CVA affect warehouse and logistics teams at Save the Children?

Save the Children will use the evidence generated from this study to help inform and strengthen its Tom Brown programming in NE Nigeria. Additionally, these findings will be shared with the Nutrition Cluster, the FMOH, and implementing partners working in NE Nigeria to help guide future policies and implementation of Tom Brown in NE Nigeria. Furthermore, this study aims to contribute to the evidence base around Tom Brown as an alternative solution to managing MAM using local, sustainable ingredients to support the design and implementation of Tom Brown in other emergency and/or development contexts where the raw ingredients are available.

Methodology & Limitations

Study design & data analysis

To address the various study questions, this study used multiple methodologies. These included the analysis of routine quantitative program data/nutrition outcomes, a cost-efficiency analysis of financial program data, and

analysis of post-distribution monitoring (PDM) surveys, focus group discussions (FGDs) and key informant interviews (KIIs). Table 1 shows the data collection tools used to answer each study question.

Table 1: Data collection tools, by study question

| Study Questions | | Data Collection Tool |
|------------------------|--|--|
| 1 | Does the 10-week cycle of Tom Brown improve child outcomes compared to the 8-week enrolment: (recovery, non-recovery, relapse, progression to SAM)? | Routine monitoring data collection tool: Registration forms and indicator performance tracking tables. |
| 2 | Which delivery modality is more cost-efficient for implementing Tom Brown at Save the Children: in-kind or CVA? | Cost-efficiency analysis using Agresso general ledger transaction lists, KIIs with Save the Children Nigeria staff |
| 3 | How are lead mothers affected by the transition from the in-kind delivery modality of Tom Brown commodities to providing CVA to the lead mothers to procure the commodities? | KIIs |
| 4 | What are the perceptions and experiences of enrolled mothers/caregivers of Tom Brown? | PDM survey data, FGDs |
| 5 | What are male household members' (spouses/fathers/heads of household) perceptions of the Tom Brown program as mothers dedicate time on a weekly basis to this intervention? | FGDs |
| 6 | How does the change from in-kind to CVA affect warehouse and logistics teams at Save the Children? | KII |

Nutrition outcomes comparison

To compare nutrition and child health outcomes between the 8-week vs 10-week cohort cycle, routine programmatic monitoring data was used, including patient registration forms, case management files, and indicator performance tracking tables. Nutrition and child health outcomes in Borno implementation sites for Tom Brown (MMC, Jere, Mafa, Konduga LGAs) were compared between August 2020–October 2021 (8-week cohort cycle; 1,477 children total) vs when the 10-week cohort was started in November 2021 through June 2024 (10,034 children total). The following nutrition outcomes were analyzed: rates of recovery, non-recovery, relapse, progression from MAM to SAM, death, default, and relocation. Although the primary comparison is between the 8-week vs 10-week cohort cycles in Borno, nutrition and child health outcomes data in Yobe (which started its programming using a 10-week cohort cycle) were also analyzed and are provided within the findings.

Cost Analysis

To conduct the analysis comparing the cost-efficiency between Tom Brown implementation using the in-kind vs CVA modality, data was compared between two separate programs—MMC/Jere program vs the Yobe program. When Save the Children began implementing Tom Brown in 2023, the CVA modality was used, while the MMC/Jere program had been implementing Tom Brown since 2020 using the in-kind modality. For the analysis, an 8-month reference period from both programs was used—from October 2022–May 2023 for MMC/Jere and from October 2023–May 2023 for Yobe. This 8-month period covered both the harvest and lean seasons, and the Save the Children Nigeria team felt that this period was adequate to capture the full cost of delivering Tom Brown to a cohort of beneficiaries. Using the same time of year mitigated the impact of any seasonal price fluctuations for staple food items in NE Nigeria on two projects which involved procuring large amounts of agricultural commodities from local markets.

Prior to conducting the cost analysis, a desk review of key program documents and KIIs with key program staff to clarify costs and program data were conducted. To conduct the analysis, cost data was gathered from the General Ledger Transaction List report from Save the Children's financial data management system (Agresso). Agresso converts any Nigerian Naira (NGN) denominated costs to the United States Dollar (USD) using the prevailing exchange rate at the time when that specific cost was incurred. Save the Children is a founding member of the Dioptra Systematic Cost Analysis Consortium¹. This costing study therefore uses the ingredients-based costing approach and standard cost category definitions of the Dioptra Consortium. This cost analysis attempted to provide a holistic cost estimate of delivering the program by including all major cost categories: direct program costs (the costs of program activities, staff and non-staff personnel, transport, materials, equipment, training, etc), shared costs (operating costs of the Save the Children Nigeria country office), and indirect costs (operating costs of Save the Children's global headquarters which contributed to the programs). Beneficiary reach data from programmatic indicator tracking tables and routine program monitoring data were also used for the analysis.

Both the Yobe and MMC/Jere Tom Brown activities were sub-components of broader multi-sectoral programs being implemented by Save the Children Nigeria in those communities. Therefore, a key challenge of the cost analysis was to distinguish the costs related specifically to Tom Brown from unrelated project costs for other activities and outcomes. For some of the main costs—including the CVA transfers, nutrition staff and community health workers, and the sub-award to local partner (Life Helpers) in Yobe—it was possible to discern their connection to Tom Brown directly from the financial coding of those items in the Agresso General Ledger. However, many other costs were not identifiable as Tom Brown related in the financial data, so this allocation had to be determined through percentage estimations based on feedback and data from the Save the Children Nigeria program team. For example, Tom Brown is a sub-activity within the broader IMAM programming being implemented by both programs. Therefore, IMAM-related costs which could not be directly attributed to Tom Brown were allocated to Tom Brown costs for the analysis based on the ratio of total IMAM beneficiaries to Tom Brown participants.

As part of the cost-efficiency analysis, the cost-per-child and cost-transfer-ratio (CTR) were estimated, and the cost drivers of Tom Brown implementation between the two programs were examined. The CTR is a standard cost efficiency measure for CVA programs which compares delivery costs with the value of the assistance delivered to project participants. In this case, the CTR is the cost of delivering each 1 USD worth of Tom Brown assistance to children. A lower CTR is therefore a sign of a program that more efficiently delivers assistance. Program design factors that may impact delivery costs were further explored.

Of note, one final factor affected the costing analysis. Nigeria has experienced significant currency volatility and devaluation of its NGN, particularly between 2023 and 2024. Namely, there were two large devaluations of the NGN with respect to the USD which occurred during the implementation period for the Yobe program within the cost analysis—one in June 2023 when the value of the NGN fell from 400 NGN per USD to 800 NGN per USD and one in January 2024 when the value of the NGN fell from 800 NGN per USD to 1600 NGN per USD. Essentially, during this time, the NGN fell to roughly 25% of its previous value over the course of just seven months. To enable a more realistic comparison of costs between the Yobe and MMC/Jere programs that was less affected by the currency devaluation, it was necessary to estimate the costs of the Yobe CVA Pilot in purchasing power parity (PPP) terms using the pre-devaluation NGN-USD exchange rate. In essence, this estimates the costs of the Yobe project as if it had been implemented in early 2023, at the same time as the other comparator projects were operational.

¹ The Dioptra Systematic Cost Analysis Consortium is a consortium program that uses Dioptra—a web-based costing application—to help program staff at humanitarian and development agencies to estimate the cost-efficiency of their programs, compare to benchmarks, and identify improvements.

Post-Distribution Monitoring (PDM)

The Save the Children Nigeria MEAL team conducted PDM surveys with enrolled mothers/caregivers and lead mothers. In addition to wanting to ensure that Tom Brown activities were being implemented as intended, the aim of the PDM surveys was to better understand the perceptions and experiences of using Tom Brown by enrolled caregivers and lead mothers. Data was collected through the PDM surveys using probability sampling. The PDM questionnaire was designed to capture various aspects of the Tom Brown intervention including:

1. Enrolled mothers' satisfaction/dissatisfaction levels with the Tom Brown activities and supplementation they received.
2. Lead mothers' experiences and perceptions of using the CVA modality compared to in-kind.
3. Perceptions and experiences with safety and security during program activities and procurement of Tom Brown commodities.
4. Community respondents' access to and effectiveness of participant feedback loops

The PDM survey was administered using Kobo Toolbox on Android tablet devices for data collection and entry/recording, and FGDs were conducted to complement the quantitative survey findings. The PDM used a two-stage cluster design as the sampling methodology. The first stage of sampling involved selection of the villages from a sampling frame of all targeted villages using systematic probability proportional-to-size sampling. The second stage of sampling included the selection of mothers from a sampling frame of all the mothers in the selected villages.

Save the Children surveyed 214 mothers, with 204 being enrolled mothers/caregivers and 10 being the lead mothers across seven villages in the Mafa and Konduga LGAs of Borno. PDM survey data collection occurred at four points in time during project implementation: February 2024 (n=67), March 2024 (n=13), April 2024 (n=76), July 2024 (n=58). PDM data was extracted from Kobo Collect into Excel, and data analysis occurred within Excel. Informed consent was integrated into the survey form and uploaded into Kobo. Participants were given the opportunity to virtually consent or not participate in the survey, with a guarantee that failure to participate would have no impact on their right to access programming or be considered for future programming.

The following ethical considerations were followed:

- **Informed consent:** The respondents were informed about the purpose, methods, and intended use of the PDM, as well as their rights to participate voluntarily, withdraw at any time, and refuse to answer any questions. Respondents were also assured of the confidentiality and anonymity of their responses and the protection of their data
- **Do no harm:** The team adhered to the principle of do no harm and avoid potential harm or risks to the respondents during the data collection. The interviews were conducted between 9 a.m. and 4 p.m., ensuring the enumerators' and respondents' safety and comfort in daylight. The team also ensured they did not create or exacerbate tensions or conflicts within or between communities or groups while conducting the exercise. The team respected the respondents' cultural and religious norms and values and avoided any offensive or insensitive questions or behaviors.
- **Beneficence:** The PDM survey aimed to benefit the respondents and their communities by providing them with relevant and valuable information, feedback mechanisms, and opportunities for participation. It also sought to improve the quality and effectiveness of the assistance provided and address any gaps or challenges identified by the respondents.
- **Accountability:** The team adhered to the standards and principles of humanitarian action, such as impartiality, neutrality, independence, and transparency. The PDM survey team also followed the ethical guidelines and codes of conduct of the organizations involved and ensured that the staff and volunteers were trained and supervised accordingly. The PDM survey team also reported and acted upon any complaints, concerns, or allegations from respondents or other stakeholders.

FGDs and KIIs

To further gain insights about the perceptions of and experiences with Tom Brown programming by lead mothers in general and understand how the change to the CVA modality may have affected them, KIIs were conducted with the lead mothers. FGDs were conducted with enrolled mothers/caregivers to better understand their perceptions of and experiences with the Tom Brown program. Lastly, FGDs were conducted with male heads of household with an enrolled mother-child pair in Tom Brown to understand how they view the Tom Brown program, particularly given the participation time that the program requires of their female partners. In three locations (Mushmiri Kura, Gwozari, and Mushmiri Gana) in Mafa and Konduga LGAs in Borno, 10 KIIs (10 lead mothers total), two FGDs with enrolled mothers/caregivers (20 enrolled mothers total), and two FGDs with male heads of household (20 male partners total) were conducted.

To better understand how the change from using the in-kind delivery modality to CVA for Tom Brown may have impacted Save the Children's logistics and warehouse teams, one KII was conducted with Save the Children's Borno Warehouse Manager, who was acting as Head of the Borno Field Office at the time of the interview.

In this study, purposive sampling was utilized to select lead mothers, enrolled mothers/caregivers, and male partner participants for the KIIs and FGDs. The selection was based on factors, such as their level of involvement in the program and demographic diversity. Semi-structured interviews were conducted to gather in-depth insights into their experiences and perceptions. The interviews were transcribed and analyzed using thematic analysis to identify key themes and patterns. Participants were informed about the study's objectives, their rights, and the confidentiality of their responses, and written consent was obtained. Thematic analysis was employed to identify, analyze, and report key themes within the data. This involved coding the transcribed interviews, identifying key themes, and interpreting the findings in relation to the research questions.

Digital and manual note-taking tools were used during interviews to minimize errors and ensure the accuracy of the data captured. Throughout the data collection period, a MEAL staff member was present in the field to supervise and provide real-time support to the data collectors. This oversight ensured strict adherence to the established methodology and allowed for immediate troubleshooting of any issues that arose. To maintain data quality, daily reviews of notes were conducted. This practice allowed for the early detection and correction of any inconsistencies or errors, ensuring the integrity of the data collected.

Limitations

This study had several limitations. First, the comparison of nutrition and child health outcomes between the 8-week vs 10-week cohort cycle used routine program monitoring data. Unlike with a controlled research trial, routine program monitoring data may be less exact. Additionally, given this was not a randomly-controlled trial, we had no control group or counterfactual for this analysis to provide more validity and statistical significance to the findings.

Second, the cost analysis focused on the costs of each project for the implementing agency. Therefore, while it did include costs of local partner organizations who were part of the programs' delivery, other societal costs, such as the costs to local government agencies and other stakeholders, are not considered. Additionally, the total children reached between the MMC/Jere and Yobe programs were very different, which could have an effect on the cost-per-child.

Finally, at the time of the study, the PDM data for Tom Brown was only collected with mothers in the Mafa and Konduga LGAs of Borno state and not in Yobe state or MMC/Jere LGAs. This limits the ability to analyze whether mothers have differing perspectives if they have always received CVA compared to those mothers that experienced the period of transitioning from commodity distribution to cash provision for the direct purchasing of commodities for Tom Brown. Additionally, it does not provide a complete picture across Save the Children's Tom Brown programming.

Findings

Study Question #1: Does the 10-week cycle of Tom Brown improve child outcomes compared to the 8-week enrolment: (recovery, non-recovery, relapse, progression to SAM)?

A total of 1,477 children 6-59 months with MAM and their mothers/caregivers were enrolled in an 8-week Tom Brown cohort in Save the Children-implemented Borno sites between August 2020 and October 2021, while 10,034 children with MAM and their mothers/caregivers were enrolled in a 10-week Tom Brown cohort in the same implementation sites in Borno. As shown in Table 2, notable improvements in nutrition outcomes were found with the 10-week cohort cycle as compared to the 8-week cohort in Borno, including: a 13% higher recovery rate (94% vs 83%), 52% lower deterioration from MAM to SAM (2.4% vs 5%), and a non-recovery rate that was more than six (6) times lower (1.5% vs 11%). Additionally, the relapse rate was considerably lower with the 10-week cohort compared to the 8-week cohort (<0.01% vs 2%).

Save the Children began implementing Tom Brown in Yobe in September 2023, using the 10-week cohort cycle. Between September 2023 and June 2024, a total of 8,559 children 6-59 months with MAM and their mothers/caregivers were enrolled in Tom Brown. As shown in Table 2, the recovery rates are quite high (99%), while the rates of non-recovery, relapse, and deterioration to SAM are notably low at 0.4%, 0%, and 0.2%, respectively. These outcomes are noticeably more positive than those from the Borno 10-week cycle cohort. However, it is likely that the reason for these improved outcomes in Yobe as compared to Borno is because, unlike for Borno, the data for Yobe does not cover the course of an entire year or capture a full lean season. NE Nigeria is highly impacted by lean vs harvest seasons, which greatly affect the food security and nutrition situation of its population. As such, it is anticipated that the data for Yobe over a full course of a year would show more similar outcomes to the Borno data.

The recovery rates from both Borno and Yobe well exceed the SPHERE minimum standards for management of MAM of >75%, and the death and default rates also fall below SPHERE's standards of <3%, and <15%, respectively (Sphere 2018). This demonstrates that Tom Brown is a suitable alternative to using commercially manufactured nutritional supplements (e.g. RUSF, FBF) for the management of children 6-59 months with MAM.

Of note, this comparison is looking at routine program data and is not from a randomly-controlled trial. Thus, there is no statistical significance, however, the data suggests positive and notable improvements in nutrition outcomes after the increase in duration to 10 weeks.

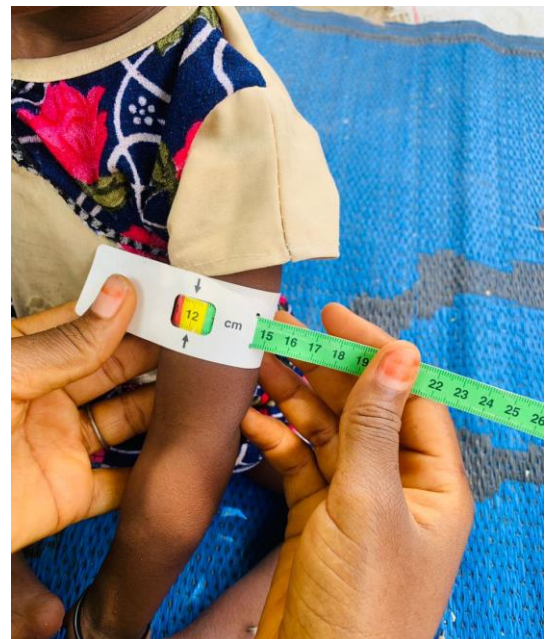


Photo credit: Save the Children Nigeria

Table 2. Nutrition outcomes of children 6-59 months in Tom Brown comparing 8-week vs 10-week cohort

| | Total children | Recovery | Non-recovery | Relapse | Deteriorated to SAM | Default | Death | Relocated |
|---|----------------|----------------|---------------|---------------|---------------------|--------------|----------------|---------------|
| Borno | | | | | | | | |
| 8 wk cycle (Aug 2020-Oct 2021) | 1,477 | 83% (1,246) | 11% (173) | 2% (31) | 5% (74) | 0.3% (5) | 0.3% (5) | 0.3% (5) |
| 10 wk cycle (Nov 2021-June 2024) | 10,034 | 94% (9,454) | 1.5% (153) | <0.01% (1) | 2.4% (248) | 0.5% (48) | <0.01% (10) | 1% (121) |
| Yobe | | | | | | | | |
| 10 wk cycle (Sept 2023-June 2024) | 8559 | 99% (8471) | 0.4% (37) | 0% (0) | 0.2% (13) | 0.4% (36) | <0.01% (1) | <0.01% (1) |

Study Question #2: Which delivery modality is more cost-efficient for implementing Tom Brown at Save the Children: in-kind or CVA?

In February 2024, Save the Children Nigeria commissioned a cost-efficiency analysis, in order to understand whether the costs of implementation of Tom Brown programming differed between the CVA delivery modality for Tom Brown ingredients vs the traditional in-kind delivery modality. The objectives of this study were to estimate and compare the cost-per-child, the CTR, and analyze the cost drivers for delivering Tom Brown using the in-kind vs CVA delivery modality.

Table 3 shows the relevant program information for the two programs compared in the cost analysis. A total of 962 children 6-59 months with MAM enrolled in Tom Brown in the MMC/Jere program, which used the in-kind delivery modality, during the timeframe of the cost analysis. During the timeframe of the cost analysis, 8,725 children with MAM enrolled in Tom Brown in the Yobe program, which used CVA.

Table 3. Program information for Tom Brown cost analysis

| | MMC/Jere In-kind Project | Yobe CVA project |
|---------------------------------|---|---|
| Delivery modality | In-kind assistance: Tom Brown ingredients delivered directly to lead mothers of each group | CVA assistance: CVA provided by Save the Children to Tom Brown lead mothers to procure Tom Brown ingredients at local markets |
| Start and end dates | October 2022 – May 2023 | October 2023 – May 2024 |
| Duration | 8 months | 8 months |
| Enrolment cycle duration | 10 weeks | 10 weeks |
| Total # children reached | 962 | 8,725 |
| Total # Tom Brown groups | 92 | 731 |
| Role of local partners | Tom Brown delivery, community outreach and malnutrition screenings by local partner NGO | CVA assistance was delivered directly by Save the Children Nigeria with local partner NGO supporting community outreach and malnutrition screenings |

MMC/Jere program (in-kind) costs: The total costs of the MMC/Jere in-kind program were \$354,523 to provide Tom Brown treatment to 962 children over the 8-month period. This amounted to an **average cost-per-child of \$369/child, equivalent to \$37/child per week of treatment** for a 10-week cohort cycle. Of this, the Tom Brown supplementation commodities accounted for \$134/child, or \$13.40/child per week or just 36% of the total delivery costs. The remaining 64% of delivery costs were primarily from management and supervision expenses (34%), indirect cost recovery (18%), and community outreach expenses (12%). The total CTR of the project was \$1.75 – this means that **the project incurred \$1.75 of delivery costs for every \$1 of Tom Brown supplementation that was delivered to the end beneficiaries.**

Yobe program (CVA) costs: After adjusting for PPP due to the severe NGN currency devaluation that occurred during the timeframe of the Yobe implementation, the project spent a total of \$458,202 to reach 8,725 children with Tom Brown services. This equates to an **average cost-per-child of \$239/child, or \$24/child per week** for the 10-week cohort cycle of the program. The Yobe project’s supplementation costs (Tom Brown commodities) amounted to \$130/child, or \$13/child per week. Breaking down the costs further, supplementation costs accounted for 53% of the total delivery costs, and the remaining 47% of delivery costs were primarily from management and supervision expenses (27%), indirect cost recovery (12%) and community outreach expenses (4%). The CTR for the Yobe program was \$0.87, which means that **the project has \$0.87 of delivery costs for every \$1 of Tom Brown supplementation that was delivered to the end beneficiaries.**

Table 4. Cost-per-child and CTR comparison for MMC/Jere and Yobe projects

| | Cost-per-child (per 10-week enrolment) | CTR (Cost transfer ratio) |
|---------------------------------|---|--------------------------------------|
| MMC/Jere In-kind Project | \$369 | \$1.75 |
| Yobe CVA project | \$239 | \$0.87 |

MMC/Jere (in-kind) vs Yobe (CVA) comparison: Table 4 shows the cost-per-child and CTR comparisons between the MMC/Jere and Yobe projects. The average **cost-per-child was 35% lower in the Yobe (CVA) program compared to the MMC/Jere (in-kind) program** (\$239/child in Yobe vs \$369/child in MMC/Jere per 10-week enrolment). In comparing the CTRs (the cost of delivering \$1 worth of Tom Brown supplementation to an enrolled child) between the two programs, the Yobe program using CVA had a CTR that was just half that of the MMC/Jere program using in-kind (\$0.87 for Yobe vs \$1.75 for MMC/Jere). This means that the Yobe program using the **CVA modality was half as costly as the MMC/Jere program using the in-kind modality.** This finding suggests that using CVA for Tom Brown commodities in NE Nigeria is significantly more cost-efficient than delivering the commodities in-kind.

The main drivers of these cost differences were the lower management and supervision costs of the Yobe CVA project when compared with the MMC in-kind program. This can likely be attributed to the decrease in management costs needed to support the commodity procurement, storage, and distribution processes. The supplementation (commodities) costs between the two programs were largely the same.

While the data suggests that the CVA delivery modality played a significant role in reducing the costs in Tom Brown implementation compared to in-kind, it is worth noting that the Yobe program had a significantly larger reach than the MMC/Jere program (8,725 vs 962 children reached). Given the role that increased reach plays in reducing the average cost-per-child across many intervention types, it is likely that reach did play a partial role in contributing to the lower costs of the Yobe CVA program. In addition to considering the use of CVA within Tom Brown programming, it is recommended that implementing partners also consider the potential to reach a larger scale when considering ways to improve cost-efficiency.

Study Question #3: How are lead mothers affected by the transition from the in-kind delivery modality of Tom Brown commodities to providing CVA to the lead mothers to procure the commodities?

In order to assess how lead mothers were affected by the transition from in-kind to the use of CVA for purchase of Tom Brown commodities, Save the Children interviewed 10 lead mothers using KIIs as well as the PDM survey. All (100%) of the lead mothers interviewed reported having facilitated Tom Brown groups both pre- and post-transition from in-kind to CVA. Two main themes arose from the interview and survey data regarding this study question: 1) lead mothers appreciated the increased autonomy to facilitate Tom Brown groups, and 2) an increase in time commitment was required to facilitate Tom Brown groups.

Increased autonomy to facilitate Tom Brown groups: When Save the Children transitioned from in-kind commodity distribution to CVA for commodities, it enabled lead mothers to access the pre-approved vendors to redeem their e-vouchers for commodities as their schedule allowed. Lead mothers were no longer bound by the commodity distribution schedules and the resulting requirement to schedule their Tom Brown support groups based on those schedules. Among lead mothers, a significant majority, 9 out of 10 respondents (90%), reported that a positive benefit of the CVA modality is the ability to coordinate independently with their Tom Brown support groups and have more autonomy over setting the schedules of support group meetings.

Time commitment required to facilitate Tom Brown groups increased: Despite the benefit of having more autonomy to facilitate their Tom Brown groups, lead mothers noted that there was an increase in the time commitment needed for Tom Brown after the change from in-kind to CVA. This includes time to travel to the market to redeem the voucher to purchase the commodities and transport them to the Tom Brown support group venue. One lead mother reported that the increase in time needed to redeem the voucher and transport the commodities impacted her responsibility to care for her own small children. Another lead mother reported that the change in delivery modality resulted in an increased responsibility in managing e-vouchers and reduced the ease of access to Tom Brown commodities. Out of the 10 lead mothers, only two (20%) reported that the transition improved convenience and control over Tom Brown commodities. This finding highlights a need to continue monitoring lead mothers' experiences within the Tom Brown program and to monitor their retention rates.

Study Question #4: What are the perceptions and experiences of enrolled mothers/caregivers of Tom Brown?

To gain an understanding of the perceptions and experiences of enrolled mothers/caregivers in Tom Brown, FGDs and the PDM survey were used. A total of 20 enrolled mothers/caregivers participated in two FGDs, and 204 enrolled mothers/caregivers completed the PDM survey.

Demographics: The large majority (77%) of respondents reported being an internally-displaced person, while 23% reported being from the host community, and one respondent self-classified as being a returnee. Most (78%) of mother/caregiver respondents reported being the spouse to the head of household, while 20% reported being the head of household, and the remainder reported being the child of or parent to the head of household, or other. The average household size of respondents was 8 individuals, with 78% of respondents having a household size with more than 8 individuals.

For most (81%) of the respondents surveyed, this was their first exposure to the Tom Brown program, and 19% of the surveyed mothers/caregivers had previously been enrolled in Tom Brown (either for another child in the family or the same child).

“Thank you for the Tom Brown, I am really grateful because my daughter is already recovering and gaining weight.” – mother in Gwozari Community in Mafa, Borno.

Perceptions of Save the Children: Respondents reported positive perceptions of Save the Children within their community, with 72% reporting a very positive perception, 23% a positive perception, and 5% reporting a neutral perception. There were no reports of dissatisfaction with Save the Children staff.

Perceptions and experiences of Tom Brown: Enrolled mothers/caregivers reported overwhelming satisfaction (99%) with the Tom Brown program. Respondents noted they appreciated various aspects of the program, including:

- The health and nutrition benefits for their child
- Social aspects of the support groups, including social cohesion and the ability to make new friends
- Learning about how to prepare the Tom Brown powder
- Nutrition counseling
- Receiving the Tom Brown powder
- Team work (to develop the Tom Brown powder)
- Community involvement

All respondents reported the selection process for enrolment in Tom Brown was fair, and 99% reported they were satisfied with the lead mothers selected for the program. When asked if this project caused any conflict or disagreements in the communities, 100% responded that the project caused no conflict or disagreements in the communities. Almost all (99%) respondents reported they felt the distribution process for the Tom Brown powder was transparent and well-communicated, with 100% of respondents stating that they received clear information about when the Tom Brown powder would be distributed, 100% stating they were informed where the support groups would meet, 99% reporting they were aware of the quantity of Tom Brown powder they would receive, and 94% were aware of the total duration of the Tom Brown enrolment duration.

Survey results reveal highly effective information dissemination mechanisms to inform enrolled mothers/caregivers about Tom Brown, with respondents expressing satisfaction with the consistency and transparency of the process.

This demonstrates that Save the Children used effective information dissemination mechanisms to inform enrolled mothers/caregivers about the Tom Brown program and their entitlements within the program. It also shows a general level of satisfaction with the Tom Brown lead mothers and the selection process for enrolment into Tom Brown.

Almost all respondents (99%) reported no issues in receiving their Tom Brown supplementation, though 1% (2 respondents) did report challenges, including the lead mother not having the Tom Brown supplementation on time, poor quality of the Tom Brown, and a long wait to receive the Tom Brown powder. All (100%) respondents reported they were treated with respect during the Tom Brown supplementation disbursement. Ninety-nine percent (99%) of respondents reported satisfaction with the quantity of Tom Brown supplementation received.

Ninety percent (90%) of respondents reported that the Tom Brown received was consumed only by the enrolled child with MAM, while 7% reported that the Tom Brown was consumed by the enrolled child with MAM and other family members, and 3% reported selling it or sharing with friends or family outside the household. The majority of respondents (99%) reported that the Tom Brown was sufficient for their MAM child's weekly needs. However, while 94% of respondents reported that the Tom Brown lasted up to the 7 days, 6% reported each weekly allotment of Tom Brown supplementation lasted 8-14 days in their household. This suggests that a small number of enrolled mothers/caregivers were not providing their MAM child the recommended daily quantity of Tom Brown supplementation.

Education & counseling: As part of the Tom Brown program, enrolled mothers/caregivers receive hands-on education about how to prepare Tom Brown powder from raw commodities, in addition to IYCF counselling. All (100%) respondents reported receiving adequate instruction to prepare the Tom Brown powder, however, 10% reported not receiving supplemental nutrition counselling or education beyond Tom Brown preparation

instructions. For the 90% that reported receiving supplemental counselling and education, respondents reported receiving information on: nutrition, exclusive breastfeeding, positive parenting practices, personal and food hygiene, and child safety.

Of the mothers that reported receiving supplemental education and counselling, 95% reported being satisfied with the counselling provided through Tom Brown, 5% reported being somewhat satisfied, and zero respondents reported being dissatisfied with the counselling provided.

Accessibility: Respondents overwhelmingly (97%) reported that the Tom Brown support group sites were generally accessible by walking, indicating that the locations were well-chosen and accessible for enrolled participants. Four (2%) respondents reported that they took public transportation to reach the support group sites. The average time to travel to the support group venue was 12 minutes, with the majority of respondents (75%) travelling less than 10 minutes, 21% between 11- 30 minutes, 2% between 31- 60 minutes, and 1% of respondents reported travelling 2 hours to get to the support group venue.

Unintended consequences: When asked whether they experienced or saw any unintended consequences or spillover effects resulting from the Tom Brown interventions, no respondents reported any notable unintended consequences from Tom Brown or spillover effects on other children.

Study Question #5: What are male household members' (spouses/fathers/head of household) perceptions of the Tom Brown program as mothers dedicate time on a weekly basis to this intervention?

Lead mothers and enrolled mothers in Tom Brown dedicate portions of multiple days per week for Tom Brown, including for processing of the ingredients into the Tom Brown powder, group meetings, one-on-one counselling, and nutritional re-assessments of their child with MAM. To understand if there were any adverse perceptions of Tom Brown seen among male partners or heads of household given the time requirements for participation, this study also sought to understand male partners' perceptions and potential challenges that mothers could face from their male household members. This information was collected through two FGDs (20 males total) and provided insights into male household members' roles, perceptions, and the intervention's impact on their households.

All respondents identified themselves as the primary decision-makers and providers within their households and emphasized their responsibility in ensuring family well-being and managing household affairs. Despite varying levels of engagement in household activities, all male respondents acknowledged that the primary caregiver's role is crucial in managing household responsibilities and childcare.

The findings show that **male household members overwhelmingly view the Tom Brown program positively**. They appreciate the benefits it brings to their households, particularly in terms of health improvements, and recognize the program as a valuable contribution to their family's well-being. The time spent by mothers on the Tom Brown intervention was reported as acceptable. Respondents believe that the time spent is justified by the positive outcomes and improvements in family health.

Study Question #6: How does the change from in-kind to CVA affect warehouse and logistics teams at Save the Children?

Save the Children Nigeria's warehouse is not reliant on a single program and is managed and resourced as a support function across programming. As such, the transition from in-kind to CVA delivery modality did not result in any loss of warehouse capacity for Save the Children Nigeria, as reported through a KII with Save the Children Nigeria's Borno Warehouse Manager, who was acting Borno Field Office Manager at the time of the interview. Rent in the warehouse was able to be reallocated from Tom Brown programming to existing programming that required storage. In addition, the change in delivery modality for commodities did not affect Save the Children's staff structure or in-house operations capacity. Save the Children's operations team is structured so that the

logistics team holds the warehouse, supply chain and fleet management capacity. This results in the same staff holding the skill sets to identify vendors for direct procurement and warehousing and also holding the skill set to transition to vendor identification and contracting for direct commodity purchasing with provided e-vouchers. The transition from commodities procurement and warehousing to CVA programming did not impact staffing or require additional capacity building.

Successes and Challenges

Throughout its Tom Brown implementation, Save the Children has experienced several successes and challenges. Below are the key successes from the program:

- Community-wide acceptance of Tom Brown
- Utilizes local markets and ingredients, rather than commercially-manufactured supplements, which often have stock-outs
- High recovery rates, particularly after increase from 8-week to 10-week enrolment
- Many enrolled mothers continue preparing Tom Brown after discharge. Some sell the powder in their communities, which has created a source of income generation for many of the formerly enrolled mothers and also improves availability of nutritious food products in the community.
- Creates social cohesion among caregivers in the Tom Brown groups. Many mothers report appreciating the outlet that Tom Brown provides to share advice, discuss challenges, and receive support from their peers in the community.

The key challenges that Save the Children has experienced in its Tom Brown programming in NE Nigeria and how they have worked to address them are outlined below:

- Tom Brown powder is sometimes shared with other family members or sold outside the household, which can hamper the rehabilitation of the enrolled MAM child. Through the lead mothers and community nutrition mobilizers, Save the Children stresses the importance to enrolled mothers/caregivers of providing the Tom Brown powder solely to the enrolled child with MAM.
- Participation of enrolled mothers is more challenging during planting and harvesting season, as they need to spend more time working. Save the Children has adapted to this challenge by changing the meeting times of some of its Tom Brown groups during the planting and harvest seasons, based on the schedules of its enrolled mothers/caregivers.
- Though families are encouraged to continue producing Tom Brown powder for their household following discharge from the program, some families struggle to purchase Tom Brown ingredients after discharge due to poverty, inflation, high cost of living.

Conclusions

This study shows high recovery and low relapse rates among children 6-59 months with MAM enrolled in the Tom Brown TSFP in Borno and Yobe, with markedly higher recovery rates with the 10-week cohort cycle compared to the 8-week cohort. Additionally, the program has high community acceptance. This demonstrates that Tom Brown is a viable solution to manage children 6-59 months with MAM, while also supporting local markets and avoiding challenges with stock-outs, typically seen with commercially manufactured nutrition supplements.

The cost analysis in this study showed that using CVA as a delivery modality for Tom Brown commodities was twice as cost-efficient as using in-kind delivery of commodities. This is a positive finding that should inform future Tom Brown programming, both in NE Nigeria and in future contexts where Tom Brown may be implemented.

This study was unable to investigate if changing from in-kind to CVA for Tom Brown commodity delivery had any effect on nutrition outcomes. To conduct the cost analysis, the costs for an 8-month implementation period in MMC/Jere (in-kind) were compared to an 8-month implementation period for Yobe (CVA). Because Tom Brown enrolment takes place continuously on a rolling basis; each Tom Brown cohort lasts 10 weeks; and the programs' nutrition outcome data monitoring takes place on a monthly basis, it was not possible within this study to tease apart retrospectively the nutrition outcomes data for the exact cohorts included in the costing study. That said, given the changes that took place with the transition from in-kind to CVA were absorbed by the lead mothers, it is not expected that this would have had any impact on the enrolled children and their mothers. Further supporting this is that the nutrition outcomes data for Yobe (which started its Tom Brown programming using CVA) has better recovery rates and lower relapse and progression to SAM than Borno does. There are other factors at play here (namely, the Yobe data didn't include a full lean season, whereas the Borno data did), but it does suggest that CVA had no negative impacts on nutrition outcomes. Of note, according to PDM/FGD data, the quality of Tom Brown commodities/supplement did not reduce when the project transitioned from direct Save the Children procurement of commodities and distribution to communities to procurement of commodities by the lead mothers using CVA.

An added benefit of using CVA for Tom Brown that was found in this study was that lead mothers reported the benefit of having increased autonomy and independence to facilitate their Tom Brown support groups, based on their own schedules. Despite this advantage, lead mothers also reported the increased time commitment to procure commodities required of them with the CVA modality compared to in-kind. One lead mother lamented that this increase in time commitment led to her having less time to care for her own young children at home. This is an important finding, and one which underscores the importance of continued monitoring of lead mothers' experiences within the Tom Brown program. Additionally, it highlights the need to monitor their retention rates in the program.

Furthermore, when examining for any possible adverse effects that the change from using in-kind delivery to CVA for Tom Brown commodities, this study found that the transition did not cause significant unintended consequences or spillover effects on lead mothers. Additionally, none were reported by male partners or heads of household of the lead mothers and enrolled mothers participating in Tom Brown—which requires several days of participation per week for processing the ingredients and receiving counseling and re-assessments. Male partners and/or heads of household of enrolled mothers reported generally viewing the Tom Brown program favorably and appreciating the benefits it brings to their households, particularly in terms of health improvements. They recognize the program as a valuable contribution to their family's well-being and reported approving of the time needed for mothers to support the Tom Brown intervention. The time dedication is seen as acceptable as they believe that the time spent is justified by the positive outcomes and improvements in family health.

Recommendations

Based on the findings from this study, it is recommended for implementing partners, donors, nutrition clusters, and Ministries of Health to consider using the Tom Brown TSFP for the management of children 6-59 months in contexts with a high prevalence of MAM. While it could be considered anywhere that has a high prevalence of MAM, it is especially recommended in contexts where stock-outs of commercially-manufactured nutrition supplements are prevalent. It is recommended that implementing agencies use a 10-week cohort cycle to support optimal recovery and relapse rates. Through the monitoring of nutrition outcomes, programmers may need to adjust the cohort cycle duration to optimize outcomes while balancing program costs.

Especially in contexts with reputable financial service providers, it is recommended that implementing partners, donors, and nutrition and CVA clusters supporting Tom Brown programming use CVA for Tom Brown commodities to reduce cost and operational inefficiencies. Some key considerations for supporting CVA for Tom Brown in contexts experiencing inflation and/or currency destabilization include the following:

- **Monitor and report on market prices** on a regular basis, looking at all Tom Brown commodities, ideally as part of inter-agency Cash Working Group coordinated efforts to maximize efficiency
- **Define and monitor closely inflation thresholds and triggers** under the Cash Working Group. Cash Working Group agencies should agree on inflation thresholds/triggers (e.g. month-to-month inflation reaching 15%)
- **Flexible donor funding:** Advocate for flexible donor funding to swiftly re-allocate budget savings made from currency devaluations and/or top-up transfer values according to inflation or review/decrease targets

Lastly, it is recommended that programs use routine monitoring, PDM data, and qualitative data to monitor Tom Brown programming, support optimal nutrition outcomes, and ensure Tom Brown activities are reaching the intended audience, while avoiding adverse outcomes.

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