

Beyond the Sachet

Implementation reforms, not new therapeutic foods, to close Uganda's severe acute malnutrition treatment gap

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“Uganda's low cure rates, falling to 36% in some districts, stem from a system delivery gap, not a product gap.”

THE PARADOX

A proven food, an unreliable system

Ready-to-use therapeutic food (RUTF) has transformed the treatment of severe acute malnutrition (SAM), enabling most children to recover at home rather than in hospital. Since the early 2000s, it has anchored national protocols, including Uganda's. Yet the intervention works only for children who complete it — and in Uganda, too few access it, too few receive it consistently, and even those who recover often do not sustain their gains (Kerac et al., 2014).

BELOW TARGET 62.3% National outpatient SAM cure rate, vs. the Ministry of Health / Sphere target of 75%	SPHERE BREACH 3 of 4 years Default rate exceeded the 15% Sphere benchmark in three of the last four years with available data	STOCKOUT 44.9% Of 150 surveyed facilities had no RUTF in stock on the day of a 2025, 15-district survey
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Source: Woldemariam et al. (2025), cross-sectional assessment of 150 facilities across 15 districts, DHIS2 data 2020–2023.

UGANDA'S BURDEN

Two epidemiologies, one national programme

Nationally, wasting among children under five sits at 3.6%, and stunting has eased from 29% (2016) to 26% (2022), real progress (UBOS & ICF, 2023). But the national average hides sharp geographic variation: the Karamoja sub-region, driven by chronic food insecurity, recurrent drought, and eroding pastoralist livelihoods, has a wasting prevalence of roughly 10%, nearly three times the national rate (Woldemariam et al., 2025). Uganda also hosts the largest refugee population in Africa; settlements in West Nile and the southwest carry their own, compounding the service-delivery burden (Lazzerini et al., 2020).

NATIONAL 3.6% Wasting prevalence, children under five	IMPROVING 26% Stunting in 2022, down from 29% in 2016	KARAMOJA ~10% Wasting prevalence in Karamoja nearly 3× the national rate
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Karamoja: children aged 6–59 months requiring treatment for acute malnutrition

	2023	2024 (projected)	...of which severe (2024)
Caseload requiring treatment	89,000	112,000+	~22,000

Source: Integrated Food Security Phase Classification (IPC) Uganda Technical Working Group, 2024.

WHERE THE CURRENT MODEL LEAKS

Four evidence and practice gaps

None of the four gaps below is a formulation problem. Each is a design or delivery choice inside the WHO CMAM framework, and each already has a tested fix, reviewed in the package that follows.

Gap 01: A split SAM/MAM system

Separate products, protocols, and clinics for severe and moderate malnutrition add administrative and logistical complexity with no strong evidence of better outcomes.

Gap 02: Weight-based dosing throughout

Full-dose RUTF for the entire treatment course can exceed what's clinically needed once a child is past the most catabolic phase of recovery.

Gap 03: Facility-anchored screening

Reliance on health-worker MUAC at clinics or periodic outreach delays detection until caregivers notice a problem, often after severe wasting has set in.

Gap 04: “Success” means anthropometric cure

Programmes are judged on weight and MUAC alone. Mortality risk stays elevated for months after anthropometric discharge (Kerac et al., 2014) — recovery is being under-measured.

THE PROPOSAL

A three-pillar implementation package

None of the following requires a new therapeutic food. Each pillar reorganizes RUTF, staff time, and infrastructure Uganda already has, around practices already validated in comparable settings.

PILLAR 1 Move screening to the family

Family-led MUAC: same product, same admission criteria, earlier referral

Train caregivers to use color-banded MUAC tapes at every antenatal, postnatal, and under-five visit, supported by Village Health Team (VHT) household visits in high-burden areas like Karamoja, moving diagnosis, in UNICEF Uganda's words, “to the family” (UNICEF Uganda, 2022).

Setting	Who measured	Result
Niger	Mothers vs. CHWs	GAM sensitivity >90%, specificity >80%; SAM sensitivity >73%, specificity >98%; agreement κ 0.88–0.91 (Blackwell et al., 2015)
Niger	Trained mothers	Earlier detection at higher MUAC; lower annual programme cost despite higher training outlay (Alé et al., 2016)
Kenya	Caregivers + tape / Click-MUAC	>93% sensitivity for SAM vs. gold-standard measurement (Grant et al., 2018)

PILLAR 2 Simplify dosing, stabilize supply

One protocol, one register, forecasted stock the same RUTF sachets

Adopt the ComPAS combined protocol — two sachets/day for MUAC <11.5 cm or oedema, one sachet for 11.5–12.4 cm, run through a single register and product line — then layer a reduced-dose taper once a child is past the initial two catabolic weeks.

Trial	Setting	Result
ComPAS	Kenya & South Sudan	Combined protocol non-inferior to standard two-protocol system, at lower programme cost (Bailey et al., 2020)
Reduced taper	Burkina Faso	Post-catabolic dose cut → 13–53% less sachet use, equivalent weight-gain velocity (Kangas et al., 2019)
Supply shortfall	Myanmar	Low-dose protocol still met Sphere minimums: 90.2% recovery, 0% mortality (James et al., 2015)

- **Formalize CMAM Surge** (piloted by Concern Worldwide, 2009 / 2012 / 2014) for seasonal forecasting and pre-positioned buffer stock in Karamoja recommended for national scale-up, not yet implemented (Oxford Policy Management, 2021; Njuguna et al., 2023).
- Expand guaranteed government/UNICEF offtake contracts with Uganda's existing USAID-supported local RUTF manufacturers, and revisit import taxes on raw ingredients that erode their price advantage.

PILLAR 3 Keep children in treatment

Demand-side retention and referral integration

Distance, transport cost, and low caregiver confidence, not clinical failure, drive dropout; the number of completed visits is the single strongest predictor of cure (Ssekajja et al., 2022; Mwima et al., 2025).

- VHT home-based monitoring between appointments, plus structured caregiver education at admission.
- Mobile / satellite OTP outreach points timed to seasonal livestock movement in pastoralist Karamoja.
- Shift capacity-building from one-off workshops to routine, DHIS2-linked supervisory mentorship. 98% of facilities already have a functioning core management team, but governance capacity is underused (Kok et al., 2015; Namugumya et al., 2022; Turyashemererwa et al., 2017; Woldemariam et al., 2025).
- Extend West Nile's integrated UNHCR–UNICEF–WFP referral loop (MUAC screening → RUTF treatment → supplementary feeding) into national host-community facilities, closing the gap between humanitarian and national systems (Lazzerini et al., 2020).

WHERE IT BITES HARDEST

District performance against national benchmarks

National averages already fall short of target, but district-level data shows the gap can be far wider, and that dropout, not treatment failure, is usually the binding constraint.

Outpatient cure rate vs. Ministry of Health / Sphere target (75%)

Site	Cure rate	Gap to 75% target
National average	62.3%	–12.7 pts
Kabale District	36.3%	–38.7 pts

Source: Woldemariam et al. (2025); Ssekajja et al. (2022), 637 OTC records, Kabale.

Default rate vs. Sphere maximum benchmark (15%)

Site	Default rate	Above 15% ceiling
Fort Portal (Tooro)	29.5%	+14.5 pts
Kabale District	58.6%	+43.6 pts

Source: Mwima et al. (2025), Fort Portal Regional Referral Hospital; Ssekajja et al. (2022), Kabale.

West Nile (refugee-hosting): no comparable national cure/default figures are published, but a cross-sectional study during the South Sudanese refugee influx documented significant gaps in SAM treatment adherence, driven by rapid caseload growth against a limited health workforce (Lazzerini et al., 2020).

DISCUSSION

What this package assumes, and doesn't fix

Uganda's policy framework already points in the right direction. The second Uganda Nutrition Action Plan (UNAP II, 2020/21–2024/25) prioritizes community-based nutrition programming and targeted action in high-burden regions such as Karamoja (Office of the Prime Minister, 2020), and Village Health Teams are formally mandated to run household MUAC screening. **The gap is not policy intent — it is the absence of specific, evidence-based practice changes needed for that existing infrastructure to deliver.**

Three limitations deserve honesty. First, most of the supporting trial evidence comes from outside Uganda Kenya, South Sudan, Burkina Faso, Niger, Myanmar. These share agro-pastoral and seasonal dynamics with Uganda, but local implementation research remains thin, limited to a handful of district assessments (Ssekajja et al., 2022; Mwima et al., 2025; Woldemariam et al., 2025) — arguing for a phased rollout monitored through routine DHIS2 data rather than an assumption of seamless transfer. Second, efficiency gains from simplified dosing will not fully offset total funding needs as climate-driven caseloads rise, particularly in Karamoja. Third, simplified protocols do not by themselves capture functional outcomes — cognition, immunity, linear growth — which routine CMAM data does not currently track; integrating basic developmental screening at follow-up visits could begin to close that measurement gap.

This strategy aligns with the WHO's 2023 wasting management guideline, which conditionally recommends simplified protocols and reduced dosing for high-need, resource-constrained settings like Karamoja and Uganda's refugee-hosting districts (World Health Organization, 2023).

Proven, validated solutions, from family MUAC to local procurement reform to integrated referral loops, are already available. The challenge is no longer generating new evidence; it is executing the operational alignment across procurement, supervision, and financing needed to deliver results in Kotido, Kabale, and Bididi-biddi.

FULL REFERENCE LIST

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