

Preventing child wasting in Africa's drylands through a food systems lens

This is a summary of the following paper: *Fracassi P, Daget M, Seo S et al. (2023) Preventing Child Wasting in Africa's Dryland: An Exploratory Review of the Enabling Environment in 8 Sub-Saharan Countries Using a Food Systems Lens. Food and Nutrition Bulletin, 44, 2, S32–S44. <https://doi.org/10.1177/03795721231188767>*

In 2021, two events – the United Nations (UN) Food Systems Summit and the Tokyo Nutrition for Growth Summit – represented a decisive time for the alignment of food systems and nutrition. In a context of persistent child wasting, notably across the Sahel and Horn of Africa, the costed country operational roadmaps, developed in 22 countries as part of the joint UN Global Action Plan (GAP) on Child Wasting, recognised the importance of preventing child wasting using a multisectoral approach.

In this review, authors used a food systems lens to assess how current governance mechanisms, policies, and programming priorities in eight sub-Saharan countries were responsive to the food security and nutritional needs of the most vulnerable people. The eight countries – Burkina Faso, Ethiopia, Kenya, Niger, Nigeria, Mali, South Sudan, and Sudan – were selected because of their commitment to address child wasting using a systemic approach as part of the GAP.

Authors assessed the governance mechanisms through a review of joint annual assessments con-

ducted by the Scaling Up Nutrition movement; the policy frameworks through an analysis of recommendations included in operational roadmaps and findings from the review of national multisectoral nutrition plans; and programming priorities through the analysis of the typologies of costed interventions in the food and social protection systems.

Governance mechanisms: Most fragile and conflict-affected countries had platforms in place that were convened around emergency responses but lacked well-equipped mechanisms to build the humanitarian–development nexus and effectively coordinate preventive actions using a food systems lens. Overall, there was limited evidence that the most vulnerable communities were prioritised through assessments of their context-specific needs and responsive actions to address shortcomings of the food systems as well as environmental, livelihoods, and/or political/conflict drivers.

Policy frameworks: Most recent plans showed a shift in systems thinking by plac-

ing sustainable food systems at the core for supporting healthy diets and better nutrition. There was a high level of emphasis on nutritionally vulnerable individuals (young children, adolescents, and women during pregnancy and lactation). Few policy recommendations mentioned other categories of vulnerable individuals such as the poor, internally displaced people, refugees, and people with disabilities.

Programming priorities: In addition to wasting, countries considered factors such as food insecurity, poverty, and vulnerability as criteria for geographic prioritisation. Costed interventions included in the operational roadmaps were aligned with recommendations to orient food systems toward healthier diets. All countries prioritised and costed interventions on nutritious food value chains and social transfers (cash and in-kind). Most countries prioritised food safety, food fortification and biofortification, school food and nutrition, and social protection.

The review revealed common strengths in terms of existing multistakeholder governance mechanisms, opportunities for engaging key actors in the food systems, and existence of policy frameworks. It also revealed that context-specific risks and vulnerabilities linked to livelihoods, environment, and seasonality, as well as political/conflict drivers, could be better incorporated into how policies are enacted and programmes implemented.

Seasonality in the African drylands: 15 years of evidence

This is a summary of the following paper: *Venkat A, Marshak A, Young H et al. (2023) Seasonality of acute malnutrition in African drylands: Evidence from 15 years of SMART surveys. Food and Nutrition Bulletin, 44, 2, S94–S108. <https://journals.sagepub.com/doi/full/10.1177/03795721231178344>*

Seasonal peaks in wasting prevalence and incidence are important considerations for nutrition programming, including humanitarian food aid interventions. However, implementers often categorise (and approximate) such data into simplified binary categories such as preharvest/postharvest or dry/wet seasons, which presents limitations. This study uses 15 years of Standardised Monitoring and Assessment of Relief and Transition (SMART) survey data (2000–2015), from 412,370 observations across 19 African dryland countries, to model peaks of wasting prevalence more accurately in continuous time across the year.

A thorough data cleaning approach was taken to increase data accuracy and study validity, including removing internally displaced person or refugee camp settings (which may have artificially inflated measures), ensuring overlaps of geographic areas between surveys, and excluding likely erroneous anthropometric measures. This thorough data cleaning, as well as the detailed breakdown of the methods provided, increase our confidence in the study findings. A detailed breakdown of the methods used is beyond the scope of this summary but

can be found in the original paper.

There was a greater proportion of observations from Sudan (19.6%), South Sudan (17.8%), Nigeria (13.6%), and Chad (13.2%) compared to other countries, which should be considered when interpreting these findings. The authors also caution that the limitations of SMART survey methodology restrict this analysis to interpreting the variability of wasting patterns rather than the magnitude of wasting in these settings.

The findings indicate that there are 2 distinct peaks of wasting during the calendar year in the African drylands. Contrary to common opinion, the results suggest that a primary wasting peak is observed between April and May (in line with peak temperature) rather than the preharvest season in August to September. A secondary peak (September to October) then occurs in line with primary rainfall, Normalised Difference Vegetation Index (NDVI) (vegetation coverage), and a secondary temperature peak. However, less than

15% of SMART surveys were implemented in April to May – highlighting a significant data gap. The relative absence of data may reflect the bias that comes with aggregating data into broad seasons, which in turn can impact survey design and/or timing.

“Greater focus on the secondary wasting peak in September to October has led to a ‘blind spot’ for the primary peak of wasting in April to May, which should be the period of greatest concern”.

It should be noted that these findings are specific to the drylands in question. Indeed, the authors flag that wasting peaks are geographically specific and are impacted by a complex blend of human and environmental interactions – which in turn are becoming more variable with changing climates. Yet, more broadly, these results showcase the importance of analysing seasonality using the time of year as a continuous variable, rather than divided into discrete seasons, to capture the true annual variability of wasting. Qualitative data can also be used to increase data quality by illuminating how changing weather patterns affect food production systems, which in turn drive wasting.

¹ <https://gisgeography.com/ndvi-normalized-difference-vegetation-index/>