

USAID Nawiri Framework

Helping to Reduce Persistent Acute Malnutrition in Kenya's Arid and Semi-Arid Lands

What is USAID Nawiri?

Implemented in partnership with the Government of Kenya in Marsabit, Isiolo, Samburu, and Turkana Counties, the USAID Nawiri program is a five-year initiative funded by the USAID Bureau for Humanitarian Assistance (BHA) to reduce persistent acute malnutrition (PAM) in Kenya's arid and semi-arid lands (ASALs) sustainably. USAID Nawiri aims to understand and help resolve the underlying causes of acute malnutrition through this integrated, multi-sectoral resilience-strengthening program that leverages ongoing emergency and development activities.

To recognize the complexity of PAM in Kenya's ASALs and the need for local, context-specific, and sustainable solutions, USAID Nawiri was designed to be implemented in two phases. The first, research and learning, has provided partners with the time, support, and access to explore the local drivers of PAM and design and pilot interventions rooted in evidence, local contexts, community strengths and assets, and feasibility for government scale-up.

Two nongovernmental organizations implement USAID Nawiri in the four ASAL counties in close partnership with local communities and the respective county governments: a Catholic Relief Services (CRS)-led consortium in Marsabit and Isiolo and a Mercy Corps (MC)-led consortium in Turkana and Samburu.



Figure 1. Counties Participating in the USAID Nawiri Program

USAID Nawiri has an overarching goal of sustainably reducing levels of PAM in Kenya's ASALs. Despite significant investment to reduce acute malnutrition in Kenya's ASALs over many years, acute malnutrition rates frequently remain at or above emergency levels and fail to improve, even when household access to food and high-quality health care increases.

What is the USAID Nawiri Framework?

Between 2020 and 2023, the USAID Nawiri program generated more than 40 research and programmatic studies documenting the drivers of and potential solutions to PAM. During this period, defined as phase I, the CRS- and MC-led consortia conducted a mix of desk reviews and formative and implementation research. Some document global experiences in various technical areas associated with PAM, others highlight learning from piloting multi-sectoral approaches to preventing or treating PAM, and others unveil evidence from primary data collection within the four-county Nawiri context. The

learning generated during phase I is embedded within an [interactive online framework](#) that mirrors the structure of the Nutrition in Africa's Drylands Framework (Young 2020) but is contextualized to the USAID Nawiri program.¹ This conceptual framework shows the drivers of PAM; learning is linked to the relevant drivers and presents both full reports and learning briefs. USAID Advancing Nutrition and BHA and Nawiri implementing partners co-developed this framework.

The framework is organized into immediate, underlying, and basic and systemic drivers of PAM. The immediate causes of PAM indicate why an individual child becomes malnourished (disease and food intake) and are driven by the underlying causes (household food security, care of women and children, and the health environment and access to health care). The basic and systemic drivers related to livelihood systems, systems and formal and informal institutions, and environment and seasonality in turn, inform these. Conflict and other shocks underpin all the determinants presented throughout the framework.

USAID Advancing Nutrition linked evidence generated by USAID Nawiri to each relevant driver in the framework. This evidence relates to drivers of PAM and potential solutions to stop those drivers, which include:

- Immediate: disease, inadequate dietary intake.
- Underlying: insufficient health services and unhealthy environment, insufficient household food security, insufficient social and care environment.
- Basic and systemic: livelihood systems, systems and formal and informal institutions, and environment and seasonality.
- Shocks.

Given the interconnected relationship between drivers grouped at the same level, studies are linked to multiple drivers throughout the framework. Some of those studies that appear in one or more locations of the framework are presented below. A more comprehensive list of studies is hyperlinked within the framework.

What Evidence is Presented in the Framework?

Below we summarize evidence, generated between 2020 and 2023, presented along each component of the framework. The results from longitudinal studies and pilot approaches will continue to inform the second phase of the program (beginning in 2023), which focuses on systems-driven implementation and efforts to strengthen local government institutions. Research is ongoing and will yield more conclusive results in the near future.

Immediate Causes of PAM

At the immediate level, inadequate dietary intake and disease decrease a child's nutritional status in interrelated ways. USAID Nawiri conducted a range of studies exploring these immediate drivers. Studies examining **inadequate dietary intake** used methodologies such as Trials of Improved Practices to explore barriers and opportunities, including food preservation, to improve children's complementary feeding practices. This framework includes findings from participatory analysis to identify appropriate context-specific, community-defined interventions to increase livestock milk production, particularly during dry seasons. It also includes findings from livestock and non-livestock interventions that aim to strengthen nutrition/health status and resilience by improving availability of and access to livestock milk, especially among children and pregnant and lactating women. A Cost of the Diet study identified the most cost-effective nutrient-dense foods locally available in markets, determined the

¹ Young, Helen. 2020. *Nutrition in Africa's drylands: A conceptual framework for addressing acute malnutrition*. Boston: Feinstein International Center, Tufts University. <https://fic.tufts.edu/publication-item/nutrition-in-africas-drylands-a-conceptual-framework-for-addressing-acute-malnutrition/>.

reported frequency of consumption (or non-consumption) of these foods by households, and calculated the minimum cost of a nutritious diet. Studies examining the relationship between **disease** and PAM explore how communities perceive the causes and changes in malnutrition prevalence by season for children and mothers. The participatory epidemiology study identified negative coping strategies, gender inequality and high labor burdens, human disease, and lack of income as the main causes of malnutrition for women and children.

Underlying Causes of PAM

At the underlying level, USAID Nawiri conducted studies related to factors below.

For **insufficient household food security**, we present learning from experiences in adapting a poverty graduation model to incorporate nutrition-specific and -sensitive approaches, include building the capacity of last-mile food supply chain actors; layering nutrition and women's empowerment approaches; bridging social capital to permit participation of the ultra-poor in governance processes; and reducing women's time poverty. One study involved desk reviews, county government and community consultations, key informant interviews, and participatory mapping to identify practical approaches to extending dry season lactation in milking animals and increasing the availability of milk in households with children under the age of five and women of childbearing age. In particular, it sought to understand why adoption of improved milk production practices remains low and, in communities where improved breeds had been distributed, whether it made a long-term difference in milk consumption.

For **insufficient social and care environment**, partners piloted an adolescent sexual and reproductive health implementation guide to inform approaches focusing on positive parenting, safe growth spaces, edutainment, and transformative masculinity in Samburu and Turkana. A gender analysis reviewed knowledge about gender, youth, and social dynamics, including highlighting women's triple burden as primary caregivers grappling with heavy reproductive, productive, and community roles, often with minimal male support. Pastoralist communities were identified as highly patriarchal with deeply rooted socio-cultural beliefs and practices that diminish women's and girls' health and well-being. The analysis identified community assets, including traditional birth attendants and elderly women that programs could build upon. Lastly, a review of the Baby-Friendly Community Initiative shows promise, but confirmed that more effort is needed to arrive at a financially sustainable form of the model that can be scaled and adapted to the needs of various service users.

Regarding **insufficient health services and unhealthy environment**, a study was carried out to determine the effectiveness of nutrition and health systems and the degree to which they have mitigated PAM, and to highlight ways to strengthen those systems' effect on nutrition in vulnerable communities. Better management of key childhood illness and acute malnutrition services requires supporting health teams to anticipate, prepare for, and manage increased demand. The approach also requires using data to inform community action.

Basic and Systemic Causes of PAM

There are three sub-levels at the basic and systemic driver level: livelihood systems; systems and formal and informal institutions; and environment and seasonality.

For **livelihood systems**, an adapted poverty graduation approach to improve nutrition security with an additional focus on poverty reduction titled *REAP for Nutrition* is described. Other models, such as the pilot of an integrated livelihood model focused on forming business savings groups; building business skills and financial literacy; and providing small business start-up grants and mentoring integrated with cash transfers, health and nutrition education, and social and behavior change interventions are outlined. A gender gap analysis reviewed information and identified knowledge gaps in mobility, sedentarization, and changing generational and traditional systems and social safety nets roles. Lastly, USAID Nawiri conducted a labor market assessment to explore constraints and opportunities for livelihoods, entry

points for interventions, and the potential effect on nutrition outcomes. The assessment showed a significant positive relationship between income and household dietary diversity, and this brief recommends types of off-farm livelihoods the program can support.

Concerning **systems and formal and informal institutions**, a market assessment to improve USAID Nawiri’s understanding of nutritious food value chain dynamics and their functionality for household access was carried out. Specifically, the study explored barriers to more effective integration among producers, private-sector food processors, and vendors within these value chains. It additionally explored ways to enhance vulnerable households’ use of the market to purchase food products. A livestock service delivery assessment examined constraints to and opportunities for improved veterinary, fodder, and extension services in Kenya ASALs. Another study summarizes the constraints and opportunities of water governance and resource management to understand the root causes of water insecurity and how they relate to adverse nutrition outcomes in Samburu and Turkana.

Regarding **environment and seasonality**, partners conducted a natural resource management desk study of how land access and natural resource management policies, institutions, and relationships are changing in the ASALs; with what consequences and for whom; and the potential effects on livelihoods, food security, and nutritional status. A malnutrition hotspot mapping and analysis identified clusters and seasonality trends of acute malnutrition. We also present key findings from an analysis of the role of governance systems and formal institutions in shaping patterns and trends in acute malnutrition. A desk review analyzed national and county government sector nutrition policies’ and strategies’ ability to reduce acute malnutrition sustainably.

Shocks

Conflict and other shocks exacerbate all these factors. In the Nawiri context, **shocks** related to COVID-19, elections, natural resource management, and locusts have been documented. Using county and community consultations, partners describe the relationship between conflict and PAM, drawing on global information and context-specific learning. An analysis summarizes the constraints and opportunities of water governance and resource management to understand the root causes of water insecurity and how they relate to adverse nutrition outcomes in Samburu and Turkana. Another analysis summarizes insights on the role of governance systems and formal institutions in shaping trends in acute malnutrition, highlighting the importance of having a nutrition agenda at county and ward levels and leveraging community engagement to reduce the risk of election-related conflict. It also highlights how migration caused by climate change and conflict alters social dynamics and exhausts social services and safety net and supporting systems. Lastly, a gender analysis explored how norms affect gender roles, decision-making power, and access to and use of resources, assets, and services at the household and community level, across seasons and in times of crisis.

How to Use the USAID Nawiri Framework

Users can sort through evidence in the interactive framework as it relates to the immediate, underlying, and basic drivers of PAM in the Kenya ASALs. The framework offers a variety of evidence from research and programmatic approaches used by the Nawiri implementing partners. Audiences and their suggested uses for the framework are outlined below.

How to Use the Interactive Framework

- Click on a driver in the diagram to bring up a list of all related learning briefs.
- Click the **“View Resources”** button to read a summary of and download the learning brief and full study.

How to Search the Framework

- Throughout the framework, you also have the option to search across all of the learning briefs.
- You can search with a specific term or use the filters to focus your search by driver, county, or technical area.
- To see all learning briefs, click the “**Apply**” button without entering a search term or selecting any filters.

United States Government Use

The USAID Kenya Mission, BHA, and other USAID bureaus supporting work on acute malnutrition may find this framework useful when presenting a country example of multi-sectoral efforts to reduce acute malnutrition. The framework is also a repository of resources, and shows collaboration across sectors to identify drivers and solutions to reduce persistent acute malnutrition. Other Missions may find the evidence useful as they consider strategic country priorities and future funding investments.

Kenyan County Government Use

Given devolution in Kenya, county governments manage their own budgets and development plans. This learning could inform future county development plans and where to prioritize resources across sectors. County governments may want to focus on learning from their county alone or from the other counties’ experience.

Implementing Partners Use

USAID BHA-funded implementing partners may find the repository useful for learning about approaches to reduce PAM that could be adapted or applied to their country's context. Experiences from other countries are featured in some of the desk reviews and recommendations for piloting approaches. As further information is generated through USAID Nawiri, linking this Nawiri Framework with the Drylands Framework would be beneficial.

USAID Nawiri implementing partners are core to all the evidence generated in phase I and ongoing in phase 2. Partners may find it useful to focus on approaches that yielded positive results in one county and consider scaling it up in another. They may want to look holistically at the different sectoral interventions that were needed across the four counties and share experiences collaborating with national and county governments and local partners communities in both the research and the capacity strengthening, and scale-up phases. Specific technical areas can be pulled from across this literature when presenting at technical working groups or citing evidence for other country experiences.



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