LEARNING **BRIEF**

AUGUST 2022

CRS NAWIRI ADAPTED NUTRITION GRADUATION MODEL (AN-GM)

ISIOLO AND MARSABIT COUNTIES

OVERVIEW

This brief highlight key findings and learning from CRS Nawiri's Adapted Nutrition Graduation Model (AN-GM) Pilot in Isiolo (May 2021 – April 2022) and scale up in Marsabit and Isiolo Counties (Feb - August 2022). The 1-year implementation pilot took place in Cherab and Ngaremara Wards of Isiolo County.

The AN-GM is now rolling out in Sericho, Garbatulla, Oldonyiro and Chari wards in Isiolo and is now being rolled out in Laisamis, North Horr and Moyale Sub-counties in Marsabit. The Poverty Graduation Approach is a holistic livelihood model designed to address the multi-dimensional needs of ultra-poor households vulnerable to acute malnutrition. It involves an integrated 5-step suite of interventions, delivered in sequence, to help the extreme poor achieve sustainable livelihoods and better nutrition. The 5 steps include (i) Targeting, (ii) Forming Business Savings Groups (BSGs), (iii) Business skills and financial literacy training, (iv) Providing small business start-up grants, and (v) Business and BSG mentoring. The pilot studied how far the approach can effectively contribute to alleviating acute malnutrition in Kenya's Arid and Semi-Arid Lands (ASALs).

Implementation Pilot Research questions included:

1. To what extent will the AN-GM help:
    a) Improve household income, with associated increases in:
        i. Purchase of nutritious foods
        ii. Consumption of nutritious foods
        iii. Access to health products and services?
    b) Improve knowledge and attitudes on health and nutrition behaviors?
    c) Improve practices in: (i) Children's dietary diversity (MDD) and (ii) Children's meal frequency (both for children 6-23 months old) (iii) preventive health and health seeking behavior and (iv) exclusive breastfeeding for children from 0-6 months old, over 1 year.
    d) Reduce acute malnutrition among malnourished children?
2. How cost effective is the AN-GM?
    a) Which of the two AN-GM approaches is most cost effective?
    b) What would it cost to scale up the approach in Marsabit and in Isiolo Counties?

Graduation Pilot adapted to Nawiri context

Adaptations of Village Enterprise's 12-month Poverty Graduation Model have included layering it with 3 complementary interventions: (i) Provision of unconditional cash transfers (UCTs) for consumption, (ii) Health and nutrition education and counseling and (iii) Embedding Social and Behavior Change (SBC) across all components. The pilot was implemented in 2 arms: Arm 1 interventions include UCTs and poverty graduation only, Arm 2 interventions include UCTs, poverty graduation, health and nutrition education and counselling and SBC initiatives, for comparison purposes.

AN-GM selection criteria have been adapted to prioritize: (i) HHs with malnourished children under 5 (CU5), (ii) HHs with CU5 at risk of acute malnutrition, (iii) HHs with relapse cases, (iv) HHs with Pregnant and Lactating Women (PLW) and (v) ultra-poor HHs.

Summary Findings and Lessons Learned

Severely malnourished children all live in households living below the poverty line: 18.5% of children were severely malnourished (wasted) before the Pilot began and AN-GM households (HHs) had an average income of only $0.44, defining them as extremely poor and vulnerable (World Bank). 100% of the severely malnourished children were in HHs living below the poverty line. Other Nawiri studies have supported this, highlighting links between lack of income and malnutrition in both USAID Nawiri counties.

Food security challenges and improvements: At baseline (BL) only 51% of AN-GM Pilot households had an acceptable Food Consumption Score (FCS) consuming on average 6 of 12 recommended food groups, reflecting limited consumption and/ or access to diverse foods. Qualitative BL findings suggest that the availability of food reserves during the associated Ramadhan period (April- May 2021) probably contributed to these relatively high scores. At endline, as shown in Table1, there is a significant increase in acceptable food consumption (up to 80% in Arm 1 and 85% in Arm 2 participants).

Most AN-GM participants know what to do to stay healthy but lack the resources to use this knowledge, including accessible basic services: 92.99% of GM Pilot participants generally know how to keep their families healthy, but 49.58% also displayed some negative attitudes. The AN-GM baseline showed that 46% of children from 12-59 months old had not been dewormed and appx. 40% had not received Vitamin-A supplements in the previous 6 months. Appx. 15% had experienced diarrhea and 32% had diarrhea with blood in the two weeks before the survey, with appx. 68% of these children not receiving either Oral Rehydration Therapy (ORT) or Zinc. Appx. 18% of CU5 showed signs of breathing difficulties (Acute Respiratory Infections, ARIs) in the two weeks preceding the survey, of whom ¾ did not receive advice or treatment which should be accessed within 24 hours. Of the 85% affected who did seek ARI advice and treatment, 43% did so after over the recommended 24-hour period. Impressively, the BL survey showed that appx. 77% of children under 6-months old were exclusively breastfed. The main hindrances to practicing optimal health and nutrition-related behaviors include no money for health and nutrition services, minimal access to (often distant) services and some negative attitudes.

Percent of households with poor, borderline, and acceptable Food Consumption Scores (FCS) disaggregated	Arm 1* Baseline	Arm 1* Endline	Arm 2* Baseline	Arm 2* Endline
Poor	20%	4%	9%	0%
Borderline	35%	16%	34%	15%
Acceptable	45%	80%	57%	85%

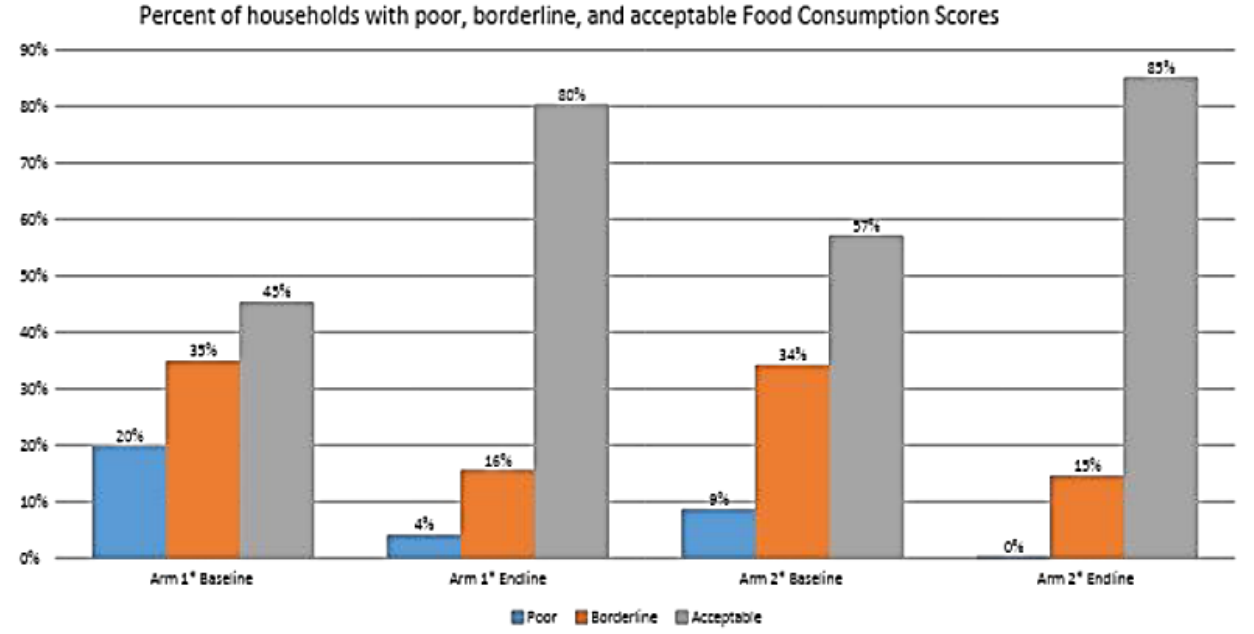


Table 1: Food Consumption Score (FCS) Trends during the AN-GM Pilot

[1] Nawiri AN-GM Baseline Study May 2021.

[1] Participatory Epidemiology, SBC formative assessment, and Food Systems Studies.

Summary Findings and Lessons Learned

Integrated Social and Behavioral Change (SBC) Initiatives: During Nawiri's AN-GM Pilot, Social Behavior Change (SBC) activities including Health and Nutrition Education and Counselling (H&N Ed & Counselling) were layered with the AN-GM, focusing on context-specific priority behaviors previously identified. From Nawiri's SBC Assessment Findings, consortium and MoH teams jointly reviewed priority behaviors relevant to the AN-GM participants and contexts. These included issues on PLW, child feeding practices, initiating businesses and savings, WASH, joint spousal decision-making etc. Implementation and monitoring tools (the SBC Planner, HH participant surveys and MUAC assessment) were jointly developed based on the SBC Assessment and MoH guidelines. CHVs and CHAs were trained to implement and use these tools, while CHA supervisory roles in Nawiri context were clarified.

Very low Minimum Acceptable Diets among AN-GM HHs: Only 5.77% in Arm 1 and 6.94% in Arm 2, of children under 2 (CU2), had a Minimum Acceptable Diet (MAD) at BL, while 90% of severely malnourished children from 6-23 months old did not achieve MAD. At endline, the percentage of children achieving MAD had improved from 5.77% to 88.20% for Arm 1, and from 6.94% to 87.50% for Arm 2 participants, during the pilot period. See Table 2 below depicting MAD trends.

	Arm 1* Baseline	Arm 1* Endline	Arm 2* Baseline	Arm 2* Endline
Percent of children 6-23 months receiving a minimum acceptable diet (MAD)	5.77%	88.20%	6.94%	87.50%

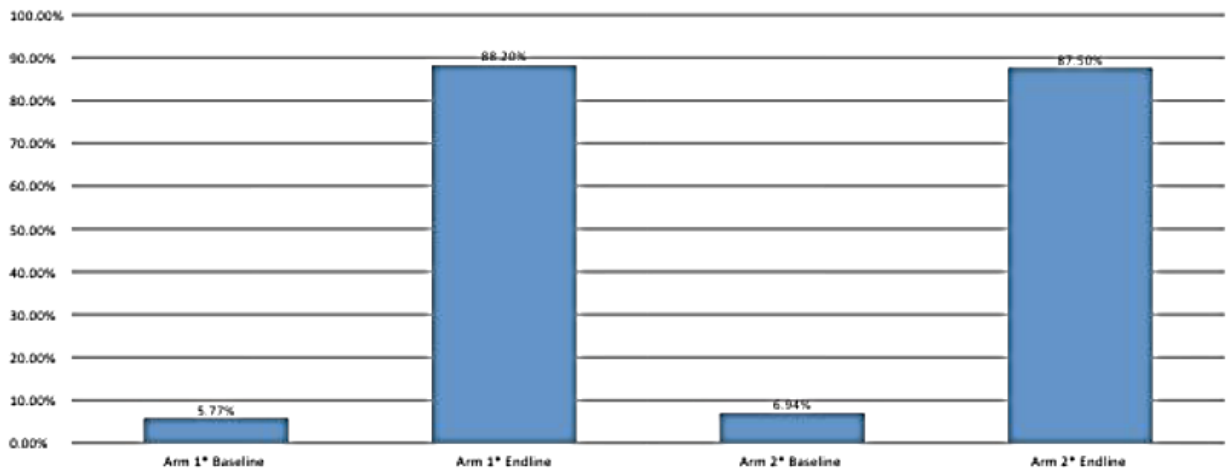


Table 2: Minimum Acceptable Diet Trends during the AN-GM Pilot

AN-GM Findings and Lessons Learned During and Since the Implementation Pilot (i.e., until August 2022)

Key Lessons	Implications & Adaptations Made by April 2022
1. All HHs with severely malnourished children lived on under $0.44 per capita per day, showing that ultra-poor HHs remain among the most vulnerable to malnutrition.	USAID Nawiri targeting processes continue to prioritize the ultra-poor and Persons Living with Disabilities (PWDs), who showed chronic vulnerability in AN-GM pilot targeting.
2. More needs to be done to ensure that systems and services cater for PWD, e.g., to enable the inclusion of PWD in nutritional anthropometric measurements to determine their nutrition status.	USAID Nawiri has been working with government officials and others to ensure nutrition-related interventions include PWDs. USAID Nawiri adapted its Business Mentor training for HHs with hearing impairments, using written communication. Nawiri continues to work with Isiolo County Special Education Department to ensure effective support for PWDs moving forward.
3. Most AN-GM HHs showed high knowledge levels alongside some negative health-related attitudes and practice, not helped by minimal access to community-level services in remote areas including PAM hotspots (see 4 below).	USAID Nawiri-SBC focuses on changing HH attitudes toward priority health and nutrition practices, alongside contextualized income generation support and advocating for accessible services in remote/ malnutrition hotspot locations, to improve vulnerable HH access to essential services.
4. Limited access to markets and health services, complicated by high Last Mile Vendor (LMV) transport costs. Access to reasonable community-level health and nutrition services remains notably limited in remote parts of both counties.	USAID Nawiri has prioritized strengthening links between local suppliers/ private sector actors and AN-GM retail business owners (BOs). Efforts to enhance LMV and community access to health services and to markets remains underway.
5. Improved nutrition-related behavior, as seen in dietary improvements (quality and diversity, or FCS and MAD), over the 12-month AN-GM Pilot period.	Significant nutrition improvements witnessed in Nawiri AN-GM HHs are actively informing the roll out of Nawiri's full AN-GM package in Marsabit County.
6. Significant shocks and stresses experienced during the AN-GM pilot (incl. worsening drought, COVID-19, regular conflict outbreaks and associated market price fluctuations) inevitably affected pilot interventions. The team had to reassess some initial assumptions and adapt planning and implementation accordingly.	USAID Nawiri continues to learn from and adapt to evolving contexts and shocks that impact on the lives of vulnerable HHs and communities. Moving forward, trainings on Natural Resource Management (NRM), environmental awareness/ responsiveness and Disaster Risk Reduction (DRR) will be conducted for Business Mentors, to be better equipped to support program participants on related issues.

AN-GM Findings and Lessons Learned During and Since the Implementation Pilot (i.e., until August 2022)

1. **PDMs have highlighted HH patterns on spending and food access, over a 2-month period;** HH FCS' rise when consumption support is given, then steadily decrease until the next CT. But when small businesses start making a profit, much of this is spent on food and nutrition status stabilizes. Nawiri has consequently modified its previous CT disbursement timings, to provide monthly consumption support over 6-months. The CT amounts have also been increased to KES 5,000 (up from KES 3,750) each month, to strengthen HH food security and consumption. Ongoing discussion with AN-GM Business Groups (BGs) reveal they are still making a profit and using it for consumption (spending up to 50% on HH consumption, with appx. 50% ploughed back into their businesses).

2. **Remote, isolated small businesses in far flung areas face immense transport and access challenges which impact severely on business potential.** Extremely high transport/ time costs, long distances on poor roads and sporadic conflicts inhibit access to most goods and it is proving almost impossible to get LMVs to bring goods to such communities (e.g., Komote Village, an island on Lake Turkana and Arapal Village on the slopes of Mount Kulal in Marsabit County, as well as Basa and Lafe villages in Cherab Ward, Isiolo County). In such locations small business accessibility to wholesalers and bulk buyers is extremely limited by these operational challenges and related costs. This raises major challenges for any service provider efforts to effectively address PAM in such locations, including AN-

3. ***The benefits of layering health and nutrition education onto the AN-GM, raising questions about sequencing:*** *As the CHV providers of health and nutrition educations are local, known and considered close to the community, health and nutrition education is generally well received. On the other hand, the delayed start to health and nutrition education within Nawiri's AN-GM framework (for operational reasons) has lessened its potential impact. Moving forward Nawiri will seek to start associated (layered) H&N education and SBC initiatives before AN-GM CT disbursements begin, to support the uptake of new/ related knowledge among AN-GM HHs as soon as possible, including for decision-making on food groups small businesses can and should invest in.*

4. ***Livestock-related small businesses which typically thrive in highly remote areas remain popular,*** understandably, given their non-dependence on regular supply top-ups. Consequently AN-GM communities and BGs located closer to markets tend to thrive, while very remote AN-GM businesses are visibly struggling in the current prolonged drought period. In more promising areas, AN-GM participants investing in livestock trade and retail businesses in better connected areas

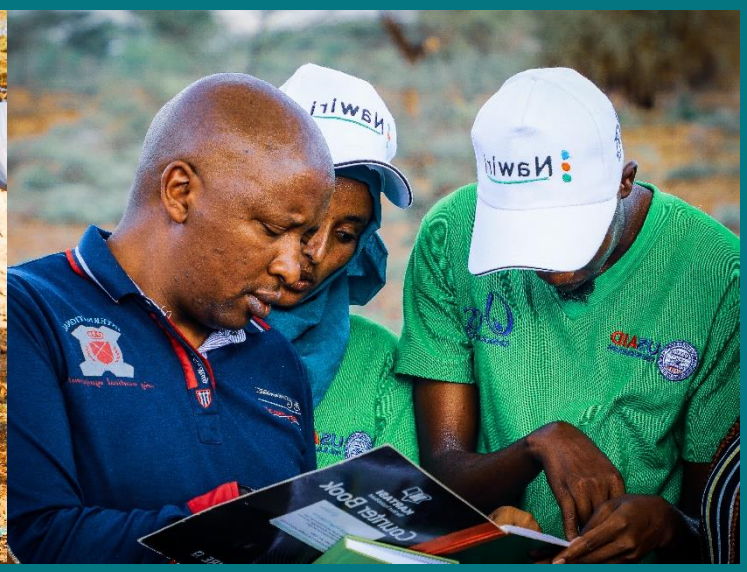
AN-GM Findings and Lessons Learned During and Since the Implementation Pilot (i.e., until August 2022)

5. ***Community BG adaptations away from livestock in the prolonged drought period:*** On the other hand, in Marsabit where so many vulnerable communities have lost at least 70% of their livestock in the worsening drought, BGs are not investing in livestock as they previously would have and Nawiri is witnessing a notable downward trend in livestock investments. While this is fueling notable business diversification including to retail and commodities unaffected by the drought, it does raise risks including potential market saturation.

6. ***AN-GM grant size increases during the worsening drought period:*** Previous (pre-extreme drought) AN-GM grant sizes have been found to be too small during the current worsening drought period following four failed rains and Nawiri is witnessing the positive impact of topping up earlier AN-GM 30K business grants by an additional 20K (i.e., to 50K total). New AN-GM cohorts in Marsabit are doing good business with their higher-amount initial business grants (30K), in anticipation of their additional second grant (20K). Less positive developments include limited local business capacity and weak local economies offering limited viable business opportunities. This is resulting in too many small businesses selling the same few basic products (of limited nutritional value) including sugar and unga, which in turn is fast fuelling local market saturation. In vastly remote areas where nutritional needs remain among the highest, for reasons outlined above there is minimal business investment in nutritious foods, raising significant concern.

7. ***Risks connected to fluid trade currencies that are influenced by contextual realities:*** In Illeret (on the Ethiopian border, with the nearest accessible livestock market just across the border) trading typically occurs in Ethiopian Birr and in fish (bartering). In Loyangalani, fish remains common currency (stronger than KES), with 5 fish typically traded for 1kg of sugar, such that when you ask Business Owners where the cash is, they show you their fish (1 fish equivalent to KES 30 or 50). These BOs are consequently at the mercy of bulk buyer/ trader timetables, as they only recover their money when the bulk buyers show up. This inevitably raises food/ fish handling and safety issues, in the absence of accessible refrigeration systems.

8. ***Pastoralist lifestyle challenges to the AN-GM:*** Some Nawiri supported BG members have relocated in search of pasture after signing up to the AN-GM, leaving particular BG members isolated. While the AN-GM works for sedentary HHs, others which have moved to non-AN-GM target locations have had to be dropped by the project. These HHs understood that they would lose access to their AN-GM benefits but still decided to migrate for their immediate livestock needs, which is not necessarily best for their own longer-term interests, including HH health and nutrition.



AN-GM Findings and Lessons Learned During and Since the Implementation Pilot (i.e., until August 2022)

9. ***Women's agency; adapting record keeping in areas of low literacy:*** AN-GM BGs are often supported in their written record keeping by the Business Mentors (BMs), especially in areas of very low literacy (including many Marsabit malnutrition hotspots). These records suffer if the BMs are unable to follow-up BGs regularly/ as planned, or if their BG visits are delayed. To help avoid associated risks, Nawiri encourages literate family members to support record keeping in such instances, but in vulnerable locations many families lack anyone literate. One positive spin off is that local women are taking their initiative and finding their own ways to adapt their record keeping and manage their small businesses, e.g., using small, labelled boxes for all their income from one source (e.g., sugar, *unga* or fish), to help track what is selling best and/ or bringing in most profit, to inform their restocking. In Komote Loyangalani for example, sachets of long-life milk are selling fast, even at the relatively high price of KES 100.

10. ***Potential, unanticipated benefits from Sequencing, Layering and Integration (SLI):*** To strengthen SBC and HH dynamics, Nawiri's SMART Couple (SC) approach has been layered onto the AN-GM. The team has seen related skills and SC facilitators using their new skills and competencies to address significant Business Group and husband/ wife conflicts, thereby minimizing conflict at various levels.

11. ***Men and women combining their efforts for mutual support and enhanced efficiency:*** The 3-person Business Group (BG) model is helping reduce women's workloads. Business owners are sharing their workloads for mutual support, e.g., with 1 vending, 1 cooking and 1 hawking foods like mandazis. Some BOs are also leveraging individual strengths like sales, marketing, and bookkeeping, to support successful business management.

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Photos: Anthony Nyandiek, CRS.