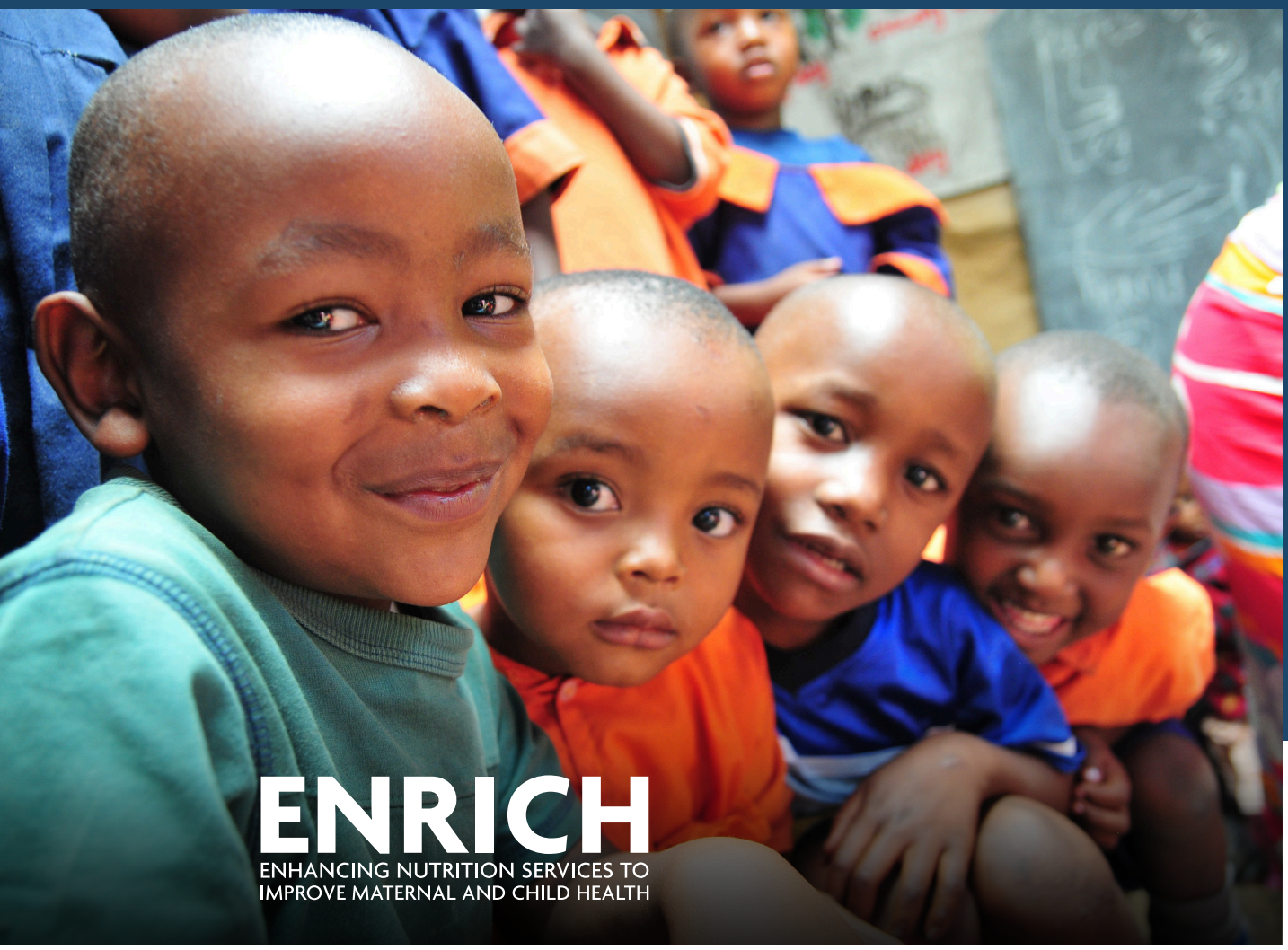
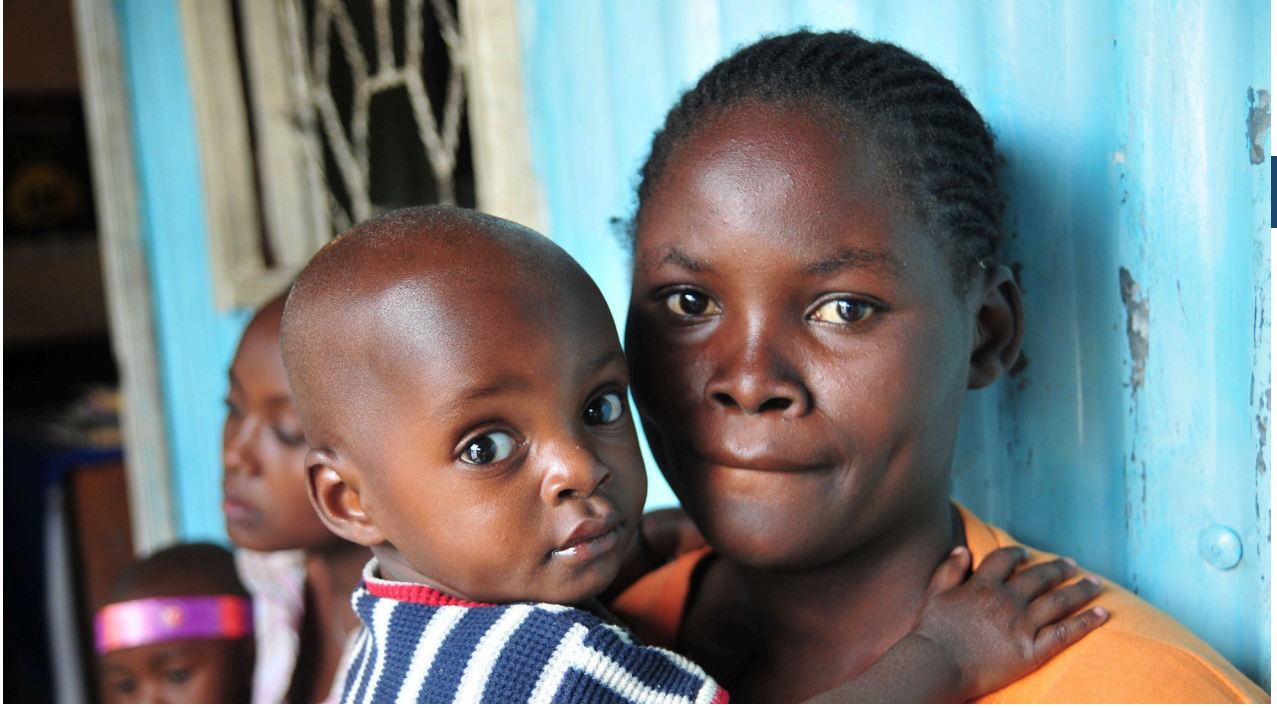
NUTRITION INTERNATIONAL

Nourish Life

HEALTH SYSTEM STRENGTHENING IN KENYA'S ELGEYO MARAKWET COUNTY

The ENRICH project experience





BACKGROUND

In 2016, World Vision Canada and Nutrition International partnered to implement the Enhancing Nutrition Services to Improve Maternal and Child Health (ENRICH) project alongside HarvestPlus, the Canadian Society for International Health, and the University of Toronto's Dalla Lana School of Public Health. Operating in targeted regions in Kenya, Tanzania, Bangladesh, Myanmar and Pakistan[i], the ENRICH project is funded by Government of Canada through Global Affairs Canada's Partnerships for Strengthening Maternal, Newborn and Child Health.

ENRICH aims to reduce maternal and child mortality by strengthening the public health system's ability to deliver quality gender-responsive facility- and community-based health services for improved health and nutrition of pregnant and lactating women and their young children, especially during the first 1,000 days — from conception to a child's second birthday — that set the foundation for optimum child health and development.

In Kenya, the ENRICH project is implemented in 11 out of 20 wards within Elgeyo Marakwet County (EMC). The project directly benefits 324,200 people, 80 percent of whom are children under two years of age.

Overall, Kenya is on course to meet global targets for under-five stunting, wasting and exclusive breastfeeding. However, within the ENRICH project area, progress has been slower (see Table 1). In addition, although no comprehensive micronutrient survey has been conducted in EMC, the last national survey (2011) reported high prevalence of micronutrient deficiencies on a national scale, especially among children under five and women of reproductive age. For example, the Kenya National Micronutrient Survey 2011[1] showed that 26.3 percent of preschool-age children (6-59 months), 16.5 percent of school-age children (9-14 years), and 41.6 percent of pregnant women had anaemia, and over 80 percent of preschool children were zinc deficient.

[i] *ENRICH Pakistan was implemented for two years in Sindh province. The project closed in December 2018.*

Table 1: National and EMC nutrition indicators

Indicators[2]	National[3]	EMC[4] (2014)	ENRICH project area within EMC[5] (2017)
Stunting among under-5 children **Global target by 2025: a 40% reduction**	35% (2008) 26.2% (2014)	29.9%	40%
Wasting among under-5 children **Global target by 2025: < 5%**	7% (2008) 4.2% (2014)	4.3%	5.3%
Underweight among under-5 children **Global target by 2025: N/A**	16% (2008) 11% (2014)	12.6%	17.8%
Exclusive breastfeeding in the first 6 months **Global target by 2025: > 50%**	31% (2008) 61.4% (2014)	Unavailable	42.5%

BARRIERS TO THE DELIVERY OF NUTRITION SERVICES IN THE EMC HEALTH SYSTEM

In 2016, the ENRICH project conducted a baseline survey[5] of the nutrition status and practices in the community (some results indicated in Table 1), the knowledge and skills in nutrition of health workers, and the availability of commodities for pregnant and lactating mothers and young children, as well as availability of routine health service information. A Nutrition Service Delivery Assessment (NSDA) was also conducted in the project area to assess the capacity of 38 lower-level health facilities (HFs) to deliver nutrition services. The baseline survey and NSDA findings highlighted the need to improve nutrition service delivery quality.

Critical gaps identified by the NSDA (2017)

- 92 percent of HFs lacked essential nutrition equipment such as weighing scales and mid-upper arm circumference (MUAC) tapes
- 97 percent of the HFs lacked quality improvement teams for nutrition
- A shortage of nutritionists often meant nursing officers were responsible for delivering nutrition services
- 83 percent of facility staff had not been trained on the Integrated Management of Acute Malnutrition (IMAM) or in nutrition assessment, counselling and support
- HFs collected health and nutrition service information, but often data was not used to track performance and inform decisions about service provision

ADDRESSING THE BARRIERS

Nutrition International worked in partnership with the Ministries of Health (MoH) at the national and county levels to design and implement an intervention to improve maternal and child health and nutrition service provision through the health system. The intervention was guided by the World Health Organization's framework for action to strengthen health systems and focused on improving four key domains: nutrition service delivery, health management information systems, management of essential medicines and commodities, and leadership and governance.

Training supported by ENRICH

Data management: training in Health Management Information Systems (HMIS), data quality audits and data review to improve on collection, reporting and utilization of data at health facility and sub-county levels. The training curriculum was adopted from USAID's Nutrition and Health Program Plus (NHPplus) training material developed in 2015.

Maternal, Infant and Young Child Nutrition (MIYCN): training in the newly developed baby-friendly community initiative to promote improved Infant and Young Child Feeding (IYCF) in the community.

Supply and commodity management: training in nutrition commodity tracking, reporting, and proper storage to promote integration of nutrition commodities within the health commodity supply chain.

Micronutrient Powder (MNP) programming: training in understanding the role of MNP in IYCF, optimal use of MNP, commodity management, monitoring and reporting as well as design and implementation of MNP programs.

Service delivery

The decentralization of the Kenya health system devolved the health management responsibilities to the county level. Consequently, an area that required strengthening was the capacity the County and Sub-County Health Management Teams (C/SCHMT) to provide formal and on-the-job (OJT) training to facility health workers as well as conduct regular supportive supervision (SS) and monitoring of nutrition service delivery. C/SCHMTs were trained as trainers, using manuals developed by the national MoH for Maternal, Infant and Young Child Nutrition (MIYCN) programming.

Health workers from 46 HFs in the ENRICH project area were then trained by C/SCHMTs. Informed by the NSDA, training focused on aspects of essential nutrition service provision, as well as monitoring tools such as the Kenya Health Information System (KHIS) and the Logistics Management Information System (LMIS) for nutrition commodities. The trained health workers were further supported with ongoing mentorship through OJT and quarterly SS visits by the C/SCHMT to assess quality of nutrition service delivery. The SS teams supported the health facility in-charges to develop action plans to address the gaps identified during visits. Observed gaps often included a lack of information, education, and communication (IEC) materials, improper filling and low utilization of service delivery registers, and inadequate reporting and/or stock management tools. The C/SCHMT followed up on the progress of the identified action points during routine monitoring visits to the HFs.

The trained health workers cascaded their training to Community Health Volunteers (CHV) with the support of World Vision Kenya. The SCHMTs followed up on this training with quarterly SS visits to the community units to assess the nutrition

activities undertaken by CHVs. World Vision supported mentorship on planning, implementation, monitoring and reporting on community level activities such as household visits, mother-to-mother support groups, care groups, and action and dialogue days. Community Health Extension Workers and SS teams developed action plans to strengthen the linkage between HFs and the community.

Health information systems

As health workers became familiar with nutrition indicators and data collection and reporting tools, regular data quality audits (DQA) were conducted to assess the completeness, accuracy and timeliness of facility monthly reports submitted to the sub-county level for entry into KHIS. DQAs were conducted every quarter at HF level by the C/SCHMT with the aim to reduce discrepancies between service delivery registers and the summary reporting tools used for data entry into KHIS. Each DQA was followed up by a data review meeting at the sub-county level, which was facilitated by the C/SCHMT to review performance of nutrition indicators based on KHIS reports and develop practical solutions to address data capture and reporting challenges identified through DQAs.

Essential medicines and commodities

To ensure alignment with government plans, the project supported orientation of C/SCHMTs and health workers on the integrated health and nutrition supply chain model under roll-out by the national MoH to all counties. The aim of the integrated model rolled out by national MoH was to streamline logistics management through one central pipeline managed by the Kenya Medical Supplies Agency and to integrate the reporting of nutrition commodities such as iron folic acid tablets, MNP, and vitamin A into the existing health reporting system. Commodity management training was followed up with routine checks conducted by the C/SCHMTs to assess storage conditions and dispensing practices at the HFs and provide recommendations for improvement.

Leadership and governance

To foster greater ownership of the health system strengthening intervention, build a stronger partnership with the county and reduce the cost involved in project planning and implementation, Nutrition International provided grants for this work directly to EMC Department of Health. A fiduciary risk assessment identified mitigation measures against significant risks and safeguards to strengthen EMC's financial and accountability systems. The grants were managed by the CHMT and the County Executive Committee.

The C/SCHMTs coordinated the implementation of the intervention and review of existing national policies, program frameworks, strategies and action plans focused on addressing MIYCN, as well as their interpretation and implementation in EMC that laid the foundation for the multisectoral County Nutrition Action Plan (CNAP).

IMPACT OF ENRICH HEALTH SYSTEM STRENGTHENING

The health workers' improved knowledge and skills in delivering quality nutrition services has led to greater demand for the nutrition services promoted by the ENRICH project. As well, the gap between health services and households has been better bridged by the capacity of CHVs to conduct referrals and follow-up visits. The ENRICH project has raised the profile of nutrition in EMC among county decisionmakers. This has, in turn, increased the county government's awareness of how poor nutrition impacts health, education, and productivity, along with the need for increased investment in nutrition.

Comparing ENRICH baseline and midterm survey data (see Table 2) shows improvement in nutrition services and related behaviours due to the health system strengthening activities in EMC. ENRICH will conduct the endline survey in 2021.

Table 2: Early ENRICH results

Indicator	Baseline survey 2016[5]	2018 survey[8]
Mother's reported consumption of IFA for ≥ 90 days while pregnant with the youngest child	4.3%	17.3%
Percentage of infants aged 0-5.9 months who were exclusively breastfed in the past 24 hours	42.5%	62.9%
Consumption of MNP in the in the past seven days among children 6-23.9 months	N/A	24.5 %
Percentage of children 0-23.9 months who were weighed at least once in the last 3 months	66.5%	79.0%
Percentage/number of health facilities submitted Health Information Management System (HIMS) data to the district/sub-district level every quarter during the past year	33.3%	100%
Health facilities reporting a stock-out of essential medicines and commodities for at least one week in the past 90 days:		
• Iron-folate tablets	16.7%	6.7%
• Zinc tablets	26.1%	5.0%
• Vitamin A capsules	30.8%	3.0%
IYCF policy/guideline is available and is being implemented in the facility	44.4%	72.0%
National guidelines for child growth monitoring is available and is being implemented in the facility	48.1%	64.0%

LESSONS LEARNED

> Now we can fight for what we need. We can look beyond the role of partners to plan ahead so we can continue key things to address existing challenges in nutrition.
>
> **County government official**
> **EMC, December 2019**

The ENRICH project experience has led to key lessons in strengthening health systems:

- **Effective implementation of a comprehensive health system strengthening intervention should be systematic and requires a lengthy timeframe.** The first year of the project was consumed with gap assessments, updates to curricula and training materials, and capacity development activities. Intensive discussions and consultation with government on the scope of work to better align with existing operational plans also required considerable time but facilitated a productive working relationship. Given the time required to complete the groundwork and plan activities for subsequent years in coordination with government and other implementing partners, progress towards achieving some outcomes were not fully evident by the time the midterm survey was conducted.
- **Greater consideration of the workloads of health workers and practical solutions to health workforce shortages are required to improve the quality of nutrition service delivery.** Health facilities were often understaffed and lacked a nutritionist to provide specialized services. The heavy workloads of health workers affected the quality of service delivery, and the recruitment of health staff was beyond the scope of the ENRICH project. The project team worked with the County Department of Health to advocate for recruitment of nutritionists for all HFs as per the Kenya Human Resources for Health Norms and Standards Guidelines for the Health Sector.[9]
- **The availability of quality data at health facilities requires regular cross-checks to ensure the data is reliable for program decision-making.** The nutrition services data collected at health facility level by trained health workers showed discrepancies between source registers and reports submitted to the sub county for uploading to the KHIS. The regular DQAs helped to identify challenges with data collection and reporting, and improve data management through on-the-job training. However, given the detailed work needed, the DQAs and data review meetings were only conducted quarterly, leading to delays in corrective actions being taken.
- **Regular transfers of trained staff negatively impact delivery of nutrition services.** Trained health workers were regularly transferred to HFs outside the geographic scope of the project, leaving fewer workers with the knowledge and skills to deliver quality nutrition services. The project team did not have a good understanding of how transfer decisions were made and therefore, could not effectively engage with government to address the issue in the project area.

RECOMMENDATIONS

From the ENRICH experience, the following are recommended for future health systems strengthening efforts in Kenya:

- **Allow sufficient time.** Implementing partners and government should engage in intensive discussions during the design and planning phase to better understand the context and allocate appropriate time to conduct the health system strengthening work.
- **Support the Task Sharing Policy.** The County Department of Health and partners should work together to support implementation of the Task Sharing Policy Guidelines 2017-2030 to ensure appropriate distribution of tasks among trained health workers and CHVs to reduce the workload and mitigate risk to service delivery.
- **Conduct more frequent HMIS data reviews.** The County Department of Health should consider including monthly data reviews at the HF level to cross-check data before submission, ensuring generation and utilization of reliable data for improving nutrition service delivery. Such data reviews can often be incorporated into the monthly supportive supervision visits to the HFs.
- **Consider a plan to mitigate the effect of health worker transfers.** Baseline assessments should study the number and distribution of health workers in the county and implementing partners should meet with County Department of Health to identify practical solutions to managing transfers of health workers to mitigate risk to nutrition service delivery. Another way to mitigate this risk would be to take a whole county approach to project implementation, rather than only targeting selected areas.

NEXT STEPS

In 2019, Nutrition International worked with the County Departments of Health, Agriculture, Education, Water, Sports and Gender and partners to develop a nutrition advocacy plan to increase ongoing county interest in — and commitment to — nutrition. Nutrition International also developed the EMC Nutrition Investment Case that highlights the potential health impacts and economic benefits of scaling up the high-impact, preventative, nutrition-specific interventions included in the CNAP.

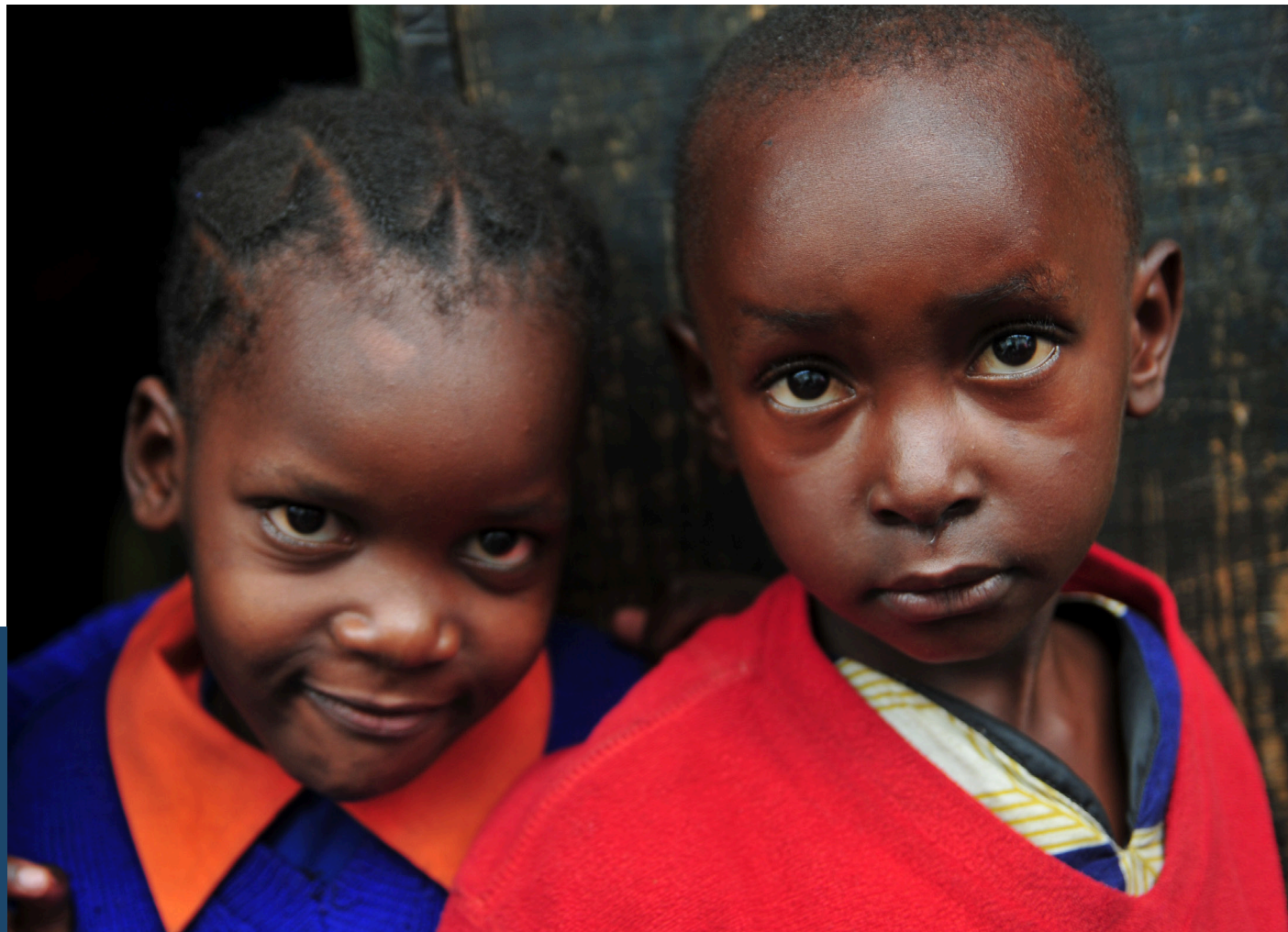
To sustain the impact of the ENRICH project and scale up efforts towards the elimination of malnutrition, EMC will need to continue its efforts to mobilize domestic resources across all key sectors to ensure investment in nutrition continues and establish a system for tracking nutrition budgets and expenditure.

MORE INFORMATION

Founded in 1992, Nutrition International (formerly known as the Micronutrient Initiative) is a global organization dedicated to delivering proven nutrition interventions to those who need them most. Working in partnership with countries, donors and implementers, our experts conduct cutting-edge nutrition research, support critical policy formulation, and integrate nutrition into broader development programs. In more than 60 countries, primarily in Asia and Africa, Nutrition International nourishes people to nourish life.

For more information, please contact Nutrition International's Kenya Office.

+254 709 638 000
africa@nutritionintl.org



REFERENCES

1. Kenya Medical Research Institute, Kenya National Bureau of Statistics, Kenya Ministry of Health, United Nations Children's Fund (UNICEF), Micronutrient Initiative, Global Alliance for Improved Nutrition (GAIN). (2011). The Kenya National Micronutrient Survey 2011.
2. Global targets are the 2012 World Health Assembly Global Nutrition Targets for 2025. Available at: **https://www.who.int/nutrition/global-target-2025/en/**.
3. Kenya Demographic Health Surveys (KDHS) 2008 and 2014.
4. Kenya Demographic Health Surveys (KDHS) 2014.
5. Egerton University, Kenya and University of Toronto, Canada (2017). Enhancing Nutrition Services to Improve Maternal and Child Health in Africa and Asia (ENRICH): Baseline Study Report, Kenya, March 2017.
6. World Vision, 2017. A Report on Nutrition Service Delivery Assessment In Health Facilities In Elgeyo Marakwet County - Keiyo North, Keiyo South, Marakwet East And West Sub-Counties.
7. World Health Organization. (2007). Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action.
8. Egerton University, Kenya and University of Toronto, Canada (2019). Enhancing Nutrition Services to Improve Maternal and Child Health in Africa and Asia (ENRICH): Midterm Evaluation Report, Kenya, May 2019.
9. Principal Secretary, Ministry of Health, Kenya. (2014). Human Resources For Health Norms and Standards Guidelines For The Health Sector.
   Available at: **https://www.health.go.ke/wp-content/uploads/2015/09/16th%20october%20WHO%20Norms%20and%20Standarnds%20%20Book.pdf.**

NUTRITION INTERNATIONAL
Nourish Life

World Vision

HarvestPlus
Better Crops • Better Nutrition

CSIH SCSI

Joannah & Brian Lawson Centre for Child Nutrition
UNIVERSITY OF TORONTO

ENRICH

ENHANCING NUTRITION SERVICES TO IMPROVE MATERNAL AND CHILD HEALTH