Mid-term Evaluation of Maternal and Child Nutrition Programme (MCNP II) in Kenya

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Abstract

Background: Kenya is still facing a triple burden of malnutrition. Malnutrition in Kenya is multi-faceted in nature with health and socio-economic implications. Huge geographical disparities exist, especially, in the arid and semi-arid lands, further exacerbated by factors such as inadequate funding allocation to nutrition sector, challenges in multi-sectoral coordination and nutrition governance. UNICEF's Maternal and Child Nutrition Program (MCNP II) is a four-year (2018-2022) resilience building, multi-sectoral program focused on pregnant and lactating women, mothers of children under five years and children under five years. The objective of this mid-term evaluation was to establish relevance, effectiveness, efficiency, and sustainability of the programme.

Methods: The study adopted a concurrent mixed methods approach, where qualitative information was gathered through key informant interviews, focus group discussions and quantitative data obtained through desk review of secondary data from various sources. Qualitative information was organized using Nvivo software and analyzed thematically, while descriptive analysis for the quantitative data was undertaken using EXCEL software.

Results: The findings show that MCNP II programme has aligned its efforts to the nutrition situation in Kenya as well as to the Government of Kenya and donor priorities. Most of the planned programme targets were achieved despite operating in COVID-19 pandemic environment. The use of approaches such as family mid-upper arm circumference (MUAC), integrated management of acute malnutrition (IMAM) surge model, Malezi bora and Logistic Management Information Management System have contributed to realization of results. Stringent financial management strategies contributed towards programme efficiencies; however, optimal utilization of the resources needs further strengthening. The programme has adopted strategies for strengthening local capacity and promote ownership.

Conclusion: The programme is on track across the four evaluation criteria. However, a few suggestions are recommended to improve relevance, effectiveness, efficiency, and sustainability. A formal transition strategy needs to be developed in consultation with multi-stakeholder groups and implemented in phases. UNICEF can explore 'Delivering as One approach' and gender transformative approaches with more systematic involvement of males and females in gender-based discussions.

Background

Worldwide, 149.2 million children under 5 years of age are stunted, 45.4 million are wasted and 38.9 million are overweight [1]. Globally, there has been a 40% reduction in stunting among children under 5 years[2]. Out of 194 countries, about 27% are on track to meet stunting and wasting targets. Despite this progress, the world is off track to meet five out of six global Maternal, Infant and Young Child Nutrition (MIYCN) targets; stunting, wasting, low birth weight, anemia and childhood overweight [1].

Kenya is classified as a low-middle-income country (LMIC) with a population of 47,564,296 (males: 23,548,056; females: 24,014,716) and under five population of 5,993,267 (KNBS, 2019). In 2020, Kenya

was on course to meet the Sustainable Development Goals (SDGs) for stunting, wasting, underweight and exclusive breast feeding [3]. The stunting level reduced from 35.3% in 2008–2009 to 26% in 2014, while underweight and wasting prevalence reduced from 16.1% and 7–11% and 4%, respectively[4]. The policy environment in Kenya has been aligned to achieve the SDGs. For instance, the current Medium-Term Plan[5] has mainstreamed the SDGs. Further, mainstreaming of SDGs in performance contracting, actions plans and sub-national County Integrated Development Plans (CIDPs), 2018–2022, position Kenya to better implement the SDGs. The Government prioritized the “Big 4 Agenda” focusing on Food and Nutrition Security that accelerates SDG 2. Multi-stakeholder engagement forums such as Parliamentary Caucus on SDGs and Business, Kenya Private Sector Alliance, Council of Governors for the sub national governments have been established to oversee the implementation and progress of SDGs. Kenya’s Beyond Zero campaign, aimed at eliminating all preventable maternal and child deaths by 2023 is also a key step towards achieving SDG 3 (good health and well-being including maternal and child health). Despite this progress, Kenya is still facing the triple burden of malnutrition characterized by the coexistence of undernutrition as manifested by wasting, underweight and stunting; micronutrient deficiencies; and overweight and obesity including diet-related noncommunicable diseases.

Malnutrition and its determinants in Kenya are multi-faceted in nature with health, nutrition, and socio-economic implications. The Cost of Hunger study in 2019 estimates Kenya lost 6.9% of its Gross Domestic Product due to undernutrition [6]. Huge geographic disparities especially in the Arid and Semi-Arid Lands (ASAL) regions exist and is associated with inequitable allocation of resources, chronic poverty, and cyclical emergencies. As a result of these repeated crises and limited capacities to absorb shocks, children in the ASAL areas experience multiple deprivations of their rights to health, adequate food and nutrition, and safe water amongst others - and remain clearly disadvantaged compared to the rest of Kenya. Stunting prevalence remains very high (above 30%) in West Pokot, Kitui, Kilifi, Narok, Samburu, Mandera, Uasin Gishu, Bomet and Tharaka Nithi [4], [7]

Women’s micronutrient status and dietary diversity in the ASAL areas is poorer as compared to other regions in Kenya, and this situation has had minimal changes in the last two decades. The important role of women is centrally underlined, given that it is mothers who educate their offspring and who contribute importantly to household economies and food security. The health and nutrition status of lactating or pregnant women as well as their economic power are, therefore, principal elements reflecting on the health and well-being of the children.

A devolved governance structure was ushered in 2013/14 in Kenya, whereby 47 counties got the responsibility to implement national policies including those related to nutrition [8]. Each county is expected to develop County Nutrition Action Plan (CNAP) anchored on the Kenya Nutrition Action Plan (KNAP) which outlines responsibilities on the provision of technical support, advocacy, guidance, and capacity development for nutrition. The nutrition sector stands to benefit from the devolution as the conceptualization and implementation of interventions will be targeted to the local needs and constraints such as agroecological, socio-economic, and political variations. the total government budget allocation

to health increased from 7% in the financial year (FY) 2017/18 to 9.2% in FY 2018/19 [9], a gradual progression towards the Abuja Declaration target of 15% for Kenya.

Despite such progress in the overall health sector funding, the nutrition sector remains grossly underfunded. Counties expenditure on nutrition is about 0.8% of the total county budgets which is inadequate for the nutrition sector needs in the counties. For example, data from the county budget briefs highlight that Garissa, Mandera, Marsabit, Samburu, and Tana River have shown decreasing budgetary allocation trends between 2014 and 2017. Similarly, certain counties like Kwale and West Pokot did not even allocate any budget for nutrition in 2017.

The Maternal and Child Nutrition Program (MCNP II) is a resilience building, multi-sectoral program focused on pregnant and lactating women, mothers of children under five years and children under five years. The first phase of the program i.e., MCNP I was introduced in the year 2014 to 2018. Based on the key learnings from the first phase, the MNCP II was launched in July 2018.

The focus of MCNP II is to support the most marginalized and vulnerable areas by ensuring that: 1) communities adopt healthy infant and young child feeding behaviors and practices, as well as demand and utilize quality nutrition services; 2) communities are provided with quality integrated nutrition services; 3) the capacity of national and county governments, and other service providers is improved, and commitment strengthened, to deliver quality integrated services; and 4) government and non-government partners adopt risk-informed integrated approaches to emergency preparedness, planning, and response to humanitarian needs. Under this program, UNICEF has been providing technical and financial support to the Ministry of Health to achieve the desired objectives. It has also worked towards improving multi-sectoral coordination by strengthening the links between the Division of Nutrition and Dietetics (DND) and other Government of Kenya (GoK) departments, such as Community Health, Maternal and Child Health, Water and Sanitation, Agriculture, Social Protection, and Education.

Given that the MCNP II completed two years of implementation in June 2020, UNICEF Kenya's Nutrition section sought to conduct a mid-term evaluation of the program to assess whether the goals established at the outset of the program were being achieved and identify key successes and lessons learned. The evaluation assessed the relevance, effectiveness, efficiency, and sustainability of MCNP II based on Organization for Economic Cooperation – Development Assistance Committee/United Nations Evaluation Group[10] criteria. The evaluation also covered aspects of gender, human rights, and equity sensitivity of the program.

Methods

This section details the methodology adopted for evaluation design, sampling, data collection and analysis.

Evaluation Design and Matrix: The evaluation employed a non-experimental concurrent mixed method approach, where quantitative information was gathered to complement the qualitative insights. The

quantitative data on key indicators from programme's result framework was collected through desk review of programme reports and documents. Primary data to gather qualitative information was collected through in-depth interviews (IDIs) with key informants and stakeholder consultations and Focus Group Discussions (FGDs). Further, The Theory of Change (ToC) was used as a guide for the logical relationships between strategies, activities, and results chain. Furthermore, regular validation sessions to seek input from different stakeholders were organized. Prior to the evaluation, a comprehensive review of processes and approaches was undertaken to understand the strengths and gaps in programme implementation. The findings from the review were used to complement the evaluation findings.

The Relevance, Effectiveness, Efficiency, Sustainability based on the OECD-DAC/UNEG evaluation criteria was used[10] for the evaluation. The evaluation matrix included key evaluation questions, sub-questions (probes), primary and secondary key indicators and data sources. In addition, the evaluation tools and rubrics were developed with a gender equality, human rights and equity perspectives in consideration.

Sampling Design: A comprehensive mapping of the relevant stakeholders was done to understand their role in the program. Following which, purposive sampling was used to identify stakeholder groups and key informants, involved in the program implementation. Key stakeholder groups included Ministry of Health (MOH), Division of Nutrition and Dietetics (DND), Ministries of Education, Livestock, Agriculture and Fisheries, Labour and Social Protection, Treasury and Planning; implementing partners, County Departments of Health, donor agencies and private sector organizations; UNICEF representatives including decision-makers involved in program planning and design and field teams including zonal officers and nutrition support officers (NSOs); and communities in which the program was implemented.

Multi-stage cluster sampling was used to identify counties, sub-counties, and recruitment of participants for the beneficiary field study.

- **Stage 1: Selection of counties -** Three counties - Kitui, Isiolo and Turkana (Fig. 1), were purposively selected from 13 program counties based on the intensity of MCNP II, levels of malnutrition, UNICEFs investment, livelihood cluster, UNICEFs field presence, partner presence, access and characteristic of the region - arid or semi-arid.
- **Stage 2: Selection of sub-counties -** Mapping of sub-counties in each of the three selected counties was conducted using Kenya National Bureau of Statistics (KNBS) data. Selection of sub-counties was based on intensity of MCNP II and performance of Integrated management of acute malnutrition (IMAM) program indicators and Vitamin A supplementation (VAS) coverage. Based on these criteria, Kitui Central (Kitui), Isiolo subcounty (isiolo) and Turkana Central (Turkana) were selected based on programme poor performance while Mwingi West (Kitui), Garbatulla (Isiolo) and Turkana South(Turkana) (Fig. 1) were selected on the basis of better performance.
- **Stage 3: Selection of participants -** In each sub-county, key community groups were recruited based on their influence on the nutrition and health seeking behaviour. The included - Community health volunteers (CHVs); Community health extension workers (CHEWs); Community leaders; Mothers of children below 5 years of age; Pregnant and lactating women; Adolescent girls and

Fathers/Males/Household influencers. The sample size was determined based on an assumption that saturation of information will be achieved through this sample size. The sample for qualitative design is based on the premix of saturation.

Training and Pre-testing of tools: Training the teams on data collection tools and evaluation matrix was conducted in two phases:

- **Phase 1**: Prior to the **key informant interviews with the stakeholder groups**, a **two-day training workshop** for the evaluation team that included qualitative researchers and note-takers, was conducted in the IQVIA Nairobi Office. UNICEF team, members from the ERG and MoH also participated in the training. The team was trained on evaluation questions, probing techniques, ethical considerations and note-taking. On the second day of the training, two tools were pre-tested with different participants, not part of the study. A debriefing session was conducted after pre-testing to readjust the evaluation questions and probes.
- **Phase 2**: Prior to the **beneficiary field study, one day training** was organized in the IQVIA Nairobi office with the evaluation team. The team was trained on evaluation tools for key informants in the community and focus group discussions with the beneficiaries, ethical considerations, field level practicalities and probing techniques. Role plays were conducted followed by debriefing session to discuss the flow of questions, challenges in eliciting responses and probing.

Data Collection: A two-pronged evaluation design was utilized to gather data comprising review of secondary documents including programme data and primary qualitative data collection.

A comprehensive desk review of key documents (we can mention which ones in blocks eg, Programme reports; policies, guidelines etc) was conducted with an objective to understand the project context, key approaches and the results achieved by the programme. Primary data collection was conducted using semi-structured interview/discussion guides, across two phases, to capture insights from both demand and supply sides. At policy and program implementation and oversight level, the study conducted 29 in-depth interviews with the key informants from the selected key stakeholder groups.

At the community level, 18 face to face FGDs (6 per county) were conducted with beneficiaries of the program who included women of reproductive age, adolescent mothers and other decision-makers in the family (including men), covering 167 participants. Nineteen (19) In-depth interviews with the key informants from the community including community leaders, health workers and community health volunteers (CHVs). were conducted.

For the policy level IDIs and community face to face interviews and discussions, Interviews were conducted remotely on Microsoft Teams and online interview notes and field notes and audio recordings used to capture insights respectively. These were later transcribed and translated where necessary into English as interview transcripts. Stringent quality assurance mechanisms were followed to ensure quality of data and transcripts. COVID-19 public health guidelines were observed as provided for by SMART

Interim guidance on restarting population level surveys and household level data collection in humanitarian situations during covid-19 pandemic" (9).

Data Analysis: Quantitative data obtained from the secondary datasets was analyzed using EXCEL and insights were generated for comparative and trend analysis of results and program indicators. The qualitative data was organized using Nvivo software, where thematic analysis was done by generating codes and themes from the qualitative interviews and discussions.

Findings

The findings are presented under the four evaluation criteria – relevance, effectiveness, efficiency and sustainability.

Relevance:

Relevance reports on ; to what extent MCNP II was aligned to the nutrition situation in Kenya; the government and UNICEF priorities, UNICEF global and regional strategies, considering gender, equity, human and child rights perspectives. Additionally, it presents findings on the adaptability of the programme to the changing programming and resource landscape.

***Relevance to nutrition situation*:** Evidence from the desk review triangulated with information from key informants' interviews revealed that MCNP II program design was based on comprehensive analysis of the nutrition situation in Kenya. Extensive review and use of findings from multiple studies and reports was done. This process enabled identification of key bottlenecks and barriers to achieving optimal nutrition for children under five and women and thus informed the choice of interventions and program focus counties for MNCP II. Bottlenecks and barriers that were identified from analysis of the nutrition situation in Kenya, were categorized into four program result areas – demand, supply, enabling environment and emergencies. ASAL counties which are prone to high levels of acute malnutrition among children under five years of age were prioritized. Further the identified bottlenecks informed the program theory of change as well as identification and alignment of program strategies to achieve the desired results.

Relevance to resource and programming landscape including government and UNICEF priorities

The MCNP II result framework was found to be aligned to key Government and Ministry of Health policies including Vision 2030, Medium-Term Plan (MTP)[5], the Kenya Health Sector Strategic and Investment Plan (KHSSIP) 2014–2018[11], Big 4 agenda[12], Food and Nutrition Security Policy (FNSP)[13] and Kenya Nutrition Action Plan (KNAP) [14]. For instance, there is alignment to the social pillar of the Vision 2030 which entails social protection, strengthening KEMSA and scale up of community strategy for nutrition; reduction of maternal and child mortality objective of MTP III; objectives such as reduction of mortality and burden of malnutrition and micronutrient deficiencies under KHSSIP, among others. The program is coherent with almost all the key result areas of the KNAP.

MCNP II was noted to be aligned with the UNICEF's Global Nutrition Strategy (2020–2030)[15]. This strategy is also focused on maternal and child nutrition and targeted towards reduction of stunting. MCNP II is part of the United Nations Sustainable Development Cooperation Framework (UNSDCF) 2018–2022 [16], and builds on the UNICEF Strategic Plan, 2018–2021, and the 2016 Concluding Observations of the Committee on the Rights of the Child in Kenya. Although, the program is largely aligned to these strategies, there are some areas beyond the program coverage, for instance, burden of overnutrition and obesity; and adoption of lifecycle approach covering middle age childhood and elderly.

Donors reported their satisfaction as the programme's strategic priorities were aligned to their priority focus areas such as systems strengthening and cross-sectoral integration, risk-informed programming and resilience building for nutrition emergencies as well as prioritization of ASAL counties for nutrition-specific and nutrition-sensitive programming.

Opportunities for cross-sectoral integration

MCNP II has four thematic/result areas, namely, demand, supply, enabling environment and risk informed/shock responsive programming that provide greater opportunity for integration and cross-sectoral programming. The thematic focus is to address the evolving nature of maternal and child malnutrition (through protection and promotion of diets, services and practices that support optimal nutrition and growth for all children, adolescents, and women). **The programme has provided opportunities for implementation of integrated programming with health, WASH, livestock and agriculture, education, child protection and social protection sectors** as outlined in Table 1. Utilizing prior evidence from research that suggested that combined interventions for improving nutrition and sanitation practices, could reduce mortality among children under five years by 15% [17], UNICEF supported Kitui County to design an integrated Sanitation and Nutrition programme (SanNut). The project bolstered the existing community sanitation initiative with a set of nutrition behavior-change messages targeted at caregivers of young children. Evaluation of the project found that it improved families' sanitation practices and nutrition knowledge [18]. Since the programme improved families' sanitation practices and nutrition knowledge without adversely affecting other sanitation components, UNICEF scaled the integrated sanitation and nutrition programme to a second county in Kenya, West Pokot. In addition, implementation of the combined programme helped to reduce implementation costs and scale up the combined programme at a more accelerated pace.

Table 1: Synergies with nutrition sensitive sectors

Health	WASH	Livestock and Agriculture	Education	Child Protection	Social Protection
• Integrated community case management (iCCM) • Baby Friendly Hospital Initiative (BFCI) at basic and comprehensive emergency obstetrics care facilities • Integration of vitamin A supplementation (VAS) into expanded immunization programme supply chain • Integrated management of acute malnutrition (IMAM) surge and integrated outreach • Integration of nurturing care in BFCI/Maternal infant young children nutrition(MIYCN)	• Nutrition integrated into community led total sanitation (CLTS)	• Modeling and scaling of integrated programming-milk value chains food security and Agri-nutrition frameworks	• Maternal education, VAS in early childhood development center • Nutrition in school curriculum • Completion of education for girls	Link BFCI with birth registration	• Nutrition improvements through Cash and Health Education (NICHE)

However, the overall governance in the nutrition sector requires further strengthening. There is a need to institutionalize a structure to effectively coordinate the multi-sectoral efforts. There is already a defined structure in place, the Food and Nutrition Security (FNS) Council and thus, the efforts can be channelized to expedite the process to establish of this council. This would require extensive coordination and contribution from different sectors.

Response to COVID-19

It was noted that the MCNP II program design was modified in a systematic manner, based on evidence and priority setting, to align with nutrition priorities during COVID-19. Additional interventions were included to respond to the pandemic in a timely and adequate manner. For instance, one of the key

adaptations made was on nutrition surveillance, where Family MUAC, an approach that allows caregivers to take an active role in screening their children for malnutrition using color coded tape for measuring mid upper arm circumference (MUAC) and referring them for treatment, was scaled up. This ensured timely identification and referral of malnourished children for treatment. During the pandemic, one of the key challenges faced by the programme was declining numbers of beneficiaries seeking essential nutrition and health services at the facilities. Between March and May 2020 outpatient service utilization among children under 5 dropped by 45% while antenatal care attendance decreased by 15% (UNICEF, 2020). UNICEF supported the Ministry of Health to develop a business continuity plan that focused on continuity of the essential services, nutrition surveillance and information.

Gender, equity and human rights perspectives

Evidence from the desk review indicated that the strategic approaches/objectives of MCNP II were aligned to the gender equality and human rights policies such as session paper No 2 0f 2019 on National Policy on Gender and Development[19] under the Kenya Vision 2030[20], Convention on Child Rights (CRC),[21], [22] Convention on the elimination of all forms of discrimination against women (CEDAW)[23] as well as human rights of persons with disabilities. Key informants noted that the sex and age disaggregated data is being collected in the Standardized Monitoring and Assessment of Relief and Transitions (SMART) survey. Similarly, gender roles and maternal workload was captured through qualitative 'Knowledge, Attitude, Behavior, Practice' (KABP) surveys. It was noted that gender sensitization on reduction of maternal workload to enhance nutrition outcomes was undertaken in the communities. Father-to-father support groups were formed to facilitate positive behavioral change on feeding practices and championing the importance to seek services in health facilities. All 13 target counties implemented community feedback mechanisms, including community dialogues, feedback boxes in health facilities, and other feedback processes to inform program improvements. A reconnaissance with community discussions showed that community members acknowledged the feedback mechanism and community involvement in the program. The community agreed that the programme made efforts towards gender mainstreaming, citing increased male involvement and father support groups that had been established were effective in garnering spousal support to use health services. However, a systematic approach needs to be adopted to include women in programme design and conduct gender-based discussions.

"They talk about pregnant mothers, children under five, and old age. Then as to whether such a facility is stocked with medicines or not, the community themselves sit down, get involved so they can find out. When wife is pregnant, I take her to the clinic, she gives birth at the maternity clinic, a month later. If she is sick, I will take her to the hospital, they will bring her back to good health." – FGD Participant (Male)

"Exactly. Mother-to-mother support. They meet to exchange ideas and support each other. At the end of the day mothers in the mother-to-mother support group are better off compared with those tucked up in the villages. Something else I want to say as a chief of this community is that this community is very vulnerable, and it is facing a lot of challenges. Despite the availability of a hospital, not everyone can get

to the hospital and the available CHVs cannot manage to reach to help in each and every household."– Community Leader

Effectiveness:

Effectiveness assessed the extent to which MCNP II attained the programme results, contributed to national and sectoral priorities, and achieved value for money. This assessment considered, programme outcomes; contribution to national and sectoral priorities; role of advocacy and cost effectiveness and value for money.

Realization of planned programme outcomes

The MCNP II has targets to reduce mortality and stunting through multiple strategies including increased access to vitamin A supplements; reduced severe acute malnutrition (SAM) among children by ensuring that all children with SAM receive appropriate care through increased admissions of children under 5 years and reduced stockouts of SAM supplies. Further, the programme targeted to create demand for iron and folic acid among pregnant women, increasing dietary diversity in children and women, using risk-informed approaches for preparedness to address emergencies, and supporting the existing national multi-sectoral committee for nutrition to remain functional in the sector. From the mid-term evaluation, the planned targets were achieved across all the key indicators defined in the results framework. These included, increased uptake of vitamin A among children, increased uptake of IFAS among pregnant women among others as detailed in Table 2 which provides a comparative analysis between the planned and achieved targets for the 13 focus ASAL counties except for admissions of children with SAM in 2020 and proportion of facilities that offered SAM services in 2018 and 2020. Looking at the current pace at which the programme has achieved its planned targets and has gone beyond, it is likely that MCNP II results will also be achieved before the end of programme cycle by June 2022.

Table 2: Comparative analysis between planned and achieved targets for MCNP II results framework indicators

Key Indicators	Planned (2018)	Achieved (2018)	Planned (2019)	Achieved (2019)	Planned (2020)	Achieved (2020)
Outcome 1 - Reduction of mortality and stunting						
Percentage of girls and boys who received two annual doses of Vitamin A supplementation	50%	64.5%	60%	67.4%	70%	87.6%
Number of Sphere standards met (in relation to the management of SAM)	3	3	3	3	3	3
Output 1.1 – Demand						
Percentage of pregnant women receiving iron and folic acid supplementation	70%	78%	72%	78%	75%	79%
Percentage of counties implementing plans/programmes to improve diversity of diets in children (% of counties out of 13)	21%	24%	26%	100%	28%	100%
Output 1.2 – Supply						
Percentage of districts providing care for children with SAM as part of regular health and nutrition services	55%	53%	60%	60%	64%	60%
Percentage of health facilities with zero stockouts of SAM supplies	92%	92%	94%	97%	95%	100%
Output 1.4 - Enabling Environment						
Existence of functional national multisectoral committee for nutrition	No	Yes	Yes	Yes	Yes	Yes
Implementation of a national strategy to prevent stunting	No	No	Yes	Yes	Yes	Yes
Output 1.5 - Risk informed Approaches						
Existence of emergency preparedness plan for nutrition	Yes	Yes	Yes	Yes	Yes	Yes
Number of children aged 6-59 months with SAM admitted for treatment	77,232	82,998	72,000	87,622	70,000	63,443
Child-sensitive national risk management plans addressing risks related to nutrition in emergencies are updated	Yes	Yes	Yes	Yes	Yes	Yes

In 2018, 5 out of 13 counties were implementing plans to improve dietary diversity in children. However, in 2019 and 2020, the planned results were achieved for all the 13 counties. In 2018, 7 counties had existence of functional national multisectoral committee for nutrition, however, this number rose to 10 counties in 2019 and in 2020, 12 out of 13 counties have achieved this result. In 2019 and 2020, all 13 counties have had existence of emergency preparedness plan for nutrition.

Service delivery approaches and innovations, use of technology and tools and alignment to government priorities were noted as key enablers that facilitated the achievement of planned results. For instance, Malezi Bora, the child health week was used as an opportunity to reach beneficiaries for health and nutrition services including vitamin A supplementation; the family Mid-arm upper circumference (Family MUAC) for screen of malnutrition at home and self-referrals, integrated Community Management of Acute Malnutrition (ICMAM) are some of the examples of service delivery models and innovations under the program. Similarly, the use of technology has facilitated efficient supply chain management and improved tracking of budget expenditure. For instance, the introduction of Logistic Management Information System (LMIS) to manage supply chain of essential nutrition commodities contributed to achievements in zero RUTF stock-out rates in the 13 target counties; Nutrition Financial Tracking Tool (NFTT) was critical for adequate budget allocation and tracking expenditure for nutrition sector and Rapid Pro SMS platform was leveraged for outreach and social behavior change communication (SBCC) activities.

Key informants also noted that MCNP II established community peer support groups for cascading nutrition knowledge from health workers to the community. CHVs were instrumental in nutrition counselling, supporting in community-facility referrals and providing support at the health facilities. Data from the focus group discussions indicated that community members perceived provision of micronutrient supplements and nutrition counselling effective in improving service delivery. Additionally, interactions with community members showed that they perceived the use of CHVs for Family MUAC and mother-to-mother support groups as some of the effective approaches.

"…But after sensitization, the targeted mothers now know that they need to breastfeed a child for 6 months, and then introduce other foods. Also, they were not buying fruits for children, they would only give ugali with potato soup, morning, lunch and dinner. But nowadays they give fruits—the local fruits, what is available here" ***– HCW***

"….the community members are no longer afraid to seek medical attention, they do not fear bringing children, they have really changed" – ***Community Leader***
"The community members air their problems through CHVs or Traditional Birth Attendants (TBAs); the TBA will bring their issues to the hospital and take the feedback to the community. Then the CHV will talk to the CHEW, who will talk to the In-charge. Then he will give the information to the CHEW, then disseminate it to the CHV then she takes it to the households." – FGD Participant

Contribution to national and sectoral priorities

The programme was found to be in coherence with the national and sectoral priorities including reducing stunting and implementing high impact nutrition interventions. By achieving improvements in its planned targets such as the vitamin A supplementation and treatment for severe malnutrition it contributed towards the planned targets of the sector. For instance, in the year 2020, the SAM sector priorities were 88,451 out of which a target of 63,443 SAM admissions was achieved by MCNP II. It also supported government in operationalization of the strategies through implementation frameworks and roadmaps.

For instance, UNICEF supported the development of strategies and policies on Maternal, Infant and Young Child Nutrition (MIYCN). The technical support included content development and designing of policies, guidelines, strategies, training packages and assessment tools. The following outputs were secured: 1) Implementation framework for securing a breastfeeding friendly environment at workplaces, 2) National framework for implementation of breast milk substitute (Regulations and Control Act, 2012, [24] Training package for the community health volunteers on BFCI, 4) National Maternal Infant and Young Child Nutrition Policy Guidelines, 5) Operational guidance for Maternal Infant and Young Child feeding in emergency 6) BFCI assessment tools.

Advocacy Approach

It was evident from the desk review and key informants' interviews that the programme fairly fulfilled its role for upstream engagement to advocate for women and child nutrition rights. Advocacy led to inclusion of more nutrition activities in county annual workplans and county integrated development plans (CIDPs) for all 13 counties. MCNP II led to the development of women and children-sensitive policies and frameworks. Advocacy efforts led to securing of nutrition specific funding in the programme-based budgets (PBB). For instance, counties like Kilifi, Wajir, Turkana, Baringo, and Samburu, are now receiving nutrition specific budgets under the PBB and this was because of the sustained advocacy actions. This ensured accessing and securing actual allocated funds during the budget process. Further, the programme contributed towards development of terms of references (ToRs) for the multi-stakeholder platforms (MSPs) which are critical for cross-sectoral advocacy at sub-national level as well as to ensure coordination with the national level. MSPs are now functional in 12 counties, except in Kitui.

Cost-effectiveness of implementation and value for money

It was noted that cost-minimization approaches were leveraged under the programme to save implementation costs. For instance, training of the trainers (ToT) approach helped reduce cost on training at the county level because it allowed fewer healthcare personnel to be trained. The trainers then cascaded the learnings to the sub-counties, reducing the cost for training all sub-county and facility level staff. On-the-Job Trainings (OJT) ensured practical skills were learned with minimal training and opportunity costs. This approach enabled the programme to directly reach out to the trainees (healthcare workers/facility staff) while reducing logistical costs for training. Integration of nutrition in health outreaches emerged as a key approach in reducing costs for vertical service delivery.

To reduce the operational and the overheads costs, the Value for Money (VfM) policy was leveraged under the Programme Cooperation Agreement (PCA) arrangements with the implementing partners. Before the introduction of Value for Money (VfM) policy, implementing partners were supporting costs at about 25% of the program costs; however, with the introduction of VFM, IPs' contribution increased. Similarly, the cost of doing business with implementing partners reduced. Notably, UNICEF's contribution to overhead cost reduced, by about 12–23%. Out of the 15 implementing partners contracted from September 2018, 5 partners contributed more than 25% to the direct program costs and 10 partners contributed at least 15%, as recommended by UNICEF. To achieve value for money, implementing partner

overhead ratio should be below 25%. The overhead ratio was less than 15% for 5 partners while for 10 partners it was between 15% and 25%. Thus, overall, the value for money and cost-effectiveness for program implementation was moderately achieved, by the time of mid-term evaluation.

Efficiency

Efficiency assessed the achievement of programme results through efficient use of resources. This component reports on efficient programme implementation approaches, partnership modalities, priority setting for resource allocation, coordination and monitoring.

Efficient programme implementation approaches

Budget allocation and utilization ratio

Table 3 presents a comparative analysis of expenditure ratio, that is, amount of budget actually utilized in proportion to the budget. The ideal expenditure ratio must be 100%. It is noted that for the MCNP II, the expenditure ratio was over 100% for the years 2018 and 2019. On the other hand, it was about 70% for the year 2020.

Table 3: Budget allocation and utilization ratio across four outputs from 2018-2020

Output areas	Expenditure ratio (2018)	Expenditure ratio (2019)	Expenditure ratio (2020)
Demand	63%	17%	22%
Supply	103%	153%	0.4%
Enabling environment	135%	17%	13%
Emergencies	3%	258%	74%
Total	**154%**	**133%**	**71%**

The utilization of funds from the allocated budget for demand output was consistently lower throughout 2018 to 2020. On the other hand, for the supply side, in the first two years of programme (2018 and 2019), the expenditure was higher than the allocated budget for the output. However, in the year 2020, about 0.4% of the total budget was utilized for the supply related programme activities. This was attributed to the end of the support by major donor, FCDO in June 2020, and to the redirection of funds towards the COVID-19 response. Similarly, the utilization of funds from the allocated budget for output 3 (an enabling environment) was lower in both 2019 and 2020. However, in the first year of the programme inception (2018), the expenditure was higher than the allocated budget. This was because the programme increased its efforts towards creating an enabling environment in the initial year of its inception. Utilization of funds for output 4(risk-informed programming) was about 3% in the first year of

MCNP II inception. However, an improvement was noted in the next two years and in the year 2019 the expenditure was higher than the allocated budget. This was attributed to the programme adjustments and shifting priorities during the 2019 drought and the COVID-19 pandemic in 2020.

Comparative analysis of forecasted and distributed nutrition commodities and supplies

The Table 4 highlights the planned v/s actual distribution of RUTF under MCNP II. It was evident, that, overall, for the years 2018 and 2019, the RUTF supplies distributed were higher than the planned distribution. This was attributed to the evolving demands and nutrition needs of the counties during the programme implementation. For instance, situations like droughts, floods and other nutrition emergencies can lead to worsening of nutrition situation and increased requirements for RUTF. However, for the year 2020, it was lower than the planned distribution due to the COVID-19.

Table 4: RUTF supplies planned v/s distributed

	2018		2019		2020	
Supplies	**Planned**	**Distributed**	**Planned**	**Distributed**	**Planned**	**Distributed**
RUTF	39,063	77,529	69,814	71,811	52,474	22,707

Table 5: Planned v/s actual distribution of RUTF in counties (*all figures in %)

Counties	Baringo	Isiolo	Kilifi	Kitui	Kwale	Mandera	Samburu	Tana River	Turkana	Wajir	West Pokot	Garissa	Marsabit
2018	160	83	556	420	762	200	38	109	192	298	155	223	290
2019	85	72	45	51	51	122	65	39	138	131	82	205	82
2020	76	22	4	64	108	19	54	8	73	17	55	9	80

Above 100% distribution than planned | Between 50-100% distribution of planned | Less than 50% distribution of planned

Table 5 highlights the planned v/s actual distribution of the RUTF in the counties. It was noted that for the year 2018, in some of the counties such as Baringo, Wajir, West Pokot, Garissa, Marsabit, Kitui, Kilifi, Kwale, Mandera, Tana River and Turkana, the distribution of RUTF was more than the planned threshold of 100% of RUTF distributed. In the years 2019 and 2020, for counties of Kilifi and Tana River, the actual distribution was less than 50% of the planned supplies. Similarly, in Isiolo, Mandara, Wajir and Garissa, in 2020, the actual distribution was as less than 50%.

Stringent financial management strategies

From the findings, UNICEF was guided by different financial policies and procedures to manage the disbursement of funds and reporting of expenditures including using the Harmonized Approach to Cash

Transfers[25] and UNICEF financial rules and regulations. The HACT approach supported risk management with a focus of reducing transaction costs associated with programme implementation by harmonizing procedures as well as promoting reporting on funds that are disbursed. The funding requests were managed through Funding Authorization and Certificate of Expenditure (FACE), which required authorization from the programme managers before funding allocations. It was evident from the review that MCNP II adopted appropriate financial management procedures and approaches that collectively contributed towards bringing cost savings and efficiencies.

Partnership modalities such as with government and nutrition support officers enhance efficiencies

Besides, partnership with the implementing partners, other partnership modalities also contributed towards enhancing programme efficiencies. For instance, utilizing nutrition support officers (NSOs) for implementing programme activities led to cost savings. The United Nations Office for Project Services (UNOPS) is a partnership modality for engaging with other UN entities. UNOPS provided infrastructure, procurement and project management services for UNICEF to implement program activities and achieve results. The Nutrition Support Officers (NSO) approach was one of the key partnerships and programme support approaches delivered through UNOPS and supported financially and technically by UNICEF. Under this approach, the NSOs were recruited by UNICEF under UNOPS and were embedded in selected ASAL counties for provision and scale up of nutrition services, working closely with the GoK County Nutrition Coordinators (CNCs). Evidently, hiring NSOs helped UNOPS to reduce its budget from US$4,578,433 to US$3,585,516 translating into savings of US$992,917 while achieving the same results. Further, importantly, the government as the key implementing partner also contributed towards the programme costs. Matching funds of $250k (KES 26M) were obtained from the government. Counties such as Garissa, Marsabit, Turkana, Wajir and West Pokot contributed finances for nutrition SMART surveys in 2018 and 2019. Notably, there is a need to enhance private sector involvement in programme planning and monitoring and evaluation. Partnership with the Kenya Private Sector Alliance (KEPSA) on the ‘Building Business Practices for Children’ Partnership, a tripartite partnership between county government, Unilever and UNICEF to scale Baby Friendly Community Initiative (BFCI) models across industries is one of the key examples of private sector involvement to improve quality, coordination and efficiency.

Sustainability

As part of REES, Sustainability assessed to what extend the achievements that had been made over the first half of the programme were likely to continue even when UNICEF support for key programme areas gradually reduced. The programme review provided an insight into decentralization of processes and services, policy environment for nutrition for children, development and integration of plans and nutrition activities at county level, system strengthening including capacity building of national and county staff. with and risk programming and disaster reduction approaches.

Decentralization of processes and services to counties

Following promulgation of the 2010 Constitution of Kenya, it ushered in a devolved governance structure in the year 2013/2014, which saw health functions devolved to the county governments. In order to

ensure sustainability of provision of nutrition services at national and county levels, MCNP II programme supported the following initiatives.

- Development of child friendly nutrition policies and guidelines
- **Capacity Building**: UNICEF trained national and county level staff on Nutrition Financial Tracking Tool(NFTT) to improve skills on budget analysis, track expenditures and develop county budget briefs for advocacy and resource mobilization. The training also aimed to address limited capacities to formulate budgets and financial plans. Additionally, GOK personnel at the two levels of government were trained on Logistic Information Management System (LMIS) for nutrition commodities to impart them with requisite knowledge and skills to forecast, request and monitor consumption of nutrition commodities at county level. Under MCNP II, 13 and 10 counties in ASAL regions were supported with capacity assessment and nutrition financial tracking respectively.
- **System Readiness Assessments**: UNICEF supported development of Nutrition Programme Maturity Analysis (NPMA) model that enabled definition and measurement of the level of nutrition programme maturity across the 13 target counties implementing MCNPII. Assessment of system readiness using NPMA model showed great improvements across the 13 counties between 2018 and 2020. These assessments checked counties' readiness and self-sufficiency to gradually take-up, finance and implement nutrition programmes using domestic financing. Based on the assessment, significant improvements were observed between 2018 and 2020 across each of the MCNP II counties, showing that most of the counties were on a journey to optimize programme maturity aimed at ensuring increased transition to county-led programme implementation.
- **Development of plans including National Nutrition Action Plan and county specific action plans** to provide roadmaps for implementation of both nutrition specific and sensitive interventions at the national and county level respectively.
- **Integration of nutrition into County Integrated Development Plans** through financial and technical assistance from UNICEF including the Nutrition Support officers (NSOs) based at the county level. NSOs played a crucial role in building capacities of the county level staff, mobilizing resources as well as engaged with county level leadership and advocated for development of child friendly legislations including Community Health Services Bills.

Systems strengthening and cross-sectoral integration

The evaluation showed that MCNP II contributed not only to system strengthening in health but also in social protection, education, Water Sanitation and Hygiene and agriculture sectors through integrated programming and enhancement of cross-sectoral linkages by supporting multisectoral technical forums and development of multisectoral strategies and programmes as indicated in Box 1. Noting the importance of multi-sectoral coordination and cross-sectoral advocacy, UNICEF supported the establishment and/or functioning of County Nutrition Technical Forums along with the Terms of reference (TORs) in 9 out of 13 focus ASAL counties). Under MCNP II, existing structures such as Nutrition Inter Agency Coordination Committee (NICC) and National Technical Forum were strengthened.

However, functionality of these forums largely depended on donor funding, hence there is need for more domestic financing to ensure their sustainability beyond the MCNP II.

"UNICEF has been one of our greatest supporters in terms of running the structures in nutrition, especially the convening of nutrition inter-agency coordinating meetings which are cross-sectoral. Also, the nutrition technical forum. Therefore, these are the platforms where the interventions followed by other sectors are brought to the fore. And, we have even been able to strengthen one in agriculture called food and nutrition linkage technical working group which is also now bringing together the nutrition sensitive players in the food security and nutrition arena" - Respondent, MoH DND

Box 1: Key Multi-Sectoral Initiatives

• **Nutrition Improvements through Cash and Health Education (NICHE) programme:** NICHE-I was piloted through a randomized controlled trial in Kitui from January 2017 to June 2018. The pilot phase beneficiaries included orphaned and vulnerable children who received additional cash top-up and nutrition counselling. The trial proved that the combined package of the cash-top up and nutritional counselling delivered through a cash transfer programme improved young children's feeding practices and quality of mothers' diets, though not stunting. The next phase, NICHE II is being implemented by the GoK through UNICEF's technical support across five counties – Kitui, Kilifi, Marsabit, Turkana and West Pokot. As part of NICHE II, an additional cash top-up of Ksh 500 (up to a maximum of ksh 1000 per household) offered to Kenya National Safety Net Programme (NSNP) beneficiary households which has a child under two years or a pregnant or lactating woman. The households receiving the cash-top up also offered intensive nutrition counselling (and child protection counselling in Kilifi) by utilizing the community health strategy platform and Baby Friendly Community Initiative approach. NICHE programme targets to reach 41,583 households in next three years (2019-2022) in all the five counties.

• **Integrated Sanitation and Nutrition Intervention (SanNut):** First piloted in Kitui, the programme focused on integrating sanitation and nutrition messages and included community members like chiefs, the administrators, the county Commissioners in implementing programme activities. Inclusion of key community members enhanced the community accountability. Evaluation of the project found that it improved families' sanitation practices and nutrition knowledge [18] Since the programme improved families' sanitation practices and nutrition knowledge without adversely affecting other sanitation components, UNICEF scaled the integrated sanitation and nutrition programme to a second county, West Pokot.

• **Technical and financial support to Early Childhood Development (ECD) programming** in Samburu and Isiolo. The programme included technical and financial support for improving dietary diversity for children, promotion and protection of MIYCN, leveraged health systems platforms helped improve quality of care of newborns in Samburu, West Pokot, and Garissa. Financial and technical support for CHMT and Healthcare worker trainings to improve skills in nutrition service delivery and support the formation and functioning of county level multisectoral platforms to address malnutrition. By 2020, all 13 counties were implementing plans/programmes to improve diversity of diets in children.

• **Technical support to integrate adolescent programming** in Samburu. UNICEF supported the Samburu county adolescent nutrition survey to address the gaps highlighted by the Ministry of Health which included nutrition, generation of evidence to address data gaps. With the Centre for Behavior Change Communication as a key partner, pilot adolescent programming was introduced in Samburu in 2019. The programme targeted about 3,000 adolescent girls and boys and identified 12,000 social influencers. SBCC strategy was developed in collaboration with government line ministries, county governments, UNICEF and other partners. A theory of change for adolescent programming was developed and lessons learnt documented.

• **Family MUAC** in Turkana, Isiolo, Nairobi, Marsabit, Kisumu and Tana River counties. The objective was to enhance detection of acute malnutrition for referral by child caregiver at community level. The programme was introduced in 2019 in collaboration with MoH, Concern Worldwide, Action Against Hunger and Kenya Red Cross Society. MCNP II successfully piloted the approach and expanded the coverage for early identification of early SAM case and trimely treatment.

• **Livestock for health programme** in Marsabit county included supporting farmers through provision of animal fodder, and in buying and selling of cattle for sustainable employment and business opportunities as part of strategy to cushion farmers from ravaging drought in the pastoralist areas.

Despite these initiatives, there are challenges such as sectoral mandates and competing priorities that hamper adequate funding allocation and implementation of nutrition interventions in the sectors. These sectoral challenges have implications on the MCNP II.

Approaches to enhance ownership and local capacity for sustainability

The programme engaged national and county governments to promote ownership of programme implementation and outcomes by adopting the direct implementation modality (where the Government entity as opposed to Civil Society Organizations and non-government organizations implement components of the programme directly). The local Civil Society Organizations (CSOs) were involved in programme implementation through PCAs. At the same time, sensitization of policy makers and community members on gender was done. It was also noted that the community peer support groups have played a crucial role in strengthening community capacities. This was also agreed during the focus group discussions by the community members. They mentioned that the community has been empowered with increased knowledge around nutrition and activities such as kitchen gardens and this ought to be beneficial for sustainability. However, the community also noted that it is important to develop community resource persons to sustain knowledge at the community level.

"…. of these groups up to now even without the support, they are still continuing with support from the link facilities. So, some of the interventions are still there, they are sustainable– the mothers there are supporting one another. And the level of awareness I feel and I think though is improving. I have not done an assessment, but you know, you can tell – you are living in this community, I can say that our mothers with the different interventions which have been done geared towards nutrition, there is some level of improvement in terms of knowledge" – Respondent, CHS

Risk-informed programming and disaster risk reduction approaches

Notably, to ensure sustainability of risk informed programming and disaster risk reduction approaches, the MCNPII programme supported:

- **Development of child sensitive bi-annual emergency preparedness response plans** driven by robust information and surveillance systems at the national and county level.
- **Health system strengthening approach** to complement Ending Drought Emergencies (EDE**)**: MCNP II aligned its approaches and contributed to EDE in the ASALs. The MCNP II was further aligned with the Ending Drought Emergencies Country Programme Framework (EDE-CPF) pillars, particularly the Human Capital Pillar, where nutrition and health facilitated GoK's commitment to end drought emergencies. NDMA is the custodian of the EDE-CPF, with UNICEF and the Ministry of Education serving as co-chairs on Pillar Three, the Human Capital Pillar. UNICEF further contributed to Pillar Four and Six, which deals with sustainable livelihood and Monitoring and Evaluation, respectively. In addition, the programme supported integration of essential nutrition commodities including ready-to-use therapeutic feeds (RUTF) into GOK supply chain management system as well as scaled-up innovative approaches such as IMAM surge. Currently, 63% of the health facilities are implementing the IMAM surge model.
- Through MCNP II, capacity of GoK personnel was strengthened to conduct bi-annual food security assessment.

- Development of **strategic and agile partnerships** that allowed nutrition sector leverage the comparative advantage of each partner. For example, partnership between UNICEF and Kenya Red Cross Society allowed the sector to build capacity to rapidly expand and scale-up services as part of early action as well as during a full-scale emergency response. In addition, under the MCNP II, UNICEF supported the MOH to develop a business continuity plan for nutrition services within the context of COVID-19 pandemic and nutrition surveillance and information guidelines.

"Yes, the government through the ministry of livestock, through the ministry of registration, the office of internal security usually warns us about floods, so that we can move because we will get problems." – Community Leader

However, some challenges were noted that may affect sustainability of implementation of risk informed programming and DRR approaches. These included: (1) weak multi-sectoral coordination system (2) inadequate adoption of EDE by other line ministries and stakeholders (3) inadequate mainstreaming of EDE into county integrated development plans (4) inadequate financing of innovative approaches for risk informed programming such as IMAM surge that limited the scope and scale of coverage.

Resource mobilization and Transition Strategy

UNICEF used a two-pronged approach in resource mobilization through internal and external mechanisms. The key donors for the MCNP II included USAID and UKAID-DFID/FCDO, EU, ECHO, and World Bank. UNICEF has over the last few years successfully implemented multi-year grants which offer flexibility in terms of programming in nutrition.

Figure 2 gives an overview of the funding contribution by different donors and internal resource mobilization by UNICEF (2018–2020)[26]. Further, it was noted that the programme does not have a formal transition strategy and there is need to develop one. Other areas of improvement include enhancing the involvement of non-government organizations (NGOs)/CSOs in planning, policy formation and M&E and strengthening their capacities. Further, gender based and human rights related sensitization sessions for policymakers and the community are conducted on ad-hoc basis; instead, a more structured process could be initiated. notably, community involvement in the transition process is also on ad-hoc basis and yet to be streamlined.

Discussion

Relevance

The MCNP II program was identified as an important programme specifically because it was designed and implemented reliant on the Kenya nutrition situation understood through a comprehensive situation analysis on causes of malnutrition, development challenges and priorities of the Government of Kenya. The alignment of the programme to the nutrition situation is an important element in programme success. Although a slight different focus, the study by[27] to fill evidence gaps about the costs and

impacts of nutrition-sensitive interventions relied on consultations for priority setting to ensure accuracy and relevance for policy making, similar to the significance of MCNP II to the government.

The challenges and bottlenecks identified from the situation analysis informed the programme's theory of change as well as identification and alignment of programme strategies to achieve the desired results. MCNP II result framework was aligned to key Government and Ministry of Health policies including the Kenya Nutrition Action Plan (KNAP 2018–2022) [14]. The programme was found to be coherent with almost all the key result areas of the KNAP. MCNP II is part of the United Nations Sustainable Development Cooperation Framework (UNSDCF) [16]and builds on the UNICEF Strategic Plan, 2018–2022[28], and the 2016 Concluding Observations of the Committee on the Rights of the Child in Kenya[21].

MCNP II was designed to address the geographic inequities, given its focus on the arid and semi-arid counties as well on the urban informal settlements. In a secondary analysis of 2014 Kenya Demographic and Health Survey data [29] modelled various causal factors of malnutrition in ASAL areas of North Rift Kenya. The duos results indicated that geographical factors such as temperature, enhanced vegetation Index, Illiteracy and drinking water sources had an association with malnutrition where the highest association was of temperature and malnutrition. Therefore, the selection of ASAL for the MCNP II implementation where the programme objectives and plans and resource allocation were aligned to the specific county needs based on priority setting exercises was timely, thus, addressing the geographic inequities.

MCNP II is sensitive to gender, child and human rights perspectives. It is evident from the desk review that the strategic approaches of MCNP II were aligned to the gender equality and human rights policies and conventions such as the child rights convention. Interviews with the key informants highlighted that sex and age disaggregated data were collected in the Standardized Monitoring and Assessment of Relief and Transitions (SMART) surveys; gender role and maternal workload was captured through qualitative 'Knowledge, Attitude, Behavior, Practice' (KABP) surveys. MCNP II established community feedback mechanisms to ensure community participation and included feedback from both males and females from vulnerable communities. The community members further established that the programme met their needs in terms of involvement of males and obtaining regular feedback. Other studies have also highlighted the central role of gender in nutrition. A study by[30] states that gender dynamics is one of the key social determinants of maternal and children nutrition status. As per a 2017 study, gender is found to be a key factor contributing to poor nutrition [31]. According to Consultative Group on International Agricultural Research (CGIAR), gender transformative approaches orient to move away from burdening women with the responsibility for equality, engage men and women together as agents of change [32]. The findings from this evaluation indicate that MCNP II was uniquely positioned by involving both females and males in gender-based discussions. Father-to-father support groups were established to involve males in nutrition related discussions as well as for gender sensitization. The involvement of fathers has been shown to improve relationships with wives and fathers can become more involved in sharing responsibilities with their wives despite going against traditional norms [33].

However, the programme can be further strengthened by adopting a more gender transformative approach. The programme needs to adopt a more systematic approach for gender-based discussions involving both and men and women. Further, the programme can enhance its coherence and relevance to these strategies by expanding its scope to areas such as non-communicable diseases and adopting lifecycle approach to include middle age childhood.

Effectiveness

MCNP II was effective across all the four planned output areas – supply, demand, enabling environment and emergencies. The programme was coherent to the national and sectoral priorities including reducing stunting and implementing high impact nutrition interventions. By achieving improvements in its planned targets such as the vitamin A supplementation and treatment of severe malnutrition, it contributed towards the planned targets of UNICEF and nutrition sector. It is also supported government in operationalization of the strategies through implementation frameworks and roadmaps. By mid of the programme, the planned targets hd been achieved for all the MCNP II indicators, except, the number of admissions for severe acute malnutrition in the year 2020, which were affected by the COVID-19 pandemic. It is quite likely that the programme will achieve its planned targets by end of the programme cycle in June 2022. The programme's adoption of an integrated service delivery model, innovative approaches and technology/tools enabled MCNP II to achieve the desired results. Service delivery models such as Malezi Bora, innovative approaches and tools such as Family Mid-Upper Arm Circumference (Family MUAC), Logistic Management Information System (LMIS), Nutrition Financial Tracking Tool (NFTT) accelerated the achievement of results in MCNP II. The community members recognized the involvement of CHVs for outreach and mother-to-mother support groups as effective strategies. Other studies suggest that, scaling up the use of MUAC by caregivers and CHWs to detect SAM in household and community settings is a promising step toward improving the coverage of SAM detection [34]. This evaluation also brings out the key role of Family MUAC and CHVs in improving nutrition outcomes.

The programme moderately achieved cost-effectiveness and value for money during its implementation in the first half of the programme. More than half of the partners were contributing at least 15%of the budget to the direct programme costs, as recommended in UNICEF Value for Money programme budget document. The programme adopted different cost-minimization approaches - integration of nutrition in health outreaches, competitive procurement process for nutrition supplies and training methods such as on-the-job trainings and training of the trainer's approach. A systematic review by Njuguna et al. (2020) found that most costs of the nutrition programs were on personnel and therapeutic feeds. Additional approaches included encouraging local production of feeds using local ingredients to save on costs. Further, the engagement of community health workers was found to be cost-effective in treatment of uncomplicated SAM. The above referenced study further suggested that integration of outpatient and inpatient care of undernourished children through CMAM program is cost effective. Findings elsewhere show that the innovations of Community Management of Acute Malnutrition (CMAMs) have been shown to be highly cost-effective using the Gross National Income (GNI) per capita threshold according to programme data in Malawi in 2007[35]. Our evaluation also highlights the focus on local products. The community members indicated that nutrition counselling focused on the use of locally available foods.

MCNP II has built capacity of CHVs for SAM surveillance and outreach for timely treatment. Integrated approaches such as iCCM and CMAM are being explored. A study by levin et al[36] highlights that in such multi-sectoral nutrition programmes, scenarios for lowering costs through economies of scale and integration into routine services should be further explored. Similarly, MCNP II has made efforts towards health systems strengthening through integrated approaches such as Integrated management of acute malnutrition (IMAM). IMAM is mostly done at the community level through the integrated Community Management of Acute Malnutrition (CMAM) program. Under the programme, Turkana, Tana River, Wajir, Garissa, Isiolo, Baringo and Samburu counties achieved over 50% IMAM service coverage.

The programme can be further strengthened by exploring innovative cost-effective approaches to reduce programme implementation costs. Besides these, there are other sectoral challenges that can be mitigated with continued advocacy and capacity development. For instance, there are larger sectoral challenges in terms of overall nutrition governance mechanisms that are critical for multi-sectoral coordination and cross-sectoral advocacy. UNICEF has already undertaken the task of continuous advocacy for establishing high-level coordination structures with vested powers to coordinate with all sectors and influence budget. Other key challenges include limited funding for M&E, inadequate capacity with regards to trained staff in nutrition information systems (NIS) and M&E and poor quality of data from routine M&E systems. These sectoral challenges have implications on MCNP II.

Efficiency

Stringent financial including cash flow, strong monitoring and cash flow management strategies were adopted in programme implementation; however, the optimal utilization of resources is yet to be achieved. Resource allocation was based on priority setting exercises and comprehensive situational analysis. MCNP II adopted partnership modalities that contributed towards enhancing programme efficiencies. MCNP II partnership strategies (United Nations Office for Project Services - UNOPs, NGOs, Direct Payment, private sector) led to improved efficiencies, and cost savings.

The role of advocacy in such programme is evidently important for upstream engagement to advocate for maternal and child nutrition rights. The focused advocacy efforts led to securing nutrition specific funding in the programme-based budgets (PBB). For instance, counties like Kilifi, Wajir, Turkana, Baringo, and Samburu, are now receiving nutrition specific budgets under the PBB and this has been a result of the sustained advocacy actions. This ensures accessing and securing of actual allocated funds during the budget process. Integrated programming enhances efficiencies. Findings from this evaluation also indicate that MCNP II has explored integrated programming through its cross-sectoral initiatives and diversified partnerships. However, these initiatives are currently at nascent stages and have a potential for scaling up. This approach is supported by findings from a study by Abdulahi et al. (2021) suggestive of some positive impact on nutrition and non-nutrition outcomes with a number of models of integration which varies according to the context and demands of the particular setting in which integration occurs.

Sustainability

The gains achieved in MCNP II have been sustained across two years for all programme results. This is evident from the trend analysis of the key programme indicators. MCNP II has contributed to the devolution process by influencing policy, budgeting, planning and monitoring. One of the key approaches was deploying technical staff, the Nutrition Support Officers (NSOs) at the county level. Previous evaluations (ref?) have also noted that NSOs are instrumental in progress at county level towards achievement of results for high impact nutrition interventions (HiNi). NSO approach is critical to build the capacities of the county level staff, mobilize resources, engage with leadership at county level to advocate and direct their focus on specific areas of nutrition and support multi-sectoral coordination.

MCNP II has contributed towards strengthening cross-sectoral programming. Under MCNP II, existing structures such as Nutrition Interagency Coordinating Committee (NICC) and National Technical Forum were strengthened. The programme provided opportunities for implementation of integrated programming with health, Water Sanitation and Hygiene (WASH), livestock and agriculture, education, child protection and social protection sectors through s Nutritional Improvements through Cash and Health Education (NICHE) and Sanitation and Nutrition programme (SanNut) initiatives. Prior evidence from research suggests that combined interventions for improving nutrition and sanitation practices, could reduce mortality among children under five years by 15% [17]. UNICEF supported Kitui County to design an integrated Sanitation and Nutrition programme (SanNut). The project bolstered the existing community sanitation initiative with a set of nutrition behavior-change messages targeted at caregivers of young children. Evaluation of the project found that it improved families' sanitation practices and nutrition knowledge [18]. Since the programme improved families' sanitation practices and nutrition knowledge without adversely affecting other sanitation components, UNICEF scaled the integrated sanitation and nutrition programme to a second county in Kenya, West Pokot. In addition, implementation of the combined programme helped to reduce implementation costs and scale up the combined programme at a more accelerated pace.

MCNP II is focused on systems strengthening by building local capacities and enhancing local ownership. Direct implementation approach was implemented in Kwale, Kilifi, Turkana, Marsabit, Garissa, and Kitui, during MCNP II as a health systems strategy to reinforce county leadership. Strategic partnerships with the local CSOs and enhancing community capacity through community peer support groups, use of Community Health Volunteers (CHVs) and community feedback mechanisms have been some of the other ways the programme enhanced local capacity and ownership. In addition, UNICEF supported development of Nutrition Programme Maturity Analysis (NPMA) model that enabled readiness of counties for directly implementing the programmes. The NPMA model has a potential to be scaled up for assessing system readiness for different programmes. These findings are in agreement with other similar systems strengthening projects aimed at improving nutrition and health of pregnant women and newborn in Kenya. According to Kung'u et al. (2018)[37], key approaches for systems strengthening include building commitment, coherence, accountability, capacity, and leadership by community sensitization and engagement of community leaders as part of stakeholder dialogue; stakeholders' participation and agreement on common results' framework; and early dialogue and engagement of political and community leadership. Approaches such as direct implementation and tools like NPMA are

some of the best practices that have emerged from the evaluation findings. These have a potential to scale up for assessing county needs and readiness for any programme as well as for enhancing local leadership and accountability for nutrition.

However, MCNP II lacks a formal transition strategy and hence, there is a need to develop one. While formulating the transition strategy, it will be imperative to undertake a phased approach to ensure that the process is gradual and progressive. According to FAO [38] a number of strategies are recommended to allow for programme transitions and ensure sustainability. There is a need to consider institutionalization of components of the programme into selected relevant sectoral activities. The nutrition activities must be included in the budgets and plans of nutrition sensitive sectors. There is a need to assess programme resources and accordingly, plan for handover to the local governments. This planning must involve participation of all key stakeholders, including the community to allow for institutionalization and ownership. The county governments commitment and buy-in, especially for human resource development is crucial. These strategies also apply to MCNP II, where in, it will be critical to have a transition strategy that is negotiated with government, donors, partners and communities that guarantees a gradual and phased approach to ensure a fairly good level of programming is maintained across the counties.

The adoption of risk informed programming approach and alignment with the Ending Drought Emergencies Country Programme Framework (EDE-CPF) pillars, particularly the human capital pillar, where nutrition and health facilitated GoK's commitment towards ending drought emergencies in the ASALs. However inadequate funding for emergency response due to challenges in mainstreaming of the EDE has led to, delays in scaling up IMAM surge.

Though MCNP II is making efforts to secure buy-ins from donors, there is need to diversify partnerships. UNICEFs adopted a two-pronged approach in resource mobilization through internal and external mechanisms. The key donors for the MCNP II programme include United States Agency for International Development (USAID) and UK Foreign, Commonwealth and Development Office (FCDO), European Union (EU), European Commission's Humanitarian Office (ECHO), and World Bank. Over the years, UNICEF has successfully implemented multi-year grants which offer flexibility nutrition programming. This notwithstanding, there is also an indication from the traditional UNICEF donors of declining support as a factor of COVID 19 impact. This calls for the need to rapidly enhance engagement with actors like private sector to further diversify the funding basket. Similarly, there is recognition that as donor support declines, there should be progressive increase in investment by the government. This informs the continued advocacy efforts with national and county governments to enhance public financing for nutrition.

Limitations

The interviews with key stakeholders were conducted remotely on an online platform to minimize in-person contacts as a measure to control COVID-19 spread. Qualitative data collection on an online platform comes with limitations of rapport building with the participant and inability to see the visual cues for probing. To mitigate these challenges, training was provided to the evaluation team including

role plays for remote interviews. Underage mothers keep pregnancies in secrecy and rarely visit health facilities for fear of being ridiculed. Therefore, it was a challenge to mobilize the adolescents' group for the interviews, especially where some were attending school. To mitigate this challenge, trusted community volunteers were engaged to mobilize the young mothers. Another challenge with this group was shyness and fear to speak despite having organized separate focus group discussions. This was mitigated through re-assurance on confidentiality with an explanation around importance of the activity to assist the Ministry identify their challenges in order to put in place measures to ensure they and their babies get the healthcare and support they need. Thus, all the mobilized beneficiaries agreed for participation in the FGDs. Initially, data collection was planned for Merti sub-county, however, after reviewing security conditions with the county government of Isiolo, Merti sub-county was replaced with Garbatulla sub-county. The sub-counties were selected based on their performance on the key IMAM indicators. While Merti was a better performing sub-county than others, Garbatulla was average performing. These contextual differences of counties might have influenced the nature of data collected and the subsequent analysis. Though the study adopted a mixed methods approach, that is, concurrent quantitative and qualitative data collection methods, there are certain limitations of this design such as challenges in comparison and integration of results from analysis of different data forms. Triangulation of data from multiple data sources was done to arrive at the findings.

Conclusion

To conclude, the programme is moving towards the right direction for all four evaluation criteria-relevance, effectiveness, efficiency and sustainability. The programme has highlighted some of the areas that have worked well for MCNP II and has potential implications on overall nutrition sector and other programmes. For instance, the alignment to the government priorities and existing structures. It is learnt that one of the key enablers for programme success is relevance and coherence to the community and other stakeholders' needs. Further, gender sensitivity is critical for nutrition programming. Initiatives such as involvement of males and community peer support groups can be scaled up and applied to other nutrition programmes. Other nutrition programmes can leverage these learnings for their SBCC activities. The programme presents examples on how sustained advocacy efforts are critical to influence nutrition policy landscape and has implications on the programme outcomes. Key focus areas of advocacy such as gender and child sensitive policies, adequate funding allocation and utilization for counties, cross-sectoral advocacy, can be replicated by other nutrition programmes. The scaling up and replication of the advocacy platforms utilized by this programme, can be done to advance the nutrition advocacy agenda globally. MCNP II has demonstrated synergies between sectors for cross-sectoral programming such as multisectoral Nutrition Action Plan, multisectoral coordination and multisectoral interventions such as Nutrition Improvements through Health and Education. These multi-sectoral initiatives have a potential to scale up. The lessons learnt from such multi-sectoral nutrition programming can be leveraged globally by other programmes and stakeholders. MCNP II leveraged Integrated service delivery approaches and innovations such as Logistics Management Information System (LMIS), Nutrition Financial Tracking Tool (NFTT), family MUAC and IMAM surge. These approaches and models can be scaled up for improving

service delivery. Community engagement through mother-to-mother support groups and use of CHVs were found to be effective strategies for servicer delivery. These can be further leveraged by other programmes. Direct implementation approach has worked well in terms of enhancing the county leadership, ownership and accountability. It is learnt that technical and donor agencies should move towards a more enabling role and promote local capacity development for programme success. The programme has also demonstrated a successful example of public private partnerships in terms of Baby Friendly Community Initiative (BFCI). Having said that, there are larger sectoral challenges and gaps in the programme. Efforts are underway to bridge those gaps and mitigate the challenges.

Recommendations

It is recommended as next steps that MCNP II develops a transition strategy through a consultative process including inputs from all stakeholders and community members. The transition strategy can focus on areas that are working well. For instance, UNICEF can move out of core implementation and service delivery and strategize around a more enabling role. There are still gaps that UNICEF can support and provide technical assistance, such as capacity development, financial planning, advocacy, multi-sectoral coordination. It is also recommended to develop a resource mobilization plan that explores opportunities for multi-year funding and emerging donors. MCNP II must continue to advocate and provide technical assistance for strengthening the nutrition governance mechanisms. Continued advocacy will be required for expediting the process of establishing the Food and Nutrition Security (FNS) Council. Efforts could be made to achieve a more gender transformative role through systematic and sustained initiatives around gender sensitization and improving awareness that can translate into practices. There is a need to strengthen UN guided approach of ‘Delivering as One’. MCNP II can explore opportunities such joint initiatives with other departments and peer to peer learning from other UNICEF-run programmes in Kenya. UNICEF needs to continue providing technical and financial support to scale up innovative service delivery such as Family MUAC, tools and technology solutions such as NFTT and LMIS. There is a need to strengthen public and private partnerships to enhance results for children.

Declarations

Ethical approval and consent to participate

The evaluation was granted approval by the African Medical and Research Foundation (AMREF) Ethics and Scientific Review Committee. Written informed consent was obtained from the participants. "permission to interview teenage mothers and written informed consent was obtained from their parents/guardians. As a government requirement, the team registered the evaluation with National Commission for Science, Technology and Innovation (NACOSTI), for the research permit to allow the evaluation to be implemented. Ethical approval was not required for secondary data review and analysis. Further administrative approval was obtained from the relevant sub national governments where the evaluation was undertaken. The evaluation methods comply with the relevant national and institutional

committees on human studies, including the ethical standards outlined in the 1975 Helsinki Declaration, as revised in 2013.

Consent for Publication

Not Applicable

Availability of data materials

The datasets generated and analysed during the current study are not publicly available due the nature of the data that contains audio recordings and the programme is still under implementation but are available from UNICEF on reasonable request. The request for data can be requested from the Chief of Nutrition, Kenya Office through email to co-author Lucy Maina on lmaina@unicef.org

Competing Interests

No competing interests reported.

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Authors' Contributions

PC, EK, PK, LM and TA provided the overall guidance and directions for the evaluation. They provided support in terms of reaching out to the stakeholders, sharing of the required data and information and regular inputs on the evaluation deliverables. ZB provided guidance on the overall evaluation methodology, matrix, tools, analysis and compilation of the evaluation findings. ZB also conducted the key informant interviews as well as focus group discussions in the community and was responsible for quality assurance of the interview/field transcripts. JM provided the technical support in finalizing the evaluation matrix, evaluation tools as well as in drafting of this manuscript. AA supported in drafting the methodology, evaluation matrix, evaluation tools, conducting secondary review, data analysis and compilation of the findings. AA also supported in conducting key informant interviews and notes taking for the same. IS supported in drafting the evaluation methodology, matrix, tools, conducting analysis and compilation of the findings. YJ provided project management support through coordination with the different stakeholders, logistics, financial and people management as well as in compilation of the findings. VM provided coordination for stakeholder engagement and review of results. HC provided overall programme management support and guidance during the different phases of the evaluation, including compilation of the findings.

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Figures

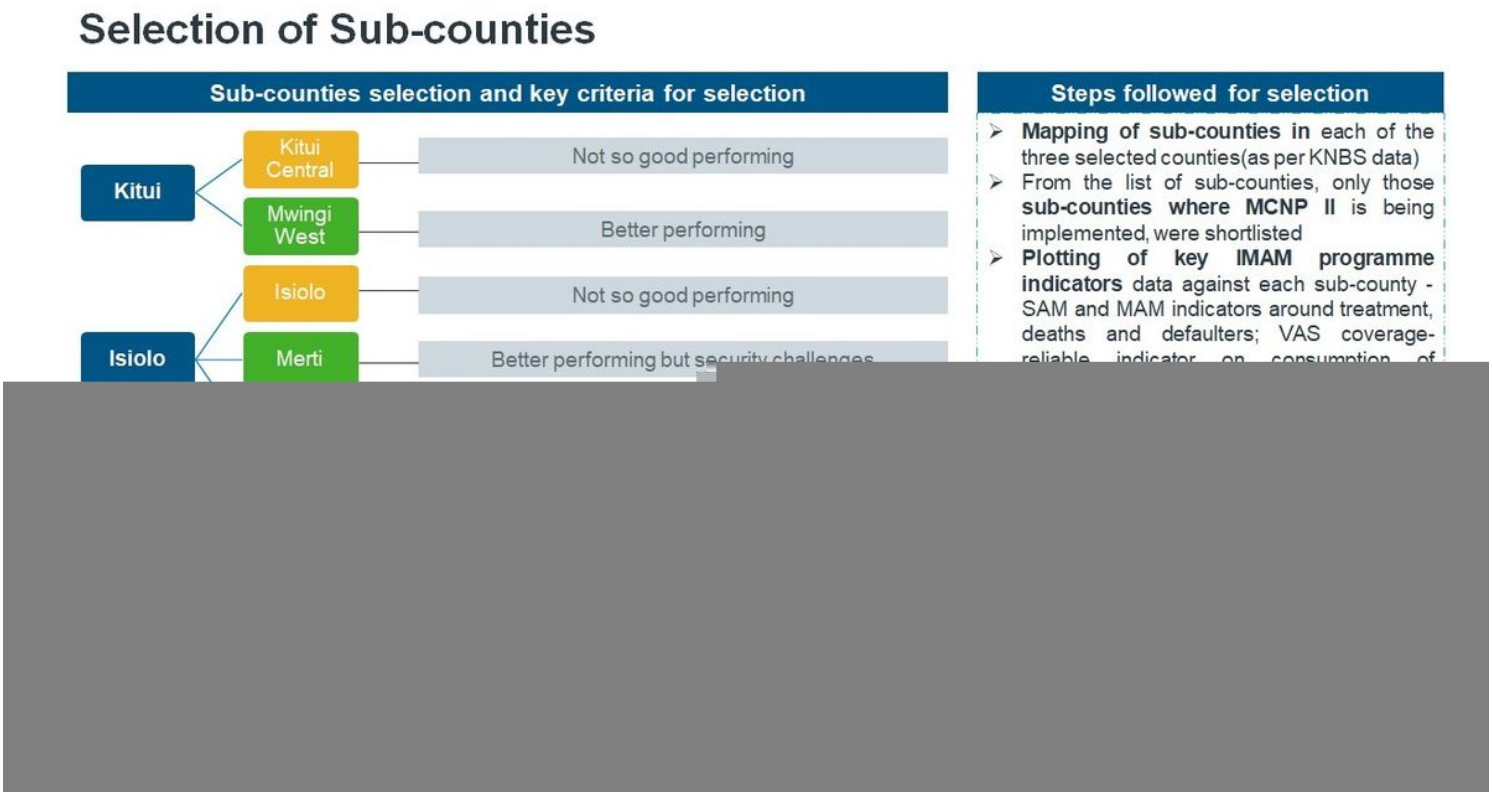

Figure 1

Selection of counties and sub counties

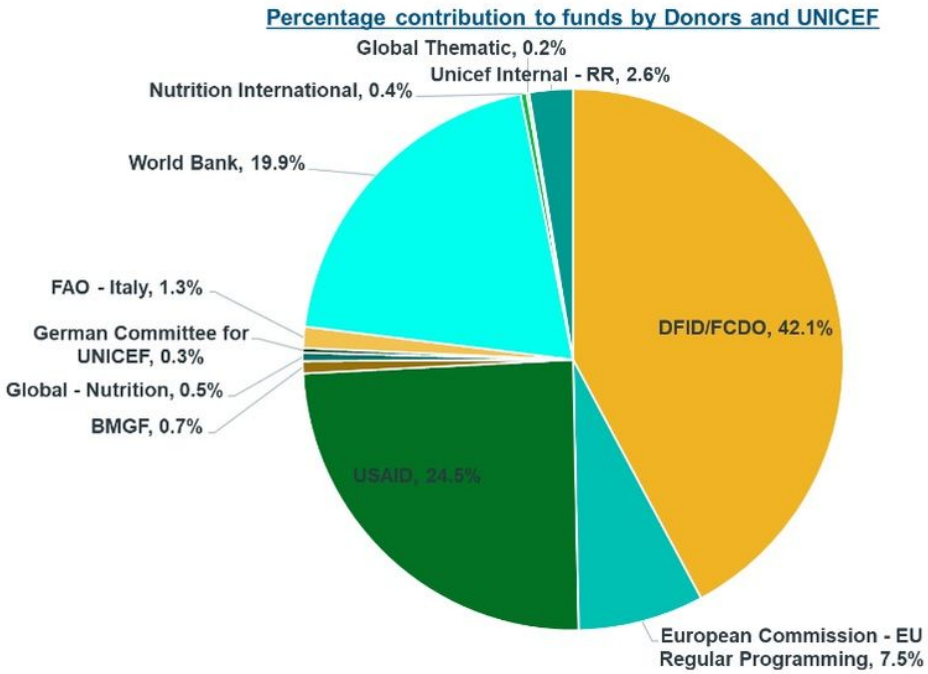

Figure 2

Percentage contribution to funds by donors and UNICEF ***(Information Source: MCNP II database 2018-2020)***