Formative Evaluation Report

Acceleration strategies for achieving the Key Result for Children # 2 (Prevention of stunting) in Nigeria 2018-2020

Photo credit: Vitamin A, MNP supplementation, and Deworming campaign

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List of Acronyms

AARR	Average Annual Rate of Reduction
AFSNS	Agricultural Sector Food Security and Nutrition Strategy
AIR	American Institutes for Research
ANRIN	Accelerating Nutrition Results in Nigeria
AOPs	Annual Operational Plans
C4D	Communication for Development
CMAM	Community Management of Acute Malnutrition
CO	UNICEF Country Office
CSO	Civil Society Organization
CS-SUNN	Civil Society Scaling Up Nutrition in Nigeria
DHIS	District Health Information System
EBF	Exclusive Breastfeeding
ECOWAS	Economic Community of West African States
EML	Essential Medicines List
FANTA	Food and Nutrition Technical Assistance III project
FAO	Food Agriculture Organisation
FCT	Federal Capital Territory
FGD	Focus Group Discussion
FHI 360	Family Health International
FMOH	Federal Ministry of Health
GDP	Gross Domestic product
HiLWA	High-Level Women Advocates
HKI	Helen Keller International
IDI	In-depth Interview
IDP	Internally Displaced People
IFA	Iron Folic Acid supplementation
IMAM	Integrated Management of Acute Malnutrition
IYCF	Infant and Young Child Feeding
KII	Key Informant Interview
KIT	Royal Tropical Institute, Amsterdam
KRC#2	Key Results for Children 2
MDAs	Ministries Departments Agencies
MDD	Minimum Dietary Diversity
MICS	Multiple Indicators Cluster Surveys
MIYCF	Maternal infant and Young Child Feeding
MMF	Minimum Meal Frequency
MNP	Multinutrient Powder
MUAC	Mid Upper Arm Circumference
MVC	Measles Vaccination Coverage
NAFDAC	National Agency for Food Drug Administration & Control
NBS	National Bureau of Statistics
NCFN	National Committee on Food and Nutrition
NDHS	Nigeria Demographic and Health Survey
NFCMS	National Food Consumption and Micronutrient Survey
NFSS	National Food Security Survey

NGO	Non-Governmental Organization
NMPFAN	National Multisectoral Plan of Action for Nutrition
NNHS	National Nutrition and Health Survey
NPFN	National Policy on Food & Nutrition
NPHCDA	National Primary Health Care Development Agency
NSHDP II	National Strategic Health Development Plan
OCHA	Office for the Coordination of Humanitarian Affairs
ORS	Oral Rehydration salts
PHC	Primary Health Care
RE	Realist Evaluation
RMNCAH	Reproductive Maternal Neonatal Child and Adolescent Health
RO	UNICEF Regional office
RTD	Round Table Discussion
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
SNE	Synthesized Narrative Exploration
SUN	Scaling up Nutrition
ToC	Theory of Change
UNICEF	United Nations International Children's Emergency Funds
VAS	Vitamin A supplementation
WASH	Water Sanitation and Hygiene
WB	World Bank
WCAR	West and Central Africa region
WCARO	UNICEF West and Central Africa regional office
WHO	World Health Organisation

1. EXECUTIVE SUMMARY

*1. **Introduction:***

This report presents the results of the evaluation of the Key Result for Children #2 (KRC#2) strategies for the prevention of stunting among children in Nigeria. This evaluation is part of a multi-country assessment and focuses on UNICEF initiatives implemented to both prevent stunting among children in the West and Central Africa region and realize the human right to health, survival, and development.

The object of the evaluation concerns the acceleration strategies implemented towards the achievement of the Key Result for Children # 2[1] at the regional level, refracted through the prism of four countries (Burkina Faso, Liberia, Mali, and Nigeria) that have adopted several such strategies and have shown promise in accelerating the reduction of childhood stunting. The overall results statement for KRC-2 is: "By 2021, 96 percent (86 million) of children under five, especially those who are marginalized and those living in humanitarian settings, receive high-impact nutrition services to prevent stunting". The UNICEF-funded evaluation was conducted by the Society for Family Health and the Royal Tropical Institute in Amsterdam.

KRC#2 Strategies adopted by UNICEF-Nigeria

Strategy 1 - Evidence and data as central to UNICEF planning, effective implementation, knowledge management and advocacy

Strategy 3 - Breaking from the past vertical approaches

Strategy 4 - Engaging with all relevant line ministries and all stakeholders to benefit from nutrition sensitive nutrition contribution

Strategy 5 - Communication for Development, focusing on evidence-based communication for removing the water in under 6-month infants diet, and improving dietary diversity for older infants and young children.

Box 1 : KRC#2 Unicef Strategies

In Nigeria, a complex and plural set of interventions and strategies are conducted for stunting prevention centered on the multisectoral and multidisciplinary approach, which focused on (i) ensuring good nutrition during pregnancy; (ii) promoting exclusive breastfeeding for the first six months; (iii) offering frequent and diverse complementary foods in addition to breast milk after six months; (iv) preventing and treating micronutrient deficiencies; (v) promoting hygiene and access to drinking water; and (vi) promoting early childhood development and cognitive stimulation. The National Nutrition programme (NNP) developed a theory of change to guide the implementation of nutrition interventions (see Figure 2, page 20). The major nutrition interventions supported by the NNP include the USAID-funded food and nutrition technical assistance III project (FANTA), conducted between 2012 and 2018, which aimed to improve the health and wellbeing of vulnerable populations by supporting the routine anthropometric assessment through the Optifood dashboard. The World Bank-funded Accelerating Nutrition Results in Nigeria (ANRiN) is a 21-year response (2019-2040) currently on-going to reduce chronic malnutrition (stunting and micronutrient deficiencies) and thus reduce maternal and child mortality rates over time. ANRiN aims to increase the utilization of quality, cost-effective nutrition services for pregnant and lactating women, adolescent girls, and children under five years. Phase 1 (2019-2023: five years) is conducted in 11 states (Abia, Akwa Ibom, Gombe, Kaduna, Kano, Kogi, Kwara, Nasarawa, Niger, Oyo, and Plateau States).

UNICEF West and Central Africa region (WCAR) developed a set of six strategies to accelerate stunting prevention in the region. UNICEF Nigeria adopted four out of the six strategies for operationalization in the country, i.e., 1, 3, 4, 5 (see Box 1).

[1] The UNICEF Regional Offices for West and Central Africa together with the Country Offices formulated the Key Results for Children (KRCs) to achieve transformational change leading to the large-scale enjoyment of children's rights. The aim of KRCs is to catalyze change by harnessing transformational approaches, in a to accelerate progress towards the large-scale realization of children's rights, without distinction, in accordance with the objectives of the UNICEF Strategic Plan 2018-2021.

2. *Purpose of the evaluation*

The evaluation has two primary purposes – accountability and learning.

- Accountability reports on results (planned and unplanned) achieved by KRC#2 acceleration strategies with donors (vertical accountability) as well as the expected beneficiaries of the programmes (horizontal accountability).
- Learning informs the nutrition section of UNICEF's regional and country office in Nigeria on how to further develop the programme i.e., the new regional and country strategy. It will also guide UNICEF to better replicate the most effective and efficient intervention models in other intervention areas.

3. *Objectives of the evaluation*

The evaluation is expected to achieve the following objectives:

- Determine the relevance, coherence, efficiency, effectiveness, impact, and sustainability of stunting prevention strategies (KRC#2);
- Identify lessons learned about what worked or not during the implementation of the regional strategy and key interventions, including unintended results (positive and negative);
- Identify good practices in the prevention of stunting and interventions for malnutrition;
- Make key recommendations on how to improve the implementation processes and performance of the strategy and key interventions; and
- Determine to what extent the regional strategy and key interventions have integrated equity and gender in their design, implementation, and monitoring.

4. *Scope of the evaluation (thematic, geographic, time frame)*

The thematic scope of this evaluation encompassed the KRC#2 strategies and related nutrition-sensitive and nutrition-specific activities developed by WCARO and implemented by UNICEF-Nigeria. Geographically, the evaluation covered a selection of national, subnational, and community locations to ensure the representativeness and applicability of findings at the national level. While certain activities relevant to the evaluation are implemented nationally, other interventions have a more sub-national focus through states and Local Government Areas (LGAs). In Nigeria, the evaluation was conducted in three states – Bayelsa, Enugu, and Niger, and covered the period 2018-2021.

5. *Evaluation Approach and Methodology*

This evaluation follows a realist evaluation approach, focusing to identify what works for whom, where, and how to provide insights into mechanisms and interventions that are successful and to help identify contextual factors that play a critical role in achieving results. Two technical frameworks informed data collection and analysis: the Lancet 2013 framework for actions to achieve optimum foetal and child nutrition and development, and the Lancet 2013 conceptual framework for nutrition-specific interventions. In addition to technical frameworks, the evaluation framework was informed by five OECD criteria: relevance, coherence, effectiveness, efficiency, and sustainability, with two additional cross-cutting criteria: human rights, gender and equity, and COVID-19. Based on the technical and evaluation frameworks we constructed the evaluation matrix with main evaluation questions, which was further operationalized with sub-questions, indicators, and data sources. The matrix was reviewed and approved by the UNICEF-Liberia team.

This evaluation focused on qualitative data, while secondary analysis of quantitative data and document review complemented findings and were used for triangulation of results. Primary data collection methods included in-depth qualitative expert interviews (IDIs) using Synthesized Narrative Exploration methodology; focus group discussions (FGDs); and round table discussions (RTDs). In total we conducted:

- 16 IDIs at the national and sub-national level with informants from relevant departments within the Ministry of Health such as Child Health and Nutrition. Respondents were interviewed from other

ministries, departments, and agencies (MDAs) such as Agriculture & rural development, Education, Budget and National planning, Department of Planning, Research & Statistics, UNICEF, and FAO;
- 3 RTDs with Support group leaders, Community volunteers, Community leaders, and Traditional Birth Attendants in the three states where the evaluation was conducted i.e., Chachanga LGA, Kolokuma Okpokuma LGA, and Udenu LGA; and
- 6 FGDs with beneficiaries at the community level in three different LGAs within the three states visited.

The sampling of participants was done using a non-probabilistic purposeful sampling strategy and any community-collected data in group formats was gender disaggregated to ensure freedom of expression. Each interview was guided by a topic guide, which was developed based on the evaluation matrix. The discussions focused on the current state of implementation of the nutrition programme, challenges and lessons learned, the technical support received from UNICEF, the role in the nutrition programme, inequalities in access and use of nutrition services, and local partnerships.

The evaluation team conducted a secondary data analysis of existing quantitative data. DHIS-2 and relevant survey reports e.g., District Health System (DHS) and National Food Consumption and Micronutrient Survey (NFCMS) provided the data for a selection of major indicators relevant to stunting, and the stunting data was used to calculate patterns in stunting rates.

Qualitative data was analyzed and coded using a coding framework developed based on the theoretical frameworks and evaluation criteria and coded using Excel. Secondary analysis of quantitative data was done in Stata and R statistical packages. These sources of data were then triangulated with available literature analyzed as part of the desk review. Where possible, quotes were extracted from the interview transcripts to validate findings triangulated across the three main data sources to fully answer the evaluation questions.

6. Main findings and preliminary conclusions (by criterion)

Relevance: The KRC#2 strategies were perceived as relevant to addressing the major factors associated with stunting in Nigeria. Recent surveys such as DHS-2018, MICS 2021, and NFCMS 2021, as well as key informants at both national and sub-national levels, confirmed that stunting was an important public health issue in the country.

KRC#2-related interventions being implemented in Nigeria were aligned with the strategies currently promoted at the national and state level. UNICEF was acknowledged as being instrumental in the development of strategic guidance for the nutrition programme at all levels. The importance of the multisectoral approach in stunting prevention is understood by all stakeholders but a common targeted approach still needs to be strengthened. Partnerships with academia and the private sector at the state level were not observed during this evaluation.

Sub-national variations of stunting prevalence in survey findings (DHS 2018, NFCMS 2021) are acknowledged, driven mainly by widespread poverty, food insecurity, and poor feeding practices. The Northeast and Northwest regions, plagued by insecurity, receive concentrated attention for interventions. Low coverage of nutrition interventions was observed in other parts of the country that could benefit from KRC#2 interventions.

The adaptations to implementation approaches to reach people most in need were visible during the COVID-19 pandemic and in areas affected by flooding in 2021. However, there is no specific focus being given to the most vulnerable and marginalized populations within the population of pregnant and lactating women and children.

The use of data to inform programming is considered important for ensuring relevance. The processes for collecting stunting-related data from the community and facility up to the DHIS2 platform, however, need to be streamlined to improve the data quality at the national level.

Coherence: UNICEF plays a key role in coordinating interventions within the MOH and between other line ministries, with bilateral and multilateral parties and NGOs aiming at a coherent stunting prevention strategy and bringing out consequent messages for stunting prevention at all levels in the country. Efforts to promote synergies between national and international partners and to foster more investment with the private sector were observed with positive outcomes. However, no synergies are observed that have led to a satisfying nutrition intervention coverage level to increase the Average Annual Rate of Reduction (AARR) rapidly. Additionally, geographic convergence needs to be strengthened to accelerate the desired outcome.

Effectiveness: Concerning stunting reduction, Nigeria has made limited progress in acceleration with children under five years from 2018 to 2021; the AARR was only 0.9 percent while Nigeria requires an AARR of 10.6 percent to meet the 2030 Sustainable Development Goal (SDG) nutrition targets. Acceleration strategies need to be promoted more widely across the country.

Sub-national analysis shows that many states have a very low, even a negative AARR of <-0.5 e.g., Gombe, Kebbi, Sokoto, and Zamfara states reveal a worsening of an already dire situation. Stunting-related indicators show different progress: exclusive breastfeeding (EBF) rates increased while minimum meal frequency (MMF) and minimum dietary diversity (MDD) decreased during the last years. We conclude that widespread poverty and food insecurity at the household level jeopardized the efforts made at the community level to promote behavioural change.

The various KRC#2 strategies promoted by UNICEF seem to have built a foundation for more positive outcomes in the future. With the existence of multisectoral costed plans at state level and increasing commitment to government funding, a more efficient integrated national supply system for essential nutrition commodities is promising for multisectoral programming and implementation and improved coordination.

Beneficiaries are yet to fully appreciate the potential impact of prevention activities as nearly all still appealed for the continued supply of Ready-to-use therapeutic food (RUTF) and recounted the observed positive effect on their children.

Efficiency: The creation of a budget line for nutrition under the Federal Ministry of Finance, Budget and National Planning provide opportunities for a sufficient nutrition budget; however, the system is still hampered in that sufficient funds for covering nutrition needs are not always released. The 'envelope system' provides generally fewer funds than were agreed upon. But a positive effect is already observed: UNICEF funding for KRC#2 strategies declined in the last two years while stunting prevalence appears to have decreased more rapidly between 2020 and 2021 compared to the previous years between 2018 to 2020.

Integration of supply chains for nutrition in the national and state supply chain added to the inclusion of RUTF and micronutrient powders (MNP) in the essential medicines list for children are gains made to ensure sustainable supply.

The shortage of human resources at all levels in the system, including at the facility and community level, constrains efforts to work efficiently and provides the risk of overloading individual health workers with a bundle of tasks, with a risk of diminished quality of care. For example, in 2019, compared to the global average of 4:1 per 1000 population, the nurse/midwife: patient ratio in Nigeria had 1.5:1 showing that a nurse had to serve nearly three times more patients than nurses elsewhere[1].

Sustainability: There have been concrete steps towards sustainability for nutrition in Nigeria such as the increase in government ownership, which is visible through the commitment of the President to make nutrition a priority area to invest in through the creation of nutrition departments in nine ministries. The responsibility of oversight and coordination is through the Ministry of Budget and Planning and provides opportunities for an increased government budget for the nutrition programme, although this is not yet fully realized. The inclusion of RUTF and

MNP in the essential medicines list (EML) for children and the integration of the UNICEF supply chain with the national health commodities supply chain creates the necessary system for the sustainability of RUTF availability.

Human rights and gender equity: The inclusion of adolescent girls and pregnant and lactating women in the target group for prevention of stunting is based on their physical needs to reach a healthy nutritional status that will prevent the youngest children from developing stunting. This approach, however, excludes the full participation of men, especially male caretakers in the programme. By not considering men as groups of the population to be served by the stunting prevention programme, the programme is missing an opportunity. By fully involving them in behavioural change on fulfilling the nutritional needs of their entire families, especially of their adolescent daughters, wives, and unborn and young children, they may become instrumental in decreasing stunting within their families and communities.

COVID-19: UNICEF made effort to continue nutrition interventions during the COVID-19 pandemic that were appreciated by all stakeholders, including the community-based service delivery. The house-to-house delivery of nutrition services integrated into the immunization platform contributed to minimizing the disruptions experienced in the delivery of nutrition services during the pandemic.

7. Lessons Learned

Lesson 1: The multisectoral approach to prevent stunting is understood and appreciated by all stakeholders; it is recognized as one of the best ways to approach stunting reduction. However, it is complex to implement and monitor and therefore requires painstaking planning and flexibility of working styles between sectors. High levels of poverty and food insecurity at the household level are serious obstacles to decreasing stunting nationwide. It is worthwhile to explore the guild approach used by the regional office to improve the effectiveness of the multisectoral cooperation[2].

Lesson 2: The main bottleneck for increasing the AARR is the low coverage of nutrition interventions at community level which severely undermines the level of input and effort. A satisfactory budget and sufficient human resources for programme implementation at state level are needed to overcome this challenge.

Lesson 3: Community engagement by implementing partners facilitates the process of understanding and meeting their identified needs. In case of changing situations (security emergencies, health crises such as COVID-19) engaging community members to help carry out nutrition services within their community is a successful strategy.

Lesson 4: Integration of too many tasks for health workers and/or community volunteers overloads these staff and jeopardizes quality service delivery for all aspects. Integrated delivery is an important mechanism to ensure services are accessible to the population, but this requires a defined incentive package for workers while efforts are made to increase the number of staff.

Lesson 5: Data quality is a challenge. Tally sheets for community-level nutrition data collection that do not completely align with the nutrition register and DHIS2 in facilities can overload individual health workers and as such is a threat to data quality. The inclusion of these data in the DHIS2 will avoid duplication of reporting and will allow integrated quality assurance for all nutrition-related data.

Lesson 6: Nutrition platforms e.g., Scaling up Nutrition (SUN) Movement and the multisectoral committees at national level are seen as relevant by all stakeholders; however, their survival and functionality depend largely on external (donor) support and resources, which is a threat to effective coordination and sustainability.

[2] *The guild approach entails representatives from different units working together in teams to accomplish common goals. For example, at the RO a guild could comprise representatives from the nutrition, M&E, Social protection, and Supply chain who work together to develop a common work plan and achieve commonly agreed goals*

Lesson 7: Capacity building at all levels is key to achieving results and making progress. To address stunting reduction nationwide, a geographical shift in attention is needed from stunting prevention activities concentrated primarily in the North to a broader set of geographic locations in the country.

Lesson 8: Male caretakers should be defined as a target group for the nutrition programme. Including males as beneficiaries of behavioral change communication will contribute to stunting prevention through the care they provide within their families.

8. Strategic and Operational Recommendations

8.1 Strategic Recommendations

RS1: Identify more sustainable ways of keeping the coordination platforms functional. This will improve nutrition programming and assist the Ministry of Health (MOH) to facilitate a more equitable distribution of partner support*. (Addressed to: UNICEF NCO Nutrition Section, Ministry of Health*)

RS2: Improve the effectiveness of multisector coordination and collaboration by facilitating routine accountability from the various MDAs designated as leading the different aspects of the multisectoral action plan. This can be achieved by supporting the national nutrition programme to develop a common monitoring framework and agreed on indicators to track the activities of all leading MDAs. This will catalyze activities from multiple directions necessary to tackle stunting, recognizing the jeopardizing effect of poverty and household food insecurity across the country. *(Addressed to: UNICEF NCO Nutrition Section, NCFN)*

RS3: Support states to implement their multisectoral and annual operation plans by formulating strategies to leverage academia to generate locally relevant evidence and create enabling business environment for the private sector to explore the production of local nutrition supplements, such as RUTF. *(Addressed to : UNICEF NCO Nutrition Section)*

RS4: Support data analytics and strengthen data management processes for collecting and collating nutrition-related date in the DHIS2 to ensure improved data quality and adequate data disaggregation for improved decision-making *(Addressed to: UNICEF CO M&E Section, Ministry of Health M&E Department)*

RS5: Strengthen high-level advocacy and resource mobilization for KRC#2 with the government at the national and state levels to periodically highlight the progress on the costed multisectoral plans. This will create an accountability mechanism for lead partners in all strategic areas. *(Addressed to: UNICEF NCO Nutrition and Partnership sections, Ministry of Budget Finance and Planning).*

RS6: Set specific targets for the most disadvantaged, marginalized, and vulnerable children across states, including those in Internally Displaced Persons (IDP) camps and flood-prone areas, and explore adaptive approaches to implementing the multisectoral plans in cooperation with other line ministries (agriculture/WASH) that entail learning by doing. *(Addressed to: UNICEF NCO Nutrition Section; Ministry of Health)*

RS7: Develop a strategy for addressing the shortage of human resources for the implementation of stunting prevention interventions at the facility and community level through various pathways (e.g., pre- and in-service training). The creation of a sustainable motivation package adapted to local circumstances for volunteers who deliver an integrated package of services should be realized in a common effort between various multisector partners, UNICEF, and the LGA leadership. *(Addressed to: UNICEF NCO Nutrition Section, Ministry of Health, LGAs, and NGOs as implementing partners)*

RS8: Develop partnerships with the national academic and professional institutions in the area of research and capacity development to promote nutrition knowledge management. This could include the conduct of a mapping of stunting-related research in Nigeria to provide insight and motivate universities and academic institutions to participate in this area of research and the development of a research in cooperation with NCFN. Academia should be motivated and supported to scale up training opportunities for nutrition in pre-service curricula and develop short courses for professional health workers. (*Addressed to : UNICEF NCO M&E section, Ministry of Education, Ministry of Health)*

RS9: *Leverage on partnerships to scale up nutrition programme coverage beyond the current 19 states (Addressed to : UNICEF, Ministry of Health)*

8.2 Operational Recommendations

RO1: Develop a stronger coordination structure for nutrition programmes and a more explicit mutual accountability framework for the multisectoral work of KRC#2 within UNICEF to better promote multisectoral engagement, including not only the 'usual suspects (health, WASH, and education) but also less usual or more difficult to engage sectors such as agriculture and the private sector (for food security and dietary diversity). For example, the "KRC Guild"* governance structure that has been set up at the regional level could be replicated at the national level. *(Addressed to: UNICEF NCO)*

RO2: Target male caregivers for extensive access to information and education and behavioural change communication in the stunting prevention programme*. (Addressed to: UNICEF WCARO, UNICEF NCO, Ministry of Health)*

RO3: Strengthen the food system through promotion of home gardening, small livestock that contribute to improvement of women and child nutrition *(Addressed to: UNICEF NCO Nutrition Section, Ministry of Health, Implementing Partners)*

RO4: Strengthen social protection (cash transfer) to empower vulnerable women and girls to access adequate nutrition diets (Addressed to : UNICEF NCO Nutrition Section, Implementing Partners, Ministry of Health)

**Multi-unit teams in the UNICEF RO working together to develop and implement activities to achieve commonly agreed KRC goals*

2. CONTEXT

2.1 Nigeria Demography and Health Structure

Nigeria has a projected total population size of approximately 211 million, of which 52 percent are living in urban areas (World Population Prospects, 2019)[3]. Despite being almost a middle-income country and the largest economy on the African continent, the extreme poverty headcount in 2019 is 40.09 percent of the population (National Bureau of Statistics - NBS, 2019)[4]. In the second quarter of 2021, Nigeria's nominal gross domestic product (GDP) stood at N39.12 trillion, with a real GDP of N16.69 trillion, growing by 5.10 percent (year-on-year) (NBS, 2021)[5].

Nigeria is a Federation of 36 states and one Federal Capital Territory (FCT) spread across six geopolitical zones (South-East, South-South, South-West, North-East, North-West, and North-Central). Each of the 36 states is a semi-autonomous political unit. Each state is subdivided into Local Government Areas (LGAs) and there are currently 774 LGAs in the country. The female population is approximately half the population of the country. Nigeria, like other developing countries, has birth and mortality rates that are higher than the world average. Since the mid-20th century, however, infant mortality has declined drastically and life expectancy has increased; therefore, population growth has been rapid. Almost three-fourths of the population is younger than 30 years. [6] In Nigeria, the administration is organized into three tiers of government - local, state, and federal. Healthcare is administered through three tiers at primary, secondary, and tertiary levels, respectively. The primary level is run by the local government, the secondary by the state, and the tertiary is run by the federal government. The Federal Ministry of Health (FMOH) was established with a mandate to provide quality stewardship and services for the health of all Nigerians. It is also tasked with the mission to develop and implement policies that strengthen the national health system for effective, efficient, accessible, and affordable delivery of health services in partnership with other stakeholders. The department of Family Health under the FMOH plays a prominent and pivotal role in improving and sustaining the nutritional status of Nigerians and combating the problem of nutrient deficiencies especially micronutrient deficiencies and Severe Acute Malnutrition (SAM).[7]

2.2 Prevalence of stunting in Nigeria

Stunting prevalence in Nigeria has not changed considerably since 2008, indicating a long-term nutritional problem in the country. According to the 2021 National Food Consumption and Micronutrient Survey (NFCMS), the prevalence of stunting among children 6 -59 months nationally was 33.3 percent, meaning that one out of every three children in Nigeria was too short compared to a healthy child of the same age and sex. Stunting was highest among children in the Northwest region of Nigeria. In terms of severe stunting, the national prevalence stands at 16.7 percent, also highest in the Northwest. The prevalence of stunting among adolescents (aged 10-14 years) has also not shown much improvement over the years, with stunting for adolescent girls currently at 21.3 percent.

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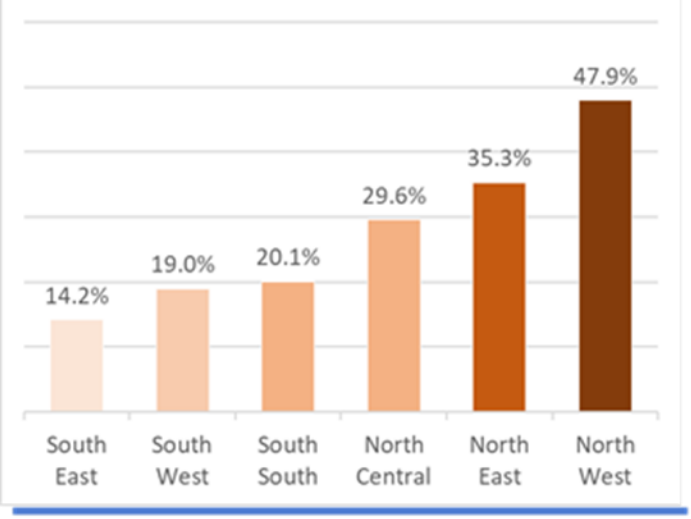


Source: National Food Consumption and Micronutrient Survey 2021

Micronutrient deficiencies, mainly in Vitamin A, iodine, iron, folic acid, and zinc, are a serious problem and despite their high-cost effectiveness, coverage rates of micronutrient supplementation and fortification remain generally low. Furthermore, dietary diversity has not received much attention as the most sustainable strategy to combat micronutrient deficiency. It is estimated that 30 percent of Nigerian children and 20 percent of pregnant women are Vitamin A deficient, while 76 percent of children and 67 percent of pregnant women are anaemic. (NDHS 2018)

Figure 1: Prevalence of stunting by geographical zone (percent)

The prevalence of stunting across geographical zones is highly uneven. According to the NFCMS, the proportion of children who are stunted is highest in the Northwest (48 percent) and lowest in the Southeast (14 percent) (see Figure 1)

2.3 Predisposing Factor Influencing Stunting in Nigeria

The gap in stunting between the North and South is widening due to several reasons. Increasing disparities in socio-political stability have resulted in stagnating poverty rates in the Northeast and Northwest zones, which reflects the growing gap in socio-economic indicators and economic opportunities between the northern and southern geo-political zones. Significant gender gaps in education levels of parents and child schooling (attendance rates and completion) between the northern and southern states, especially lower levels of women's education, have further exacerbated the issue. The proportion of children who are stunted, wasted, and underweight declines substantially with increasing mothers' education and household wealth. For example, the prevalence of stunting is 47.1 percent among children whose caregivers have no education compared with 14.8 percent among children whose caregivers have attained tertiary education (NFCMS, 2021)[8].

There was also a statistically significant difference in the prevalence of stunting in children between the age groups, residence (urban or rural), geographical zones, wealth quintile, and type of toilet facility used. Stunting was lowest in the 6-11-months old age category (16.3 percent) and more than double at 39.9 percent in children in the 24-35-months old age category, with higher prevalence among children living in rural (39.6 percent) compared to urban areas (20.6 percent). The prevalence was highest in the Northwest zone (47.9 percent), among children in the lowest quintile (49.1 percent), and in children whose caregivers had low educational attainment (47.1 percent). It was lowest in children whose households used improved toilet facilities (15.1 percent) (NFCMS, 2021)[8].

Curtailed female agency and decision-making in the household coupled with high fertility rates of 7.26 and 6.35 births in the Northwest and Northeast regions, compared to less than 4.5 in the Southern zones of the country, have contributed to the poor maternal, infant, and young child feeding and caring practices and therefore, the inter-generational cycle of stunting (NDHS, 2013)[9]. Stunting in the Northwest has been consistently increasing between 2008 and 2015 whereas the states of the Southwest and Southeast have recorded consistent decreases in stunting.

According to NDHS 2018[10], stunting in Nigeria is the result of three main categories of factors: (i) inadequate access to nutrition and health services, including family planning services; (ii) inappropriate caring practices and a poor environment for young children and women during pregnancy; and (iii) insufficient and poor-quality food.

[8] https://cgspace.cgiar.org/handle/10568/125113
[9] https://dhsprogram.com/publications/publication-fr293-dhs-final-reports.cfm
[10] https://www.dhsprogram.com/publications/publication-fr359-dhs-final-reports.cfm

Access to health services remains low and inequitable. For example, advice or treatment was sought for 65 percent of children under years who had diarrhea in the two weeks before the survey in 2018; 50 percent of children with diarrhoea received oral rehydration therapy (ORT), while 17 percent received no treatment.

The high fertility rate and high rate of adolescent pregnancies also contribute to chronic malnutrition. The total fertility rate in Nigeria is 5.3 births per woman. The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and well-being of the mother and child. In Nigeria, the median age at first birth among women aged 25-49 is 20.4 years. This means that half of the women aged 25-49 give birth for the first time before age 21, (NDHS, 2018). Twenty-three percent of women aged 15-19 have already begun childbearing and about one-third (32 percent) of women aged 20-49 have given birth by age 18. Childbearing during teenage has been associated with negative child health outcomes such as stunting[11,12].

In Nigeria, exclusive breastfeeding (EBF) among children aged 0-5 months has increased since 2013, from 17 percent to 29 percent in 2018. According to WHO, children should receive nothing but breast milk during the first six months of life. Presently, only 29 percent of children under six months in Nigeria are being exclusively breastfed. Starting at six months, children should receive a diversified and nutrient-rich diet and be actively fed several times a day. Minimum dietary diversity (MDD) is a proxy for adequate micronutrient density of foods. A diet comprising at least five groups means that the child has a high likelihood of consuming at least one animal source food and at least one fruit or vegetable in addition to a staple food such as grains, roots, or tubers (WHO, 2008). The selection is made from a list of eight food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. In the 2018 Nigeria Demographic Health Survey (DHS), 23 percent of children had an adequately diverse diet in which they had been given foods from at least five food groups, and 42 percent had been fed the minimum number of times appropriate for their age.

In general, poor feeding practices are not primarily caused by food insecurity because the quantities of food required by young children are small. It is rather a question of inadequate knowledge and beliefs about how children should be fed. Nigeria has considerable food security challenges; however, these are less of a determinant of poor nutritional outcomes than the lack of access to diverse and micronutrient-rich foods. Available data showed that the total average expenditure on food by households between 2018 and 2019 was about 57 percent (NBS, 2019). The food distribution system in Nigeria remains largely inefficient due to factors such as crop seasonality, inadequate storage technology and facilities, inadequate transportation and distribution systems, as well as market information. These factors create considerable spatial and seasonal variations in food production and availability and are responsible for considerable variations in food prices across the country. However, given that half of the households even in the poorest quintiles have been able to raise children who are not stunted and that children require only small quantities of food, it is unlikely that access to enough food is the main driver of malnutrition in Nigeria. A key food security challenge for many Nigerians is to ensure that they have adequate vitamins and minerals in their diets, including ensuring that the diets of children 6-24 months are diverse and micronutrient rich.

2.4 Key Result for Children (KRC#2) – Prevention of Stunting

As a contribution to attaining the Sustainable Development Goals (SDGs), UNICEF West and Central Africa region's (WCAR) strategic plan for 2018 – 2021 identified a set of Key Results for Children (KRC), which focused on the prevention of stunting in West and Central Africa, including Nigeria.

KRC 2 is defined as follows: "By 2021, 96 percent (86 million) of girls and boys under 5, especially those who are marginalized and those living in humanitarian settings, receive high-impact nutrition services to prevent

[11] https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/nyas.14608
[12] https://academic.oup.com/cdn/article/4/Supplement_2/1463/5845785

stunting". The interventions and strategies for preventing stunting focused on multisectoral and multidisciplinary approaches, including (i) ensuring good nutrition during pregnancy; (ii) promoting EBF for the first six months; (iii) offering frequent and diverse complementary foods in addition to breast milk after six months; (iv) preventing and treating micronutrient deficiencies; (v) promoting hygiene and access to drinking water; and (vi) promoting early childhood development and cognitive stimulation. In a bid to accelerate the prevention of stunting, UNICEF WCAR developed the following six strategies:

- **Strategy 1:** Gather evidence and data that are central to planning, effective implementation, knowledge management, and advocacy.
- **Strategy 2**: Mobilize political leaders and international donors to lead the effort, since stunting affects national social and economic development.
- **Strategy 3:** Replace previous approaches focused on a single ministry with a broader, more multisectoral approach that encompasses all relevant ministries and stakeholders and looks to local authorities for accountability and leadership. This implies a community-based, multisectoral package of interventions and a system of professional community workers.
- **Strategy 4:** Use evidence-based communication to convince parents to remove water from the diet of infants under six months and improve dietary diversity for older infants and young children.
- **Strategy 5:** Use innovative technology to gather real-time data, especially to strengthen monitoring at the local and regional levels.
- **Strategy 6:** Integrate interventions in water, sanitation, and hygiene into malnutrition programmes.

The application of the strategies varies among countries, with Strategies 1, 3, 4, and 5 supported by the UNICEF Nigeria team.

2.5 Evaluation of Key Result for Children (KRC#2)

Some nutrition-focused evaluations have been conducted in Nigeria between 2018-2020. Between 2012 and 2018, USAID funded the Food and Nutrition Technical Assistance III project (FANTA), which aimed to improve the health and wellbeing of vulnerable populations. In partnership with the federal ministry of health, FANTA supported the routine anthropometric assessment through the Optifood dashboard. The United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) conducted secondary data in 2019 that revealed major barriers to food security and nutritional status in the Northeast region of Nigeria. Action against Hunger (ACF) commissioned an assessment in 2019 to determine the nutritional status, morbidity, and mortality of children in Maiduguri, Borno state, Nigeria. Relatedly, UNICEF conducted an emergency survey in 2019, to determine the nutritional status and food security in Northeast Nigeria. In 2020, UNICEF Nigeria commissioned a comprehensive evaluation led by the American Institutes for Research (AIR) to determine the merit of the Government of Nigeria-UNICEF Country Programme of Cooperation nutrition component, which aimed to increase the access of women and children to quality services and adopt nutritional practices to prevent and treat malnutrition, in terms of expected results. In the same period, UNICEF WCAR commissioned a similar evaluation led by the Royal Tropical Institute (KIT) to determine the extent of operationalization of the KRC#2 strategy. Both evaluations are concluded.

It is pertinent to know the extent of KRC#2 achievement and to gain an understanding of how the strategies were operationalized in Nigeria. To this end, and to foster accountability and learning regarding the regional and national programmatic actions related to KRC#2 activities, UNICEF WCARO commissioned the KRC#2 evaluation. Adaptations made to the strategies during implementation informed by the changing needs of the population or unforeseen external circumstances such as the COVID-19 pandemic were documented, as well as successes achieved that could be scaled, challenges encountered, and possible solutions.

The information generated through this evaluation informs the refinement of the KRC#2 to ultimately: 1) enhance equitable access to basic services for the most disadvantaged children; 2) accelerate results to reach the 2021

KRC#2 results in the region and each country; 3) improve the sustainability of programme results; and 4) contribute to the KRC#2 theory of change (see Figure 2) and a mutual accountability framework to reach the most disadvantaged children.

3. EVALUATION SUBJECT

The evaluation subject concerns the acceleration strategies implemented toward the achievement of the Key Result for Children #2 in Nigeria, highlighting those that have shown promise in accelerating the reduction of child stunting. A summary of the nutrition-related programming costs in Nigeria, as well as additional details regarding the evaluation subject, are listed in Table 1. A further narrative description is provided below.

Table 1: Overview of the evaluation subject

Project/programme title	**KRC#2: Key Results for Children 2 (Nigeria)**
Country	Nigeria
Sources of funding/donors	UNICEF
Duration	01/2018 - 12/2020
Overall objective	By 2021, 80 percent (74 million) of girls and boys under 5, especially those who are marginalized and those living in humanitarian settings, receive high-impact nutrition services to prevent stunting.
Components (axis, effects, results, etc.)	KRC#2 accelerator strategies application to Nigeria include: **Strategy 1:** Ensure evidence and data are at the centre of planning, effective implementation, knowledge generation, and advocacy **Strategy 3:** Break with previous vertical approaches **Strategy 4:** Engage with all relevant ministries and stakeholders to benefit from a nutrition-sensitive contribution **Strategy 5:** Develop evidence-based Communication for Development (C4D) to eliminate water in the diets of infants under 6 months and improve dietary diversity for children aged 6-23 months
Expected beneficiaries	Adolescents, pregnant and lactating mothers, children under 5
Partners (institutional, implementing)	**International and national NGOs** Civil Society Scaling Up Nutrition in Nigeria (CS-SUNN) Family Health International - FHI360 (Alive & Thrive, project) Accelerating Nutrition Result in Nigeria (ANRiN) Helen Keller International (HKI) Save the Children International (SCI) Action Against Hunger (ACF) **International and national Institutions** World Bank (WB) Federal Ministry of Health (FMOH) National Agency for Food & Drug Administration & Control (NAFDAC) National Primary Health Care Development Agency (NPHCDA) International Committee of the Red Cross (ICRC) State Ministries of Health **UN Agencies** World Health Organisation (WHO) World Food Programme (WFP)

The current theory of change (ToC) guiding the nutrition programme in Nigeria is anchored in preventive interventions that address the determinants of stunting, wasting, and other forms of malnutrition. Though not specifically developed for KRC#2, the main activities proposed in the ToC are aligned with the KRC#2 strategies e.g., a multisectoral approach that breaks away from traditional interventions, improving governance, political

accountability and domestic funding, capacity building of healthcare workers, and sub-national and national nutrition managers. Other activities proposed are linked to strengthening the nutritional response in humanitarian situations affecting parts of the country, especially the Northeastern region (see Figure 2).

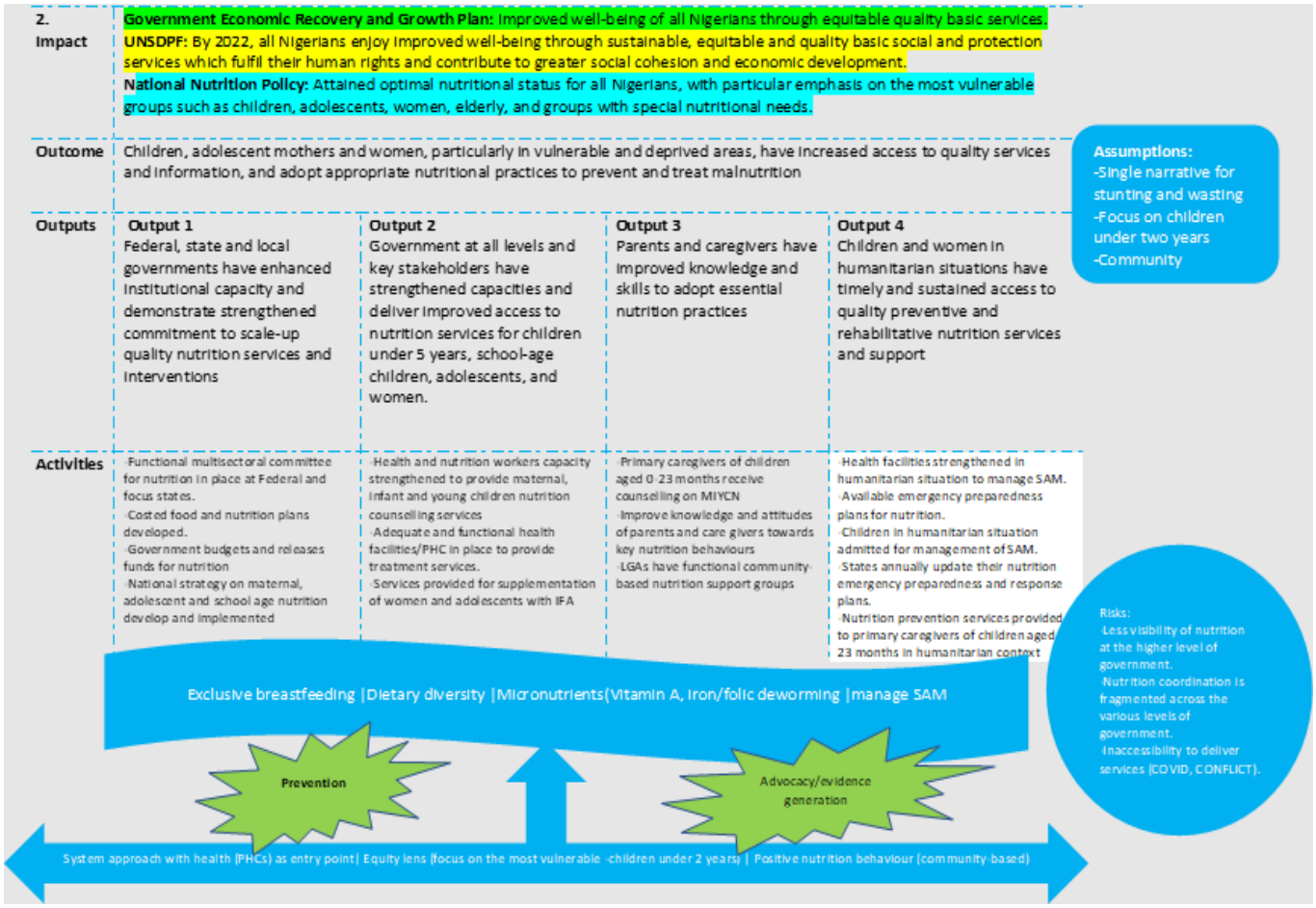


Figure 2: Theory of Change for the National Nutrition programme in Nigeria

Although the current ToC is consistent with KRC#2 strategies, it lacks specificity in showing the pathways through which the different strategies contribute to achieving the key results, the anticipated outcome, and impact. However, by promoting an integrated package of preventive strategies at the base of all nutrition efforts i.e. exclusive breast feeding, dietary diversity, micronutrient (Vitamin A, Folic acid, Iron) supplementation, and severe acute malnutrition treatment, the ToC aligns with core strategies promoted by KRC#2. The ToC could be further specified, contextualized, and evidence-based. Particularly in areas of pathways (where the linkages between activities, outputs, and outcomes are not made), risks (how these are linked to the different elements in the ToC), assumptions (for example around communities, level of commitment expected from government at all levels and other stakeholders) and more generally, clarity in language used (for example, clarifying what a "single narrative for stunting and wasting" mean?).

The activities planned to support the achievement of the desired results include activities conducted at the regional level by the UNICEF WCARO and others at the country level by the UNICEF Nigeria country office (CO). At the regional level, WCARO provided technical assistance (TA) to the CO, regional bodies, and networks, which in turn support implementation at their respective levels in the following areas.

Evidence & Knowledge Management: (KRC#2 Strategy 1, 6)

- Generating and disseminating state-of-the-art knowledge and evidence for nutrition
- Supporting the use of data and evidence for improved care, dietary practices, and services
- Strengthening monitoring and surveillance systems to generate quality data
- Supporting the provision of real-time data, both on the supply and demand side, with particular emphasis on strengthening decentralized monitoring
- Support countries to integrate nutrition indicators into routine health information systems using technology (e.g., RapidPro, District Health Information Software (DHIS) tracker)

Advocacy & Communications: **(KRC#2 Strategy 5)**

- Building their capacity in evidence-based national policy and legislation development including social accountability
- Engaging partners at the global and regional levels to leverage resources for nutrition
- Support the development of more comprehensive communication approaches to facilitate the adoption of EBF for up to six months and dietary diversity

Nutrition leadership and Coordination (KRC#2 Strategy 2)

- Improve nutritional leadership and governance through capacity building, coordination, and technical excellence
- Equip country offices with evidence and tools to advocate for an increased domestic budget for nutrition
- Support the dissemination of relevant global guidelines and tools through regional consultation

Programme delivery at scale (KRC#2 Strategy 3)

- Develop, design, and scale-up evidence-based multisectoral risk-informed nutrition programing
- Support context-specific and nutrition-sensitive interventions in countries requiring cross-sectoral collaboration with WASH, Health and Communication for development (C4D)

Strategic partnerships (KRC#2 Strategy 4)

- Develop strategic partnerships and engagement with donors, academia, business, CSOs, and UN agencies to mobilize resources and create an enabling environment for nutrition

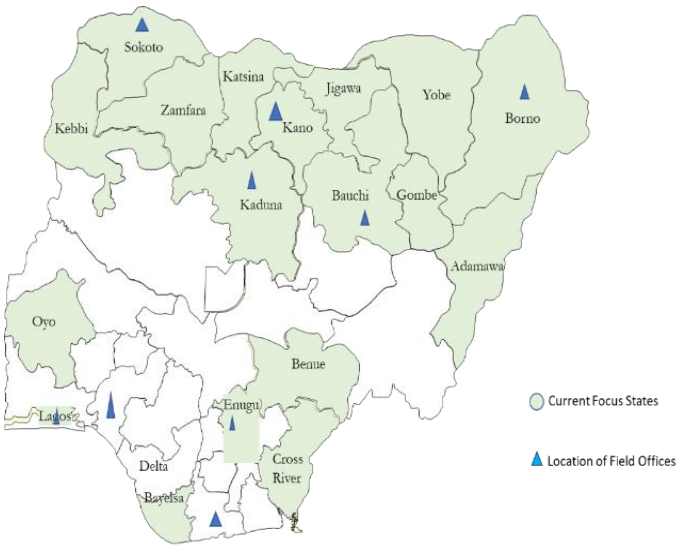


Figure 3: Priority states by specific nutrition package

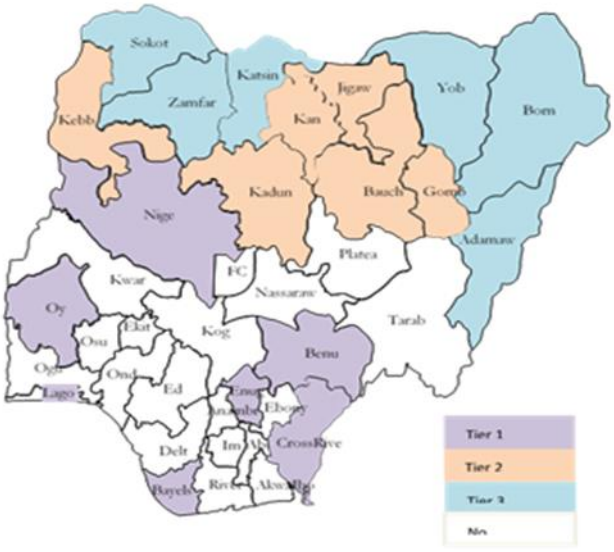


Figure 4: Priority states for the nutrition programme

The nutrition programme in Nigeria covers the entire country, with 18 states currently targeted for active programming while for the remaining states, there is a basic package of education and counselling for mothers

and caregivers on how to adequately feed their children (see Figure 3). The specific package of nutrition interventions delivered in the 18 states is categorized into three categories (Figure 4). In tier 1 states (Bayelsa, Benue, Cross river, Enugu, Lagos, Niger, and Oyo), in addition to supporting the basic package, advocacy is done to influence policies and realize government commitments towards nutrition. In tier 2 states (Bauchi, Gombe, Jigawa, Kaduna, Kano, and Kebbi), a full package of nutrition interventions (micronutrient supplementation) is conducted by leveraging other sectors for complementary interventions to tackle poverty and WASH challenges. Lastly, in tier 3 states (Adamawa, Borno, Katsina, Sokoto, Yobe, and Zamfara), a full package of nutrition interventions are conducted together with supporting other emergency response interventions such as the provision of primary health care, safe water, improved sanitation facilities, and basic education.

The roles of the main implementing agencies, development and humanitarian partners, primary duty bearers, secondary duty bearers, and rights holders are listed in table 2 below.

Table 2: Implementing partners/agencies and roles in implementing KRC#2

	Main implementing partners/agencies	**Specific role**
Political-strategic partners	Nigeria Governor's Forum Civil Society with national and international non-governmental organizations Scaling Up Nutrition and SUN Networks The Economic Community of West African States (ECOWAS)	Provide political leadership for promoting the Prevention of stunting strategies in terms of policies, and strategic partnerships
Donors and foundations	Bilateral Cooperation (Germany, DFID, USAID, etc.) Bill and Melinda Gates Foundation Dangote Foundation WB Power of Nutrition UNICEF National Committees	Coordinate the mobilization of financial resources required to implement KRC#2 strategies
Implementing partners	International and national NGOs (Alive & Thrive, AAH, FHI360HKI, etc.) Academic Institutions UN Agencies	Support the implementation of KRC#2-related activities at facility, community, sub-national and national levels
Primary duty bearers	Governments (of concerned countries) Local Authorities	Facilitate adequate access to social services, public health, and a healthy environment (water and sanitation)
Secondary duty bearers	Parents and immediate community members	Ensure adequate nutritional practices are implemented
Rights holders	Women, children including adolescents	Ensure appropriate utilization of available nutritional resources

4. PURPOSE OF THE EVALUATION

The evaluation aimed to report the extent to which results, both planned and unplanned, were achieved by the KRC #2 acceleration strategies to donors (vertical accountability) and expected beneficiaries of the programme subject of evaluation (horizontal accountability). The findings from the evaluation will guide UNICEF to better replicate the most effective and efficient strategies and interventions. The Government will also be able to use the recommendations and lessons learned to redesign the country's nutrition approach by considering new policies and strategic plans (learning).

The intended users and uses of the evaluation are captured in table 3 below:

Table 3: Users and uses of the evaluation

Evaluation Users	Uses of the evaluation (how the findings and recommendations will be used)
UNICEF NIGERIA (NUTRITION SECTION) **ACADEMIA (REFERENCES FOR RESEARCH AND PRODUCT DEVELOPMENT)** **FMOH, MFBNP (FOR POLICY DEVELOPMENT)**	• Inform the revision of the KRC#2 ToC and refine intervention strategies • Improve the effectiveness of multisector coordination and collaboration (regional and country level) • Improve the awareness and contribution of external partners (government, donors, private sector, and CSOs) on the concept and the strategy • Formulate strategies to leverage and engage academia in generating evidence about KRC#2 • Identify nutrition-sensitive intermediate indicators that can be linked with the KRC#2 strategies • Engage in community dialogue with rights holders to address social and cultural barriers to programme uptake • Engage the private sector in both home and school food environments (improving children's diets) • Address barriers to delivering KRC#2 at scale (identify the priority barriers and how to address them) • Enhance the effectiveness of Regional Office TA in countries • Strengthen high-level advocacy and resource mobilization with the Government of Nigeria and donors in this area • Strengthen strategies for the overall maintenance of key child health indicators beyond 2021 • Coordinate and support the implementation of state annual operational plans (AOP) as well as scale-up up the development of AOPs to the remaining 13 states of the federation plus FCT • Support data analytics at national and sub-national levels by building capacities on evidence-based planning and monitoring, using score cards and trend analysis across different periods and sources of data towards an improved understanding of bottlenecks and priorities in Nigeria • Build the resilience of communities to include innovations that maintain basic nutritional adequacy during a pandemic
UNICEF NIGERIA HEALTH SECTION FMOH (FAMILY HEALTH DEPARTMENT)	• Strengthen high-level advocacy and resource mobilization with donors in this area. While dealing with the impact of COVID-19, annualized administrative data showed overall maintenance of key child health indicators in 2020, namely treatment of diarrhoea with ORS (80 percent), care seeking for pneumonia (84 percent), and treatment of malaria (73 percent).

Evaluation Users	Uses of the evaluation (how the findings and recommendations will be used)
	• Strengthen integrated Reproductive Maternal Neonatal Child and Adolescent Health + Nutrition (RMNCAH+N) plans by addressing coverage and quality service delivery with the sustained engagement of community structures
UNICEF NIGERIA SOCIAL PROTECTION SECTION	• Expand the section on the social protection component and include it in the new Country Programme of Cooperation (2021- 2025) • Inform the development of a new advocacy strategy for greater engagement of national actors in child protection • Support the provision of a minimum package for infection prevention and control in response to COVID-19 and other emergencies • Revise the national regulatory framework for child protection based on the findings
UNICEF NIGERIA INNOVATION SECTION	• Strengthen inter-agency intervention and integration packages • Strengthen direct emergency response (focused on supporting the testing, medical response and risk communication, and community engagement) as in "COVID-19 proofing" existing programmes to safeguard progress under shifting circumstances • Use identified gaps to engage academia for in-depth research and the government for innovative policy readjustments
UNICEF NIGERIA EDUCATION SECTION	• Inform the development of new intervention strategies • Become familiar with the approaches identified as successful by the evaluation and introduce them more systematically into operations • Identify and scale up strategies to yield a reduction of out-of-school children, and improve learning, transition, and completion rate with gender equity at the basic education level • Sustain the collaboration with development partners, technical agencies, CSOs, and other UN agencies in the implementation of results-based education sector plans • Strengthen the mainstreaming of evidence-based advocacy strategies into the national and state government plans, budgets, and policies. • Build systemic capacity to improve the quality of annual school census data. • Strengthen community-led interventions such as timely enrolment drive, High-Level Women Advocates (HLWA) NGO to boost girl-child school enrolment, and targeted cash transfer programmes, which lead to a reduction in out-of-school children • Build on the lessons learned during the evaluation to strengthen their advocacy strategy with technical partners, territorial and devolved administrations
Donors	• Better define financial support in the fight against child marriage and female genital mutilation • Identify areas of investment priorities for effective nutritional and health outcomes

5. EVALUATION OBJECTIVES

The objectives of the evaluation are:

1. To determine the relevance, coherence, efficiency, effectiveness, impact, and sustainability of stunting prevention strategies (KRC#2) to contribute to the survival and development of each child.
2. To identify lessons learned about what worked or not during the implementation of the regional strategy and key interventions, including unintended results (positive and negative).
3. To identify good practices in the prevention of stunting and interventions on stunting prevention.
4. To make key recommendations on how to improve the implementation processes and performance of the strategy and key interventions as part of a continuous learning process.
5. To determine to what extent the regional strategy and key interventions have integrated equity and gender in their design, implementation, and monitoring.

6. SCOPE OF THE EVALUATION

6.1 Thematic Scope

The thematic scope of the evaluation of the KRC#2 nutrition intervention programme in Nigeria covered the various nutrition programmes implemented or supported by UNICEF between 2017 and 2020. The focus of the assessment was on the contribution of KRC#2 acceleration strategies to the reduction of stunting. Because of the heterogeneity of the contexts within Nigeria, the evaluation has addressed specific issues about the inclusion of marginalized and vulnerable populations, including across gender, geographic location, and migration status. Another key thematic dimension covered by this evaluation is the *de facto* operationalization of the regional strategies for the acceleration of KRC#2 within Nigeria. To this end, the evaluation team identified differences in the use of terminology between UNICEF (WCARO and CO) and national governments when it comes to indicating the activities undertaken to accelerate reducing childhood stunting. In other words, WCARO and UNICEF CO in Nigeria may refer to KRC#2 strategies, whereas the national government may refer to its 'National Multisectoral Plan of Action for Food and Nutrition' or 'National plan of action on Food & Nutrition'. As a result, the evaluation team captured the width and depth of action related to accelerating the reduction of childhood stunting in WCAR at regional, country, and subnational levels.

This evaluation also looked at the effectiveness and functionality of the multisectoral committee on food and nutrition in providing a framework to facilitate advocacy, planning, coordination, partnership, and leveraging of resources across relevant government ministries. The evaluation highlighted multisectoral collaborations and other regional or in-country partnerships to explore tackling emerging needs.

The evaluation entailed policy analysis, stakeholder analysis, coordination effectiveness and efficiency of financing mechanisms at the national level; coverage estimation, capacity and quality of care assessment at the subnational level; utilization and effectiveness of community health workers, as well as mapping other nutrition-related interventions e.g., WASH, malaria prevention, etc., at the community level. The evaluation also covered KRC#2-related activities implemented in the capital and other selected regions/states/counties in Nigeria, Liberia, Mali, Burkina Faso, and Niger. The evaluation considered all KRC#2-inspired activities implemented in the WCAR region and each target country between 2017 and 2020.

6.2 Geographic Scope

The evaluation in Nigeria focused on UNICEF strategies implemented to prevent stunting among children in the Northern and Southern regions of Nigeria. The evaluation aims to cover a sample of national, state, and local government sites to ensure the representativeness and applicability of findings at the national level. We understand that UNICEF's programme supports the government of Nigeria to implement the National Plan of Action on Food and Nutrition by strengthening health and community systems and fully integrating nutrition into all aspects of the primary health care (PHC) system, with a particular focus on community management of acute malnutrition (CMAM), infant and young child feeding (IYCF) interventions and micronutrient supplementation. Thus, we prioritized the 18 states identified in the national nutritional strategic plan for the evaluation; these states are Adamawa, Bauchi, Bayelsa, Benue, Borno, Cross River, Enugu, Gombe, Jigawa, Kaduna, Kano, Katsina, Kebbi, Lagos, Oyo, Sokoto, Yobe, and Zamfara (Figure 5). However, the qualitative interviews with beneficiaries, implementing partners, and key stakeholders were spread across three states – Bayelsa (to represent the South), Enugu, and Niger (to represent the North). Additional data from Borno was obtained through a data transfer agreement with the American Institutes for Research (AIR)

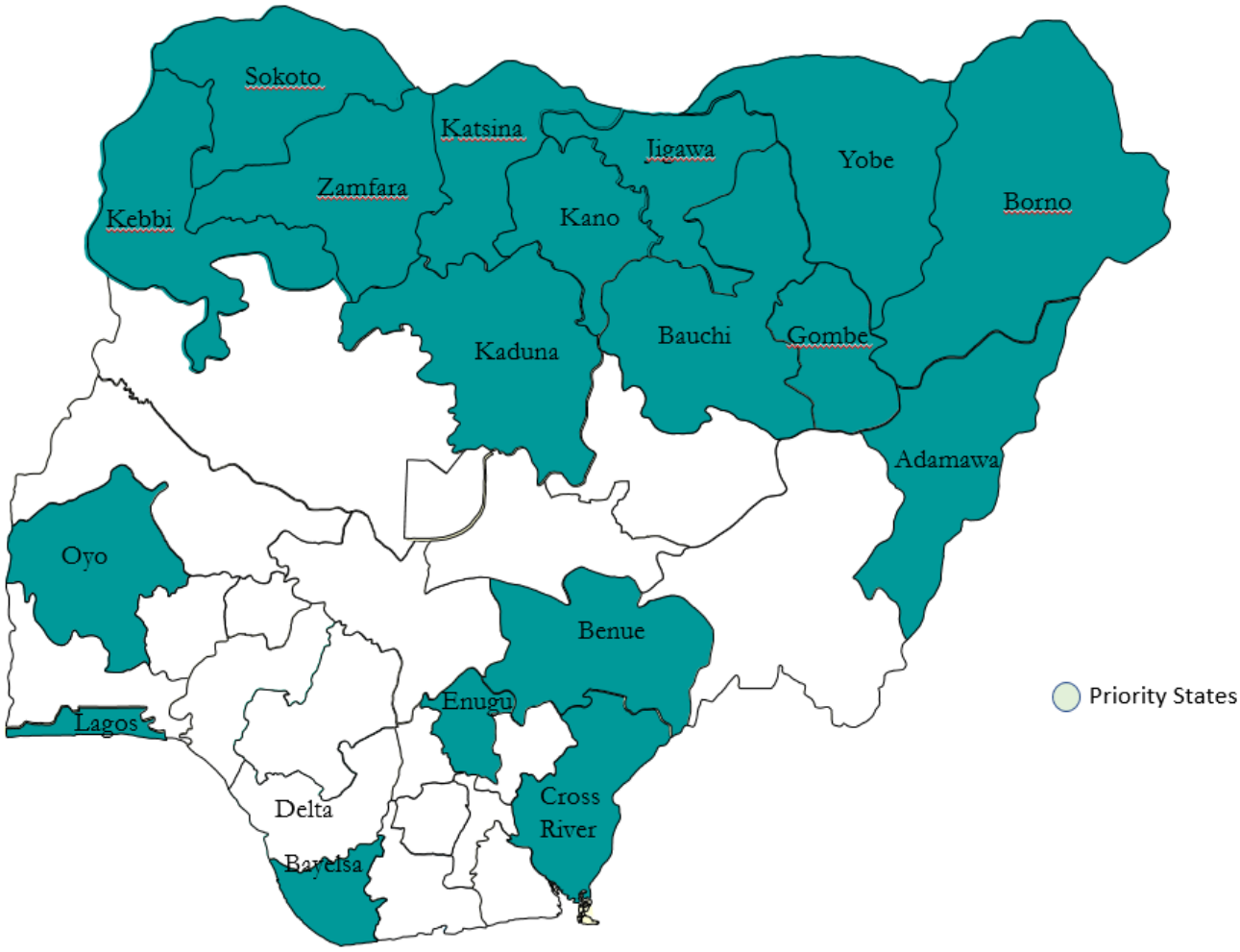


Figure 5: Evaluation geographical scope: Nigerian states and priority areas

6.3 Chronological scope

In Nigeria, the evaluation will cover activities that took place between January 2017 and December 2020. The period of evaluation is illustrated below in Figure 6. It should be noted, however, that while the scope of the evaluation was limited to 2017-2020, interviews and data collection, taking place Nov-Dec 2021, included more recent information spanning the period of 2020-2021. Where relevant to the evaluation objectives, the information collected has been included in support of the findings and the evaluation objectives.

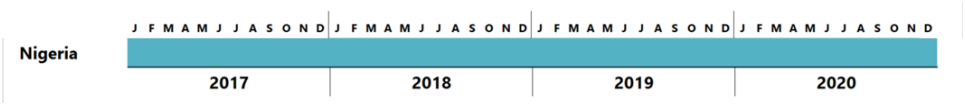


Figure 6 Chronological scope for the evaluation in Nigeria

*Data for Borno was obtained through a Data transfer agreement with American Institutes for Research (AIR)

7. CRITERIA AND EVALUATION QUESTIONS

To fulfill the evaluation purposes and meet the envisaged objectives, the work of the evaluation was guided by seven criteria: five OECD/DAC criteria (relevance, coherence, effectiveness, efficiency, and sustainability) and two additional cross-cutting criteria (one on COVID-19 and the other on human rights, gender, and equity).

The questions were grouped by criterion and developed based on the evaluation ToR as well as on discussions between the evaluation team and the key evaluation users during the inception phase. Each question will be addressed individually by the evaluation team in this report.

Table 4 below presents the main criteria and questions. The full evaluation matrix including indicators per key result strategy can be found in Annex 1.

Table 4: Main evaluation criteria and questions

Evaluation criteria	Evaluation question
1. Relevance	1.1 To what extent have the interventions in the field resulting from KRC#2 strategies responded to the identified needs of the target populations, taking into account the changing needs in changing situations (security emergencies, health crises such as COVID-19, etc.)?
	1.2 To what extent are field interventions aligned with regional and international recommendations for the prevention of stunting?
	1.3 To what extent were the different monitoring and evaluation strategies adapted to measure the results of the approach? And how could they be improved?
	1.4 To what extent has the technical support provided by the UNICEF Regional Office been adapted to the needs of country offices and government counterparts and how could it be improved?
2. Coherence	2.1 To what extent are the interventions carried out under KRC#2 complementary with other interventions carried out in the field of nutrition as well as with the nutritional situation in the country within each country?
3. Effectiveness	3.1 To what extent were the KRC#2 strategies effective in achieving the intended KRC#2 result (By 2021, 80 percent (74 million) of girls and boys under 5, especially those who are marginalized and those living in humanitarian settings, receive high-impact nutrition services to prevent stunting)?
4. Efficiency	4.1 To what extent have resources made available (financial, human, and material/property) been: - Sufficient (in terms of quantity) concerning the needs identified and the expected results? - Adequate (in terms of quality) concerning the expected results? - Deployed on time? - Flexible to respond to unforeseen needs (Insecurity, COVID-19)?
5. Sustainability	5.1 To what extent has UNICEF put measures in place to ensure that activities funded by the Malnutrition Prevention and Response Programme continue in the future without UNICEF support?

Evaluation criteria	Evaluation question
6. Human rights, gender, and equity	6.1 To what extent do interventions systematically consider human rights, gender equality, and equity considerations?
7. COVID-19	7.1 How did COVID-19 affect the implementation of the KRC#2 strategy at regional and national levels? What are the unintended (positive and negative) effects?

The evaluation matrix is further operationalized with sub-questions, indicators, and data sources. Questions from sections 6 and 7 are integrated within sections 1-5 and are further not discussed separately, however, the main conclusions for the two questions will be clearly articulated.

8. METHODOLOGY

8.1 Approach of the evaluation

Evaluation framework

The overall evaluation rests on two key frameworks.

We have selected the "Lancet 2013 framework for actions to achieve optimum foetal and child nutrition and development" (see Annex 2, Figure 18 below), as well as the "Lancet 2013 conceptual framework for nutrition-specific interventions" (see Annex 2, Figure 19 below) as the broader theoretical framework to guide this evaluation. The first framework covers both nutrition-specific factors as well as a selection of nutrition-sensitive approaches that require the contribution of various sectors and appropriate governance for multisectoral cooperation. This conceptual framework also shows the importance of the enabling environment, such as advocacy strategies, accountability, and resource mobilization to succeed in stunting reduction, a key strategic priority of the KRC#2 acceleration strategies.

Second, the evaluation is based on a framework that encompasses all those evidence-informed interventions that aim to improve the nutritional status across the life cycle, displayed below in Annex 2, Figure 19.

Both frameworks – as well as traditional OECD DAC criteria – were used to develop the evaluation framework. The main evaluation questions were framed and aligned with the OECD DAC criteria, while the Lancet frameworks were used to formulate the sub-questions regarding the nutrition-sensitive and nutrition-specific aspects of KRC#2 interventions. We included gender and equity as cross-cutting issues within the framework to ensure that these aspects are fully integrated into the evaluation. We also included an examination of the effects and implications of COVID-19 on the implementation of the KRC#2 strategy.

We have also discussed the use of the UNICEF framework (see Annex 2, Figure 20) on determinants of Maternal and Child nutrition. While this framework is comprehensive in mentioning the different types of determinants that may affect nutrition-related outcomes in women and children, it does not provide information on what evidence-based interventions exist to improve the nutritional status, specifically related to stunting in young children. Furthermore, the evaluation team notes that the framework was published in 2020, two years after the implementation of KRC#2 strategies was started.

However, this framework in its compactness was used for the conclusion and final discussion of the evaluation, showing where strategies implemented under KRC#2 have influenced the various determinants in the five countries.

Our overall approach is based on Realist Evaluation (RE), which simply asks "What works for whom, where, and how?" (see Figure 7). A RE approach provides insight into which mechanisms and interventions produce outcomes and helps identify contextual factors that appear to be of critical influence in reaching results. This method of evaluation has been successfully used in the past by KIT in research[3] and in evaluations and is aimed at uncovering the contextual parameters as well as the mechanisms that produce the desired outcomes towards the objective, in this case reducing childhood stunting in the WCA region.

Evaluation approach

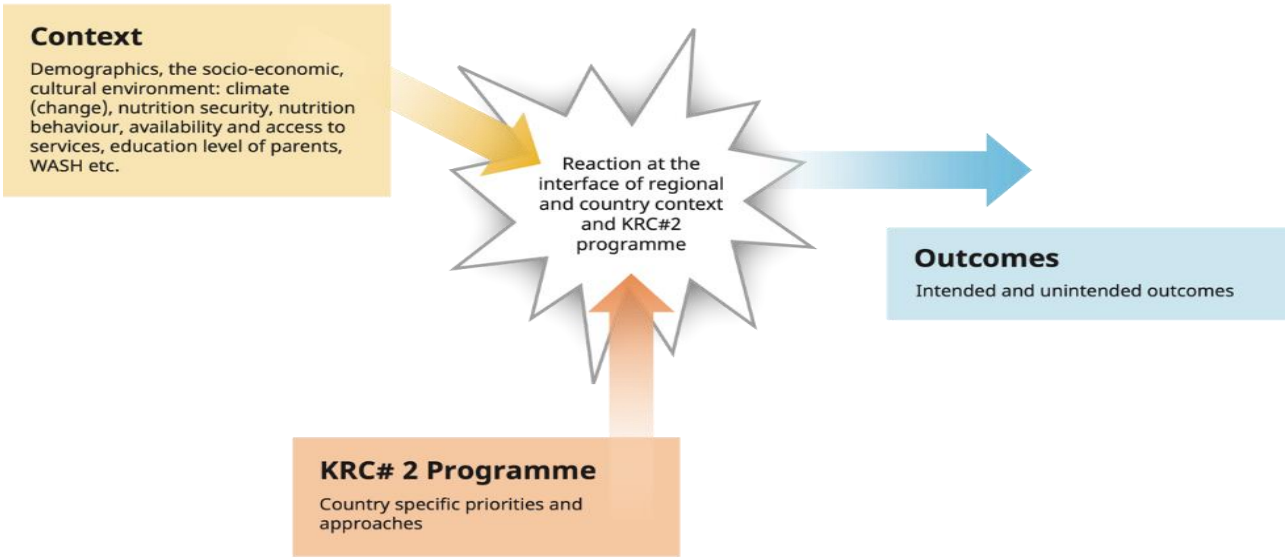


Figure 7: Realist evaluation as an approach to the KRC#2 evaluation

While the frameworks guide the content of the analysis, the RE approach guides the evaluation process. The RE approach is uniquely adequate for this evaluation as it allows for flexibility in the analysis of national and local contexts while aiming to uncover the underlying key context-mechanism-outcome constellations that can be used for learning within and between countries. Moreover, the theory-driven approach is uniquely aligned with UNICEF's principles of evidence-based interventions and approaches to ensure the well-being and development of all children. This is by eliciting mechanisms through which interventions or strategies work and exploring how contexts interact with these mechanisms to produce different outcomes in each context. Lastly, the RE approach allows for rapid analysis, interpretation, and triangulation of the large number of data sources that are to be consulted for this evaluation and allows for synthesis at the country and regional level within a shorter amount of time than conventional methods by building on what is already known.

The RE approach is further optimized with a theory-driven innovative approach to in-depth interviews, called Synthesized Narrative Exploration (SNE), developed at KIT whereby summarized findings from an extensive literature review are further explored using qualitative data collection methods. Pioneered at KIT, and previously successfully used in research and evaluations for UNICEF, this is a type of in-depth interviewing technique that builds on document review and secondary quantitative and qualitative data analyses to establish "what is already known". In such an interview, the researcher seeks to validate known information with experts and beneficiaries, which allows the researcher to focus on aspects of the key evaluation questions that are not yet known or clarified. Thus, more information can be covered in greater depth and in less time than with conventional qualitative interview techniques.

The overall approach, the RE approach, and the SNE methodology, in addition to other data collection methods, are all operationalized in the evaluation matrix presented as part of this report in Annex 1.

8.2 Methods and data collection tools

In chapter 7, we provided the main evaluation criteria and questions (see Table 4) and we referred to the full evaluation matrix, which can be found in Annex 1. The data collection tools (see Annex 3) are based on these questions. The qualitative data collection tools follow all the five main evaluation criteria while the focus on the sub-questions will differ per In-Depth Interview or Focus Group Discussion. The order of questions in the data

collection tools does not always follow the order of sub-questions in Table 4, to ensure a logical flow of discussion of subjects and facilitate data collection.

A rapid assessment conducted as part of the preparation for this report with our in-country partners revealed that costly and time-consuming primary quantitative data collection is not necessary, as re-analysis of available secondary existing data such as National Nutrition Surveys (NNS), Multiple Indicators Cluster Surveys (MICS), NDHS and DHIS data can suffice. This allows the evaluators to focus on in-depth qualitative expert interviews (IDI) at regional and national levels, complemented with focus group discussions (FGD) and roundtables to iterate and reach saturation regarding relevant context-mechanism-outcome pairings that produce the intended results.

Desk Review

The list of documents reviewed during the evaluation is presented in Table 5 below.
The documents provided the resources for understanding the priorities of the government and strategies employed for the nutrition programme. They were also used to gather information about the guidance provided by UNICEF in the implementation of activities related to KRC#2 strategies following the DAC criteria.

Table 5: List of documents used for desk review

Data sources for Desk review
1. National Policy on Food & Nutrition (NPFN) 2016 2. National Strategic Health Development Plan (NSHDP II) 2018-2022 3. Federal Ministry of Health. National Multisectoral Plan of Action for Food and Nutrition (NMPFAN): 2021 – 2025 4. Federal Ministry of Health. Training Manual for health workers and teachers on adolescent nutrition programme 5. Federal Ministry of Health. National Guidelines on Micronutrient Deficiencies Control in Nigeria: 2013 6. Federal Ministry of Health. Nutrition and Food Security Surveillance: North East Nigeria – Emergency Survey; October 2020 7. Federal Ministry of Health. Nutrition and Food Security Surveillance (NFSS): North East Nigeria – Emergency Survey; November 2019 8. National Primary Care Development Agency (NPHCDA) in collaboration with the National Health Insurance Scheme (NHIS) and National Emergency Medical Treatment Committee (NEMTC). Guideline for the Administration, Disbursement, and Monitoring of the Basic Healthcare Provision Fund; Basic Healthcare Provision Fund; March 2020 9. Federal Ministry of Health. Government of Nigeria: Nutrition Policy Landscape; 2020 10. UNICEF Programme Strategy Note: Nutrition, Nigeria Presentation to Regional Office; October 7, 11. UNICEF Annual reports 2018, 2019, 2020 12. Nigeria Essential Medicines List for Children 2020, 1st Edition 13. Nutrition and Food Security Surveillance North-East Nigeria – Emergency Survey 2019 14. Agricultural Sector Food Security and Nutrition Strategy (AFSNS) 2019 15. National Food Consumption and Micronutrient survey (NFCMS) 2021 – Final report 16. Multiple Indicator Clusters Survey (MICS) 2021 – Final report 17. Demographic and Health Survey (DHS) 2018 – Final report 18. National Nutrition and Health Survey (NNHS) 2018 – Final report

Quantitative Data Collection (secondary data analysis)

The quantitative approach leveraged on following secondary sources for its analysis:

1. Publicly available population survey data
2. Routine health management information system (DHIS2)

3. Programme data (M&E data)

Population Survey data

National and state-level estimates of indicators directly or indirectly associated with stunting from the following survey reports were extracted and analysed: NNHS 2014 and 2015, MICS 2016-17, NNHS 2018, and MICS 2021. Relevant reported variables were used for the regional analysis including measles vaccination coverage (12-23 months), skilled birth attendance (live birth in past two years), improved water source, and minimum acceptable diet (6-23 months). Data not consistently reported at a subnational level but indirectly or directly related to stunting (including antenatal care, minimum meal frequency, breastfeeding practices, etc.) were excluded from the analysis.

Routine Health Management Information data

Routine data from the national health management information system was used to understand the changes in the uptake of formal nutritional services across the 18 UNICEF focal states. This source also enabled us to explore how the change in uptake contributed to observed population trends. The central HMIS system used by the Department for Planning Research and Statistics (DPRS) to monitor health services delivered by public health providers in Nigeria is called the District Health Information System (DHIS2). The KIT team was granted access by UNICEF to the database platform and extracted relevant indicators to address the evaluation questions. Table 6 below provides an overview of the data that we were able to extract and the reason for not including it in the results. In Nigeria, the completeness and timeliness of reporting nutrition data in DHIS2 are still low and data quality is problematic.

Table 6: Extracted data from DHIS2 not included in the result and reasons for exclusion

Indicator	Years available	Reason for exclusion
ANC1 coverage	2017 – 2021	No information on numerator or denominator.
ANC8 coverage	2020 & 2021	Missing data for 14 states in 2020 Data from 2021 falls outside of the KRC#2 intervention period
% Children <5 years with severe acute malnutrition (SAM) discharged as healthy following treatment	2020 & 2021	Missing data for 17 states in 2020 Data from 2021 falls outside of the KRC#2 intervention period
% Children <5 years with severe acute malnutrition (SAM) that were transferred out	2020 & 2021	Missing data for 17 states in 2020 Data from 2021 falls outside of the KRC#2 intervention period
% Children <5 years with severe acute malnutrition (SAM) that defaulted from treatment	2020 & 2021	Missing data for 17 states in 2020 Data from 2021 falls outside of the KRC#2 intervention period
% Children <5 years with severe acute malnutrition (SAM) that died	2020 & 2021	Missing data for 18 states in 2020 Data from 2021 falls outside of the KRC#2 intervention period
Total of children 6-11 months receiving Vitamin A (100,000 IU)	2021	Data from 2021 falls outside of the KRC#2 intervention period

Total of children 6-59 months receiving Vitamin A (200,000 IU)	2021	Data from 2021 falls outside of the KRC#2 intervention period

Programme data and other sources

The programme data such as the number of children who took Vitamin A or deworming medication or were treated for SAM as part of KRC#2 activities were not provided. We used stunting estimates that are collated by WHO and UNICEF as part of the WHO and UNICEF joint malnutrition estimates. These are mostly derived from the surveys mentioned above but also include other sources.

Qualitative Methods and data collection tools

As explained above, the Evaluation Team focused the methodology on qualitative data collection to elicit the underlying issues presented by the secondary data analysis and documentary review.

Table 7: Qualitative data collection methods

Type of primary data collection	Location	# (number of interviews)
In-depth qualitative expert interviews (IDIs) using Synthesized Narrative Exploration methodology *Director, Department of Child Health* *Director, Ministry of Agriculture and Rural Development* *Director, Ministry of Education.docx* *Director, Department for Planning Research and Statistics* *Director of Nutrition Division, Ministry of health* *Head of Department Ministry Budget and National Planning.doc* *Nutrition Expert @FAO* *Chief of Party Nutrition Department UNICEF CO Office.* UNICEF Departments: *WASH, Public Health, and Child Protection Department*	Country Office and National level stakeholders FCT Abuja	11
In-depth qualitative expert interviews (IDIs) using Synthesized Narrative Exploration methodology *State Nutrition Officer (SNO)* UNICEF *State Nutrition Specialist*	State level Bayelsa, Enugu, and Niger	5 (3 SNOs and 2 UNICEF CO)
Focus Group Discussions (FGD) with beneficiaries. Male and Female caregivers with children under 5, including adolescent mothers	State level Kolokuma Okpokuma LGA Enugu East and Udenu LGA, and Chachanga LGA	6 (2 per state i.e., 1 male group, 1 female group)
Roundtables discussions (RTD) with implementers *Women's Support Group Leader* *Community Volunteer* *Traditional Birth Attendant* Community Leader	LGA level Kolokuma Okpokuma LGA Enugu East and Udenu LGA, and Chachanga LGA	3 (1 per state)

Key Informant Interviews: A total of 15 in-depth interviews were conducted with key informants (experts), 10 at the national and 5 at the state level, including UNICEF staff (see Table 7). During these interviews, the focus was on the content of the (sub-) national stunting prevention programme, the governance and functioning of the multisectoral committee, the development of the national (multisectoral) nutrition plan, partnerships, resource mobilization, the national capacity for nutrition, and the progress, challenges, successes, and implementation of

the programme. There were also questions on COVID-19, to generate insight into the roles the government and other partners played in mitigating the challenges that might disrupt nutrition services in communities. In addition to the 15 KIIs, KIT also entered into a data-sharing agreement with the AIR to exchange transcripts from their concurrent evaluation of UNICEF and the Government of Nigeria's Country Programme of Cooperation (CPC) nutrition component. As a result of this collaboration, KIT received additional data from KIIs with the UNICEF Field offices in Akure, Borno, Kaduna, Kano, Port Harcourt, Sokoto, and from the UNICEF country office.

Focus Group Discussion: A total of six focus group discussions were coordinated with the selected participants - three groups with male caregivers (including adolescent males) and three groups with female caregivers (including adolescent girls). In a group, we had a minimum of six people. The group discussions explored known and available nutrition services in the communities, the perception of services, the (equal) use of services, the fora and mechanism of community dialogue, and issues around equity distribution of nutrition services.

Round Table Discussion: These discussions brought together community health and nutrition workers and leaders (see Table 7) to discuss issues around the state of implementation of nutrition programmes in communities, the technical support they receive for their nutritional work, their role in the nutrition programme, inequalities in access and use of nutrition services and local partnerships. We conducted a total of three round table discussions across the implementing states – Bayelsa, Enugu, and Niger states. In each group, we had a minimum of three people.

The data collection tools can be found in Annex 4. The data collection tools for national and subnational stakeholders were adapted to the synthesized narrative approach during the training data collection. A field guide for the data collectors was also prepared as a reference guide for data collectors. The tools were contextualized during the training by adapting questions to a specific language (state, LGA, etc.) and the content of the questionnaires so that attention to the strategies chosen during KRC will be tailor-made. Data collection lasted around six weeks.

8.3 Sampling strategy

The recruitment of the various groups of participants for the evaluation at national and sub-national levels was done in collaboration with key stakeholders at the appropriate level :

- The selection of relevant stakeholders for KIIs at the national and state levels was done by KIT with support from the UNICEF Nigeria team and the national steering committee.
- The recruitment of beneficiaries for FGDs was conducted by Society for Family Health with support from the state nutrition officer and UNICEF state nutrition specialist. The recruitment ensured that only those who are beneficiaries of the UNICEF KRC#2 programme were selected for the group discussion. We also ensured that adolescents (male or female) were included in the group discussion.
- The recruitment of participants for the roundtable discussion was done in the community with support from the state nutrition officers. To address issues of possible bias by these key informants concerning recruitment, it was explained that it is important to recruit different cadres of health workers. As primary data collection concerns qualitative data collected through KIIs and FGDs, our sampling strategy is non-probabilistic. See Table 8 for the participants recruited.

Table 8: Sampling Strategy Overview

Data Collection Tools	Sampling strategy	Total Number	Women	Men
Key informant interviews	Purposeful sampling	16	12	4

Focus group discussion		48	24	24
Round table discussion		12	11	1

8.4 Data Analysis and quality assurance

Qualitative data analysis: The interviews were transcribed in English from the audio recordings. Extensive notes were also taken and further elaborated upon completion of interviews/FGD/round tables. The transcripts were reviewed for emerging themes, completeness of work, and inconsistencies. We also used the Lancet framework to develop the coding frame, which was further enriched with recognized new and emerging themes in the notes. Qualitative data was analyzed and coded using a coding framework that was developed based on the theoretical frameworks and evaluation criteria and coded using Excel.

Quantitative data analysis: The analysis focuses entirely on reanalyzing results extracted from nutrition and health surveys between 2014 and 2021. Indicators that were relatively consistently reported throughout the various reports were analyzed. The analysis focuses on the progress of stunting reduction between 2012 and 2020, nationally and 2014 - 2020 sub-nationally against the 2025 global nutrition targets. These targets specify a reduction in the number of stunted children of at least 40 percent. Progress against this target can be presented in terms of the current and required annual average rate of reduction – AARR: these were calculated to assess progress between 2012 and 2020 nationally, and from 2014 to 2020 for regional, gender, and age-disaggregated AARRs.

Furthermore, regional progress on measles vaccination coverage (MVC), skilled birth attendance, improved water source, and minimum acceptable diet is described from 2014 to 2021 concerning regional improvements in stunting. The analysis presented here is purely descriptive as raw data (e.g., original datasets) were not available. All analysis was done using STATA version 16.

Quality Assurance: To ensure high quality of data collection and processing, we adopted two levels of monitoring of the data collection process: 1) Internal monitoring by the nutritional and evaluation consultants of each of the data collection teams 2) Fieldwork monitoring – spot-checking and accompaniment. We also created a WhatsApp platform where everyone discusses challenges encountered and shares an update on relevant issues. In addition to the above, we also employed the following processes:

- All our qualitative consultants participated in the training sessions, which were facilitated by KIT and the Society for Family Health. Attendance ensured everyone has the same understanding of the evaluation objectives and the expected roles and responsibilities
- All our qualitative consultants have a good understanding of the local languages spoken by the majority in the selected communities where FGDs and RTDs were conducted
- The evaluation consultants with support from the state team worked closely with the data collection to select communities where FGDs and RTDs were conducted. This is to ensure that those selected were truly beneficiaries of the programme.

Triangulation: The evaluation draws on multiple sources of data that can be compared and triangulated. Methods used to investigate these sources include document review, in-depth interviews, FGDs and RTDs, and secondary data analysis. Triangulation of these sources occurred in the development of research tools. The thematic guides for the interviews and focus groups were based on our understanding of the national programmes gained through the literature review, and this understanding was expanded, verified, and/or qualified during the interviews and other FGDs (a method called Synthetic Narrative Exploration). Secondly, the qualitative data obtained from the interviews, focus groups, and round tables were triangulated and compared. Discrepancies found between these

data sources were followed up with UNICEF COs and, if necessary, further discussions with other relevant stakeholders.

The hypotheses generated by secondary data analyses were triangulated with qualitative information. The qualitative study provided a better understanding of why certain outcomes are observed and how similar activities may yield different results due to contextual differences (geographical, cultural, etc.). Wherever possible, all findings were supported by information from the desk study. Triangulation of quantitative and qualitative data was limited to those sub-questions for which quantitative data exists. The evaluation matrix in Annex 1 provides an overview of the methods that will be used to evaluate each question.

8.5 Ethical Considerations

KIT as an independent knowledge institute is highly committed to adhering to ethical research standards. Our evaluation experts uphold the strictest ethical standards based on principles of independence, impartiality, transparency, disclosure, ethical conduct, credibility, and usefulness. None of the evaluation experts involved in this work has any interest in or has professionally or otherwise been engaged with the implementation of the KRC#2 strategy or any of its resulting programmatic components.

As such, the team adhered to the UNEG Ethical Standards and the evaluators' obligations which include independence, impartiality, credibility, conflicts of interest, and accountability. In terms of **independence**, KIT is an independent knowledge institute and has a longstanding track record of conducting independent evaluations including for UNICEF. In the context of this evaluation, independence was safeguarded by KIT or its advisors having no stake in the implementation of the object of evaluation. In terms of **impartiality**, KIT's role is based on non-discrimination nor favouritism, and its advisors upheld this during this evaluation by not taking sides and handling and assessing all data shared in the context of this evaluation with equal care. Credibility in this evaluation was ensured by obtaining, analysing, and triangulating relevant data from different sources in keeping with the mixed methodology employed to draw conclusions and derive appropriate recommendations based on the strength. The team has **no conflicts of interest** to report. The KIT team's accountability in this evaluation is ensured by constant communication and coordination with the UNICEF WCAR and country teams and a communicated work plan (Annex 5) with due dates that the team can reasonably be held accountable to.

In Nigeria, the survey protocol and other supporting documents were submitted to the National Health Research Ethic Committee (NHREC) board to review and approve the conduct of the study. The research commenced in Nigeria after NHREC approved the protocol and all related study documents. The NHREC Approval Number is NHREC/01/01/2007-22/06/2022 and the document can be found in **Annex 4** of this report. Ethical considerations were guided by holistic ethical principles such as the right to privacy, confidentiality, right to no harm, honesty, respect, and trust.

8.6 Limitations and mitigation measures of the evaluation

Table 9: Limitations and Proposed Mitigation Strategies

Limitations and constraints of the evaluation	Mitigation strategies identified
Non-inclusion of relevant documents	We have attempted to locate all relevant documents programmatic, policy, scientific, and administrative documentation (e.g., national surveys) by consulting with the UNICEF Nigeria team and relevant government stakeholders
Conflict and political unrest hampered the fieldwork (originally planned for Borno state) and the ability of national	Northeast Nigeria continues to experience insecurity due to the Boko Haram insurgency. We entered a Data sharing arrangement with another organization conducting similar research during the

consultants to travel within the country to selected research locations	same period and utilized the data collected as appropriate for our evaluation.
Communication with Country Offices	Lack of response due to competing priorities from respondents in the CO. To this end, the team employed different remote conferencing channels to try to reach as many as possible.
Many variables directly or indirectly related to stunting (including antenatal care, minimum meal frequency, breastfeeding practices, etc.,) could have been analysed but these were not consistently reported on a sub-national level.	The extent of availability of the data utilized for secondary data analysis is declared for each indicator, graph, or map presented in the result section. The effect of the quality of data used on the interpretation given is also highlighted in the narrative of the finding and where necessary, the conclusion and recommendation.

9. FINDINGS AND PRELIMINARY CONCLUSIONS

9.1 Relevance

1.1. *To what extent have the interventions in the field resulting from KRC#2 strategies responded to the identified needs of the target populations, taking into account the changing needs in changing situations (security emergencies, health crises such as COVID-19, etc.)?*

1.2. *To what extent are field interventions aligned with regional and international recommendations for the prevention of stunting?*

1.3. *To what extent were the different monitoring and evaluation strategies adapted to measure the results of the approach? And how could they be improved?*

1.4. *To what extent has the technical support provided by the UNICEF Regional Office been adapted to the needs of country offices and government counterparts and how could it be improved?*

1.1. *To what extent have the interventions in the field resulting from KRC#2 strategies responded to the identified needs of the target populations, taking into account the changing needs in changing situations (security emergencies, health crises such as COVID-19, etc.)?*

1. Data from DHS 2018 and NNHS 2018 reveal that stunting is prevalent across the country with wide variation within and between states. The reports show a national stunting prevalence of 37 percent and 32 percent respectively. The DHS reports figures ranging from the lowest, 18 percent, in the Southeast to 57 percent in the Northwest, while the NNHS reveals similar trends i.e., 17 percent and 50 percent respectively. In addition, respondents at the national and sub-national levels all agree that stunting is recognized as a serious public health problem across the country that need to be addressed, as succinctly put by this key informant at the FMOH.

"In Nigeria, we know that stunting is a problem, and because it's a problem, most NGOs, they try to do their best, like World Bank is working, like UNICEF is working, the World Bank is also working, and providing a lot of money in terms of loans and grants to address issues on malnutrition generally. So, everybody, we know it's a problem for us, and everybody's attention is on it. But it's just in bits and pieces." – KII National level

2. Respondents at the national and sub-national levels were unanimous in highlighting widespread poverty as a major contributing factor to stunting. Poverty is also mentioned in the National Multisectoral Plan on Food and Nutrition (2021-2025) as an underlying factor to malnutrition for 91 percent of Nigerians reported to be living under the poverty line (i.e., living on less than $2 per day) and 69 percent reported to be in extreme poverty (live on less than $1.25/per day)[13]. Other contributing factors reported in the NNHS 2018, DHS 2018, and NFCMS 2021 and mentioned by most key informants at the national and state levels include the increasing insecurity and consequently food insecurity within many states, and poor infant and young child feeding (IYCF) practices (Table 10).

Table 10: Barriers to access and associated factors related to stunting prevalence

	Stunting prevalence	Barriers to access & utilization of services	Factors associated with stunting	Environmental and Health system issues
DHS 2018	National-37 % NW-57 % SE-18 %	Out-of-facility delivery, No/low maternal education, Lowest wealth quintile; Getting permission to go to the doctor (11 %), Getting money for treatment (46 %); having 5 or more children, Distance to facility	No/low mother educational status,	Rural residence, residing in the north NE, NW especially;
MICS 2021		No/low maternal education; Home delivery; Young mother (<20 yrs), Being of Hausa or Fulani ethnicity; Lowest wealth quintile; NE or NW residence	Poor dietary intake, Underweight mothers, LBW; poor breastfeeding practices, poor dietary diversity, poor access to safe drinking water	Rural residence; Lack of birthweight data
NFCMS 2021	National-33.3% NE-35.3%; NW-47.9%; NC-29.6%; SS-20.1%; SW-19%; SE-14.2%	Low access to home gardens-29%; **Low coverage of national interventions** **Women of Reproductive Age** (past 6m) – Deworming-19%; IFA-14.9; Multivitamin-13.4%; **Pregnant women** (past 7 days)- IFA-87; ANC-43.8; Nutrition couseling-34 %; Nutrition counseling EBF-31.5 % **Children 6-59 months** – Iron/MN – 7%; Vitamin A-25%; Deworming-28; caregiver nutrition counselling-15%; **Adolescent 10-14 yrs**- Deworming-25%; IFA-11%; Multivitamins-9%	Living in food insecure HH; Lowest wealth quintile, no education of caregiver, rural residence, poor toilet facilities; poor source of drinking water; Low consumption of bio-fortified foods;	High level of food insecurity; Insecurity;
NFSS – NE Nigeria 2020	Yobe-43.7; Borno 33.1-; Adamawa-29.2		**Maternal malnutrition** (adolescents, 15-19 yrs 5x more malnourished than older women 30.1 vs 6.2%); sub-optimal breastfeeding practices (LBW, persistent diarrhea; chronic disease	Poor vital registration and age documentation; Stress, displacement, and distribution of infant
NNHS 2018	National-32 NE-42.8 NW-50.4 NC-29.7 SS-20.4 SW-20.8 SE17.2		Poor access to safe drinking water sources, poor access to hygienic toilet facilities	NE or NW residence

Legend: NNHS – National Nutrition & Health Survey; NFSS – National Food Security Surveillance; NFCMS – National Food Consumption and Micronutrient Survey; MICS – Multiple Indicator Cluster Survey; DHS – Demographic and Health Survey; IFA – Iron Folic Acid supplementation; MN – Micronutrient; ANC – Antenatal Care; NE – Northeast; NW – Northwest; NC – Northcentral; SE – Southeast; Southwest; SS – Southsouth; LBW – Low Birth Weight

3. In agreement with DHS 2018, secondary data analysis using NFCMS 2021 data also shows sub-national variation in stunting numbers in the country highlighting the Northwest and Northeast regions as having the highest absolute numbers of stunted children (see Figure 8). The nutrition programme recognises this and

[13] National Multisectoral Plan on Food and Nutrition (2021-2025)

therefore has identified some states as priority states for a more targeted group of interventions as depicted in Figure 6.

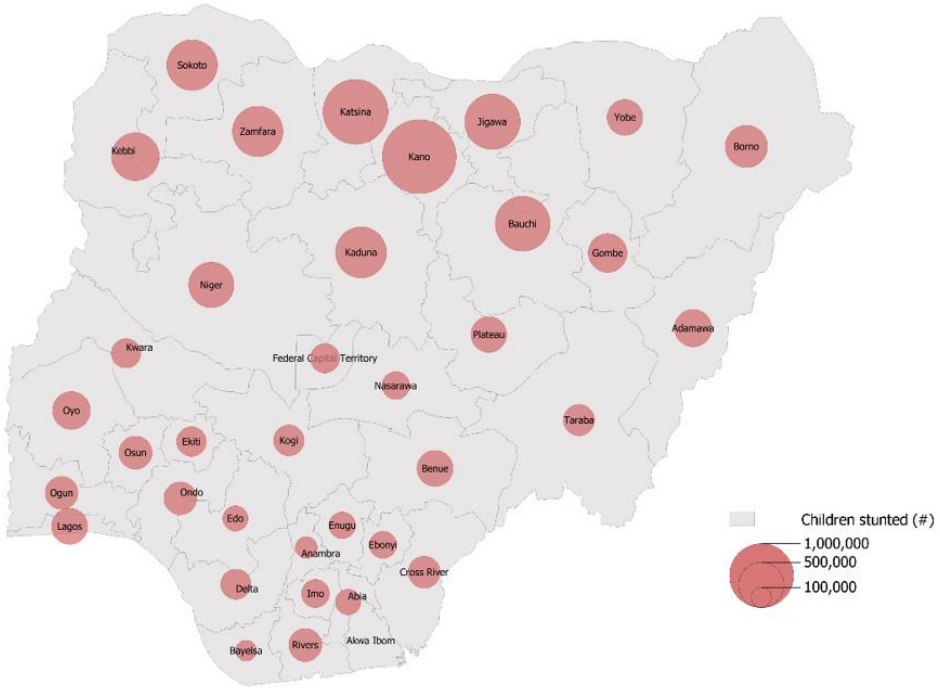


Figure 8: Absolute number of stunted children in 2020

4. Our desk review highlights key interventions promoted in the country that are aligned with KRC#2, which we presented per strategy in Annex 3 in Nigeria. Annex 3 highlights the complex mix of interventions conducted informed by each KRC#2 strategy and the variety of the types of partners supporting each effort. KRC#2 strategies in Nigeria are in alignment with identified government priorities and strategic direction as outlined in key guidance documents e.g., the National Policy on Food & Nutrition (NPFN), National Strategic Health Development Plan (NSHDP II), National Multisectoral Plan of Action for Nutrition (NMPFAN), National Health Strategic Plan of Action for Nutrition (NHSPAN), National Policy on Maternal, Infant, and Young Child Nutrition (MIYCYN). Drawing from the NPFN, all documents promote the multisectoral approach, integrated implementation of interventions and activities, and the use of data for planning and implementation, added to context-appropriate communication and good governance, all in line with KRC#2 strategies (see Table 11).

Table 11: KRC#2-related strategies in policy and strategic documents

	Stunting-related target	**KRC#2-related priorities/strategies in documents**
National Policy on Food & Nutrition (NPFN)	All nutrition-related policy and strategy documents adopt the NPFN stunting target i.e. reduce the stunting rate among under-five children from 37% in 2013 to 18% in 2025	• Ensuring optimal nutrition in the first 1000 days of life by promoting EBF and dietary diversity **(KRC#2 Strategy 4)**; • Good governance and responsiveness **(KRC#2 Strategy 2)**; • Ensure the use of evidence to inform policy and implementation for improved performance and outcomes **(KRC#2 Strategy 1)**; • Strengthen behavioral communication strategy & Raising awareness and understanding malnutrition **(KRC#2 Strategy 5);** • Improve adolescent nutritional care, MIYCF, Vit A supplementation, preventing micronutrient deficiencies, iron, iodine, & zinc, deworming of children **(KRC#2 Strategy 3, 4);**
National Strategic Health Development Plan (NSHDP II)		
National Multisectoral Plan of Action for Nutrition (NMPFAN)		
National Health Strategic Plan of Action for Nutrition (NHSPAN)		
National Policy on Maternal Infant And Young Child Nutrition (MIYCN) in Nigeria		

	Stunting-related target	KRC#2-related priorities/strategies in documents
National Guidelines for Integrated Community Management of Acute Malnutrition, September 2019		• Integrated approach for nutrition service delivery e.g., WASH, School-based strategies, Agriculture, Education, etc **(KRC#2 Strategy 6);** • Multisectoral collaboration & partnerships for the delivery of nutrition-sensitive and specific interventions. Enhance caregiving capacity for caregivers, and community health workers **(KRC#2 Strategy 3)**

5. The specific stunting reduction target set in the NPFN i.e., to reduce the stunting rate among children under-five from 37 percent in 2013 to 18 percent by 2025, aligns with the KRC#2 target and is adopted in all national documents. UNICEF activities are supportive of and in alignment with governmental priorities in the area of nutrition. This is demonstrated by the collaborative development of a harmonized operational Nutrition activities work plan annually guided by the NMPFAN and facilitated by UNICEF, with all relevant departments, ministries, and agencies (MDAs) at both the national and state levels, NGOs, international partners, and UN agencies. A review of the current work plan highlights a comprehensive set of activities and organisations responsible. All respondents at the national and state level affirm the support provided by UNICEF in this work, a situation which is corroborated by UNICEF respondents.

"We now have all partners working in nutrition, which UNICEF is part of them, FHI, 360, Elkana, no, Nutrition International (NI), USAID, save the children, many of them, huh, they're all involved in, they are all involved in developing this (National nutrition strategic costed plan), it is holistic, that's why we call them national documents then you now have the 36 plus FC that is 37 nutrition, um, officers and we call them SNO, State nutrition officers, 36 of them plus FC making 37 they're all involved" KII National level
"The country office cannot have programmes that do not align with the national programmes. So, we take our programmes from what is approved (in the national plan) because that is what they're going to monitor, and we report." – KII UNICEF SO

6. The expected groups of the population to be served as described in the NPFN and NMPFAN are infants, young children, and mothers (women of reproductive age and adolescent girls), which are the same groups targeted for KRC#2. The interviews at the national and sub-national levels identified access to quality nutrition commodities and service delivery as a core need of these populations. Other groups that are not specifically emphasized in these documents include marginalized, disabled, hard-to-reach groups, adolescent males, and male caregivers, which give room for different interpretations (e.g., they may not be specifically targeted which could lead to exclusion of targeted populations). In emergencies and humanitarian situations, the target remains children and women, though everyone including the elderly is also considered among the generally vulnerable groups, especially if displaced. The interviews confirmed that there is inadequate coverage and accessibility of nutrition services/commodities, especially because donor and government funding and interventions are mostly concentrated in the Northern part of the country. UNICEF constantly works with the states to identify these target populations and facilitate access to services. All UNICEF annual reports (2018-2022) include specific support to states; for example, in 2019, dietary diversity to Kano state, and in 2020 adolescent IFA supplementation to Delta and Katsina states. Across states, key informants and round table discussion respondents mention infants, young children, and mothers as primarily targeted for nutrition interventions. In recognizing the first '1000 days of life' as a crucial window for targeted interventions to yield maximal nutritional impact, the NMPFAN affirms the relevance of KRC#2 strategies which facilitate interventions focused on the same period for stunting prevention.

7. Adaptations to interventions identified from the desk review and interviews occurred most commonly during the COVID-19 pandemic, flooding, and insecurities to make services available continually. Regarding COVID-19, respondents at the state level indicate that during the lockdown, minimal facility-based activities were conducted due to imposed restrictions and mostly fear. House-to-house campaigns were adopted across states using volunteers recruited within their communities to continue providing nutrition services as a whole

and did not specifically target stunting e.g., IYCF counseling, MNP distribution, VAS nutrition supplements, etc. Beneficiaries acknowledge receiving services in their homes. UNICEF provided personal protective equipment (PPE) to volunteers for the campaigns that facilitated continued service delivery during the pandemic.

"So, I think if they (the people) cannot be able to go out because of the sudden situation (COVID-19), then they employ people from that area … some of them will go house to house to distribute the vitamins, the nutrition powder, they share it with the mothers and children in families."– FGD Female caregiver

In the UNICEF NCO annual report, the COVID–19 response was described as valuable: The COVID-19 pandemic provided valuable lessons for the nutrition programme, for example, continuous coordination of interventions was possible via Zoom meetings, sustained high-level advocacy can yield the release of domestic funds required for essential nutrition commodities and the development of policies that facilitate EBF. The restrictions minimized the delivery of nutrition services in health facilities, however, the use of existing platforms such as immunization and other critical services led to increased coverage similar to the pre-COVID-19 period.

8. Beneficiaries from the flood-prone riverine terrains of Bayelsa state in the South-south region of the country affirm generally receiving nutrition services despite being displaced periodically from their homes. Respondents at the state level report that flexible measures were adopted to ensure minimal disruption in the delivery of nutrition services e.g., VAS, MNP, IYCF counselling, etc., within the state.

"For example, if there is a flood and I left my community for another place, I will trace another health centre in the new area where I can get the services. There was a time we experience flood and we went to Yenagoa, I still look for another health centre, and they gave me and put my record on a paper which I kept till we came back and recorded back to the register." – FGD Female caregiver

9. Informants in Niger state reported the increasing level of insecurity within the state, resulting in increasing numbers of internally displaced people (IDP) camps. They acknowledge, however, that nutrition interventions were not happening at the same pace, as many of these camps do not have access to nutrition services. Beneficiaries confirm the situation and further describe high-level household food insecurity due to overcrowding. In our desk review, findings from the nutrition and food security surveillance Northeast Nigeria survey (NFSS-2019) revealed that stress, displacement, and the distribution of infant formula (where this intervention happens) further discourage mothers from breastfeeding, underscoring the need for these IDPs to be targeted for appropriate individual level (e.g., IYCF) and community level (e.g., access to farming) interventions.

"It's like they are forgetting these IDPs because the rate of IDPs in Niger state is just increasing, they don't have access to nutrition services, some IDPs are being neglected, because I am opportune to be in this (mentions the name of one IDP), there are so many malnourished children in that (mentions same IDP), you people should just put IDPs in consideration." – FGD Male caregiver

10. Respondents at both national and state levels described exploring new remote ways of working during these situations using multiple electronic channels such as Zoom meetings, e-checklists, conference calls, etc., that enabled the continued supervision and provision of services.

"Virtual meeting… that is what came up during the COVID-19 period. And these things had results. We could not move, but we could hear ourselves. We could not, we could feel the the the, uh, what, what, what the need was and we march out for it." – KII State level

11. The integrated management of interventions and multisectoral approach promoted by KRC#2 strategies reveal the relevant potential that can be tapped for involving multiple partners in maximizing routine intervention delivery and during emergency response.

1.2. *To what extent are field interventions aligned with regional and international recommendations for the prevention of stunting?*

12. The activities proposed in the nutrition programme's ToC (see Figure 2) in Nigeria for accomplishing desired outcomes and impact, such as an integrated and multisectoral approach, data-based planning, capacity building, and leadership, align with the KRC#2 strategies. Similarly, the revision of the guidance documents i.e., NPFN, NSHDP II, NMPFAN, NHSPAN, etc., all depends on the most current evidence, international standards, and recommendations from global health institutions such as the WHO's Ambition and Action in Nutrition 2016-2025[14]. Respondents at the national level all affirm the coordination and support of UNICEF in providing required evidence while facilitating such revisions and engaging all relevant stakeholders, including the private sector, and bilateral and multilateral donors.

"WHO oversees the health of everybody and they all come up with recommendations to enable countries to adopt, so, we go to WHO, we pick from other countries, i.e. conduct a desk review from other countries that have done it, that are ahead of us that have a success story…appoint a consultant to develop a zero draft strategy, then we call a stakeholders meeting which will now prelude to the validation and by the time we come out with that, we come out with the document, it's a global document because all these partners, WHO, World Food Programme, UNICEF, FAO, USAID, most of them have worked with the government to produce the document." – KII National level

13. At the state level, key informants report that any revisions made to guidance documents are duly cascaded, disseminated, and domesticated to ensure that interpretation is contextually relevant as also highlighted in the state-level multisectoral plan of actions[15,16]. Community involvement during such planning happens unevenly across states and commonly through selected civil society organizations (CSO) that are also listed among contributors in state-level policies and strategic documents. Informants affirm that UNICEF supports the state governments to identify priorities, strategies, and activities that are feasible in their context as articulated in such strategic plans.

"We've been able to domesticate the National Policy on Nutrition, which is very important. We've also been able to have the multisectoral plan, signed and launched, which formed like the faith book of our activities. If you ask me what the activities education is focusing on now, I can bring it out for you, which one is being focused on by water resources. So, I mean the Ministry of Health, Primary Health care, all the MDAs that are involved, we have this document. – KII State level

[14] [1] WHO's Ambition and Action in Nutrition 2016-2025

[15] [2] https://cs-sunn.org/wp-content/uploads/2021/06/NIGER-STATE-POLICY-ON-FOOD-AND-NUTRITION.pdf Niger state Policy on Food & Nutrition 2017

[16] [3] https://cs-sunn.org/wp-content/uploads/2021/06/NIGER-STATE-MULTISECTORAL-PLAN-OF-ACTION-FOR-NUTRITION.pdf Niger state Multisectoral Plan of Action for Food and Nutirition 2020-2025

1.3 *To what extent were the different monitoring and evaluation strategies adapted to measure the results of the approach? And how could they be improved?*

14. Key informants at the national level report incomplete documentation and reporting of nutrition data. Consequently, data necessary for nutrition-related decision-making are not completely available in DHIS2 at the national level. Therefore, implementation planning is done without adequate population and financial data. The NSHDP II acknowledges data completeness as a major challenge in the DHIS2. Average reporting rate and timeliness are estimated at 72 percent and 63 percent respectively for health services data in general, with little or no reporting from the private sector.

"…Federal ministry of planning research and statistics here is the custodian for health data in Nigeria, we have a software which they call DHIS2 where all these data from the states through the LGA should be uploaded but if you look at that DHIS, we discover that most of the critical indicators for nutrition are not there." – KII National level

15. Most indicators to monitor stunting currently derive from Nutrition SMART surveys e.g., NFSS, the annual National Nutrition and Health Survey that UNICEF conducts as an attempt to bridge the knowledge gap. UNICEF and other partners are working with the government to improve the quality of DHIS2 data for informing the nutrition programme, including stunting-related indicators by conducting a complete review of the DHIS2 platform and other nutrition variables in surveys, to identify specific processes to strengthen data collection[17]. Table 10 highlights the stunting prevention-related indicators currently collected in DHIS2.

Table 12: Nutrition indicators currently collected in DHIS2 (Source: DHIS2.0 Nigeria)

Nutrition indicators currently collected in DHIS2	
Prevention of stunting	%age of newborns breastfed within the first hour after delivery
	%age of infants under six months exclusively breastfed
	%age of young children (6-23 months) breastfed with other foods
	Low birth weight rate
	Underweight rate (<5 years)
	Children 12-59 months given deworming medication
	%age of children 6-59 months that received Vitamin A
	%age of children 0-59 months growing well
	Growth monitoring for children under five

State-level respondents concur with having no unified register for collecting stunting-specific nutrition data. Tally sheets, developed by UNICEF, are therefore utilized to capture data from different interventions at the facility and in the communities but not all the data can yet be collated in DHIS2. For example, KRC#2 related data collected in the tally sheet includes Vitamin A supplementation and deworming that are not disaggregated by sex. Others are the measurement of mid-upper arm circumference (MUAC) and handwashing. Additionally, the tally sheets collect aggregated data, while the DHIS2 collects patient-level data. There is no clearly defined path for documenting data from the community into DHIS2 across states. The NSHDP II recognizes fragmentation of the health information system in the country, alongside the multiplicity of data collection

[17] https://health.gov.ng/doc/Final_Nigeria_Health_Sector_Recommendations_for_Nutrition_Indicators_September percent202022_Final.pdf

tools and weak community health information systems as challenging. To institutionalize an integrated and sustainable health information system for decision-making at all levels in the country is, therefore, a priority.

"We use a tally sheet to capture the raw data. Okay. We have a tally sheet for the 6 months to 11 months and, uh, 12 to 59 months. Likewise, Albendazole, Iron folate, and folic acid. We use tally sheets. These tally sheets are now summarized. We have word summary, the local government summary, which is now remitted to the state, and the state will... – KII State level

16. Additionally, nutrition data on the tally sheets such as Vitamin A and deworming are not disaggregated by gender or by any socio-cultural norms. This challenges the inclusion of data on tally sheets into DHIS2. All state-level key informants and UNICEF respondents acknowledge this challenge. UNICEF is advocating to have the data collated in tally sheets more disaggregated to provide more granular information that is compatible with DHIS2.

"I'll say we started to now ensure that all data that is coming in is gender-disaggregated. Well, because I know we were not getting this data before, we just say more children are getting the services, we may not get the evidence, we just say what's the summary… We are in the middle of doing the big formative research exercise across six states in the country to identify what are the gender and socio-cultural norm.s" – KII UNICEF CO

In addition, state respondents cite examples where health workers prioritize and focus on documenting activities where they receive some stipend or added training e.g., immunization. So, staff prioritizes 'incentivized' activities contributing to incomplete/proper documentation of other activities. Poor and sometimes irregular payment of remuneration, lack of institutionalized motivation and retention mechanism, conflicts of interest, unclear job descriptions, and frequent strikes are common factors recognised in the NHS 2016, and NSHDP II as barriers for health workers. KRC#2 related interventions rest on prevention and promotion activities, which rely on community health workers and volunteers and will benefit from a clear delineation of duties and remuneration.

"I am looking forward to a day we can train all the officers in charge of facilities. When you talk about health programmes the only thing the officers know is immunization, they have not owned nutrition programmes, and also, they always say immunization gives them more money but in nutrition, we don't have that type of money they will not even record the activities they carried out. They will supplement Vitamin A and they will not record it in the growth monitoring register and when you go the DHIS2 it is as if it has not been supplemented." – KII State level

1.4. *To what extent has the technical support provided by the UNICEF Regional Office been adapted to the needs of country offices and government counterparts and how could it be improved?*

17. UNICEF country office (CO) admits to having a good relationship and receiving the necessary support from the regional office (RO) for assisting the country's nutrition programme. For example, based on the technical assistance received, the CO could support the development, revision, and domestication of strategic documents that promote KRC#2 strategies such as the Multisectoral Plan of Action at the national level, and in 25 states. Similarly, the CO received support to sustain high-level advocacy that enabled the release of domestic funding allocated for the nutrition programme at the national level as reported in the UNICEF 2021 Country Office Annual Report.

"… As I said, we have good relations, they are very responsive, no complaints on that but I think we need a little more on the technical assistance, like responding to our needs here on, planning support with this resource mobilization." – KII UNICEF CO

The state respondents echo similar comments about the support received from the RO, which they claim is adapted to the needs of the government at the state level and facilitated the promotion of KRC#2 strategies in Nigeria. For example, the support from the RO was instrumental in contextualizing the 'Zero Water' campaign that was renamed 'Start Strong/Zero Water' which promotes EBF in the country. In partnership with Alive & Thrive, 12 states were supported to develop baby-friendly policies e.g., the extension of paid maternity leave from four to six months as documented in the 2020 UNICEF country office annual report. Also, the RO facilitated capacity building among health workers in IYCF counselling through the provision of an online IYCF course[18].

"We have constant communication from WCARO. Constant communication of all the country offices and WCARO calls meetings. And when there is any strategy coming up, it's usually shared. Key results for children didn't start today. We have critical ones over time in our work plans like VAS – Vitamin A Supplementation is key results for children, key results for stunting level, these things we know about them and are entrenched. And they are the critical points where our programme implementation rallies around to address issues that will address to achieve those key results for children. For instance, if I say like water, exclusive breastfeeding, WCARO has a series of programmes on zero water campaigns, which is trickled down and we all do same, we all do same. Like exclusive breastfeeding, for instance, we all queue into it and then design strategies. When they started breastfeeding advocacy initiatives like Collective, my field office was the first to launch it in Nigeria."– KII UNICEF SO

While acknowledging the support provided by RO, UNICEF respondents stated that more support is however desirable from the RO in the areas of technical support for conducting assessments and also for materializing and mobilizing the financial commitments made by the government. This is especially as RO emphasizes some interventions that they assume the counterpart funding committed to by the government is happening while this is not so.

…and what I would have liked to see is a little more engagement and support on technical issues… like say strong on data coming in and helping us to do an assessment etc., and/or a little more assistance on the resource mobilization, piece on writing more proposals…– UNICEF CO

Preliminary Conclusions – Relevance

REL 1: Prevention of stunting is considered a serious public health problem in policy documents and by all stakeholders from national-level policymakers to the beneficiaries at the community level. Poverty and shortage of food and poor feeding practices are seen as the main contributing factors to stunting. (Para 1-2)

REL 2: There is evidence of sub-national variations in stunting prevalence with the Northwest and Northeast regions having the highest share of stunting. These regions are prioritized by the National Nutrition Programme, and for various nutrition interventions by UNICEF and other donors, thereby limiting the attention given to the needs of those in other parts of the country. However, the low coverage of interventions in this huge country is a bottleneck for increasing the AARR in a short time. There is no evidence that there is specific attention to the needs of the most vulnerable and marginalized populations. (Para 1-4)

REL 3: Efforts are made at the state level to adapt the nutrition interventions that responded to the identified needs of target populations during emergencies, e.g., COVID-19 e.g., house-to-house campaigns by community volunteers, and integrating with other existing service delivery platforms at the community level e.g., the immunization campaigns. During flooding, people could access services from facilities close to where they were sheltered. Beyond the Northwest and Northeast regions with known insecurity issues, access to nutrition services appears limited for the increasing number of people being displaced to camps due to rising insecurity in other parts of the country. (Par 1-7, 9)

REL 4: Guidance documents (e.g., NMSPAN) have been developed and costed for the nutrition programme at the national and state levels and align with the preventive strategies promoted by KRC#2 strategies and other

[18] https://agora.unicef.org/course/info.php?id=29156 Investing in Child Nutrition, UNICEF IYCF online course

international recommendations. Nutrition interventions are generally guided by these documents, which are revised periodically by all major stakeholders in alignment with current evidence. (Para 11-12)

REL 5: There is no unified monitoring framework for collating stunting data from facility to national levels. Seven stunting-related indicators to monitor progress are collected in the national routine information system, the DHIS2. However, data quality issues exist as data is hardly ever complete at the national level for decision-making. (Para 13-14)

REL 6: There is ongoing support towards improving the quality of documentation on tally sheets, facility registers, and the DHIS2 platform e.g., the disaggregation of all data by gender. (Para 15-16)

REL 7: The support received from the RO is perceived by UNICEF CO and SO staff as appropriate and adequate, especially in the areas of providing strategic direction and high-level advocacy support for mobilizing government funding. More support is, however, desirable for conducting assessments and materializing government commitments to the nutrition programme (Para 17)

9.2 Coherence

2.1. *To what extent are the interventions carried out under KRC#2 complementary with other interventions carried out in the field of nutrition as well as with the nutritional situation within each country?*

18. Key informants at the national and state levels were unanimous in agreeing that UNICEF's support has been instrumental in ensuring the functionality of coordination platforms (through quarterly meetings) where various stakeholders e.g., the MOH and different ministries, departments and agencies, NGOs, implementing partners, donors, international and UN agencies develop, review, and revise policies and strategies guiding the nutrition programme. The main coordination platforms are between departments within the Ministry of Health (MOH), secondly, between MOH, other ministries, departments, and agencies involved in nutrition-sensitive activities, and lastly, coordination between MOH and several UN agencies and international partners. The National Policy on Food & Nutrition (NPFN)[19] and the National Multisectoral Strategic Plan of Action for Food and Nutrition (NMPFAN)[20] are key guidance documents for coordination platforms at the national level. The main strategies promoted in these documents, to which all stakeholders agree, include ensuring optimal nutrition in the first 1000 days of life, preventing micronutrient deficiencies, building capacity, monitoring, and using data to inform implementation, all of which align with KRC#2. Respondents at the national level perceive that such coordination platforms provided much-needed visibility to the various activities supported by different partners that are valuable for facilitating a more consolidated and coherent response to identified national and sub-national priorities.

19. The most common coordination platform replicated at the state level is the state committee on food and nutrition where various stakeholders operating within states e.g., state MOH, other ministries, departments, and agencies at the state level, NGOs, and other international partners meet to review, revise and domesticate national policy and strategies. Though states vary in the status of completion, a review of such

[19] https://www.nipc.gov.ng/product/national-policy-on-food-and-nutrition-in-nigeria/ National Policy on Food & Nutrition (NPFN) 2016

[20] https://ngfrepository.org.ng:8443/handle/123456789/3255 National Multisectoral Strategic Plan of Action for Food and Nutrition (NMPFAN) 2021-2025

state-level policies[21] and multisectoral plans[22] reveal that they mostly mimic the strategies put forward in the national policy and plan and which align with KRC#2 strategies. Respondents at the state level confirm UNICEF's contribution in facilitating multisectoral participation in the food and nutrition committee that they perceive as important for enabling visibility, transparency, and coherence in the operations of all stakeholders.

"We've been able to domesticate the National Policy on Nutrition, that is very important. We've also been able to have the multisectoral plan, signed and launched, which formed like the faith book of our activities. If you ask me what the activities education is focusing on now, I can bring it out for you, which one is being focused on by water resources. So, I mean the Ministry of Health, Primary Health care, all the MDAs that are involved, we have this document… we also have the multisectoral plan of action, and each MDA also extracts from this multisectoral plan of action their annual operational plans and going to the local government the same thing. Let me tell you, if a partner comes, once you are saying why you are here, we look at our multisectoral plan. And one good thing is that partners have started understanding this, to the extent that when they are planning now, they come to us, they don't come in with already concluded plans, they ask us now, what we have to do to take care of these identified problems? and we work together with them, this is how we do things now" – KII State Level

The strategic priorities put forward by other existing strategic plans such as the Agricultural Sector Food Security and Nutrition Strategy (AFSNS) are complementary to KRC#2 strategies in terms of target population and interventions. For example, the AFSNS targets women for diversifying household food production by increasing access to micronutrient-rich and high-energy nutritious seeds. State-level respondents report that by supporting the coordination platform, UNICEF supports the MOH to strengthen such complementarity and integration of nutrition activities across ministries. To operationalize this, UNICEF partnered with the Ministry of Agriculture in supporting state committees on food and nutrition to provide biofortified seedlings for crops such as cassava, maize, and orange sweet potato, for example, in Niger State. The coverage of bio-fortified food consumption across the country, however, is still low as revealed in the NFCMS 2021, which reports, 3 percent, 5 percent, and 13 percent for bio-fortified cassava, potato, and maize, respectively. The survey gave low acceptance of these fortified foods as a factor contributing to the results.

"UNICEF supports multisectoral partnership especially from the side of government MDAs; Ministries, Departments, and Agencies that are relevant to nutrition; Agriculture, Education, Water and Sanitation, and health. So, they do that by supporting the continuation and review meetings and they also sensitize MDAs on their roles and their mandates with the view to reducing stunting. If I will take the example of Agriculture, for instance, UNICEF has made Agriculture to also throw open the seedlings, I remember the case of orange flex potatoes they disseminated the information among caregivers, and pregnant women so that it's not just planting potatoes, a particular specie was mentioned for biofortification for vitamin A and all that. – KII UNICEF SO

20. Synergies with KRC#2 are explored by enabling more private sector engagement and investment e.g., in food vehicle fortification such as iodized salt, sugar, and vegetable oil fortified with vitamin A, and wheat flour fortified with vitamin A, iron, and zinc. At the core of these food fortification efforts is the prevention of micronutrient deficiencies, which aligns with KRC#2 beyond the usual target populations of women and children. The advantage of this generalized approach to micronutrient supplementation is that less targeted populations or those in hard-to-reach regions tend to benefit. The NFMNS 2021 highlights the coverage of these fortified food vehicles at or above standard in households across the country as 95 percent, 2.6 percent, 1.3 percent, and 0 percent for iodized salt, Vitamin A fortified sugar, vegetable oil, and wheat, respectively. The high iodized salt coverage is corroborated by finding in DHS 2018, thus revealing areas needing improvement. UNICEF co-chairs the Scaling up Nutrition (SUN) - Nutrition Development Partners Group

[21] https://cs-sunn.org/wp-content/uploads/2021/06/NIGER-STATE-POLICY-ON-FOOD-AND-NUTRITION.pdf Niger state Policy on Food & Nutrition 2017

[22] https://cs-sunn.org/wp-content/uploads/2021/06/NIGER-STATE-MULTISECTORAL-PLAN-OF-ACTION-FOR-NUTRITION.pdf Niger state Multisectoral Plan of Action for Food and Nutirition 2020-2025

platform that brings public and private sector partners supporting the nutrition programme together to strategize and standardize.

"UNICEF is the co-chair of the scaling-up of the Nutrition Development Partners Group and that involves mainly partners like FCDO, USAID, BMGF, etc… we try to have five to six meetings in a year. UNICEF for a long with FCDO now with USAID provides such leadership and then any other opportunities, so, let's say now, there was breastfeeding week or there is a food system summit that was there, we utilize that opportunity to bring donor partners together" – KII UNICEF CO

21. Other collaborative efforts facilitated by UNICEF to achieve complementarity involve the Ministry of Agriculture supporting irrigation farming that increases the availability of food all year round, and the WASH commission supporting the establishment of CMAM sites as well as with the Ministry of Education to facilitate capacity building for health workers in an integrated manner.

"It improves our results if I will use the fact that for the health facility where we established the CMAM site, we sat with the WASH committee to say put a borehole where there is no borehole because apart from handwashing before feeding that child, they need portable water because as you are feeding them they should get drinking water. So, it brought about different results for that community, not only were we treating children, they had water, the hygiene standards improved and at a limited cost because some things happened at the same time, it reduces cost" – KII UNICEF SO

22. Irrespective of whether received in health facilities or within communities or by different implementing partners, the messaging received by caregivers across states appears to be coherent, especially as related to breastfeeding and infant feeding counselling and most perceive the message received as important and well-understood. However, the proportion of caregivers who had spoken to a health worker or community volunteer during pregnancy about what foods to eat during pregnancy and during breastfeeding in the NFCMS 2021 was generally low at 34 percent and 32 percent, respectively. The appreciation of prevention as a strategy for tackling malnutrition will likely take some time as beneficiaries consistently focus on treatment by appealing for a steadier supply of RUTF, perceiving that this is still needed despite their best effort to improve feeding practices.

"I want the government to be supplying plumpy nut regularly so that mothers can give to their children to boost their immunity because not mothers can give their children the 6 classes of food." – Male RTD respondent

"There was one food they use to bring, one children's food that they use to bring in a sachet, like a lump of groundnut paste, you see it is very good and now we don't get it. Honestly, I used it with this child and I enjoyed it. Even his elder brother ate it, and even you as an adult can eat it, the food is good, but it is no more available. They gave us in the health facility, they give nursing mothers and anyone that child is not strong, they ask her to be giving him, you will observe that the child is eating it and getting stronger, you can add it to pap too and you can eat it like that; I use to give the children like that." – FGD Female caregiver

23. We found limited evidence for the geographic convergence of different intervention packages targeting the same populations. Rather, respondents at the national and sub-national levels perceive that low coverage of interventions jeopardizes the best efforts despite the existence of good plans. The NFCMS 2021 supports this observation by highlighting only a 7 percent national coverage of micronutrient powder distribution. Significant variation was observed across regions with the Southwest and Southeast reporting the highest

and lowest coverage of 10 percent and 2 percent respectively.

"What affects a lot of programmes is coverage. There's a good plan, but we don't envisage the actual demand or where the need is."– KII National level

"We have a CMAM centre within the local government, in (mentions 3 health centres in the 3 senatorial zone)... But I tell you, ***the*** *state has 17 local governments. The three CMAM centres are nothing, compared with the population of* ***the*** *state because, how we segregated that, was to have one CMAM centre per senatorial zone. And we have three senatorial zones, So, one CMAM centre, covering five to six local governments. It goes nowhere."– KII state level*

Preliminary Conclusions – Coherence

COH 1: By supporting the functionality of different platforms at national and sub-national levels where stakeholders including public sector line ministries and other agencies, bilateral and multilateral donors meet to review and revise strategies, UNICEF creates a pathway for more visibility and coherent implementation of nutrition-sensitive interventions. (Para 18-19)

COH 2: Effort has been made to work with the Ministry of Agriculture in the area of bio-fortification of foods. More synergies can be accomplished by making the fortified seedlings more widely available and promoting use thereby contributing to micronutrient deficiency reduction. (Para 20)

COH 3: Engaging the private sector in the area of food vehicle fortification has led to significant progress, especially in the coverage of iodized salt, which benefits the more vulnerable populations as well that do not have easy access to nutrition services. Other fortified food vehicles e.g., vegetable oil and wheat could benefit from more targeted promotion (Para 21)

COH 4: The prevention messaging currently provided appears to be coherent and may benefit from a mix involving both nutrition-specific and nutrition-sensitive interventions targeted at specific groups to increase coverage and achieve geographic convergence. (Para 23)

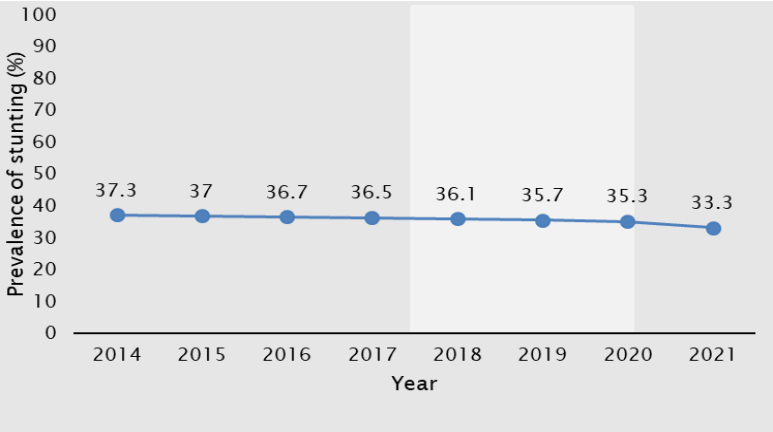
9.3 Effectiveness

3.1. *To what extent were the KRC#2 strategies effective in achieving the intended KRC#2 result (By 2021, 80 percent (74 million) of girls and boys under five, especially those who are marginalized and those living in humanitarian settings, receive high-impact nutrition services to prevent stunting)?*

24. To address Q3.1 results from the secondary data, analysis was performed to show trends in (a) stunting prevalence; (b) breastfeeding practices; (c) child feeding practices); and (d) maternal health indicators and improved water sources. Data collected from KIIs around perceptions about the support that could affect interventions i.e., capacity building, prioritization, and financing in various sectors, and support from academia have also been presented, together with collected perceptions and experiences of respondents at community and decentralized levels (i.e., beneficiaries including vulnerable and marginalized populations, health workers) about factors contributing to the effectiveness of KRC#2-related interventions.

Progress in stunting prevalence between 2014 and 2021 (National)

25. Figure 9 shows the trend over time in the prevalence of stunting among children under the age of five between 2012 and 2020, which shows that Nigeria made little progress within this period. Indeed, the prevalence of stunting decreased from 38 percent in 2012 to 35.3 percent in 2020, corresponding to an AARR of 0.9 percent. This is far below what is required to meet the 2025 target of a 40 percent reduction in the total number of stunted children (5.6 percent). If Nigeria wants to meet this target currently, an AARR of 10.6 percent is required.



Required AARR[1]	5.6%
Actual AARR[1]	1.2%
Male[2]	0.1 %
Female[2]	2.6%
0-23m[2]	-0.9 %
24-59m[2]	2.6 %
Required AARR[1] onwards	14.3 %

1. Uses 2012 as baseline. 2. Uses 2014 as baseline
Source: UNICEF/WHO/WB Joint Child Malnutrition Modelled Estimates (2014 – 2020); NFCMS 2021 (2021)

Figure 9: National prevalence of stunting from 2012 to 2021.

26. In the period 2018-2020, the prevalence of stunting reduced by less than one percentage point from 36.1 percent to 35.3 percent. This shows that during these first two years of KRC#2 implementation, there was no real acceleration in stunting among children between 6 months and 5 years. The AARR up until 2020 is different for girls and boys, as well as for younger and older children. For example, the AARR calculated for boys is much lower (0.1 percent) as compared to girls (2.6 percent), suggesting that more progress is made among girls than among boys. However, this could also be due to sampling variation. Furthermore, the AARR among children aged 24 to 59 months is higher (2.6 percent) as compared to children aged below 24 months (-0.9 percent). This suggests that progress in stunting is not achieved equally across different subpopulations.

27. Respondents at the national level did not seem surprised that the AARR had not increased. In providing probable factors contributing to this trend, they widely agree that known contextual factors like poverty, food insecurity, and insecurity, etc. were major culprits. Other plausible explanations provided were the minimal government funding, and the persistent limited and uneven coverage of nutrition interventions.

"… government funding is needed to solve the problem of stunting, UNICEF alone or donors alone cannot do it. And the nation needs to address the issue of poverty so that children are well-fed. If children are well-fed, the number that will be pushed over, and the number that will be stunted will be reduced. But because poverty is there, families are not able to feed their children well. There is a high rate of food insecurity. And the challenge erm the insecurity; current insecurity has not helped. Most farmers... in most areas that people farm, because of insecurity, will not farm. Everywhere; in the North, in the South, everywhere because of this herdsmen, farmers' issue, a lot of lands lay wasted because women are afraid to go to the farm, even in the South-South, even in the South, when you go out, you are not sure of coming back. So, it affected a lot of things and that is why we are encouraging people to... under the food system, for people to try to do some gardening around their homes so that whatever happens, you can get some vegetables around." – KII National level

"Federal level and even at the state level, … they are doing a lot but the problem there is that Nigeria is 774 LGAs, it's difficult for one partner to be in all these LGA, so most times they may be in four or five states and inside that five states, they are not in all LGAs, so the problem keeps occurring and it seems as if the government and the partners are not doing anything, so nutrition requires huge investment and the collaboration on both private and the public, you know, involvement to assist the government and other partners to deliver." – KII National level

Progress in the rate of stunting reduction between 2014 and 2021 (sub-national)

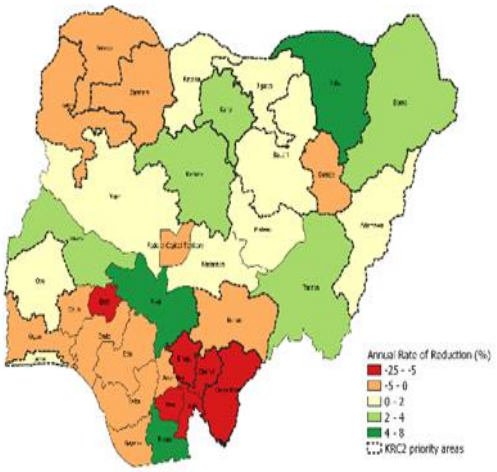


Figure 10: Rate of Stunting reduction between 2014 and 2021 (sub-national)

Sources: AARR 2014-2020 calculated based on National Nutrition and Health Survey 2014, 2015, 2018, 2019-20; Multiple Indicator and Cluster Survey 2016; Demographic and Health Survey 2018 extracted from the https://data.unicef.org/resources/dataset/malnutrition-data/

Gombe, Kebbi, Sokoto, and Zamfara on the other hand had high baseline stunting prevalence rates in 2014 and yet have a slow AARR. Table 13 further provides an overview of the estimated number of stunted children in Nigeria by state. Approximately 38 percent of stunted children live in states with a slow AARR, showing that a lot of work still needs to be done.

The AARR shows a considerable regional variation (Figure 11). One can observe slower AARRs in Southern and Northwestern states and faster AARRs in Central and Northeastern states. Within KRC#2 priority areas, Cross River and Enugu have the slowest AARRs (less than 5 percent), followed by Kebbi, Sokoto, Zamfara, and Gombe in the North (between 0 percent and -5 percent). There is a moderate correlation between the baseline prevalence of stunting and AARR across states (Figure 12; ρ=0.57). This means that states with a higher prevalence of stunting in 2014 generally have a faster AARR, while states with a lower baseline prevalence of stunting achieve slower AARR.

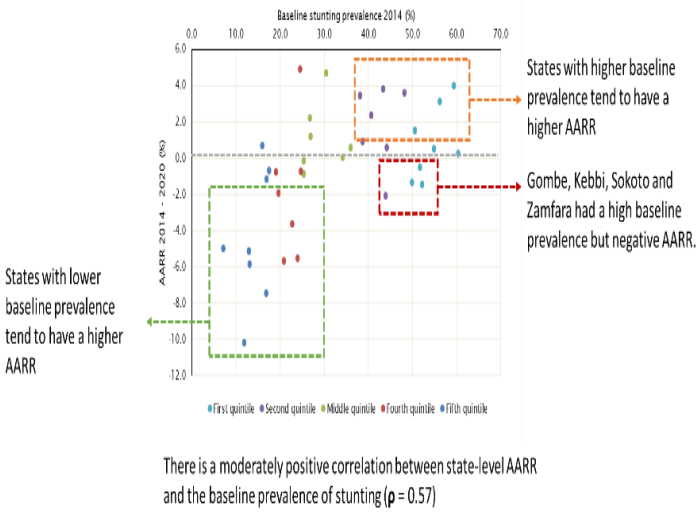


Figure 11: Correlation between baseline prevalence of stunting (2014) and AARR

Table 13: Prevalence of stunting, estimated number of stunted children, and AARR by state

	Estimated number of children under 5[a]	Prevalence of stunting (2020[b])	Estimated number of stunted children	AARR (percent)
Nigeria	**43,594,310**	**31.7**	**13,815,197**	**1.1**
KRC#2 priority states				
Adamawa	945,462	36.3	342,946	0.6
Bauchi	1,493,603	49.5	739,756	1.5
Benue	1,276,397	24.9	318,355	-1.9
Borno	1,325,838	33.0	436,948	3.6
Cross River	862,160	29.1	250,971	-5.7
Enugu	985,391	17.6	173,684	-10.2
Gombe	731,695	50.3	367,830	-2.1

Jigawa	1,297,776	58.1	754,398	0.5
Kaduna	1,835,244	34.7	637,087	3.8
Kano	2,956,704	45.2	1,337,161	3.1
Katsina	1,752,359	58.9	1,032,050	0.2
Kebbi	993,144	56.2	557,996	-1.3
Lagos	2,801,824	11.4	319,843	0.7
Oyo	1,785,882	19.6	350,173	1.2
Sokoto	1,118,409	56.2	628,018	-0.5
Yobe	751,589	41.7	313,397	4.0
Zamfara	1,013,311	61.5	623,152	-1.5
Subtotal	*23,926,788*	*38.4*	*9,183,765*	-
Non-priority states				
Abia	823,030	19.4	159,401	-5.8
Akwa ibom	1,252,064	25.1	314,420	2.2
Anambra	1,231,178	9.5	117,032	-5.0
Bayelsa	508,336	21.2	107,566	-3.7
Delta	1,273,970	17.5	223,435	-1.2
Ebonyi	639,872	28.2	180,713	-7.5
Edo	934,646	16.7	155,774	-0.7
Ekiti	731,133	29.4	215,257	-5.5
FCT Abuja	976,002	21.6	210,396	-0.8
Imo	1,223,149	15.7	192,065	-5.1
Kogi	991,801	23.3	231,010	4.7
Kwara	717,297	29.5	211,792	3.4
Nasarawa	563,674	33.6	189,451	0.0
Niger	1,261,659	40.1	505,575	0.9
Ogun	1,174,686	22.5	264,186	-0.9
Ondo	1,040,972	25.4	264,841	-0.2
Osun	1,064,193	25.3	269,306	-0.7
Plateau	923,140	34.0	313,669	0.6
Rivers	1,656,151	16.1	266,262	4.9
Taraba	680,569	35.2	239,281	2.4
Subtotal	*19,667,522*	*23.5*	*4,631,432*	-

Source: a: Nigeria 2020 Projected Population by state b:2019-20 Nigeria National Nutrition & Health Survey

Regional progress in selected indicators from 2014 to 2021 in KRC#2 priority regions

28. Generally, areas with a very slow stunting reduction rate i.e., AARR below -5 percent, also show little improvement in MVC and minimum acceptable diet between 2014 and 2021/2018 (see Table 14). However, it should be noted that these states (Cross River and Enugu) had higher MVC coverage and to some extent,

higher coverage of minimum acceptable diet as compared to the national average. It seems that stunting reduction progress in these states has stagnated.

29. In states with a slow stunting reduction rate, i.e., AARR -5 percent, progress in MVC and minimum acceptable diet coverage vary considerably. Benue and Sokoto seem to have made little progress on either front. This is particularly concerning for Sokoto state which already had poor coverage of MVC (18.6 percent) and minimum acceptable diet (13.5 percent) in 2014. Gombe reveals a concerning downward trend in both MVC (-14 percent points - pp) and minimum acceptable diet (0 pp). In this state, only 8 percent of children received a minimum acceptable diet in 2021. Kebbi (+14 pp) and Zamfara (+ 27 pp) both show considerable progress when it comes to MVC, but not when it comes to a minimum acceptable diet.

30. Among states with a moderate stunting reduction rate i.e., AARR 0 percent-2 percent, Jigawa stands out when it comes to improvements in MVC, which increased from 38 pp in 2014 to 56 percent in 2021. However, considering the high variability in measles coverage in this state it has to be seen whether this is maintained. Bauchi and Oyo states both have considerably lower MVC coverage in 2021 as compared to 2014. Borno and Yobe have made considerable improvements in measles vaccination coverage between 2015 and 2021, and slight improvements in minimum acceptable diet. Little progress can be observed for Kaduna and Kano.

31. Generally, the minimum acceptable diet has improved very little across the country and appears to have little association with the rate of stunting reduction. Similarly, no clear association is seen between MVC and the rate of stunting reduction. Meanwhile, MVC shows a wide variation in results across states and within states.

Table 14: Changes in Measles vaccination coverage & Minimum acceptable diet by AARR level and state

	Measles vaccination coverage						Minimum acceptable diet			
	2014	2015	2017	2018	2021	Change	2014	2017	2018	Change
Nigeria	**64.0**	**50.6**	**41.7**	**64.7**	**60.0**	**-4**	**17.5**	**15.3**	**17.0**	**-1**
Very low AARR (<-5 percent)										
Cross River	84.5	73.3	73.7	75.3	80.0	**-5**	15.9	29.1	18.5	**+3**
Enugu	82.1	76.1	81.2	79.7	80.0	**-2**	32.9	10.7	35.0	**+2**
Low AARR -5 percent - 0 percent)										
Benue	73.2	62.4	53.6	60.4	68.0	**-5**	18.4	14.2	20.0	**+2**
Gombe	50.9	34.4	32.4	63.0	37.0	**-14**	8.5	21.6	4.2	**-4**
Kebbi	48.9	14.7	25.5	18.8	63.0	**+14**	22.6	14.5	13.9	**-9**
Sokoto	16.4	3.9	9.8	23.7	19.0	**+3**	13.5	11.0	9.7	**-4**
Zamfara	18.6	7.0	16.2	20.4	46.0	**+27**	13.0	12.5	12.0	**-1**
Moderate AARR (0 percent - 2 percent)										
Adamawa	62.1	61.1	48.8	68.4	61.0	**-1**	14.0	23.0	35.5	**+22**
Bauchi	40.8	23.8	22.2	54.5	31.0	**-10**	9.1	14.5	7.0	**-2**
Jigawa	38.2	29.7	10.4	62.0	56.0	**+18**	13.1	11.1	13.9	**+1**

Katsina	44.4	21.0	21.1	15.8	44.0	**-0**	9.1	17.4	7.1	**-2**
Lagos	90.5	84.3	88.0	95.6	86.0	**-5**	21.8	16.2	18.3	**-4**
Oyo	80.7	66.7	53.1	59.7	61.0	**-20**	15.6	6.8	23.9	**+8**
Moderate to high AARR (2 percent - 4 percent)										
Borno	27.1	27.9	58.1	54.6	39.0	**+12**	15.3	16.8	18.4	**+3**
Kaduna	59.7	36.8	43.1	68.0	57.0	**-3**	9.0	15.8	12.7	**+4**
Kano	46.2	24.7	24.1	49.0	40.0	**-6**	15.6	15.0	14.4	**-1**
High AARR (> 4 percent)										
Yobe	26.6	7.1	14.7	64.5	71.0	**+44**	10.7	7.5	12.2	**+2**

Breastfeeding practices between 2014 and 2021

32. **Figure 13** shows the progress in breastfeeding practices between 2014 and 2021. Over this period, EBF among children under six months of age increased from 25 percent to 34 percent. On the other hand, complementary feeding reduced from 79 percent in 2017 to 70 percent in 2021, and early initiation of breastfeeding shows an increasing trend until 2018 (43 percent), but the latest MICS 2021 results report a far lower rate of 23 percent. Wide sub-national variations are revealed in breastfeeding practices. This agrees with findings from DHS 2018 that show better breastfeeding practices in southern than northern states. Factors contributing to this observation could include the commitment to promoting baby-friendly breastfeeding policies and practices by these state governments. The UNICEF 2020 annual report affirms that UNICEF supported four states (Ekiti, Kaduna, Lagos, and Oyo) to revise their nutrition policy and extend maternity leave from four to six months. A key informant from a southern state confirms this

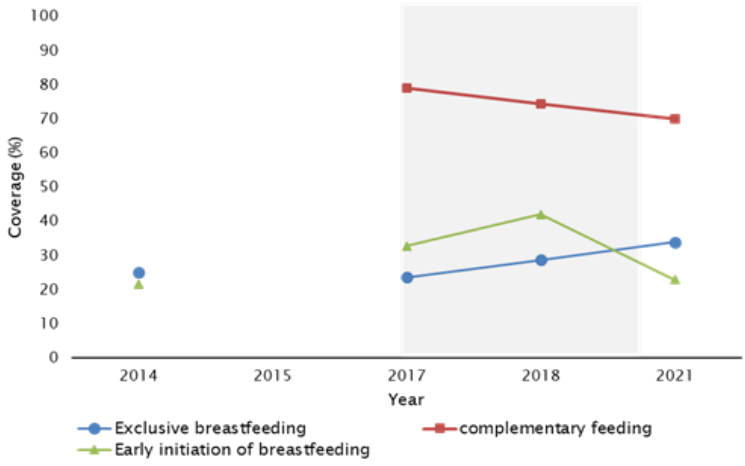


Figure 12: Breastfeeding practices from 2014 to 2021.

Sources: National Nutrition and Health Survey 2014 & 2018, Multiple Indicator Cluster Survey 2016-17 & 2021

> *"…For example, in Enugu State, CS-SUNN with the collaboration of the State Committee on Food and Nutrition is pushing that Enugu state will give six months maternity leave and if possible, two weeks paternity leave to fathers … Remember that I showed you somewhere yesterday, our creche, it's still because of that, that mothers continue breastfeeding even when they are at work. That creche was made for the state workers." – KII State level*

33. Despite most respondents acknowledging knowing about EBF and its importance, the practice of complementary feeding for babies below six months of age is still present due to cultural beliefs.

> *"in the village, actually what we do, we don't … tolerate this exclusive breastfeeding. What we do in the village is a mixed type of feeding, you give breast milk, then you use that 'tuwo' again, you smash it and make it a little bit watery and then you start giving it to the baby … when they give birth to a baby, they will breastfeed the baby and be giving him a little hot water …* And some concoctions, one leaf we are calling "Lampo Lampo"…" *– FGD Male caregiver*

Male caregivers mention their concerns regarding EBF, for example, the public display of a body part that is considered culturally to be the exclusive property of the husband can influence breastfeeding practices.

*"…As a man one of the things I frown at when my wife was during this breastfeeding, she can't dress the way she have to dress because of breastfeeding. There is a function we went to and the baby was disturbing, she have to bring out her breast in public to satisfy **…** I was doing security there to see if any man is looking … That is some of the disadvantages." – FGD Male caregiver*

Child feeding practices between 2014 and 2021

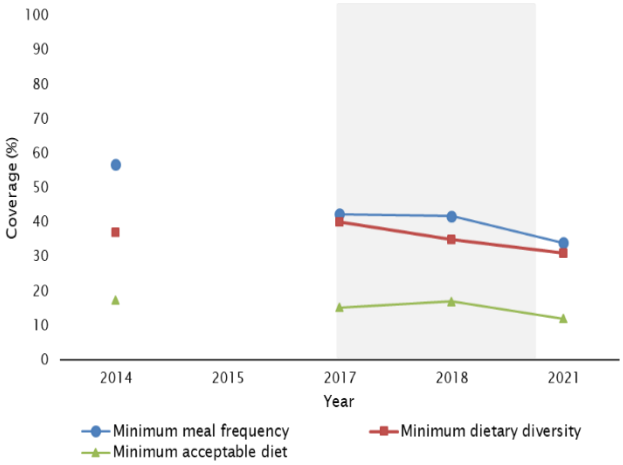


Figure 13: Child feeding practices from 2014 to 2021. *Sources: National Nutrition and Health Survey 2014 & 2018, Multiple Indicator Cluster Survey 2016-17 & 2021*

34. Figure 14 shows the progress in child-feeding practices between 2014 and 2021. We observe a reduction in the percentage of children who receive the minimum meal frequency (2014: 57 percent, 2021: 34 percent), who receive the minimum diet diversity (2014: 37 percent, 2021: 31 percent), and who receive the minimum acceptable diet (2014: 17.5 percent, 2021: 12 percent). Many respondents in the FGD, confirm that probable factors contributing to the poor child feeding practice trend observed are likely related to the prevailing economic situation, food insecurity, and more recently, COVID-19 which generally limits the feeding practice options for households as a whole.

"…Number one, generally, the feeding habit here in Abakpa is bad due to the economic situation, yeah, the mothers, uh, the models are not well fed, one, first they must have to care for their children first, sometimes a mother will go to bed hungry, making sure that the children fed first because the food, the scarcity of food, money, not that we don't know how we can afford to buy, to feed, but the resources are not there and even if that information the resources are there, most things, we are most that were most fed with carbohydrate." – FGD Male caregiver

35. On the other hand, it seems that information received from health workers is consistent in highlighting the benefits of proper child feeding, and appears important for convincing caregivers, especially men. Most male caregivers across states acknowledged receiving consistent messaging about the importance of breastfeeding and dietary diversity from health workers.

"… I will have to confess, that after 1,2,3 meeting, I was invited, I went, myself, I saw what they were doing, the second one I attended the third one in (mentions community) because there is another this thing there, the ward head there is my friend, he invited me, I went. It was in (mentions same community), that I got everything clear. So when I came back, I have to apologize to my wife. Then I asked her their next meeting date, and she told me, I was there and I apologized to the other people, in, fact, I am the one laughing now." – FGD Male caregiver

Maternal health and improved water sources between 2014 and 2021

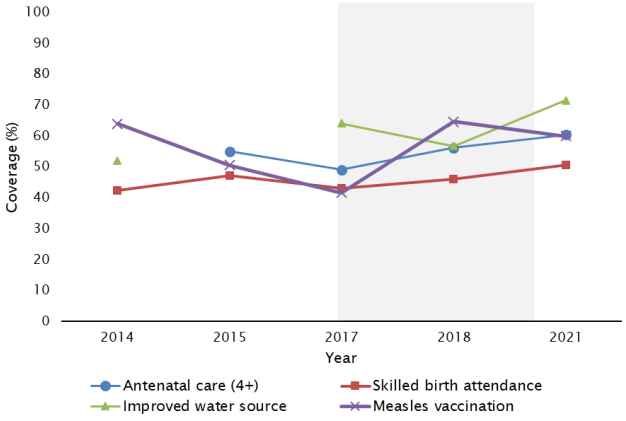


Figure 14: Measles vaccination coverage and access to improved water source 2014 to 2021.

36. Slow but steady progress can be observed for skilled birth attendance (from 42 percent to 51 percent) and at least four antenatal care visits (from 55 percent to 60 percent) – see **Figure 15.** Access to improved water sources increased considerably from 52 percent in 2014 to 72 percent in 2021. MVC showed a declining trend between 2014 and 2017 but is since increasing again with coverage estimated at 60 percent in 2021.

Sources: National Nutrition and Health Survey 2014, 2015 & 2018, Multiple Indicator Cluster Survey 2016-17 & 2021

Partnership support

37. In addition to the coordination role played by UNICEF as earlier mentioned, the continued capacity-building support provided by UNICEF and other partners for actual implementation and management of interventions is perceived as equally important for maximizing the results of the stunting prevention programme according to respondents at both national and state levels. In addition, UNICEF support was instrumental in building capacity that enables effective supplies of nutrition commodities at the state and local government levels.

"Take all the money that you bring in, even increase the money. You will not get the results you get. The reason why you're getting the results you get is because of the support, and the TA given by partners. You know, especially support in implementation. You know, everything you see being done is government, along with his partners, remove the partners who are supporting these programmes, just drop the money, and walk away. You won't get the quarter of results you're getting…" – KII National level

38. According to UNICEF CO annual report 2019, 25 states were supported to develop costed Multisectoral Plans for Nutrition, which included costing for improved EBF and dietary diversity. This is evidenced by the existence of such state-specific nutrition strategic documents, especially where the nutrition programme is prioritized. All state-level respondents state categorically that the development of these strategic documents was only possible because of UNICEF's support.

"Through the support of UNICEF, we've been able to domesticate the National Policy on Nutrition, that is very important, we've also been able to have the multisectoral plan, signed and launched, which forms like the faith book of our activities. If you ask me what the activities education is focusing on now, I can bring it out for you, which one is being focused on by water resources. So, I mean the Ministry of Health, Primary Health Care, all the MDAs that are involved, we have this document … UNICEF has done a lot for us." – KII State level

Similarly, all state-level key informants highly appreciate the capacity-building support provided by UNICEF. They acknowledge being able to confidently fulfill their responsibilities as a result of such support, for example being able to build the capacity of other health workers. They all convey the perception of total dependence on UNICEF to function adequately.

"When it comes to nutrition UNICEF … they are our pride, they are our everything both in capacity building, they will build you, you become a resourceful person, that can stand and talk to women and tell them what

it takes to succeed. You know, they send you training. In short, UNICEF is everything to us. I'm sorry to say it this way, one will feel like "a child that has lost his mother" if UNICEF leaves (mentions the name of state) state. It's just as serious as that, you know, because they are the ones that understand us more, when, where you lay your complaint, they understand what it is." – KII State level

Prioritization and financing support for nutrition in relevant ministries

39. A culmination of advocacy efforts within the period of KRC#2 implementation yielded a presidential mandate to establish a nutrition department in nine relevant ministries (Finance, Budget & National planning; Health; Agriculture; Women Affairs; Water resources; Humanitarian Affairs, Disaster management & Social Development; Industry, Trade & Investment; Information & Culture; and Education). All nine ministries have signed the mandate (Ref: MBNP/AB/SEC/2742/T/31) as a show of commitment to implementation. This has created room from 2023 onwards, for potentially gaining more budgetary allocation for nutrition activities as a whole, and invariably for stunting prevention. The National Council for Nutrition is currently chaired by vice president Professor Yemi Osibajo, and he has demonstrated leadership and commitment by taking one of the largest international development assistance loans of USD270 million for nutrition.

"… with the influence of the National Council of Nutrition, we've gotten a presidential directive for Nutrition Department to be established in all relevant Ministries … (health, agriculture, education, budget & planning, science, information, finance, gender, and, um, cultural and tourism) … also for a budget line to be created mandatorily by all MDAs, because most MDAs, they don't have a budget line for nutrition that they depend on (phone rings), they depend on donors, whatever any donor can give them…" – KII National level

40. An effect of this mandate is that the responsible ministry for State Committees and Committees of Food and Nutrition is the Ministry of Finance, Budget, and Planning, both at the national and state levels. All state-level respondents confirm that UNICEF is instrumental in ensuring that these committees remain functional by funding the meetings. Depending on the commitment of state-level decision makers e.g., the commissioners of health, this can lead to the timely approval and release of budgetary allocation for the nutrition programme.

".... in (mentions the name of state). And the commissioner… has been quite proactive. He's not a nutritionist, but the way he pushes for nutrition), you know, is so admire, uh you know, one has to admire the way he's going about it because he has that passion and he is, really comfortable… So right now, there is a budget that has already been approved, for advocacy. That committee will go on advocacy, making the line ministries understand what nutrition is, and ask them to create a budget line in their ministry." – KII State level

Private sector and academic support

41. Specialized skills are required within the country for implementation and continued generation of the relevant evidence necessary for effective nutrition interventions. By actively engaging academia in the National Committee for Food & Nutrition, UNICEF continues to push for the development of required academic progammes (pre-service) and courses (post-service). There was no evidence of involving academia in an ongoing research project aimed at generating evidence for KRC#2-related topics. This is also needed to address the human resource capacity gaps in nutrition required for effective implementation.

"We also have challenges of shortage of manpower; human resource which I think is all over; shortage of dietists and nutritionists. And even in that aspect, you see the state Committee for Food and Nutrition out fully going into discussions with schools; our higher institutions to bring out courses for nutritionists, for dietists, abridged

courses for community health workers to do, conversion courses for people from other courses to come back and study nutrition." – KII State level

42. Most respondents mentioned that UNICEF facilitates partnerships with the private sector to complement the efforts of the nutrition programme by supporting the committees of food & nutrition at the national and state levels and the SUN platform that engages private sector stakeholders involved in the nutrition programme. At the national level, the private sector participates in the SUN platform for planning (e.g. the development of roadmaps for the local manufacture of MNP and RUTF and exploring additional funding opportunities. A feasibility study was done to show the overall supply costs and the viable business model for actualizing the local manufacture of RUTF[23]. There was limited evidence of SUN platform operations at the state level.

"… at the State Committee for Food and Nutrition level, we are also seeking to develop indigenous complementary food, because our major problem with RUTF is the sustainability, so, we have, through the academia group in the State Committee for Food and Nutrition, have come out to give them that assignment to go conduct research and bring out alternatives that we can use for our own sustainability." – KII National level

"Private sectors are involved, I have heard of Dangote, we have some big farms like AFEGS, … so private sector are involved … When we have meetings, they do come like this, NCFN meeting, like ACN meeting, ACN, national council, I think the private sector, Dangote Foundation, Bill Gates, they are involved." – KII National level

Perceptions about interventions

43. **Beneficiaries** – Beneficiaries perceived that the nutrition services they received were useful. Services received varied among beneficiaries, the most described services being EBF counselling, Vitamin A supplementation, IYCF counselling, RUTF, IFA, IMAM, CMAM, and Zinc supplementation. The availability of commodities for free motivated retention, and immediate benefits like reduced episodes of illness in infants like diarrhoea were some benefits derived from attending nutrition services, as stated in the following remarks,

"Yes, was while I was pregnant, I didn't think I will be able to attend all the ANC because of the medications I use to buy if I was to go to the health facility. In my previous pregnancies, sometimes when my husband says he doesn't have money to give me to buy the medication, I skip that month. But when they started giving us this medication, once it is time for clinic, with joy and vigor, I go and they conduct the antenatal and give me the medications to use."- FGD Female caregiver

44. Many beneficiaries demonstrated an understanding of stunting especially in terms of treatment. The rapid weight gain observed in malnourished infants who receive RUTF was widely described among beneficiaries as clearly beneficial, as summarized by this respondent,

" … I have a stunted child, after some intense stages of feeding (with RUFT), the child started growing normal, so we see the evidence in the child." – FGD Male caregiver

45. **Vulnerable and marginalized populations -** In Niger state, due to insecurity, there is an increasing number of IDPs in the state thereby making more people vulnerable in terms of food security. For the IDP population, food security at the household level is lacking due to limited access to farms and

[23] https://resourcecentre.savethechildren.net/pdf/ready-to-use_therapeutic_food_feasibility_study_nigeria_2015-1.pdf/

markets[24],[25]. Evidence reveals that government counterpart funding is not being implemented or implemented in an untimely manner[26], a trend confirmed by state-level respondents and perceived by displaced persons. This limits the scale of interventions that are achieved thereby exacerbating the situation.

"It's like they are forgetting this IDPs because the rate of IDPs in Niger state is just increasing in Minna. Some IDPs are being neglected truly because I was opportune to be in this (mentions name of one IDP). There are so many malnourished children in that (mentions same IDP), you people should just put IDPs into consideration, please. Even this (mentions name of IDP) there are houses IDP, they stay there more than 50 people, 60 people, 70 people."– FGD *Male caregiver*

46. Beneficiaries reveal opportunities for increasing the coverage and effectiveness of the nutrition programme as they identify other populations that they consider marginalized in terms of distance to service, tribe, or cultural beliefs. This provides pointers about populations to target to further expand the reach of the nutrition programme. The MICS 2021 survey highlights variation by ethnicity in accessing services.

"Like the Anam people they stay across the river inside the bush and they can't come to town. What they can do for them is to set aside a day and hire a boat to carry all the health personnel to go inside their camp." – FGD Female caregiver

Table 15: Level of achievements of the expected results

Expected results at the beginning of the programme	Baseline value (2017)	Target value (2022)	Results achieved (Based on data in the UNICEF indicator report)	Assessment of the Level of Achievement of Results
The country has a budgeted plan to eliminate water and fluids to support increase in EBF	No plan	Plan exists	Fully achieved[1]	**Good level**
The country has a budgeted plan to improve dietary diversity	No plan	Plan exists	Fully achieved[1]	**Good level**
Number of children aged 6-59 months who received: (a) vitamin A supplements in semester 1; (b) vitamin A supplements in semester 2	16,028,000	32,111,592	Fully achieved[1] (Target – 27,564,000 Achieved – 35,437,597)	**Good level**
Percentage of children aged 6-23 months receiving a minimum number of food groups	19 % 40.2 %[2]	12 % 31.1 %[3]	11% Partially achieved[1] MICS	
Percentage of infants aged 0-5 months who are exclusively fed with breast milk	17 % 23.7 %[2]	57 % 34.4 %[3]	38%[1] MICS	

Source: [1] UNICEF Indicator Performance by Result area; [2] MICS 2017; [3]MICS 2021

[24] https://fscluster.org/nigeria/document/nutrition-and-food-security-surveillance-0

[25] https://cgspace.cgiar.org/handle/10568/125113

[26] https://cs-sunn.org/wp-content/uploads/2018/10/Trend-Analysis-of-Health-Nutrition-Budget-in-Nigeria-2014-2018.pdf

Preliminary Conclusions – Effectiveness

EFFE 1: Three years after the start of KRC#2 little effect of the strategies on the outcome indicator has been observed. Between 2018 and 2020; the AARR was only 0.9 percent while Nigeria requires an AARR of 10.6 percent to meet the 2025 SDG nutrition targets. However, the KRC#2 strategy showed intermediate results that can be built upon to achieve a better AARR in the coming years such as the enhanced institutional capacities and strengthened commitment at the state and national levels i.e. (output 1 TOC – see Figure 2), though scale-up is still challenging and the improved knowledge and skill of caretakers to adopt essential nutrition practices (output 3 TOC) that can be harnessed for improving AARR. (Para 24-32)

EFFE 2: Though respondents show an understanding of the information received about the importance of dietary diversity, evidence reveals a contrary trend in minimum dietary diversity as the beneficiaries are constrained in practice due to factors related to food insecurity, economic circumstance, and cultural practices. Behavioural change communication targeting men can contribute to optimal practice. (Para 33-36)

EFFE 3: On the first 3 (out of 4) outputs described in the Nigeria nutrition ToC, good progress has been made to strengthen the government's capacity to develop sound nutrition policies and costed strategic plans. (Para 38)

EFFE 4: Good efforts have been made by UNICEF to build capacity at the national and state level for planning and management of interventions to improve effectiveness e.g., supporting the development of the National Multisectoral Plan of Action for Food and Nutrition. The operationalization of the multisectoral plan at the state level needs to be strengthened. (Para 38-39)

EFFE 5: Consistent high-level advocacy can influence the realization of government commitments regarding putting a structure in place that enables budgeting domestic funds for the nutrition programme. The actual release of budgeted funds is currently hampered by the envelope budget system. (Para 40-41)

EFFE 6: Roadmaps have been developed to guide the engagement of the private sector and academia. The private sector is engaged in the biofortification of food vehicles like vegetable oil, flour, etc., and the local production of RUTF. An improvement can still be made for better coordination and expansion of activities. Beyond attending meetings, the academia appears to be engaged only passively in offering nutrition-related courses. (Para 42-43)

EFFE 7: Beneficiaries perceive the interventions as useful for their health and the health of their children, especially in terms of treating chronic malnutrition. There are well-observed constraints that jeopardize the effectiveness of the KRC#2 strategies. For example, beneficiaries are yet to fully appreciate the importance of prevention interventions as nearly all appealed for the continued supply of RUTF and recounted the observed positive effect on their children. (Para 44-47)

9.4 Efficiency

4.1. *To what extent have resources (financial, human, and material/property) been made available:*
- Sufficient (in terms of quantity) concerning the needs identified and the expected results?
- Adequate (in terms of quality) concerning the expected results?
- Deployed on time?
- Flexible to respond to unforeseen needs (Insecurity, COVID-19)?

C Finances

47. At the national level, sustained high-level advocacy culminated in the presidential mandate enforcing the creation of nutrition departments in nine relevant MDAs (see paragraph 42). This means that more financial resources will be budgeted from 2023 onwards for conducting nutrition-related interventions. The mandate document is confidential but was sighted by the evaluation team. However, respondents at national and state levels explain that due to 'envelope funding' practiced in government ministries, the amount of money finally released may be lower than allocated in the budget (envelope financing in this case means the amount of money released is the amount available regardless of what was budgeted). For example, in 2017, USD 5,912,372 was budgeted for the nutrition programme, but only USD 3,488,556 billion was released (59 percent of approved budget)[27].

"If you look at budget allocation at the LGAs MDAs level, it is more like an envelope type of budget. What you see in the envelope is what we work with. 500 million nairas may be approved for you in that fiscal year to work with, but at the end of the whole thing, maybe what is released to you for your activity might not be half of that money. So, we call it the envelope type of release. So, the envelope is sealed, so, it is when you open it that you see what is inside. Assuming you're given 500 million nairas to work with, even when you have a target that is running to 3 billion, automatically you are incapacitated, you cannot exceed what you are given. So, that is why we say envelope, you are not allowed to express yourself beyond what you are given. So, if you are limited to the particular amount that is given to you, that is why it is envelope." – KII National level

[27] [1] https://www.health.gov.ng/doc/FINAL-VERSION-NHA-2017.pdf

48. The level of buy-in and commitment to the nutrition programme varies across states, which affects the level of operationalization of KRC#2. For example, in states where commitment is achieved, the multisectoral plan of action has either been domesticated or is still in the process of this through support by UNICEF. Nutrition activities, including those that are KRC#2 related, have therefore been costed and budgeted for in these states[28,29]. Where buy-in is yet to be achieved, UNICEF continues to provide advocacy support to domesticate the multisectoral plan of action and have a budget line for nutrition in the state budget.

"… We have tried to see that nutrition has budget line, not me alone even with the state ministry of budget we have gone to them to see how they can include budget line nutrition that is what will are still fighting for but it has not been done…" – KII state level

For states where the buy-in is achieved, a scenario like that at the national level plays out where, although nutrition budgets have been approved, the money released in the envelope may be lower than the approved budgetary allocation. Often funds are barely released and most releases are not timely. A trend analysis of health and nutrition budgets between 2014-2018 revealed for example that across states, the money released was consistently lower than what was approved in the budget for nutrition activities. The actual amount released for nutrition is not always publicly available and in states where it is available, analysis reveals a trend of fewer funds released than budgeted. In 2016 for example, Niger state budgeted NG₦68,160,977, and only NG₦12,392,905 (18 percent) was released[30].

"… we're able to have the budget line, but haven said this, budget line and fund release have not been on the same pat … Release of fund, it does not equate - budget line and the release of fund. So that is an area of concern with us, otherwise, I think most of our MDAs have been able to get a budget line, but the release has been another story entirely… The release comes in both release and timely release, I look at time as this is another thing again that we also need to look at." – *KII State level*

49. UNICEF continues to advocate for the release of counterpart funding by states employing different strategies e.g., the siting of CMAM sites was made conditional to the release of UNICEF funds. This affects the coverage of CMAM interventions as funds allowed only the set-up of a limited number of CMAM centres:

"We have a CMAM centre within the local government, in Ubolafor, Ubolafor health centre, we have in Enugu East, at Abakpa health centre, and we have another one in Orji River, Orji basic health. But I tell you, Enugu state has 17 local governments. The three CMAM centres are nothing, compared with the population Of Enugu state because, how we segregated that, was to have one CMAM centre per senatorial zone. And we have three senatorial zones, So, one CMAM centre, covering five to six local governments. It goes nowhere."– KII State level

50. Though a budget line may exist for nutrition in a state, many times it is not flexible enough to respond in cases of emergencies, as explained below:

"… that is what is compounding the problem, why it is not enough, whatever you must have budgeted for, once there is insecurity, it will escalate … People are moving to, we are now having IDPs all around, our farmers are not getting to their farms and that will affect the household feeding state, with this you are likely to have an increase in malnutrition and you need an increase in commodities to tackle this, definitely this is it because you can see we have a block of some of our LGAs that have been identified as in security prone areas…" – KII State level

[28] https://cs-sunn.org/wp-content/uploads/2021/06/KADUNA-STATE-MULTISECTORAL-PLAN-OF-ACTION-FOR-NUTRITION.pdf

[29] https://cs-sunn.org/wp-content/uploads/2021/06/NIGER-STATE-MULTISECTORAL-PLAN-OF-ACTION-FOR-NUTRITION.pdf

[30] https://cs-sunn.org/wp-content/uploads/2018/10/Trend-Analysis-of-Health-Nutrition-Budget-in-Nigeria-2014-2018.pdf

51. Funding from donors is focused on states where insecurity is high, thereby minimizing the funds to attend to other regions. This highlights the necessity of increasing government funding for more consistent implementation of the nutrition programme.

> *"I'm very confident to tell you that everybody that source for funding today or look for resources to approach the national issue, either NGO or any... their concentration is in the North. Right now, why I said in the North now is that Northwest is another place, another region now that they've shifted focus to. And I think that's what is real, there's a gap in that. We need to look at other regions where we don't have insecurity." – KII National level*

52. Findings from UNICEF's financial data (see Table 16) show that for most years, the amount mobilized by UNICEF was close to the amount budgeted or more. Mobilized funding represents the actual amount realized including government counterpart funding for nutrition interventions. Compared with other cost categories (i.e., Nutrition in emergencies and Nutrition systems), the funds mobilized and spent for KRC#2 related activities only account for approximately 23 percent and 28 percent of total funds respectively, on average. The minimal decrease in stunting prevalence and slow increase in AARR does not immediately show any clear pattern or major impact with the amount spent on KRC#2-related activities (see table 16).

Table 16: Funding budgeted, mobilized, and spent vs stunting prevalence and AARR (in US Dollars)

	Total UNICEF Budget for KRC#2	%age of total UNICEF Budget	Total Mobilized for KRC#2	Actual Spend for KRC#2	%age of Total Spent	Stunting prevalence (%)	Difference in prevalence	AARR
2017						36.5		
2018	1,660,000	5.6	13,869,701	14,581,321	29	36.1	0.4	0.8
2019	1,198,416	2.9	14,902,275	15,649,883	44.5	35.7	0.4	0.8
2020	1,136,736	3.0	7,770,790	8,198,512	24.1	35.3	0.4	0.9
2021	15,292,508	34.8	5,453,613	5,713,919	13.6	33.3	2.0	1.1

53. From the total funds budgeted and mobilized by UNICEF, USD14.6 million was spent in 2018 on KRC#2 related activities (i.e., increasing access to nutrition and improving nutritional behaviors). The prevalence of stunting reduced from 36.5 percent in 2017 to 36.1 percent in 2018, meaning that the funding spent reduced stunting by 0.4 percentage points (pp) in 2018. Despite spending more in 2019 i.e., 15.6 million, and far less in 2020 i.e., 8.2 million, the pp reduction in stunting prevalence remained the same. The funds spent on KRC#2-related activities were reduced even further in 2021 to 5.7 million. However, according to the NFCMS 2021 report, the stunting prevalence was at 33.3 percent, showing a significant 2 pp reduction in stunting prevalence at the end of 2021 (see Figure 16). This steady reduction in stunting prevalence and somewhat accelerated reduction observed between 2020 and 2021, despite decreasing spending, suggests some efficiency in implementation. A closer look at the cost categories reveals that on average, three times more is spent on Access to Nutrition and Nutrition in emergencies services than Nutrition behaviour activities (3:1). Examples of access to nutrition and nutrition in emergencies services include CMAM, MNP distribution, deworming, Vitamin A supplementation, salt iodization, and iron folate supplementation.

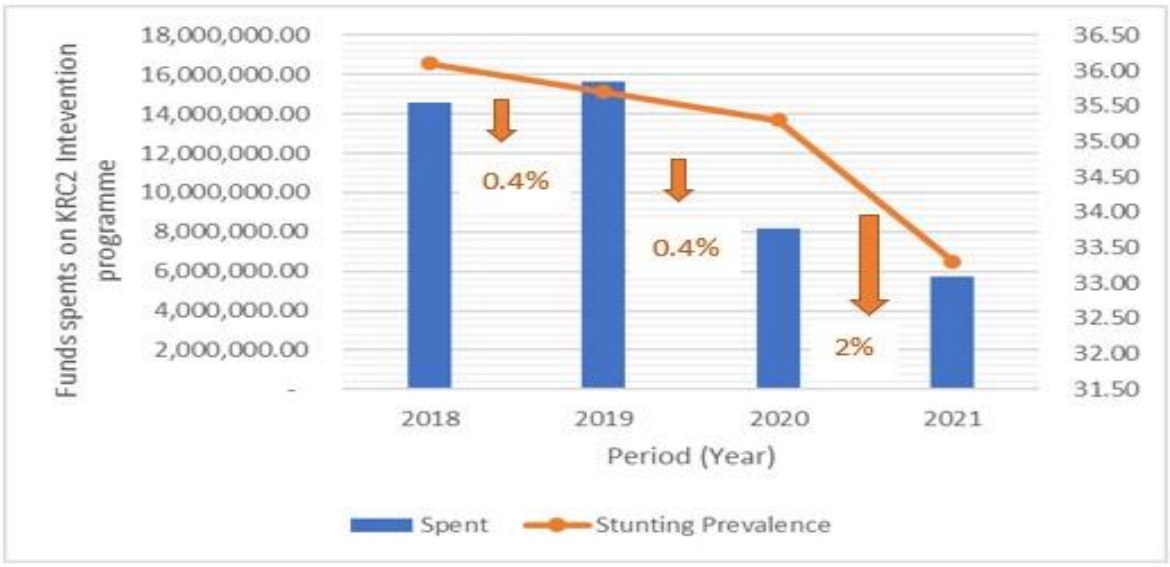


Figure 15: UNICEF funds spent vs stunting prevalence 2018-2021

54. A closer look at the cost categories (see Figure 17) within the KRC#2 related activities reveals that supplies and commodities followed by grants were the main cost drivers. This suggests that most of the funds for prevention activities are spent to ensure the availability of commodities like Vitamin A and MNP and also for expanding IYCF counselling services. State-level respondents all affirm that UNICEF supports the supply chain management and therefore the availability of nutrition commodities e.g., Vitamin A, up to the warehouses at the state level.

"UNICEF has done a lot for us … I think these areas they have been more into. Sometimes, for example, our Vitamin A supply, is 100 percent, when I say 100 percent, we are not getting supply from any other - it's UNICEF. They will transport it up to our warehouses, which is tremendous, and also they have gone into our health workers' capacity building." – KII State level

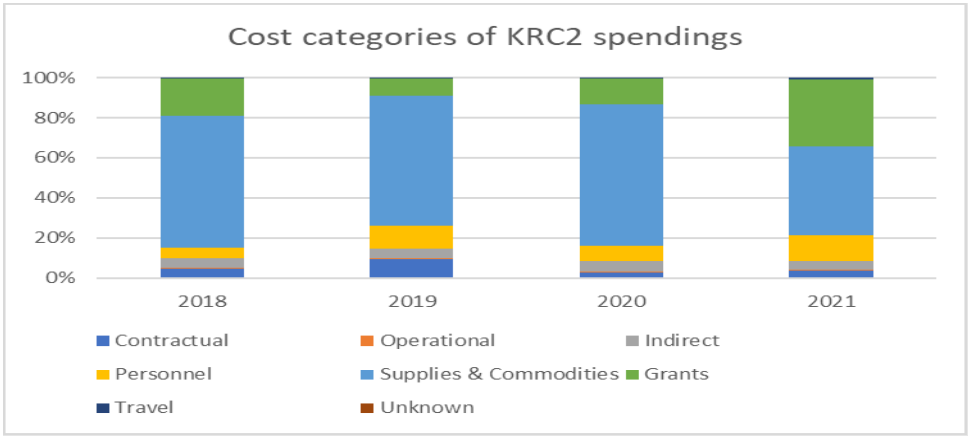


Figure 16: Cost categories of UNICEF spending on KRC#2 related activities

Human resources

55. The shortage of professional healthcare workers is widely acknowledged, and community health volunteers are largely used to implement nutrition activities, especially those that are community-based. Respondents at the state level and most of the community volunteers mention that there should be the recruitment of

more volunteers, who should be paid a stipend, to expand the reach of interventions, especially in hard-to-reach communities.

"… for the government to recruit health workers, train more personnel and continue to supply us that thing, not when they bring the programme before the awareness reaches to the rural people, they will stop it (cross talk) they will just stop it like that. Then, let them recruit because we don't have enough health workers, that's why I'm doing volunteer. And that volunteer is when the officer in charge (OIC) gave me 100 nairas a day, I will say "thanks ma". It is unfair. So, even if they don't want to recruit, let them be paying the volunteers now so that all these programmes will be... and let them keep on supplying, not after supplying (RUTF), they'll change…" – RTD Volunteer

56. The shift from vertical to more efficient and holistic integrated nutrition programming is challenging with the known shortage of health workers, with those working overburdened with multiple tasks inherent in integrated service delivery. This compromises the quality of work done and documentation, as noted by this UNICEF respondent.

"I will give a clear example … where during Maternal Newborn and Child Health Week, child protection will bring birth registration; because some children are still being delivered at home, so they don't have birth records. So, on coming to take any of the interventions during the week, mainly immunization or Vitamin A supplementation, or even MUAC screening, if they find out that the child has no birth record, they will register the child. But they will tell you that that health worker should be able to register the child but the health worker will have to put Vitamin A, will have to give vaccines, will have to chart records... this constitutes a challenge." – KII UNICEF SO

Commodities and supplies

57. At the national level, UNICEF has been working with the Ministry of Health to integrate the supply chain for nutrition commodities into the national supply chain system. Our desk review revealed that six nutrition commodities were included in the essential medicines list for children (EML for children 2020 – see Table 17). This has also facilitated the local manufacture of these commodities.

"... they (UNICEF) support the production of Ready to Use Therapeutic Foods, the support they've given to all these local companies to ensure that Ready to Use Therapeutic Foods is being produced in the country. They've done something in that regard." – KII National level

Table 17: Six Nutrition commodities in the Essential medicines List for children (2020)

Nutrition commodity	Formulation
Therapeutic Milk formula 75 (f75)	Sachet: 410g
Therapeutic Milk formula 100 (f100)	Sachet: 450g
Micronutrient powder (MNP)	Sachet: 1g
Vitamin A	Capsule: 100,000 units (blue) for children 6-11 months; 200,000 units (red) for children 12-59 months
Ready-to-use therapeutic food (RUTF)	Sachet: 500 Kcal
Rehydration solution for severe malnutrition (RESOMAL)	Sachet: 45 mmol/L (sodium); 40 mmol/L (potassium)

Preliminary Conclusions – Efficiency

EFF 1: Some gains were made in efforts to increase the domestic funding of the whole nutrition programme e.g., the creation of nutrition departments in nine ministries. The government's envelope budget system appears to increase funding for nutrition but has not yet led to sufficient funds for the nutrition programme in all states so that resources remain limited to implement all the planned stunting prevention interventions. (Para 48-52)

EFF 2: UNICEF spending on KRC#2 decreased during the last two years, but stunting prevalence lowered at a faster speed than in previous years. This suggests increased funding from other parties (including the government) and as such, higher coverage of interventions in the country. This higher coverage may be explained by the greater proportion of UNICEF's budget used for grants dispersed to third parties responsible for implementation. It remains a challenge that government funding is often lower than required and often not released in time. (Para 53-55)

EFF 3: Human resources for nutrition are also limited and health/nutrition workers are regularly overloaded with tasks in service delivery, with the risk of compromising the quality of care and documentation while volunteers appear unsatisfied with the compensation they receive for the tasks they perform. (Para 56-57)

EFF 4: Successes with programme efficiency include the inclusion of nutrition commodities like the MNP and RUTF in the essential medicines list for children and the integration of the UNICEF nutrition supply chain with the national supply chain (Para 58)

9.5 Sustainability

5.1. *To what extent has UNICEF put measures in place to ensure that activities funded by the Malnutrition Prevention and Response Programme continue in the future without UNICEF support?*

In this section, we present the efforts that UNICEF has made to ensure the sustainability of the gains achieved within the period of KRC#2 Implementation.

Institutional sustainability

58. Attention to sustainability by increasing the ownership for stunting prevention with the national and local government has been observed at several levels in the country and is already partly covered in earlier chapters of this report, such as the fact that the National Council for Nutrition is chaired by the Vice President, Professor Yemi Osinbajo, resulting in an international development assistance loan of USD270 million for nutrition. According to UNICEF, ownership is also well addressed at State level where UNICEF supports the State government with the development of multisectoral plans by specifying the role of every stakeholder in the nutrition programme, as noted in the state-level multisectoral plans.[31] These plans guide partners supporting the state on how best to make a lasting investment.

"… And before any programme, we have a sustainability plan, we enter into sustainability plan; we share and disseminate what will be the role of government, what will UNICEF do and government at all levels do; what the state will do at state level, what the government will do, what the local government will do. We are even bringing a fourth level which is facility and community." – KII UNICEF CO

Facilitating the engagement of local manufacturers in the production of RUTF ensures a sustained supply of commodities that does not depend on importation, as described in section **9.3.1.2c** which highlights the ongoing collaboration with the private sector to realise the relevant roadmaps.

[31] https://cs-sunn.org/wp-content/uploads/2021/06/NIGER-STATE-MULTISECTORAL-PLAN-OF-ACTION-FOR-NUTRITION.pdf Niger state Multisectoral Plan of Action for Food and Nutirition 2020-2025

Financial sustainability

59. The creation of nutrition departments in nine relevant ministries, as described in section 9.4.42, has secured government budgetary allocation to the nutrition programme and demonstrates the government's willingness to provide their counterpart nutrition programme, coordinated by the Ministry of Budget and Planning at the national and state levels, as described in chapter 6.4. By this, a sustainable budget line for government funding is assured, although as already explained in chapter 6.4 it does not guarantee that funds will be released according to the needs, or in a timely response. Apart from personnel costs especially for interventions delivered in health facilities, the government's contribution to the nutrition programme goes to the UNICEF budget counterpart funding, which usually funds the procurement of RUTF.[32],[33]

Multisectoral partnership platforms for exploring further investment

60. UNICEF provided leadership for strategic multisectoral partnerships e.g., in SUN to accelerate and influence investment in stunting prevention among international partners. Such partnerships provide additional funding for different aspects of the nutrition programme in the short term. For example, USAID-funded partners like Humanitarian Assistance support nutrition interventions across six states in the Northeast and Northwest regions where insecurity is high[34]. In the long run, it will be important that the government continually increases domestic funding for the nutrition programme.

"I think now, we've been able to bring donors, like Foreign, Commonwealth and Development Office, UK (FCDO) which is one of the biggest donors in Nigeria to drop about the prevention agenda for nutrition. For recent donors like Global Affairs Canada now, we need to put in money. And similarly, even USAID or the Bureau of Humanitarian Assistance which previously used to focus their resources, mostly as I understood it on commodities, you know bringing in commodities, or meals like RUTF, they have started to earmark more money for agencies like us and others to be able to do preventive programming."– KII UNICEF CO

Partnership for Academia for continuous generation of manpower

61. In Nigeria, efforts are also ongoing to review the curriculums to increase nutrition course offerings in Nigerian institutions of higher learning, as described in section 9.3.43, which details the engagement of the academia in pre- and post-service training for building human resource capacity.

Local production of RUTF

62. Facilitating the engagement of local manufacturers in the production of RUTF ensures sustained supply that does not depend on importation as described in section 9.3.44, which details the effort made to facilitate collaboration with the private sector.

Perceptions about the sustainability of KRC#2 interventions without external donor support

63. Respondents at both the national and state levels were unanimous in agreeing that the financial and technical support from external donors and international partners will remain relevant for a while.

"… it still really around what I've just said, it's not that buoyant now, by the time UNICEF says, I'm withdrawing now, it's not gonna be easy. But then I said if what we have started now continues, probably towards the end of that 10 years things will be better… I have said it even before you finish, it's for UNICEF now to continue, for other

[32] https://www.icirnigeria.org/analysis-fg-has-cut-funding-for-nutrition-and-the-consequences-will-be-long-lasting/

[33] https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/nutrition_sector_mid-year_bulletin_-_2022.pdf

[34] https://www.usaid.gov/humanitarian-assistance/nigeria

partners to continue also you understand, and for the state despite the difficulties to still move in that direction of ownership." – KII State level

Preliminary Conclusions – Sustainability

SUST 1: Structures to increase government ownership are continually being strengthened in Nigeria. For example, UNICEF's support and advocacy yielded some effects such as having a budget line for nutrition activities under the Ministry of Budget, Finance and Planning at the national level and in some states. However, the funding released should still be made sufficient. (Para 58)

SUST 2: The multisectoral platforms supported by UNICEF also strengthen government coordination efforts towards meeting stunting targets within ministries, the private sector, and other international organizations, including the funding of these organizations. (Para 59)

SUST 3: Ongoing collaboration with the private sector to support the local manufacture of RUTF can add to the sustainability of supply and cost reduction of this essential commodity. (Para 60)

9.6 Policy Review of Nutrition Policies and Strategies in Nigeria

Adeyemi et al's[35] informative article, published in 2022, provides valuable insight into the nutrition policy environment in Nigeria. The article triangulates our findings and strengthens the evidence we found so we have included information from this article throughout this chapter. To extensively discuss the policy reviews and issues concerning nutrition within the KRC#2 period, the following thematic areas were considered to guide the discussion:

Framing Nutrition

In Nigeria, the number of policies /strategies across all relevant sectors with nutrition objectives, activities, and/or indicators has increased since 2010, indicating that the importance placed on nutrition has grown over time. Some of the policies framed malnutrition as a core consequence of several developmental challenges. The 2006 National School Health Policy, 2017 National HIV/AIDS strategic framework and 2019 National Health Promotion Policy are policy documents with nutrition objectives and/or activities that framed malnutrition as a contributing cause for their challenges but no nutrition-related indicator in its monitoring and evaluation was included. Other documents such as the 2016 Draft National Policy on Environment and 2017 Economic Recovery and Growth Plan emphasized nutrition as a problem to be addressed but failed to include nutrition objectives or activities in the documents.

Advocacy and Focusing

An increasing commitment is observed from the government as regards policy/strategy development, budgetary allocation, and releases for nutrition, at federal, state, and local government area levels. This is due to the increase in advocacy around nutrition in the country, stimulating political attention to nutrition at all administrative levels. Some of the pivotal events are the birth of the Scaling Up Nutrition (SUN) Movement in 2011; a National Nutrition Forum in 2012; the development of various national policies and strategies; the Malabo declaration and revitalization of the Comprehensive African Agriculture Development Programme (CAADP) framework; the release of the 2013 Lancet Series on Nutrition; the 2016 Lancet Series on Breastfeeding; World Health Assembly meetings; 2013 Nutrition for Growth Summit; 2014 International Conference on Nutrition, and declaration of UN Decade of Action on Nutrition. The Sustainable Development Goals (SDGs) were also very influential in the heightening focus on nutrition.

Nutrition intervention coverage, scale, and quality:

The qualitative interviews at the national and state level emphasized that evidence provided by nutrition data had been instrumental in galvanizing and maintaining nutrition action. Most stakeholders explained that there has been an increased commitment from the government to the implementation of nutrition programmes in Nigeria. There has been improvement in MNCHW and CMAM interventions as well as the promotion of optimal IYCF within the KRC#2 evaluation period (2018 to 2020). We also witnessed improvement in social protection programmes including a national home-grown school feeding programme and cash transfer programmes. Despite these interventions, the interviews at the national and state-level revealed the availability and accessibility of nutrition commodities and services as one of the core needs of the target beneficiaries of KRC#2 interventions. The nutrition intervention coverage is low in Nigeria as confirmed by surveys e.g., NFCMS 2021 (Vitamin A – 25 percent; deworming – 28 percent; IYCF – 15 percent) and key informants both at the national and state levels. According to the Lancet Maternal & Child nutrition series[36], a conservative estimate of 90 percent population coverage of 10 proven nutrition-specific interventions will be required for a significant reduction of about 20 percent to occur in stunting prevalence.

Contextual research

[35] https://link.springer.com/article/10.1007/s12571-022-01328-2
[36] http://dx.doi.org/10.1016/S0140-6736(13)60996-4.

The KRC#2 strategy 1, "Evidence and data at the centre of planning, effective implementation, knowledge generation, and advocacy", stresses the importance of evidence and data at the centre of planning, effective implementation, knowledge generation, and advocacy. The policy review found that the importance of implementation research was captured in recent nutrition sector policies/strategies. There has been an increase in the use of research to inform implementation and decision-making, however, research to address gaps in nutrition outcomes in Nigeria vis-à-vis the context of different states and local government areas has still to be strengthened.

Impact pathways:

The policy review found causal theory underlying nearly all the policy/strategy documents was not made explicit. This implies that it does not explain how implementing policy roles and responsibilities would lead to the achievement of objectives and offer solutions as to how the problem can be addressed. However, the 2014 Health Sector National Strategy Plan of Action for Nutrition (NSPAN) and 2016 Agricultural Sector Food Security (AFSNS) provided an overarching Theory of Change that broadly explained the links between groups of activities and key objectives and links between objectives and outcomes.

- Vertical Coordination:

By promoting the multisectoral approach, KRC#2 creates a pathway to strengthen the vertical coordination of the nutrition programme, which entails the system of accountability between the levels of government regarding the coordination of the nutrition programme. The prescribed mechanism for coordination in the nutrition policy is through the committees on food and nutrition at the national and state levels. The review found that although formerly only minimal accountability existed between the LGA and the state, as well as between states and the national, this situation has improved over time. In two out of the three states where the KRC#2 evaluation was conducted, the national policy and the multisectoral plan of action had been domesticated. Moreover, all states had a nutrition officer who coordinates with the LGA nutrition officers and facility staff to conduct interventions, thus affirming the findings of the review.

10. LESSONS LEARNED

The main lessons learned from this evaluation are:

Lesson 1: The multisectoral approach to prevent stunting is understood and appreciated by all stakeholders; it is recognized as the best way to approach stunting reduction in Nigeria. However, it is complex to implement and monitor and therefore requires painstaking planning and flexibility of working style between sectors. High-level poverty levels and food insecurity at the household level are serious obstacles to decreasing stunting nationwide.

Lesson 2: The main bottleneck for increasing the AARR is the low coverage of nutrition interventions at the community level, which severely undermines the level of effort put in. A satisfactory budget and human recourses for programme implementation at the State level are needed to overcome this challenge.

Lesson 3: Community engagement by implementing partners facilitates the process of understanding and meeting identified needs. In case of changing situations (security emergencies, health crises such as COVID-19), engaging community members to help deliver community services within their community was successful.

Lesson 4: Integration of too many tasks for health workers and/or community volunteers, overloads these staff and jeopardizes the quality of service delivery. Integrated delivery is an important mechanism to make services accessible for the population but needs sufficient numbers of staff.

Lesson 5: Tally sheets for community-level nutrition data collection that do not completely align with the nutrition register and DHIS2 in facilities overload individual health workers and threaten data quality. The inclusion of these data in the DHIS2 will avoid duplication in reporting and will allow integrated quality assurance for all nutrition-related data.

Lesson 6: Nutrition platforms e.g., SUN and the multisectoral committees at national level are seen as relevant by all stakeholders; however, their survival and functionality depend largely on external (donor) support and resources, which is a threat to effective coordination and sustainability.

Lesson 7: Capacity building at all levels is key to achieving results and making steps forward. Addressing stunting nationwide requires a geographical shift in attention from stunting prevention activities concentrated primarily in the North to a broader set of geographic locations throughout the country.

Lesson 8: Male caretakers should be defined as a target group for the nutrition programme (currently not included). Males as beneficiaries of behavioural change communication will contribute to stunting prevention through the care they provide within their families.

11. FINAL CONCLUSIONS

This evaluation focused on how the KRC#2 strategies related to stunting prevention were translated by the UNICEF Country Office into interventions. The conclusions of the evaluation across the six criteria are as follows:

Relevance

The KRC#2 strategies are relevant to addressing the causes of stunting as identified in Nigeria as the interventions implemented in the country are largely consistent with the objectives of these strategies and with internationally recommended and evidence-based interventions.

- The multisectoral approach has been undertaken with stakeholders of the public sector and sometimes the private sector at the national and state level. Partnerships with academia at the state level were not observed during this evaluation. The importance of working together in the fight against stunting is understood but a common targeted approach still needs to be strengthened
- Sub-national variations of stunting prevalence are acknowledged, driven mainly by poverty, food insecurity, and widespread poor IYCF practices. KRC#2 interventions are therefore relevant in many parts of the country aside from the regions plagued by insecurity and should inform nutrition interventions to tackle low coverage.
- The use of data to influence programming is considered important for ensuring relevance. The processes for collecting stunting-related data from the community and facility up to the DHIS2 platform, however, need to be streamlined to improve the data quality at the National level.
- The support provided by the regional office has been highly appreciated by UNICEF CO and UNICEF State Officers.
- The implementation approaches to reach people most in need were visible during COVID-19 and in flooded areas. However, there is no articulated attention on the most vulnerable and marginalized populations within the population of pregnant and lactating women and children.

Coherence

UNICEF plays a key role in coordinating interventions within the MOH and between other line ministries, with bilateral and multilateral parties and NGOs aiming at a focused stunting prevention strategy and promoting subsequent messaging at all levels in the country. Efforts to promote synergies between national and international partners and to foster more investment with the private sector have been observed with positive outcomes regarding multisectoral interventions. However, no synergies are observed that have led to a satisfactory nutrition intervention coverage level needed to increase the AARR rapidly. Additionally, geographic convergence needs to be strengthened to accelerate the desired outcome.

Effectiveness

With regards to stunting reduction, Nigeria has made very limited progress with children under five from 2018 to 2021; the AARR was only 0.9 percent while Nigeria requires an AARR of 10.6 percent to meet the 2025 SDG nutrition targets. Sub-national analysis shows that many states have a very low, even a negative AARR of <-0.5 revealing a worsening of an already dire situation. Stunting-related indicators show different progress: EBF rates increased while minimum meal frequency (MMF) and minimum dietary diversity (MDD) decreased during the last years. We conclude that poverty and food insecurity at the household level undermined efforts made at the community level to promote behavioural change.

However, the various KRC#2 strategies seem to have built a foundation for more positive outcomes in the future. With the existence of multisectoral costed plans at state level and increased government funding, a more efficient, integrated supply system for essential nutrition commodities holds promise for multisectoral programming and implementation and improved coordination. Beneficiaries are yet to fully appreciate the importance of prevention activities as nearly all appealed for the continued supply of RUTF and recounted the observed positive effect on their children.

Efficiency

- The installment of a budget line for nutrition under the Ministry of Budget, Finance, and Planning provide opportunities for a sufficient nutrition budget, but the envelope system is still hampering the provision of sufficient funds for covering nutrition needs. Furthermore, the envelope generally provides fewer funds than were agreed upon. For example, in 2017, USD 5,912,372 was budgeted for the nutrition programme, but only USD 3,488,556 billion was released (59 percent of approved budget). A positive effect is already observed: UNICEFs funding for KRC#2 strategies declined in the last two years while stunting prevalence appears to have decreased more rapidly between 2020 and 2021, suggesting that efficiency is achieved.

Integration of supply chains for nutrition in the national and state supply chains is a gain made. The shortage of human recourses at all levels in the system, including at the facility and community level, constrains efficient working and provides the risk of overloading individual health workers with a bundle of tasks, with a risk of diminished quality of care. Compared to the global average of 4:1 per 1000 population, the nurse/midwife: patient ratio, in Nigeria, had 1.5:1 showing that a nurse had to serve nearly three times more patients than nurses in other countries, which has implications for the quality of care.

Sustainability

There is evidence of concrete steps towards sustainability for nutrition in Nigeria, such as the increase in government ownership that is visible through the president's commitment to make nutrition a priority investment area through the creation of nutrition departments in nine ministries. The responsibility of oversight and coordination is through the Ministry of Budget, Finance, and Planning and provides opportunities for an increased government budget for the nutrition programme; however, that is not yet fully realized. The inclusion of RUTF and MNP in the essential medicines list for children and the integration of the UNICEF supply chain with the national health commodities supply chain creates the necessary system for the sustainability of RUTF availability.

Human rights and gender equity

The inclusion of adolescent girls and pregnant and lactating women in the target group for prevention of stunting is based on their physical needs to reach a healthy nutritional status that will prevent the youngest children from developing stunting. This approach, however, excludes the full participation of men, especially male caretakers in the stunting prevention programme. Involving them in behavioural change programmes regarding fulfilling the nutritional needs of their entire families, especially of their adolescent daughters, their wives, and their unborn and young children will enable men to be instrumental in decreasing stunting within their families and communities.

COVID-19

UNICEF's efforts to continue nutrition service delivery during the COVID-19 pandemic have been effective and were appreciated by all stakeholders, including the community. The house-to-house delivery of nutrition services integrated into the immunization platform resulted in a satisfactory coverage of nutrition services.

12. RECOMMENDATIONS

Based on findings, lessons learned and conclusions, the Evaluation Team developed a certain number of strategic and operational recommendations, which were discussed, finalized and validated at the National Steering Committee chaired by the Government and facilitated by UNICEF with the participation of a variety of stakeholders.

Table 18: Strategic Recommendations

Strategic Recommendations Preliminaries Conclusions	Recommendation	Stakeholder responsible	Level of priority
#1. REL 1, REL 2, COH 2, Sustainability Para 61	Identify more sustainable ways of ensuring coordination platforms remain functional i.e., committees on food and nutrition and multisectoral platforms at both national and state levels. The meetings improve the visibility of nutrition programming and assist the MOH to facilitate a more equitable distribution of partner support across the country and within states.	UNICEF nutrition section MOH	H
#2. REL 1, REL 2, COH 2, EFFE 6	Improve the effectiveness of multisector coordination and collaboration to catalyze activities from multiple sectors needed to tackle stunting, recognizing the jeopardizing effect of poverty and household food insecurity across the country by: • facilitating routine accountability from the different MDAs designated as leading the different aspects of the multisectoral action plan.	UNICEF nutrition section in collaboration with other sections, NCFN	H
#3. REL 3, COH 2, EFF 4, SUST 3, Sustainability Para 62-63	UNICEF should support states to implement their multisectoral and annual operation plans by: • building capacity for leadership; • formulating strategies to leverage academia to generate locally relevant evidence; • creating convincing business cases to attract private sector investment to explore the production of local nutrition supplements and RUTF; and • enhancing the engagement of community structures by identifying context-relevant strategies to deliver packages of KRC#2 interventions targeted to specific populations, e.g., nomads, flooded areas, etc., to address low coverage.	UNICEF nutrition section, Ministry of Budget, Finance, and Planning	H
#4. REL 5, REL 6, EFFE 1	Support data analytics and strengthen data management processes for collecting and collating nutrition-related data in the DHIS2 to ensure improved data quality and adequate data disaggregation of data for better decision-making by developing capacity at community and facility levels for data capture, data validation, and data use for HCWs/volunteers, facility managers, and LGA managers.	UNICEF M&E department, MOH M&E department	H
#5 EFF 1-2, Sustainability Para 58	Strengthen high-level advocacy and resource mobilization for KRC#2 with the government at the national and state levels to materialize commitments made. Periodically highlight progress on costed multisectoral plans to create an accountability mechanism for lead partners in all strategic areas. Ensure continuous high-level advocacy for prioritization of- and funding of- nutrition programme in 13 states that have yet to develop a multisectoral plan of action.	UNICEF nutrition & partnership section, and Ministry of Budget, Finance, and Planning	H
#6 REL 5, REL 6, COH 4	Set specific targets for the most disadvantaged, marginalized, and vulnerable children across states, including those in IDP camps and flood-prone areas, not	UNICEF nutrition section in cooperation with other UNICEF sections, MOH,	H

	just the NE & NW regions, to improve equitable access to basic services by conducting trend analysis across different periods and data sources. Explore adaptive approaches to implementing multisectoral plans in cooperation with other line ministries (agriculture/WASH) that entails learning by doing.	and other ministries in Nigeria	
#7 REL 6, SUST 1, EFF 3	Develop a strategy for addressing the shortage of human resources for the implementation of stunting prevention interventions at the facility and community level through various pathways (pre- and in-service training). The creation of a sustainable motivation package adapted to local circumstances for volunteers who deliver an integrated package of services should be realized in a common effort between various multisector partners, UNICEF, and the LGA leadership.	UNICEF nutrition section, MOH LGA takes the lead and involves NGOs supporting nutrition implementation programmes	M
#8 EFF 1- 4, REL 1-3, EFFE 1, EFF 2-7, Coherence 3	Develop partnerships with the national academic and professional institutions in the area of research and capacity development to promote nutrition knowledge management. This could include the conduct of a mapping of stunting-related research in Nigeria to provide insight and motivate universities and academic institutions to participate in this area of research and the development of a research in cooperation with NCFN. Academia should be motivated and supported to scale up training opportunities for nutrition in pre-service curricula and develop short courses for professional health workers.	UNICEF M&E section, Ministry of Education, Ministry of Health	M
#9 EFFE 1-7, SUST 1	Leverage on partnerships to scale up nutrition programme coverage beyond the current 19 states (Addressed to : UNICEF, Ministry of Health)	UNICEF NCO Nutrition Section, Partnership Section, Ministry of Health	H

Table 16: Operational Recommendations

Operational Recommendations			
Preliminaries Conclusions	**Text of the Recommendation**	**Responsible**	**Level of priority**
#10 EFFE 1-7, SUST 2	Develop a stronger coordination structure for nutrition programmes and a more explicit mutual accountability framework for the multisectoral work of KRC#2 within UNICEF to better promote multisectoral engagement, including not only the 'usual suspects (health, WASH, and education) but also less usual or more difficult to engage sectors such as agriculture and the private sector (for food security and dietary diversity). Explore the "KRC Guild" governance structure that has been set up at the regional level and replicate it at the national level.	UNICEF Country Office	H
#11 REL 1, EFFE 1-7	Target male caregivers for extensive access to information and education and behavioural change communication in the stunting prevention programme.	UNICEF WCARO and Nigeria CO, MOH	H
#12 EFFE 46 REL 23	Strengthen the food system through promotion of home gardening, small livestock that contribute to improvement of women and child nutrition	UNICEF NCO Nutrition Section, Ministry of Health, Implementing Partners	H
#13 EFFE 1-7	Strengthen social protection (cash transfer) to empower vulnerable women and girls to access adequate nutrition diets	UNICEF NCO Nutrition Section, Implementing Partners, Ministry of Health	

13. APPENDICES

1. Evaluation matrix
2. Frameworks used in the evaluation
3. KRC#2 related interventions conducted in Nigeria
4. Data collection instruments (such as survey questionnaires or interview guides):
5. NHREC Approval
6. Evaluation team profile
7. Terms of Reference

- ***Annex 1: Evaluation Matrix***

Criteria	Evaluation Questions	Sub- questions	Data sources*	Data collection method	Indicators/Measures	Data analysis
1. Relevance	1.1 To what extent have the KRC Strategies contributed to the delivery of interventions to meet the identified needs of the target populations, taking into account the changing needs in changing situations (security emergencies, health crises such as COVID-19, etc.)?	a) To what extent are the KRC#2 Strategies support interventions to be **aligned with identified government priorities**, for example, in national nutrition policies?	RO/COs (annual) reports National multisector nutrition plans, National reports on COVID-19/ other emergencies key national (situational) reports and nutrition experts, Interviews with Rights holders	Document review Interviews with stakeholders at national, and subnational stakeholders Roundtable discussion with a local level health and nutrition workers FGD with rights holders	-Type of contribution of the KCR2 programme to the development of national policies and plans (per country) and the extent to which these contributions responded to identified needs Presence of a multisectoral nutrition plan Presence of common results framework in the national nutrition plan Type of adaptations in national nutrition plans due to environmental changes (COVID-19, conflict/ drought) Presence of adapted national nutrition plans due to environmental changes Descriptive data of population needs (sub-national and by population if available): percent of household food insecure[1] percent of children under 6 months who are exclusively breastfed[1] percent of children aged 6-23 months receiving minimum dietary diversity[1] percent of children aged 6-23 months receiving minimum meal frequency[1] percent of children aged 6-23 months receiving minimum acceptable diet[1] percent of children who are stunted or severely stunted[1]	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data collection Triangulation of secondary data analysis with desk review and primary qualitative data collection
		b) To what extent are the KRC#2 Strategies to support interventions **aligned with population needs** in terms of geographic coverage, target population, etc?				
		c) To what extent are the KRC#2 Strategies to support interventions re**align with the specific needs of the most vulnerable and marginalized** populations (adolescents, women, disabled, living in remote areas)?				
		d) To what extent is the KRC#2 ToC in line with KRC#2 **adapted to changing needs** and situations? (Ability to adapt in a changing environment; COVID-19)				
		e) To what extent **adaptations** made to the programme **keep meeting governmental and the population changing needs** relevant to KRC#2?				
		f) To what extent activities of regional/ country interventions are aligned with the theory of change of the KRC#2				

	1.2 To what extent are field interventions aligned with regional and international recommendations for the prevention of stunting	a) To what extent were **regional or international standards used** to inform the activities/interventions currently conducted for the prevention of stunting at the national level	International documents such as: "REDUCING STUNTING IN CHILDREN: Equity considerations for achieving the Global Nutrition Targets 2025 WHO 2018 Regional Office and Country Office and national policies and plans Country expert opinions	• Document review • Interviews with national stakeholders	Type and number of regional and international standards used in developing national nutritional policies and plans, with analysis regarding the extent to which field interventions aligned with regional and international recommendations on the prevention of stunting Examples of using international or regional standards to inform stunting prevention interventions Examples where Gender awareness/ women's empowerment is integrated into all strategic interventions and followed during implementation	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
	1.3 To what extent were the different monitoring and evaluation strategies adapted to measure the results of the approach? And how could they be improved?	a) To what extent do the **r KRC#2 results framework indicators measure results progress on stunting reduction and** all relevant strategies implemented at the national level and how could this be improved?	M&E framework at RO and CO Common Result Framework in National Multisector plans Interviews with representatives of various ministries involved in the programme	• Document review • Interviews with national stakeholders	Availability and use of a multisectoral framework for results and M&E, that provides space for disaggregated data (gender, SES, urban/ rural etc.) at national level (per country The national M&E framework has indicators agreed upon by all stakeholders. Number and examples of adaptations made in the multisector framework for result and M&E due to context changes (COVID-drought-conflict) Number and examples of changes in the stunting prevention programmes based on M&E information M&E framework provides space for disaggregated data in relation to gender and vulnerable groups (with evidence from data collection tools) ;	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		b) Was the **M&E framework adapted to changing needs** of the country offices, governments and populations changing situations? (focus on COVID-19 indicators)				
		c) Does the monitoring system **sufficiently disaggregate data to inform the programme** on results **relevant to marginalized populations** (age, gender, migration status, ethnicity, disability, urban/ rural/ urban slumps etc)?				
		d) How are the results from the monitoring system **analysed and used for planning** adapting interventions resulting from KRC#2 strategies?	RO docs data management system interviews with UNICEF COs, national government	Doc review, Interviews with national and subnational stakeholders Observation of data management systems		

			and implementing organisations			
	1.4 To what extent has the technical support provided by the UNICEF Regional Office been adapted to the needs of the country office and the government and how could it be improved?	a) To what extent was the support provided by the regional office relevant to the needs of country office? What is working and what needs improvement? (ie. the quality of engagement and communication. Does the country offices find RO support relevant, how can this be improved?)	• COs • National/subnational stakeholders	• Interviews with CO • Interviews with national /subnational stakeholders	Example of technical support provided by WCARO relevant to the needs of CO for promoting KRC#2 strategies that 1. is working 2. needs to improve • Information from M&E framework for RO KRC#2 is shared and discussed with the COs and used for needed adaptations. in all 5 countries	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		b) To what extent was the **support** provided by the regional office **comprehensive and addressing all the needs related to KRC#2 programme** of the country office?	• RO reports • CO reports • National/ subnational stakeholders	• Doc review • IDI	• Narrative evidence of extent of satisfaction of COs with support provided by WCARO for promoting 1. KRC#2 strategy 1 2. KRC#2 strategy 2 3. KRC#2 strategy 3 4. KRC#2 strategy 4 5. KRC#2 strategy 5 6. KRC#2 strategy 6	
		c) To what extent was the RO able to bring in **new regional and international knowledge, approaches and skills and promote innovation** in addressing stunting at country level	RO reports COs and national stakeholders	• Doc review • interviews with participants of events	Number and documented examples of new knowledge and approaches and skills for prevention of stunting promoted by the RO and implemented	
		d) To what extent was the RO able to organize a **platform for active learning and knowledge exchange** in the region to accelerate achievement of KRC#2 and prevention of stunting?			An active learning and knowledge exchange platform, in the region is established by the RO Number and examples from countries on how this platform contributed to KRC #2 stunting reduction Number and content of regional events led by regional bodies with UNICEF technical support Number and content Regional Nutrition Working Group (RNWG meetings)	

					Specific guidance/events and docs produced during emergency situations (COVID-19/ Drought/ Conflict)	
2. Coherence	2.1 To what extent are the interventions carried out under KRC#2 compatible and complementary with other interventions carried out in the field of nutrition stunting as well as with the nutritional situation political, cultural, socio and geographic environment that influence nutritional status of pregnant women and children in Nigeria	a) To what extent is UNICEF **CO adequately aligning and coordinating the KRC#2 strategies** with its work with **local partners** (ie. implementation, targeting and coverage), **government** (ie. advocacy, technical support, changes in program implementation) and **internally** (synergies with activities from other UNICEF departments)?	National/ subnational/ local stakeholders	• interviews with national and subnational stakeholders • Round table discussions with health and nutrition workers at local level	• • Type and examples of coordinating activities led by UNICEF for interventions related to KRC#2 • Number of strengthened or new partnerships formed leading to improved resource mobilisation and more efficient programme implementation in the region • Type of support provided by UNICEF to accelerate the synergies between nutrition interventions and programmes at the regional level • Type and examples of multisectoral investments and interventions contributing to the stunting prevention programme • Type and contribution of different partners to the KCR#2 strategy e.g., 1. the government 2. donors, 3. private sector and 4. CSO) Factors contributing to the success of the KRC#2 strategy y • bottlenecks to implementing the KRC strategy	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data and secondary quantitative data
		b) To what extent has UNICEF identified **or accelerated synergies at regional level between different nutritional interventions and programmes**?	Programme/annual Regional Reports Stakeholders at regional level	Doc review Interviews with regional stakeholders		
		c) To what extent is UNICEF **promoting any identified synergies** at country and regional level in terms of partnerships (strategic and financial)?	Programme/annual RO and CO reports Stakeholders at regional level, and at CO and national level stakeholders	Doc review Interviews with regional and national stakeholders		
		d) To what extent are the KRC#2 strategies understood, accepted and operationalised at national level, within and outside of UNICEF? This question will explore further: How wide within the country office is the KRC concept (specifically KRC #2) known and accepted? • How are different sectors contributing to KRC #2? • How is it coordinated? And at the national government? • To what extent are external partners (government, donors, private sector and CSO) aware and contributing to the concept and the strategy?	National/subnational and local stakeholders Programme data: UNICEF country office and DHIS2 Population statistics: DHS, MICS, nutrition surveys	Interviews with national/subnational Round table discussions with local stakeholders of various sectors Review of reports and statistics		

		• Has there been change in the level of (severe and moderate) stunting in the country and if so, how likely is it that the KRC initiative played a role in this? • Have there been changes in the intermediate indicators for stunting and how are these linked to the KRC initiative? • In places where the KRC strategies has worked best: what were the factors that contributed to success? In places where the strategy has worked less well: what were the major bottlenecks?				
3. Effectiveness	3.1 To what extent were the KRC#2 strategies effective in achieving the intended KRC#2 result (By 2021, 80 percent of girls and boys under 5, especially those who are marginalized and those living in humanitarian settings, receive high impact nutrition services to prevent stunting)?	a) To what extent have the KRC **strategies produced/ accelerated the expected results** (operationalized in KRC#2 KPIs) in accordance with the plans of the Country Office? What are the **potential challenges and opportunities** at country level to strengthen implementation? b) To what extent have the interventions **produced accelerated the expected results among marginalized and vulnerable populations** (operationalized in KRC#2 KPIs) in accordance with the plans of the Country Office? What are the **potential challenges and opportunities** to **reach vulnerable and marginalized populations.**	• Population statistics: NDHS, MICS, nutrition surveys • Programme data: UNICEF Nigeria offices and DHIS2 • Interviews with national stakeholders at all levels	• Interviews with national and subnational stakeholders • Round table discussions with representatives of all sectors at local level • Review of databases and reports	• The current average annual rate of reduction in stunting • The required average annual rate of reduction in stunting to meet the Global Nutrition Targets. Intermediate stunting indicators (depends on interventions implemented by country): • percent of children under 6 months who are exclusively breastfed[1] • percent of children aged 6-23 months receiving minimum dietary diversity[1] • percent of children aged 6-23 months receiving minimum meal frequency[1] • percent of children aged 6-23 months receiving minimum acceptable diet • percent and # of children 6-59 month received vitamin A supplementation [1,2,3] • percent and # of children 6-59 month received deworming tablet [1,2,3] • # of children screened for malnutrition[2,3] • # and percent of children diagnosed with malnutrition[2,3]	Triangulation of three sources of quantitative data (population surveys, programme data and health information systems data) on subnational level and for different populations (if available).

					• # of women received information on infant and young child feeding practices[2,3] • percent of households with access to improved water source[1] • percent of households with access to improved sanitation[1] • • Access to improved sanitation. •	
		To what extent were the **multisector coordination teams** (when they exist) -set up as part of KRC#2 implementation- **able to support achievement of results,** and what were the identified strengths and weaknesses in terms of leadership, capacity and political will? Was **RO effective in supporting setting up the multisector coordination teams** at country leve? What are their opportunities and challenges to reach objectives (political will, leadership, capacity etc.)?	• Project docs (e.g annual reports) • UNICEF Nigeria Office, National government and stakeholders	• Doc review • Interviews with CO, National government and stakeholders	• Documented evidence that the multisectoral nutrition plan changes in level of coordination and synergism between sector activities and programmes • Number and type of objectives of the multisectoral nutrition plan that are (not) met • Existence of multisectoral coordination team and evidence of periodic review meetings • Type and examples of accomplishment of multisector coordination teams • Examples of opportunities and challenges faced by multisector coordination team	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		d) How is the governance of the multisector nutrition programme organized • Under which ministry is a multisector team functioning (health, prime minister, other? How is this leadership? • How are tasks divided in the multisectoral committee? • Which structures for the programme exist?	• UNICEF Nigeria office, S/FMoH Annual report	• Doc review • Interview with a key official in UNICEF Country office, Federal and State Ministry of Health, stakeholders	• Availability of organogram of the governance structure for the multisector nutrition programme inclusive tasks and responsibilities • Number of ministries departments participating actively in the integrated package to prevent stunting programme	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data

		Which partnerships with academia and private sector were formed at regional and country level and how they have supported the achievement of results? How can these be further leveraged to improve the nutritional status of pregnant and lactating mothers and young children? Can UNICEF Nigeria strategy be improved to further leverage partnerships with academia and private sector in KRC#2 work?	• Project docs (eg annual reports) • UNICEF Nigeria Office National government and stakeholders	• Doc review • Interviews with key officials at UNICEF Nigeria Office, National government and stakeholders	• Number and type of functioning partnerships at regional level/ national level and subnational level with academia and the private sector • Number of strengthened or new partnerships formed with academia and the private sector •	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		e) What are the factors (inside and outside UNICEF) that have **contributed to the achievement or prevented the achievement** of the envisaged objectives of the interventions? In places where the strategy has worked best what were the **factors that contributed to success?** In places where the strategy has worked less, what were the **major bottlenecks.**			See as 2.1 above	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		f) To what extent have relevant and appropriate **corrective measures** been adopted to mitigate the challenges in the environment encountered (for example to adapt the program to the context of COVID-19/ drought/conflict?)?	• Project docs (RO and CO) • National docs on COVID-19/ Conflict/ Drought • National, subnational and local stakeholders	• Doc review • Interviews • Round table discussions • FGD	Number and type of adaptations made to KRC#2 strategies to environmental changes especially on COVID-19	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		g) According to COs to what extent has the **support provided by the regional office** been effective? Which areas of support were **most beneficial**? Which areas of support were **less effective/useful**. What areas of support **requires**	• RO and CO reports on KCR implementation • National/subnational		• Level of satisfaction with COs • See 1.4 above	Thematic analysis of primary qualitative data and document review.

		strengthening? What areas of support **can be left out**??	and local stakeholders			
		h) What are the **unexpected effects** (positive or negative) of the interventions in each of the countries concerned?				Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		i) To what extent was the program able to appropriately **engage in community dialogue** and in dialogue with a broader network of stakeholders (e.g., implementing organizations) to **address social and cultural barriers** to uptake? What (**beneficiary) feedback mechanisms** (including those for vulnerable and marginalized groups) were employed and how was it **used to adapt the program**?	• project docs • implementing organizations and end users (beneficiaries)	• Doc review • Interviews • FGD • Round table discussions	• Examples of successes achieved through community dialogue to address social and cultural barriers • Examples of beneficiary mechanisms employed to identify and eliminate barriers that prevent the most vulnerable and marginalized (girls, women, disabled) from accessing the services	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		j) To what extent have the interventions related to KRC #2 stunting prevention programme **identified and eliminated the barriers that prevent most vulnerable and marginalized (girls, women, disabled) from accessing the services** it makes available in the targeted communities?				

		k) If there were any **obstacles, political, practical or administrative**, to the **effective integration of human rights and gender equality in the implementation of the interventions**, what was the level of effort in order to overcome these difficulties?	• RO/CO reports/ documents • RO/CO national and subnational stakeholders	• Doc review • Interviews		
		l) To what extent did RO facilitate strategic dialogue with key donors (bilateral, multilateral, philanthropists, etc.) on funding for prevention of malnutrition (BMGF, DFID, USAID, EU, Norway, WB, AfDB, PfN etc.). How do funding organizations appreciate UNICEFs work on stunting? How can UNICEF communicate better (more effectively) to influence investment for nutrition particularly prevention work and what are the opportunities for this?	• RO project docs • interviews with funding organizations	• Doc review • Interviews	• Types of partnerships developed with funding organizations at regional and country level to fund KRC#2 related strategies	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		m) To what extent did CO and RO engage strategically with national governments and regional institutions/platforms to influence domestic budget commitment and disbursement? How can RO communicate better and more strategically?	•RO and CO project docs • national and subnational stakeholders, representatives of regional institutions and platforms	• Doc review • Interviews	• Presence of a line item added or with increased allocation to nutrition in the National budget :	
		n) What priority barriers can be identified and must be addressed to further effectively deliver interventions for the prevention of stunting at scale?	•RO and CO project docs • national and subnational stakeholders,	• Doc review • Interviews		

4. Efficiency	4.1 To what extent have resources (financial, human and material/property) been made available: - Sufficient (in terms of quantity) in relation to the needs identified and the expected results? - Adequate (in terms of quality) in relation to the expected results? - Deployed on time? - Flexible to respond to unforeseen needs (Insecurity, COVID-19)?	a) Which resources were made available for the KRC #2, at RO and CO? Who made the resources available at several levels and countries? Were financial, human and material resources adequate and timely in order to achieve identified and expected results? b) Were these resources (financial, HR, material) flexible to respond to unforeseen needs (COVID-19 crisis, civil insecurity, drought etc.)? c) What measures were put into place to increase maximise the use of resources and reduce costs?	• RO and CO project docs • Financial reports • National docs • national and subnational stakeholders and local stakeholders (especially health/nutrition workers)	• Doc review • Interviews • Round table discussions	• Types of financial partnerships in place for delivering of KRC#2 interventions • Amount of resources made available for implementing KRC#2 related interventions • i.e. 1. Financial 2. HR 3. Material • Examples of resources released in response to unforeseen needs e.g., COVID-19, civil insecurity etc. • Increased coverage of services	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
5. Sustainability	5.1 To what extent has UNICEF put measures in place to ensure that activities funded by the Malnutrition Prevention and Response Program continue in the future without UNICEF support?	a) What measures were taken in order to **increase ownership of approach, interventions and results** at country level? To what extent have **national institutional partners, including the government, appropriated the approach and its achievements** (in terms of (costed) commitment or approach)?	• Program documents and blogs, • Key informants at national, subnational and local level • National subnational and local stakeholders	• Doc review • Key informant interviews, • Round table discussions local stakeholders	Commitment of political leaders to combat stunting evidence by the existence of a national nutrition policy, national multisectoral nutrition strategic costed plan per country Existence of national training manual for building capacity of personnel at the national and sub-national government levels to plan and implement the stunting prevention programmeSee 3.1m above • Dialogue between all sectors (including private) on stunting prevention.	Thematic analysis of primary qualitative data and document review. Triangulation of document review and primary qualitative data
		b) To what extent have the **strategic partnerships enabled to accelerate the work on prevention of stunting** and to what extent these **partnerships have been able to influence investment decisions** for stunting prevention work?	• RO activity report; • UNICEF Nigeria Annual Report, • Key informants from national level, including	• Doc review • Key informant interviews,		

			NGOs, multilateral partners and bilateral partners			
		c) To what extent has the necessary **capacity building at national level** taken place in order **to sustain routine activities and the achieved results**? Are there **adequate measure taken to institutionalize continuous process for training/capacity building** at country level?	• RO activity report; • UNICEF Nigeria annual report, • key informants from different ministries involved in the nutrition programme			
		d) What arrangements were made to **include the KCR#2 interventions in the national multisector nutrition strategy**?	• RO activity report; • UNICEF Nigeria Annual Report, key informants			
		e) What arrangements and coordination mechanisms were employed to **include relevant strategies for stunting prevention in the other relevant programs in various sectors** (for ex. WASH, Agriculture) in each country?	• RO activity report; • UNICEF Country Annual Report, • key informants from all sectors involved in the programme	• Doc review • Key informant interviews, • Round table discussions		
		f) What mechanisms were employed to **involve private sector**? How the **potential of the private sector can be better leveraged** to improve the nutritional status of pregnant and				

		lactating women and young children?				
6. Human rights, gender and equity	6.1To what extent interventions systematically take into account human rights, gender equality and equity considerations?	)			● Examples of Gender awareness/ women empowerment strategies integrated in policy/strategic documents and followed during implementation ● Examples of types of facilitation to improve access to nutrition (services) for the most vulnerable and marginalized pregnant/ lactating women and children If programme data is disaggregated by vulnerable groups (these data are not sufficiently available from population surveys, this can only be assessed if these data are collected by the interventions under KRC#2): ● Reduction of stunting within vulnerable groups[2] ● # of children 6-59 months from vulnerable populations received vitamin A a supplementation ● # of children 6-59 months from vulnerable populations received deworming tablets[2] ● # of children form vulnerable populations received essential nutrition services [2] ● # of women from vulnerable populations received information on infant and young child feeding practices[2] ●	Triangulation of secondary data analysis of programme data (if available) with thematic qualitative analysis
		a) To what extent have the KRC Strategies produced the expected results among marginalized and vulnerable populations (operationalized in KRC#2 KPIs) in accordance with the plans of the Nigeria country office? What are the potential challenges and opportunities to reach vulnerable and marginalized populations in Nigeria	Nigeria country office report	Key Informant Interviews Doc review		
		c) To what extent have the interventions related to KRC #2 stunting prevention programme identified and eliminated the barriers that prevent most vulnerable and marginalized (girls, women, disabled) from accessing the services it makes available in the targeted communities?				
		d) If there were any obstacles, political, practical or administrative, to the effective integration of human rights and gender equality in the implementation of the interventions, what was the level of effort in order to overcome these difficulties?				

		e) To what extent does the monitoring system sufficiently disaggregate data to inform the programme on results relevant to marginalized populations (age, gender, migration status, ethnicity, disability, etc)?				

1. Derived from population surveys. 2. Derived from programme data (if available). 3. Derived from health management information systems data (if available).

Annex 2: Frameworks employed in the evaluation

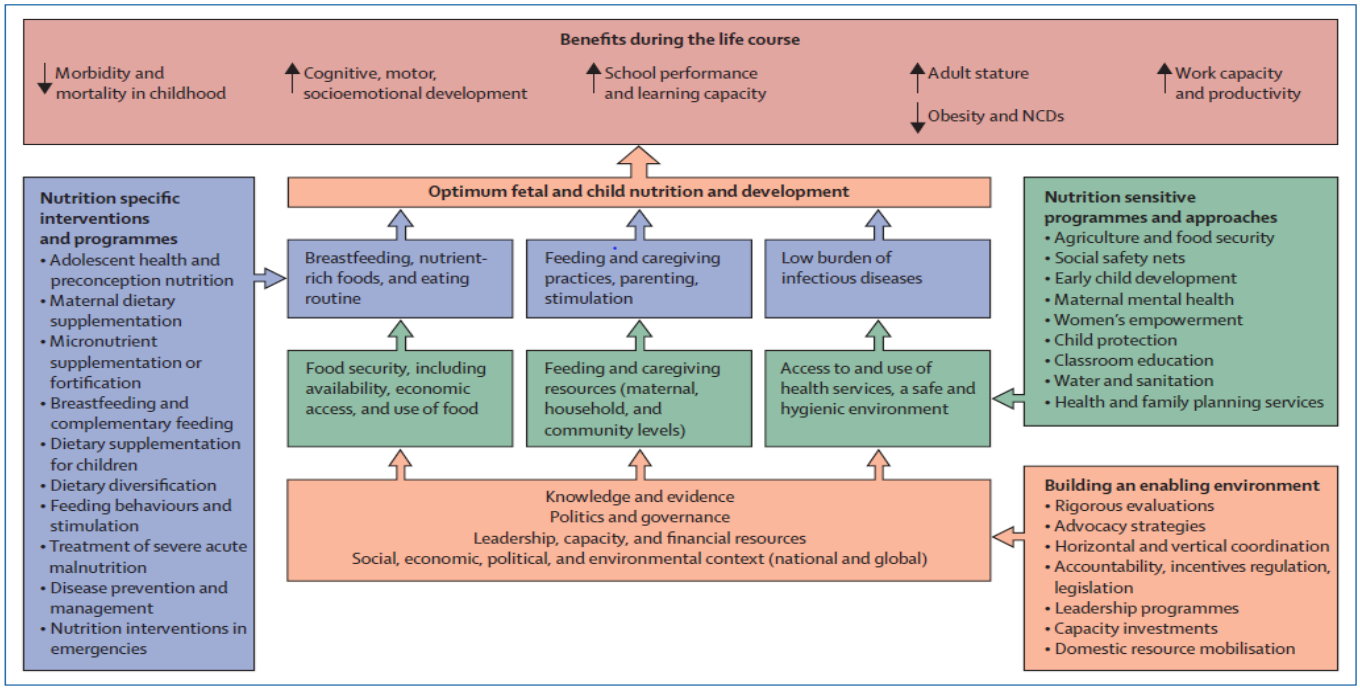


Figure 17: Framework for actions to achieve optimum fetal and child nutrition and development. Source: Lancet Maternal and Child Nutrition Series 2013

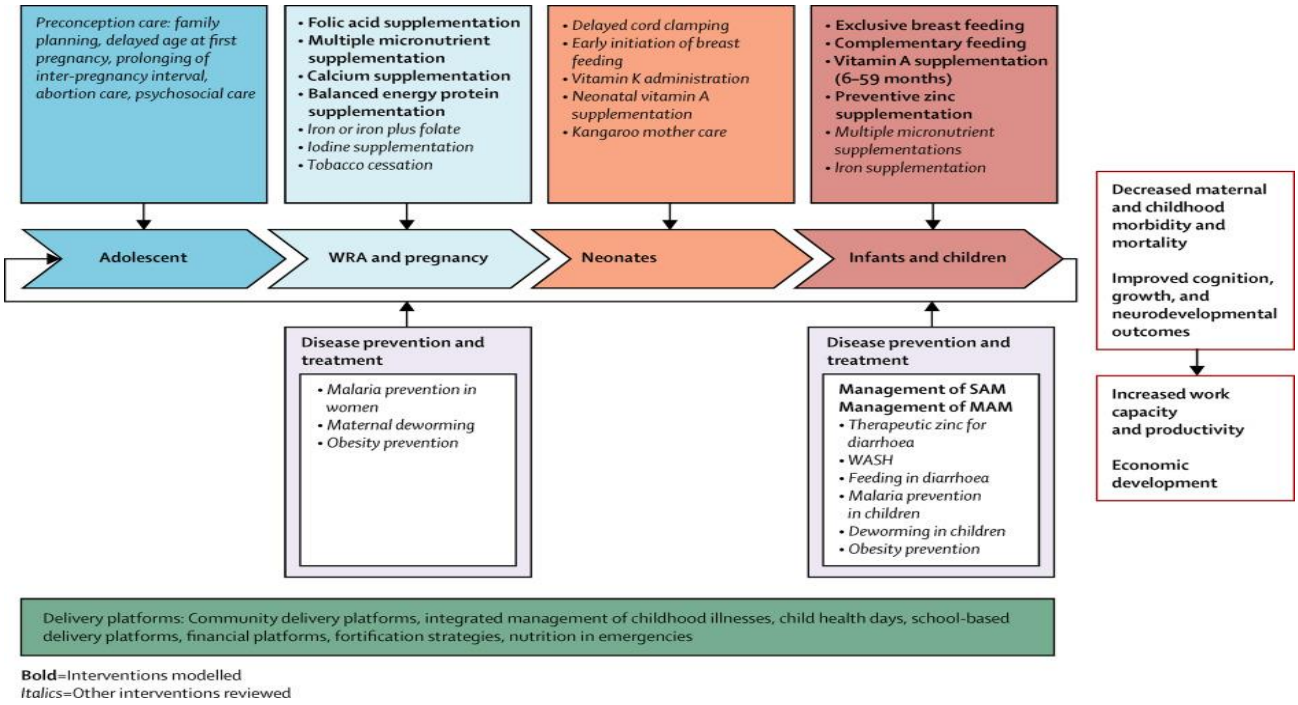


Figure 18: Conceptual framework of nutrition-specific interventions. Source: Lancet Maternal and Child Series 2013

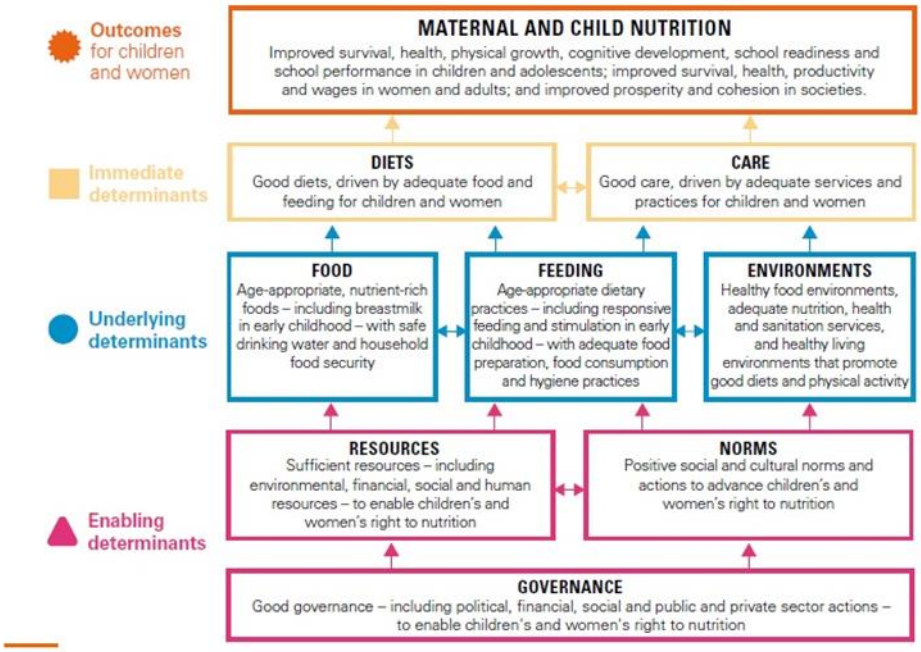


Figure 19: UNICEF Conceptual Framework on the Determinants of Maternal and Child Nutrition, 2020.

Annex 3: KRC#2-related interventions per strategy in Nigeria

Intervention	target population	States covered	implementing partner	Data available??
A. UNICEF activities aligned with Prevention of stunting and other forms of malnutrition **1. UNICEF-supported advocacy resulted in the** **a. inclusion of nutrition commodities in the Essential Medicine Lists (2018) and the** **b. inclusion of nutrition intervention in the Universal Health Care Coverage's package and the** **c. CHIPS (Community-based Health Influencers, Promoters and Services) initiative by the Federal Government.** **d. Inclusion of the Small Quantity Lipid Nutrient Supplements (SQLNS) in the National Guideline for Integrated Management of Acute Malnutrition (IMAM)** **e. Policy and Decision Makers to create budget lines for nutrition to mobilize domestic resources** **2. UNICEF supported the improvement of data quality in the North west region** **3. UNICEF supported child poverty analysis, carried out by the government of Nigeria.** **4. UNICEF supported the federal and state governments of Nigeria both in COVID-19 response but also very importantly in "COVID-proofing" existing programmes in health, education, nutrition, child protection, water, sanitation and hygiene** **5. UNICEF supported the COVID 19 response and continued work on several health care initiatives building on the use of evidence to enhance targeted planning and programming.** **6. UNICEF provided technical and financial support and led the vaccine procurement and logistics, social mobilization, community engagement and demand generation components of the Polio Eradication**				
Strategy 1 - Evidence and data at the centre of planning, effective implementation, knowledge generation and advocacy				
Alive & Thrive	U5, mothers, adolescents	Kaduna and Lagos State	FHI 360	
Civil Society Scaling Up Nutrition in Nigeria (CS-SUNN)	Policy Makers	36 states plus FCT	CSSUNN	Yes
Federal Ministry of Health/ UNICEF	Policy Makers	CMAM states	FMOH/UNICEF	Yes
Accelerating Nutrition Result in Nigeria (Routine data collection currently on-going across the intervention locations but are not on the national database	Policy Makers/Mothers/Adolescents/ Under 5/Lactating Mothers	Abia, Akwa Ibom, Gombe, Kaduna, Kano, Katsina, Kogi, Kwara, Nasarawa, Niger, Oyo and Plateau	World Bank/FMoH/SMoH	Currently on-going the data is directly synchronized to the ANRIN server. We don't have access to the backend data
Strategy 2: Improving governance and accountability: mobilizing political leadership				
	1. UNICEF supported the government to develop and disseminate the Nutrition guidelines including the National Infant and Young Child Feeding (IYCF) and the Social Behaviour Change Communication (SBCC), and advocacy conducted to policy makers 2. UNICEF provided technical and financial support to 25 States out of 31 States for the development of State Specific costed nutrition plans 3. UNICEF provided technical and financial support and led the vaccine procurement and logistics, social mobilization, community engagement and demand generation components of the Polio Eradication Initiative.			

	4. UNICEF supported the Micronutrients Deficiency Control Taskforce stakeholders meeting take place, to develop a roadmap for the anemia reduction strategy 5. UNICEF supported national and State counterparts towards finalizing State annual operational plans (AOP) for 2021 and this was completed for 23 states			
National Strategic Plan of Action on Nutrition (NSPAN)	Under 5, pregnant and lactating mothers, caregivers (women of reproductive age), legislators, general population	36 states including FCT	NPC/FMOH/ NPHCDA/SMOH/LOCAL COUNCILS/NAFDAC/SUN/Ward Community leaders	Can't say
National Guideline on Integrated Management of Acute Malnutrition	Under 5, women of reproductive age	36 states including FCT	UNICEF/FMOH/SMOH/NPHCDA/ State Primary Health Care Development Board/	
National Multisectoral Plan of action for Nutrition	Under 5, farmers, general population, adolescent, pregnant and lactating mothers, legislators	36 states including FCT	National Committee on Food Nutrition (NCFN)/ FMOH/NAFDAC/NPHCDA/ Nutrition Society of Nigeria (NSN)/NBS	
National Guideline for Micronutrient Deficiencies Control	Under 5, women of reproductive age, pregnant and lactating mothers	36 states including FCT	UNICEF/FMOH/SON/NAFDAC/NP HCDA/LSMOH/GAIN	
Finalizing State annual operational plans (AOP) for 2021	State Nutrition teams	23 states	UNICEF	
Strategy 3: Break with previous vertical approaches				
	1. UNICEF provided financial, technical and material support for the three rounds of integrated medical outreach services. 2. UNICEF supported the procurement, distribution and installation of 2,963 cold chain equipment supplied through the Cold Chain Equipment Optimization Platforms (CCEOP) with Gavi support in support of PHC revitalization in Nigeria 3. UNICEF supported the Federal and State governments to design an adolescent nutrition strategy and implement a pilot in Delta and Katsina states 4. UNICEF supported the use of **Community Nutrition Mobilizers** (a form of CHIPS) 5. UNICEF supported the procurement and distribution of Micronutrient Powder (MNP). 6. UNICEF supported the training of the Federal and State Health worker on home fortification using MNP			
Integrated medical outreach services (3 rounds) • **Integrated Management of Acute Malnutrition**	6-59months			
Adolescent nutrition strategy pilot Anaemia Reduction by Iron folic supplementation in Schools Community e.g., ARISING PROJECT	Adolescents Girls in Schools and Community	Delta and Katsina As pilot states	UNICEF	
Community-based management of acute malnutrition (CMAM)	U5, caregivers, pregnant and lactating mothers	18 States (Anambra, Imo, Ebonyi, Enugu, Delta, Bayelsa, Edo, Ondo, Lagos, Sokoto Kebbi Bauchi, Zamfara ,Osun, Ogun , Jigawa, Adamawa , FCT Abuja	UNICEF/FMOH, WORLD BANK	

Food Fortification. **Home fortification using Micronutrient Powder (MNP)**	General Populace Women , Children under 5, school age children , adolescents , elderly. 6-59 months in the reviewed MNDC Guideline awaiting validation.	All CMAM States as above	UNICEF/FMOH	
Bio fortification **Training farmers on producing bio fortified crops and sensitization of health workers on the benefits of bio fortification**	Small scale farmers at the grassroots and Health workers	36 states	FMOH, NAFDAC, SON, FOOD MANUFACTURERS. HARVEST PLUS, CSSUNN	
Vitamin A supplementation **Through the Maternal Newborn and Child Health (MNCH) Week.**	6-59months	36 States plus FCT	UNICEF, NI, FMOH, NPHCDA	
Infant and Young Child Feeding (IYCF) • **Exclusive Breast Feeding)** • **Adequate Complementary Feeding**	0-59 months 0-6 months 6-59 months	36 States plus FCT	UNICEF, ACF, SCI, AISHA FOUNDATION, WORLD BANK, BREATHROUGH ACTION	
Blanket Supplementary Feeding (BSF) in Emergency situations	Pregnant and Lactating Women / children 6-59 months	Zamfara, Borno, Yobe, Adamawa	World Food Program	
Targeted supplementary feeding (TSF) in Emergency situation	6-59 months	Zamfara, Borno, Yobe, Adamawa	World Food Program	
School feeding program	6-9yrs	All states except Bayelsa, Edo, Kogi, and Lagos	Federal Government of Nigeria	
Deworming	12-59months / School Age Children	36 States	FMOH, NPHCDA, UNICEF,	
Community Health Influencers, Promoters and Services (CHIPS) • **Training on basic health and nutrition services i.e. IYCF, SBCC, EBF, BSF** • **CHIPs activities during MNCH week**	Community Nutrition Mobilizers U5 children, adolescents pregnant and lactating mothers	36 States	The FMOH, National Primary Health Care Development Agency, State Ministries of Health and Education and their agencies, UNICEF, WHO	
Accelerating Nutrition in Nutrition (ANRiN)	Caregiver of children 0-59 months, Adolescents, breastfeeding and lactating mothers	Abia, Akwa Ibom, Gombe, Kaduna, Kano, Kogi, Kwara, Nasarawa, Niger, Oyo and Plateau States	National Primary Health Care Development Agency (NPHCDA), FMoH,, SMoH, World Bank	YES FROM FMOH, NPHCDA, WORLDBANK
1. **Diet diversity in Kano state (2019)** 2. **School age children nutrition in Katsina and Delta (2019)** 3. **No water campaign (2019) - caregivers trained to educate mothers on the completeness of the breast milk** 4. **IYCF counselling**	Adolescents/Mothers/Children	Kano State	SWEDEN /UNICEF	YES

		36 states plus FCT	UNICEF, ACF, SCI	YES.

B. UNICEF activities aligned with the treatment of stunting

	1. UNICEF supported the government to integrate RUTF procurement into the procurement of other health supplies for childhood illnesses **2. UNICEF supported the scale-up of community-based treatment of severe acute malnutrition (SAM) in outpatient sites in 44 Local Government Areas in Borno, Adamawa and Yobe** **3. UNICEF supported training of health workers** **4. UNICEF-supported advocacy resulted in the inclusion of nutrition commodities in the Essential Medicine Lists (2018) and the inclusion of nutrition intervention in the Universal Health Care Coverage's package and the** **5. UNICEF supported data analytic at national and sub national levels towards building capacities on evidence-based planning and monitoring, using score cards and trend analysis across different time periods and sources of data towards an improved understanding of bottlenecks and priorities in 23 states** **6. In Borno State, UNICEF supported Measles Outbreak Response (OBR) ensuring 437,515 children aged 6 months - 9 years and 800,666 children aged 6 months - 6 years were protected against Measles.**			
Train health workers on inpatient/outpatient management of SAM; on Rapid Pro Reporting; Maternal, Infant and Young Child Feeding (MIYCF) promotion and counseling	Children 6-59 months Activities of the health workers	Kebbi, Sokoto Zamfara. Borno, Yobe , Adamawa Kano Kaduna . Bayelsa	UNICEF, IRC, ACF, SCI ,ICRC, WHO (capacity strengthening)	
Training for government health workers and nutrition partners on nutrition in emergencies IYCF in Emergencies	Nutrition officers , Internally displaced people	Federal and 3 States. Borno , Delta and Bayelsa	UNICEF, WHO	
Strategy 4: Engage with all relevant ministries and stakeholders to benefit from a nutrition sensitive contribution				
	1. UNICEF supported the quarterly meeting of multisectoral committees on food and nutrition			
Quarterly meeting of the National Committee on Food and Nutrition **Reviving States Committee on Food and Nutrition**	Multisectoral partners (MDAs and Partners Multisectoral Partners		CSSUNN, MBNP, CSSUNN, UNICEF	
Strategy 5: Communication for Development (C4D), evidence-based to eliminate water in the diets of infants under 6 months and improve dietary diversity for children aged 6-23 months				
	1. UNICEF supported the production of a movie in collaboration with Nollywood to improve feeding practices 2. UNICEF supported over 19000 Volunteer Community Mobilizers (VCM) network implemented a variety of communication/social mobilization activities in 12 high-risk states 3. UNICEF contributes to all four KRC#2 outcome areas, Health, Nutrition, HIV&AIDS; Learning and skills development; Water, sanitation, and hygiene; and protection.			

Social behavioral change communication (SBCC)	Policy Makers at all levels, Federal, State Local Government	All States	UNICEF/FMOH	
Social Behavioural Change Communication	Family/Peers (Caregivers, Social Networks)		UNICEF, CSSUNN, SCI	
Community Engagement	CBOs, Community leaders, Women Groups, Youth Groups. Religious leaders especially during the MNCH week	ALL STATES	CSSUNN	
Social Mobilization		ALL STATES MNCH WEEK	CSSUNN, UNICEF	
Movie production to improve feeding practices	Pregnant and lactating mothers, adolescents	DELTA , KATSINA	Nollywood; Federal and State Government, Save the Children International, Alive and Thrive and Action Against Hunger	
Strategy 6: Innovation **Technologies for Development (T4D) provide real-time data, both on the supply and demand side (decentralized monitoring)**				
Improve data quality in the North west region	Government and implementing partners staff	NORTH WEST STATES	UNICEF WORLD BANK	
Growth Monitoring	6-59 months	All States	NPHCDA UNICEF ,WHO	YES

Annex 4: **Data collection instruments (such as survey questionnaires or interview guides):**

In-depth interview guide – National Nutrition Actors

Example of respondents: Members of the multisector committee for nutrition, nutrition focal points of various ministries or national networks/ platforms for nutrition, multilateral and bilateral stakeholders, representatives of national (or semi-national) operating NGOs and private institutions involved in prevention of stunting.

List of possible National Nutrition Actors

- Representatives (focal points) of different member ministries of the multisectoral nutrition committee
- Multilateral and bilateral organizations (e.g WB, FAO, WFP, WHO, bilaterals)
- National (or subnational/ state) NGO involved in nutrition programmes (eg FHI 360)
- Private (for profit) institutions

Introduction:

- Introduce yourself and explain the purpose of the interview
- Hand over the informed consent form and answer any questions raised by the respondent
- If the respond signs the form proceed to the questions, otherwise thank the respondent for his/her time and say goodbye.

Questions:

- What prevention of stunting activities/programmes are you (or your department/ organization) currently involved in? How has your involvement evolved/changed?
  1. **Relevant to:** all

What can you tell about the technical assistance of UNICEF in relation to the stunting prevention? **Probes** (Provide reminder prompts about the KRC#2 strategies i.e., promoting (1.) use of data for planning, implementation, knowledge generation, and advocacy, (2.) improving governance, accountability and political leadership, (3.) break with previous vertical approaches, (4.) engaging with all relevant ministries and stakeholders, (5.) communication strategies for exclusive breast feeding and dietary diversity for children 6-23 month, and (6.) innovation for real time data collection.

- What is your role and responsibility in delivering stunting prevention programmes/activities currently?
- Can you explain your role and the role of your department in the national multisector nutrition plan?
- Can you explain changes in your role and responsibilities that have occurred in the last 5 years

- How was the development of the national (multisectoral) nutrition plan organized?

Relevant to: representatives (focal points) of different member ministries of the multisectoral nutrition committee; multilateral and bilateral organizations (e.g., WB, FAO, WFP, WHO, bilaterals) involved in national nutrition programming**Probes**

1. Who were the actors involved (e.g., ministries, CSO, community leaders, NGOs, private institutions, expected beneficiaries)? At which stage?
2. What was their role? How did they contribute?
3. In your opinion, how satisfactory was the process in taking into account the voiced needs and experiences of communities? In which way (examples)?
4. How did this plan take into account a multisectoral perspective?

- What protocols/guidelines were used, if any, to develop evidence based stunting prevention strategies and interventions?
    1. **Relevant to**: representatives (focal points) of different member ministries of the multisectoral nutrition committee; multilateral and bilateral organizations (e.g., WB, FAO, WFP, WHO, bilaterals) involved in national nutrition programming

Probes

2. Which guides/protocols did you use (e.g. UNICEF, WHO, FAO etc.)?
3. Is the guide: "REDUCING STUNTING IN CHILDREN: Equity considerations for achieving the Global Nutrition Targets 2025 WHO 2018 known to you? How did it inform the planning and implementation of strategies and interventions?
4. Any regional/ other international strategic documents/standards?

- Was a causal analysis on chronic undernutrition with children under 2 years (resulting in stunting) performed before the strategic national (multisector?) plan was developed?

Relevant to: representatives (focal points) of different member ministries of the multisectoral nutrition committee; multilateral and bilateral organizations (e.g., WB, FAO, WFP, WHO, bi-laterals) involved in national nutrition programming

Probes

1. If no, what types of analyses were undertaken? (If the respondent says that no analysis was performed, ask why)
2. Which information sources (and databases) were used for this causal analysis?
3. Which actors were involved in making this analysis (e.g., ministries, CSO, community leaders, NGOs, private institutions)
4. How were the most vulnerable groups identified? And which groups are they?

- What do you know about the technical assistance UNICEF provides in relation to prevention of stunting? Do you know about their prevention of stunting strategies, known as KRC#2? Can you tell us more?
    1. **Relevant to:** all except UNICEF stakeholders
- For the interventions to prevent stunting you are involved in, what is the main objective of the intervention and how is the progress made so far?

Probes

1. Which strategic partnerships are available to improve the effectiveness and efficiency of the intervention?
2. Which strategic partnerships have been developed recently?
3. How are these interventions visible in the national strategic nutrition plan?
4. How likely is it that the programme will be implemented according to plan? Opportunities, challenges? (Probe further: mentioned as a priority program? Is the program costed? From which budget line is the program financed?

- Can you tell us, how communities are involved in (and please give examples): the development and planning of stunting prevention programs? The implementation of stunting prevention programs?

Relevant to: all

Probes

1. How were they consulted?
2. How were their needs integrated into planning and implementation?
3. If applicable, how do communities participate in the planning and communication (ie community engagement, SBC activities)

- How did the stunting prevention programs/interventions take into account the specific needs of men? Of women? Other groups such as young parents, vulnerable groups?

Relevant to: all

Probes

1. What are the facilitating mechanisms to guarantee equal access and what are the barriers? What measures are taken to strengthen the facilitating mechanisms and to diminish the barriers?

2. How effective was the approach taken to address the identified barriers with regards to geographical, cultural, political and economic determinants? Please give examples

- What approaches were taken to ensure that the interventions/programs remained relevant to the changing needs of identified groups in the targeted communities? Examples?

- What specific activities and interventions are being implemented at your level/in your organisation in relation to: i) multisectoral approaches? I) strengthening partnerships and synergies between/at the local /national/international level? Iii) mobilising more resources for stunting prevention? iv) piloting new and high impact initiatives?

Relevant to: all

- What are the successes of the strategies you have implemented at national level for stunting prevention?

• Relevant to: representatives (focal points) of different member ministries of the multisectoral nutrition committee

- What type of support do you receive from UNICEF with regards to the stunting prevention programs you are involved in?
  1. **Relevant to:** all except UNICEF stakeholders

Probes

2. How is this support organized? Formally (e.g., through a partnership) or informally?
3. What kind of support for development/implementation of stunting prevention programs from UNICEF?
4. Probe for: technical support? Financial support? Capacity building support? Did you receive supplies (eg. Vit A, weighing scales, means of transport, iodine testers, micronutrient powders etc.)?

- How did this support led to changes in the prevention of stunting programs you have been involved with in the past 2 years (to account for the period when KRC#2 should have been promoted)?
  1. **Relevant to:** all except UNICEF stakeholders

Probes

2. Can ask the respondent to describe:

- Approaches (e.g., combining VitA / deworming with measles vaccination initiation of moving forward campaigns, starting community-based growth monitoring)
- Strategic partnerships
- Synergies between programs and funds
- New initiatives
- Strengthened resources

- What are strong points in the support of UNICEF and of the existing WCA regional collaboration/platform to strengthen stunting prevention programs? What can be improved?
  1. **Relevant to:** all except UNICEF stakeholders

- How are the implementation and the results of programmes related to stunting prevention monitored and documented?
  1. **Relevant to:** representatives (focal points) of different member ministries of the multisectoral nutrition committee; multilateral and bilateral organizations (e.g., WB, FAO, WFP, WHO, bi-laterals) involved in national nutrition programming

Probes

2. Can we see any documentation?
3. Does the national (multisector) nutrition plan includes a common result framework -including indicators- for all sectors involved?
4. Which databases are used for VitA/IFA distribution program, for the multisector prevention of stunting programs and the C4D, to eliminate water in the diets of infants under 6 months and improve dietary diversity for children aged 6-23 months?
5. Which indicators are used to monitor processes and results of stunting prevention interventions? Are these the same or different from national nutrition indicators?
6. Are there specific indicators for the most vulnerable target groups?
7. Are indicators added to measure the impact of COVID-19 or other major environmental changes on the programs?
8. Who are involved in M&E of the various programmes (stakeholders at all levels, including beneficiaries)?
9. What are the main difficulties and challenges? Successes?

- How is data used to inform the implementation of the KCR and national programmes, and how has it helped (or not) to achieve programme results
  Relevant to: representatives (focal points) of different member ministries of the multisectoral nutrition committee

Probes

1. Why, examples? (eg. highly visible commitment of political leaders, improved accountability, strategic partnerships for efficiency, effectiveness and making funds available, inclusion of nutrition commodities is Essential Medicine List etc.)
2. What was not successful and why, give examples?

- What challenges were faced during the development and implementation of the strategies for stunting prevention?
  1. **Relevant to:** representatives (focal points) of different member ministries of the multisectoral nutrition committee

Probes

2. Problems due to the design of the program (including adaptation to cultural environment)
3. Problems due to changes in the environment (e.g., COVID-19, conflict, drought)
4. How were these problems treated? (e.g., extra support from UNICEF)

- How is the governance of the national nutrition program (in relation to the nutrition national plan?) organized in the country?
  1. **Relevant to:** representatives (focal points) of different member ministries of the multisectoral nutrition committee

Probes

2. Is there a multisector committee or taskforce for nutrition/ prevention of stunting?
3. Who is the chair of the multisector committee/ taskforce? (eg. MOH, Office of the prime minister etc.)
4. What is UNCEF role in supporting the governance mechanisms?
5. Which organisations and ministerial departments are members of this committee?
6. What is the main role of the committee/taskforce?
7. How effective has it been in influencing the stunting prevention agenda at the national level, at the sub-national level, taking into account as well the community nutrition needs??
8. What were the successes and challenges? Give some example

- In your experience, how well are the different actors in these stunting prevention strategies organized?
  1. **Relevant to:** representatives (focal points) of different member ministries of the multisectoral nutrition committee

Probes

2. How are synergies and complementarities identified? Give some examples
3. What are the challenges and successes?
4. How does UNICEF CO support this type of coordination? How is it working?

- Have other national programs affected stunting prevention strategies (whether positively or negatively)?
  1. **Relevant to:** representatives (focal points) of different member ministries of the multisectoral nutrition committee

Probes

2. Which ones (e.g., World Bank, AAH)? How? And why?
3. How were these challenges addressed?

- Do you think that some stunting prevention programs can benefit by being implemented along (or being integrated in) other sectoral programs? Please provide examples
  1. **Relevant to:** all

Probes

2. Based on the above, are systems in place to facilitate required adaptations to the stunting prevention strategies when necessary? Please give examples
3. In case integration is already happening: how effective is the integration so far? Give examples.
4. In case integration is already happening: what stunting prevention programs could be further integrated and how? Give examples.

- What lessons were learned during planning and implementing of the national stunting prevention strategies and interventions?
    1. **Relevant to:** representatives (focal points) of different member ministries of the multisectoral nutrition committee
- How are lessons learned documented and shared in the different nutrition forums that exist at national, regional and local level? (Please identify which ones)
    1. **Relevant to**: all

Probes

2. For example, the regional platform on nutrition? (RO UNICEF?)?
3. National committees
4. Intersectoral forums etc...

- As part of your role in implementing stunting prevention programmes, what type of capacity building initiatives have you received?

Relevant to: all

Probes

- Were these delivered through the national nutrition program? at national, decentralized or community level?
- How did this help? please give examples
- Were they any needs that were not covered?

- How are resources mobilized and made available for the implementation of national stunting prevention strategies?
    1. **Relevant to**: representatives (focal points) of different member ministries of the multisectoral nutrition committee; multilateral and bilateral organizations (e.g., WB, FAO, WFP, WHO, bi-laterals) involved in national nutrition programming

Probes

2. Contribution of government budget
3. Contribution from multilateral and bilateral donors
4. Contribution from Foundations etc.
5. What is done in the last five years to attract new donors for prevention of stunting? Which successes are made in new funders? Which barriers are experienced?
6. How far is funding secured for prevention of stunting for the coming 10 years?

- What is your opinion on the existing capacity at national level to continue the prevention of stunting activities for the long term, with less support from UNICEF?

Relevant to: all

Probes

1. What is needed to ensure continuation of prevention of stunting programmes in the next 10 years?
2. What are the key measures or targeted actions to put in place in order to ensure sufficient contribution from the partners and the government at national level?

Closure:

- Ask the respondent if he/she has any remaining comments or questions
- Thank the respondent for his/her time and participation in the study

In-depth interview guide – Sub-National/ State/Region Nutrition Actors (the area where a certain KCR#2 strategy is implemented)

List of possible Sub-National Nutrition Actors

- Representatives (focal points) of different member ministries of the regional multisectoral nutrition committee
- Regional representatives of national regional operating networks (e.g., SUN, REACH)
- Multilateral and bilateral organizations active in this region (e.g., WB, FAO, WFP, WHO, bi-laterals)
- Regional/subnational NGO involved in nutrition programmes (e.g., FHI 360)
- Private (for profit) institutions active in the region

Introduction:

- Introduce yourself and explain the purpose of the interview
- Hand over the informed consent form and answer any questions raised by the respondent
- If the respond signs the form proceed to the questions, otherwise thank the respondent for his/her time and say goodbye.

Questions:

- What prevention of stunting activities are you currently involved? Is that different from the past?
  1. **Relevant to:** all

Probes

2. Do you know about the prevention of stunting strategies (known as KRC#2) currently promoted by UNICEF?

- What is your role and responsibility in stunting prevention interventions currently?
  1. **Relevant to:** all

Probes

2. Explain your role and of your department in the national multisector nutrition plan
3. Explain changes on your role and responsibilities occurred in the last 5 years

- Who from the region/state was involved in development of the national (multisector?) nutrition plan.
  1. **Relevant to:** all

Probes

2. e.g., ministries, CSO, community leaders, NGOs, private institutions
3. What was the role of these regional actors?
4. Can you tell something about the involvement in the development of the multisector plan at more decentralized level (district/ ward/ community)?

- Was there a regional causal analysis on chronic undernutrition with children under 2 years (resulting in stunting) performed before the strategic national (multisector?) plan was developed?
  1. **Relevant to:** representatives (focal points) of different member ministries of the regional multisectoral nutrition committee

Probes

2. Which information sources (and data bases) were used by making this causal analysis?
3. Which actors were involved by making this analysis (Probe: ministries, CSO, community leaders, NGOs, private institutions)
4. How were the most vulnerable groups for stunting identified in this analysis? And which groups are that?

- What type of support do you receive from UNICEF with regards to the stunting prevention programs you are involved in?
  1. **Relevant to:** all except UNICEF stakeholders

Probes

2. How is this support organized? Formally (i.e., partnership) or informally?
3. Did the state/region get any support for development/implementation of preventive of stunting programs from CO UNICEF. For example: technical support; financial support; capacity building support; did you receive supplies (eg Vit A, weighing scales, means of transport, iodine testers, micronutrient powders etc.)?

- How did this support led to changes in the prevention of stunting programs you have been involved with in the past 2 years (to account for the period when KRC#2 should have been promoted)?
  1. **Relevant to:** all except UNICEF stakeholders

Probes

- Can ask the respondent to describe:
  1. Approaches (e.g. combining VitA / deworming with measles vaccination initiation of moving forward campaigns, starting community-based growth monitoring)
  2. Strategic partnerships
  3. Synergies between programs and funds
  4. New initiatives
  5. Strengthened resources

- What are strong points in the support of UNICEF CO to strengthen stunting prevention programs? What can be improved?
  1. **Relevant to**: all except UNICEF stakeholders

- How are the implementation and the results of programmes related to stunting prevention monitored and documented?
  1. **Relevant to:** representatives (focal points) of different member ministries of the regional multisectoral nutrition committee; regional representatives of national regional operating networks (e.g. SUN, REACH); multilateral and bilateral organizations active in this region (e.g. WB, FAO, WFP, WHO, bi-laterals)

Probes

2. Does the region use a common result framework -inclusive indicators- for all sectors involved?
3. To what extent does the M&E and result framework for the KRC#2 strategy measure all relevant strategies implemented at the state/regional level and how could this be improved?
4. Which data bases are used at the region for VitA/IFA distribution program, for the multisector prevention of stunting programs and the C4D, to eliminate water in the diets of infants under 6 months and improve dietary diversity for children aged 6-23 months?
5. Which indicators are used at the region to monitor processes and results of KCR#2, strategy and interventions?
6. Are there specific indicators for the most vulnerable target groups? Who has defined those most vulnerable target groups? Probe: national level/ regional level etc)
7. Are indicators added to measure the impact of COVID-19 or other major environmental changes on the programs?
8. Who are involved in M&E of the various strategies/interventions (stakeholders at all levels, including beneficiaries)

- How is data used to inform the implementation of the KCR and regional programmes, and how has it helped (or not) to achieve programme results
- For the prevention of stunting interventions and strategies the state/region is involved in, what is the main objective of the intervention and how is the progress made so far?

1. **Relevant to:** representatives (focal points) of different member ministries of the regional multisectoral nutrition committee; multilateral and bilateral organizations active in this region (e.g., WB, FAO, WFP, WHO, bi-laterals)

Probes

2. Which strategic partnerships are available at the state/region to improve the effectiveness and efficiency of the program
3. Which strategic partnerships in the state/region are developed recently?
4. Are state/regional nutrition programmes costed? From which budget line is the program financed?

- What are successes of the prevention of stunting interventions in the state/region?
  1. **Relevant to:** all

Probes

2. Why? Can you give examples? (e.g., highly visible commitment of political leaders, improved accountability, strategic partnerships for efficiency, effectiveness and making funds available, etc.)
3. What was not successful and why? Please give examples.

- What problems were faced during the development and implementation in the state/region of the prevention of stunting strategies?
  1. **Relevant to:** representatives (focal points) of different member ministries of the regional multisectoral nutrition committee; multilateral and bilateral organizations active in this region (e.g., WB, FAO, WFP, WHO, bi-laterals)

Probes

2. Problems due to the design of the program (including adaptation to cultural environment)
3. Problems due to changes in the environment (e.g., COVID-19, conflict, drought)
4. How were these problems addressed? (e.g., extra support from UNICEF)

- How flexible is the prevention for stunting programme in the region towards challenges in intervention implementation and in the environment changes?
  1. **Relevant to:** representatives (focal points) of different member ministries of the regional multisectoral nutrition committee; multilateral and bilateral organizations active in this region (e.g., WB, FAO, WFP, WHO, bi-laterals)

- How is the governance of the subnational/regional nutrition program organized?
  1. **Relevant to:** all

Probes

2. Is there a subnational/ regional multisector committee or taskforce for nutrition/ prevention of stunting?
3. Which departments are members of this committee?
4. Are there focal points from each department appointed to have a seat in the multisector nutrition committee
5. Who is the chair of the multisector committee/ taskforce? (eg MOH, Office of the prime minister etc.)
6. How does the multisector committee functions?

- How is the coordination between different actors the prevention for stunting programme organized?
  1. **Relevant to:** all

Probes

2. Who, in this region, takes the lead in this coordination?
3. What is UNICEFs' CO role in this coordination?

- Have other subnational programs positively or negatively affected the prevention of stunting (KRC strategies or interventions?
    1. **Relevant to:** all

Probes

2. How? And why? How as it addressed?

- Do you think that some stunting prevention programs can benefit by being implemented along (or being integrated in) other sectoral programs in the region? Please provide examples
    1. **Relevant to:** all

- What lessons has the region learned during planning and implementing prevention for stunting strategies and interventions?
    1. **Relevant to:** all

- How are lessons learned documented and shared in the different nutrition forums that exist at local, regional and national level? (Please identify which ones)
    1. **Relevant to:** all

Probes

3. For example, the regional platform on nutrition? (RO UNICEF?)?
4. Local committees
5. Inter-sectoral forums etc.

- As part of your role in implementing stunting prevention programmes, what type of capacity building initiatives have you received?
    1. **Relevant to**: all

Probes

- Were these delivered through the national nutrition program? at national, decentralized or community level?
- How did this help? please give examples
- Were they any needs that were not covered?

- How are resources mobilised and made available for the implementation of stunting prevention strategies and interventions at the sub-national level?
    1. **Relevant to**: all

Probes

2. Contribution of government budget
3. Contribution from multilateral and bilateral donors
4. Contribution from Foundations etc.
5. What is done in the last five years to attract new donors for prevention of stunting in the region? Which successes are made in new funders? Which barriers are experienced?
6. In how far is funding secured for prevention of stunting for the coming 10 years?

- What is your opinion on the existing capacity currently at subnational level to continue the prevention of stunting activities for the long term, with less support from UNICEF?
    1. **Relevant to:** all

Probes

2. What is needed to assure continuation of prevention of stunting programmes in the region in the next 10 years?

- What approaches were taken to ensure that the interventions/programs remained relevant to the changing needs of identified groups in the targeted communities? Examples
- How did the stunting prevention programs/interventions take into account the specific needs of men? Of women? Other groups such as young parents, vulnerable groups?

1. **Relevant to:** all

Probes

2. What are the facilitating mechanisms to guarantee equal access and what are the barriers? What measures are taken to strengthen the facilitating mechanisms and what to diminish the barriers?
3. How effective was the approach taken to address the identified barriers with regards to geographical, cultural, political and economic determinants? Please give examples

- How is equity and equality assured in the prevention of stunting strategies and interventions? Are the approaches taken to assure equity in access and utilization successful? What are the barriers?
    1. **Relevant to:** representatives (focal points) of different member ministries of the regional multisectoral nutrition committee; multilateral and bilateral organizations active in this region (e.g., WB, FAO, WFP, WHO, bi-laterals)

Probes

2. Do all population groups have access to the prevention for stunting interventions with regard to geographical, cultural, political and economic determinants? What are the facilitating mechanisms to guarantee equal access and what are the barriers? What measures are taken to strengthen the facilitating mechanisms and what to diminish the barriers?
3. Are all population groups consulted and involved in feedback on the programs, including the most vulnerable populations?

Closure:

- Ask the respondent if he/she has any remaining comments or questions
- Thank the respondent for his/her time and participation in the study

Round Table topic guide – professional health and nutrition workers from various departments

Example of respondents:

- Health workers (nurses, Clinical Officer, Nurse midwives etc.) working at a health facility from the government, form and NGO or private for-profit health facility in an implementation area of the KRC#2 programme
- Agriculture extension workers, WASH extension workers and other "professionals for stunting" working for the government, for and NGO or private for profit organization in an implementation area of the KRC#2 programme

Introduction:

- Introduce yourself and explain the purpose of the interview
- Hand over the informed consent form and answer any questions raised by the respondent
- If the respond signs the form proceed to the questions, otherwise thank the respondent for his/her time and say goodbye.

Questions:

- What prevention of stunting activities are you currently involved? Is that different from the past?

- What is your role and responsibility in stunting prevention programmes/ activities currently?
  1. Explain your own role and the role of health facility/ office/organization your work
  2. Explain changes on your role and responsibilities occurred in the last 5 years

- Do you know what stunting prevalence in your catchment area is? How has this changed over the years?

- How are you connected to the development of the national multisector nutrition plan? How were you involved?
  (Probe: national workshops, surveys, consulted by a team that explored programme options etc.).

- What do you know of the content of the national multisector nutrition plan. What do you like in it, what do you think is challenging.

- How is there multisector cooperation organized in your catchment area/ ward? (Probe: local multisector committee, informal meetings, through district /LGA level meetings etc.)

- Can you tell me about the nutrition interventions you are involved in? What are the successes and challenges in these interventions you face in your daily work? Can you provide examples for various nutrition specific interventions?
  1. Prevention of iron deficiency anemia in pregnant women and adolescent girls (aged 10 to 19);
  2. Prevention of iodine deficiency;
  3. Promotion and protection of early and EBF for the first six months and continuation of breastfeeding for up to 24 months or more;
  4. Improving complementary feeding practices by providing age-specific education and counseling on Appropriate Infant and Young Child Feeding (IYCF), with an emphasis on promoting dietary diversification and maximizing the use of locally produced foods;
  5. Vitamin A supplementation for children 6 to 59 months
  6. Zinc supplementation for children 12 and 59 months
  7. Prevention and management of acute malnutrition in children under 5
  8. Interactive feeding and cognitive stimulation

- Can you specify this as well for various nutrition sensitive interventions?

Probes

- Food security
- Food security at household level
- Access to safe water
- Access to toilet facilities
- Social safety nets
- Education
- Agriculture! (?)

- How are you supported to implement the stunting prevention interventions and from whom?

Probes

- Technical support (e.g. manuals and guidelines, training (supportive) supervision
- Material support (supplies, financing for community visits etc.)
- How helpful was this support implement the stunting prevention interventions? What can be improved?

- Can you talk about how men and women/boys and girls are involved in the stunting prevention interventions? How do they participate, who is learning or benefiting most of the interventions? Are they any groups who are not accessing stunting prevention services? Why?

- Can you describe how the various population groups in your catchment area are involved in the programme? Who is learning or benefitting most of the interventions? How are the most vulnerable groups (poverty, adolescent mothers and their children, orphans, PLHIV) assisted to access the nutrition interventions?

- Is there a way/forum where you can express your opinion about how the implementation of activities can be improved? (Probe: give examples of adaptations that have been made to ensure that services reach everyone.

- What are your partners/partner organizations for implementation nutrition interventions? (Probe: NGOs, religious organizations, CSOs, donors, etc.)

- What are your partners/partner organizations for financing nutrition interventions? (Probe: NGOs, religious organizations, CSOs, donors, etc.)

- How are stunting data recorded in your catchment area? (Probe: in paper registers? Child Growth Card? Added to routine information system (HMIS or DHIS2) or separately reported? specific per age group and gender?

- You have described some of the challenges and successes you experience working on prevention of stunting. Do you have suggestions for how your work related to prevention of stunting can be improved?

Closure:

- Ask the respondent if he/she has any remaining comments or questions
- Thank the respondent for his/her time and participation in the study

Round table topic guide

Community health/nutrition volunteers
(Including those occupying with WASH or agriculture)

Example of respondents: community leaders, Community Health Workers/ Volunteers, TBA, Leads of Mother Support Groups/ CHIPS etc.

Introduction:

- Introduce yourself and explain the purpose of the interview
- Hand over the informed consent form and answer any questions raised by the respondent
- If the respond signs the form proceed to the questions, otherwise thank the respondent for his/her time and say goodbye.

Questions:

- Are there any activities for nutrition targeted at pregnant women, young children and adolescents going on in your community now, and in the past? If so, what do these look like?
- Are there specific activities related to prevention of stunting? If so, what are these?
- How are you involved in nutrition activities for pregnant/ lactating mothers and children? Can you describe some of your activities (e.g., weekly/ monthly meetings with beneficiaries, weighing of children, distribution of commodities (e.g. micronutrient powder, Vit A distribution, WASH, Social Behavior Change etc.)
- Is your opinion/input sometimes sought about what activities/services to provide before any of the nutrition activities are started in your community or whether there's a need to change something during intervention? (This is to get how much the community is involved in the design and adaptation of interventions)
- What kind of support do you receive for your contribution to these nutrition activities? Who provides this support?
  What kind of support did you receive?

  Probes
  - Manuals to understand the work?
  - Financial support?
  - Materials for yourself (bikes, t shirts, rain clothes etc.)
  - Materials to distribute to the community
  - Transport?
  - Supervision support? Who supervises you? How often?
  - Training support?
  - Other?

- Who are coming for the nutrition activities?

  Probes
  - women/children/adolescents from certain communities, religion, ethnic groups, vulnerable children (orphans, HIV infected)?

- Which women and children are not coming? From which groups?

Probes

- What in your opinion are reasons why they are not coming to receive these services (Probe: cultural, social, economic barriers?

- Do boys and girls children turn up for nutrition activities in the same way or is there a gender differences in attendance?
- Who of the caregivers show up for the nutrition activities? (mothers, fathers, others?)
- How are men attracted to participate in activities about nutrition of their wives and children? What are the challenges to get them involved?
- What motivates you to do this work?
- Is the community motivated to participate in nutrition activities? What motivates them? Do you have examples?
- What do you need to improve the quality of you activities/services for nutrition (knowledge, skills, resources, technical support)?

Closure:

- Ask the respondent if he/she has any remaining comments or questions
- Thank the respondent for his/her time and participation in the study

Focus groups discussion guide – Male and female caretakers

Separate focus group discussions for:

- Male caretakers
- Female caretakers

Background Characteristics: Name, age of participants, occupation, number of children, age range of children/geographical area (village/ ward etc.),

Introduction:

- Introduce yourself and explain the purpose of the focus group discussion and the ground rules
- Ask for oral informed consent and answer any questions raised by the respondent
- If any of the respondents do not want to participate, thank the respondent for his/her time and say goodbye. Thereafter proceed to the questions.
- Count the number of participants and note this down.

Questions:

- What can you tell us about nutrition for mothers, pregnant women and children in your community?

Probes

- Availability, feeding practices, challenges

- Are there nutrition activities or services for pregnant/lactating mothers, children under 2 years and adolescents going on in your community at the moment?
- How are your opinions considered about what services you prefer either before or during the implementation of nutrition intervention?

Probes

- Please can you describe this?
- How did it look like?
- Who was involved?

- Can you explain how these nutrition services/activities assist you? and how the services/activities do not assist you?

- Have you attended these activities and accessed these services? If yes, how often and where (e.g. community volunteer, health facility, somewhere else)

Probes

1. What did you like about them? Any unintended positive effects?
2. Did attending to these activities changed anything for you?
3. What did you not like about the nutrition activities/ services? Any unintended negative effects?

4. Are there other nutrition services that you would like to receive that you're currently not receiving? Please list them. (This is to capture if interventions are sensitive to the needs of beneficiaries)

- Do many caretakers and children attend nutrition activities? (Probe: Coverage in your community?)
- Who does not attend the nutrition activities (Probe: Children from certain communities, religion, ethnic groups, far distance, orphans?)? Why, in your opinion?
- What is done to reach all men, women and children in this village/ward for nutrition activities?? Did this work? If not, what should be done?
- Are men regularly involved in nutrition activities? How do men receive information about nutrition for mothers and children? How do women receive information about nutrition for mothers and children?
- If for some external reasons you can't control (e.g. flood, COVID-19), you are not able to attend the activities, was any effort made or any changes made to reach you with the services?
- Do parents bring both boys and girls to benefit from the nutrition activities? Are they brought both for e.g. growth monitoring and for nutritional supplies when needed?
- How is food divided in the household?

Probes

- Between men, women, boys, girls?
- How does age change this?
- Why is it divided this way?

- Are there any other things that you would like to share on nutrition in your household/village?

Closure:

- Ask the participants if they have any remaining comments or questions
- Thank the participants for their time and participation in the study

Annex 5: NHREC Approval

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Annex 6: Evaluation Team Profile

Chinedu Edward Onyezobi: Evaluation Consultant

Chinedu Onyezobi currently works as a Monitoring, Evaluation and Research specialist with Society for Family Health in Nigeria, Ghana, Sierra Leone and Liberia. He provides oversight function for all research carried by Society for Family Health e.g. Consumer Market for Family Planning (CM4FP), CIFF-DMPA-SC Scale Up Project, Delivering Innovation in Selfcare (DISC), "Stamp Out Trafficking in Nigeria" etc.

Chinedu started his research career in 2011 and has gathered wealth of experience both in qualitative and quantitative studies in his 9 years of experience. Over the period of his research experience, he has managed research consultancies for development partners such as DFID, World Bank, Lagos State Government, Princeton Research Survey Associates International, Social Impact, Research Triangle International (RTI), John Hopkins University (JHU), HC3, Osun state Government among others. His work experience has mainly involved business development, project management and coordination, formulation of project framework and design.

He has an extensive ability to use statistical packages (SPSS, STATA, MINITAB among others) to solve complex statistical problems and well vast in setting up Computer Aided Personal Interview (CAPI) on flexible data collection tools such as SurveyCTO and Survey Solutions which are specially designed. He has extensive experience in designing Monitoring and Evaluation Framework. A champion in Technology Enable Research (TER) mobile with vast experience in management of SMS surveys.

Bukola George: Qualitative Consultant (National and Enugu State)

Bukola George is a qualitative consultant with over 20 years of demonstrable experience in field and research coordination. She has successfully led various research projects across fifteen (15) states in Nigeria for various international and local non-governmental organizations. She has worked with different categories of audience such as adolescents, youths, adolescents, youth, health professionals, media practitioners, community leaders, OVC, MARPs and women in ensuring behavioral change in Reproductive, Maternal, Child, Adolescent Health, and Development issues.

Bukola has a master's degree in Sociology and current running her PH. D in Sociology at University of Lagos. She has gathered wealth of experiences, haven worked as consultants with highly and reputable developmental agencies such as UNFPA, APIN, SFH and Lagos State Government. She has extensive experience in using qualitative software such as Atlas ti and NViVo to analyze transcript, to generate insights.

Bukola George moderated the focus group discussions with beneficiaries, round table discussions community healthcare providers and key informant interviews with state nutrition officer of Enugu State. She also conducted the in-depth interviews with the stakeholders at national level.

Folashade Olumeyan: Qualitative Consultant (Niger State)

Folashade Imelda Olumeyan is a public health professional passionate about improving health outcomes and the well-being of vulnerable populations. A graduate of Ahmadu Bello University; with over ten (10) years of experience in the development sector and expertise in evidence-based research, surveys, interventions, project implementation, assessments, and evaluations. She has several experiences working in communities with diverse ethnocultural and religious beliefs and has contributed significantly to improving their life outcomes.

Folashade is committed to optimally utilizing her innate and learned abilities to offer innovative, creative, and excellent services. She is highly skilled in qualitative and quantitative research methods. In addition to her involvement in project implementation and research, Folashade has also been engaged in several consultancies by international and national organizations like the World Bank, MacArthur Foundation, Ford Foundation, Society for Family Health, Oxford Policy Management (OPM), and ITAD- UK, Independent Evaluation Managers (IEM) - UK, Social Development Direct (SDD) – UK.

Folashade contributed to the evidence-based research that led to the Federal Ministry of Health's adoption of the guidelines on the use of misoprostol at the community level for the prevention of Post-Partum Haemorrhage in 2011.

Folashade coordinated the focus group discussion with beneficiaries, round table discussions with healthcare providers and key informant interview with SNO for Niger state.

Omotola Omotosho: Qualitative Consultant (Bayelsa State)

Omotola is a Project Manager, Public Health Specialist, Health Policy Specialist and Health Service Administrator with exceptional work ethics and demonstrable ability to complete a wide range of activities requiring clear communication. A self-starter, highly motivated, innovate and result oriented with over 9 years demonstrated research experience in local and international organizations (both humanitarian and developmental project). She possesses skills in qualitative research skills around HIV/AIDs, Malaria, Family Planning, Adolescent and Sexual Reproductive Health**.**

She has a master's degree in public health from the University of Ibadan and bachelor's degree in Economics. She coordinated the fieldwork activities in Bayelsa State.

FIELD LOCATION

Location	Interview type and location
National - Abuja	Key Informant Interviews with national stakeholders
Bayelsa	Round table discussion with community healthcare providers Focus group discussion with beneficiaries of KRC2 Key informant interviews with SNO and UNICEF Nutrition specialist **Location**: Kolokuma-Opokuma.
Niger State	Round table discussion with community healthcare providers Focus group discussion with beneficiaries of KRC2 Key informant interviews with SNO and UNICEF Nutrition specialist **Location**: Chachanga.
Enugu	Round table discussion with community healthcare providers Focus group discussion with beneficiaries of KRC2 Key informant interviews with SNO and UNICEF Nutrition specialist **Location**: Enugu East, Udenu

- Annex 7: ***Terms of Reference;***
    - ***[Insert Terms of reference about here]***