

**FEDERAL REPUBLIC OF NIGERIA**



**KEBBI STATE GOVERNMENT**

**COSTED PLAN OF ACTION ON FOOD AND NUTRITION**

**(2017 – 2021)**

# ACRONYMS

AIDS - Acquired Immune Deficiency Syndrome

ANC - Antenatal care

BCC - Behaviour Change Communication

CBO - Community-Based Organisation

CHW - Community Health Worker

CIYCF - Community-Based Infant and Young Child Feeding

CMAM - Community Management of Acute Malnutrition

CSO - Civil Society Organisation

DFID - UK Department for International Development

DRNCD - Diet Related Noncommunicable Diseases

EBF - Exclusive Breastfeeding

FAO - Food and Agriculture Organisation of the United Nations

FBO - Faith-Based organization

FCT - Federal Capital Territory

FMOH - Federal Ministry of Health

GAIN - Global Alliance for Improved Nutrition

GDP - Gross Domestic Product

HIV - Human Immunodeficiency Virus

HKI - Helen Keller International

HMIS - Health Management Information System

IFA - Iron and Folic Acid

IFAD - International Fund for Agricultural Development

IFPRI - International Food Policy Research Institute

IMCI - Integrated Management of Childhood Illnesses

IUGR - Intra-Uterine Growth Restriction

IYCF - Infant and Young Child Feeding

LBW - Low Birth weight

LGA - Local Government Authority

MDGs - Millennium Development Goals

M&E - Monitoring and Evaluation

MNCH - Maternal, Newborn, and Child Health

MNDC - Micronutrient Deficiency Control

MUAC - Mid-Upper Arm Circumference

NAFDAC - National Agency for Food and Drug Administration and Control

NCFN - National Committee on Food and Nutrition

NDHS - Nigeria Demographic and Health Survey

NFNP - National Food and Nutrition Policy

NGN - Nigerian Naira

NGO - Non-Governmental Organization

NHSPA - National Health Sector Strategic Plan of Action

NIPD - National Immunisation Plus Day

NPC - National Planning Commission

NPHCDA - National Primary Healthcare Development Agency

NSHDP - National Strategic Health Development Plan

NSS - Nutrition Surveillance System

PHC - Primary Healthcare Centres

PLWHA - People Living with HIV/ AIDS

PLW - Pregnant and Lactating Women

PMTCT - Prevention of Mother-to-Child Transmission of HIV

PPP - Public-Private Partnership

RUTF - Ready-To-Use Therapeutic Food

SAM - Severe Acute Malnutrition

SGA - Small-For-Gestational Age

SLEAC - Simplified LQAS Evaluation of Access and Coverage

SMART - Standardized Monitoring and Assessment of Relief and Transition

SMOH - State Ministries of Health

SOML - Saving One Million Lives Initiative

SON - Standards Organization of Nigeria

SQUEAC - Semi-Quantitative Evaluation of Access and Coverage

SUN - Scaling Up Nutrition

UN - United Nations

UNICEF - United Nations Children’s Fund

VAD - Vitamin A Deficiency

WFP - World Food Program

WHO - World Health Organisation

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# FOREWORD

Malnutrition brings huge human and economic costs. The effect of malnutrition on physical stature, cognitive development, and on the ability to do physical work can lock children and their families into poverty and entrench inequality.

As the World Community transits from the Millennium Development Goals (MDGs) to the Sustainable Developments Goals (SDGs), and as the country has commenced implementation of the National Food and Nutrition policy, these represent two windows of opportunity that can help Kebbi state move forward. We therefore need to take crucial steps to accelerate the reduction of hunger and malnutrition in our dear state.

The latest NDHS 2013 indicates that more than two-thirds of Kebbi State Children are stunted; the highest rate in the country. This is highly unacceptable to the state given all the investments and resources committed towards addressing malnutrition and hunger in the past five years. One of the major commitments of the state is the budgetary allocation of 175 Million Naira annually for the state Community Management of Acute Malnutrition (CMAM) program. The fact is that we have realized that we cannot eliminate malnutrition and hunger with efforts from one sector alone.

Therefore, in order to achieve the Zero Hunger Challenge (ZHC), including zero stunted children under the age of 2, nutrition-sensitive interventions in the agriculture, health, social protection, early child development, education, and water and sanitation sectors will also be required. These should be supported by strong political and systemic processes that build and enable sustained momentum for nutrition.

It is for this reason that the state government has taken the bold step to produce a holistic costed state strategic plan of action for nutrition where all relevant sectors are involved. A set of 9 priority areas have been identified that are considered key to improving nutritional status in the state. These include six Nutrition-specific areas- maternal nutrition, Infant and young Child Feeding, Management of Severe Acute Malnutrition, Micro-nutrient Deficiency Control, Diet-related NCDs, Adolescent Nutrition, and three Nutrition-sensitive areas - Poverty reduction, Food Security and Water & sanitation. Cross-cutting strategies have been identified as the means to achieve high coverage and quality delivery of the priority areas above and thus achieve the objectives and targets of the plan. Activities for each of these strategies will be delivered by various relevant sectors through appropriate delivery platforms to ensure maximum coverage. In particular, the plan also identifies the need for strengthened collaboration between sectors and improved financing and accountability mechanisms to achieve the ambitious targets.

This costed plan will also serve as a resource mobilization tool for the state and subsequently allocation guide for effective implementation as well as proper program monitoring and evaluation. It is also envisaged that it will guide development partners in aligning their support and activities with the identified priority areas.

The successful implementation of this strategic plan of action will therefore depend on the sustained commitment of the different levels of government, development partners, the private sector and other stakeholders.

Babale Umar Yauri, mni.

**Secretary to the State Government**

# ACKNOWLEDGEMENT

This costed strategic plan is to restate Kebbi state’s commitment towards improving the Nutritional outcomes of its people, with particular emphasis on vulnerable populations, women and children. This plan has been developed as a Multi-sectoral document to guide the integrated and collaborative implementation of high-impact Nutrition and nutrition-related interventions over the next five years. In this regard, the Kebbi State Government wishes to acknowledge the effort of all those who contributed to the development of this document and without whom this would have been possible.

Sincere appreciation goes to the State Ministries of Health, Agriculture, Information, Water resources, Women Affairs and Social Development, Local Government and Chieftaincy affairs, Education, Budget and Economic Development, and their respective agencies and parastatals, for their commitment, time and staff who contributed to develop this strategic plan. Others are the State Wing of the National Orientation Agency, Medical Women Association of Nigeria, Academia and the State Nutrition Ambassador.

We also acknowledge the efforts and contribution of our development partners United Nations Children Fund (UNICEF), Save the Children International (SCI), UKaid and Clinton Health Access Initiative (CHAI), for their technical , and funding support towards the process that led to the development of the State Strategic Plan on Nutrition.

Lastly, the state wishes to thank the Federal Ministry of Health, National Primary Health Care Development Agency and the Federal Ministry of Budget and National Planning for the technical guidance towards supporting Kebbi state in the development and finalization of this costed strategic plan.

Signed,

Alh. Mohammed Sani Umar

**Chairman of the Food and Nutrition Committee, Kebbi State**

# EXECUTIVE SUMMARY

Malnutrition and nutrition related diseases continue to be problems of great public health importance in Nigeria. Despite being a lower-middle-income country, Nigeria has the highest number of stunted children under age five in sub-Saharan Africa, and the second highest in the world, with 41% of all children under five classified as stunted and 23% as severely stunted. The situation in Kebbi is particularly dire. 28.6% of children under five years of age are underweight while 9.7% of under five children suffer are stunted[[1]](#footnote-1). An estimated 1.8% of the children suffer from severe acute malnutrition or wasting, and this translates to over 34,000 children under-five that are wasted annually.

As part of efforts to address the dire nutrition situation of Nigeria, a National Health Sector Strategic Plan of Action was developed that builds off other strategic documents such as Vision 20:2020 and the National Strategic Health Development Plan for 2009 to 2015. It is in view of comprehensively addressing these problems that this plan has been formulated as a guide for action for the Health Sector component of the National Food and Nutrition Policy. Similarly, the Ministry of Budget and Economic Development has revised the National Food and Nutrition Policy, which further served as a guide to the development of Kebbi’s holistic plan to address Nutrition in the state.

This Costed Plan of Action takes a comprehensive approach to addressing the issues related to Nutrition in the state and it is a Multi-sectoral plan that requires joint implementation by the various related Ministries and parastatals in the state including Agriculture, Health, Women Affairs, Education, Information, Local Governments and Finance.

The goal of this plan is to improve the nutritional status throughout the lifecycle of the people of Kebbi state with a focus on vulnerable groups especially women of reproductive age and children under-five years of age. To achieve the goal, a number of specific objectives have been formulated, as follows:

1. To improve food security at the state, LGA, community and household levels
2. To promote the delivery of effective and high quality nutrition related interventions for the people of Kebbi State
3. To increase the knowledge of nutrition among the populace to strengthen nutrition research, monitoring and evaluation
4. To incorporate food and nutrition considerations into the state and local government sectoral development plans
5. To promote optimum nutrition for people in especially difficult circumstances, including PLWHA
6. To promote and strengthen nutrition coordination and collaboration
7. To reduce diet related non-communicable diseases
8. To strengthen systems for providing early warning information on the food and nutrition situation
9. To ensure increased access to nutrition-sensitive social protection

Adopting a similar approach as used for the National plans, the interventions needed to safeguard the nutrition of children and women and people of Kebbi state have been grouped into key priority areas These include: Maternal nutrition

* Infant and young child feeding
* Management of severe acute malnutrition in children under five
* Micronutrient deficiency control
* Diet related non-communicable diseases
* Adolescent Nutrition
* Poverty Reduction
* Water and Sanitation
* Food Security

Six core strategies have been identified to achieve high coverage and quality delivery of the priority areas in the nutrition plan, and thus achieve the objectives and targets of the plan. Activities in these strategic areas will be delivered through available delivery platforms to ensure that maximum coverage is attained for the targeted populations: 1) Administratively, at the State and LGA levels, 2) Health facility; 3) Community-level; and 4) Campaigns/Outreach 4) Schools 5) Social Safety Net Programs. The strategies include the following:

1. Behaviour change communication;
2. Enhancing the provision of quality health services;
3. Capacity building;
4. Advocacy, resource mobilisation and resource allocation at all levels;
5. Research, monitoring and evaluation; and
6. Private Sector Engagement

Cross-cutting strategies that are relevant across board include Coordination and Multi-sectoral partnerships and Financing. These are critical to the successful delivery of all the strategies across the prioritized areas.

Kebbi state has made significant investments towards improving the Nutritional outcomes of its children. In 2014, the Kebbi state Government contributed an estimated 702,792 EUR to the partnership programme with UNICEF on Maternal, Child and Newborn Health and also contributed 562,500 EUR on the UNICEF supported Nutrition Programme. Agriculture is the mainstay of the economy in Kebbi state with more than 80% of the population involved in it. It is endowed with largely arable and irrigable land, and economically viable rivers. Therefore, meaningful economic development will not happen without an urgent improvement in nutrition. Nutrition interventions that have proven to be cost-effective, feasible and with high impact should be brought to scale. This Strategic Plan of Action recognizes that direct nutrition interventions need to be coordinated at all levels of government –State, and Local Government – in collaboration with the communities.

The total cost required to operationalize the Strategic Plan of Action for the five-year period is estimated at **NGN** **15.5 Billion or 49.5 million USD** and the average annual cost is **NGN 3.1 billion or 9.9 million USD.**

# 1. INTRODUCTION

Nutrition has a powerful influence on growth, development, and the productive life of every individual. Optimal nutrition at each stage of the lifecycle is therefore a fundamental human right with malnutrition being viewed as a denial of that right. Furthermore, nutrition is linked to most of, if not all, the Millennium Development Goals (MDGs) and the right to food, adequate nutrition, and healthcare are fundamental to achieving the MDGs.

As part of efforts to address the nutrition situation of Nigeria, with a focus on the states most influenced by the negative nutrition status, the Kebbi State Strategic Plan of Action for Nutrition (SPAN) has been devised in line with the National Strategic Plan of Action for Nutrition (NSPAN). This plan builds on other strategic documents such as Vision 20:2020 and the National Strategic Health Development Plan (NSHDP) for 2009 to 2015. It is in view of comprehensively addressing these problems that the Kebbi State SPAN has been formulated as a guide for action to domesticate the implementation of the multi-sectoral National Food and Nutrition Policy (NFNP).

The design of the Kebbi State SPAN was guided by the following principles:

* Lifecycle approach to nutrition that recognises the multifaceted and often changing nature of nutrition problems
* Community ownership and participation
* Political will and Government commitment
* Evidence-based and cost-effective interventions
* Effective partnership and collaboration between various stakeholders across all relevant sectors
* Commitment to global, regional, and national goals relating to food and nutrition such as the Millennium Development Goals (MDGs), the Scaling Up Nutrition (SUN) initiative, and the African Regional Nutrition Strategy.

**1.1 Rationale**

The implementation of sector strategies which contribute to improved nutrition of children and their families is increasingly seen as the primary means for addressing immediate and underlying causes of poor nutrition. Many different sectors contribute to achieving better nutritional outcomes and the following are particularly important: food security, social protection, education, public health, water and sanitation, national development, and poverty alleviation.

Nutrition related challenges result from either undernutrition or over-nutrition. Undernutrition can result from inadequate dietary intake, where a person receives insufficient nutrients, which are then compounded by common infectious diseases, such as diarrhoea and pneumonia. Over-nutrition, on the other hand, results from excess consumption of food and is associated with a number of diet related non-communicable diseases (DRNCD) such as hypertension, diabetes, and cardiovascular disease. Nutrition is also essential for increasing the efficacy of medications, such as antiretroviral drugs and vaccines, and plays a critical role in the strategies for the prevention, treatment, and care of HIV/AIDS.

The high disease burden resulting from nutrition-related factors can manifest as:

* Intra-uterine growth restriction (IUGR) resulting in low birth weight (LBW) babies
* Underweight - a reflection of low weight-for-age
* Stunting - a chronic restriction of growth in height indicated by a low height-for-age
* Wasting - an acute weight loss indicated by a low weight-for-height
* Micronutrient deficiencies - often referred to as “hidden hunger”

In 2008 The Lancet series on nutrition featured systematic evidence of the impact of undernutrition on infant and child mortality and its largely irreversible long-term effects on health and on cognitive and physical development. It also demonstrated the availability of proven interventions that could address these problems and save millions of lives. The Lancet set of interventions focused on the “first 1,000 days” (from pregnancy to 24 months old) for high impact in reducing death and disease and avoiding irreversible harm. Other studies drawing on a similar set of interventions, have demonstrated very high cost-effectiveness, with high returns to cognitive development, individual earnings, and economic growth.

It has to be recognized that the attainment of MDGs and meaningful economic development will not happen without an urgent improvement in nutrition. Nutrition interventions that have proven to be cost-effective, feasible and to have impact should be brought to scale. Therefore the KSPAN is a practical tool that presents an opportunity to take action on the sustainable development goals (SDGs). The Kebbi State Strategic Plan will also be used as a resource mobilization tool by nutrition stakeholders and a guide to investment in cost-effective nutrition interventions.

# 2. BACKGROUND

**2.1 State Background**

Kebbi State is located in the North-western geo-political zone of Nigeria. Kebbi State is bordered by Niger Republic to the West, Sokoto state to the North, Zamfara and Niger states to the east and South respectively. Formed from Sokoto and Niger states in 1991, Kebbi state spans a total land mass of 36,800Kilometers and is divided into 21 Local Government Areas (LGAs), 4 Emirate councils and 35 districts.

Kebbi state population represents about 2.3% of Nigeria’s population, estimated at 4.1million of people in 2014. Kebbi state’s population continues to grow at an annual rate of 3.1% as a result of a high fertility rate (8.2 children born per woman). Rising population pressure is leading to overcrowding with an estimated population density of 56 people per square kilometer in 2010. Kebbi state experiences temporary rural-urban migration where most youth travel during the dry season and return to participate in farming practices during the rainy season. Hence more than 80 percent of the population resides in rural areas.

Although Nigeria is considered a lower-middle-income country with a national per capita GDP of $1,452.[[2]](#footnote-2), Kebbi state has a lower per capita GDP IF $993. The average GDP growth rate of 6.8% over the seven years from 2005 to 2011 was higher than both the global average of 4.9% and the African average of 5.5%. Between 2008 and 2011 the average annual inflation rate was 12.63%.

It is estimated that 61% of the population live on less than a dollar a day and 69% live below the relative poverty line, which is set slightly higher at 1.25 dollars per day (66,802 NGN per year). The proportion of Nigerians living below the relative poverty line has increased significantly from just 27% of the population in 1980. Poverty is not equally distributed, with the highest proportion of poor in the North East and North West zones (40% and 35% respectively. Poverty is also higher in rural areas than urban. The degree of inequity among the population, measured using the Gini coefficient, is also increasing. In 2010 the Gini coefficient was 0.447, which represents an increase of 4.1% in the degree of inequity from 2004 and is close to the sub-Saharan African regional average of 0.46.

**2.**2 Malnutrition in Nigeria

**Figure 1: Undernutrition in children under five in Nigeria**

Globally, almost seven million children under the age of five die every year.[[3]](#footnote-3) Undernutrition accounts for about 35% of all deaths among these children. Stunting, severe wasting and IUGR are the major contributors to child mortality, accounting for about two million deaths of under-fives annually. Undernutrition is also the number one cause of morbidity for all age groups, accounting for 11% of the disease burden. With regard to maternal mortality, iron deficiency is the leading cause, contributing 20% of the estimated 536,000 deaths. About 43% of all deaths among under-fives occur in Africa.

S = Stunting (<-2 SD); W = Wasting (<-2 SD)

Source: National Bureau of Statistics. (2011). Nigeria Multiple Indicator Cluster Survey (MICS) 2011: Main Report. Abuja, Nigeria.

S: 33%

W: 8%

S: 14%

W: 7%

S: 53%

W: 12%

S: 54%

W: 14%

S: 20%

W: 7%

S: 20%

W: 9%

Nigeria’s maternal mortality rate of 576 deaths for every 100,000 live births[[4]](#footnote-4)accounts for 14% of the global burden of maternal deaths--second only to India. This represents approximately 40,000 maternal deaths per year. Under-5 mortality rate is 128 per 1,000 live births[[5]](#footnote-5)and Nigeria experiences over 800,000 deaths among under-five children annually, 30% of which is attributable to newborn deaths.[[6]](#footnote-6) Mortality rates for children, infants and neonates are higher than the latest average estimates for the Sub-Saharan Africa region: 128, 69 and 37 per 1,000 live births respectively.[[7]](#footnote-7)[[8]](#footnote-8) Malnutrition is the underlying cause of 53% of these deaths.

In Nigeria, about 14 million people – 8.5% of the total population - are undernourished.[[9]](#footnote-9) It is also home to the highest number of stunted children in the continent and ranks second globally with more than 10 million stunted children. The 2013 Nigeria Demographic and Health Survey (NDHS) reported 37% of children under five as being stunted, 29% as underweight, and 18% as wasted.[[10]](#footnote-10)

Although undernutrition is a problem throughout the country, there are three zones in Nigeria that represent the majority of those affected – North West, North East, and North Central (including the capital Abuja). Rural areas are also disproportionately affected for many reasons, including distance from markets, limited health and education resources, as well as access to sanitary water and refuse disposal sites. The zonal variation of these figures is striking with an under-five mortality rate of 185 per 1000 live births in the North West zone. The 2013 Nigeria Demographic and Health Survey (NDHS) data and more recently the MICS (2011) summary report clearly showed that the Northern States continue to have the highest mortality and morbidity rates in the country; with low coverage of core Maternal, Newborn and Child Health (MNCH) interventions.

**2.3 Malnutrition in Kebbi State**

Reports show that for all three indicators on malnutrition in under-5 children, Kebbi State has alarmingly poor nutritional status. The NDHS found high stunting levels in Kebbi State with over 60% of children exhibiting stunting and another 42.7% showing severe stunting[[11]](#footnote-11). Similarly, wasting levels in Kebbi State is at 18.1% and an underweight level of 39%. Regular Standardized Monitoring and Assessment in Relief and Transition (SMART) surveys are conducted periodically in the 36 States of the federation including the FCT. The findings in this report confirm the low nutritional status of children in Kebbi. The most recent SMART survey (February to May 2014 installation), reported stunting levels at over 46% with severe stunting levels at 16.5%. Wasting and underweight levels in the same year were also found at low levels of 9.7% and 28.6% respectively[[12]](#footnote-12)

Considering the poor nutritional status of under-5 children in Kebbi state as seen with the high levels of stunting, wasting and underweight, it is not surprising to see that exclusive breast feeding rates are very poor. In Kebbi State only 8.3% of mothers initiated breastfeeding within the first hour of delivery which is an indicator that the neonate will successfully latch on to the mother’s breast and increase the odds of successful breastfeeding as an infant. Exclusive breastfeeding during the first 6months of life has been shown to be the most effective infant feeding practice for children in that age range in low-income settings. Although, the NDHS 2013 does not have exclusive breastfeeding data for Kebbi State, it reports 45.5% of children in Kebbi were fed with something other than breast milk in the first 3 days of life. This finding suggests a poor chance for successful initiation of breastfeeding for almost half of the infants in Kebbi State. Thus the low 0.4% rate of exclusive breastfeeding in Northwest Nigeria reported by the NDHS can be extrapolated to Kebbi State’s levels and points to poor infant feeding practices in the state. It becomes clear that not much progress can be made on the nutritional outcomes of children under-5 unless infant and young child feeding practices are addressed.

The immediate causes of undernutrition are a lack of micronutrients such as vitamin A, iodine, iron, and zinc. Vitamin A is an essential micronutrient necessary for developing epithelial cells while Iron is important for cognitive development and red blood cell formation a lack of which is responsible for aneamia. In Kebbi State, national campaigns like the MNCH weeks acts as the major plat form for providing micronutrient supplements and deworming medication. In Kebbi state, only 10.7% of under-5 children were reported to have received Vitamin A, a severely low 0.2%[[13]](#footnote-13) received iron supplements and only 1.4% received deworming medication[[14]](#footnote-14).

The MNCH weeks data shows seemingly high coverage of some of these micronutrients that are delivered through the campaigns. In the most recent data collected from the August 2015 MNCH week conducted in Kebbi state, almost 89% of under-five children targeted received Vitamin A[[15]](#footnote-15). Although the population of under-5 who received Vitamin A was high, there remains a 20% unmet need for Vitamin A supplementation among under-5 children in Kebbi.

Access to quality care during pregnancy also results in better nutrition outcomes. However, Kebbi state faces similar challenges as the North Western zone in the area of improving uptake of facility services, and ensuring women (pregnant women) have access to quality care. In Kebbi State, only about 8.5% of women deliver in a health facility compared to the 35.8% of women who delivered in a facility in the country[[16]](#footnote-16). There is a large disparity in the proportion of women who did not receive antenatal care with 71% of pregnant women in Kebbi State not attending one antenatal visit. The report for Kebbi State on postnatal care is disturbingly low with only 8% of women receiving postnatal care.

The use of micronutrients during pregnancy is equally low among women in Kebbi State. Only 4.2 percent received a dose of Vitamin A postpartum while more than 77% did not take any iron folate during pregnancy[[17]](#footnote-17). In addition, almost 63% of women are anaemic and 31% are iodine deficient, while close to 30% of under-fives are vitamin A deficient (VAD) and 20% are zinc deficient.[[18]](#footnote-18).

The use of national campaigns as the major platform for distribution of maternal and child micronutrient supplements is less than adequate for closing the gap on meeting the need for micronutrient consumption in Kebbi state. The low frequency of MNCH weeks which occur only twice a year coupled with the design and execution of such campaigns which hinge heavily on political will and provision of funding by the state government may continuously result in a high unmet need for micronutrient supplementation. In addition, the campaigns are implemented in only a few health facilities which may be too far away for all the caregivers to access service. The state is typically responsible for generating funds for executing the campaign. In most cases an inadequate amount of funding necessary for adequate volume of service providers and supplies ultimately affects the poor quality and quantity of the highlighted essential micronutrients and medication.

Furthermore, Nigeria has started to witness an alarming rise in the incidence of DRNCD. The 2013 NDHS reported almost 25% of women were overweight or obese, with the frequency increasing with age, education, and wealth.[[19]](#footnote-19) Although lower than the national average, 17.2% of women in Kebbis State were found overweight or obese. Diabetes is predicted to cause 52% of mortality in Nigeria by 2015.[[20]](#footnote-20) Globalization, urbanization, lifestyle transition, socio-cultural factors, and poor maternal, foetal and infant nutrition are all major causes of the increase in DRNCD. These factors are also emerging as areas of concern in Kebbi state.

**2.4 Causes of Undernutrition in Kebbi**

It is widely accepted that malnutrition has many causes – from lack of food and improper feeding and caring practices to economic and political structures – and Nigeria suffers from all of these. Many nutritional problems in Nigeria are compounded by poor infant and child feeding practices. Underlying these problems of malnutrition are a number of issues such as poor maternal nutrition, suboptimal infant and young child feeding (IYCF) practices, inadequate health services, and limited access to nutritious foods. These factors also play a major role in undernutrition in Kebbi.

According to the 2013 NDHS, breastfeeding is a common practice in Nigeria, yet 17% of children less than six months of age are exclusively breastfed (WHO recommendation). Additionally, infants should not be given water, juices, other milks, or complementary foods until six months of age, yet 87% of Nigerian infants less than six months of age receive complementary foods. As mentioned earlier, the NDHS reports the rate for exclusive breast feeding for the 6 geopolitical zones and not the states. However, that of the Northwest zone is attributable to Kebbi state and is distressingly low at 0.4% of all children who have ever been breastfed. Such poor breastfeeding practices may be the precursor to the low levels of mothers who followed the 3 IYCF practices recommended by the WHO. The levels reported for Kebbi State are only about 16% for the use of all 3 IYCF feedings practices[[21]](#footnote-21). This is confirmed by the SMART survey which shows that the rate for exclusive breastfeeding in the North West which is attributable to Kebbi was reported at 10.3%. Also, in children 6 – 24 months receipt of the minimum dietary diversity is only at 22.6% while coverage of Vitamin A supplementation was very low at 15.2% in Kebbi state[[22]](#footnote-22).

Another key cause of malnutrition is a lack of access to healthcare, water and sanitation. The poor environmental sanitation, hygiene, and unsafe drinking water result in a high prevalence of infectious and parasitic diseases, particularly in infants and children, which further aggravates their already poor nutritional status. Reports show that as high as 66% of women in Kebbi state confirm having problem with accessing health care. The poor capacity of healthcare workforce at the State, LGA and community levels who lack the appropriate skills required to provide quality the nutrition related services also introduces challenges surrounding access. This is further aggravated by the lack of appropriate volume of healthcare workers who can address the needs of the population.

Kebbi state has been shown to lack the minimum standard number of healthcare work force as prescribed by the National Primary Health care Development Agency (NPHCDA).

The availability of safe sources of drinking water and the use of appropriate mechanisms for the disposal of body waste and other household waste products, can significantly impact the prevalence of disease in a community. Thus the availability of improved drinking water sources and sanitation facilities can adversely or favorably impact the nutritional status of a society. Considering that about 80% of the population in Kebbi resides in rural areas, the NDHS values for non-improved sources of water and sanitation facilities of 52% and 61.3% respectively can be attributed to most of the state’s population. The SMART survey confirms this finding with a report that shows that the levels of improved sources of drinking water and sanitation facility in Kebbi are low percentages of 18.6 and 6.9 respectively. This suggests the need to address water and sanitation issues in Kebbi State to achieve an improved nutritional status among the state’s population

The low status – and particularly the low level of education – of wnomen is another key cause of malnutrition. A mother’s malnutrition is closely linked to malnourishment in her newborn babies and children, so the fact that 11% of women of child-bearing age in Kebbi State were found to be undernourished is a cause for concern.[[23]](#footnote-23) For those families that receive education surrounding appropriate IYCF, they lack access to affordable foods with sufficient quantities of micro- and macronutrients required for a growing infant. These nutrients are lacking not only for the child, but also for the mother during pregnancy and breastfeeding, who often shares food with the rest of the family. In Kebbi like in all of Nigeria, foods currently on the market are too expensive for many of the poorest and most vulnerable, and do not reach rural areas where the majority of the population (about 80% of Kebbi State’s population), lives and the problem is most severe. Compounding these poor feeding practices is a high burden of disease with preventable or treatable infectious diseases such as malaria, pneumonia, diarrhoea, measles, and HIV/AIDS accounting for more than 70% of the estimated one million under-five deaths in Nigeria.

Additionally, poverty plays a prominent role as a cause of malnutrition. The 2014 Oxford Poverty and Human Development Initiative (OPHI) reveal that Kebbi State ranks 2nd as the state with the largest population of people living in poverty[[24]](#footnote-24). The report also shares that almost 69% of the population in Kebbi live in severe poverty. Although Nigeria possesses great wealth in oil and has experienced recent economic growth, 68% of the population lives below the international poverty lines of US$1.25. The poorest 20% of children are three times more likely to be underweight than the richest 20%.[[25]](#footnote-25) This can be compared to the situation in Kebbi State and will need to be addressed to achieve improved nutritional status

## 2.5 Consequences and Impact of Malnutrition

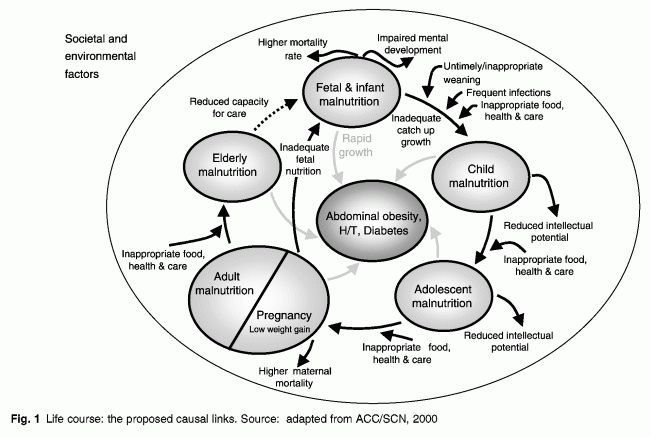
**2.5.1 Impact on Health and Education**

There is growing evidence that maternal body size is strongly associated with the size of newborn children. Undernourished women tend to become shorter adults, and thus are more likely to have small children. Some studies have even shown that for every 100g increase in maternal birth weight, her child’s birth weight increased by 10-20g (in developed countries) and by 29g (in low-income countries).[[26]](#footnote-26) In low-income countries, the same studies also show that birth length can rise by as much as 0.2cm for every 1cm increase in mother’s birth length. In addition, maternal height is associated with birth weight of their grandchildren, confirming the long-term repercussions of maternal nutrition.

Undernutrition in pregnant women is also one of the causes of adverse pregnancy outcomes such as miscarriage, still birth, and IUGR. Children born with LBW are more susceptible to recurrent infections whose severity is also closely linked with child nutritional status. Emerging evidence points to the fact that children who are undernourished in the first two years of life and who put on weight rapidly later in childhood and in adolescence are at high risk of DRNCD such as diabetes, hypertension, arthritis, gout, certain types of cancers, and heart disease among others.

In one study carried out in Guatemala, expectant mothers were put on a nutritional supplementation trial. Children born to women who had received a protein-energy supplement were on average 0.8cm taller than were those whose mothers received a low energy supplement.[[27]](#footnote-27) The importance of these findings is that good maternal nutrition is critical for the nutrition of future generations. These findings also point to the need for Nigeria to adopt a lifecycle approach to battling undernutrition. If Nigeria wants to improve the nutritional status of future generations, it should start with the present generation.

**Figure 3: Malnutrition’s impact on productivity throughout the lifecycle, adapted from the Administrative Committee on Coordination/Subcommittee on Nutrition (United Nations), 2000**



As shown in Figure 3, malnourished children suffer from irreparable intellectual impairment and stunted physical growth. Hungry children make poor students and are prone to drop out of the educational system. Hungry and malnourished adults are unable to be fully productive workers and are more likely to be ill, increasing the strain on often overburdened health systems. Malnourished women give birth to LBW babies, transferring the broad economic disadvantages of malnutrition in their own lives to the next generation.

Good nutrition is imperative for optimal mental and physical development, learning, and school performance. Undernutrition affects cognitive development by causing direct structural damage to the brain and by impairing infant motor development and exploratory behaviour.

Similarly, iron deficiency anaemia delays mental development in infants and is correlated with poorer performance on cognitive tests in older children. Children have considerably reduced learning abilities, school performance and retention rates are low, and hearing and speech are impaired with such children not being trainable. Vitamin A deficiency (VAD), on the other hand, lowers immunity thus increasing the incidence and severity of illnesses which increase absenteeism and reduce concentration in school. In severe cases, night blindness and partial or total loss of sight may result from this deficiency.

In Zimbabwe, a difference of 3.4 cm in height-for-age at 3 years was associated with almost an additional grade of achieved schooling,[[28]](#footnote-28) whilst in Guatemala, food supplementation during early childhood improved schooling in women by 1-2 years, and test scores in men and women.[[29]](#footnote-29) This evidence underlines why Nigeria cannot wait but intensify investment in child nutrition especially with a deliberate focus on the lifecycle of its citizens.

**2.5.2 Impact on Economic Development**

Although economic development does improve nutrition outcomes, it often does so at a very slow pace, and direct reductions in income poverty do not imply proportional reductions in undernutrition. Not only do reductions in income poverty not necessarily improve nutrition outcomes, but malnutrition can actually act as a brake on economic development. In effect, economic growth is retarded in countries where malnutrition is widespread. It follows that any government pursuing an efficient development strategy should include nutrition policy as an input that, along with sound fiscal, foreign investment, exchange rate, and sector-specific policies, is requisite to sustainable economic growth.

Economic analyses of the costs of malnutrition have examined specific micronutrient deficiencies as well as stunting. For example, an estimated 3.4% of global gross domestic product (GDP) is lost to the effects of anaemia on childhood cognitive development and educational attainment.[[30]](#footnote-30) Iron deficiency in adults has been estimated to decrease national labour productivity by 5 to 17%.[[31]](#footnote-31) And up to 10% in lost productivity and earnings has been attributed to stunting.[[32]](#footnote-32) These figures are especially pertinent in terms of future development goals, since nearly one-third of all children in the developing world are currently underweight or stunted.[[33]](#footnote-33)

There are massive economic and social consequences to the high rates of undernutrition in Nigeria. Billions in GDP are lost each year due to the pernicious cycle of undernutrition. Annually, Nigeria loses over US$1.5 billion in GDP to vitamin and mineral deficiencies.[[34]](#footnote-34) Due to VAD alone, 25% of our children grow up with lowered immunity, which leads to frequent illness and poor health. Analysis by the Micronutrient Initiative shows that unless we take effective action to prevent and control VAD, over 80,000 Nigerian children will die annually. These estimates are corroborated by a recent study by the World Food Program (WFP) and the Economic Commission for Latin America, which estimated the economic losses due to undernutrition in seven nations at a staggering 6% of annual GDP.[[35]](#footnote-35)

## 2.5 Current Efforts to Address the Problem

**2.5.1 State Efforts**

Food and nutrition activities in Nigeria, prior to 1990, were carried out sectorally, thus giving rise to several policies addressing food and nutrition concerns in different development sectors. Addressing the problems went beyond health sector actions, in view of the causal analysis espoused by nutrition and development experts based on the UNICEF Conceptual Framework of the causes of malnutrition (Appendix 1). These activities were very limited in scope, uncoordinated, and largely ineffective in addressing nutritional problems comprehensively.

The NCFN formulated a National Food and Nutrition Policy (NFNP) in 1995, which the Federal Government approved in 1998 and launched in November 2002. The development and launching of the policy was a crucial step in addressing the malnutrition problem. This policy set specific targets, which included reduction of severe and moderate malnutrition among children under five by 30% by 2010, and reduction of micronutrient deficiencies (principally of vitamin A, iodine, and iron) by 50% by 2010. This effort included the fortification of staple foods with vitamin A, so that children would naturally consume vitamin A in their food. This resulted in vitamin A fortification of 70% sugar, 100% wheat flour, and 55% vegetable oil sold on the market. Nigeria is also fortifying wheat flour with iron, thereby helping to protect children and mother’s physical and mental health. The SCFN has domesticated the policy and set attainable targets for Kebbi State.

Key instruments to improve the delivery of Primary Health Care (PHC), has also been developed, such as the *Primary Health Care Under One Roof* and *the Minimum Standards for PHC*[[36]](#footnote-36). Thus the establishment of the State Primary Health Care Agency (SPHCDA) has contributed to improved planning, implementation and monitoring of PHC services. Opportunities for leveraging national and state resources exist as funding has improved in the health sector through the Debt Relief (MDG) Funding and the Subsidy Reinvestment and Empowerment Programme (SURE–P). Maternal and Newborn Health have been classified as priorities that will attract this funding.

At the state-level, the Kebbi State has established a State Committee on Food and Nutrition (SCFN) with the State Planning Commission/Budget and Economic Planning playing a major role in collaborating with other sectors to domesticate and implement the nutrition policies relevant to the Kebbi State people. Thus the SCFN when supports the SMOH and other stakeholders to implement and coordinate nutrition activities in the state.

Nigeria held its first Nutrition Summit to create a “Roadmap to Scaling up Nutrition in Nigeria” early in 2012. The interventions recommended to drive the scale up were arrived at the summit and has been adopted by the Kebbi State government. These interventions include: promoting optimal infant feeding practices, controlling micronutrient deficiency and anaemia through vitamin and mineral supplementation, food fortification and dietary diversification, and eliminating iodine deficiency through a salt iodization programme in Nigeria. Recognition was also given to the role that other sectors play in improving food security. Nigeria has recently embarked on management of severe acute malnutrition (SAM) and currently has over 495 community management of acute malnutrition (CMAM) sites across northern Nigeria. Kebbi State has been part of this program and currently has CMAM sites in 15 of its 21 LGAs while continuously building capacity among health care workers on Infant and Young Child Feeding (IYCF) processes and CMAM.

In Kebbi state, the Nutrition Department in the SMOH, serves as the current convening Government body responsible for scaling up nutrition and is responsible for bringing together various government ministries and departments including the Ministries of Health, Education, Agriculture, Women Affairs, Finance, Information, Science and Technology, and Water Resources, and the Planning Commission. All relevant ministries are also engaged through the Nutrition Partners Forum, which is expected to meet at least four times annually with external partners including national and international non-governmental organizations (NGOs), UN agencies, donors, businesses and the media, to discuss strategy development and undertake decisions relating to funding and nutrition emergencies.

**2.5.2 Nutrition Partner Landscape**

Undernutrition is most severe in northern Nigeria and the majority of nutrition interventions take place in this region. Across the region of the Sahel belt, a third of children under five are underweight, half are stunted, and a fifth are wasted.[[37]](#footnote-37) In the ten northernmost States OF WHICH Kebbi State is one, there are an estimated 3.9 million children under five who are stunted and 900,000 with SAM.[[38]](#footnote-38) Current nutrition-specific programmes that focus on growth monitoring, fortification, management of acute malnutrition, and interventions to combat micronutrient deficiencies use existing campaigns to administer during Maternal, Newborn, and Child Health (MNCH) weeks.

UNICEF and other International Non-Government Organizations (INGOs) in Kebbi State like Save the Children UK and Action against hunger (ACF) participate in the Nutrition Partners Forum and contribute to nutrition activities through implementation of community-level nutrition programmes. The combined efforts of the three development partners are aimed at decreasing the impact of malnutrition among mothers’ children and infants by implementing effective interventions which have proved to improve malnutrition indicators. By supporting the nutrition programme in Kebbi state, to provide infant and young child feeding (IYCF), community based management of acute-malnutrition (CMAM), Vitamin A supplementation and deworming and the provision of services for managing childhood infectious disease like Malaria, Diahorrea and Pneumonia.

These Interventions are implemented through providing technical assistance to the State Ministry of Health, support to primary healthcare (PHC) centres, and campaign-style Child Health Weeks (like the MNCH week which include screening for undernutrition, de-worming and vitamin A supplementation). In addition, through collaboration with the State Nutrition department, UNICEF through its financial and technical support has established monthly CMAM coordination meetings (January to October, 2015) focusing on data collection and resolution of programme challenges. Save the Children UK currently supports Kebbi State Ministry of Health to implement a prevention, detection, and treatment programme for malnutrition. This programme works in synergy with UNICEF and existing state structures to provide the services aimed at addressing the maternal, child and infant malnutrition burden in three LGAs in Kebbi State.

# 3. STRATEGIC PLAN OF ACTION

This Strategic Plan of Action provides an overview of the priority nutrition interventions for nutrition in Kebbi state for the period 2017 to 2021. This plan is the first of its kind being developed by the state and is Multi-sectoral with cross-cutting strategies aimed at identified priority areas.

This plan promotes optimal nutrition at each stage in the lifecycle as a priority issue and fundamental to achieving high productivity and improved economic outcomes for Kebbi state. The implementation of these sector strategies acknowledge the challenges resulting from undernutrition and overnutrition and the multifaceted and often changing nature of nutrition problems across vulnerable groups.

## 3.1 Vision

A state where the people are equitably food and nutrition-secure with high quality of life and socioeconomic development contributing to objectives of the Sustainable Development Goals (SDGs).

## 3.2 Goal

To improve the nutritional status throughout the lifecycle of the people of Kebbi state with a focus on vulnerable groups especially children under-five years of age, women of reproductive age and people with special nutritional needs.

## 3.3 Objectives

To achieve the goal of improving the nutritional status of the people of Kebbi, a number of specific objectives have been formulated, as follows:

1. To improve food security at the state, LGA, community and household levels
2. To promote the delivery of effective and high-quality nutrition related interventions for the people of Kebbi State
3. To increase the knowledge of nutrition among the populace To strengthen nutrition research, monitoring and evaluation
4. To incorporate food and nutrition considerations into the state and local government sectoral development plans
5. To promote optimum nutrition for people in especially difficult circumstances, including PLWHA
6. To promote and strengthen nutrition coordination and collaboration
7. To reduce diet related non-communicable diseases
8. To strengthen systems for providing early warning information on the food and nutrition situation
9. To ensure increased access to nutrition-sensitive social protection

## 3.4 Targets

Targets for this plan have been guided by the National Food and Nutrition Policy. The specific targets to be achieved include:

1. Reduce the proportion of people who suffer hunger and malnutrition by 30% by 2021;
2. Increase exclusive breastfeeding rate from 10.3% in 2014[[39]](#footnote-39) to 30% by 2021;
3. Increase the percentage of children age six months and above who receive appropriate complementary feeding from 23%[[40]](#footnote-40) in 2013 to 46% by 2021;
4. Reduce stunting rate among under-five children from 60.6% in 2013 to 48% by 2021;
5. Reduce childhood wasting including Severe Acute Malnutrition (SAM) from 18.1% in 2013 to 10% in 2021;
6. Achieve and sustain universal household access to iodized salt by 2021;
7. Increase coverage of Zinc supplementation in diarrhoea management from 7% in 2013 to 45% of all children needing treatment by 2021;
8. Increase the proportion of children who receive deworming tablets from 1.4%[[41]](#footnote-41) in 2014 to 15% by 2021;
9. Increase the proportion of pregnant women who receive Iron supplementation during ANC from 13%[[42]](#footnote-42) in 2014 to 45% in 2021
10. Reduce prevalence of diet-related non-communicable diseases by 25% by 2021;
11. Increase coverage of Vitamin A supplementation from 11% in 2013 to 25% by 2021;
12. Increase by 50% households with relevant nutrition knowledge and practice that improve their nutritional status
13. Increase access to potable drinking water from 18.6% in 2014 to 65% by 2021;
14. Increase the proportion of relevant MDAs at all levels with functional nutrition unit to 75% in 2017;
15. Reduce the incidence of malnutrition among victims of emergencies by 50% by 2021;

## 3.4 Priority Areas

The Lancet in its 2013 series on maternal and child nutrition developed a framework (Appendix 2) that, rather than focus on the determinants of undernutrition, looks at the means to achieving optimum foetal and child growth and development. This new framework shows the dietary, behavioural, and health determinants of optimum nutrition and development. It highlights how the determinants are affected by underlying food insecurity, caregiving resources, and environmental conditions, which shaped by economic and social conditions, national and global contexts, resources, and governance. The challenge is to ensure that these nutrition interventions reach those most in need.

Direct nutrition interventions need to be coordinated at all levels of government –State and LGA – with actions to address the underlying determinants of good nutrition. With this in mind, nine priority areas have been selected:

* **Maternal nutrition** - the cycle of undernutrition begins with the nutritional status of women and mothers.
* **Infant and young child feeding** - the right nutrition during a child’s first 1,000 days (from conception until a child turns two) can have a profound effect on the child’s growth, development, and economic potential.
* **Management of severe acute malnutrition in children under five** - treatment for SAM can be efficiently managed at the community level in a cost-effective manner.
* **Micronutrient deficiency control** - “Hidden hunger” is all too common in Nigeria meaning children are not receiving the proper nutrients to improve immunity and growth.
* **Diet related noncommunicable diseases** - Poor nutrition and dietary practices are leading to a double burden of malnutrition in Nigeria.
* **Adolescent Nutrition** - proper monitoring and evaluation controls are not in place for early detection of nutrition emergencies, growth monitoring of the population, and evaluation of nutrition programming.
* **Food Security** – exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern[[43]](#footnote-43).
* **Water and Sanitation** – households suffering from hunger and food insecurity are often the same as those that lack adequate water and sanitation facilities.
* **Poverty Reduction** - Food insecurity, ill health and sub-optimal caring practices are all closely related to poverty. The one billion people who live in extreme poverty – on the equivalent of less than US$1 per day – generally also consume fewer than 2,100 calories per day[[44]](#footnote-44).

The choice of these priority areas of interventions has also been informed by emerging evidence on nutrition interventions that can accelerate the reduction of maternal and child undernutrition in 36 high prevalence countries.[[45]](#footnote-45)

**Maternal Nutrition**

The intergenerational transfer of undernutrition begins with the poor nutritional status of women, both before and during pregnancy. Women who are short, thin, and gain inadequate weight during pregnancy, and are deficient in micronutrients are more likely to give birth to LBW infants. They are also at increased risk of obstetric complications and of maternal death. Globally, 32 million babies are born small-for-gestational-age (SGA) annually – representing 27% of all births in lower-middle-income countries.[[46]](#footnote-46) Foetal growth restriction causes more than 800,000 deaths each year in the first month of life – more than a quarter of all newborn deaths. This newer finding contradicts the widespread assumption that babies who are born SGA, by contrast with pre-term babies, are not at a substantially increased risk of mortality. Neonates with foetal growth restriction are also at substantially increased risk of being stunted at 24 months and of development of some types of noncommunicable diseases in adulthood.

Effective interventions to reduce maternal undernutrition, LBW, and associated morbidity and mortality include iron and folic acid (IFA) supplementation, increasing the age at first pregnancy, birth spacing, reduction of women’s workload, additional rest during pregnancy and lactation, and nutrition education to improve dietary intake. Several of these actions relate to improved caring practices for women. Improving caring practices for women requires building the knowledge of not only the women themselves, but of those who influence their access to the resources they need for proper care, particularly their family members. It requires greater empowerment of women within households, society in general and in decision-making.

**Table 4: Interventions focusing on Maternal Nutrition**

|  |  |  |  |
| --- | --- | --- | --- |
| **Intervention** | **Description** | **Target Population** | **Potential Delivery Platforms** |
| **Iron-folic acid supplements for pregnant women** | * Iron-folic acid supplements | Pregnant women | * Health facility/Antenatal care (ANC) * Community nutrition programs * Neonatal outreach and safe motherhood programs, * MNCH weeks/Child health days |
| **Vitamin A supplementation for lactating mothers** | * Vitamin A supplementation | Lactating women | * Health facility/ANC * Community nutrition programs * Neonatal outreach and safe motherhood programs, * MNCH weeks/Child health days |
| **Promote women’s nutritional status** | * Promote women’s nutritional status * Dietary counselling during pregnancy and lactation | Entire population | * Health facility/ANC * Community nutrition programs * Mass media approaches |

**Infant and Young Child Feeding**

Infant and young child feeding (IYCF) encompasses the set of feeding practices needed to prevent malnutrition. These practices are essential for the nutrition, growth, development, and survival of infants and young children. Breastfeeding should be initiated within 30 minutes of delivery, and infants should be exclusively breastfed for the first six months of life, and thereafter breastfeeding should continue up to two years and beyond while safe complementary foods are introduced at six months after delivery.

Inappropriate breastfeeding practices are a major factor contributing to infant and child mortality. Children from 0-6 months who are not breastfed have five and seven times higher risk of dying from pneumonia and diarrhoea, respectively.[[47]](#footnote-47) In addition, these children are at a higher risk of developing non-communicable diseases in adulthood. Promotion of EBF for six months and continued breastfeeding, with adequate complementary foods, until 24 months and beyond constitutes the most effective preventive interventions for reducing child morbidity and mortality.

Stunting (height-for-age z-score <-2 SD) probably begins during pregnancy and continues during the first six months of life, but the prevalence of stunting increases during the 6-24 month window when breast milk is no longer sufficient to provide a growing infant the entire need of micro- and macronutrients. While the addition of appropriate complementary foods to breast milk prevents stunting from occurring and can reverse the early effects of stunting, if not addressed by age two, the impact of this chronic undernutrition on brain function becomes irreversible. A window of opportunity exists for the 0-24 month period to prevent stunting or achieve a catch-up through EBF and appropriate and adequate complementary feeding.

Skilled behaviour change counselling and support for infant and young child nutrition should be integrated into all points of contact between mothers and health service providers during pregnancy and the first two years of life of a child. Every health facility that provides maternity services should successfully and sustainably practise all the requirements of the IYCF guidelines. Community-based support networks are also needed to help support appropriate IYCF at the community level.

Since most rural families lack year-round access to sufficiently nutritious foods, behaviour change counselling can only go so far in reducing undernutrition. The burden is felt not only for the child, but also the mother during breastfeeding and pregnancy, who often shares food with the rest of the family. Foods currently on the market are too expensive for many of the poorest and most vulnerable, and do not reach rural areas where the majority of the population lives and the problem is most severe. There is a great need for nutritious products for infants and pregnant and lactating women (PLW) that is produced locally, based primarily on local agricultural products, and aligned with local consumption habits. Additionally, such products should be fortified with the micro- and macronutrients required for children under five and PLW, and made widely available through the health system, communities and private sector delivery channels.

Feeding of children in difficult circumstances, such as LBW infants, infants born to HIV positive mothers, orphans and those in emergency situations deserve special considerations. Other conditions worthy of attention include sick infants with persistent diarrhoea, infants living with HIV/AIDS, infants of adolescent mothers and those with cleft-palate.

**Table 5: Interventions focusing on Infant and Young Child Feeding**

|  |  |  |  |
| --- | --- | --- | --- |
| **Intervention** | **Description** | **Target Population** | **Potential Delivery Platforms** |
| **Breastfeeding promotion and support, taking into account policies and recommendations of HIV and infant feeding** | * Early initiation of breastfeeding within 30 minutes of delivery * EBF for six months and continued breastfeeding until two years of age and 12 months for HIV-exposed infants | Pregnant mothers and parents of infants under six months of age | * Community nutrition programs * Health facilities/Antenatal and delivery care * Neonatal outreach programs, * Mass media approaches * World Breastfeeding Week * National Nutrition day |
| **Complementary feeding promotion** | * Behaviour change promotion to follow international best practices * Provision of CIYCF counselling * Provision of nutrient-dense complementary foods for children under two | Pregnant mothers and parents of infants and young children under two | * Health facilities (training H/Ws) * Community nutrition programs * Mass media approaches * Private sector * National Nutrition Day |
| **Strengthening of optimal feeding of a sick child during and after illness and exceptional circumstances** | * Encouragement of breastfeeding * Increased frequency of eating during and after illness | Pregnant mothers and parents of infants and young children under five years of age | * MNCH weeks/Child health days * Community nutrition programs * Paediatric wards and outpatient clinics |
| **Advocacy for legislation supporting the International Code of Marketing of Breast milk Substitutes** | * Advocate for increased monitoring and enforcement of legislation that supports breastfeeding promotion | Legislators | * Advocacy campaigns |

**Management of Severe Acute Malnutrition in Children Under Five**

The capacity of the family, community, and health system to manage child undernutrition needs to be further developed. Caregivers, community health workers (CHWs), and health service providers who have contact with infants and young children should be oriented on the early signs and dangers of undernutrition. Community health workers and health service providers should also know how to identify the underlying causes of undernutrition; be able to recognize poor child caring practices and advise caregivers on corrective action; and be equipped with screening tools for acute undernutrition and appropriate information for referral and follow-up.

A system for active screening of acute undernutrition in children needs to be established both at the community and facility level, with referral for appropriate treatment. Mid-upper arm circumference (MUAC) measuring tape is ideal as an initial screening tool. It is simple to perform, rapid, and can be integrated into all contacts between children and health services (for example, immunization, integrated management of childhood illnesses (IMCI), vitamin A supplementation and de-worming, preventing mother-to-child transmission of HIV (PMTCT), and paediatric care for HIV/AIDS), as well as other child survival outreach programs such as MNCH weeks.

Children with acute malnutrition are at a higher risk of dying, particularly those with SAM, and require therapeutic feeding with appropriate treatment. Severely acute malnourished children with complications should be referred to an inpatient facility with trained staff for nutritional rehabilitation and treatment according to the National Guidelines. Those without complications, who are alert, have good appetite, and are clinically well can be managed at home through CMAM. Health service providers will require guidelines and training in order to carry out their responsibilities as well as an uninterrupted supply of therapeutic feeds, supplements, and pharmaceuticals.

**Table 6: Interventions focusing on Management of SAM**

|  |  |  |  |
| --- | --- | --- | --- |
| **Intervention** | **Description** | **Target Population** | **Potential Delivery Platforms** |
| **Prevention and management of moderate undernutrition in children 0-23 months of age** | * Identification of circumstances in which food supplementation is needed * Provision of adequate complementary food in these circumstances | Populations with high prevalence of children 0-23 months of age with weight-for-age z scores <-2 | * Service delivery through community nutrition programs or primary healthcare system or market-based delivery systems (e.g. using coupons) |
| **Treatment of severe acute malnutrition** | * Identification of SAM and subsequent treatment | Children 6-59 months of age with weight-to-height z scores <-3 (with or without oedema) or with MUAC <110mm | * Identification of children through primary health care; referral through community nutrition programs, MNCH weeks or child health days * Service delivery via inpatient therapeutic feeding centers * Service delivery via CMAM, referral to PHC system |

**Micronutrient Deficiency Control**

Vitamin and mineral deficiencies contribute to morbidity and mortality among children by impairing immunity, impeding cognitive development and growth, and reducing physical capacity and work performance in adulthood. Micronutrient deficiencies of public health importance in Nigeria include vitamin A, zinc, iron, folic acid, and iodine. Multiple strategies are needed to prevent and control these deficiencies. They are all designed to increase the dietary intake of vitamins and minerals, and include supplementation, fortification, and dietary improvement. Groups at high risk of vitamin and mineral deficiencies need supplements to produce rapid improvements in their vitamin and mineral status. This is likely to remain the case until significant improvements are made in the diets of the entire population.

The strategy aims to ensure that the fortification agenda in Nigeria is advanced by ensuring that legislation, regulations, standards and guidelines are set for fortification of appropriate food vehicles with vitamins and minerals; establishing a quality assurance system at critical control points; and socially marketing fortified foods among consumers.

**Table 7: Interventions focusing on Micronutrient Deficiency Control**

| **Intervention** | **Description** | **Target Population** | **Potential Delivery Platforms** |
| --- | --- | --- | --- |
| **Vitamin A supplementation** | * Bi-annual doses for children * Used in the management of measles | Children 6-59 months of age | * MNCH weeks/Child health days * Vitamin A campaigns * Routine health care visits combined with outreach |
| **Zinc supplementation** | * As part of diarrhoea management | Children 6-59 months of age | * PHC system * MNCH weeks/Child health days * Market-based delivery system plus social marketing |
| **Multiple micronutrient powders** | * Micronutrient powders for in-home fortification of complementary foods | Children 6-23 months of age | * Community nutrition programs * MNCH weeks/Child health days * PHC system * Market-based delivery system |
| **De-worming** | * Two rounds of treatment per year | Children 12-59 months of age | * MNCH weeks/Child health days * Vitamin A campaigns * PHC system * Market-based delivery system |
| **Nutrition education on bio-fortified foods** | * Promote consumption of fortified foods | Parents, caregivers | * MNCH weeks * Health facilities * Campaigns |

**Diet Related Non-communicable Diseases**

Diet related non-communicable diseases (DRNCD) such as obesity, diabetes mellitus, and cardiovascular diseases are increasing in public health importance in Nigeria. About 5 million Nigerians may die of noncommunicable diseases by the year 2015, and diabetes alone is projected to cause about 52% of the mortality by 2015.[[48]](#footnote-48) At present, about 8 million Nigerians suffer from hypertension and 4 million have diabetes. Researchers have empirically identified the link between noncommunicable diseases and globalization, urbanization, demographics, lifestyle transition, socio-cultural factors, poverty, poor maternal, foetal and infant nutrition.

**Table 8: Interventions focused on DRNCD**

| **Intervention** | **Description** | **Target Population** | **Potential Delivery Platforms** |
| --- | --- | --- | --- |
| **Awareness of DRNCD** | * Identifying risk factors, providing education, and increasing services for DRNCD | General population | * Mass media * Advocacy campaigns * Routine health care visits combined with outreach |

**Adolescent Nutrition**

There are an estimated 1.2 billion adolescents aged 10-19 in developing countries, making up one fifth to one quarter of their country's populations. Adolescents have typically been considered a low risk group for poor health, and often receive few healthcare resources and scant attention[[49]](#footnote-49).

Adolescence is a critical period of growth and development, so good nutrition is essential. During adolescence, the need for most nutrients including energy, protein, vitamins and minerals increases. As appetite is also likely to increase, it is important that food choices are made carefully. The phenomenal growth that occurs in adolescence, second only to that in the first year of life, creates increased demands for energy and nutrients. Total nutrient needs are higher during adolescence than any other time in the lifecycle. Nutrition and physical growth are integrally related; optimal nutrition is a requisite for achieving full growth potential[[50]](#footnote-50). Failure to consume an adequate diet at this time can result in delayed sexual maturation and can arrest or slow linear growth. Nutrition is also important during this time to help prevent adult diet-related chronic diseases, such as cardiovascular disease, cancer, and osteoporosis. Prior to puberty, nutrient needs are similar for boys and girls. It is during puberty that body composition and biologic changes (e.g., menarche) emerge which affect gender-specific nutrient needs. Nutrient needs for both males and females increase sharply during adolescence. Nutrient needs parallel the rate of growth, with the greatest nutrient demands occurring during the peak velocity of growth. At the peak of the adolescent growth spurt, the nutritional requirements may be twice as high as those of the remaining period of adolescence[[51]](#footnote-51).

There are many factors and conditions which affect nutrient needs during adolescence including pregnancy, lactation, level of physical activity, and chronic illnesses

Energy needs of adolescents are influenced by activity level, basal metabolic rate, and increased requirements to support pubertal growth and development. Basal metabolic rate is closely associated with the amount of lean body mass. Adolescent males have higher caloric requirements since they experience greater increases in height, weight, and lean body mass than females[[52]](#footnote-52).

Besides being important for normal vision, vitamin A plays a vital role in reproduction, growth, and immune function[[53]](#footnote-53).Iron is vital for transporting oxygen in the bloodstream and for preventing anemia. For both male and female adolescents, the need for iron increases with rapid growth and the expansion of blood volume and muscle mass. The onset of menstruation imposes additional iron needs for girls. Iron needs are highest during the adolescent growth spurt in males and after menarche in females. Iron deficiency is the most prevalent micronutrient deficiency among adolescents. Iron deficiency and anemia are associated with impaired cognitive functioning, lower school achievement and most likely lower physical work capacity.

Folate plays an integral role in DNA, RNA and protein synthesis. Thus, adolescents have increased requirements for folate during puberty. The RDA for folate is 300 µg/day for 9-13 year olds and 400 µg/day for 14-18 year olds. Adequate intakes of folate prior to pregnancy can reduce the incidence of spina bifida and select other congenital anomalies, and may reduce the risk of Down syndrome among offspring[[54]](#footnote-54). The protective effects of folate occur early in pregnancy, often before a teen may know she is pregnant. Thus, it is important that female adolescents who are sexually active consume adequate folic acid. In view of the evidence linking folate intake with neural tube defects in the fetus, it is recommended that all women capable of becoming pregnant consume 400 µg/day from supplements or highly fortified breakfast cereals in addition to food folate from a varied diet that includes fruits, vegetables, and whole grains. Folate deficiency, if not addressed during the pre or periconceptual period, may cause irreversible fetal damage. Addressing folate deficiency beyond the middle of the first trimester of pregnancy will not correct neural tube defects that occur in the early weeks of pregnancy. The unplanned nature of many adolescent pregnancies underscores the need to take a preventive approach to this specific nutritional issue for youth.

**Table 9: Interventions focused on Adolescent Nutrition**

| **Intervention** | **Description** | **Target Population** | **Potential Delivery Platforms** |
| --- | --- | --- | --- |
| **Promote optimal linear growth and prevent thinness (low Body Mass Index)** | * Nutrition education on adequate energy/protein consumption * Micronutrient strategies | Adolescent boys and girls at risk of stunting, thinness | * MNCH weeks/Child health days * School-based programs |
| **Supplementary feeding for at-risk girls during pregnancy/lactation** | * Comprehensive ANC for pregnant adolescents including counselling on preventive health and nutrition self-practices * Provision of Iron-folate supplements to adolescent girls | Adolescent girls in supervised settings (weekly for non-pregnant, daily for pregnant teens) | * PHC system * MNCH weeks/Child health days * School-based programs |
| **De-worming** | * Regular deworming of adolescents in high parasite-load settings (girls at higher risk than boys) | Adolescents | * Community nutrition programs * MNCH weeks/Child health days * PHC system * School-based programs |
| **Postpone/avoid adolescent pregnancy to reduce nutritional losses** | * Increase age at marriage; delay first pregnancy including provision of family planning and reproductive health information and services for adolescents | Adolescent girls | * Community-based campaigns * School-based campaigns |
| **Promotion of Gender Equity** | * Gender-sensitive school environment/policies (e.g., safety/privacy for girls at school; flexible hours for girls; programs to support school retention for adolescent mothers; raise proportion of female teachers * Foster girls' self-esteem (e.g., sports programs; community-service projects; mentoring programs to expand girls' expectations for the future) | Parents, caregivers  School teachers  Adolescents | * School-based programs * Community-based campaigns |

**Poverty Reduction**

Nutritional status is often associated with food intake which, in turn, is taken to be dependent on income. Hence poverty is regarded as a major cause of low level of nutrition. In reality, the situation is not as straightforward as often aspects of nutrition are dependent on other factors apart from food intake[[55]](#footnote-55). More so, the level of income may not be the only determinant of food intake. Therefore the relationship between poverty and nutrition is quite complex. The UNDP 2008-2009 report on Nigeria put the human poverty index for Kebbi state at 50.2%.

Nutritional intake and status is both an effect and a cause of income-earning opportunities of individuals and households. As an outcome, the nutritional status of individuals is influenced, among other factors, by the amount and type of food that is consumed. That in turn is influenced largely by the employment and income-earning opportunities available to household members. Finally, employment and income-earning opportunities at the household level are linked to production activities within as well as outside the household. The level of nutritional intake can also influence the income-generating ability of the household by increasing or decreasing productivity, which can be a function of the energy intake of the individual through food consumption. Therefore, improving nutritional intake of individuals can result in increased productivity and more income.

Discrimination, geography and environmental factors play a role in poverty. Also, poverty rates tend to be higher in more remote areas with difficult access to roads, markets, communications infrastructure, schools and health services. Such areas are often “less-favoured” in terms of their natural resource endowments as well as in socioeconomic and political terms. Most of the rural poor people in developing countries (who account for the vast majority of all poor people) live in such resource-poor areas[[56]](#footnote-56).

Agriculture is the principal driving force of the rural economy in most developing countries and sometimes the whole economy where the country does not have significant quantities of mineral resources. This is the case also for Kebbi state. Massive, sustainable poverty and hunger reduction is nearly impossible without growth in rural economies. Hunger and poverty reduction require that the incomes of poor people and the sources from which they derive their livelihoods be enhanced. Therefore, pro-poor income growth needs to be encouraged. Initial productivity-induced growth in agricultural output will create multiplier effects in non-farm economies, increasing the incomes of those involved. It will also raise the incomes of those directly engaged in farming.

**Food Security**

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life[[57]](#footnote-57). It has four dimensions as defined by the FAO: food availability, access to food, stability of supply and access, and safe and healthy food utilization. Stability depends on food production, incomes, markets and transfer programmes (both public and private) and can be adversely affected by shocks due to weather, price fluctuations, human induced disasters and political and economic factors. Utilization refers to the proper use of food and includes the existence of appropriate food processing and storage practices, adequate knowledge and application of nutrition and child care and adequate health and sanitation services[[58]](#footnote-58). Food security is a key factor in good nutrition, together with health, sanitation and care practices.

**Figure 4: FAO/FIVIMS Framework: linkages between the overall development context, the food economy, households and individual measures of wellbeing**



Even if a person consumes enough calories, this does not guarantee adequate intake of essential micronutrients – vitamins, minerals and trace elements. Micronutrient malnutrition – often called “hidden hunger” because it is not readily apparent from clinical signs of a wasted body – afflicts a far greater swath of humanity than insufficient calorie intake.

The diet in Kebbi state is based mainly on cereals (maize, rice), poultry and fish. Consumption of micronutrient dense foods such as fruits and vegetables is infrequent and subsequently micronutrient deficiencies are widespread. Agriculture is the mainstay of the economy Kebbi State, with more than eighty percent of the people engaged in it. Rainfall is seasonal, as such most farming is carried out during the wet season on the upland during which food and cash crops such as millet, sorghum, maize, rice, beans, cassava, cotton, and tobacco are cultivated. During the dry season, farming is carried out in the vast fadama lands where crops such as tomatoes, onions, pepper, sugar cane, vegetable and sweet potatoes and wheat are cultivated. Farming is mostly based on indigenous techniques, using local inputs of seeds, family and animal labour and informal credits

**Table 10: Interventions focused on Food Security**

|  |  |  |
| --- | --- | --- |
| **Food availability** | **Stability of Food supplies** | **Food access** |
| * Provisions for good agricultural land * Provisions for increasing productivity and production of food (use of modern agricultural inputs/technology) * Irrigation; * Knowledge transfer; * Capacity building and institutional development; * Research and development to improve food crop varieties; | * Early warning systems on stock depletion and management; * Food saving systems at home and warehouse systems nationally; * Food storage and post-harvest management of losses; | * On and off farm employment opportunities; * Food and cash related safety nets; * Market and fair prices for agricultural commodities. |

**Water and Sanitation**

Access to safe water remains an extremely important global health issue. More than 2 billion people live in the dry regions of the world and suffer disproportionately from malnutrition, infant mortality and diseases related to contaminated or insufficient water[[59]](#footnote-59). Globally, one billion people are currently without access to safe water and over 2 billion lack adequate sanitation facilities. Populations suffering from hunger are often the same as those that lack adequate water and sanitation. Water insecurity constitutes a serious constraint to sustainable development, particularly in savannah regions which cover approximately 40 percent of the world’s land area[[60]](#footnote-60). Water scarcity may lead to multiple adverse health outcomes, including water-borne diseases, exposure to chemicals, vector-borne diseases associated with water-storage systems and malnutrition. Drought and water scarcity can lead to negative effects on nutrition through increased infections, mortality and reduced food availability (in terms of both quantity and quality). Most efforts to address nutrition and hunger have focused on increasing food availability and caloric intake. However, energy balance depends on the intake and use of calories. In most rural settings, due to the unavailability of clean sources of water, most impoverished people expend significant calories from traveling over great distances to collect water, or are unable to properly absorb food nutrients because of underlying diarrhoeal disease or other intestinal infections.

Meanwhile, mounting evidence has shown that poor hygiene and sanitation also constrain linear growth in children. The World Health Organization estimates that 50 percent of malnutrition is associated with repeated diarrhea or intestinal worm infections from unsafe water or poor sanitation or hygiene[[61]](#footnote-61). Stunting can stem from enteropathy, a chronic illness caused by inflammation that keeps the body from absorbing calories and nutrients. Children who are exposed to open defecation or who don't have a clean water supply may ingest bacteria, viruses, fungi, or parasites that cause intestinal infection; chronic inflammation in a child's gastrointestinal track is linked to stunting and anemia, and puts children at risk for poor early childhood development[[62]](#footnote-62).

Many organizations have adopted an integrated approach to improve water, sanitation, and hygiene, known as WASH programs. One of the United Nation's Millennium Development Goals is to halve by 2015 the proportion of the population without sustainable access to safe drinking water and basic sanitation. However, despite progress, 2 billion people in developing countries still lack access to improved sanitation facilities[[63]](#footnote-63). Universal access to water and sanitation hygiene is an integral component of tackling poverty, food security and malnutrition.

## 3.5 Strategic areas

Six main strategic areas have been identified to achieve high coverage and quality delivery of the priority areas of focus in nutrition, and thus achieve the objectives of the plan. These strategic thrusts include the following:

1. Behaviour change communication;
2. Enhancing the provision of quality health services;
3. Capacity building;
4. Advocacy, resource mobilisation and resource allocation at all levels;
5. Research, monitoring and evaluation; and
6. Private Sector Engagement

In addition to these, two cross-cutting strategies were also identified for improved delivery of Nutrition programs in the state, and these are:

1. Coordination and multi-sectoral partnerships
2. Financing

These strategic areas form the basis of the detailed 5-year costed Plan of Action.

**Strategy 3.5.1: Behaviour Change Communication**

Behaviour change communication (BCC) is an effective way of improving the nutritional status of a population by providing them with appropriate information about food and feeding practices that enhance positive outcomes. At the facility, household, and community level, improved knowledge on caring practices and health seeking behaviour for infants, young children, pregnant women, mothers and women of reproductive age is a necessary component of sustainable efforts to reduce malnutrition.

**Strategy 3.5.2:** Enhancing the provision of quality health services;

Nutrition interventions must be delivered at scale and with high coverage if they are to have an impact on the prevalence of undernutrition at the population level. A focus of this plan will be on delivering a package of high-impact nutrition services extending the reach of services so that vulnerable populations are not missed. Additionally, support and collaboration between the FMOH and State Ministries of Health (SMOH) will be enhanced in order for States to be able to address the unique nutritional issues they face and ensure all the required components for service delivery are put in place at the facility and community levels.

**Strategy 3.5.3 Capacity Building**

Evidence from the WHO-led Landscape Analysis Country Assessments carried out in many low- and middle-income countries over the last five years, indicates that the capacity to act in nutrition is very often quite limited, both at national and state levels. Before trying to strengthen nutrition capacity in Nigeria, there is a need to have an understanding of the sort of capacities needed, what already exists, what must be developed, as well as what are the challenges, the limitations, and the opportunities for doing this.

With support from partners, capacity building will be undertaken to increase the ability of service providers - at all levels - to provide core nutrition services and counselling. Additionally, efforts will focus on improving the ability of State and LGA nutrition officers to coordinate and budget for nutrition activities.

**Strategy 3.5.4: Advocacy, Resource Mobilization** and Resource Allocation at all levels

Advocacy will be intensified to raise the visibility and profile of nutrition at all levels, and increase the commitment and resources for nutrition programming. The budget gap in nutrition needs to be reduced by mobilizing adequate and sustainable financial resources and improving the efficiency in the use of these resources for nutrition. Until now, although a budget line has been created for nutrition in the FMOH and SMOH, these funds remain to be released. It is hoped that the situation will change in order to complement the efforts of donor agencies.

**Strategy 3.5.5: Research, Monitoring and Evaluation**

Research, monitoring and evaluation (M&E) are essential for evidence-based decision making and enhancing public accountability. Monitoring is continuous and aims to provide the management and other stakeholders with early indications of progress in the achievement of goals, objectives, and results. Evaluation is a periodic exercise that attempts to systematically and objectively assess progress towards and the achievement of a program’s objectives or goals. Research tests specific interventions and approaches for the betterment of nutritional status, and provides further evidence for policy and programming.

**Strategy 3.5.6: Private Sector Engagement**

According to the SUN toolkit on private sector engagement, the private sector is where most people access most products and services to meet most of their needs. Including private sector in the SUN efforts acknowledges how people live and offers major opportunities to improve nutrition sustainably and at scale. Private sector engagement in Scaling Up Nutrition will bring specific capabilities and expertise and innovative approaches and technologies to nutrition efforts.

To address Nutrition holistically, there is an urgent need to engage the private sector in a meaningful, comprehensive way to meet the challenge. The engagement has to support private sector companies’ core business interests while addressing critical strategies for improvement of the Nutritional status of the general population. These partnerships advance the impact of sustainable development and foster private sector-led growth which is critical to reducing poverty, fighting hunger, and improving nutrition. State Governments need to create an enabling policy environment and the necessary infrastructure that will facilitate private sector investments. Kebbi state is endowed with vast agricultural resources and can tap into this area to increase private sector investments to increase agricultural production amongst others. Other opportunities exist to develop responsible market-based approaches to provide sustainable access to effective and affordable nutritious products and services at scale to entire populations e.g. locally sourced and manufactured complementary foods.

**Strategy 3.5.7: Coordination and Multi-Sectoral Partnerships**

The NSPAN and the reviewed National Policy on Food and Nutrition recognize that nutrition interventions need to be coordinated at all levels of government-Federal, State and LGA. The policy document advices the creation of a committee on food and nutrition committee domiciled in the ministry of Budget and Economic Planning that will advise on the coordination of nutrition interventions.

Recent research by Save the Children identified Kebbi as one of the states without functional state committees on food and nutrition. Underpinning the Kebbi State Strategic Plan of action will be the coordination of the relevant MDAs that have a mandate towards nutrition. The plan seeks to achieve effective collaboration among the various stakeholders, by revitalizing the state committee on food while working towards the creation of a nutrition desk office in key MDAs (Health, Education, Information, Agriculture, Environment, Women Affairs, Local Government, Information and Budget& Planning).

While the health sector efforts is commended, especially towards reducing the rate of wasting in Kebbi State, a long lasting in nutrition outcome( Stunting) can only be realized with effective coordination and response from other sectors. In accordance to recommendation by experts on nutrition, health sector response alone can only reduce stunting by 40% the last 60% reduction will require concerted efforts of other MDAs.

To this end, the performance monitoring of this strategic plan has set up matrix and indices that will measure progress towards the coordination. These indicators will not only measures coordination, but will also monitor progress towards the institutionalization of nutrition interventions in activities, plans and guideline of the afore mentioned MDAs.

**Strategy 3.5.8: Financing**

The financial shortfall within the nutrition sector is one of the biggest barriers to success, and reflects insufficient political commitment to tackling the scourge of malnutrition. Only 0.4% of Overseas Development Aid is spent on nutrition programmes; identified by The Lancet in 2013 as only around 1.4% of what is required. This is despite evidence proving undernutrition contributes to 45% of all deaths in children under the age of 5. There is therefore an urgent need for Governments to bridge the financial gap for nutrition. A fiscal space analysis of the National Strategic plan of Action for Nutrition developed by the Health Sector in 2014 showed that approximately a third of the costs required for the full implementation of the plan were available over the period assuming that baseline costs don’t change. The majority of these costs are from International donors and multilateral organizations like UNICEF[[64]](#footnote-64).

Given the burden of malnutrition in Nigeria, the budgetary commitments to Nutrition interventions are disproportionately small. Kebbi state has more recently provided funds towards the procurement of RUTF for CMAM, but more needs to be done. As global resources diminish and the economic outlook worsens, governments have to identify innovative mechanisms to increase financing for nutrition and food security. Innovative mechanisms to catalyze private investment are essential to achieve food security and nutrition objectives. These mechanisms need to have a wide scope, complement traditional financing strategies, and have long-term and predictable income streams.

Innovative financing mechanisms can be sub-divided into:

1. Generation of new resources – through taxes, voluntary contributions,
2. Catalyze private investments – Credit tools, risk management tools, subsidy schemes

Critical to financing is accountability to ensure that resources are used for purposes planned. The ability to track nutrition funding flows to Nutrition programs is fundamental to the success of any plan. This can be done through routine budget reviews for line items on Nutrition, and annual public expenditure reviews (PER).

### Delivery Platforms

It is vital that these interventions and strategies are delivered in an effective and efficient manner to achieve maximum impact. The delivery platforms will serve as the primary means of delivering the strategies to different target populations in the state:

1. Through the health system;
2. Through the community;
3. Through the school system;
4. Through national campaigns and outreach activities; and
5. Through social safety net programs

In choosing these platforms, it is necessary that they have maximum reach, are able to target and provide services to the most vulnerable groups in the population, and are cost-effective in delivering these strategies and interventions. A huge focus will be placed on strengthening the primary healthcare service delivery points to provide the basic prevention and curative nutrition interventions as they are closest to the people. Communities will be empowered to proactively work towards reducing malnutrition and its effects in order to improve the health outcomes, while highly successful campaigns and outreach programs such as the MNCH weeks will be leveraged further to increase reach especially in the areas of micronutrient deficiency control, as they provide a huge opportunity to cover indigent groups who can ordinarily not afford healthcare services through the facilities.

Nutrition information dissemination and activities will be increased in all public schools in the state, with a focus on targeting school children. The agriculture section will also provide more social safety net programs to encourage small scale farmers and improve food production and storage and distribution processes in the state.

Activities will be grouped to ensure that a comprehensive suite of interventions, which cover all of the priority areas, are provided through each of these platforms and targeted at the right groups.

## 3.6 Monitoring and Evaluation

To better understand the scope of the problem of malnutrition throughout the country and to measure progress in addressing it, the nutritional status of the population must be monitored on a regular basis. This requires the collection and collation of nutritional data, its analysis, and management. A robust results framework and M&E system will be put in place for implementation and results to be reported in a timely and efficient manner. In addition, transparent feedback loops will be established with implementing agencies, stakeholders, and the public.

Monitoring and evaluation will help extract relevant information from past and ongoing activities that can be used as the basis for programmatic fine-tuning, reorientation, and future planning. Without effective planning for M&E, it would be impossible to evaluate if activities are going as planned, whether progress and success can be claimed, and how future efforts might be improved. Programs and projects with strong M&E components tend to stay on track. Additionally, problems are often detected earlier, which reduces the likelihood of having major cost overruns or time delays later.

The role of M&E will be to provide a strategic link with the NSPAN, and ensure that strategies are dynamic and more effective in responding to the nutrition challenges in the country. The following will be generated:

* + Overall performance of the KSPAN;
  + Coverage of nutrition interventions and services to groups that are at risk such as women and children;
  + Maternal and child epidemiology related to nutrition; and
  + Effects of nutrition policies, strategies, and inputs on nutrition outcomes, which will inform the process of redesigning sector policies and strategies as they relate to nutrition.

**3.6.1 Information Requirements**

Among the key outcomes to be monitored will include malnutrition among children under-five years and women of child-bearing age, as well as effectiveness of nutrition programs such as service delivery, nutrition education campaigns, food availability and access and extent of the use of fortified foods by households.

A set of key performance indicators has been identified, and will form the basis of the information management system for the KSPAN. Indicators will comprise a mix of outcome and output indicators. The program will minimize the use of inputs indicators to monitor progress. The selection of indicators to be tracked will be based on what is practical, what is results-oriented, and what helps to build programs stronger.

**3.6.2 Mid-term review / Impact assessment**

An efficient and constant feedback loop is critical to ensuring that the strategic plan of action is being followed. In order to make timely decisions on what is working, what is not, and what needs to change, a mid-term review of the Strategic Plan of Action will be undertaken in 2018 to monitor and track progress towards meeting targets.

A report will be produced which will provide an update to all stakeholders as to the progress of the plan, disseminating lessons learned, and opportunities for moving forward.

### 3.6.3 Monitoring and Evaluation Framework

### Outcome Level Indicators

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Priority Area | Expected Outcomes | Indicators | Baseline | TIMEFRAME | | | | | Data Source |
| **Y1** | **Y2** | **Y3** | **Y4** | **Y5** |  |
| Adolescent Nutrition | By 2020, 60% of adolescent girls will receive folate and folic acid supplementation | Number of adolescent receiving folate and folic acid supplementation |  |  |  |  |  |  | NDHS, MICS |
| Maternal Nutrition | Increase iron-folate supplementation coverage of pregnant women from 13% to 40% s by the year 2020. | % women who receive iron folate and folic supplementation | 13% | 18.4% | 23.8% | 29.2% | 34.6% | 40% | SMART SURVEY,NDHS, ADMIN |
| Food Security | 40% of farmers in kebbi state will practice integrated farming system | % of farmers practising integrated farming system | NA | 8% | 16% | 24% | 32% | 40% | State Ministry of Agriculture reports |
| 20% of farmers in Kebbi will plant biofortied seeds and staple crops | % of farmers planting biofortified seeds and staple crops | 0% | 4% | 8% | 12% | 16% | 20% | State Ministry of Agriculture reports |
| Infant and Young Child Feeding | Increase the percentage of children age six months and above who receive appropriate complementary feeding from 20% to 40% by 2020. | % of children age six months and above who receive appropriate complementary feeding | 20% | 24% | 28% | 32% | 36% | 40% | NDHS |
| Increase the percentage of children from 0 to 23 months who were breastfed within one hour of birth from 5.9% to 30% by 2020 | % of children age 0 to 23 months who are breastfed within one hour of birth | 5.9% | 10% | 13% | 17% | 24% | 30% | SMART SURVEY |
| Micronutrient Nutrient | Achieve universal household access to iodized salt by 2020. | % Household with access to iodized salt |  |  |  |  |  | 100% | Nutrition Survey |
| Increase coverage of Vitamin A supplementation from 15% to 50% by 2020. | %coverage of Vitamin A supplementation | 15% | 19% | 27% | 34% | 42% | 50% | NDHS, SMART SURVEY, MNCH weeks reports |
| Increase coverage of Zinc supplementation in diarrhoea management from 0.7 to 20% of all children needing treatment by 2020. | % of children with diarrhea receiving Zinc and low osmolality ORS for treatment | 0.7% | 4.0% | 8.0% | 12% | 16% | 20% | SMART SURVEY, Health Facility Audits, NDHS, NHMIS |
| Poverty Reduction | Increase the number of girl-child enrolled in schools from to 65% by 2020 | % of girls aged 5 – 19 enrolled in school |  |  |  |  |  | 65% | Ministry of Education annual report |
| SAM | 50% reduction in the prevalence of Stunting in children under 5 | percent (%) of children under 5 with stunting | 57% | 51% | 46% | 34.5% | 38.5% | 28.5% | NDHS, MICS |
| 50% reduction in the prevalence of wasting in children under 5 | percent (%) of children under 5 with wasting | 1.8% | 1.6% | 1.4% | 1.2% | 1.0% | 0.9% | NDHS,MICS |
| 50% reduction in the prevalence of underweight in children under 5 | percent of (%) children under 5 that are underweight |  | 39 |  |  |  |  | NDHS,MICS |
| Water and Sanitation | Increase access to potable water from 19% to 50% by 2020. | % of communities with access to potable water | 19% | 25% | 31% | 38% | 44% | 50% |  |
| DRNCD | 50% reduction in the prevalence of Diet related non-communicable diseases | (%) of people living with DRNCD | 28% | 25% | 20% | 18% | 16% | 14% |  |

### Output Level Indicators

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Expected outputs | Indicators | TIMEFRAME | | | | | Data Source |
|  |  |  | Y1 | Y2 | Y3 | Y4 | Y5 |
| Adolescent Reproductive | By 2020, 10,500 adolescents will be reached with nutrition messages | 10,500 Adolescents reached with nutrition message | 2100 | 2100 | 2100 | 2100 | 2100 | Program Report |
| By 2020, at least one Adolescent Support group center will be established in each local government | 21 Adolescent support group centers established | 10 | 21 | 21 | 21 | 21 | Program Report |
| By 2020, nutrition will be integrated into the curriculum of schools (Primary & Post Primary ) | Number of schools with Nutrition as a subject in curriculum |  |  |  |  |  |  |
| Maternal Nutrition | By 2020, 10 campaign activities will held for maternal nutrition | Number of campaigns held per year | 2 | 2 | 2 | 2 | 2 | Campaign Report |
| By 2020, 20% of pregnant women in highest burden LGAs will receive CCT to encourage improved nutrition practices and ANC attendance | % women in identified high burden LGAs receiving CCT | 4 | 8 | 12 | 16 | 20 | Financial Report |
| By 2020, at least one health care worker from each of the 123 health facilities that offer ANC will be competent in nutrition counselling, breastfeeding & management of nutrition supplies | Number of health care workers from each of 123 health facility trained | 123 | 123 | 123 | 123 | 123 | Training Report Visit |
| By 2020, the 9 line ministries will have a nutrition desk office | Number of state ministries with nutrition desk | 9 | 9 | 9 | 9 | 9 | Agencies/ Ministry Report |
| By 2020 locally sourced pre-packaged complementary food recipes will be produced in Kebbi | Number of complementary food produced | 1 | 2 | 3 | 4 | 5 | Research Report |
| Food Security | 4200 community farmers (200 per LGA) will be trained on food processing, agriculture value chains by 2020 | Number of community farmers trained | 840 | 1680 | 2520 | 3360 | 4200 | Program Report |
| 21 demonstration farms set up | Number of demonstration farms established | 21 |  |  |  |  | Program Report |
| IYCF | 15 public awareness campaigns conducted on IYCF by 2020 | Number of public awareness campaigns on IYCF conducted annually | 3 | 3 | 3 | 3 | 3 | Program Report |
| 1200 health workers trained on IYCF and BFHI activities by 2020 | Number of trained on IYCF and BFHI activities annually | 240 | 480 | 720 | 960 | 1200 | Program Report |
| 1950 community volunteers trained to provide BFCI by 2020 | Number of community volunteers trained to provide BFCI | 325 | 650 | 975 | 1300 | 1950 | Program Report |
| 250,000 mothers and care givers counselled at PHCs, ANCs, OTPs, CMAM sites by 2020 | Number of mothers and caregivers counselled | 50,000 | 100,000 | 150000 | 200,000 | 250,000 | Program Report |
| MICRONUTRIENT DEFICIENCY | 15 public awareness campaigns conducted on MNDC by 2020 | Number of public awareness campaigns on MNDC conducted annually | 3 | 6 | 9 | 12 | 15 | Program Report |
| 1200 health workers trained on MNDC by 2020 | Number of health workers trained on MNDC annually | 240 | 480 | 720 | 960 | 1200 | Program Report |
| 15 public awareness campaigns conducted on MNDC by 2020 | Number of public awareness campaigns on MNDC conducted annually | 3 | 6 | 9 | 12 | 15 | Program Report |
| Poverty Reduction | 11,250 women, youths and adolescents trained by 2020 on vocational activities such as tailoring, soap making, food processing, hairdressing, knitting, etc., in order to empower them economically | Number of women, youths and adolescents trained annually | 2250 | 4500 | 6750 | 9000 | 11250 | Program Report |
| Increase the number of girls enrolled in schools from … annually by 30% by 2020 so as to improve girl-child education | Number of girls enrolled and retained in schools |  |  |  |  |  | Program Report |
| SAM | Increase the number of OTP sites from 90 to 225 by 2020. | Number of OTP sites | 116 | 144 | 171 | 198 | 225 | Program Report |
| Increase the number of health care workers trained on the management of SAM | Number of health care workers trained | 585 | 720 | 855 | 855 | 855 |  |
| Increase the number of Community Volunteers trained on the identification of SAM | Number of Community Volunteers trained on the identification of SAM | 1950 | 1950 | 2100 | 2100 | 2100 |  |
| Reduce the number of CMAM sites experiencing stock out of key nutrition commodities to zero | The number of CMAM sites experiencing stock out of key nutrition commodities | 0 | 0 | 0 | 0 | 0 |  |
| DRNCD | 50% of the Population above 40 have increased awareness of DRNDC | 50% percent of health facilities that have screening and referral services related to DRNCD | 116 | 114 | 171 | 198 | 225 |  |

## 3.7 Costing

The main objective of this section is to provide cost estimates for the five-year period of the KSPAN so that stakeholders know the cost required to operationalize the plan. The section also provides the cost estimates to be used for advocacy and resource mobilization from stakeholders (international donors and local private sector, civil society, and Government) in the fight against malnutrition.

Micro-costing and activity-based costing are the techniques used to calculate the costs for this plan based on the activities related to the key priority areas and strategic directions. The approach assumed an inflation rate of 9% for the Nigerian Naira (NGN)) on the cost estimates. The official exchange rate used to convert the NGN to the USD is 313 NGN: 1 USD being the exchange rate as at 31st October 2016. Kebbi state opted for an activity-based costing approach so as to provide as close to accurate as possible costing estimates to inform better budgeting at all levels. It also recognizes the different contributions required by the respective sectors involved in the implementation of the plan. It is important to note that many of these activities could be partner supported, given the depth of experience that nutrition partners in Nigeria have to fill these roles.

The total cost required to operationalize the Strategic Plan of Action for the five year period is estimated at **NGN** **15.5 Billion or 49.5 million USD** and the average annual cost is **NGN 3.1 billion or 9.9 million USD** (Table 5).

**Table 5: Cost breakdown by Priority Area and year (in Nigerian Naira)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Priority Area | 2016 | 2017 | 2018 | 2019 | 2020 | Total (5-year) |
| Adolescent Nutrition | 25,924,000 | 25,015,200 | 26,570,250 | 8,936,865 | 29,293,701 | 115,740,016 |
| Diet related NCDs | 161,457,000 | 164,149,125 | 152,219,419 | 151,796,472 | 156,074,041 | 785,696,057 |
| Food security | 32,112,000 | 27,942,600 | 27,278,055 | 13,592,833 | 20,350,006 | 121,275,493 |
| Infant and Young Child Feeding | 393,739,242 | 377,552,828 | 358,086,971 | 419,952,861 | 452,068,573 | 2,001,400,474 |
| Management of SAM | 1,584,861,138 | 1,543,417,569 | 1,507,085,916 | 1,451,376,458 | 1,434,412,423 | 7,521,153,504 |
| Maternal nutrition | 637,256,600 | 614,526,570 | 639,588,033 | 695,136,680 | 289,613,569 | 2,876,121,452 |
| Micronutrient Deficiency Control | 210,402,600 | 214,864,650 | 152,126,919 | 155,087,021 | 540,705,314 | 1,273,186,504 |
| Poverty reduction | 182,531,000 | 2,620,800 | 201,240,428 | 2,889,432 | 3,033,904 | 392,315,563 |
| Water and Sanitation | 108,540,000 | 95,067,000 | 96,620,344 | 63,162,914 | 43,320,643 | 406,710,901 |
| Grand Total | **3,336,823,580** | **3,065,156,342** | **3,160,816,333** | **2,961,931,536** | **2,968,872,173** | **15,493,599,964** |

As shown in Table 5 above, the management of severe acute malnutrition takes the biggest share of the costs. This is related to the cost of procuring and providing the RUTF commodities required for the management of SAM across the state over the five years, which over time decreases as the prevalence of SAM also declines.

Maternal Nutrition, Infant and Young Child Feeding, and Micronutrient deficiency control are leading cost areas after the management of SAM. These are areas that require a lot of improvement and increased investments, and reflected in the activities planned.

**Table 6: Cost breakdown by Strategy and year (in thousands Nigerian Naira)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Strategy | 2016 | 2017 | 2018 | 2019 | 2020 | Total (5-year) |
| Advocacy and resource mobilization | 88,390,000 | 92,321,250 | 70,824,600 | 40,505,299 | 397,500,931 | 689,542,080 |
| BCC | 253,625,100 | 249,887,400 | 263,118,350 | 251,197,679 | 290,823,362 | 1,308,651,892 |
| Capacity building | 410,260,500 | 239,485,050 | 309,204,945 | 151,255,861 | 199,914,921 | 1,310,121,277 |
| Coordination and multisectoral partnership | 3,131,000 | 3,250,800 | 3,451,928 | 3,584,007 | 3,763,207 | 17,180,942 |
| Private sector engagement | 46,765,000 | 48,000,750 | 13,963,163 | 27,974,008 | 20,967,483 | 157,670,403 |
| Research monitoring and evaluation | 101,630,000 | 26,229,000 | 26,327,700 | 76,090,691 | 136,233,941 | 366,511,332 |
| Enhancing the provision of quality health services | 2,433,021,980 | 2,405,982,092 | 2,473,925,648 | 2,411,323,990 | 1,919,668,328 | 11,643,922,038 |
| Grand Total | **3,336,823,580** | **3,065,156,342** | **3,160,816,333** | **2,961,931,536** | **2,968,872,173** | **15,493,599,964** |

The majority of costs are also geared towards ensuring the provision of quality services at all levels, building the capacity of service providers in the different sectors, and behavior change communication.

Majority of the estimated costs are borne by the Health Sector(88%) given the focus on Nutrition specific interventions. While Nutrition-sensitive interventions have been costed, the costing exercise was limited to areas that directly influence Nutrition improvements. The KSPAN does not estimate the total costs for delivering sector-wide strategies for the non-health sectors, hence the seemingly small contributions from these sectors to the overall costs as shown in figure 5 below.

**Figure 5: Share of Cost by Sector**

Finally, when reviewed by cost category, 58% of the costs are driven by the procurement of commodities and equipment that will be used for service delivery over the next five years. This is followed by the costs of the provision of the conditional cash transfers to women from high-burden areas to improve uptake of ANC services and nutrition practices among mothers, meetings and trainings.

**Figure 6: Share of Cost by Cost Categories**

58%

## 3.8 Roles and Responsibilities

Nutrition is a multi-disciplinary issue best addressed through well-coordinated and multi-sectoral approaches. The lack of an institutionalized coordination mechanism for nutrition in Nigeria has been one of the main contributors to the limited effectiveness of past interventions. Inadequate coordination of the planning and implementation of nutrition programmes and projects often resulted in undue duplication of services and programmes without proper equitable distribution and convergence of resources. Nutrition interventions have been implemented mostly as vertical projects with little investment in human capacity and technical skills development in the public sector.

The implementation of this strategy requires the participation and involvement of stakeholders at all levels from the community to the State level, including the public sector (sectoral Ministries and institutions, regional Secretariats and LGAs), research institutes, professional bodies, private sector, development partners, media, and the community. All concerned parties share responsibility for the successful implementation of the strategy and should acknowledge and embrace its responsibilities. The roles and responsibilities of all stakeholders are identified below to ensure that their collective action contributes to the full attainment of the strategy’s goals and objectives.

The Government of Nigeria has committed itself to the SUN movement in the country. To enhance fulfillment of this commitment, the Government will work with partners to strengthen existing Health Sector partnership for nutrition to intensify action to prevent malnutrition and reduce nutrition related diseases, thus contributing to achievement of the Vision 20:2020 and the MDGs.

**1. Public Sector**

**1.1 State Ministry of Budget and Economic Planning**

* Support sustained advocacy for nutrition issues
* Support SMOH to advocate for adequate financial provisions in the State Rolling Plan, and State annual budget for implementation of the Health Sector State Food and Nutrition Policy and programmes
* Actively support SMOH in coordination of Health Sector nutrition related activities
* Facilitate dissemination of nutrition data

**1.2 State Primary Health Care Development Agency (SPHCDA)**

* Provide support for implementation of all plans developed to achieve set targets of this plan at the primary health care level
* Conduct advocacy and social mobilisation of State and LGA policy makers to solicit their support for the implementation of strategies within this plan
* Support the state to build State and LGA level capacity for training community-level care providers on the implementation of relevant aspects of the Kebbi State Strategic plan of action for nutrition
* Provide technical support to States and LGAs for effective implementation of programmes and activities aimed at improving the nutrition status of the people of Kebbi state
* Supervise, monitor, and evaluate PHC activities relating to this plan

**1.3 State Food and Nutrition Committee**

* The Committee shall comprise representatives of all stakeholders in the nutrition space in Kebbi state including relevant departments of the SMOH, its agencies, other relevant Government sectors, professional organisations, academia, development partners, and other stakeholders
* With the SMOH as the secretariat, the committee will coordinate Health Sector nutrition interventions within the State
* It shall be responsible for ensuring the implementation of this plan, submission of periodic reports on national nutrition status, and advice to the Honourable Commissioner of Health on nutrition matters.

**1.4** **LGA Food and Nutrition Committee**

* Providing necessary technical and professional assistance and support to the secretariat (Office of the LGA Vice Chairman) on food and nutrition programme implementation;
* Proposing and reviewing, on a continuous basis, programmes that have a potential impact on food and nutrition issues;
* Ensuring that the representatives of relevant sectors on the committee undertake effective implementation of their various policies and programmes;
* Implementing appropriate strategies for programme M&E;
* Supporting the Office of LGA Vice Chairman in the maintenance of ongoing advocacy for food and nutrition issues;
* Managing and maintaining database of nutrition activities; and
* Coordinating nutrition programme implementation at the LGA level.

The LGCFN shall have a secretariat established in the Office of the LGA Vice Chairman who shall serve as chair of the LGCFN, and the LGA nutrition focal person shall serve as the secretary.

**1.5 State Ministry of Health (SMOH)**

Coordination

* Coordinate all Health Sector nutrition activities in the State
* Liaise with the State Committee on Food and Nutrition to ensure optimal implementation of the policy at State and LGA levels
* Support the National Committee on Food and Nutrition to effectively carry out its mandate
* Report the Health Sector nutrition activities to the State Committee on Food and Nutrition

Services

* Adopt and ensure effective implementation of the NSPAN with the involvement of professional organisations
* Advocate for recruitment of appropriately qualified and adequately skilled nutrition personnel in all health facilities in the State
* Initiate and maintain a multi-sectoral and multi-disciplinary approach to nutrition, involving relevant line Ministries and organisations such as Ministries of Agriculture, Water Resources, Education, Information, Women Affairs, Justice, Environment, Finance and Budget Office, professional associations, NGOs, faith-based organisations (FBOs), relevant Tertiary institutions, and development partners
* Collaborate with LGAs and communities to identify priority programmes related to nutrition
* Establish and strengthen existing community-based outreach nutrition services

Training

* Build capacity of nutrition personnel through updating of knowledge and skills on a continuous basis to perform relevant functions
* Ensure that healthcare providers are trained in methods, skills, and processes that help mobilise communities around positive nutrition practices, promote community ownership, and sustainability

M&E

* Facilitate data collection, processing, and dissemination of information on health and nutrition interventions
* Ensure the timely transmission of the data to the national database

BCC

In collaboration with LGAs:

* Promote systematic and sustained community health education through health personnel, mass media, print, NGOs, community-based organisations (CBOs), community leaders, families, and individuals
* Facilitate the training of health providers of both public and private institutions in interpersonal communication and counselling

Media

* Create a sustained platform for public debate in support of the promotion and implementation of the Kebbi State Strategic plan of action for nutrition
* Create and maintain awareness on issues concerning nutrition
* Include nutrition issues in their publications and programmes and community engagement interventions
* Provide focused and strategic media coverage of nutrition interventions

**1.6 State Ministry of Information**

* Support the SMOH to create a platform for the promotion and implementation of the Strategic nutrition plan
* Support the SMOH in building the capacity of media personnel on the effective promotion and implementation of relevant aspect of the plan
* Support the inclusion of nutrition issues in medias publications and programmes

**1.7 State Ministry of Education**

* Support the SMOH in developing/updating nutrition specific curriculum in line with the Strategic plan at all levels of education
* Support the SMOH in implementing the relevant education aspects of the plan

**1.8 State Ministry of Water Resources**

* Support the SMOH in providing potable water at facilities identified for implementation of the plan
* Ensure the provision of functional water supply facilities across communities in the state
* Support the sensitization of communities on sanitation and hygiene practices

**1.9 State Ministry of Environment**

* Support the provision of sanitary toilet facilities across the communities in the state
* Support the training and sensitization of environmental health officers on improved regulatory services for food handling and hygiene

**1.10 State Ministry of Agriculture**

* Support the SMOH to implement community level programs aimed at improving food security as outlined in the Kebbi State SPAN
* To include Nutrition considerations in their plans and activities
* Generate data on food availability in the state

**1.11 LGA Councils**

Services

* Collaborate with the SMOH to identify and implement priority programmes related to nutrition and ensure effective implementation
* Establish and strengthen existing community-based outreach nutrition services
* Collaborate with Ward and Village Health Committees to support nutrition services

Mobilization

* Mobilise the community to participate in planning, implementation, and monitoring of nutrition programmes through involvement of traditional chiefs, religious leaders, other influential persons and groups
* Motivate communities through community action cycle processes to undertake, own, and sustain nutrition programmes
* Advocacy and social mobilisation
* Create awareness on nutrition activities in the LGA
* Create a platform for advocacy on nutrition activities to policy makers and relevant stakeholders (FBOs, NGOs, CBOs, etc.)
* Serve as a link with the media to propagate issues concerning nutrition
* Develop, distribute, and disseminate information, education, and communication (IEC) materials
* Create platform for community dialogue, focused group discussion to promote nutrition issues

Training

* Organise regular trainings and refresher courses to update knowledge and skills of LGA nutrition/health personnel on issues identified in the Kebbi State SPAN

**1.12 Ward and Village Health Committees**

* Determine how best to provide the essential elements of nutrition programmes
* Assign roles and responsibilities in the communities for health and nutrition services and in other sectors so as to involve individuals and families in the implementation of nutrition priority programmes
* Periodically provide health and nutrition information to the community in order to promote ownership and improve the nutrition status of the community
* Harness resources to support nutrition programmes, involving co-opting voluntary workers and practitioners of traditional methods to achieve nutrition goals
* Ascertain the availability and maintenance of basic health infrastructure
* Collate relevant data about resources available for nutrition

**1.13 State Ministry for Local Government and Chieftaincy affairs**

* Coordinate LGAs on the implementation of recommendations of the Kebbi SPAN
* Ensure the creation of budget lines for nutrition in all the LGAs
* Ensure the timely release of funds for LGA activities on food and nutrition security
* Maintain the quality and infrastructure for primary health care facilities at the LGAs

**1.14 State Ministry of Finance**

* The State Ministry of Finance at all levels to ensure prompt release of funds for the implementation of nutrition programmes Explore appropriate and efficient mechanisms for mobilising and allocating resources for nutrition programmes

**2. Partners**

**2.1 Non-Governmental Organizations (NGOs)**

NGOs shall in collaboration with the State and LGAs:

* Identify nutrition needs of communities through studies and research
* Initiate pilot schemes that have the potential to be further scaled up such as establishing cottage industries for complementary food
* Support the training of Healthcare workers, community resource persons and other voluntary village health workers in the delivery of nutrition services
* Assist in M&E of nutrition programmes
* Mobilise the community to embark on awareness campaigns to eradicate harmful traditional nutritional practices
* Support Government and community to establish community-based nutrition centres which will be affordable, accessible, acceptable, and sustainable
* Document success stories and lessons learned on community engagement in nutrition

**2.2 Professional Bodies, Civil Society Organization (CSOs), Faith Based Organizations (FBOs)**

To ensure proper coordination of activities and to avoid duplication of efforts, the coordinating agencies at State and Local Government levels will work closely with relevant professional bodies (including Nutrition Society of Nigeria, Dietetic Association of Nigeria, and Nigeria Institute for Food Science and Technology), NGOs, CBOs, CSOs, FBOs and local communities in pursuit of the objectives of this plan.

This partnership could benefit the policy implementation through:

* Resource mobilization;
* Project implementation;
* Community mobilization, participation, and ownership at the grassroots level as well as sustainability.

**2.3 Professional Associations**

* Advocacy to all levels of Government and private sector
* Dissemination of documents on nutrition education
* Participation, research, training, and conduct of nutrition surveys
* Awareness creation through seminars, conferences, and public lectures

**2.4 Educational Institutions**

* Provision of professionally competent and versatile practitioners who are capable of providing high quality nutrition and healthcare to children and expectant mothers in homes, communities, clinics, health centres, and hospitals state-wide

**2.5 Research Institutions**

Research institutes shall be responsible for conducting relevant research on:

* Food-based nutrition interventions for the management of identified health conditions such as SAM, micronutrient deficiencies, HIV/AIDS, etc.
* Developing local process capacity for the production of nutritious food products for infants and PLWs
* Partner with the SON to conduct operational research on current/ongoing food fortification programmes
* Generate nutrition data on composition of Nigerian local foods

**2.6 Partners Forum**

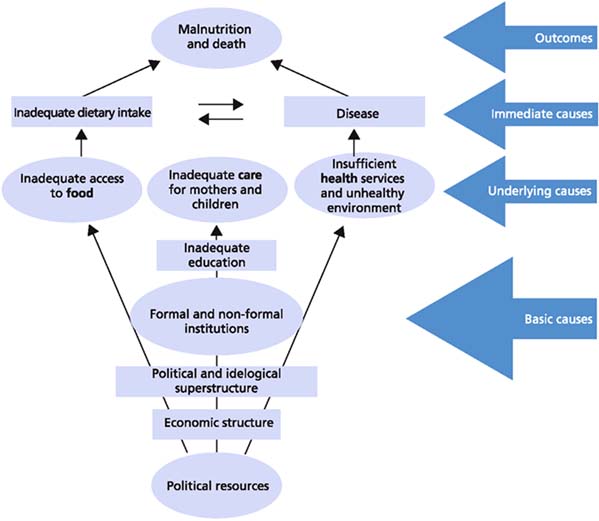
* Support Kebbi State SPAN from planning to implementation and monitoring, collaborating with government at all levels in line with the Paris-Accra Principles of Aid Effectiveness

**3. Private Sector**

* Support policy implementation through the development of low cost, nutritious complementary foods, fortification of staple foods, awareness creation, fund mobilisation, and research

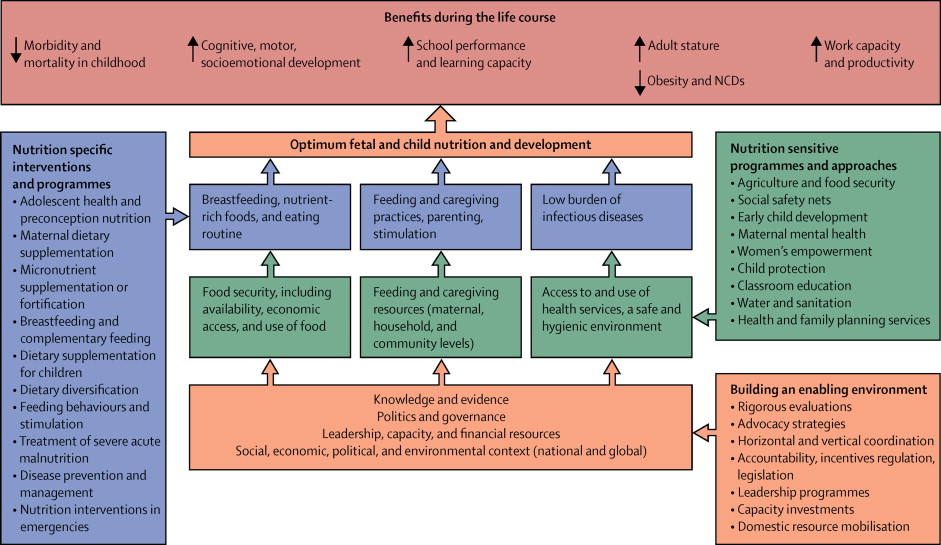
# 4. APPENDICES

## Appendix 1: Conceptual framework for the causes of malnutrition



**Source:** UNICEF, 1990.

## Appendix 2: Framework to achieve optimum foetal and child nutrition and development[[65]](#footnote-65)



## 

## Appendix 3: Maternal Nutrition Interventions

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | Conduct Bi-annual state wide campaign to disseminate key messages to promote dietary practices that support maternal nutrition | Campaigns and outreaches | Health |
|  | Promote maternal nutrition through MNCH weeks, World Breastfeeding Week, National Nutrition Day | Campaigns and outreaches | Health |
|  | Mass media (special regular nutrition programmes on radio and TV) and information and communication technology (ICT) platforms to provide general information on maternal nutrition | Campaigns and outreaches | Health |
|  | Promote maternal nutrition to women of reproductive age through community structures | Community level | Health |
|  | Orientation of communities on appropriate health seeking behaviours (utilization of health services), especially during pregnancy (through community structures) | Community level | Health |
|  | Promote maternal nutrition at all health facilities (PHC centres, ANC clinics, OTP and CMAM sites, and child welfare clinics) | Facility-based | Health |
|  | Promote proper food handling and preparation methods, and importance of dietary diversity at ANC clinics, OTP sites, and PHC centres | Facility-based | Health |
| Service delivery | Train and engage public and private sector service providers to improve nutrition information and counselling in order to support maternal nutrition | Facility-based | Health |
|  | Procure and distribute essential nutrition commodities (iron-folate, SP) to all health facilities for routine services | Facility-based | Health |
|  | Initiate conditional cash transfer to ensure Procurement of complementary and nutritious foods for Pregnant and Lactating Women (PLW) which will be mainstreamed into ANC service provision | Facility-based | Health |
|  | Conduct food demonstrations that include proper food handling, preparation methods, and importance of dietary diversity at ANC clinics, OTP sites, and PHC centres | Facility-based | Health |
|  | Establish and strengthen existing support groups to promote maternal nutrition | Community level | Health |
|  | Promote appropriate health seeking behaviours | Community level | Health |
|  | Distribute iron-folate supplements (3 months) to pregnant women through MNCH weeks | Campaigns and outreaches | Health |
|  | Procure and distribute essential nutrition equipment (adult weight scales, adult MUAC tapes, heightometer, haemocue for anaemia, food demonstration equipment) to all health facilities | Facility-based | Health |
| Capacity building |  |  |  |
|  | Incorporate in-service training schemes for healthcare workers at all levels on maternal nutrition | State-level | Health |
|  | Update/develop, print, and disseminate guidelines, standards, protocols, job aids, and other technical tools for maternal nutrition | Facility-based | Health |
|  | Train all frontline health workers on nutrition counselling | Facility-based | Health |
|  | Train all health workers on breastfeeding and lactation management and counseling | Facility-based | Health |
|  | Work with Tertiary institutions and professional bodies to strengthen pre-service curricula at institutions of learning such as Universities, Medical schools, Schools of Nursing, Midwifery, Health technology, Polytechnics, etc. | State-level | Health |
|  | Train frontline healthcare workers on stock management for nutrition supplies | Facility-based | Health |
|  | Strengthen the capacity of Nutrition officers at all levels on adequate costing, budgeting, and tracking for nutrition interventions and lobbying | Facility-based | Health |
|  | Update/develop, print, and disseminate training materials for CHWs and community peer counsellors on maternal nutrition | Community level | Health |
|  | Train community resource persons and volunteers on nutrition counselling | Community level | Health |
|  | Train and engage patent and proprietary medicine vendors (PPMVs) and community pharmacists (CPs) on maternal nutrition | Community level | Health |
|  | Build the capacity of media personnel on maternal nutrition issues | Campaigns and outreaches | Health |
| Advocacy and resource mobilization | Support LGAs to adopt the Strategic Plan of Action | State | Health |
|  | Work with LGAs to develop budgets for nutrition activities | State | Health |
|  | Implement an advocacy strategy for establishment of Nutrition desk office and the creation of a dedicated budget in all line ministries and LGAs to nutrition activities | State | Health |
|  | Implement advocacy and communication strategies targeted at various audiences of the LGA levels for maternal nutrition | State | Health |
|  | Conduct advocacy visits on nutrition programmes to key policy makers and decision makers at all levels | State-level | Health |
|  | Increase advocacy to LGAs governments for the creation and funding on LGAs Committees on Food and Nutrition | State-level | Budget & Economic planning |
|  | Conduct advocacy visits on nutrition programmes to key decision makers, religion leaders, opinion leaders, and traditional leaders in the community to generate demand for nutrition services | Community level | Health |
|  | Mobilize and sensitize community leaders on maternal nutrition | Community level | Health |
|  | Seek support from community structures to support maternal nutrition | Community level | Health |
| Coordination and Multi-sectoral partnership | Strengthen intra- and intersectoral collaboration to address immediate and underlying causes of maternal malnutrition in a comprehensive manner | State-level | Health |
|  |  | State-level | Health |
|  | Creation of domain in all line ministries and nutrition portal to provide information on nutrition activities and results | State-level | Health |
|  | Develop, maintain, and update partner mapping of past, current, and future nutrition programmes and projects (should be at all levels) | State-level | Health |
|  | Organize semi-annual partner meetings to review on-going projects and report on progress at the Federal and State levels | State-level | Health |
|  | Promote statewide home gardening/consumption of micronutrient rich foods | State-level | Agriculture |
|  | Promote statewide consumption and planting of bio-fortified foods among local farmers | State-level | Agriculture |
| Research monitoring and evaluation | Develop an M&E plan for maternal nutrition interventions | State-level | Health |
|  | Develop a research plan for maternal nutrition | State-level | Health |
|  | Develop a nutrition commodities logistics management system | State-level | Health |
|  | Conduct formative assessments to determine best practices, lessons learned, and potential strategies for BCC in Kebbi | State-level | Health |
|  | Develop and tailor BCC strategies and dissemination methods | State-level | Health |
|  | Develop advocacy and communication strategies targeted at various audiences at the State and LGA levels for maternal nutrition | State-level | Health |
|  | Conduct bottleneck analysis of barriers to effective coverage of maternal nutrition interventions at the PHC, Secondary, and Tertiary levels | State-level | Health |
|  | Develop local recipes that can be produced at home to nutritionally enhance complementary foods based on the seven recommended groups and locally available foods | State-level | Health |
|  | Regular and periodic maternal nutrition programme monitoring, | State-level | Health |
|  | Conduct mid-term and final evaluation of maternal nutrition programmes, conduct Quarterly review meeting. | State-level | Health |
|  | Develop a regulatory frameworks for PPMVs and CPs to ensure provision of high-quality services for maternal nutrition in the community | State-level | Health |
|  | Assess the practice of dietary diversification, proper food handling, preparation and food fortification in the community | Community level | Health |
|  | Schedule and implement supportive supervision and monitoring visits on community nutrition programmes | State-level | Health |
|  | Engage the media to conduct regular opinion polls on maternal nutrition | State-level | Health |

## 

## Appendix 4: IYCF Interventions

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | Conduct of weekly radio and TV shows | Mass Media | Information |
|  | Conduct of public campaigns on IYCF during MNCH Weeks, World Breastfeeding Week, Safe motherhood Day, IPDs and National Nutrition Day | Community level | Multi-sectoral |
|  | Dissemination of information and communication on IYCF during ANC | Facility-based | Health |
|  | Dissemination of information and communication on IYCF through town hall meetings, compound meetings | Community level | Health (Ministry of Information/NOA) |
|  | Produce and distribute IEC materials (Food recipe translated) | State level | Health, (MOI) |
|  |  |  |  |
| Capacity building | Training of health workers at all levels on IYCF | Facility-based | Health |
|  | Training of community volunteers and WDCs on IYCF | Community level | Health |
|  | Formation of community support groups on IYCF | Community level | Health |
|  | Develop local recipes that can be produced at home to nutritionally enhance complementary foods based on the seven recommended groups and locally available foods | Community level | Multi-sectoral |
|  | Develop the capacity of media personnel on IYCF | Mass Media | Multi-sectoral |
|  |  |  |  |
| Advocacy and resource mobilization | Pay advocacy visits to the Executive and legislative arms of the Government at all levels in the state, traditional, religious leaders, opinion leaders and influential persons/Philanthropists to generate demand for nutrition services | State-level | Multi-sectoral |
|  | Pay advocacy visits to schools, targeting heads of schools and relevant teachers | School-based | Multi-sectoral |
|  |  |  |  |
| Service delivery | Provide counselling services to mother and care givers at PHCs, ANCs, OTPs, CMAM sites | Facility-based | Health |
|  | Procure and distribute essential nutrition commodities e.g. vit A,, Fe folate, amoxicillin, RUTF, micronutrient powder | Facility-based | Multi-sectoral |
|  | Procure and distribute de-worming commodities | School-based | Multi-sectoral |
|  | Procure and distribute essential nutrition commodities e.g. vit A,, Fe folate, amoxicillin, RUTF, micronutrient powder | Campaigns and outreaches | Multi-sectoral |
|  | Conduct food demonstrations (proper food handling, preparation methods and importance of dietary diversity at ANCs, OTPS, and PHCs | Facility-based | Health |
|  | Integrate IYCF counselling into SAM management | Facility-based |  |
|  | Produce and distribute IYCF guidelines, standards operating protocols, job aids, and other technical tools | State level | Health |
|  | Procure and distribute nutrition equipment (weighing scales, MUAC tapes, heightometers, child cards, registers, food demonstration equipment) | Facility-based | Health |
|  |  |  |  |
| Coordination and Multi-sectoral partnership | Create a platform for intra and intersectoral collaboration to address immediate and underlying causes of poor IYCF practices in a comprehensive manner | State level | Multi-sectoral |
|  | Create nutrition portal within the state ministries of Agriculture, Information, Women Affairs, Education, Water resources, Budget and Planning, Local Government and chieftaincy affairs, animal health to provide information on nutrition activities and results | State level | Multi-sectoral |
|  | Conduct Financial tracking for nutrition interventions at state and LGA levels | State level/LGA level | Multi-sectoral |
|  | Establish accountability structure framework for state and partners | State level/LGA level | Multi-sectoral |
|  | Establish accountability structure framework for LGA | LGA level | Multi-sectoral |
|  | Organize bi-annual partner meetings to review ongoing projects and report on progress at state and LGA level | State level/LGA level | Health |
|  |  |  |  |
| Research monitoring and evaluation | Develop an M & E plan for IYCF interventions | State level | Health |
|  | Develop a research plan for IYCF | State level | Health |
|  | Develop a nutrition commodities logistics management system | State level | Multi-sectoral |
|  | Conduct formative assessments to determine best practices , lessons learned, and potential strategies for BCC in Nigeria | Community level | Multi-sectoral |
|  | Develop and tailor BCC strategies and dissemination methods | State level | Multi-sectoral |
|  | Conduct bottleneck analysis of barriers to effective coverage of IYCF interventions at the Secondary and Tertiary levels | State level | Multi-sectoral |
|  | Conduct bottleneck analysis of barriers to effective coverage of IYCF interventions at the PHC level | LGA level | Multi-sectoral |
|  | Regular and periodic IYCF programme monitoring | Community level | Health |
|  | Conduct mid-term and final evaluation of IYCF programmes | Community level | Health |
|  | Produce and distribute data monitoring tools | State level | Health |

## 

## Appendix 5: Management of SAM Interventions

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | Sensitize mothers/caregivers within communities on adequate nutrition for infant and young children | Community level | Health |
|  | Sensitize and mobilize communities to support CMAM and health seeking behaviours | Community level | Health |
|  | Promote awareness of SAM through community structures | Community level | Health |
|  | Orientation of communities on appropriate health seeking behaviours for treatment of SAM (through community structures) | Community level | Health |
|  | Conduct state and LGA bi-annual campaign to disseminate key messages promoting practices that create awareness of SAM | Campaigns and outreaches | Health |
|  | Promote proper management of SAM during MNCH weeks, World breastfeeding day, Safe Motherhood day and National Nutrition day | Campaigns and outreaches | Health |
|  | Mass Media special (Town announcers, radio and TV, drama groups) and ICT platforms to provide general information on SAM | Campaigns and outreaches | Health |
|  | Promote management of SAM at select facilities per ward (PHC, ANC clinic OTP and child welfare clinics | Facility-based | Health |
| Private sector engagement | Engage traditional Leaders and WDC to promote and disseminate information on the management of SAM | Community level | Health |
|  | Engage private hospitals to promote the management of SAM | Facility-based | Health |
|  | Engage private schools to promote information on appropriate nutrition and SAM | School-based | Education |
|  | Engage private companies to complement government efforts on poverty alleviation | Social safety nets | Social Development and Welfare |
| Capacity building | Train PPMVs and CPs on active case findings on management of SAM | Community level | Health |
|  | Train community resource persons and volunteers on active case finding for SAM | Community level | Health |
|  | Strengthen the capacity of nutrition officers at all levels on adequate costing budgeting and tracking for nutrition interventions. | Facility-based | Health |
|  | Training health facility staff on appropriate management of SAM | Facility-based | Health |
|  | Training of media personnel on SAM management | Campaigns and outreaches | Health |
|  | Train HCW on stock management for nutrition supplies (RUTF, MUAC etc.) | Facility-based | Health |
|  | Work with tertiary institutions and professional bodies to strengthen pre-service curriculum at institution of learning such as University, School of Nursing, School of health technology and Medical schools | School-based | Education |
|  | Incorporate in-service training schemes for health care workers at all levels on management of SAM | School-based | Education |
|  | Strengthen the skills of nutrition focal persons in the state through regular refresher training on management of SAM | Facility-based | Health |
| Advocacy and resource mobilization |  |  |  |
|  |  |  |  |
|  | Sustain and increase budget for nutrition activities in the state | State-Level | Health |
|  | Create a budget line for nutrition in other state MDAs | State-Level | All Sectors |
|  | Create a budget line for nutrition in LGAs | LGA-Level | Health |
|  | Implement advocacy and communication strategies targeted at different audience of state level on management of SAM | State-Level | Multi-sectoral |
|  | Engagement with the legislative arm to gain their buy-in on nutrition budget | State-Level | Multi-sectoral |
|  | Implement advocacy and communication strategies targeted at different audience of LGA level on management of SAM | LGA-Level | Multi-sectoral |
|  | Conduct advocacy visit on nutrition programs to policy makers at all levels | State-Level | Multi-sectoral |
| Coordination and Multi-sectoral partnership | Conduct quarterly state food and nutrition committee meetings | State-Level | Multi-sectoral |
|  | Conduct quarterly LGA food and nutrition committee meetings | LGA-Level | Multi-sectoral |
|  | Conduct quarterly Ward food and nutrition committee meetings | Community level | Multi-sectoral |
|  | Conduct quarterly partner meeting to review on-going projects and report on progress at state level | State-Level | Health |
|  | Establish an accountability structure framework for the SMOH, LGA and Partners | State-Level | Health |
|  | Develop maintain and update partner mapping of past, current and future nutrition programs and projects at all levels | State-Level | Budget and Economic planning |
|  | Promote home & school gardening and consumption of micronutrient rich foods | School-based  Community level | Agriculture |
| Research monitoring and evaluation | Develop an M&E plan for SAM management interventions | State-Level | Health |
|  | Production and distribution of CMAM M&E data tools | State-Level | Health |
|  | Conduct formative assessment to determine the best practices lessons learned and potential strategies for BCC in Kebbi | State-Level | Health |
|  | Develop a nutrition commodities logistics management system | State-Level | Health |
|  | Work with local manufacturers to develop locally sourced prepackaged nutritious complementary food at affordable prices | State-Level | Agriculture |
|  | Monthly meetings with nutrition focal persons for data collation, assessment and improvement of M&E processes | State-Level | Health |
|  | Scale up real time data collection on SAM through the use of rapid SMS and other innovative ICT tools simplified LQAS evaluation of access and coverage (SLEAC) and semi-quantitative evaluation of access and coverage (SQUEAC) | State-Level | Health |
|  | Schedule and implement supportive supervision and monitoring visit on community nutrition programs | State-Level | Health |
|  | Conduct mid-term and final evaluation of CMAM programs | State-Level | Multi-sectoral |
| Service delivery | Procurement and distribution of essential nutrition commodities aimed at managing SAM | Facility-based | Health |
|  | Integrate IYCF counselling into SAM management | Facility-based | Health |
|  | Strengthen linkages between community volunteers and health service providers on CMAM | Facility-based | Health |
|  | Conduct active community screening of children for sign of under nutrition in the community | Community level | Health |
|  | Support Community volunteers to carry out follow up activities for CMAM services | Community level | Health |
|  | Establishment of CMAM sites to increase access to CMAM services across the state | Facility-based | Health |

## 

## Appendix 6: Micronutrient Deficiency Control Interventions

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | Promote awareness of MNDC at all facilities, PHCs, ANCs, OTPs and child welfare clinic MNCH Weeks, World Breastfeeding Week, Safe motherhood Day, IPDs and National Nutrition Day | Facility-based | Multi-sectoral |
|  | Conduct public awareness campaigns to promote proper food handlings and food preparation methods, and the importance of dietary diversification | Community level | Multi-sectoral |
|  | Sensitize mothers/caregivers within the communities on essential micronutrients | Community level | Multi-sectoral |
|  | Orient communities on appropriate health seeking behavior, utilization of health services especially for infant and young children through community structures | Community level | Multi-sectoral |
|  | Provide general information on MNDC at special regular nutrition programmes on radio and TV | Mass Media | Multi-sectoral |
|  |  |  |  |
| Capacity building | Update, develop, print and disseminate training material for CHEWs and community peer counsellors on MNDC | State level | Health |
|  | Train community resource persons and volunteers on MNDC | Community level | Health |
|  | Recruit Nutritionist in every LGA | LGA level | Health |
|  | Build the capacity of media personnel by training them on MNDC activities | State level | Multi-sectoral |
|  | Conduct workshops to improve the knowledge of health workers at the LGA level on MNDC | LGA level | Health |
|  |  |  |  |
| Advocacy and resource mobilization | Conduct advocacy visits on nutrition programmes to key decision makers, opinion leaders, religious and traditional leaders in the community, to generate demand for nutrition services | Community level | Multi-sectoral |
|  | Develop budget for nutrition activities in all LGAs | LGA level | Ministry of LGAs |
|  | SMOH to advocate to state Government Ministry for Local Government and Chieftaincy Affairs to support the LGAs to adopt the implementation of this plan of action | State level | Multi-sectoral |
|  | State Ministry of Budget and Economic Development (Chairman,, SCSFN) to advocate to the state Government for increased funding of state committee on food and nutrition | State level | Multi-sectoral |
|  | To advocate for the creation of dedicated nutrition budget line in all relevant MDAs at the state and LGA levels | State level | Budget and Economic planning |
|  |  |  |  |
| Service delivery | Procure and distribute essential micronutrients (Vit. A, deworming, Zinc/LO-ORS, iron-folate and micronutrient powder through community structures | State level | Health |
|  | Engaging public and private sector service providers to improve nutrition information and counseling through dialogue | State level | Multi-sectoral |
|  | Distributing Vit. A, deworming, Iron-folate through MNCH platform | Campaigns and outreaches | Health |
|  | Establish and strengthen existing support groups to promote MNDC awareness | Community level | Health |
|  | Conduct food demonstration that includes proper food handling, preparation methods and importance of dietary at ANCs, OTPs and PHCs. | Facility-based | Health |
| Research monitoring and evaluation | Conduct a research needs assessment to identify priority areas for MNDC | State level | Health |
|  | Develop a research plan for micronutrient deficiency control | State level | Health |
|  | Develop an M & E plan for MNDC interventions | State level | Multi-sectoral |
|  | Develop nutrition commodities logistics management system | State level | Multi-sectoral |
|  | Conduct bottleneck analysis of barriers to effective coverage of MNDC interventions at the Primary health care, secondary and tertiary levels | Community level | Health |

## Appendix 7: Diet Related Non-communicable Diseases Interventions

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | Conduct awareness of DRNCD and healthy life style at all health facilities ( PHC centres, ANC clinics OTP and CMAM sites) | Facility-based | Health |
|  | Promote proper food handling and preparation methods and important of dietary diversity (ANC clinics, OTP sites and PHC Centres | Facility-based | Health |
|  | Promote awareness of DRNCD and health life styles through community structures | Campaigns and outreaches | Health |
|  | Promote Healthy Life Styles during MNCHW, World breast feeding week and immunization plus days | Campaigns and outreaches | Health |
|  | Mass Media special (Special media programme on radio and TV) to provide general information on DRNCD | Campaigns and outreaches | Health |
| Private sector engagement | Work with private sectors service provider to improve nutrition information and counselling related to DRNCD | Social safety nets | Health |
|  | Work with private sector to support services and products on DRNCD |  |  |
|  | Work with private sector to strengthen existing support groups to promote DRNCD awareness and health lifestyles | Community level | Health |
| Service delivery | Work with public and private sector service providers to improve nutrition information and counseling related to DRNCD | Facility-based | Health |
|  | Provide assessment and referral related to DRNCD | Facility-based | Health |
|  | Promote the establishment of food preparation demonstration center | Community level | Health |
|  | Promote the strengthening/development of nutrition clubs in schools | School-based | Education |
|  | Promote healthy life styles at the health facilities | Facility-based | Health |
|  | Provide assessment and referral related to DRNCD | Community level | Health |
| Capacity building | Improve the capacity of HCW at the PHC level to diagnose and treat DRNCD | Facility-based | Health |
|  | Procure and distribute essential equipment (glucometer, weight scale, heightometers, blood pressure monitors, sphygmomanometers, anthropometers, skinfold calipers) and consumables to all health facilities | Facility-based | Health |
|  | Update/develop, print and disseminate guidelines, standards, protocols and other technical tools for nutrition for state and LGA | Facility-based | Health |
|  | Work with tertiary institutions and professional bodies to strengthen pre-service curricula at institutions of learning | School-based | Education |
|  | Train media personnel on the causes of DRNCD and consequences of unhealthy and sedentary life style | Campaigns and outreaches | Information |
| Advocacy and resource mobilization | Work with MDAs and LGAs to develop and implement budgets for nutrition activities | State-Level | Budget and Economic planning |
|  | Conduct advocacy visits on nutrition programs to keep policy and decision makers at the state level | State-Level | Multisectoral |
|  | Conduct advocacy visits on nutrition programs to keep policy and decision makers at the LGA level | LGA-Level | Multi-sectoral |
|  | Conduct advocacy visits on nutrition programs to traditional and opinion leaders at the community level | Community level | Multi-sectoral |
|  | Mobilize and sensitize community leaders on DRNCD | Community level | Multi-sectoral |
| Coordination and Multi-sectoral partnership | Strengthen intra and inter sectoral collaboration to address immediate and underlying causes of DRNCD in a comprehensive manner | State-Level | Multi-sectoral |
|  | Work with the Ministry of Agriculture to promote home gardening and consumption of micronutrient rich foods | State-Level | Agriculture |
|  | Work with agriculture to promote the consumption and planting of bio-fortified food among local farmers | State-Level | Agriculture |
|  | Track the implementation of costed work plan developed at the state level | State-Level | Multi-sectoral |
| Research monitoring and evaluation | Develop an M&E plan for DRNCD interventions | State-Level | Multi-sectoral |
|  | Development and production of data collection tool for M&E of DRNCD interventions | State-Level | Health |
|  | Develop a nutrition commodities logistics management system | State-Level | Health |
|  | Conduct a research needs assessment to identify priority areas for DRNDC interventions | State-Level | Health |
|  | Regular and periodic monitoring of DRNCD interventions | State-Level | Health |
|  | Schedule and implement supportive supervision and monitoring visit on community nutrition programs | State-Level | Health |

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## Appendix 8: Adolescent Nutrition

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | mobilization of adolescent on key Nutrition activities | Campaigns and outreaches | Health |
|  | Production and airing of jingles on Adolescent nutrition | Campaigns and outreaches | Multi-sectoral |
|  | Encourage the formation health club to promote adolescent nutrition | School-based | Education |
|  |  |  |  |
| Service delivery | Iron Folate supplementation of adolescent girl through school health | School-based | Health |
|  | Establishment of adolescent friendly centers | School-based | Education |
|  | Deworming of adolescent | School-based | Health |
| Advocacy and resource mobilization | Advocate to policy maker to integrate adolescent friendly services in facilities | State-level | Health |
|  | Advocate to review school curriculum to include issues of nutrition | State-level | Health/Education |
| Capacity building | Conduct training for school teachers on Food and Nutrition | State-level | Education/ Health |

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## Appendix 9: Poverty Reduction

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| Capacity building | Training women on vocational activities such as tailoring, soap making, food processing, hairdressing, knitting, etc., in order to empower them economically | Social safety nets | Women affairs |
|  | Provide soft loans to women to build their capacity to engage in income generating activities | Social safety nets | Multi-sectoral |
|  | To promote participation of women in agriculture (livestock farming, gardening, small-scale farming) |  | Multi-sectoral |
|  | To promote formation of cooperative societies in the communities |  |  |
|  |  |  |  |
| Private sector engagement | Working with microfinance houses to provide financial support to women |  |  |
|  | Promote the formation of cooperative societies in the communities | Community | Ministry of commerce, industry and cooperatives |
| Coordination and Multi-sectoral partnership | Promote girl-child education so as to improve women empowerment | Community based | Women Affairs & Social Development/Education |
|  | Provision of basic infrastructure; water, housing/shelter, education, health services | State-level | Multi-sectoral |
|  | Provision of insurance services (health, social services) | Social safety nets | Multi-sectoral |
|  | Provision of social welfare grants to the poor disabled, children and aged | Social safety nets | Women Affairs & Social Development |
| Research monitoring and evaluation | Development of database for physically challenged people that are unable to work | Social safety nets | Multi-sectoral |
|  | Develop an M & E plan to monitor and evaluate all the poverty reduction programmes in the state |  |  |

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## Appendix 10: Food Security

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | Create awareness on integrated farming through regular airing of Radio and Television jingles | Campaigns and outreaches | Agriculture |
|  | Raise awareness of farmers on the availability of bio-fortification of various staple seedling | State-level | Agriculture |
| Capacity building | Training on Agricultural Extension workers on Nutrition | State-level | Agriculture |
|  | To conduct day training on agricultural value chain to farmers | State-level | Agriculture |
| Advocacy and resource mobilization | Advocate to policy makers on creation of Desk officer for Nutrition | State-level | Agriculture |
| Service delivery | Initiation and Scale up of bio-fortification of staple foods production | State-level | Agriculture |
|  | Procurement tools and machinery for food processing | State-level | Agriculture |
|  | Establish Demonstration farms on integrated crops production | State-level | Agriculture |
| Research monitoring and evaluation | Bottleneck analysis on food security issues | State-level | Agriculture |

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## Appendix 11: Water and Sanitation

|  |  |  |  |
| --- | --- | --- | --- |
| Strategy | Activities | Delivery Platform | Sector |
| BCC | Create awareness on the importance of good hygiene practices for general public through media | Campaigns and outreaches | Multi-sectoral |
|  | Include the provision of Zinc and ORS during MNCH weeks in the state | Campaigns and outreaches | Health |
| Private sector engagement | Promote private sector involvement in the collection and disposal of refuse | State-level | Environment |
|  | Advocate for support for the provision of water guard to communities for improved water hygiene | State-level | Water resources and Health |
| Capacity building | Training of environmental health officers to promote optimal sanitary practices | State-level | Health |
|  | Training of health care providers on the appropriate management of diarrhoea | Facility-based | Health |
| Advocacy and resource mobilization | Advocate to Legislators on the need to legislate on waste and sewage disposals | State-level | Environment |
| Service delivery | Provision of boreholes in health facilities | Facility-based | Water resources |
|  | Provision of VIP Latrine in health facilities, school and Motor Parks | School-based | Environment |
|  | Provision of boreholes at the community level in each ward | Community level | Water resources |
| Research monitoring and evaluation | Conduct KAP study on Hygiene and sanitation practices | State-level | Environment |

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