Government of Sierra Leone

NATIONAL FOOD AND NUTRITION SECURITY IMPLEMENTATION PLAN

2013-2017

Scaling Up NUTRITION

ENGAGE • INSPIRE • INVEST

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LIST OF ACRONYMS

ABC	Agricultural Business Centre
AIDS	Acquired Immune Deficiency Syndrome
BCC	Behaviour Change Communication
BFHI	Baby Friendly Hospital Initiative
BMI	Body Mass Index
BEmONC	Basic Emergency Obstetric and Neonatal Care
CAADP	Comprehensive Africa Agriculture Development Programme
CFSVA	Comprehensive Food Security Vulnerability Assessment
CFW	Cash for Work
CHWS	Community Health Workers
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CLTS	Community Led Total Sanitation
CMAM	Community Management of Acute Malnutrition
CRS	Catholic Relief Services
DAC	District Agricultural Committee
DHMT	District Health Management Team
DHS	Demographic Health Survey
EPI	Expanded Programme on Immunisation
EWS	Early Warning Systems
FBOS	Farmer Based Organisations
FFS	Farmer Field Schools
FFW	Food for Work
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
IFAD	International Fund for Agricultural Development
IPTP	Intermittent Preventive Treatment in Pregnancy
ITN	Insecticide Treated Nets
ITP	Inpatient Therapeutic Programme
IYCF	Infant and Young Child Feeding
IVS	Inland Valley Swamps
MAFFS	Ministry of Agriculture, Forestry and Food Security
MAM	Moderate Acute Malnutrition
MEST	Ministry of Education, Science and Technology
MEWR	Ministry of Energy and Water Resources
MICS	Multiple Indicator Cluster Survey
MFMR	Ministry of Fisheries and Marine Resources
MOFED	Ministry of Finance and Economic Development
MOHS	Ministry of Health and Sanitation
MNP	Micro Nutrient Powder
MSG	Mother Support Group
MSWGCA	Ministry of Social Welfare, Gender and Children's Affairs
MTI	Ministry of Trade and Industry
MUAC	Mid-Upper Arm Circumference
NaCSA	National Commission for Social Action
NCDs	Non Communicable Diseases
NGO	Non-Governmental Organisation
ODF	Open Defecation Free
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
OTP	Outpatient Therapeutic Programme
OVC	Orphans and Vulnerable Children
P4P	Purchase for Progress
PHU	Peripheral Health Unit
PLHIV/TB	People Living with HIV/AIDS/TB
PLW	Pregnant and Lactating Women
PMTCT	Prevention of Mother to Child Transmission
PTAG	Presidential Taskforce on Agriculture
POP/FLE	Population and Family Life Education
REACH	Renewed Efforts Against Child Hunger and Under-nutrition
RH/FP	Reproductive Health and Family Planning
SAM	Severe Acute Malnutrition
SCP	Smallholder Commercialisation Programme
SFP	Supplementary Feeding Programme
SLARI	Sierra Leone Agricultural Research Institute
SLDHBS	Sierra Leone District Health Baseline Survey
SMART	Standardised Monitoring and Assessment of Relief and Transitions
SMS	Short Messaging Service
SNAP	Sustainable Nutrition and Agriculture Programme
SSHE	School Sanitation and Hygiene Education
STH	Soil Transmitted Helminths
SUN	Scaling Up Nutrition
TB	Tuberculosis
TOR	Terms of Reference
TOT	Training of Trainers
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
VAS	Vitamin A Supplementation
VHC	Village Health Committees
WIAN	Women in Agriculture and Nutrition
WFP	World Food Programme
WHO	World Health Organisation

[1]*The 2011 INPSS finding is comparable to the 2007 finding of 37 percent but a decrease from 66 percent in 2008 and from 53 percent in 2005.*

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ACKNOWLEDGEMENTS

The government of Sierra Leone would like to acknowledge the support and contributions of a large number of people, organizations, who made the development and delivery of the 2013-2017 national Food and Nutrition Security Implementation Plan a reality.

First, we would like to thank His Excellency the President of the Republic of Sierra Leone for taking the leadership role in the fight against hunger and malnutrition. For this reason, Sierra Leone has made nutrition a priority in its five-year Poverty Reduction Strategic Plan – the "Agenda for Prosperity" and joined the Global Movement called "Scaling Up Nutrition" (SUN).

Given the broad nature of the mandate and scope of coordinating food and nutrition activities, we gratefully acknowledged the Ministry of Health and Sanitation (MoHS) and the Ministry of Agriculture, Forestry and Food Security (MAFFS) for their relentless support in the driver's sit. These Ministries have contributed immensely to the technical work concerning nutrition and food security, and the finalization of the Implementation Plan. They have coordinated several multi-sectoral workshops without which this the work of putting this document together would not have been effective.

The implementing partners in food and nutrition, drawn mainly from civil society organisations, business, academia and UN system network, were integral to the process of putting together valuable ideas for the Food and Nutrition Security Implementation Plan. They have always been in the forefront of the fight against hunger and malnutrition, and we consider their work invaluable. In this regard therefore, special thanks must go to UN REACH initiative who worked tirelessly in collaboration with MoHS and MAFFS to put together the concept and first draft of the Implementation Plan.

The Donors and development partners, mainly Irish Aid, UNICEF, WHO, WFP, FAO, and the entire United Nations family deserve special mention for their keen interest in nutrition and recent health emergencies. FAO and WFP jointly hired Agricultural Development Consultants to review and strengthen the food security component of the first draft document. Without their moral and financial support, this report would hardly have been actualized.

Members of the SUN Civil Society Platform (CSP) have demonstrated commendable interest in nutrition issues. Focus 1000 was the consultant to finalise the document after inputs made by multi-stakeholder partners during the validation workshop of the Food and Nutrition Security Implementation Plan.

Last but not the least is the SUN Secretariat in the Office of the Vice President. The SUN Secretariat coordinated meetings and the workshop for validating the Implementation Plan and pushed hard for its launch so that it becomes a working document accepted by all the partners. We are also grateful for the administrative support provided by the staff of the Office of the Vice President.

To all and sundry who made valuable contributions, in one way or the other, but have not been named specifically, we would like to thank you for what you have done for the present and future generations of Sierra Leoneans, as we continue to work collectively to end hunger and malnutrition.

FOREWORD

Under-nutrition is prevalent among the very poor, particularly among women and children. It also has a direct relationship with the high rates of infectious and other preventable diseases. The human and economic costs associated with under-nutrition are huge. It is, therefore, desirable that a coordinated action is pursued both at the national and global levels to combat under-nutrition.

Aware of the debilitating effects of under-nutrition in achieving sustainable growth and human development, my Government has prioritized Nutrition and Food Security as a key project in our Poverty Reduction Strategy, our Agenda for Prosperity. In pursuit of our commitment to achieve Nutrition and Food Security for all, Sierra Leone is now a member of the Scaling Up Nutrition (SUN) Global Movement. We consider this a flagship programme. That is why we have located it within the Presidency and coordinated by the Office of the Vice President; giving it political support and superintendence at the highest level.

The Food and Nutrition Security Implementation Plan (FNSIP) is a step-by-step guide towards ensuring Food and Nutrition Security in Sierra Leone within the next few years. However, this can only be achieved through concerted and coordinated efforts by the state and non-state institutions and actors. It involves a multi-dimensional approach, and certainly a multi-sectoral partnership to achieving the targets we have set for ourselves.
The FNSIP has four interlinked parts. Part 1 presents an overview of the food and nutrition situation of Sierra Leone, and the policy context within which this document was developed.

Part 2 discusses food and nutrition interventions as per national priorities. It lays out the current situation of each intervention; planned targets for outcome and coverage indicators; strategies for scaling up each of the interventions; and roles and responsibilities of each partner/actor. It also discusses cross cutting issues that impact on each of the interventions.

Part 3 presents the institutional arrangements and coordination mechanisms required for the efficient and effective implementation of the FNSIP, taking into consideration its multi-sectoral nature. It also presents monitoring and evaluation mechanisms to keep us on track.

Part 4 contains Annexes with Log frames and a budget spread sheet of how to operationalize the interventions against each specific objective within a specified timeframe.

We have benefitted from a multi-sectoral collaborative approach in the design of FNSIP. Let me thank all those partners who have supported us in putting the Plan together. It is my fervent hope that this partnership will be strengthened and fully utilized as we embark on implementing the Food and Nutrition Security Plan.

H.E. Ernest Bai Koroma
President of the Republic of Sierra Leone

PART I: OVERVIEW

1.1 INTRODUCTION

Sierra Leone has a population of 5,743,000 people (National Population Census 2004[1]). The life expectancy at birth is 39 years for males and 42 years for females. The low life expectancy in Sierra Leone is associated with heavy disease burden and high child and maternal morbidity and mortality. The factors contributing to this are limited access to safe drinking water, inadequate sanitation, poor feeding and hygienic practices and access to quality health care services and over crowded housing. These issues can be attributed to pervasive poverty, weak institutional structures for programme and policy design and high levels of illiteracy especially among females.

Agriculture is the main source of food and essential nutrients and an important livelihood source for many poor people. It plays a crucial role in ensuring food security, poverty reduction and improving the nutrition situation of vulnerable populations. About 70% of the population in Sierra Leone is in rural areas, and engaged in smallholder agricultural production. Despite its potential to contribute in alleviating malnutrition, many poor rural people are trapped in a situation of low-productive agriculture, poor health, and poverty. This is partly because improved nutrition is not usually an explicit goal of agricultural production systems and many agricultural policies may have even contributed to declining nutrition and diet diversity for the poor.
To a large extent, nutrition has always had more health focus and has not adequately considered agriculture as a key vehicle to improve nutrition. The multi-facetted nature of the causes of malnutrition makes it clear that alleviating poor nutrition cannot be solved merely from a single sector but requires strong linkages with all relevant sectors. Hence, the need to have a combined nutrition and food security approach to reducing malnutrition.

This document is divided into four parts.

Part 1: Presents an overview of the food and nutrition situation of Sierra Leone, and the policy context within which this document was developed. It also contains five-year targets for key nutritional indicators.

Part 2: Discusses food and nutrition interventions as per national priorities. It lays out the current situation of each intervention, planned targets for outcome and coverage indicators, strategies for scaling up each of the interventions and roles and responsibilities of each actor. It also discusses cross cutting issues that have an impact on each of the eight interventions.

Part 3: Presents the institutional arrangements and coordination mechanisms required for the efficient and effective implementation of the plan taking into consideration its multi-sectoral nature. It also presents monitoring and evaluation mechanisms, and financing details.

Part 4: Contains annexes with Log frame and budget spread sheet of how to operationalize the eight (8) national policy specific objectives integrating the implementation and scale-up intervention strategies. Each specific objective indicates key strategies, outputs, indicators, timeframe (short term, medium term, long term) of implementation and responsibilities. Short-term activities will be implemented in the first year while duration of medium and long-term activities take 2 to 5 years

[1]*Statistics Sierra Leone, 2004. National Population and Housing census survey*

1.2 NUTRITION SITUATION

Malnutrition still remains an important contributor to infant morbidity and mortality in the country. It is also a major impediment to the manpower and economic development of the country. While there has been some improvement in reduction of malnutrition rates in Sierra Leone since 2005, it remains a serious problem in most parts of the country (Figure 1). According to the national SMART[2] survey conducted in 2010, 34.1% of children under the age of five years are stunted, 6.9% are wasted and 18.7% are underweight. The prevalence of overweight in children over five years was 8% in 2008[3] (DHS). In absolute numbers, over 300,000 children in Sierra Leone are chronically malnourished and the situation is worsening in the eastern and southern regions. Stunting and wasting appear to have high prevalence in the same districts. The bulk of wasted children are in Port Loko, Kenema, Bo and Western Urban districts, while the largest number of stunted children are in Bo, Kenema, and Western Urban areas.

Exclusive breastfeeding (EBF) has improved from 2% in 2000 (MICS) to 32% in 2010 (MICS). Even at early ages, majority of children receive liquids or foods other than breast milk. Most of the liquids and complementary foods are not prepared, stored or handled under proper hygiene conditions and this may result in diarrhoea. Other barriers to exclusive breastfeeding are the heavy workload on women and inadequate support from their husbands and other members of the family.

Breastfeeding begins to rapidly decline at ages 12-17 months. Promotion of exclusive breastfeeding is undertaken through mass campaigns, the health system, media campaigns and MSGs. It is envisaged that EBF will increase to 60% by 2016, which is an average of six per cent increase per year as it is a behaviour change which may occur over the long term complementary feeding should only start after a child is 6 months of age but most mothers initiate it earlier. Inadequacy of complementary feeding is mainly driven by frequency and the quality of the food fed to the child. Appropriate complementary feeding frequency (four times per day for 6-8 months old children) has improved, from 41% in 2005 (MICS) to 53% in 2008 (DHS). However, between the ages of 6-8 and 9-11months, the frequency does not increase from two to three times a day as recommended from 9 months of age (Figure 7).

According to SMART[4] (2010) Vitamin A supplementation (VAS) has been scaled up to 91% in children 6-59 months nationally as compared to the 2008 DHS figures of 26%. However there is need to improve VAS through routine health care service delivery, and through consumption of Vitamin A rich foods. Vitamin A supplementation is delivered through bi-annual mass campaigns targeting all children 6-59 months old, combined with polio immunization and deworming. The intervention has also been integrated into the routine health delivery services. A national guideline on distribution and administration of VAS has been developed and disseminated. Promotion of Vitamin A supplementation is conducted through mass media, Health systems and community-based structures.

Only 40% of women received VAS within six week postpartum (SLDHSBS, 2009). This proportion is equal to women who delivered in health facilities, which is very small. Consequently, there is a dire need to scale up the intervention. This can be done through campaigns encouraging more women to deliver in health facilities.

A National food fortification Alliance (NFFA) has been formed to spearhead advocacy for micronutrient fortification. The standards for oil fortification with vitamin A have been developed and gazetted as mandatory. Vitamin A deficiency is expected to reduce to 20% by 2016. This is based on the fact that VAS has been intro-

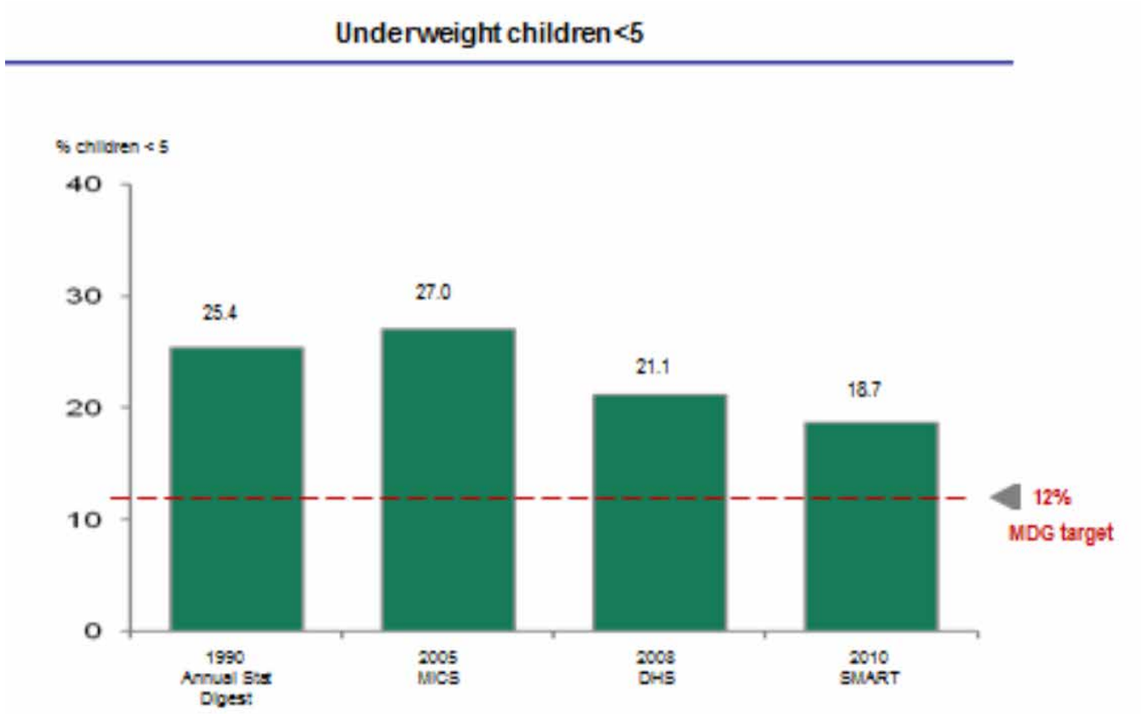
[2]*UNICEF. 2010. The Nutritional Situation in Sierra Leone, Nutrition Survey using SMART Methods*
[3]*Demographic Health Survey (DHS 2008) of the Ministry of Health and Sanitation*
[4]*Standardized methodology of assessment in relief and transition UNICEF 2010*

duced and scaled up in the entire country. A micronutrient survey conducted in 2013 will establish a baseline on serum retinol levels. The scaling up of food diversification, consumption and fortification is also expected to further boost the decline of Vitamin A deficiency.

Malaria remains the most common cause of illness and death in the country. Over 24% of children under the age of five years had malaria in the two weeks preceding the 2008 household survey (DHS 2008[5]). Anaemia is also highly prevalent at 76% and 46 % in children under-five years and women of child bearing age, respectively (DHS 2008). The high levels of anaemia could be due to the high rates of malaria and other parasitic infections, poor dietary intake of iron-rich foods, or a combination of these reasons.

Figure 1: Trends of malnutrition rates from 1990-2010 (Annual Statistic Digest 1990, MICS 2005, DHS 2008, SMART 2010)

Sierra Leone is making progress in reducing malnutrition, but more needs to be done to achieve MDG1



[5]*Sierra Leone (SSL) and ICF Macro. 2009. Sierra Leone Demographic and Health Survey 2008. Calverton. Maryland, USA: Statistics Sierra Leone and ICF Macro*
[6]*Demographic Health Survey (MOHS) 2008*
[7]*Multiple Indicator Cluster Survey (MICS)2010*

Infant and young child feeding (IYCF) practices indicate that only 32% of infants in Sierra Leone are exclusively breastfed (MICS 2010). While 51% of children 6-9 months receive timely introduction of complementary foods, amongst children 6-23 months[6] , only 19%are fed with the minimum acceptable complementary diet[7]. These inappropriate feeding practices are important contributors to child morbidity, which exacerbates the already heavy burden of disease. Furthermore access to safe water and adequate sanitation are critically low especially in rural areas.

Pregnant women who attended at least four antenatal care services in their most recent pregnancy were 75% in 2010[8] however, only 50% subsequently delivered in a health facility (MICS 2010). Insufficient numbers of health facilities are equipped and staffed to acceptable standards to provide emergency obstetric care. The referral system in many districts is not functional, often leading to dangerous delays in the provision of comprehensive emergency obstetric care.

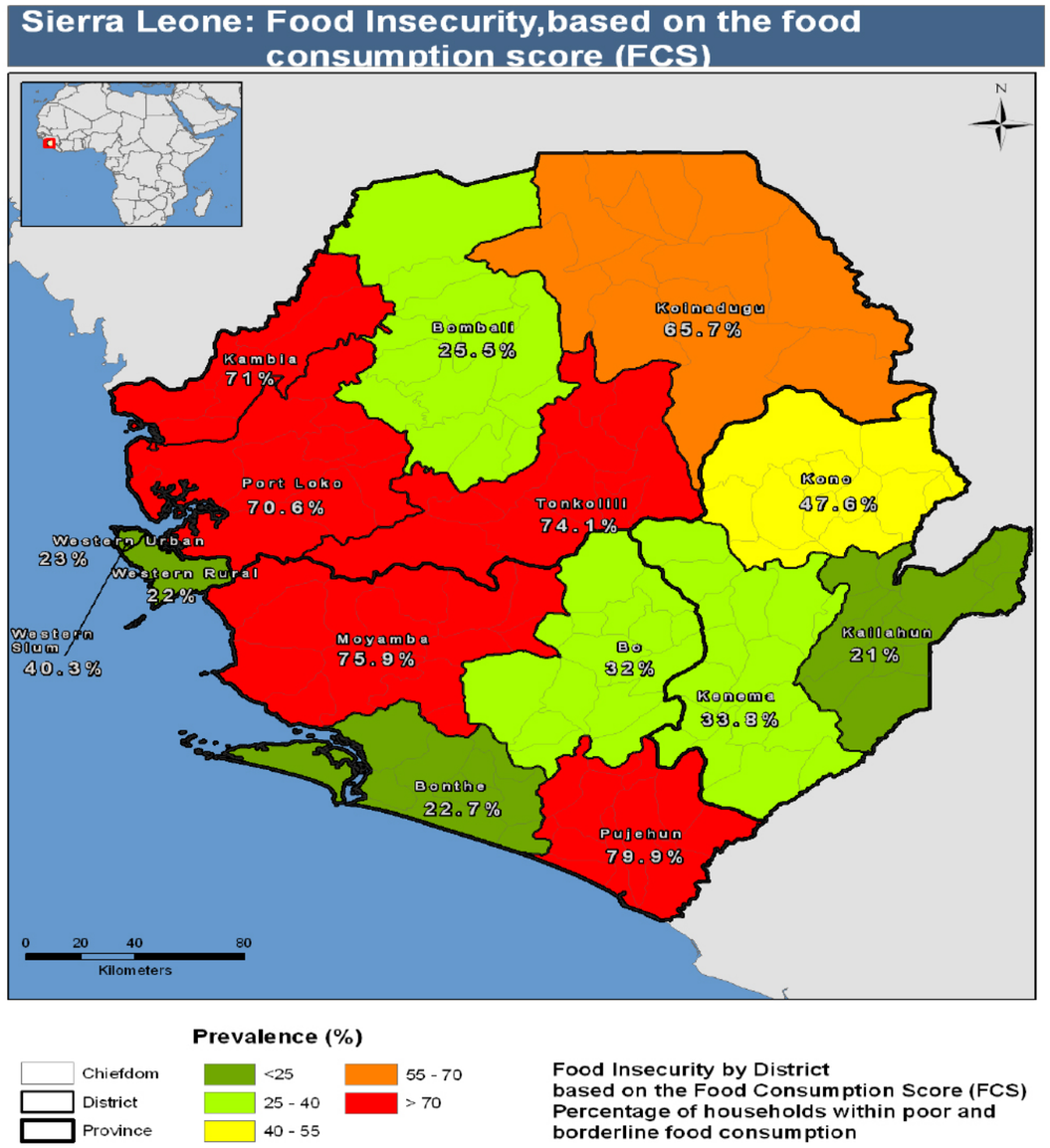
1.3 FOOD SECURITY SITUATION

Food insecurity in Sierra Leone increases sharply in the lean season, when 45% of the population do not have sufficient access to food (CFSVA 2011[9]). The situation varies across the country with some districts being more food insecure than others (Figure 2). The CFSVA further indicates that diets in Sierra Leone are mostly cereal-based with vegetables and fats/oils, but low intake of meats and fruits. Food secure households consume pulses on average 4.86 times in recall period while food insecure households do not consume pulses. Generally, there is very little consumption of animal source foods although fishing households consume the highest amount of meat despite their high levels of poverty. Both adults and children (1-5 years) average 1.9 meals per day and only 22% of children 1-5 years have 3 meals per day.

The unfavourable nature and patterns of food consumption is caused by unavailability of sufficient quantities of food at all times (either from local or external sources); relatively high costs of food that makes food largely unaffordable; and inefficient utilization and absorption of food consumed into the body.

[8]*Multiple Indicator Cluster Survey (MICS)2010*
[9]*WFP. 2011. WFP. Comprehensive food security and vulnerability analysis (CFSVA)*

Figure 2: Food Insecurity, based on the food consumption score (CFSVA 2011)

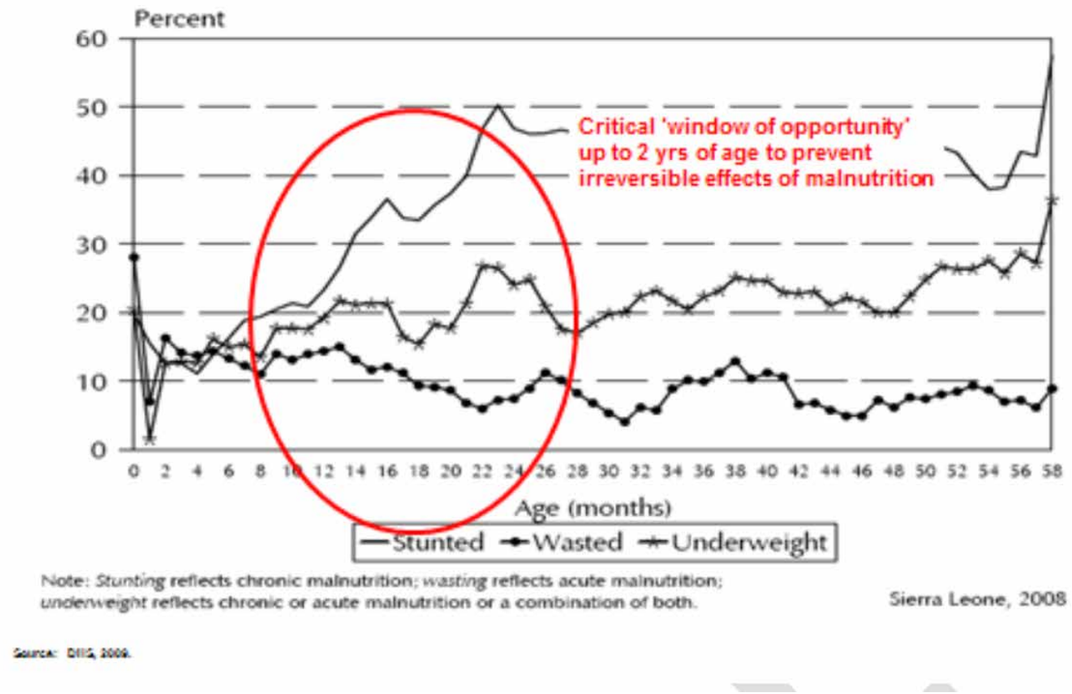


Food security status differs by livelihood and income. Most households are dependent on local markets for the majority of their food, but access to markets is limited and where they do exist food prices are unstable. This makes households especially the poor particularly vulnerable to household food insecurity. Rural households purchase 65% of their food from markets while urban households purchase nearly all food from markets (91%).

1.4 OPPORTUNITIES FOR SCALING UP

When it comes to implementing nutrition actions, Sierra Leone has several recent at-scale successes. Some programs already being scaled-up include Integrated Management of Acute Malnutrition (IMAM), Vitamin A supplementation, deworming and distribution of Insecticide Treated Nets (ITN). Sierra Leone has achieved high coverage of under-five Vitamin A Supplementation and de-worming at 91% and 85% respectively (SMART 2010). However, interventions specifically focused on the 'critical window of opportunity' (between conception and two years of age) need strengthening. As shown in Figure 3, stunting increases dramatically up to 23 months of age after which time it remains unchanged.

Figure 3: Nutrition status of children by age (DHS 2008)



In terms of actions related to food security, the government has reflected its commitment to 'an adequate diet for all' by renaming the 'Ministry of Agriculture and Forestry' to 'Ministry of Agriculture, Forestry and Food Security' and subsequently implemented the following:

- Developed a National Food Security Strategy in 2004
- Prioritized agriculture and health as major areas of focus for the government
- Subscribed to the African Peer Review Mechanism (APRM) by allocating 10% of the national budget to agriculture
- Diversified and increased investment in agriculture through the 'flagship' Small Holder Commercialization Project and other food security related initiatives
- Established a Task Force on strengthening Food and Nutrition Security
- Initiated establishment of committee on National Grain Reserves

Current opportunities to accelerate the reduction of malnutrition in Sierra Leone include:

- Putting more focus on children and women from conception to two years of age to prevent the irreversible effects of stunting
- Improve the effectiveness and increasing the coverage of nutrition-specific interventions through better integration of health and agriculture-based approaches e.g. Promotion of nutritious foods through the Smallholder Commercialisation Programme, the right to food approach, WASH and through the health system
- Enhance agricultural productivity by creating the enabling environment for increased food production and diversification, value addition and consumption patterns
- Improve the livelihoods of poor households by linking farmers to markets in order to link income generation and good nutrition
- Ensure the social protection interventions are nutrition sensitive?"
- Strengthening M&E through integrated nutrition and food security surveillance
- Strengthening governance, coordination, advocacy and capacity to scale-up nutrition interventions through global initiatives such as REACH[10] and Scaling up Nutrition (SUN[11])

1.5 POLICY CONTEXT

The government recognises that ensuring people's physical, social and economic access to sufficient, safe and nutritious food and maternal and childhood health is crucial for a healthy society. Government is therefore committed to reducing food insecurity and the high rates of maternal and child morbidity and mortality. In this regard, government has taken steps through the 'Agenda for Change' to roll-out the Small-holder Commercialization Programme, developed a Basic Package of Essential Health Services and introduced the Free Health Care Initiative for all pregnant women, lactating mothers and children of less than five years of age. These initiatives have considerably improved access to food in relatively sufficient and affordable quantities, and health care, with the hope that this will result in the steady reduction of food insecurity and improvement of maternal and child health indicators in Sierra Leone.

The Ministry of Health and Sanitation (MOHS) has put several policies and strategies in place, including the National Health Policy[12] (2009), the Reproductive New-born and Child Health Policy (2011)[13], Joint Programme of Work and Funding (2012-2014)[14], Free Health Care Initiative, the National Nutrition Policy[15] (2012) and various other policies, which provide clear directions for the health sector. The Ministry of Agriculture, Forestry and Food Security (MAFFS) has developed the Small Holder Commercialisation investment Programme (SCP) under the Comprehensive Africa Agriculture Development Programme (CAADP) initiative. The SCP has six components that include: (i) SCP production intensification, diversification, value addition and marketing (ii) Small scale irrigation development (iii) Market access expansion through feeder road rehabilitation (iv) Smallholder access to rural financial services (v) Strengthening social protection, food security, productive social safety nets and (vi) SCP planning, coordination, monitoring and evaluation. Component (i) and (v) have a direct impact on nutrition while the other components have an indirect impact on nutrition.

The development of the National Nutrition Policy was a crucial step in addressing the nutrition problems of Sierra Leone. Different stakeholders and sectors in government to address them revised the Policy in 2009 to reflect the complex nature of the causes of malnutrition and the need for multi-sectorial collaboration. The vision of the National Nutrition Policy is: "A healthy and well-nourished population with communities and families well informed and empowered to take appropriate action on their food and nutrition situation".

[10] *REACH is a country led approach to scale-up proven and effective interventions addressing child under nutrition through thepartnership of UN agencies, civil society, donors, private sector under the leadership of national governments*
[11] *Scaling Up Nutrition is a movement of all countries whose populations experience under-nutrition and for all stakeholders committed to providing support*
[12] *National Health Policy 2009*
[13] *Reproductive New born and Child Health Policy 2011*
[14] *Free Health Care Initiative 2010*
[15] *National Nutrition Policy*

1.6 GOAL AND OBJECTIVES

1.6.1 Goal:

The overall goal of the policy is to contribute to the improved health, social and economic well being for all the people in Sierra Leone, especially women, children and other nutritionally vulnerable groups.

1.6.2 Objectives:

The general objective is to improve the nutritional status of the population especially infants and young children, pregnant and lactating women in Sierra Leone.

The policy has eight specific objectives. The strategies to achieve these objectives are outlined in the National Nutrition Policy document.

The specific objectives of the national nutrition action plan are to:

1. Increase commitment from policymakers, policy advisors, and programme designers at national and district levels to accord nutrition a high priority in the political and national development agenda;
2. Improve household food security situation (quantity, quality and safety) in order to satisfy the daily dietary needs of the population;
3. Improve the nutritional status through appropriate feeding practices of children under the age of 5 years and women of reproductive age (15-49);
4. Strengthen preventive measures against nutrition related diseases;
5. Improve access to quality curative nutrition services;
6. Strengthen surveillance systems for monitoring the food and nutrition situation;
7. Enhance evidence-based decision making on food and nutrition issues through research;
8. Strengthen the effective and efficient coordination food and nutrition interventions.

1.7 TARGETS AND ORGANISATION OF THE PLAN

This Food and Nutrition Security Policy implementation plan has been developed as a supplement to the Sierra Leone National Nutrition Policy. The primary objective of the implementation plan will be to translate the goals, objectives and strategies articulated in the policy into implementable priority projects and activities. Implementation of this plan will involve appropriate departments in the relevant ministries, institutions of higher learning, research institutions, the private sector, community-based organisations, non-governmental organisations, development partners, international agencies, individuals, families and communities.

The implementation plan is for a period of five years from 2013 -2017. The overall target is to increase food production and consumption score by 80% and 25% respectively and reduce malnutrition rates among infants and young children in Sierra Leone by 30% by 2017 (Table 1). However, stunting rates are expected to be reduced from 34.1% to 28.5%by 2017because of its irreversible nature.

Table 1: Indicator Targets for the Food and Nutrition Security implementation plan

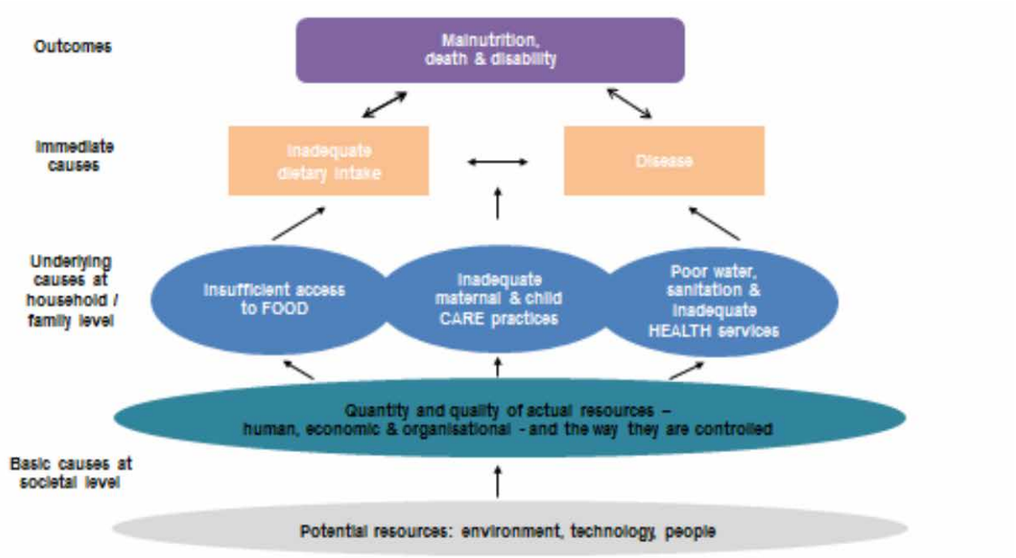
Indicator	Baseline 2013	Target, 2017
A. Food Security		
Food Production	69%	85%
Access to Food	55%	75%
Food Consumption Score	20-21.5	30-36
Kcal/person/day	2000	2001
B. Nutrition		
Stunting	34.1%	28.5%
Underweight	18.7%	13.1%
Wasting	6.9%	4.8%
Overweight	8%	5.6%
Child mortality	140/1000 live births	98/1000 live births

PART II: PRIORITY AREAS

This section discusses priority food and nutrition interventions as per national priorities. It lays out the current situation of each intervention, planned targets for outcome and coverage indicators, strategies for scaling up each of the interventions and roles and responsibilities of each actor. It also discusses crosscutting issues that have an impact on each of the eight interventions. The main causes of malnutrition in Sierra Leone were identified using the conceptual framework (UNICEF 1990) for analysing malnutrition (Figure 4). The analysis was important in identifying priority food and nutrition security interventions to be scaled up to accelerate the reduction of malnutrition levels in Sierra Leone.

Figure 4: Conceptual framework for analysing the causes of malnutrition

Conceptual framework for analysing the causes of malnutrition



Tackling the challenge of malnutrition requires an integrated approach associated with the three underlying causes of (i) insufficient access to food, (ii) inadequate maternal and child care practices and (iii) poor water sanitation and inadequate health services. To address the underlying causes of malnutrition in Sierra Leone, interventions were identified under eight priority areas (Table 2).

The implementation details of the eight interventions are outlined in the action plan in Part 4 annex 1, following the logic of the National Nutrition Policy strategic objectives. Cross-reference is made between the implementation strategies of each intervention and the action plan. For example, in improving breastfeeding and complementary feeding, one of the implementation strategies is; Develop policy/strategy document on IYCF and review existing guidelines which is detailed in Objective 3.1 in the action plan (Part 4, Annexe 1).

2.1 PRIORITY AREA 1: ADVOCACY

The primary advocacy objective is toincrease commitment from policymakers, policy advisors, and programme designers at national and district levels to accord nutrition a high priority in the political and national development agenda.

The following strategic actions will be undertaken to support the realization of objective 1:

1. Integrate food and nutrition security into the national development agenda;
2. Review, align, and harmonise messages on food and nutrition security across all sectors.
3. Strengthen the human resource capacity in food and nutrition security;
4. Institutionalise and operationlise gender equity policies.

2.1.1 Integrate food and nutrition security into the national development agenda

In order to ensure national ownership and sustainability of food and nutrition security interventions, it is vital to actively engage decision and policymakers at the national and district levels. Such engagements would culminate in increased national budget allocated for food and nutrition security. An integral component of the targeted advocacy efforts include identifying policy and decision-makers that can become Champions for Food and Nutrition Security. Attaining high-level commitment from members of Parliament, Cabinet, and District Councils would serve as a catalyst for the implementation of all other priority areas outlined in this plan of action.

The following activities will be undertaken as part the strategic action to integrate food and nutrition security into the national development agenda:

- Coordinate targeted advocacy efforts for food and nutrition security among parliamentarians, policy makers and donors;
- Develop an advocacy strategy and advocacy materials to ensure that food and nutrition security attains visibility at the highest level;
- Identify decision and policymakers – such as Cabinet, Parliament, and District Council members who would become Champions for Food and Nutrition Security;
- Support the integration of food and nutrition security into multi-sectorial plans.

2.1.2 Review, align, and harmonise messages on food and nutrition security across all sectors

A key activity would be to develop a multi-sector food and nutrition security communication strategy that harmonises messages on food and nutrition security. Despite the fact that nutrition related interventions are articulated in national policies, as well as other sectorial policy documents, many high level policy makers and national programme designers still lack adequate knowledge on the relevance of nutrition to national development. This hampers their ability and capacity to demand for nutrition-related data for decision making or to consider nutrition outcomes in national programme design. The lack of a harmonized policy messages that explicitly guide each sector on their roles and responsibilities with a clear accountability framework has been an impeding shortfall. A national food and nutrition security forum was conducted in Sierra Leone in 2011 to address the shortcomings relating to adequate knowledge of nutrition and food security. However, additional strategic communication efforts are needed in order to increase the knowledge base on food and nutrition security.

At the beneficiary level, the messages are not well harmonized and targeted to reach the intended audiences in ways that could impact positively on their lives. To address these gaps, multi-sectorial stakeholders will develop a joint communication/advocacy strategy targeting policy makers and programme designers and disseminate the policy implementation plan to all relevant sectors at the national and district level. An investment case for food and nutrition security will be developed and used to advocate for increased investment needed for nationwide scale-up of low-cost, high-impact interventions.

Similarly, at the intervention level, nutrition education is a crosscutting issue with many players across all sectors. There will be a need to harmonize messages and leverage on each agency's comparative advantage to successfully accomplish the nutrition education component. This requires a common nutrition communication strategy to build consensus on harmonised messages and delivery mechanisms. All stakeholders will then use the materials developed. In addition, advocacy efforts will be undertaken for integration of nutrition communication into the curricula of pre-service training of public health and extension workers. Measures to strengthen community participation in planning, implementation, monitoring and evaluation of communication activities will also be undertaken.

2.1.3 Strengthen the human resource capacity in food and nutrition security

The human capacity in most sectors in government is currently inadequate. Most of the government ministries are trying to request for additional staff to implement food and nutrition security interventions. For example, the MoHS and MAFFS are in the process of building up their staff capacity especially for nutritionists. In 2011, the number of staff in key ministries is as stated in Table 4 below. To scale up food and nutrition security interventions contained in this plan, additional capacity will be needed especially at the district level. However, a capacity assessment is required to determine existing gaps in knowledge and skills that are needed in food and nutrition security interventions. Tentative measures to develop capacity will be the recruitment of additional nutritionists, Maternal & Child Health Aides at the health centers, agricultural extension workers and Social development workers at the chiefdom level. Staff on the post will also receive on-the-job training and ministries would also need to work in collaboration with training institutions to revise and update their curricula to reflect current design and implementation realities. The areas that will require curricula review have already been identified under each intervention. Furthermore, Food and Nutrition Security Focal Persons within each sector would be identified and provided with the requisite competencies needed to coordinate the efficient and effective implementation of this national plan of action.

Table 2: Current staff capacity (2011)

Sector	Facilities/Channels	First Line Human resources
Health	CHC 201 CHP 233 MCHP 620 Hospitals 147 Tertiary 8	Community Health Centers: 229 Community Health Nurses: 196 MCH Aides: 1876 Midwifes: 81 Nutritionists: 13
Agriculture	Agricultural Business Centres: 192 Extension training centres: 2 (Kenema and Tonkolili)	District Agricultural Officers: 13 Subject Matter Specialists: 78 District Extension Coordinators: 26 Block Extension Supervisors: 65 Field/block Extension workers: 520

2.1.4 Institutionalise and operationlise gender equity policies

Poor nutritional status in early life reduces learning potential, increases reproductive and maternal health risks and lowers productivity. The main problem that women in Sierra Leone encounter like in most other developing countries is poor access to land, information, technology, low participation in decision-making and high poverty levels. This is precipitated by a number of reasons that include; social, religious and cultural barriers, poor organization of women, disproportionate labour and low literacy levels. These lead to women disempowerment and they get caught in a vicious circle of poverty and under nutrition.

A number of strategies will be applied to address the above problems, namely:

- Rollout of the three gender acts by MSWGCA in order to highlight and minimize the socio-cultural and economic threats to the wellbeing of women,
    - Mass sensitization and mobilization of women to ensure that they are better organized to receive support (livelihoods, inputs, training etc.),
    - Engagements at the community level targeting the traditional and religious leaders, local authorities, heads of local councils and secret societies to address cultural barriers and promote the girl child school enrolment.
- Active targeting of men to increase their participation in food and nutrition security interventions for them to better provides support to the women.
- Advocate for the application of policy on maternity entitlements including workplace initiatives

2.2 PRIORITY AREA 2: PROMOTION AND FACILITATION OF ADEQUATE NATIONAL AND HOUSEHOLD FOOD SECURITY

The specific objective of priority 2 is toimprove household food security situation (quantity, quality and safety) in order to satisfy the daily dietary needs of the population

According to CFSVA 2010, 45% of the population or 2.5 million people are food insecure. This is as a result of the limited use of appropriate agricultural technology, over-dependence on rain-fed agriculture, lack of markets and market information, high post-harvest losses, poor feeder roads, poor and inadequate storage and processing facilities, stress food sales and inadequate buffer stocks.

The interventions discussed under the priority area are aimed at improving household food security by increasing availability and accessibility to good quality and sufficient food at all times. In addition, some interventions also provide safety nets to the vulnerable groups.

The following strategic actions will be undertaken to support the realization of priority 2:

- Nutrition activities integrated into Farmer Field School activities
- Research to facilitate food diversification & availability of adequate and appropriate technologies promoted
- Availability of improved agricultural inputs to farmers at the appropriate time in the agricultural season enhanced (especially focusing on vulnerable groups)
- Nutrition education integrated into schools and institutions of higher learning
- Post-harvest handling and storage of foods at farm and household level enhanced
- Provision of support to farmers to process, add value & market their farm produce
- Vulnerable groups receive livelihood support through cash and food for work
- Vulnerable groups access nutritious foods

2.2.1 Nutrition activities integrated into Farmer Field School activities

Over the years interventions in agriculture have focused mainly on increased production and not on how proper agricultural practices can increase nutritional value. The emphasis of the SCP has been to increase the production of rice and cassava as the staple and substitute foods respectively in order to achieve food self-sufficiency. Rice production has increased significantly since 2000. However, yield improvement is constrained by unavailability of labour, access to technology and other agricultural services such as storage (CFSVA 2011). Improved production is primarily due to increase in the area cultivated while yields remain low (1.0–1.5 tons/hectare). Overall, 55% of farming households leave part of their cleared land uncultivated, mostly due to lack of inputs and labour in the community. Also, 65% of households that cultivate rice do not produce enough to feed their family; only 5.5% rely on their own production for the full year.

There has been a steady increase in crop production over the past eight years due to production intensification. It is projected that crop production will increase by 10%/year for area and 5% per year for yield (Table 2).

Table 3: Food production and accessibility indicators

	Description	Baseline 2013	Target 2017
Indicator	Food consumption score	20-21.5	30-36
	Food diversity score	N/A	N/A
Coverage	% of farmers receiving training and accessing inputs	55% estimate	80%
	% of Mother Support Groups receiving training and accessing inputs	N/A	80%
Target group	Farming households, Mother Support Groups		

Table 3: Food production and accessibility indicators

Crop	Baseline 2011 (Mt)	Projected 2017 (Mt)
Rice Paddy	1,183,691	2,116,234
Cassava	3,753,147	6,722,633
Sweet potato	238,150	426,652
Ground nut	94,446	169,561

Source: Planning Evaluation Monitoring and Statistics Division 2011

Implementation Strategies

Studies have shown limited impact of rice production on the nutrition intake and status of small holders and their families. However, several potential entry points that can improve the nutritional effect of the production component of the smallholder value chain have been identified (WUR/NU/SLARI 2011[16]).

- Production can improve nutrition by increasing food availability for own consumption, a source of income through sale of excess produce;
- Promotion of fast maturing varieties creates room for crop diversification (especially vegetable production) and should continue to be encouraged among farmers;
- Improving the nutrient content of rice by using fertiliser. For example, studies have shown that a short term and rapid approach for improving zinc concentrations in cereals is the application of Zinc fertilizers or Zinc-enriched NPK fertilizers (Cakmak 2008[17]);
- Research to identify nutrient content of rice varieties to find opportunities for crossbreeding and production of nutritious rice. For instance a variety high in protein could be cross bred with a variety that is well-adapted to the ecology in which it is used;
- Research on how processes such as the timing of harvesting can help to improve nutrient quality of rice. For example, a study that compared parboiled and non-parboiled rice samples harvested at different times showed that parboiling rice at the hard[18] and soft[19] dough stages showed significantly higher amounts of starch, magnesium and B vitamins as compared to non-parboiled rice. Beta-carotene re-

[16] *REACH, WUR, SLARI, Njala University. 2011. Improving Nutrition through Agriculture: Challenges and Opportunities*
[17] *Cakmak I (2008). "Enrichment of cereal grains with zinc: Agronomic or genetic biofortification?" Plant and Soil 302 (1-2): 1-17*
[18] *Hard dough: Harvested 123 days from seeding*
[19] *Soft dough: Harvested 110 days from seeding*

mained higher in parboiled soft dough samples as compared to parboiled hard dough samples (Rodriguez and Hurtada 2009[20]).

The activities that will support the realization of implementation strategies are:

- Develop FFS modules on (i) production of nutrient rich foods for dietary diversification, (ii) appropriate feeding practices especially for vulnerable groups and (iii) nutritional value of locally available foods;
- Conduct Training of Trainers on the FFS nutrition module for field extension workers;
- Train FFS and mother support groups on production and utilization of locally produced nutritious foods (e.g. through the Baby Friendly Farms).

Scaling-up strategies

Other opportunities of improving the nutrition content of staples are the establishment of (i) the orange-fleshed sweet potato. There is limited use of this crop currently in Sierra Leone but there is need to promote its production and consumption. (ii) Promoting consumption and production of rich protein foods such as benni (sesame seed), peanuts and other plant protein sources – black eye peas, broad beans etc. that can be used in complementary feeding. Due to its use in the industrial production of supplementary foods, benni is scarce and expensive. Increased production will increase supply and reduce costs.

Half of the households in Sierra Leone have home gardens where they produce pot vegetables for household consumption and/or sale for income. Women mainly carry out vegetable production. In some districts, such as Koinadugu, women grow exotic vegetables mainly as a livelihood option. According to an FAO/IFAD study (2011), women are involved in all aspects of farming systems but face particular challenges related to time resource allocation. Existing demands on women's time prevents them from pursuing other opportunities and can affect productivity. Women often have to go through men to access land, negotiate prices and deals, or technology/inputs. While women participate in all household agricultural activities, they often have little control over income, particularly for high-value crops. Many women have to find additional income generating activities in order to generate 'fast cash' within their control to meet daily household expenses (e.g. purchase food), particularly in the lean season. Establishment of vegetable gardens is one of the options identified.

2.2.2 Research to facilitate food diversification & availability of adequate and appropriate technologies promoted

Studies have shown limited impact of rice production on the nutrition intake and status of small holders and their families. However, several potential entry points that can improve the nutritional effect of the production component of the smallholder value chain have been identified (WUR/NU/SLARI 2011[21]). According to the REACH operational research on the rice value chains the entry points to improve nutritional status is to improve drying and storage (in terms of facilities and knowledge) and to increase access to milling machines. However, the main nutritional entry points in rice processing relate to fortification of rice during parboiling process. Fortification of rice with micronutrients such as iron and zinc during the parboiling process can significantly improve the nutritional quality of rice. Further research is however required to determine the amount of iron or zinc that can be used to fortify rice, its bioavailability to the consumer after the rice has been cooked, and the feasibility of carrying out rice fortification in Sierra Leone.

[20] *Rodriguez FM and Hurtada WA (2009). "Nutritional Quality of Parboiled and Non-Parboiled Dehulled Rice (Oryza sativa L.) at soft Dough Stages." Annals of Nutrition and Metabolism 55: 384-384*

[21] *REACH, WUR, SLARI, Njala University. 2011. Improving Nutrition through Agriculture: Challenges and Opportunities*

In the vegetable value chain on the other hand, the research identified that processing and packaging can have impact on nutrition through increasing income, increasing food availability, improving shelf life and improved nutritional value of the products. Food processing is taking place on a low-scale mainly for home consumption and using local preservation methods.

Facilitating strategies include:

- Increase production to improve nutrition by increasing food availability for own consumption; as well as source of income through sale of excess produce
- Promotion of fast maturing varieties of food crops for crop diversification (especially vegetable production) and should continue to be encouraged among farmers.
- Improving the nutrient content of rice by using fertiliser.
- Research to identify nutrient content of rice varieties to find opportunities for crossbreeding and production of nutritious rice. For instance a variety high in protein could be crossbred with a variety that is well adapted to the ecology in which it is used.
- Research on how processes such as the timing of harvesting can help to improve nutrient quality of rice. For example, a study that compared parboiled and non-parboiled rice samples harvested at different times showed that parboiling rice at the hard[22] and soft[23] dough stages showed significantly higher amounts of starch, magnesium and B vitamins as compared to non-parboiled rice. Beta-carotene remained higher in parboiled soft dough samples as compared to parboiled hard dough samples (Rodriguez and Hurtada 2009[24]).

Table 5: Projected food crop production

Crop	Baseline 2012/2013 (Mt)	Projected 2017 (Mt)
Rice Paddy	1,141,417	2,116,234
Cassava	3,585,172	6,722,633
Sweet potato	220,829	426,652
Ground nut	84,748	169,561
Maize	39,237	42,376

Source: Planning Evaluation Monitoring and Statistics Division 2011

Implementation strategies

- Promote production and consumption of diversified foods and adoption of appropriate feeding practices especially for vulnerable groups. Develop an extension training module on production, processing and utilisation of locally produced nutritious foods to be incorporated into the FFS curriculum. Expand the number of ABCs from 192 to 650 (SCP component 1) to facilitate the acquisition of productive packages (fertilisers, vegetables seeds, improved rice seeds, agrochemicals etc.) by FBOs and Mother Support Groups.

[23] *Soft dough: Harvested 110 days from seeding*

[24] *Rodriguez FM and Hurtada WA (2009). "Nutritional Quality of Parboiled and Non-Parboiled Dehulled Rice (Oryza sativa L.) at soft Dough Stages." Annals of Nutrition and Metabolism 55: 384-384*

- Link nutrition education into agriculture through the FFS. MAFFS to work in collaboration with the MOHS and other sectors to develop appropriate nutrition education messages and materials.
- Promote access to credit/savings and loan facilities to small-scale farmers especially targeting women through component 3 of the SCP. NGOs and Faith Based Organisations (churches and mosques) to complement the efforts of government by establishing microcredit /village savings and loan schemes. (Promote small-animal revolving fund (pass on programme)
- Establish nutrition friendly school gardens in primary schools to promote demand for diversified nutritious foods. This will also introduce the young generation to farming as a livelihood option.
- Integrate nutrition in the education curriculum and roll out in the university (agriculture extension), in the curriculum of basic education at primary and all secondary schools in the country.
- Promote research on nutritious foods and appropriate technologies and disseminate results through the agriculture extension service. SLARI and Njala University will undertake the profiling and analysis of locally available foods and use the food composition tables to determine their nutritional value. Research and promotion of agricultural technologies, innovations to improve nutrition will also be enhanced. For example, technologies such as bio-fortification to improve nutrient content of staple foods, labour saving devices to reduce labour demands on women, development of recipes for preparation of nutritious foods for healthy diets and for use by vulnerable groups, dry season gardening etc.
- Advocate for women to access land for farming, credit and production resources for improved livelihoods support as stated in the gender policy. This will empower women in the homes and communities to get their fair share of goods and services. Promotion of cheap and efficient energy for reducing women workload. (Objective 2.2)

Activities identified to support the strategies include:

- Research on the nutritional value of locally produced foods for development of dietary based guidelines
- Adopt and disseminate technologies to conserve and improve nutrient content of foods (solar driers, eco stoves, etc.)
- Develop and disseminate recipes for preparation of nutritious foods for healthy diets for use by vulnerable groups (P&L women, U5s, PLHIV, NCDs affected)
- Establish gardens for health clinics and at community level and undertake food preparation and demonstrations for harvested nutritious foods for pregnant and lactating mothers
- Promote production of micronutrient rich foods and dietary diversification

Scaling-up strategies

Channel	Priority actions
SLARI/Njala University	Develop recipes for preparation of nutritious food
Government extension services	Provide agricultural advice and nutrition education to farmers in FFS, FBOs and Mother Support Groups Promote establishment of Kitchen gardens and small livestock activities to increase consumption of animal products
Mother Support Groups	Establish demonstration gardens Conduct food demonstrations for pregnant and lactating women
ABCs/Private sector	Provide seeds, fertilisers and other production elements to boost food production Establish village and community banks for farmers
NGOs	Provide agricultural advice and nutrition education to farmers in FFS, FBOs and Mother Support Groups Support vulnerable groups to establish microcredit, village saving and loan
Social workers & Civil Society	Mobilise Mother Support Groups, HIV/AIDS/TB affected households to join FBOs Advocate for gender equity in land resource allocation and access to productive elements Provide production inputs to farmers
Schools	Establish school gardens Conduct nutrition education in primary and secondary schools
NARS (SLARI, NU etc.)	Disseminate research information to end users and ensure application into household food and nutrition security practices

Other opportunities of improving the nutrition content of staples are the establishment of (i) the orange-fleshed sweet potato. There is limited use of this crop currently in Sierra Leone but there is need to promote its production and consumption. (ii) Promoting consumption and production of rich protein foods such as benni (sesame seed), peanuts and other plant protein sources – black eye peas, broad beans etc. that can be used in complementary feeding. Due to its use in the industrial production of supplementary foods, benni is scarce and expensive. Increased production will increase supply and reduce costs.

In rural communities where access to income is limited, small-scale beekeeping can contribute significantly to livelihood security. Women and other vulnerable groups can do bee keeping. FAO have initiated a pilot project in Koinadugu district and this can be scaled up to other districts. Through the SCP, establishing bee-keeping ABCs will support bee keeping. NGOs can also be encouraged to support the establishment of apiculture projects.

Government extension workers deliver agricultural extension services from MAFFS and NGO extension workers through the Farmer Field schools and directly to farming households. Farmers are encouraged to form Farmer Based Organisations (FBOs) to boost food production. So far, there are 346 FBOs. The MOHS through the IYCF programme has established Mother Support Groups to promote improvement of IYCF practices. The Mother Support Groups are expected to champion the growing of nutritious foods and undertake food demonstrations for pregnant and lactating women to enhance the nutrition status of women and children. However, they normally have limited access to production inputs and extension support.

2.2.3 Availability of improved agricultural inputs to farmers at the appropriate time in the agricultural season enhanced (especially focusing on vulnerable groups)

Current situation

Half of the households in Sierra Leone have home gardens where they produce pot vegetables for household consumption and/or sale for income. Women mainly carry out vegetable production. In some districts, such as Koinadugu, women grow exotic vegetables mainly as a livelihood option. According to an FAO/IFAD study (2011), women are involved in all aspects of farming systems but face particular challenges related to time resource allocation. Existing demands on women's time prevents them from pursuing other opportunities and can affect productivity. Women often have to go through men to access land, negotiate prices and deals, or technology/inputs. While women participate in all household agricultural activities, they often have little control over income, particularly for high-value crops. Many women have to find additional income generating activities in order to generate 'fast cash' within their control to meet daily household expenses (e.g. purchase food), particularly in the lean season. Establishment of vegetable gardens is one of the options identified.

Value-addition and yield improvements are constrained by unavailability of labour, poor access to technology and other agricultural infrastructure, such as storage. Low levels of education, poverty, and limited financial literacy inhibit women from engaging in marketing activities, including access to credit. Women often have to go through men to access land, negotiate prices and deals, or technology/inputs. Currently, the estimated value added products in the markets is 5% derived from the fact that the national average for post-harvest and value added products is less than 9%. It is estimated that this figure will increase to 40% by 2016, as it constitutes a change of attitude and perceptions. This is one way of ensuring food stability. However, it is good to note that value addition can lead to increase in cost of the food and make it unavailable to most poor people.

Implementation strategies

Strategies to improve the production of vegetables have been identified (WUR/NU/SLARI 2011). They include:

- Timely access to required inputs like seeds, fertilizer and pesticides;
- Secured land access could contribute to increased production, since especially women can only rent land for one year. As a result of this short-term land access farmers are not willing to make large investments in their land and year-round cropping is discouraged;
- Improved access to (affordable) labour would allow farmers to cultivate more land. One opportunity to achieve this could be by making farming more attractive to the youth;
- Scaling up school gardening programme. Via this programme children have access to more diversified food at school and are sensitized to eating and preparing various vegetables. This in addition will shape their future food choices rather than depending on only rice;
- Facilitating access to credit to cater for emergency, pay for medical bills, buy food at times of scarcity, pay for labour in case of illness and buy farm inputs in time for planting season;
- Conducting food preparation demonstrations. Currently, women involved in vegetable production lack knowledge on nutritional value and (proper) preparation of newly introduced crops (e.g. carrots, lettuce). For local crops (e.g. okra, cassava leaves) knowledge is lacking on how to ensure nutritional value is contained during preparation;
- Promote access to credit/savings and loan facilities to small-scale farmers especially targeting women through component 3 of the SCP. NGOs and Faith Based Organisations (churches and mosques) to complement the efforts of government by establishing microcredit /village savings and loan schemes.
- Promote small-animal revolving fund (pass on programme).

Activities to support the realization of this objective include:

- Facilitate the acquisition of production packages (fertilisers, vegetable seeds, breeding livestock, fingerlings, improved rice seeds, agrochemicals, pesticides) to communities groups through the ABCs
- Promote small-animal revolving fund (pass on programme)

Scaling up Strategies

The SCP is further promoting increased production of staples and vegetables through dry season farming. The government is supporting the clearing of the Inland Valley Swamps (IVS) and establishment of irrigation infrastructure. These have a further potential of bridging food stability especially during the lean season.

Livestock is a major source of animal protein and micronutrients in the household diet. However, very small quantities of fish and meat are commonly used as a condiment in Sierra Leone. Milk consumption is also not significant in most household diets. Fishing households consume highest amount of meat despite high levels of poverty (CFSVA 2011). To promote livelihood activities of the vulnerable and poor people, the SCP is establishing livestock/fisheries Agro Business Centres to promote production of poultry, fisheries, small stock and cattle. Through the SCP, the government plans to establish five ABCs in five districts. This is expected to increase the livestock population by 10% per year (Table 3) and should result in increased availability and consumption of livestock and livestock products. Other than a source of protein, livestock are also a source of livelihood and can contribute significantly to poverty reduction among the rural poor.

Table 6: Projected livestock production

Livestock	Baseline 2012/2013	2017 Target
Cattle	625,570	856,462
Sheep	825,220	1,129,801
Goats	971,630	1,330,250
Poultry	11,446,800	15,671,436
Ducks	971,044	1,329,448
Pigs	52,310	78,462

Source: Planning Evaluation Monitoring and Statistics Division 2012/2013

In rural communities where access to income is limited, small-scale beekeeping can contribute significantly to livelihood security. Women and other vulnerable groups can do Beekeeping. FAO have initiated a pilot project in Koinadugu district and this can be scaled up to other districts. Through the SCP, establishing bee-keeping ABCs will support bee keeping. NGOs can also be encouraged to support the establishment of apiculture projects.

Government extension workers deliver agricultural extension services from MAFFS and NGO extension workers through the Farmer Field schools and directly to farming households. Farmers are encouraged to form Farmer Based Organisations (FBOs) to boost food production. So far, there are 346 FBOs. The MOHS through the IYCF programme has established Mother support groups to promote improvement of IYCF practices. The Mother support groups are expected champion the growing of nutritious foods and undertake food demonstrations for pregnant and lactating women to enhance the nutrition status of women and children. However,

they normally have limited access to production inputs and extension support.

2.2.4 Nutrition education integrated into schools and institutions of higher learning

Promotion of food production alone will not be adequate to produce the intended nutritional impacts, especially reduction of the high stunting levels of children under five years (34% SMART survey 2010), or the high micronutrient deficiencies such as high anemia levels in women and children under five years (45% and 76% respectively–DHS 2008). A nutrition education component will therefore be critical to ensure change of feeding habits to enhance the consumption of highly nutritious foods and knowledge of good food preparation methods that maintain the nutritional content of food.

Current situation

While agricultural interventions increase household income, they do not necessarily lead to improved nutritional wellbeing (see Haddad, 2000[25]; World Bank, 2007). Partly, this is because interventions aimed at increasing smallholders' income seldom explicitly also target enhancing food and nutrition security. Nutrition education will therefore be an important component to ensure that income earned is utilised for nutritional benefit.

The Women in Agriculture and Nutrition (WIAN) Unit of MAFFS, works in partnership with Njala University, SLARI and MOHS to promote the food utilisation component of the SCP. The Unit works with women farmers in FBOs and ABCs. The Unit promotes food recipes developed by SLARI using locally produced foods and supports food processing and nutrition education. Training of women groups on food processing into variety of products using local recipes will enhance household food diversification as well as enable women to engage in income generating activities using these local recipes.

Some of the projects initiated by WIAN are the establishment of Moringa trees to uplift the farmer's livelihoods. Moringa is a very good source of micronutrients. They are also in the production and utilization of Soya bean as a high protein rich crop. The government is equipping ABCs to support farmers to process and market their farm produce. So far 192 ABCs have been established.

With all these efforts in place, food insecurity is expected to reduce from the current 45% to 25% by 2016 during the hunger gap. This will be the result of continued intensification of production, processing, marketing and nutrition education activities currently supported by the SCP.

The objective is to improve households' access to information relating to diversified and alternative food consumption patterns that enhance nutritional status.

In order to achieve this objective, MAFFS will work in close collaboration with MOHS and other line ministries to:

i) Develop nutrition education materials;
ii) Disseminate education materials through multiple channels including the FFS and FBOs; and
iii) Support food preparation demonstration in FFS, MSGs, agricultural shows, mass media etc.

Implementation strategies

- Promote production and consumption of diversified foods and adoption of appropriate feeding practices especially for vulnerable groups. Develop an extension training module on production, processing and utilisation of locally produced nutritious foods to be incorporated into the FFS curriculum. Expand the number of ABCs from 192 to 650 (SCP component 1) to facilitate the acquisition of productive packages (fertilisers, vegetables seeds, improved rice seeds, agrochemicals etc.) by FBOs and Mother support groups;

- Link nutrition education into agriculture through the FFS. MAFFS to work in collaboration with the MOHS and other sectors to develop appropriate nutrition education messages and materials;

- Promote access to credit/savings and loan facilities to small-scale farmers especially targeting women through component 3 of the SCP. NGOs and Faith Based Organisations (churches and mosques) to complement the efforts of government by establishing microcredit /village savings and loan schemes;

- Promote small-animal revolving fund;

- Establish nutrition friendly school gardens in primary schools to promote demand for diversified nutritious foods. This will also introduce the young generation to farming as a livelihood option;

- Integrate nutrition in the education curriculum and roll out in the university (agriculture extension), in the curriculum of basic education at primary and all secondary schools in the country;

- Promote research on nutritious foods and appropriate technologies and disseminate results through the agriculture extension service. SLARI and Njala University will undertake the profiling and analysis of locally available foods and use the food composition tables to determine their nutritional value;

- Research and promotion of agricultural technologies, innovations to improve nutrition will also be enhanced. For example, technologies such as bio-fortification to improve nutrient content of staple foods, labour saving devices to reduce labour demands on women, development of recipes for preparation of nutritious foods for healthy diets and for use by vulnerable groups, dry season gardening etc.

- Advocate for women to access land for farming, credit and production resources for improved livelihoods support as stated in the gender policy. This will empower women in the homes and communities to get their fair share of goods and services. Promotion of cheap and efficient energy for reducing women workload.

Activities to support the strategies include:

- Strengthen nutrition education in secondary schools and tertiary institutions

- Support primary schools to establish nutrition friendly school gardens (30 primary school gardens currently)

Channel	Priority actions
SLARI/Njala University	Develop recipes for preparation of nutritious food
Government extension services	Provide agricultural advice and nutrition education to farmers in FFS, FBOs and Mother Support Groups

[25] *Haddad, L (2010). From HarvestPlus to Harvest Driven: "How to Realise the Elusive Potential of Agriculture for Nutrition?" paper presented at First Global Conference on Bio-fortification, Washington D.C (9-11 November).*

	Promote establishment of Kitchen gardens and small livestock activities to increase consumption of animal products
Mother support groups	Establish demonstration gardens Conduct food demonstrations for pregnant and lactating women
ABCs/Private sector	Provide seeds, fertilisers and other production elements to boost food production Establish village and community banks for farmers
NGOs	Provide agricultural advice and nutrition education to farmers in FFS, FBOs and Mother Support Groups Support vulnerable groups to establish microcredit, village saving and loan
Social workers & Civil Society	Mobilise Mother support groups, HIV/AIDS/TB affected households to join FBOs Advocate for gender equity in land resource allocation and access to productive elements Provide production inputs to farmers
Schools	Establish school gardens Conduct nutrition education in primary and secondary schools
NARS (SLARI, NU etc.)	Disseminate research information to end users and ensure application into household food and nutrition security practices

2.2.5 Post-harvest handling and storage of foods at farm and household level enhanced

Current situation

The use of traditional household food-processing and preservation methods such as sun drying, fire drying, salting, fermenting, smoking, roasting and grinding, is on the decline. While industrial methods are gradually replacing traditional ones, farmers still have limited access to agricultural services and installations, resulting in high post-harvest losses estimated at 40% (for rice). This figure is expected to reduce to 25% by 2016 because the SCP in addition to what other organisations are doing is currently providing the postharvest and value addition equipment and facilities. Nearly half of households in Kailahun and Bombali have access to drying floors (national avg. 30%) while 35% of households in Kambia and 23% in Kailahun have rice mills in villages, compared to less than 9% national average for rural households (CFSVA 2011). Most households store agricultural products indoors with only 19% of households having access to a storage facility in the village. Women in particular bear disproportionate burden from lack of labour-saving technologies to reduce the burden of time-consuming manual post-harvest handling and processing (e.g. cassava grating, rice milling).

Value-addition and yield improvements are constrained by unavailability of labour, poor access to technology and other agricultural infrastructure, such as storage. Low levels of education, poverty, and limited financial literacy inhibit women from engaging in marketing activities, including access to credit. Women often have to go through men to access land, negotiate prices and deals, or technology/inputs. Currently, the estimated value added products in the markets is 5% derived from the fact that the national average for post-harvest and value added products is less than 9%. It is estimated that this figure will increase to 40% by 2016, as it constitutes a change of attitude and perceptions. This is one way of ensuring food stability. However, it is good to note that value addition can lead to increase in cost of the food and make it unavailable to most poor people.

According to the REACH operational research on the rice value chains the entry points to improve nutritional status is to improve drying and storage (in terms of facilities and knowledge) and to increase access to milling machines. However, the main nutritional entry points in rice processing relate to fortification of rice during parboiling process. Fortification of rice with micronutrients such as iron and zinc during the parboiling process can significantly improve the nutritional quality of rice. Further research is however required to determine the amount of iron or zinc that can be used to fortify rice, its bioavailability to the consumer after the rice has been cooked, and the feasibility of carrying out rice fortification in Sierra Leone.

In the vegetable value chain on the other hand, the research identified that processing and packaging can have impact on nutrition through increasing income, increasing food availability, improving shelf life and improved nutritional value of the products. Food processing is taking place on a low-scale mainly for home consumption and using local preservation methods. Specifically the opportunities are:

- Process tomatoes into tomato paste or for drying of vegetables. The latter is already occurring at small scale for home consumption, but can be scaled up. Both these processing methods do not enhance the nutritional value of vegetables, but increase shelf-life and can result in a higher price for the farmers;

- Use of proper and more hygienic processing equipment could increase quality and shelf life of the end products and will reduce contamination. Some women are already using proper local drying equipment. Interventions aimed at increased drying of vegetables with proper and hygienic equipment targeting women have potential for scaling up;

- Farmer groups can sell vegetables in bulk to a processor or factory where they achieve a higher price. This opportunity is valid if access to processing equipment for farmers is not achievable. Currently however, the factories in existence are only those that process mango fruits. The private sector will therefore need to be encouraged to set up such factories;

- Provision of cool rooms allows farmers to cool their vegetables until the market is available and it also allows farmers to keep vegetables for processing instead of immediate sale.

Marketing of value fresh and value added products are constrained by poor infrastructure and lack of transport facilities to get the vegetables to the market. Access to closer markets will also help farmers to cut down on spoilage. When farmers do not have to transport their vegetables all the way to Freetown, the distance and time for transport will decrease, resulting in lower costs and less spoilage of produce.

With all these efforts in place, food insecurity is expected to reduce from the current 45% to 25% by 2016 during the hunger gap. This will be the result of continued intensification of production, processing, marketing and nutrition education activities currently supported by the SCP.

Implementation strategies

- Promote post-harvest handling, preservation, value addition, safety and storage of foods at farm and household levels. Conduct research, adapt and disseminate technologies to reduce post-harvest losses. Develop capacities of households on indigenous technical knowledge on safe handling, preservation, value addition and storage of food products;

- Train agriculture extension staff on good practices in post-harvest loss reduction, design and develop simple technologies for processing food at the household level for dissemination to the FBOs and FFS. The NGOs will support farmers to adapt the technologies;

- Support farmers to process and add value to their farm produce. Equip ABCs, support farmers in food processing, value addition and also marketing facilities such as stalls, cool rooms and others as appropriate;

- Promote marketing of value added products: The NGOs, ABCs and the private sector will continue to support farmers to improve packaging, branding and advertising and create marketing outlets for value added products. Market facilities (stalls, cool rooms, feeder roads) will also be established. The WFP purchase for progress programme (P4P) will also help to identify market outlets for value added products.

Activities to support the implementation of this strategy include:

- Conduct baseline assessment to establish actual level of post-harvest loss of rice and other nutritious crops and technologies available for post-harvest reduction and food processing;

- Train extension staff on good practices in post-harvest loss reduction and simple technologies of processing food at the household level;

- Train farmers (FBOs) on good practices in post-harvest loss reduction and simple technologies of processing food at the household level.

Scaling up strategies

Channel	Priority actions
Government extension	Provide systematic advice to minimize post-harvest losses and improved processing to FFS, FBOs and MSGs Facilitate farmers access to drying floors, storage and value addition facilities
ABCs/Private sector	Provide value addition services and link farmers to markets
NGOs	Train farmers on packaging, processing of value added products and post-harvest loss prevention technologies Link farmers to markets Purchase for progress

2.2.6 Provision of support to farmers to process, add value & market their farm produce

The Government of Sierra Leone has established the Sierra Leone Investment and Export Promotion Agency (SLIEPA) with the aim of pursuing an export diversification policy that includes the export of both traditional and non-traditional crops. To ensure food security and to promote nutrition, food must be distributed equitably from the production sites to the consumer. Surplus food should be marketed especially to those areas with food deficits or to those who need to diversify their diets. A mechanism for the storage of surplus food should be established. While food export diversification is being promoted, there is a need to ensure that the food security needs of the population are not compromised.

The aim of Government in the area of food storage, marketing and distribution is to promote the availability of and access to, affordable, safe and nutritious foods.

Specific objectives under this aim are:

(i) To increase the coverage of adequate and appropriate storage facilities at household, community, district and national levels;
(ii) To support the establishment and maintenance of minimum strategic food reserves at the district and national levels;
(iii) To develop a reliable network of appropriate food transport systems;
(iv) To develop and expand local and external food markets;
(v) To strengthen market research intelligence and information dissemination;
(vi) To establish and maintain data banks on food storage, marketing and distribution;
(vii) To encourage the introduction of user-friendly credit facilities for those involved in the food chain.

Implementation strategies

These objectives will be realised through:

- Promoting household food reserves;
- Assessing national food losses and establishing or designing national programmes for preventing food losses at all levels;
- Establishing the overall storage requirements for strategic food reserves at all levels;
- Encouraging the construction of appropriate storage facilities at all levels;
- Developing a well-co-ordinated system for collecting, collating and disseminating information on food marketing and distribution;
- Creating an enabling business environment such as tax concession, common external tariff and infrastructure.

Activities to facilitate the realization of his strategy are:

- Equip and train ABCs to support farmers in food processing, value addition (fortification) & marketing of their products

- Support farmers and build capacity in packaging, branding & advertising of value added products for local consumption as well as export

- Raise awareness on quality standards and food safety

Scaling-up strategies

Channel	Priority actions
MOT, MAFFS, MOW	Design criteria and requirements for storage and marketing facilities
SLSB, SLIEPA	Construct appropriate storage and marketing facilities
MOT, MOF, SLIEPA	Review tax concessions and tariffs

2.2.7 Vulnerable groups receive livelihood support through cash and food for work

Current situation

Food for work and cash for work interventions are used as a social safety net to meet the dietary requirements of vulnerable populations. For example, nearly two-thirds of households have borrowed money at least once to buy food in the past year and 33% used largest loan to buy food (CFSVA 2011). Cash and food for work are provided to vulnerable youth in exchange for the construction and rehabilitation of infrastructure e.g. feeder roads, markets and construction of ABCs, establishment of tree crops and rehabilitation of Inland Valley Swamps (IVS). This intervention is carried out through NACSA and some NGOs with support from the World Bank and WFP.

Poverty levels are expected to reduce due to current programmes such as the SCP and the Free Health Care Initiative that provides free access to healthcare to all pregnant and lactating women and children under the age of five years. The Household expenditure on food is expected to reduce as the target group gets food for work. Also, the government will stabilise the costs of staple foods by releasing stocks from the strategic reserves to be established by the government.

Table 7: Cash for work and food for work indicators

	Description	Baseline 2013	Target 2017
Indicator	Household expenditure on food	63%	50%
	Food consumption score	45%	20%
Coverage	Proportion of HH receiving cash for work	3%	6%
	Proportion of HH receiving food for work	20%	40%
Target group	Vulnerable Households		

Implementation strategies

- Develop a clear definition and strategy of identifying vulnerable groups in the community to be supported through cash and food for work, working in close collaboration with MOHS and other line ministries;
- Provide cash and food for work opportunities through labour intensive activities such as construction of additional ABCS, rehabilitation of IVS, construction of feeder roads (component 5 of the SCP) etc.;
- Develop a cash transfer implementation strategy targeting pregnant and lactating women.

Activity to support the successful implementation of this strategy includes:

- Develop and implement conditional cash transfer mechanism to benefit the most vulnerable groups

Scaling-up strategies

Channel	Priority actions
Contractors	Ensure required infrastructure specifications are achieved
NGOs	Distribute food for work
Ward councillors	Distribute cash for work
CSOs	Identification of beneficiaries Monitor interventions

Roles and responsibilities in improving household food security

Ministry/Partners	Roles and Responsibilities
MAFFS	• Develop and promote nutrition sensitive agric-food systems in the districts most affected by chronic malnutrition • Develop FFS nutrition manual • Extension delivery to disseminate research and production information to end users, • Develop guidelines and conduct food demonstrations • Facilitate access to production inputs, value addition, marketing and nutrition education • Facilitate establishment of FBOs and ABCs • Provide guidelines and standards for construction of market, irrigation infrastructure, IVS rehabilitation and ABCs construction through cash/food for work • Provide guidelines and technical support for the establishment of school gardens, clinic gardens, kitchen gardens and promotion of small livestock activities • Link social transfer (cash/food for work) to production activities targeting vulnerable/poor populations

MOHS	• Provide technical inputs in FFS manual production, • Provide support in development of nutrition messages, nutrition education and food demonstrations • Mobilise the mother support groups and other vulnerable groups to benefit from livelihood and social protection interventions • Provide support for construction and rehabilitation of birth-waiting homes through cash/food for work • Develop and implement norms and protocol for blanket feeding • Ensure compliance on hygiene and nutrition standards of food prepared in the school feeding programme and other institutional feeding setups
MLG (local councils)	• Provide land for demonstration gardens • Identify schools to benefit from school feeding • Support in the identification of vulnerable groups
MTI (Standards Bureau)	• Support in value addition, processing, packaging of agricultural produce • Provide quality assurance on food safety and fortification standards
MEST	• Support the establishment of school gardens • Develop/review nutrition education curriculum and roll it out in primary, secondary schools and tertiary institutions • Overall management of school feeding programme and development of a policy on school feeding
Banks/Micro-finance institutions MIC	• Provide credit facilities for small scale farmers and other vulnerable groups • Facilitate flow of information on agricultural and livestock products and labour markets to small holder farmers
National Agricultural Research Support (SLARI/NU etc.)	• Identify and classify local food recipes and catalogue indigenous knowledge systems and nutritional content of locally produced foods • Develop key technologies for value addition • Conduct operational researches in consultation with programmes • Disseminate research findings to the beneficiaries
NACSA	• Overall management of cash for work Programme to support youth empowerment
National Youth Commission	• Mobilise youths for cash and food for work
SLRA	• Provide technical backstopping to ensure feeder roads constructed through cash/food for work comply with the policy
MSWGCA	• Develop social protection policy • Lobby for women to access more land and other production inputs
FAO, UNICEF, WFP	• Technical backstopping and resource mobilization
NGOs	• Provide support in production, value addition, processing and marketing of agricultural products • Establish savings and loan schemes • Distribute food for work, targeted and blanket feeding as well as school feeding • Disseminate nutrition education messages and materials • Support capacity building activities at the community level
Private sector	• Support supply of production inputs • Support value addition and marketing of farm produce • Support in establishment of agro-based industries • Provide technical backstopping in specialized areas

2.2.8 Vulnerable groups access nutritious foods

Sierra Leone has received food aid during times of man-made and natural disasters such as prolonged civil strife and price hike. This is not sustainable in the long run. Government must, therefore, develop national alternative mechanisms for addressing such emergency food needs. Food imported under the food aid scheme should be restricted to alleviating temporary food crisis; otherwise continued food aid may lead to dependence on external sources. The quality and safety of donated food is currently also inadequately monitored. It would also be prudent for Sierra Leone to develop capacity to donate food aid to other countries in food emergency situations.

Table 8: Indicators and coverage for Low birth weight and underweight

	Description	Baseline 2013	Target 2017
Indicator	Incidence of low birth weight	11%	5%
	Prevalence of underweight among children <2 years	40.9%	13.1%
Coverage	Malnourished pregnant and lactating women, all pregnant teenagers, women with multiple births, pregnant women on PMTCT	N/A	80%
	PLWs in districts with stunting rates >40% receiving blanket feeding	0%	80%
	Under 2s in districts with stunting rates >40% receiving blanket feeding	0%	80%
	Primary schools children in the school feeding program	33%	50%
Target group	PLWs &<2s in high districts with high stunting rates, malnourished PLWs, Pregnant teenagers, women with multiple births, Pregnant women on PMTCT, school going girls		

Current situation

Blanket feeding for pregnant and lactating women and children 6-23 months is currently going on in some districts but on a limited scale. The WFP Supplementary Feeding Programme targets malnourished pregnant and lactating women, including all pregnant teenagers and women with multiple births and pregnant women on PMTCT. Pregnant women who benefit from food distribution are expected to also comply with the antenatal care schedule. They are enrolled into the programme during the second trimester and continue until the child is six months old and so the programme is considered as a food security intervention. The programme is implemented by NGOs through PHUs.

School feeding programme is supported by WFP in 12 districts targeting primary schools in the most vulnerable chiefdoms as well as slum and deprived communities in the Western Urban area. The school-feeding programme covers all schools falling under these geographical areas. It is implemented through NGOs in collaboration with MEST. Catholic Relief Services (CRS) is also providing school feeding in four Chiefdoms in Koinadugu. By 2011, 1,223 primary schools were benefiting from the school-feeding programme. A take home ration is offered to the girl child as an incentive to remain in school. The school feeding programme is also a strategy of increasing the school enrolment of the girl child which in the long run increases education levels of women while at the same time reducing teenage pregnancy and the risk of underweight infants.

Implementation strategies

- Scale-up blanket feeding for (i) all children 6-23 months (ii) Pregnant and lactating women especially in districts with stunting rates over 40%;
- Scale up targeted feeding of malnourished PLWs, all teenagers, women with multiple births, women on PMTCT and maintain them in the programme;
- Develop a school feeding policy and strategy and scale up school feeding programme to cover at least 50% of the primary schools through support from government and development partners.

Activity to support the realization of this strategy includes:

- Support food distribution to affected households with malnourished PLHIV/TB, OVCs)

Scaling up strategies

Channel	Priority actions
Health Facilities	Issue supplementary food to <2s, PLW Establish clinic gardens and conduct food demonstrations during antenatal visits etc.
NGOs	Supply rations for school feeding and blanket feeding
Schools	School feeding for primary school pupils
MAFFS	Provide seeds and advice for establishment of school, clinic and kitchen gardens and promote small livestock activities to increase consumption of animal products Support Health workers in conducting food demonstration
CSOs/VDCs	Monitor food distribution at the community level
Community Teachers association	Manage food preparation Make in-kind contributions
Mother Support Groups	Provide counselling support to malnourished PLWs

Roles and responsibilities in improving household food security

Ministry/Partners	Roles and Responsibilities
MAFFS	• Develop and promote nutrition sensitive agric-food systems in the districts most affected by chronic malnutrition • Develop FFS nutrition manual • Extension delivery to disseminate research and production information to end users, • Develop guidelines and conduct food demonstrations • Facilitate access to production inputs, value addition, marketing and nutrition education • Facilitate establishment of FBOs and ABCs • Provide guidelines and standards for construction of market, irrigation infrastructure, IVS rehabilitation and ABCs construction through cash/food for work • Provide guidelines and technical support for the establishment of school gardens, clinic gardens, kitchen gardens and promotion of small livestock activities • Link social transfer (cash/food for work) to production activities targeting vulnerable/poor populations
MOHS	• Provide technical inputs in FFS manual production, • Provide support in development of nutrition messages, nutrition education and food demonstrations • Mobilise the mother support groups and other vulnerable groups to benefit from livelihood and social protection interventions • Provide support for construction and rehabilitation of birth-waiting homes through cash/food for work • Develop and implement norms and protocol for blanket feeding • Ensure compliance on hygiene and nutrition standards of food prepared in the school feeding programme and other institutional feeding setups
MLG (local councils)	• Provide land for demonstration gardens • Identify schools to benefit from school feeding • Support in the identification of vulnerable groups
MTI (Standards Bureau)	• Support in value addition, processing, packaging of agricultural produce • Provide quality assurance on food safety and fortification standards
MEST	• Support the establishment of school gardens • Develop/review nutrition education curriculum and roll it out in primary, secondary schools and tertiary institutions • Overall management of school feeding programme and development of a policy on school feeding
Banks/Micro-finance institutions MIC	• Provide credit facilities for small scale farmers and other vulnerable groups • Facilitate flow of information on agricultural and livestock products and labour markets to small holder farmers
National Agricultural Research Support (SLARI/NU etc.)	• Identify and classify local food recipes and catalogue indigenous knowledge systems and nutritional content of locally produced foods • Develop key technologies for value addition • Conduct operational researches in consultation with programmes • Disseminate research findings to the beneficiaries

NACSA	• Overall management of cash for work Programme to support youth empowerment
National Youth Commission	• Mobilise youths for cash and food for work
SLRA	• Provide technical backstopping to ensure feeder roads constructed through cash/food for work comply with the policy
MSWGCA	• Develop social protection policy • Lobby for women to access more land and other production inputs
FAO, UNICEF, WFP	• Technical backstopping and resource mobilization
NGOs	• Provide support in production, value addition, processing and marketing of agricultural products • Establish savings and loan schemes • Distribute food for work, targeted and blanket feeding as well as school feeding • Disseminate nutrition education messages and materials • Support capacity building activities at the community level
Private sector	• Support supply of production inputs • Support value addition and marketing of farm produce • Support in establishment of agro-based industries • Provide technical backstopping in specialized areas

2.3 PRIORITY AREA 3:ADOPTION OF APPROPRIATE FEEDING PRACTICES FOR VULNERABLE GROUPS

The specific objective of priority 3 is to improve the nutritional status of children under the age of 5 years and women of reproductive age (15-49).

This is composed of (i) Early initiation of breastfeeding (ii) Exclusive breastfeeding (iii) Complementary feeding and (iv) Adolescents and maternal nutrition and good hygiene interventions that make up the Infant and Young Child feeding programme (IYCF) of the MOHS. These interventions are associated with the problem of inadequate maternal and childcare practices.

The following strategic actions will be undertaken to support the realization of objective 3:

- Strategy document on Adolescents and maternal and Infant and Young Child Feeding (IYCF) developed
- Code on marketing of breast milk substitutes adapted to local situation and implemented
- Baby Friendly Hospital Initiative and Baby Friendly Community Initiatives promoted and implementation strengthened
- Harmonise key Nutrition messages aimed at decision makers in households (fathers, mothers, grandmothers) developed and disseminated

2.3.1 Strategy document on Infant and Young Child Feeding (IYCF) developed

The Ministry of Health and Sanitation (MOHS) has put several policies and strategies in place, including the National Health Policy (2009), the Reproductive New born and Child Health Policy (2011), Joint Programme of Work and Funding (2012-2014), Free Health Care Initiative, the National Nutrition Policy (2012) and various other policies, which provide clear directions for the health sector. The National Food and Nutrition Policy was developed for effective programme planning and realization of the enormous challenges related to food and nutrition, embark on comprehensive institutional reforms and build capacities to manage the development agenda. Through this policy, the GoSL will ensure full involvement and strengthening of partners, thereby paving the way for effective resource mobilization, management and programme implementation for improvement of food and nutritional status of Sierra Leoneans. The component of the strategy on Infant and Young Child Feeding (IYCF) was adopted from the WHO recommended IYCF guideline for optimal feeding of infants and young children. However, there is the need to develop a strategy document as a guide on the implementation of the maternal nutrition and feeding of Infants and Young children.

Table 9: Indicators and coverage for early initiation of breastfeeding

	Description	Baseline 20146	Target 2018
Indicator	Early initiation of breastfeeding–(immediately within one hour of birth)	45%	60%
Coverage	Health Facilities (District Hospitals and BEmONC Centres) compliant with Baby Friendly Hospital/Community Initiative (BFHI)	TBD	50%
Target group	Pregnant women		

	Description	Baseline 20146	Target 2018
Indicator	Per cent of Infants 0-5 months exclusively breastfed	32%	60%
Coverage	Pregnant and lactating women reached with EBF promotion	>50%	80%
Target group	Pregnant and lactating women, husbands, grandmothers		

Current situation

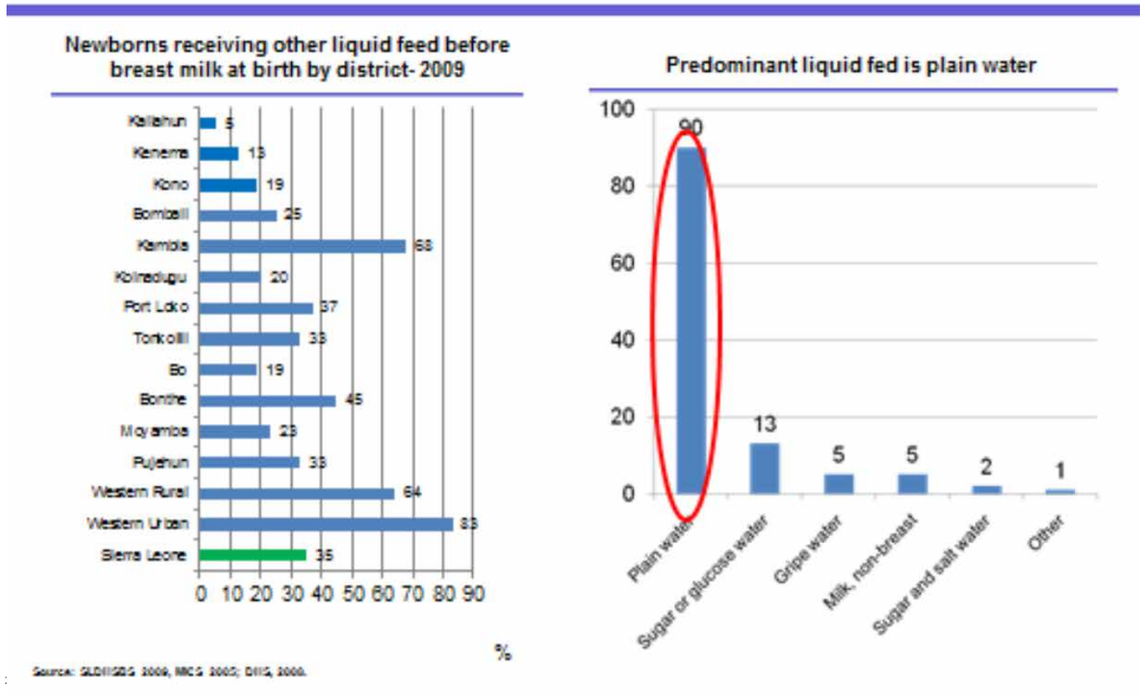
A child should be introduced to the breast immediately within one hour after birth, but strong cultural beliefs related to early and exclusive breastfeeding have presented major challenges to improving the nutrition outcomes of the children in Sierra Leone. Almost one third (36%) of new-borns are fed on other liquid (predominantly water) before breast milk, with some districts recording very high levels of this practice[26]. Most of these liquids fed to the new-borns are not of good hygienic quality (Figure 5).

According to the MICS 4 2010[27] report, only 32% of infants were exclusively breastfeeding for the first six months of life and 50% of infants initiated breastfeeding within the first hour after birth[28]. Furthermore, only an estimated 25% of infants and young children receive adequate complementary foods from six months (judged by diet diversity and frequency). These figures indicate the need to address infant feeding practices through various methods, including exploring cultural traditions and practices around feeding. It is critical to understand why mothers do not practice exclusive breastfeeding, why many mothers do not receive adequate support and counselling on early and exclusive breastfeeding, and why so many families believe that infants need to begin complementary foods far earlier than recommended. In all of these instances, one can never assume knowledge translates into improved practices, behaviours or attitudes related to nutrition.

Communities themselves must be engaged in identification of the barriers to optimal feeding practices and strategies for removing them.

Figure 5: New-born receiving other milk before breast milk

A high proportion of children are fed on other liquid before breast milk at birth; water constitutes the main liquid



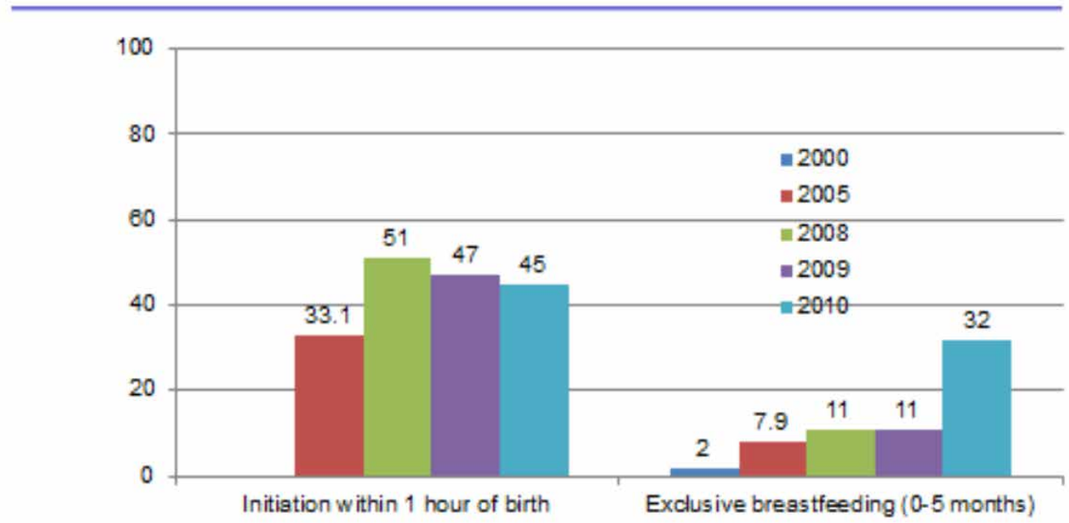
Source: SLDHS/DS 2008, MICS 2005; DHS, 2008.

[27] *Multiple Indicator Cluster Survey*
[28] *Statistics Sierra Leone and Measure DHS, Macro International Inc. Sierra Leone Demographic and Health Survey 2008. Preliminary Report. Freetown, Sierra Leone.*

Education on early initiation of breastfeeding is delivered as part of exclusive breastfeeding promotion during the antenatal and outreach services through the health delivery system. At community level, it is implemented by 'Mother Support Groups' (MSGs).

Figure 6: Trends in initiation of breastfeeding and exclusive breastfeeding

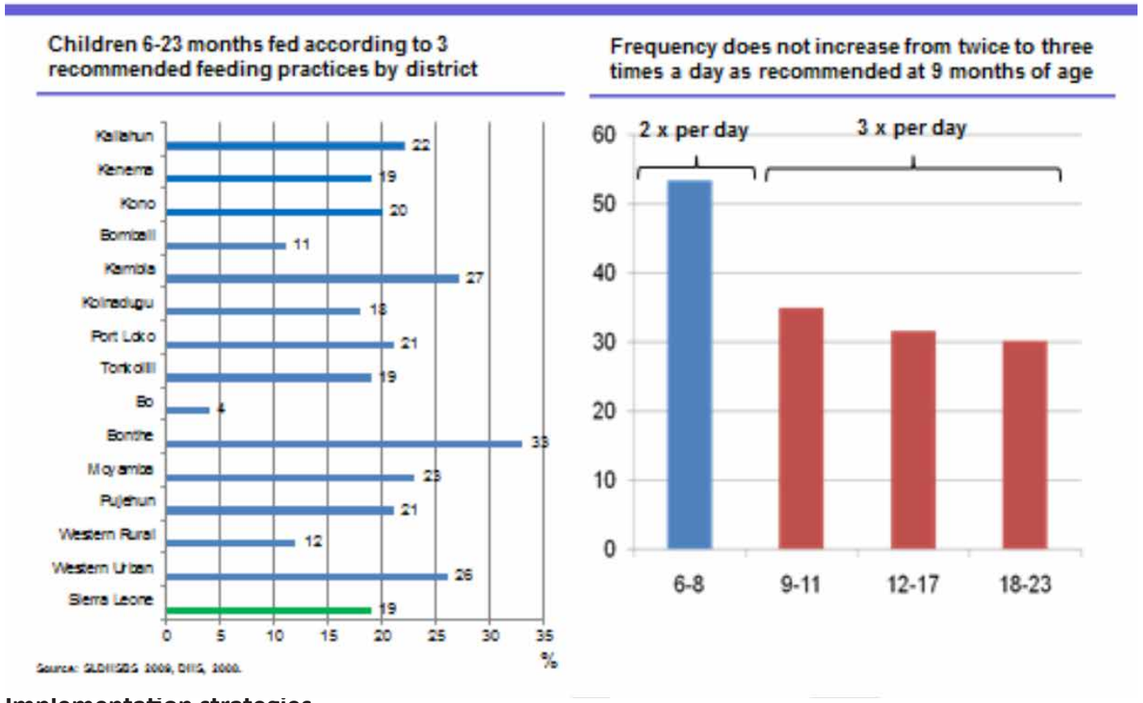
A steady decline in early initiation of breastfeeding from 2008 while exclusive breastfeeding is improving



Health workers through the health system and MSGs at the community level, mass campaigns and media campaigns do promotion of adequate complementary feeding during the breastfeeding week. There are currently minimal linkages with the agriculture sector. Eating habits are very complex and change is likely to be achieved over the long term as feeding habits are developed over time. These factors were considered in setting the targets for 2016.

Figure 7: Appropriate complementary feeding by district and frequency

A steady decline in early initiation of breastfeeding from 2008 while exclusive breastfeeding is improving



Implementation strategies

To promote maternal nutrition, early initiation of breastfeeding, exclusive breastfeeding and timely complementary feeding practices, the following strategies will be adopted:

- Develop strategy document on maternal nutrition, IYCF and review existing guidelines disseminate and implement.

- Develop and adapt the code of marketing of breast milk substitutes to the local country situation. The code will provide national legal framework on the use and marketing of breast milk substitutes without compromising good practices for early initiation and exclusive breastfeeding.

- Promote and strengthen the implementation of the Baby Friendly Hospital Initiative and Baby Friendly Community Initiative.

- Promote nutrition education component of maternal nutrition and IYCF and develop strategies for reaching hard to reach groups such as teenage mothers. Develop new IEC/BCC materials and disseminate through mass media, mother support groups, faith based organisations, CHWs, Village Health Committees (VHCs), TBAs, Farmer Field Schools (FFS), decision makers at the household and community level Routine IYCF education during antenatal, EPI and outreach will also continue.

- Promote appropriate complementary feeding practices for children six months to 2 years and optimum feeding practices for children 2-5 years through awareness raising, operational research production of fortified complementary foods, development of recipes, Kitchen gardens, food demonstrations through the MSGs and introduction of micronutrient powders.

- Review and update the IYCF university course contents for nutrition, food security and home economics disciplines and incorporate appropriate information on maternal nutrition and IYCF into the pre-service curricula/training for social workers, health training institutions and community health volunteers.

Scale-up strategies

Channel	Priority actions
Health Facilities	• Group counselling through antenatal, EPI, outreach • Individual counselling during clinical visits • Routine growth monitoring • Food demonstrations
Mother support groups	• Group and individual counselling • Food demonstrations
CHWs	• Individual counselling during growth monitoring
Social workers	• Group and individual counselling
TBAs	• Individual counselling
Agricultural extension workers	• Promote IYCF practices to farmers at FFS and FBOs • Conduct food demonstrations in FFS • Support production and processing of local nutritious complementary foods • Support establishment of clinic demonstration gardens • Support MSG to establish demonstration and kitchen gardens
Agricultural Business Centres	• Source of seeds, tools and other equipment for production of nutritious crops • Provide value addition and processing services
Mass media	• Radio/TV messages, radio discussions, Billboard messages, newspaper, sms

Mass campaign	• Breastfeeding week, Maternal and Child Health week
Njala University Nutrition extension workers& SLARI Nutrition instructors	• Disseminate recipes and research information to the community
Birth waiting homes	• Provide birth waiting facilities for pregnant women living far from PHUs
Community theatres, Village Health Committees, Paramount Chiefs, Churches, mosques	• Disseminate IYCF information
NGOs	• Disseminate IYCF information • Community mobilisation

2.3.2 Code on marketing of breast milk substitutes adapted to local situation and implemented

The International codeon marketing of breast milk substituteswas adopted in 1981 by the World Health Assembly, and now further adopted by Government of Sierra Leone, to promote safe and adequate nutrition for infants, by the protection and promotion of breastfeeding and by ensuring the proper use of breast-milk substitutes, when these are necessary.

Since exclusive breastfeeding is to be encouraged for 6 months, any food or drink shown to be suitable for feeding a baby during this period is a breast milk substitute, and thus covered by the Code. This would include baby teas, juices and waters. Special formulas for infants with special medical or nutritional needs also fall under the scope of the Code.

Current situation

It is the policy of the Government of Sierra Leone to protect, promote, and support breastfeeding in all populations. All mothers should be encouraged to give exclusive breastfeeding[29] from birth to six months, followed by introduction of appropriate complementary foods and continued breastfeeding up to two years and beyond.

The Code on marketing of breast milk substitutes has been adopted but compliance is not enforced. The hospitals and health facilities are still infiltrated with Infant and young child feeding formula form business companies who do not adhere to the code

To promote early initiation of breastfeeding, exclusive breastfeeding and compliance with the code, the following strategies will be adopted:

- Develop strategy document on IYCF and review existing guidelinesdisseminate and implement;
- Develop and adapt the code of marketing of breast milk substitutes to the local country situation. The code will provide national legal framework on the use and marketing of breast milk substitutes without compromising good practices for early initiation and exclusive breastfeeding;
- Promote and strengthen the implementation of the Baby Friendly Hospital Initiative and Baby Friendly Community Initiative;
- Promote nutrition education component of IYCF and develop strategies for reaching hard to reach groups such as teenage mothers. Develop new IEC/BCC materials and disseminate through mass media, mother support groups, faith based organisations, CHWs, Village Health Committees (VHCs), TBAs, Farmer Field Schools (FFS), decision makers at the household and community level Routine IYCF education during antenatal, EPI and outreach will also continue;
- Review and update the IYCF university course contents for nutrition, food security and home economics disciplines and incorporate appropriate information on IYCF into the pre-service curricula/training for social workers and community health volunteers.

Activities to facilitate the realization of the strategies include:

- Adapt code to local situation and conduct training on code
- Monitor implementation of the code

2.3.3 Baby Friendly Hospital Initiative and Baby Friendly Community Initiatives promoted and implementation strengthened

All mothers and families should be provided with an enabling environment, including health care facilities and community structures, where breastfeeding is protected, promoted and supported.

Key Strategies

- Provide appropriate level of training on lactation management to comply with the Baby-Friendly Hospital/Community Initiative;
- Adopt the Ten Steps to Successful Breastfeeding (Annex VI) and establish coordination committee for monitoring BFHI/CBFI implementation at facility and community levels;
- Adopt and implement the Code of Marketing of Breast Milk Substitutes (Annex VII);
- Adopt International Labour Organization (ILO) guidance on support for post-partum mothers under Maternity Protection Convention, to establish space and time in the workplace for lactating mothers;
- Traditional birth attendants should always bring mothers to health facilities for safe delivery and always ensure early initiation of breastfeeding immediately after birth;
- Mothers and caregivers should attend health facilities for routine follow-up care, immunization, micro-nutrient supplementation, growth monitoring and promotion;
- Where locally available foods can be difficult to access, such as urban areas, support and encourage expansion of locally and centrally produced appropriate complementary foods to fully meet the nutrition requirements of young children;

[29] *Exclusive breastfeeding means giving the baby only breast milk without any other liquids, foods, formula, or even water*

- Private and public sectors should comply with Codex Standards for appropriate packaging, labelling, and distribution of complementary foods

Activities to support the realization of these strategies include:

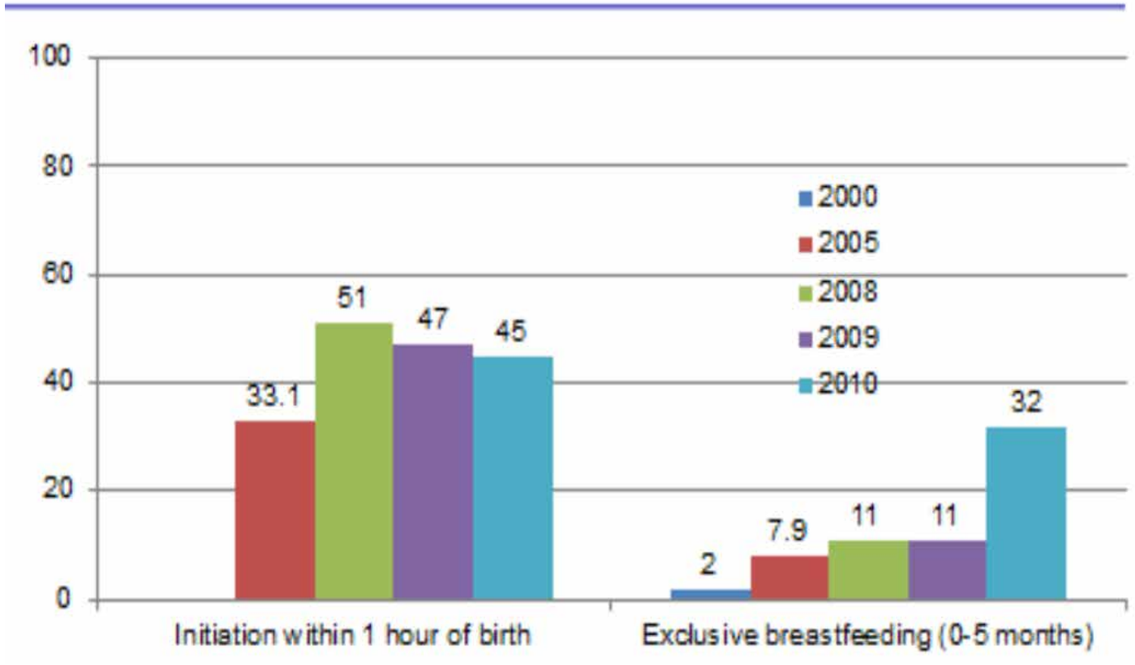
- Adapt guidelines on standards for BFHI;
- Train health workers on baby friendly hospital initiative;
- Conduct refresher training on BFHI for health workers previously trained;
- Train mothers support groups, TBAs, village health committees, FFS and key stakeholders on Baby Friendly Community Initiative (BFCI);
- Map all existing birth waiting homes in communities with peripheral health facilities;

2.3.4 Nutrition messages aimed at decision makers in households (fathers, mothers, grandmothers) developed and disseminated

Education on early initiation of breastfeeding is delivered as part of exclusive breastfeeding campaigns and is promoted during antenatal and outreach services through the health delivery system. At community level, it is implemented by Mother support groups (MSGs).

Figure 8: Trends in initiation of breastfeeding and exclusive breastfeeding

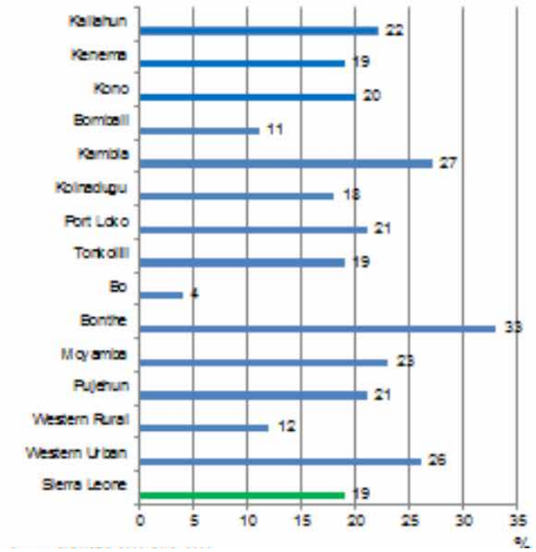
A steady decline in early initiation of breastfeeding from 2008 while exclusive breastfeeding is improving

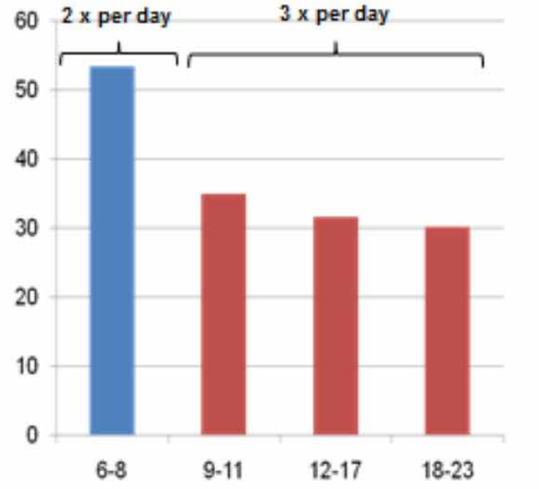


Exclusive breastfeeding (EBF) has improved from 2% in 2000 (MICS2) to 32% in 2010 (MICS4). Even at early ages, majority of children receive liquids or foods other than breast milk. Most of the liquids and complementary foods are not prepared, stored or handled under proper hygiene conditions and this may result in diarrhoea. Other barriers to exclusive breastfeeding are the heavy workload on women and inadequate support from their husbands and other members of the family. Breastfeeding begins to rapidly decline at ages 12-17 months. Promotion of exclusive breastfeeding is undertaken through mass campaigns, the health delivery system, media campaigns and MSGs. It is envisaged that EBF will increase to 60% by 2017, which is an average of six per cent increase per year as it is a behaviour change, which may occur over the long term. Complementary feeding should only start after a child is 6 months of age but most mothers introduce other foods and liquids earlier. Adequacy of complementary feeding is determined mainly by the frequency, consistency and the quality of the food fed to the child. However, between the ages of 6-8months and 9-11months, the frequency does not increase from two to three times a day as recommended (Figure 7). Health workers through the health delivery system and MSGs at the community level, mass campaigns and media campaigns conduct promotion of adequate complementary feeding during the commemoration of World Breastfeeding Week. There are currently minimal linkages with the agriculture sector. Eating habits are very complex and change is likely to be achieved over the long period of time as feeding habits are developed over time. These factors were considered in setting the targets for 2017.

Figure 9: Appropriate complementary feeding by district and frequency

Appropriate complementary feeding practice varies by district and drops between 6-8 and 9-11 months of age





Implementation strategies

To promote early initiation of breastfeeding, exclusive breastfeeding and complementary feeding practices, the following strategies will be adopted:

- Develop policy/strategy document on IYCF and review existing guidelines;
- Develop and adapt the code on marketing of breast milk substitutes to the local country situation. The code will provide national legal framework on the use and marketing of milk substitutes without compromising good practices for early initiation and exclusive breastfeeding;
- Promoting and strengthening the implementation of Baby Friendly hospital/ i Baby Friendly Community Initiative (promote baby friendly farms, Construct birth waiting homes) for emergency obstetric care;
- Promoting nutrition education component of IYCF and developing strategies for reaching hard to reach groups such as teenage mothers. Develop new IEC/BCC materials and disseminate through mass media. Disseminate messages through mother support groups, faith based organisations, CHWs, Village Health Committees (VHCs), TBAs, Farmer Field Schools (FFS), decision makers at the household and community level Routine IYCF education during antenatal, EPI and outreach will also continue;
- Promoting appropriate complementary feeding practices for children six months to 2 years and optimum feeding practices for children 2-5 years through awareness raising, operational research production of fortified complementary foods, development of recipes, kitchen gardens, food demonstrations through the MSGs and introduction of micronutrient powders.
- Review and update the IYCF university course contents for nutrition, food security and home economics disciplines and incorporate appropriate information on IYCF into the pre-service curricula/training for social workers and community health volunteers.

Activities to support implementation of strategies include:

- Review and update existing IEC materials including billboards to promote positive IYCF practices;
- Define a communication strategy to improve IYCF practices (using the IEC/BCC materials developed);
- Train Health workers on use of IEC/BCC counseling in IYCF;
- Organize radio discussions, phone in programmes, jingles on barriers and benefits of positive IYCF practices;
- Continue nutrition education during antenatal visits, EPI and outreach;
- Form additional mother support groups in communities that are without for the promotion of positive IYCF practices (Average of 20/district);
- Organize community stakeholders meetings and support community theatre performances to advocate for positive IYCF practices (MSG, Traditional healers, TBAs).

Roles and Responsibilities in improving exclusive breastfeeding and complementary feeding

2.3.5 Training curricula reviewed and updated to incorporate IYCF at all levels

Education approaches, including counseling and behaviour change communication are essential to improve infant and young feeding practices. They should be at the centre of any strategy to improve infant and young child feeding. These educational activities are especially needed to impart knowledge and develop skills to maximize use of locally available, high-quality foods, as well as to improve infant and young child feeding practices. Feeding, food safety, cultural beliefs and intra-family food distribution could be the focus of education and counseling for this purpose. Effective implementation requires adequate knowledge of service providers on nutrition. Training curricula on Nutrition is developed at institutional level under the Ministry of Education Science and Technology. Therefore in collaboration with the Ministry of Education Science and Technology there is need to review, and update the training curricula on Nutrition to incorporate Infant and Young Child Feeding (IYCF)

Current situation

The curriculum development unit in the Ministry of Education Science and Technology in collaboration and relevant stakeholders are responsible for developing training curriculum for the sector. The Ministry of Health and Sanitation in collaboration with partners develop guidelines to support implementation of activities.

Activities to support effective implementation of the strategy include:

- Review the MCH Aides/SECHN/Midwives and CHWs training manual to up-date gaps on IYCF practices;
- Advocate for review and updating of university curriculum to incorporate maternal nutrition and IYCF in nutrition and food security disciplines and incorporate appropriate information into the pre-service curricula/training for social workers.

2.3.6 Appropriate complementary feeding for children from six months to 2 years and optimum feeding practices for children 2-5 years promoted

Complementary feeding should only start after a child is 6 months of age but most mothers introduce other foods and liquids earlier. Adequacy of complementary feeding is determined mainly by the frequency, consistency and the quality of the food fed to the child. However, between the ages of 6-8 and 9-11months, the frequency does not increase from two to three times a day as recommended from 9 months of age (Figure 7). Health workers through the health delivery system and MSGs at the community level, mass campaigns and media campaigns conduct promotion of adequate complementary feeding during the commemoration of World Breastfeeding Week. There are currently minimal linkages with the agriculture sector. Eating habits are very complex and change is likely to be achieved over the long period of time as feeding habits are developed over time. These factors were considered in setting the targets for 2017.

Table 11: Indicators and coverage for complementary feeding

	Description	Baseline 2013	Target 2017
Indicator	% Children 6-23 months old with minimum acceptable diet	19%	40%
	% of children with timely initiation of semi/solid foods at 6 months	51%	60%
Coverage	Estimated number of pregnant and lactating women receiving Complementary feeding promotion messages	>50%	80%
Target group	Pregnant and lactating women, husbands, caretakers, grandmothers		

Activities to facilitate the implementation of the strategy include:

- Undertake operational research on complementary foods and practices to inform the development of feeding recommendations;
- Coordinate with private sector to produce fortified complementary foods and distribute using their marketing channels.

2.3.7 Nutritional support to children infected and affected by HIV/AIDS, TB and OVCs provided

HIV&AIDS and TB increase the risk of malnutrition in children and result in increased food insecurity family members through its impact on productive labour, income and food stores. Provision of nutritional care and support for children with HIV/AIDS and TB to mitigate and reduce the progression of HIV&AIDS, morbidity, mortality, and related discomfort for the care and support Promoting adequate growth and health is important for all children. Children born to HIV positive mothers are more likely to be born with low birth weight, experience growth failure and malnutrition and also more likely to die from common childhood diseases. Furthermore, mothers may not be able to give adequate care, which may worsen the malnutrition situation.

Current situation

As there is currently no cure for HIV&AIDS, there is equally no nutritional support for children with HIV/AIDs if they are not considered malnourished to be rehabilitated at OTP centres. It is a fact however, that nutrition plays an important role in the care of PLWHA. Achieving and maintaining optimal nutritional health with HIV, can delay the progression to AIDS, enhance the body's ability to fight opportunistic infections.
Implementation strategies

- Provide supplementary feeding to PLHIV with poor nutritional status, TB patients on treatment and OVCs;
- Assess the nutritional status of PLHIV/TB and other vulnerable children in the country to understand the severity of the problem;
- Review and update the national nutrition guidelines for nutrition support to PLHIV/TB and train health care providers;
- Promote IYCF practices for HIV/TB infected children and OVCs. Integrate the HIV component into the child health card to enhance data collection on infected children and monitor their nutrition status. Provide nutrition education and counselling to target groups through the PMTCT sites and Mother support groups and using the WHO recommended guidelines. Through the BFHI mothers will be informed on the benefits of infant and young child nutrition for HIV/TB/OVCs;
- Incorporate, nutritional counselling and support for HIV/TB/OVC into the curriculum of all training institutions;
- Organise and advocate for livelihood support to HIV/TB infected and affected households e.g. vocational skills training, provision of tools and equipment, access to microcredit, CFW/FFW.

Activities to support implementation of these strategies include:

- Provision of nutritional support in hospitals and PHUs to infants exposed to HIV/TB, infected infants and young children based on the PMTCT guidelines;
- Integration of PMTCT into the child health card and IYCF.

Scaling up strategies

Channel	Priority actions
Health Facilities	Provide Nutrition counselling to PLHIV/TB Disseminate messages to promote good practices in nutrition support and care for PLHIV/TB
Care and support groups	Sensitise and counsel PLHIV/TB/OVCs on appropriate nutrition
Agriculture extension	Disseminate materials on nutritional care and support for HIV/TB
Schools	Disseminate materials on nutritional care and support for HIV/TB to school children
Mass media	Disseminate messages on TV, Radio and newspaper to Sensitise and counsel PLHIV/TB/OVCs on appropriate nutrition
NGOs	Disseminate messages to promote good practices in nutrition support and care for PLHIV/TB Distribute supplementary feeding for malnourished PLHIV/TB Mobilise and advocate for livelihoods support for PLHIV/TB and OVCs

Faith Based Organisations	Disseminate messages to promote good practices in nutrition support and care for PLHIV/TB

2.3.8 Nutritional status of PLHIV/TB and OVCs promoted

Good nutrition helps the body process the many medications taken by people with HIV/AIDS and TB, while malnutrition suppresses the immune system increasing the likelihood of acquiring disease. Once a person is infected with HIV or TB, the disease increases their energy requirements, and the infected person's ability to absorb and optimally utilize nutrients is compromised. Malnutrition in people with HIV or TB can contribute to disease progression and increase the risk of death. Mortality rates in pregnant women are three times higher with HIV/TB co-infection than in HIV alone, regardless of CD4+ count. According to the Annual Report of the National TB Control Programme, of 2010, 10% (976) of the people screened and found to be HIV positive are also infected with Tuberculosis (co-infected).

Prevention of mother-To-Child Transmission (PMTCT) of HIV can occur in three stages: during pregnancy, labour and delivery, and during prolonged breastfeeding. Without any interventions to prevent PMTCT, the baby has a 30% chance of contracting the virus. However, with anti-retroviral therapy, this risk can be dramatically reduced. Safer breastfeeding practices can also contribute to a reduced risk of HIV transmission through breast milk, particularly in areas where avoidance of breastfeeding is considered more dangerous for the infant's survival than the exposure to HIV. Difficult circumstances such as HIV therefore create more challenges in determining the safest feeding options for infants and young children.

Table 12: Indicators and coverage for nutritional mitigation for PLHIV/TB and OVCs

	Description	Baseline 2013	Target 2017
Indicators	Prevalence of malnourished PLHIV	44%[30]	20%
	OVCs 5-18 years food insecure	50% (WFP est.)	25%
	Prevalence of malnutrition among TB patients	40%[31]	80%
Coverage	Malnourished PLHIV, TB, OVCs receiving nutrition support	9.8% (PLHIV) 10% (TB) <5% (OVCs)	65% 40% 50%
	PLHIV children 0-2 years receiving nutrition support	TBD	80%
Target group	Malnourished PLHIV, TB patients, OVCs, Entire Population		

Activities to support the implementation of the strategies include:

- Conduct annual assessment of nutritional status of PLHIV/TB and OVCs;
- Review the 2008 national nutrition guidelines for PLHIV and adapt appropriate dietary guidelines for PLWHIV/TB including the adoption of WHO recommended guidelines on IYCF for HIV;
- Conduct training on the use of the guideline and integrate into HIV/TB programmes.

2.3.9 Nutrition assessment, education and counseling to PLHIV/TB and other vulnerable groups provided

Nutrition education and counseling should be an integral part of nutritional care and support of the PLWHA; good counselor can effect positive changes in nutrition related behaviour and help improve the quality of life of the PLWHA. Preference should be given to individual counseling or small group counseling for more effective and in depth counseling. Group counseling can be used if HIV status of most members of the group is unknown. Assess his/her needs clearly in the context of his/her living situation. Counseling can identify the alternatives he/she has for addressing a problem or meeting a need, address the constraints that may affect choice of alternatives, make the best choice depending on his/her circumstances, understand the pros and cons of each option and take responsibility for choices made, express their innermost fears/feelings or concerns and develop the confidence to address them and develop a positive attitude towards achieving behaviour change.

Activities to support the realization of these strategies include:

- Develop IEC/ BCC materials on nutritional care and support for HIV/TB for use by Health workers, community support groups, NGOs and Faith based organisations
- Support care and support groups to sensitise and counsel the PLHIV/TB/OVCs and their affected families affected groups on appropriate nutrition
- Promote research on nutrition interventions related to PLHIV/ART&TB-Patients/PMTCT/TB and OVCs
- Disseminate IEC/ BCC materials on nutritional care and support for HIV/TB to PLHIV/TB/OVC, school going children, entire populations

Scale-up strategies

Channel	Priority actions
Health Facilities	• Group counselling through antenatal, EPI, outreach • Individual counselling during clinical visits • Routine growth monitoring • Food demonstrations
Mother support groups	• Group and individual counselling • Food demonstrations
CHWs	• Individual counselling during growth monitoring
Social workers	• Group and individual counselling
TBAs	• Individual counselling

[30] *WFP PLHIV/TB and OVCs nutritional surveillance status analysis 2012 (Western Areas statistics)*
[31] *MoHS TB programme assessment (2009)*

Agricultural extension workers	• Promote IYCF practices to farmers at FFS and FBOs • Conduct food demonstrations in FFS • Support production and processing of local nutritious complementary foods • Support establishment of clinic demonstration gardens • Support MSG to establish demonstration and kitchen gardens
Agricultural Business Centres	• Source of seeds, tools and other equipment for production of nutritious crops • Provide value addition and processing services
Mass media	• Radio/TV messages, radio discussions, Billboard messages, newspaper, sms
Mass campaign	• Breastfeeding week, Maternal and Child Health week
Njala University Nutrition extension workers& SLARI Nutrition instructors	• Disseminate recipes and research information to the community
Birth waiting homes	• Provide birth waiting facilities for pregnant women living far from PHUs
Community theatres, Village Health Committees, Paramount Chiefs, Churches, mosques	• Disseminate IYCF information
NGOs	• Disseminate IYCF information • Community mobilisation

2.4 PRIORITY AREA 4:PREVENTIVE MEASURES AGAINST NUTRITIONAL AND OTHER RELATED INFECTIOUS DISEASES

The specific objective of priority 4 is tostrengthen preventive measures against nutrition related diseases

The primary causes of child deaths worldwide are pneumonia, followed by diarrhoea, low birth weight and prematurity, asphyxia at birth and, in some regions, malaria and HIV/AIDS. The direct causes of deaths during complex emergencies are essentially the same as in normal situations. Most maternal, newborn and child deaths occur in poor communities. Nearly all deaths among children under five years of age (99 per cent) occur in low-income households and families. Poor health and nutrition in the early years of life perpetuate the cycle of poverty and intergenerational underachievement for poor families and societies. Solutions do exist to prevent maternal and child deaths and reduce under-nutrition, but often do not reach those most in need. The direct causes of maternal, neonatal and young child deaths are known and are largely preventable and treatable using proven and cost-effective interventions and practices.

The following strategies will be implemented to contribute to the achievement of priority area 4:

- Vitamin A Supplementation for< 5s and postpartum women promoted and sustained
- Iron folate compliance in pregnant women promoted
- Pre-service capacity in micronutrient supplementation developed and promoted
- Widely consumed foods such as wheat flour fortified with micronutrients (iron and Vitamin A and Zinc)
- Use of Micronutrient powder introduced and scaled-up to improve quality of complementary feeding for 6-23 months children
- Consumption of iodised salt promoted and ensure that all imported or locally produced salt for human and animal consumption is fortified with adequate levels of iodine
- Use of zinc in ORS for the treatment of diarrhea implemented and to Scaled up
- Deworming interventions targeting children 12-59 months, primary school going children and pregnant women intensified
- Utilization of ITNs and IPTP for malaria control promoted
- Improve access, treatment and storage of water at community and household level improved
- Household hygiene and sanitation practices improved
- Food safety and hygiene practices improved
- Counseling and support on life style changes on non-communicable nutrition related(NCDs) (Hypertension, diabetes, heart diseases and cancer) provided
- Management of common NCDs integrated into the training curriculum of Primary Health Care Workers

2.4.1. Vitamin A Supplementation for< 5s and post partum women promoted and sustained

Vitamin A deficiency affects about 47% of the under-five population (UNICEF/MI 2004), largely due to younger children consuming diets lacking in vitamin A rich foods. In Sierra Leone foods rich in Vitamin A including palm oil, are not usually consumed adequately until the child is nearly two years old. The consumption of Vitamin A rich foods by children below five years of age increases steadily from 35% at 6-8 months to 93% by the age of 24-35 months (DHS 2008, SMART 2010).

Table 12: Indicators and coverage for nutritional mitigation for PLHIV/TB and OVCs

	Description	Baseline 2013	Target 2017
Indicator	% of children < 5 years with Vitamin A deficiency	TBD 47	20%
Coverage	% of children 6-59 months receiving Vitamin A supplementation during mass campaign	91%	98%
	% of children 6-59 months receiving Vitamin A supplementation (routine)	38%	80%
	% of children 6-35 months old consuming foods rich in fruits and vegetables	65%	80%
	% of postpartum mothers receiving Vitamin A supplementation	40%	80%
Target group	children 6-59 months old, post-partum women		

Current situation

According to SMART (2010) Vitamin A supplementation (VAS) has been scaled up to 91% in children 6-59 months nationally as compared to the 2008 DHS figures of 26%. However there is need to improve VAS through routine health care service delivery, and through consumption of Vitamin A rich foods. Vitamin A supplementation is delivered through bi-annual mass campaigns targeting children 6-59 months old, combined with polio immunization and deworming. The intervention has also been integrated into the routine health delivery services. A national guideline on distribution and administration of VAS has been developed and disseminated.

Only 40% of women receive VAS within six week postpartum (SLDHSBS, 2009). This proportion is equal to women who deliver in health facilities, which is very small. Consequently, there is a dire need to scale up the intervention. This can be done through campaigns encouraging more women to deliver in health facilities.

A food fortification Alliance has been formed to spearhead advocacy for micronutrient fortification. The standards for oil fortification with vitamin A have been developed and gazetted as mandatory. Vitamin A deficiency is expected to reduce to 20% by 2016. This is based on the fact that VAS has been introduced and scaled up in the entire country. A micronutrient survey will be conducted in 2013 to establish a baseline on serum retinol levels. The scaling up of food diversification, consumption and fortification is also expected to further boost the decline of Vitamin A deficiency.
Promotion of Vitamin A supplementation will also be conducted through mass media campaigns, and community based sensitisations.

Implementation strategies

- Sustain mass administration of Vitamin A (children 6-59 months) through bi-annual integrated maternal and child health week campaigns;
- Scale up routine administration of VAS through already established health delivery system;
- Reporting on routine VAS for children 6-59 months should be integrated into the Expanded Programme on Immunisation (EPI) and post- partum VAS into the Tetanus Toxoid.
- Intensify delivery of integrated antenatal, post natal and family packages;
- Develop and disseminate IEC/BCC materials to promote VAS;
- Fortify widely used foods such as cooking oil with Vitamin A by providing nutritional technical assistance and incentives to the private sector. Promote research on bio-fortification through the agriculture sector;
- Promote the production and consumption of Vitamin A rich foods. Promote food diversification through recipe development, nutrition education and information campaigns.

Activities to support the achievement of these strategies include the following:

- Review guidelines and policies and job aids to reflect 6 month VAS;
- Conduct 2 national mass campaigns per year to distribute Vitamin A to children 6-59 months;
- Support and scale-up routine Vitamin A supplementation;
- Scale-up use of new child health cards in all Health facilities by training Health Workers and provision of supplies (cards);
- Introduce a 6 months health package for routine <5 provision;
- Integrate postpartum vitamin A supplementation into tetanus toxoid card and advocate for regular supplies.

Scale-up strategies

Channel	Priority actions
Health Facilities	Supply Vitamin A supplements to target groups particularly in hard to reach areas Disseminate VAS promotion messages countrywide
Schools	Promote nutrition education in all schools country wide Promote school gardens in primary schools country wide
CHWs	Monitor compliance of VAS for children 6-59 months country wide through the health card Monitor post-partum VAS within 6 weeks in communities nation wide. Disseminate messages to promote VAS and diet diversity at community level
Mother support groups	Disseminate messages to promote VAS and diet diversity in communities
Mass media	Disseminate messages on Radio, TV and print media

Mass campaign	Organize MCH Week twice yearly and World Breastfeeding week annually
Private sector	Facilitate (promote, technical input, monitor and supervise) the Fortification of foods with Vitamin A Ensure that only food fortified with Vitamin A are imported for consumption of children
Standard Bureau	Regulate fortified food imports through laboratory analysis
Agricultural extension workers	Promote production and consumption of diversified foods, including bio fortification Participate in disseminating nutrition education messages country wide
NGOs	Promote Messages to promote VAS and dietary diversity

2.4.2 Iron folate compliance in pregnant women promoted

Iron deficiency anemia is the most common micronutrient deficiency in the world today. It impacts the lives of millions of women and children contributing to poor cognitive development, increased maternal mortality and decreased work capacity. Yet with appropriate public health action, this form of micronutrient malnutrition can be brought under control particularly among pregnant women Iron deficiency is not the only cause of anemia, but where anemia is prevalent, iron deficiency is usually the most common cause. The prevalence of anemia, defined by low hemoglobin, is commonly used to assess the severity of iron deficiency in a population and is prevalent among women of childbearing age. Therefore pregnant women need to comply with the administration of iron folate as a preventive measure undertaken to reduce anemia among this target by

Table 12: Indicators and coverage for nutritional mitigation for PLHIV/TB and OVCs

	Description	Baseline 2013	Target 2017
Indicator	% of children 6-59 months with anaemia	76%	51%
	% of women 15-49 years with anaemia	45%	36%
Coverage	% of children 6-35 months old who consume iron rich foods	59%	80%
	% of women who took iron folate supplement during pregnancy for 90 days or more	44%	60%
Target group	Pregnant women, Women 15-49 years		

Current situation

Specifically, 76% of children 6-59 months and 45% of women of reproductive age (15-49 years) are anaemic[32] (DHS 2008). Anaemia in pregnant women leads to low birth weight infants. In the prevention and control of anaemia, a minimum package of iron folate, de-worming pills and fansidar (sulfadoxine and pyrimethamine) is given to all pregnant women who visit antenatal clinics during pregnancy. The package for children under five years includes deworming and ITN distribution. Supplementation of iron to pregnant women is delivered through the health system although compliance remains a major challenge. No regular iron supplementation is currently targeting children under the age of five years old. Children do not consume foods rich in iron until nearly two years of age. Efforts in food fortification are as described for Vitamin A.

Reduction of iron deficiency in children less than five years is projected at 51% by 2017 from the current 76%, mainly due to the introduction of Micronutrient Powders (MNPs), fortification and expected increased intake of micronutrient rich diets. On the other hand, iron deficiency in women of reproductive age is expected to be reduced to 36% in 2017 from the current 45% with increased efforts to promote production and consumption of micronutrient rich foods.

Implementation strategies

- Continue routine and promote compliance of iron folate supplementation for pregnant women through the health delivery system;
- Develop and disseminate IEC/BCC messages through the mass media, health clinics, schools, community channels and outlets to improve iron folate compliance and antenatal visits;
- Promote fortification of widely consumed foods e.g. wheat flour with iron by providing support to local wheat flour industries and importers/traders to align to mandatory fortification standards for flour based on WHO recommendations. Promote research on bio-fortification;
- Promote food diversification through nutrition education and information campaigns;

Activities to support the achievement of these strategies include the following:

- Continue with iron folate supplementation during antenatal visits; and
- Conduct in-service training of health staff on improved iron folate compliance.

Scale-up strategies

Channel	Priority actions
Health Facilities	• Supply Iron Folate supplements to all pregnant women attending Ante natal clinic • Disseminate messages to promote Iron Folate supplementation and compliance through antenatal visits and outreach services • Disseminate messages on consumption of micronutrient rich foods
Schools	• Promote nutrition education in all schools country wide • Promote school gardens in primary schools country wide • Import fortified foods

[32] *Demographic Health Survey 2008*

Mother support groups, CHWs and TBAs	• Sensitise and mobilise pregnant and lactating women to attend clinics • Disseminate messages to promote iron folate supplementation, compliance and diet diversity
Mass media	• Disseminate messages on Radio, TV and print media
Private sector	• Fortify food with iron folate • Import fortified foods
Agricultural extension workers	• Promote and support production and consumption of diversified foods • Develop and disseminate appropriate recipes to reach targeted beneficiaries country wide • Disseminate messages on nutrition education
NGOs	• Disseminate messages to promote compliance for iron folate supplementation to pregnant women • Disseminate messages to promote consumption of diversified foods

2.4.3 Pre service capacity in micronutrient supplementation developed and promoted

The prevalence of micronutrient deficiencies in Sierra Leone remains especially high among women of child-bearing age and children under five years. Sierra Leone has consequently made efforts over the past few years to address the high prevalence of micronutrient deficiencies. The interventions under this priority area are associated with both a problem emanating from insufficient intake of micronutrient rich foods and poor health conditions that can lead to deficiencies. Micronutrient deficiencies of primary health concern in Sierra Leone are Vitamin A, iron, iodine and zinc.

Implementation strategies

- Develop and disseminate IEC/BCC materials to promote micronutrient supplementation;
- Integrate micronutrient supplementation into the curriculum of pre-service training institutions;
- Fortify widely used foods such as cooking oil with Vitamin A by providing nutritional technical assistance and incentives to the private sector. Promote research on bio-fortification through the agriculture sector;
- Promote the production and consumption of Vitamin A rich foods. Promote food diversification through recipe development, nutrition education and information campaigns

Activities to support the effective implementation of this intervention include:

- Develop and disseminate IEC/BCC materials for training institutions;
- Curriculum development for pre-service training for health and nutrition tutors;
- Conduct a micronutrient survey.

Roles and Responsibilities in increasing micronutrient intake

Ministry/Partners	Roles and Responsibilities
MOHS	• Develop training packages and train Health Workers, on relevant technical guidelines • Supply micronutrients to all health facilities • Develop and disseminate IEC materials on micronutrient supplementation and fortification
NU	• Conduct operational research to introduce and scale-up MNPs
NGOs	• Provide technical and capacity building support on micronutrient promotion and dissemination • Develop promotional materials and disseminate • Advocate for policy and guideline review
MOTI	• Provide guidelines and technical assistance to the private sector for the fortification of locally available foods • Enforce mandatory regulations for fortified food imports and support local industries and importers to align to the mandatory food fortification standards • Develop information guide for local traders on the importation and marketing of iodised salts • Ensure quality assurance and control for compliance e.g. iodine content of salt • Map all salt boilers in the country and provide technical support for salt iodisation to local salt boilers/producers
MAFFS	• Provide support to small scale farmers in the production of varieties of local nutritious foods • Disseminate promotion materials on the consumption of micronutrient rich foods • Establishment of school and kitchen gardens • Provide technical support in food fortification and bio-fortification
MEST/Training institutions	• Review curricula for primary, secondary and tertiary levels to incorporate emerging issues/developments on micronutrients • Train pre-service trainees on emerging issues/developments on micronutrients • Support implementation of school gardens
UN Agencies	• Provide Technical support • Procurement of supplies- Vitamin A. Iron foliate, fortificants

Private companies	• Fortify locally produced foods (including complementary foods) • Conduct social marketing and branding for locally fortified foods • Conduct research on consumption of fortified products and feasibility of fortifying various local foods • Import fortified foods
NGOs	Provide Technical support Procure supplies Promotion of micronutrient dietary intake

2.4.4 Widely consumed foods such as wheat flour fortified with micronutrients (iron and Vitamin A and Zinc)

Interest in micronutrient malnutrition has increased greatly over the last few years. One of the main reasons is the realization that micronutrient malnutrition contributes substantially to the global burden of disease. Furthermore, although micronutrient malnutrition is more frequent and severe among children women of childbearing age are also affected therefore it is a public health problem in Sierra Leone. Measures to correct micronutrient deficiencies aim at ensuring consumption of a balanced diet that is adequate in every nutrient. Unfortunately, this is far from being achieved everywhere since it requires universal access to adequate food and appropriate dietary habits.

Food fortification has the dual advantage of being able to deliver nutrients to large segments of the population without requiring radical changes in food consumption pattern. A Food Fortification Alliance has been formed to spearhead advocacy for micronutrient fortification. The standards for oil fortification with vitamin A and wheat flour with iron have been developed and gazetted as mandatory. Vitamin A deficiency is expected to reduce to 20% by 2016. This is based on the fact that VAS has been introduced and scaled up in the entire country. A micronutrient survey will be conducted in 2013 to establish a baseline on serum retinol levels. The scaling up of food diversification, consumption and fortification is also expected to further boost the decline of Vitamin A deficiency. Promotion of Vitamin A supplementation and iron supplementation to pregnant women will also be conducted through mass media campaigns, and community based sensitisations.

Implementation strategies

- Review IYCF strategy to include home fortification;
- Conduct operational research on complementary foods using MNP. This should include palatability and acceptability tests on MNP for children 6-23 months of age before scale-up. Train health workers and CHWs on MNP utilization in complementary food;

- Promote the use of MNPs. Develop IEC/BCC materials and disseminate the messages through the media, NGOs, schools, health clinics and other community channels. NGOs will also undertake community sensitization and mobilization to raise awareness on availability, importance and use of MNP.

Activities to support the implementation of the intervention include:

- Support local food industries and importers/traders to align to mandatory fortification standards for oil, flour based on WHO recommendations and implement social marketing strategy for fortified foods

- Advocate for the formalization of an active national fortification alliance

Scale-up strategies

Channel	Priority actions
Health Facilities	• Supply of MNPs to targeted beneficiaries • Disseminate MNP promotion messages to facilities with targeted beneficiaries
Mother support groups, CHWs and TBAs	• Disseminate MNP promotion messages in communities
Mass media	• Disseminate messages on Radio, TV and print media
Mass campaign	• Organize twice yearly MCH Week and annual World Breastfeeding week
NGOs	• Disseminate MNP promotion messages

Roles and Responsibilities in increasing micronutrient intake

Ministry/Partners	Roles and Responsibilities
MOHS	• Review guidelines and policies to reflect 6 months VAS, introduce a 6 month health package and scale-up the use of the new health card • Integrate PVAS into the Tetanus Toxoid card • Develop training packages and train Health Workers, on relevant technical guidelines • Supply micronutrients to all health facilities • Conduct national mass (<5s) and routine Vitamin A supplementation (<5s &post-partum women) • Develop and disseminate IEC materials on micronutrient supplementation and fortification • support local industries and importers to align to the mandatory food fortification standards • Advocate for the formalization of an active national fortification alliance
NU	• Conduct operational research to introduce and scale-up MNPs
NGOs	• Provide technical and capacity building support on micronutrient promotion and dissemination • Procure supplies e.g. Vitamin A, fortificants • Develop promotional materials and disseminate • Advocate for policy and guideline review

MOTI	• Provide guidelines and technical assistance to the private sector for the fortification of locally available foods • Enforce mandatory regulations for fortified food imports and support local industries and importers to align to the mandatory food fortification standards • Develop information guide for local traders on the importation and marketing of iodised salts • Ensure quality assurance and control for compliance e.g. iodine content of salt • Map all salt boilers in the country and provide technical support for salt iodisation to local salt boilers/producers
MAFFS	• Provide support to small scale farmers in the production of varieties of local nutritious foods • Disseminate promotion materials on the consumption of micronutrient rich foods • Establishment of school and kitchen gardens • Provide technical support in food fortification and bio-fortification
MEST/Training institutions	• Review curricula for primary, secondary and tertiary levels to incorporate emerging issues/developments on micronutrients • Train pre-service trainees on emerging issues/developments on micronutrients • Support implementation of school gardens
UN Agencies	• Provide Technical support • Procurement of supplies- Vitamin A. Iron foliate, fortificants
Private companies	• Fortify locally produced foods (including complementary foods) • Conduct social marketing and branding for locally fortified foods • Conduct research on consumption of fortified products and feasibility of fortifying various local foods • Import fortified foods
NGOs	Provide Technical support Procure supplies Promotion of micronutrient dietary intake

2.4.5 Use of Micronutrient powder introduced and scaled-up to improve quality of complementary feeding for 6-23 months children

Micronutrient powders (MNP) are single-dose packets containing multiple vitamins and minerals in powder form that can be sprinkled onto any semi-solid food immediately before eating. Micronutrient powders with 15 nutrient components that include Zinc and iron supplements for children 6-23 months will be introduced initially on a pilot basis in a few districts and later to be scaled up to other districts. The MNP will improve the quality of complementary food for children 6-23 months. The MNPs are expected to have high impact on all micronutrient intervention indicators discussed earlier.

Implementation strategies

- Review IYCF strategy to include home fortification;
- Conduct operational research on complementary foods using MNP. This should include palatability and acceptability tests on MNP for children 6-23 months of age before scale-up. Train health workers and CHWs on MNP utilization in complementary foods;

- Promote the use of MNPs. Develop IEC/BCC materials and disseminate the messages through the media, NGOs, schools, health clinics and other community channels. NGOs will also undertake community sensitization and mobilization to raise awareness on availability, importance and use of MNP.

The following activities will be undertaken as part the strategic action:

- Conduct operational research to introduce and scale up (usability trials) for MNP into IYCF to improve quality of complementary food for 6-23 months children

- Train Health workers on MNP (TOT) on utilization for complementary feeding followed by cascaded trainings in all districts

- Conduct community mobilization to raise awareness on availability, importance and use of MNP

2.4.6 Consumption of iodised salt promoted and ensure that all imported or locally produced salt for human and animal consumption is fortified with adequate levels of iodine

Current situation

According to a national nutrition survey[33] (2003), the proportions of school-aged children with low urinary levels of iodine were 34%. Adequately iodised salt consumption has gradually increased from 45% in 2005 to 63% in 2010 (MICS4). This has been achieved through quality control of imported salt. The Sierra Leone Standards Bureau has developed legislation (2011) on the importation of iodized salt into the country and a monitoring system put in place. However, the consumption of iodised salt has lagged behind in the Northern and Western regions and a marked improvement in the Southern region (Figure 8). Some of the regions in the north and south mine local salts for household consumption. However the local salt is not iodised. The salts are however used widely in the community because they are cheaper than imported salts. Support to local producers to iodise locally mined salts is not adequate. Community education on the need to consume iodised salt is delivered via mass media and through community groups.

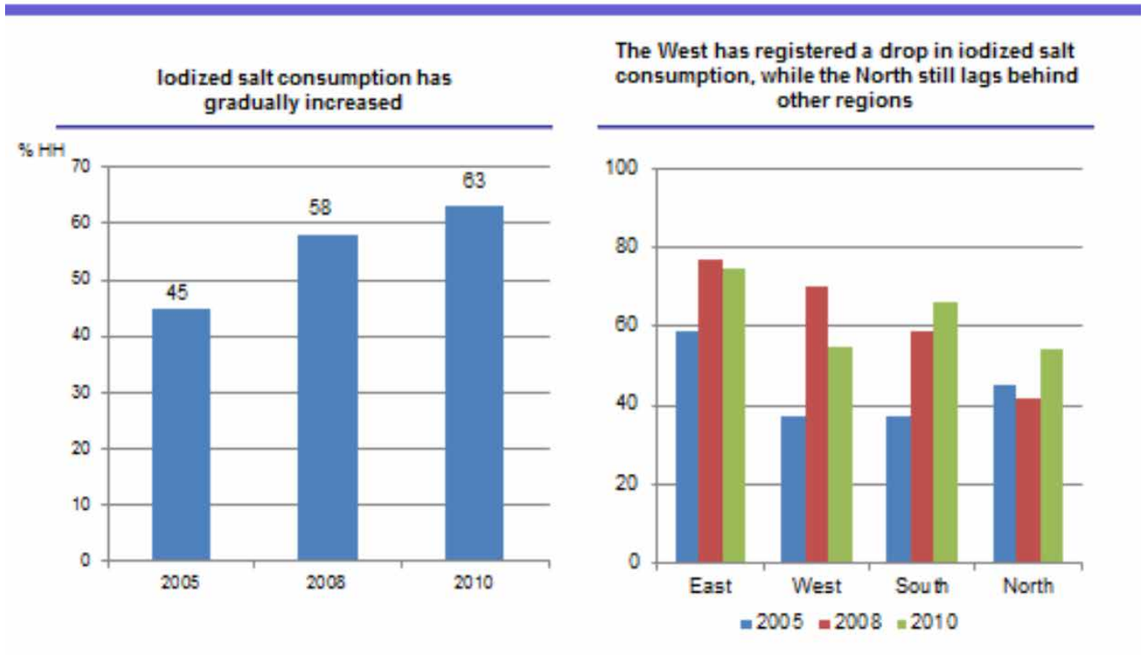
With increased efforts to promote consumption of iodised salt and iodisation of locally produced salts, it is projected that the proportion of school aged children with low urinary levels of iodine will reduce to at least 20% by 2017.

[33] *Sierra Leone National Iodine Deficiency Disorders Survey (IDD) June 2003*

Table 12: Indicators and coverage for nutritional mitigation for PLHIV/TB and OVCs

	Description	Baseline 2013	Target 2017
Indicator	% of school aged children with low urinary iodine (less than 100 µg/l)	34%	20%
Coverage	% of households consuming adequately iodised salts	63%	80%
Target group	Households		

Figure 10: Consumption of iodised salt by region



Implementation strategy

- Promote consumption of iodised salt and ensure that all imported or locally produced salts for human and animal consumption are fortified with adequate levels of iodine. (Objective 4.6)

The following activities will be undertaken as part the strategic action:

- Institute controls and promote testing salt for iodine content to ensure that all salt used for human and animal consumption be iodized;
- Provide technical support for salt iodization to local salt boilers/producers;
- Map all salt boilers in the country

Scale-up strategies

Channel	Priority actions
Health Facilities	• Disseminate messages on consumption of iodised salt during antenatal and outreach services
Mass media	• Disseminate messages on Radio/TV and print media on consumption of iodised salt
Private sector	• Facilitate (promote, technical input, monitor and supervise) Importation of iodised salt • Ensure that locally produced salt is Iodised
Sierra Leone Standards Bureau officers	• Ensure that all imported and locally available salts are iodised
NGOs	• Disseminate messages on consumption of iodised salt promotion
Schools	• Promote consumption of iodised salt

2.4.7 Use of zinc in ORS for the treatment of diarrhea implemented and to Scaled up

Current situation

Zinc deficiency has been linked to high prevalence of stunting among children less than five years of age. Currently, no zinc supplementation is taking place. Zinc in Oral Rehydration Therapy for diarrhoea treatment in children under-five years is also not fully implemented. The use of Oral Rehydration Therapy has steadily increased from 60% in 2006 to 73% in 2010 (MICS) and this presents an opportunity to scale up the use of zinc in ORT.

Table 16: Indicators and coverage for Zinc Supplementation

	Description	Baseline 2013	Target 2017
Indicator	Prevalence of stunting among children < 5 years	34%	23.9%
Coverage	% of children <5 receiving zinc in ORT for diarrhoea treatment	6.1%	80%
Target group	Children under <5 years		

Source: SMART 2010

Implementation strategies

- Promote zinc in ORT for the treatment of diarrhoea through procurement of ORS with zinc to be used for all diarrhoea treatment for under-fives;
- Promote zinc rich foods, development of IEC materials;
- Promote zinc fortification for staples.

Activity to support the effective implementation of this intervention includes:

Scale-up strategies

Channel	Priority actions
Health Facilities	• Procure and distribute ORT with Zinc to all health facilities • Treat all under-5 children suffering from diarrhoea cases with ORT with zinc • Promote consumption of Zinc rich foods
Mass media	• Disseminate messages on Radio/TV and print media on use of ORT with Zinc
CHWs/Blue flag volunteers	• Promote the use of ORT with zinc for diarrhoea treatment
Agricultural extension workers	• Disseminate messages to promote consumption of zinc rich foods
Private sector	• Fortify staples foods with zinc • Import fortified foods

2.4.8 Deworming interventions targeting children 12-59 months, primary school going children and pregnant women intensified

Current situation

De-worming for children 12-59 months is delivered on a national scale through biannual mass campaigns together with Vitamin A Supplementation (VAS). Routine deworming of children 12-59 months is implemented through the health delivery system including outreach services. Worm infestation in under-five children is expected to reduce from 54% (HKI/UNICEF 2011) to 20% in 2017 because deworming is currently fully scaled up with high coverage. National school-based deworming campaigns targeting primary school and out of school children is also implemented routinely. Currently mass administration of Albendazole has reached 90% of the schools (HKI June 2010 report) and this will be scaled up to 100% by 2017. Deworming of school children takes place every 6 months and is administered by teachers and health workers and volunteers Schools are selected in districts with high prevalence of soil transmitted worms. Deworming for pregnant women is delivered during antenatal visits at the PHUs and during outreach services. According to SLDHBS (2009) only 36% of pregnant women are dewormed.

Table 17: Indicators and coverage for deworming

	Description	Baseline 2013	Target 2017
Indicator	% of children < 5 infected with Soil Transmitted Helminths	54%	20%
Coverage	% of children 12-59 months de-wormed two times a year	85.8%	95%
	% of children 12-59 months de-wormed two times/year (routine)	18%	60%
	% of pregnant women who take intestinal parasite drugs	36%	60%
	% of primary school age children taking intestinal parasite drugs in school (5-11)	TBD	80%
Target group	Pregnant women, children 6-59 months old, primary school going children		

Implementation strategies

- Continue mass deworming of children 12-59 months through mass campaigns and routine bi-annual deworming. Deworming will also be included in the Child Health Card and monitored by CHWs during growth monitoring;
- Continue collaboration with School Health Programme to scale up routine administration of Albendazole for children in primary schools and out of school and cascaded training of teachers on deworming. Campaign for school enrolment of all eligible children to increase coverage;
- Sensitize communities, including the local authorities on the need for pregnant women to attend antenatal clinics to increase coverage of pregnant women being dewormed;
- Continue with routine administration of Albendazole for pregnant women during antenatal visits at the PHUs;
- Develop and disseminate appropriate IEC/BCC materials to promote deworming. The messages will be disseminated through the mass media (radio, television), community theatres.

Activities to support the effective implementation of these interventions include:

- Routine administration of Albendazole in 12-59 months old children and pregnant women;
- Mass campaigns deworming for children 12-59 months old;
- Sensitise Local authorities and communities on deworming for children and pregnant women;

- Scale up mass administration of Albendazole in primary schools and develop TOT for training Teachers on deworming.

Scale-up strategies

Channel	Priority actions
Health Facilities	• Routine administration of deworming tablets for pregnant women and children 12-59 months including hard to reach areas • Maintain adequate supply of deworming tablets in schools • Disseminate standard messages to promote deworming of children 12-59 months, pregnant women and school children.
Mother support groups & CHWs	• Disseminate messages to promote deworming to children 12-59 months, pregnant and lactating women. • Monitor child deworming through the child health card
Mass campaign	• Mass administration of deworming tablets to children 12-59 months during the breastfeeding week and MCH week
Mass media	• Disseminate messages on print, Radio/TV
NGOs	• Mobilise resources for deworming interventions, Disseminate messages to promote deworming
Schools	• Administration of deworming tablets in schools

2.4.9 Utilization of ITNs and IPTP for malaria control promoted

Current situation

Malaria prevalence among children under five years is 25% (SLDHSBS 2009) and this needs to be significantly reduced. Free Insecticide Treated Nets (ITNs) are distributed during mass campaigns at national scale during the maternal and child health week and routinely through PHUs. The beneficiaries are pregnant women and mothers with children under five years. Although the distribution of nets has almost reached scale, coverage in utilization is still very low only 30% of children under five and 28% of pregnant women were sleeping under an ITN in 2010 (MICS4). This coverage needs to be scaled up to 80% to reduce malaria prevalence.

The Intermittent Preventive Treatment of malaria during pregnancy (IPTP) requires that pregnant women take at least two doses of anti-malarial tablets (during second and third trimesters) to protect them from malaria. The intervention, which is implemented during antenatal care and outreach services, needs to be scaled up as only 40% of women are following the correct IPTP during pregnancy.

Insecticide Treated Nets distribution

Table 18: Indicators and coverage for Insecticide Treated Nets distribution

	Description	Baseline 2014	Target 2018
Indicator	Malaria prevalence among children under five years	25%	13%
Coverage	% of pregnant women utilising ITNs	28%	80%
	Children under five years sleeping under a bed net	30%	80%
Target group	Pregnant women and children under five years		

Table 19: Indicators and coverage Intermittent Prevention Treatment of Pregnant Women (IPTP)

	Description	Baseline 2013	Target 2017
Indicator	Prevalence of anaemia among pregnant women	62%	32%
Coverage	Women following correct IPTP during pregnancy	41%	90%
Target group	Pregnant women		

Implementation strategies

- Continue mass (annual) and routine distribution of ITNs, targeting pregnant women and children under five years. The government will procure adequate ITNs for use by all targeted groups. The private sector will also be encouraged to procure and sell ITNs;

- Develop and disseminate IEC materials on culturally acceptable ways of using ITNS. These materials will be used to sensitise the local councils and communities on malaria prevention among children and pregnant women through NGOs, CHWs, Health system, radio discussions and jingles. NGOs and CHWs will follow-up and train the community on proper hanging-up and utilization of ITNs;

- In collaboration with malaria programme promote and intensify IPTP use. Continue routine IPTP during antenatal visits and improve its accessibility and utilization by pregnant women by establishing community level distribution points managed by CHWs. Train CHWs on distribution of drugs and monitor IPTP compliance amongst pregnant women;

- Strengthen linkages with malaria programme to promote and intensify IPTP use.

The following activities will be undertaken as part the strategic action:

- Continue routine and mass distribution of ITN through the Health system and NGOs;

- Revise IEC materials on use of nets to make them culturally acceptable and disseminate through radio, jingles etc.;

- Support Local Councils and communities to advocate for malaria prevention among children and pregnant women;
- Continue routine IPTP for pregnant women as part of antenatal care and improve accessibility and utilisation of IPTP by creating community distribution points at community level (CHWs).

Scale-up strategies

Channel	Priority actions
Health Facilities	• Disseminate messages to promote proper use of ITNs and IPTP • Distribute ITNs particularly in hard to reach areas
Mother support groups & CHWs	• Promote use of ITNs to pregnant and lactating women • Train the community on proper utilization of ITNSs e.g. hanging-up monitor use of ITNs at household level and use of IPTP for pregnant women, organize defaulter tracing to ensure compliance
Mass campaign	• Disseminate messages to promote use of ITNs and IPTP • Distribute ITNs
Mass media	• Disseminate messages through Radio/ TV, newspaper
Private sector	• Supply and promote use of ITNs
NGOs/CBOs	• Mobilize resources to ensure availability of ITNs. Disseminate messages to promote use of ITNs and IPTI • Conduct hanging-up campaigns for proper utilisation of ITNs
Local councils	• Mobilize resources to ensure availability of ITNs. Advocate for the use of ITNs by pregnant women and <5s

2.4.10 Improve access, treatment and storage of water at community and household level improved

Current situation

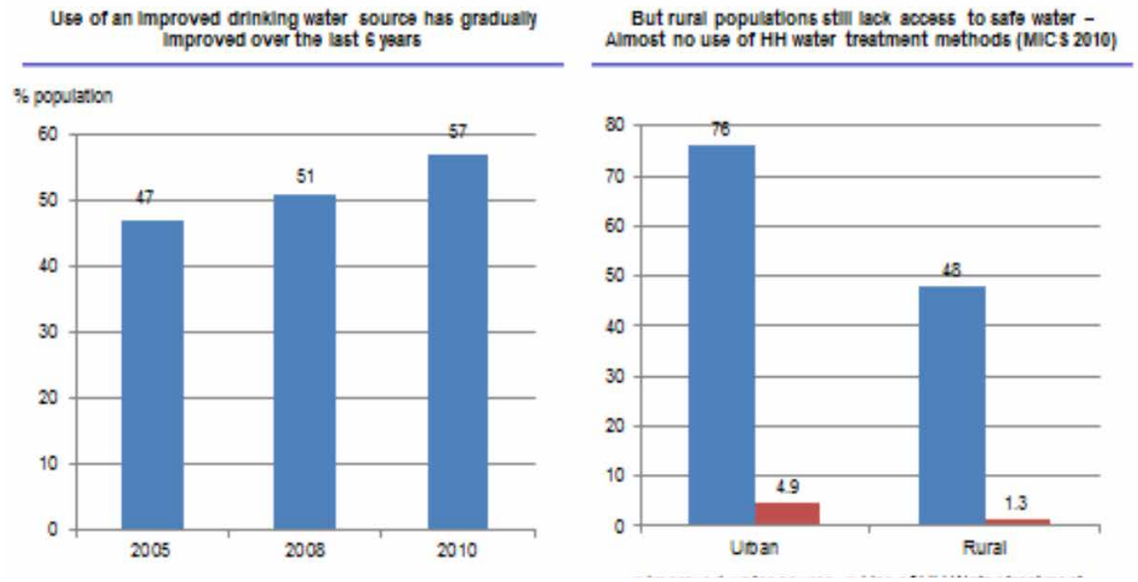
National use of improved water sources for household utilisation has gradually increased over the last six years from 47% in 2005 (MICS3) to 54% in 2010 (MICS4). The proportion of households accessing improved water sources is 76% in urban areas and 48% in rural areas (MICS4 2010). Only 2% (4.9% urban and 1.3% rural) of households using unimproved drinking water sources are using appropriate water treatment methods (MICS4 2010). In the rural areas, the use of bio-filters, solar water treatment and shock treatment of newly constructed wells using chlorine is also being promoted. Community education and sensitisation is also going on through the Community Led Total Sanitation (CLTS) program. The Ministry of Energy and Water Resources (MEWR) has developed a National WASH policy.

Table 20: Indicators and coverage of Household water treatment

	Description	Baseline 2013	Target 2017
Indicator	Diarrhoea for under fives	11%	7%
Coverage	HH using adequate water treatment methods	2%	80%
	Household access to improved water source	54%	74%
Target group	Households		

Figure 11: Access to improved water source and household water treatment

Access to improved water has only improved in urban areas. Households do not treat water appropriately



Implementation strategies

- Restore and institute management systems for the wider water supply schemes- Gravity Fed Scheme, spring boxes & Degremont Patterned Stations;
- The private sector and NGOs will train water point technicians on operation and maintenance of water facilities at community levels and supply water treatment commodities where hand dug wells are functional;
- Promote household water treatment and safe storage options. Develop appropriate IEC/BCC materials on household water treatment and safe storage for different literacy groups, using multiple channels;

- Set up water quality monitoring and surveillance system

Activities to support the effective implementation of these interventions include:

- Create awareness for ownership, operations and maintenance of water facilities nationwide;
- Promote Household water treatment options.

Scale-up strategy

Channel	Priority actions
Health Facilities	• Disseminate messages to promote household water treatment safe storage and use
Water Services division	• Restore the wider water supply schemes, monitor implementation of water supply schemes
Sierra Leone Water Company	• Water treatment and supply, monitor water quality
District laboratories	• Water quality monitoring and surveillance
Local councils	• Community mobilization and water tariff collection
Mass media	• Disseminate messages on good hygiene practices on Radio/TV, through community health workers at household level.
Community water point technicians	• Operate and maintain water facilities nationwide, teach communities simple maintenance procedures
Community emerging leaders	• Train other community members on CLTS
Mother Support groups and CHWs	• Disseminate messages on household water treatment and safe storage and use to pregnant and lactating women and other household members
NGOs	• Support households with facilities for water treatment, safe storage and use. Ensure availability of spare parts
Private sector	• Procure and supply water facility maintenance spare parts

2.4.11 Household hygiene and sanitation practices improved

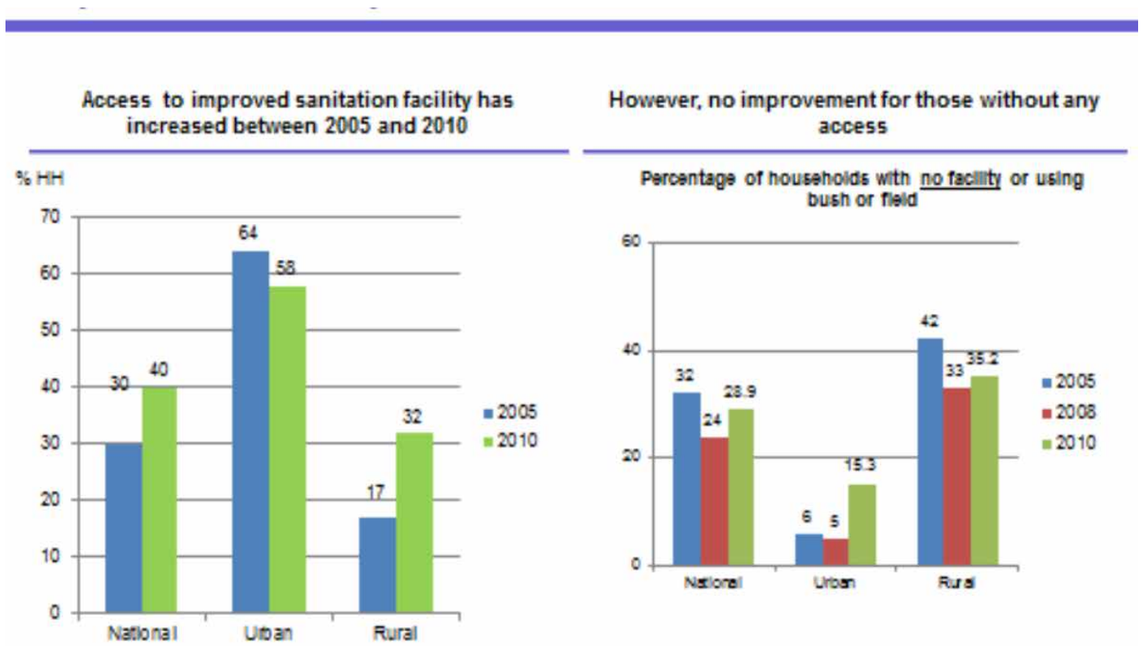
Current situation

Hand washing should take place following key activities that include contact with food after contact with faeces. In 2010, only 13% of households had a designated place for hand washing with soap and water (MICS4 2010). Promotion of hand washing with soap and water in the community is delivered through the CLTS programme; School Sanitation and Hygiene Education (SSHE) programme that targets school going children. The hand washing promotion education in schools, is delivered by teachers, school clubs, and mass campaign (global hand washing day). By end of 2010, 170 schools had the SSHE component in seven districts. This would need to be scaled up to cover all districts in the country.

Table 21: Indicators and coverage for hand washing with soap and water and sanitation

	Description	Baseline 2013	Target 2017
Indicator	Prevalence of diarrhoea among children <5	11%	7.15%
Coverage	Evidence of hand washing with soap	13%	50%
	Access to improved sanitation facility	40%	66%
	Safe disposal of baby faeces	54%	80%
Target group	Households, School Children		

Figure 12: Access to improved sanitation



According to MICS4 2010, 40% of the population in Sierra Leone live in households using improved sanitation facilities. The situation is worse in rural areas (Figure 10), but is expected to improve to MDG target of 66% by 2015 Also of importance is the safe disposal of child's faeces which currently stands at 54% but needs to be scaled up to 80% by 2017.The community will be targeted through the CLTS approach while school children will be targeted through the SSHE approach.

Implementation strategies

- Promote community approach to total sanitation. Develop and disseminate appropriate IEC materials on hand washing for different literacy groups. Promote hygiene, sanitation and hand washing through mass campaigns & social mobilization by contracting radio stations, TV, newspapers, civil society organi-

zations, telecommunication companies and community theatres. Train emerging CLTS natural leaders in Outside Defecation Free (ODF) communities;

- Advocate to the private sector to produce affordable soap to promote hand washing with soap;
- Develop Environmental Health and Sanitation Policy and update the Public Health Act;

The following activities will be undertaken as part the strategic action:

- Advocate for the production of affordable soap for hand washing by the private sector;
- Promote Community approach to total sanitation (CAT).

Scale-up strategy

Channel	Priority actions
Sanitation division of MOHS	• Review and improve VIP latrine designs at PHUs and schools and mobilize communities for uptake of service
Health Facilities	• Develop and disseminate messages to promote hand washing with soap and water and improved sanitation
Mother support groups & CHWs	• Promote safe disposal of baby stool and hand washing with soap and water to pregnant and lactating women and other household members
Mass media	• Disseminate standard messages through print, Radio/TV
Schools	• Promote School Sanitation and Health Education
Private sector	• Supply affordable soap, monitor access of right holders to facilities provided
NGOs	• Disseminate messages on hand washing with soap and sanitation marketing

2.4.12 Food safety and hygiene practices improved

Current situation

Food safety and hygiene are major sources of infections and diseases within households in poor communities. Unclean hands and utensils used to feed children are major sources of diarrhoea and typhoid, which are common among children. Food safety sensitisation on general safe and hygienic management of food, including its preparation and storage, has been conducted on a low scale for market women, butchers and housewives. FAO is undertaking a study on street food vending to assess access, safety and quality. The outcome will provide relevant baseline information for promoting food safety and hygiene.

Implementation strategies

- Strengthen the institutional framework and implement national food standards and laws including code and guidelines on food hygiene for locally produced and imported foods;
- Ensure compliance on hygiene and nutrition standards of food prepared in the school feeding programme and other institutional feeding setups;
- Promote safety and quality of food sold by food companies and vendors to the public and ensure it complies with best practices on food safety and hygiene;
- Develop training manuals on food safety and hygiene for training (i) Street vendors, restaurant and hotel owners and staff on preparation, packaging, transporting and storage of food for public use and for (ii) School children using a child friendly food hygiene manual incorporated in the school curriculum;
- Develop and disseminate IEC/BCC materials targeting food producers, food processors, food handlers, street vendors, school children and general mass education on food safety and hygiene.

Table 22: Indicators and coverage for food safety and hygiene

	Description	Baseline 2013	Target 2017
Indicator	Prevalence of diarrhoea among children under five	11%	7%
Coverage	% of population tested and confirmed to be affected by food borne diseases	N/A	Reduce by 25%
	% of vendors registered, trained and certified	N/A	80%
	% of food processors and vendors observing food safety and hygiene practices	N/A	60%
Target group	Street vendors, school children, food processors, food transporters, market women, households		

The following activities will be undertaken as part the strategic action:

- Develop and implement a national food standards and laws including code and guidelines on food hygiene for locally produced and imported foods;
- Develop and implement a national food standards and laws including code and guidelines on food hygiene for locally produced and imported foods;
- Establish partnership with consumer protection organization;
- Conduct a rapid assessment of licensed and unlicensed food companies and food vendors for compliance to best practices on food safety and hygiene;
- Develop appropriate training manuals on food safety and hygiene for street vendors, restaurant and hotels;
- Develop a community and child friendly food hygiene manual and other IEC materials and conduct TOTs for primary school teachers;
- Undertake TOT for street vendors on food safety and practices including appropriate packaging, transporting and storage of food.

Scale-up strategy

Channel	Priority actions
Health facilities, agricultural extension workers, social workers	Disseminate messages to promote food safety and hygiene to well defined targets in the community particularly in hard-to reach areas Ensure compliance on hygiene and nutrition standards of food prepared in the school feeding programme and other institutional feeding setups, monitor food safety and hygiene practices in schools and communities
Schools	Promote food safety and hygiene. Include food safety and hygiene in school currula at all levels
Mass media	Disseminate messages on Radio/ TV/ newspaper print
NGOs	Intensify sensitization and mobilise resources for uptake of good practices Disseminate messages to promote food safety and hygiene
Private sector	Ensure food for public use is safe to eat
VHCs/CBOs/Town criers	Disseminate messages to promote food safety and hygiene

2.4.13 Counseling and support on life style changes on non-communicable nutrition related (NCDs) (Hypertension, diabetes, heart diseases and cancer) provided

Current situation

Sierra Leone is experiencing a marked upsurge of chronic non-communicable diseases with dietary implications such as hypertension, diabetes, gout and communicable diseases such as tuberculosis (TB). As such there is increase in the admission of such cases in hospitals. The high prevalence of malnutrition and existence of the double burden of disease, changing lifestyle of a growing middle class, poor dietary practices calls for the continuous monitoring of the food and nutrition situation countrywide through a systematic food and nutrition surveillance. A comprehensive, on-going, regular, and coordinated food and nutrition surveillance system will in the long term assist in health and development planning, programme management, timely warning and design of intervention programmes.

Table 23: Indicators and coverage for NCDs

	Description	Baseline 2013	Target 2016 2017
Indicator	Prevalence of overweight and obesity in women	17.9%	6%
	Prevalence of NCDs (diabetes, hypertension, coronary heart disease)	TBD	TBD
Coverage	Population reached with healthy lifestyles messages	TBD	80%
Target group	Entire Population		

Implementation strategies

- Establish community and facility surveillance system for NCDs through the STEPS survey;
- Develop and disseminate (nationwide) IEC materials on NCDs to promote a healthy lifestyle for prevention of NCDs;
- Integrate the management of common NCDs into the primary health care and the community. Develop appropriate dietary guidelines targeting people living with NCDs, followed by orientation and training on the use of dietary guidelines on NCDs by Health workers and other service providers.

The following activities will be undertaken as part the strategic action:

- Conduct the STEPS survey and establish community and facility surveillance system for adults 25-64 years old;
- Develop and disseminate materials to promote healthy life style and prevention of NCDs in the general population;
- Develop appropriate dietary guidelines on NCDs and train Health Workers on their use.

Scale-up strategies

Channel	Priority actions
Health Facilities	Counselling for NCDs
Agriculture extension	Promote healthy lifestyle to prevent NCDs
Mass media	
	Disseminate messages on TV, Radio and newspaper to promote healthy lifestyle and prevent NCDs
NGOs	Promote healthy lifestyles
Faith Based Organisations	Promote healthy lifestyles

Roles and responsibilities in improving the nutritional status of PLHIV/TB/OVCs and prevention of NCDs

Ministry/Partners	Roles and Responsibilities
MOHS	• Provide nutritional support in hospitals and PHUs to infants exposed to HIV/TB, infected infants and young children • Integrate PMTCT into the child health card • Review the 2008 guideline and adapt appropriate dietary guidelines for PLWHIV/TB • Conduct annual assessment of nutritional status of PLHIV/TB and OVCs • Develop and disseminate IEC/BCC materials on nutritional care and support for PLHIV/TB/OVCs and NCDs • Promote research on nutrition interventions related to HIV/TB and OVC • Organise PLHIV/TB households to access to access more sustainable livelihoods from other sectors • Integrate management of common NCDs into the Primary Health Care and the Community • Develop appropriate dietary guidelines on NCDs • Conduct the STEPS survey and establish community and facility surveillance system for adults 25-64 years old
MAFFS, MMR	• Support the dissemination of key messages on nutrition needs for PLHIV/TB and preventive measures for NCDs through FFS • Support PLHIV/TB to access agricultural production inputs and credit facilities
NGOs	• Facilitate the provision of nutrition support • Nutrition education and dissemination of IEC materials
NETHIPS	• Monitor the type of support provided to beneficiaries • Disseminate IEC/BCC materials • Provide counselling support
MAFFS	• Provide support to small scale farmers in the production of varieties of local nutritious foods • Disseminate promotion materials on the consumption of micronutrient rich foods • Establishment of school and kitchen gardens • Provide technical support in food fortification and bio-fortification
MEST/Training institutions	• Review curricula for primary, secondary and tertiary levels to incorporate emerging issues/developments on micronutrients • Train pre-service trainees on emerging issues/developments on micronutrients • Support implementation of school gardens
Research Institutions	• Provide technical backstopping in the review and development of guidelines and manuals • Promote research on nutrition interventions related to HIV/TB and OVC
MWR	WASH • Restore Degremont type water supply schemes, water wells and Train water point technicians in operation and maintenance of water facilities at community levels • Create community awareness on operations and maintenance of water facilities nation wide • Develop a TOT manual for use by laboratory and water technicians • Raise awareness on need for safe drinking water and good household water treatment options
MOHS- DPC	**WASH** • Develop and disseminate appropriate IEC materials for household water treatment and hand-washing with soap and water for different literacy levels • Cost and review sanitation implementation options • Develop and implement Environmental Health and Sanitation Policy and upgrade Public Health Act **Parasite control** • Supply drugs and commodities for malaria and worm infestation control and prevention; Support the administration of deworming and antimalarial interventions • Integrate <5 deworming into the Child Health card • Review, develop and disseminate materials to promote deworming, ITN use and IPTP • Ensure compliance and safe drug use **Food safety and hygiene** • Develop and implement appropriate food safety and quality assurance policies and standards • Develop guidelines and training manuals for people working in the food industry and school feeding programme
MIC	• Raise awareness on good household water treatment techniques, good hygiene practices and hand-washing with soap and water
MEST	**WASH** • Promote School Sanitation and Hygiene Education **Parasite control** • Support administration of deworming in schools • Disseminate messages to promote deworming of children and pregnant women **Food safety and Hygiene** • Train school children on good food safety and hygiene practices
MLG	• Set up infrastructure at district council to support CLTS • Support distribution of water treatment commodities • Support construction and rehabilitation of water supply systems • Develop and enforce by-laws to ensure the safety and hygiene of foods for public consumption

NGOs	**WASH** • Provide technical support for construction and rehabilitation of water schemes • Develop capacity of the local authorities in water management • Develop governance capacity to manage water resources at the community level • Provide technical support in the development and dissemination of messages in water treatment and hand-washing with soap and water **Parasite control** • Mobilize resources for deworming intervention • Develop and disseminate messages on deworming • Conduct sensitisation and support distribution of commodities for deworming intervention
Ministry of Trade and Industry	**Food safety** • Ensure the adoption of laws and standards set and compliance by the private sector • Set standards, disseminate, train and ensure compliance
MAFFS, MMR	**Food safety** • Develop and implement appropriate food safety and quality assurance policies and standards • Develop guidelines and training manuals for Agricultural Business (ABCs) Cooperatives undertaking food processing and value addition **WASH** • Promote hand washing with soap and water
Research Institutions and Higher institutions of learning	• Develop training manual for water treatment and purification methods for use by teachers and community members • Translate CLTS Audio and other existing training manuals in other local languages • Conduct further research on water treatment and purification methods
Private sector	• Support the provision of spare parts and train communities on maintenance of water supply facilities at the community level. Adopt and promote compliance with standards and guidelines on food safety and hygiene • Support the provision and sale of ITNs at an affordable cost and sensitise the buyers on their use
UN	• Provide technical and logistic support for deworming intervention

2.4.14 Management of common NCDs integrated into the training curriculum of Primary Health Care Workers

Current situation

Family Planning and education services are supported by UNFPA, WHO and NGOs. Through the family planning services, women are given a choice to plan their family and this boosts their capability to take care of their children. The programme targets women 15-49 years old and also men. Strategies applied include advocacy to young people in and out of schools on prevention of teenage pregnancy, community advocacy to delay girl circumcision (70% for girls 15-19 years old -MICS 2010) and early marriage and encouraging the education of the girl child.

In recognition of the need to bring sexual reproductive health education to young people in schools and literacy and non-formal education centres, there has been the integration of Population and Family Life Education (POP/FLE) in schools, out of school and tertiary institutions. POP/FLE has been integrated into nine subjects in the schools and three subjects for non-formal education. At least 5,000 teachers/facilitators, 100 district supervisors have been trained using the life skills approach behaviour change and demand for services. The integrated teaching syllabi have been produced for both in and out of school reaching 40 schools and 50 literacy and non-Formal education centres.

Table 24: Indicators and coverage for family planning

	Description	Baseline 2013	Target 2016 2017
Indicator	Average age at first pregnancy among women 20-49 (years)	17.9%	6%
	Median number of months since preceding birth	TBD	TBD
Coverage	% of women who use modern contraceptive methods	TBD	80%
	% of young people 10-24 years receiving family planning and counselling messages	TBD	80%
Target group	Women of reproductive age, school going girls/boys, adult men		

Implementation strategies

- Continue procurement and distribution of Reproductive Health/Family Planning (RH/FP) commodities in all hospitals and PHUs. Create adolescent friendly health facilities. Establish community distribution points for family planning services for easy access and train CHWs to manage the community distribution points;

- Review, print and disseminate IEC materials on RH/FP. Sensitise local authorities (gate keepers) at chiefdom level on family planning and health education of the girl child and delayed marriage. Similar messages will be disseminated to men and women, boys and girls and bike riders (‘okadas’) and drivers. The local authorities will be supported to institute bye-laws against early marriage and girl child abuse in schools and at home;

- Incorporate Family Planning Education into all schools; Peer Education Clubs will be created in secondary schools for the promotion of adolescent sexual reproductive health messages.

The following activities will be undertaken as part the strategic action:

- Create adolescent friendly health facilities with commodities available in all hospitals and PHUs for teenage girls;
- Train CHWs and Mother Support groups and create community distribution points of FP services for easy access;
- Review, print and disseminate IEC material on RH/FP and family planning especially targeting bike riders, drivers, women, boys and girls;
- Support the Local Authority to institute byelaws against early marriage.

Scale-up strategy

Channel	Priority actions
Health facilities	• Issue family planning commodities and counselling
Community Health Worker	• Support Family Planning Education • Manage community FP commodity distribution points
Mass media	Disseminate messages on Radio/ TV/ newspaper
NGOs	• Conduct Family Planning Education at community level • Advocate for girl child education, against early marriage and other cultural practices that inhibit girl child education
Schools	• Conduct Family Life Education and Counseling in schools • Provide additional incentives to retain girls in school e.g. take home rations for girls

Roles and Responsibilities in increasing micronutrient intake

Ministry/Partners	Roles and Responsibilities
MOHS	• Provide family planning commodities and create community distribution points • Create adolescent friendly health facilities • Provide family planning counselling support • Develop and disseminate IEC/BCC materials
MEST	• Ensure inclusion of adolescent sexual and reproductive health in the curricula of schools • Support counselling support and peer education • Advocate and provide incentives to promote and retain girls in school
MSWGCA	• Advocate for the enforcement of bylaws on early marriage, gender violence and teenage pregnancy • Promote girl child education
MDR/DECSEC	• Institute bylaws and ensure compliance
NGO	• Support the development and dissemination of IEC/BCC materials • Mobilize, Sensitise and train communities on family planning methods • Provide family planning commodities
Ministry of Justice	• Ensure that the Act on early marriage is enforced and penalties set for non-compliance

2.5 PRIORITY AREA 5: PROVISION OF CURATIVE SERVICES TO MALNOURISHED INDIVIDUALS

The Specific objective of priority 5 is to improve access to quality curative nutrition services.

Treatment of acute malnutrition includes two interventions (i) Treatment of children 6-59 months with SAM (ii) Treatment of children 6-59 months with MAM. They form a major component of the MOHS Community Management of Acute Malnutrition (CMAM) Programme.

The following strategic interventions will be undertaken to achieve the strategic objectives:

- Quality care and management of children with acute malnutrition promoted; and
- Community mobilisation for early detection of cases of acute malnutrition strengthened.

2.5.1 Quality care and management of children with acute malnutrition promoted

The Integrated Management of Acute Malnutrition (IMAM) programme is the integration of three modes of care and treatment for moderate and severe acutely malnourished under-five children Inpatient Facility (IPF), Outpatient Therapeutic feeding Programme (OTP) and Supplementary Feeding Program (SFP). It consists of four basic principles: access and high coverage, timeliness, multi-sectoral integration and capacity building. Within this continuum of care, active screening, referral, partnership and strong communication mechanisms are needed to provide all children with comprehensive prevention and treatment of acute malnutrition. It is therefore necessary to ensure that IMAM interventions are readily available and accessible to all children, especially those among the vulnerable populations across the country. IMAM is part of the Basic Package of Essential Health services under the Free Health Care Initiative.

Table 25: Indicators and coverage for SAM & MAM

	Description	Baseline 2013	Target 2016 2017
Indicator	SAM prevalence among children 6-59 months	1%	0.2%
	GAM prevalence among children 6-59 months	6.9%	4.8%
Coverage	IMAM coverage	12%	50%
Target group	SAM and MAM Children		

Current situation

Severely acute malnourished (SAM) children with complications are treated in hospitals/inpatient facilities (IPF), while SAM children without complications are enrolled in outpatient therapeutic programmes in Peripheral Health Units (PHUs.) Children with Moderate Acute Malnutrition (MAM) are referred to the Supplementary Feeding Programme (SFP) where they receive take home rations.

An IMAM coverage survey conducted by UNICEF in 2011 established coverage of only 12%. This means that many malnourished children are not enrolled into the programme. Screening of children is conducted by CHWs. Those who are malnourished are referred to PHUs for further screening and treatment. More malnourished children have to be targeted for treatment for improved coverage in management of SAM.

Early detection and treatment of children with MAM will contribute significantly in reducing the prevalence of SAM and GAM. The SAM prevalence is therefore projected to be reduced to 0.2% by 2017. Similarly, effective treatment and management of children with SAM will contribute significantly to a reduction in under-five mortality.

Implementation strategies

- Promote quality care for children with acute malnutrition;
- Conduct additional training on the new WHO Child Growth Standards and key messages on IMAM;
- Provide logistics including tools for PHU with feeding programs; monitoring tools for admission and discharge for PHUs with OTP;
- Review IMAM guidelines and develop a user friendly version;
- Support supply of therapeutic/supplementary foods and other logistics for the management of children 6-59 months with SAM and MAM;
- Strengthen and implement systems to reduce supply chain breakages and leakages to ensure that the supplies reach the intended beneficiaries;
- Expand SFP to ensure that the full CMAM package is implemented at each Peripheral Health Unit (PHU) with OTP.

Activities to support the implementation of these interventions include:

- Conduct refresher training for IMAM staff on WHO growth standards monitoring and the key messages including admission and discharge criteria and monitoring tools;
- Conduct training on detection/ screening and referral to health staff and other sector field officers;
- Strengthen supply chain management for efficient distribution and targeting of food/medical supplies and to ensure proper targeting;
- Scale up SFP and ensure coverage of all OTPs.

Scale-up strategies

Channel	Priority actions
Health facilities	• Provide therapeutic/supplementary foods and other supplies • Treat children with acute malnutrition • Disseminate messages to address negative attitudes on SAM/MAM • Conduct food demonstrations for PLW • Provide meals for mothers taking children to Inpatient facilities (IPF)
Mother support groups & CHWs	• Sensitise and mobilise communities for active screening • Conduct Screening, referral of SAM children and counselling of mother /caregivers
NGOs	Disseminate messages to address negative attitudes on SAM/MAM
MAFFS	• Support mothers with malnourished children to establish livelihoods projects/kitchen gardens • Identify and refer acutely malnourished children
SLARI Nutrition instructors	• Identify and refer acutely malnourished children • Conduct sensitization to create awareness on malnutrition
Social Welfare	• Identify and refer acutely malnourished children • Conduct sensitization to create awareness on malnutrition

Roles and responsibilities in treatment of acute malnutrition

Ministry/Partners	Roles and Responsibilities
MOHS	• Train all health workers on IMAM • Train NGOs on community mobilization and IMAM • Train other sector staff on community detection and referral • Facilitate treatment of acute malnourished children through heath worker, NGOs and community volunteers.

UNICEF, WFP, WHO	• Provide technical support and funds for capacity building for staff and other stakeholders • Support procurement of therapeutic/supplementary food for OTP and Inpatient Facilities (IPF) including Drugs • Provide logistic support for transportation communication, supportive supervision of IMAM intervention • Strengthen supply chain management • Strengthen health information systems
NGO/CSO	• Manage and supervise active screening and referral of malnourished children • Supervise distribution of supplementary food to moderately malnourished children • Ensure that prescribed food supplementation is received by malnourished children on a regular basis • Mobilise and sensitise communities for uptake and scaling up of CMAM services
MAFFS/Social Welfare, NU	• Support identification and referral of malnourished children in communities • Design and implement follow up strategies to facilitate early, timely and adequate response of feeding programs in communities for improved outcomes • Support mothers to undertake livelihoods projects /assist them to establish kitchen gardens as a source of diversified foods

2.5.2 Community mobilisation for early detection of cases of acute malnutrition strengthened

Treatment Screening of children is conducted by Community Health Workers (CHWs). Those who are malnourished are referred to PHUs for further screening and treatment. More malnourished children have to be targeted for treatment for improved coverage in management of SAM.

Early detection and treatment of children with MAM will contribute significantly in reducing the prevalence of SAM and GAM. The SAM prevalence is therefore projected to be reduced to 0.2% by 2017. Similarly, effective treatment and management of children with SAM will contribute significantly to a reduction in under-five mortality.

Implementation strategies

- Develop and utilise effective community sensitisation and mobilisation systems to ensure full participation of all children and their parents/ caregivers in the systems;
- Strengthen community mobilisation; train NGOs, CHWs and Mother Support Groups on community mobilization techniques. CHWs and Mother Support Groups will also be retrained on use of MUAC. Other groups that are in contact with the community such as agriculture extension workers, social welfare officers, TBAs, SLARI nutrition instructors will also be trained and be involved in awareness creation, detection and referral. Supervision and training of Mother Support Groups will be conducted on a continuous basis;

- Develop and disseminate BCC messages/materials to address the attitudes of key household members on SAM/MAM prevention and management.

The following activities will be undertaken as part the strategic action:

- Develop and disseminate BCC strategies to address the attitudes of key household members on SAM/MAM prevention and management targeting fathers, WCBA and the elderly;

- Conduct community mobilisation, screening, referral and follow-up.

Scale-up strategies

Channel	Priority actions
Health facilities	• Provide therapeutic/supplementary foods and other supplies • Treat children with acute malnutrition • Disseminate messages to address negative attitudes on SAM/MAM • Conduct food demonstrations for PLW • Provide meals for mothers taking children to Inpatient facilities (IPF)
Mother support groups & CHWs	• Sensitise and mobilise communities for active screening • Conduct Screening, referral of SAM children and counselling of mother /caregivers
NGOs	Disseminate messages to address negative attitudes on SAM/MAM
MAFFS	• Support mothers with malnourished children to establish livelihoods projects/kitchen gardens • Identify and refer acutely malnourished children
SLARI Nutrition instructors	• Identify and refer acutely malnourished children • Conduct sensitization to create awareness on malnutrition
Social Welfare	• Identify and refer acutely malnourished children • Conduct sensitization to create awareness on malnutrition

Roles and responsibilities in treatment of acute malnutrition

Ministry/Partners	Roles and Responsibilities
MOHS	• Train all health workers on IMAM • Train NGOs on community mobilization and IMAM • Train other sector staff on community detection and referral • Facilitate treatment of acute malnourished children through heath worker, NGOs and community volunteers.

UNICEF, WFP, WHO	• Provide technical support and funds for capacity building for staff and other stakeholders • Support procurement of therapeutic/supplementary food for OTP and Inpatient Facilities (IPF) including Drugs • Provide logistic support for transportation communication, supportive supervision of IMAM intervention • Strengthen supply chain management • Strengthen health information systems
NGO/CSO	• Manage and supervise active screening and referral of malnourished children • Supervise distribution of supplementary food to moderately malnourished children • Ensure that prescribed food supplementation is received by malnourished children on a regular basis • Mobilise and sensitise communities for uptake and scaling up of CMAM services
MAFFS/Social Welfare, NU	• Support identification and referral of malnourished children in communities • Design and implement follow up strategies to facilitate early, timely and adequate response of feeding programs in communities for improved outcomes • Support mothers to undertake livelihoods projects /assist them to establish kitchen gardens as a source of diversified foods

2.6 PRIORITY AREA 6: NATIONAL SURVEILLANCE SYSTEM DEVELOPED AND STRENGHTENED

The specific objective of priority 6 is to strengthen surveillance systems for monitoring the food and nutrition situation.

Treatment Screening of children is conducted by Community Health Workers (CHWs). Those who are malnourished are referred to PHUs for further screening and treatment. More malnourished children have to be targeted for treatment for improved coverage in management of SAM.

The high prevalence of malnutrition and existence of disease, including the changing lifestyle of a growing middle class, poor dietary practices, calls for the continuous monitoring of the food and nutrition situation countrywide. This will be done through a systematic food and nutrition surveillance system capable of detecting changes in trend or distribution in order to initiate corrective measures. The system will assist in long-term health and development planning, programme management, timely warning and design of intervention programmes. The National integrated nutrition surveillance system will also be used to track progress on the output and income indicators on a monthly/quarterly basis. The results can then be used for the evaluation at the outcome and impact levels.

The MOHS collects information on nutritional status, weight for height, Vitamin A supplementation and MUAC on a monthly basis. The information is compiled at the district level and it is fed into the national health management information system (HMIS). The current gaps are that the data are incomplete, data analysis and dissemination are inadequate and the information is not available on a timely manner. Nutritional surveillance therefore needs to be strengthened by harmonizing tools and methodologies for assessing the state of food security and nutrition among concerned sectors, develop capacity to collect, analyse, report and disseminate information for decision making and action. In addition, key indicators for nutrition surveillance should be identified. An effective reporting mechanism with modern communication systems, efficient monitoring and supervision should be established. Some of this capacity can be developed through on-the-job training.

The following strategies will be implemented to contribute to the achievement of this priority:

- Strengthen early warning system incorporating food security and nutrition status indicators
- Develop preparedness plans for shocks
- M&E Systems strengthened

2.6.1 Strengthen early warning system incorporating food security and nutrition status indicators

One of the main causes of food and nutrition insecurity is the seasonality in the food production cycle. With most livelihoods based on agriculture, the state of food insecurity varies according to the agricultural production cycle. August is the peak of the lean season. According to the CFSVA (2011), hunger in urban areas increases in January, following a period of overspending in December. Most households in urban areas depend on commercial trade or wage employment. With trade generally being slow in January and wages paid at the end of the month, the scope for purchasing food decreases. During the months of June-July the percentage of households unable to access sufficient food increases dramatically. Hence the large number of people identified as being food insecure in Sierra Leone. In subsequent months food insecurity drops sharply to below 4% in rural areas (CFSVA 2011). This scenario is likely to cause food insecurity and malnutrition.

Current Situation

MAFFS in collaboration with CILSS/FEWSNET has established a multi-disciplinary working group coordinated by the Planning Evaluation Monitoring and Statistics Division (PEMSD). The multi-disciplinary working group is comprised of relevant line ministries, UN agencies and NGO's. There is need to expand the membership to include the MOHS. An initial food and nutrition security system consisting of nine modules has been developed. Data for the modules will be individually collected, with various institutions/organisations and sectors/agencies being responsible for the various modules within their mandate. The modules will be part of a common database, and the data will be regularly analysed with the intention of establishing the food and nutrition situation.

The EWS modules are: (i) National Cropping Calendar (ii) Crop Forecast (iii) Crop Protection (phytosanitary) (iv) Climatology (Agromet) (v) Pastorisation (vi) Crop Yield (vii) Hydrology (viii) Market Information (ix) Nutrition Surveillance.

1. Detection, collection, analysis and reporting of major Food and Nutrition Security risks.
2. Deployment of mitigation measures to avoid high losses.
3. Quick response to affected areas and population in case of any reported outbreaks to avoid hunger, malnutrition and death.

Implementation strategies

- Strengthen the multi-disciplinary working group coordinated by the Planning Evaluation Monitoring and Statistics Division to monitor the food and nutrition security pattern;

- Expand the multi-disciplinary working group to include Ministry of Health and Sanitation

The following activities will be undertaken as part the strategic action to strengthen early warning systems:

- Provide support for EWS regular data collection, analysis, reporting and coordination;

- Review, formulate and enforce food standards and codes of practice to ensure that food meant for human and animal consumption is safe and nutritious.

2.6.2 Develop preparedness plans for shocks

Food and nutrition emergency preparedness platform is currently at its early stages of development. The country has no contingency plan and early detection of emergencies is also a constraint. The need to strengthen the food and nutrition early warning and surveillance system cannot be over-emphasized. To strengthen emergency preparedness, the following should be put in place (Objective 6.2):

Implementation strategies

- Establishment of a Coordination mechanism: An emergency nutrition platform will be established to plan and respond to disasters. The cluster will work closely with other emergency preparedness mechanisms.

- Development of a nutrition contingency plan: The priorities of the contingency plan will be to prevent death from starvation and diseases, reduce malnutrition (by supporting and protecting breastfeeding, especially exclusive breastfeeding, Infant and Young Child Feeding (IYCF), therapeutic feeding and supplementary feeding) providing essential micronutrients and feeding of orphans. It will also focus on the need to improve the nutritional status of women. The contingency plan will provide a common framework to guide the actions of all partners.

- Establishment of strategic grain reserves: The MAFFS aims to reduce rural poverty and household food insecurity on a sustainable basis. Through its mandate to improve food security, MAFFS is proposing to establish a Strategic Grain Reserve in Sierra Leone. The purpose of the reserve will be to hold physical stockpile of rice, or its cash equivalent, to serve as a buffer against food emergencies arising from production shocks and rapid food price inflation. In addition the reserve will also serve to provide commodity loans to recognized organizations.

Activities to facilitate the achievement of these interventions include:

- Develop a nutrition emergency contingency plan to guide response to disasters with comprehensive package and coordination mechanism and review annually;

- Develop the capacity of national government and districts to provide nutritional services in emergencies;

- Cost of prepositioning of drugs and plumpy nut;

- Advocate for the establishment of a strategic grain reserve.

2.6.3 M&E systems strengthened

Current situation

Currently, monitoring of interventions is done in each sector through established monitoring and reporting systems. All sectors will be encouraged to integrate nutrition indicators into their monitoring and reporting systems in line with SUN common result framework.

At the national level joint supervision will be coordinated by SUN secretariat between the UN and the MOHS is done on a quarterly basis. However, it is not regular due to staff shortage at the national nutrition programme. At the district level, the nutritionists are responsible for supervising nutrition interventions in all PHUs while the district Monitoring and Evaluation Officers of MAFFS are responsible for food security monitoring.

Supervision will be strengthened at the district level through a number of modalities:

- Strengthen the district food and nutrition security technical committees;
- Advocate for the Civil Society Groups and Local Council Authorities to monitor intervention implementation in their respective districts;
- Quarterly joint monitoring schedule between the UN and government (SUN Secretariat);
- Provide logistical support for Community-based organisations to monitor and supervise interventions at the community level.

Evaluation of food and nutrition interventions is mainly carried out through national surveys that are conducted periodically in Sierra Leone. These include the DHS, MICS, and CFSVA, SMART. Government ministries, UN agencies and NGOs also commission independent evaluations for specific programmes and projects. While information on most impact indicators is available, analysis of existing statistics shows that a series of impact indicators are not up to date and thus assessment of the current status may not be accurate. Similarly, baseline statistics are not available for some indicators necessitating the use of proxy indicators. Coverage for a series of interventions whose impact indicators suggest a major problem for example Exclusive Breastfeeding, Complementary Feeding, and dietary measurement is also not known.

Most sectors do not have nutrition sensitive indicators and this poses a challenge in analysing progress and attribution to national nutritional impacts. Some evaluations also take place at sector level and are not shared out.

Advocacy to ensure more up-to-date assessment of indicators or inclusion of such data in the main national surveys e.g. the DHS, MICS, and CFSVA, SMART will therefore be important. Some indicators will also need to be added systematically for routine annual monitoring of high priority and potentially fast impact interventions. Among them are:

- Care givers and food preparers (women) washing hands with soap at critical times
- Household food group consumption
- Diet diversity scores
- % post-harvest loss
- Vendors registered, trained and certified by Standard Bureau
- Vendors observing key practices

Some indicators will also need to be added sporadically for interventions that need expensive and complex analytical processes and cannot be conducted on a regular basis. They include:

- % of children < 5 years with VAD
- % of children < 5 with zinc deficiency
- % of school age children with urinary iodine levels below 100 ug/dl

Considering the multi-sectoral nature of the plan, there will be a need to have a more coordinated and robust M&E system. An integrated M&E framework for nutrition and food security will be developed. A nutrition and food security database will be established and an information sharing platform set-up for information sharing. The necessary capacities in M&E including communication equipment, reporting formats and development of the capacity of all relevant staff will be undertaken.

Table 26: Food and nutrition security indicators by intervention and source

Intervention	Outcome indicator	Source of information	Ministry Responsible	Department Section	Regularity
Early initiation of breastfeeding	Timely initiation of breastfeeding within one hour of birth	MICS 2010	MOFDEP	Statistics Sierra Leone	3 years
Exclusive breastfeeding	Infants 0-5 months exclusively breastfed	MICS 2010	MOFDEP	Statistics Sierra Leone	3 years
Complementary feeding	Children 6-23 months old with minimum acceptable diet	MICS 2010	MOFDEP	Statistics Sierra Leone	3 years
	Timely initiation of semi-solid foods at 6 months	DHS 2008	MOHS	Planning & Information	5 years
Vitamin A supplementation	Children <5 years with Vitamin A deficiency	Micronutrient Survey	MOHS	Planning & Information	-
Iron foliate supplementation	Children 6-59 months with anemia	DHS 2008	MOHS	Planning & Information	5 years
	Women 15-49 years with anemia	DHS 2008	MOHS	Planning & Information	5 years
Iodine fortification	School aged children with low urinary levels of iodine (less than100 µg/l	National Nutrition Survey 2003	MOHS	Planning & Information	-
Zinc	Prevalence of stunting among children 6-59 months old	SMART 2010	MOHS	Planning & Information	-
Deworming	Children <5 infected with STH	HKI/UNICEF	MOHS	Planning & Information	-
Household water treatment	Prevalence of diarrhea in children < 5	DHS 2008	MOHS	Planning & Information	5 years
Hand washing with soap & water	Prevalence of diarrhea in children < 5	DHS 2008	MOHS	Planning & Information	-
ITN	Malaria prevalence among children < 5 years	SLDHSBS 2009	MOHS	Planning & Information	-
IPTP	Prevalence of anemia among pregnant women	DHS 2008	MOHS	Planning & Information	5 years
Food Safety and hygiene	Prevalence of diarrhea among children < 5	DHS 2008	MOHS	Planning & Information	5 years
Therapeutic feeding	SAM prevalence among children 6-59 months old	SMART survey 2010	MOHS	Nutrition	-
Food distribution	Incidence of low birth weight	DHS 2008	MOHS	Planning & Information	5 years
	Prevalence of underweight among <2s	SMART 2010	MOHS	Planning & Information	-

Cash and food for work	Population living under poverty line	MDG report	MOFDEP	Planning	Annual
	Household expenditure on food	CFSVA	MAFFS	PEMSD	-
	Food consumption score	CFSVA	MAFFS	PEMSD	-
Household food production	Food consumption score	CFSVA	MAFFS	PEMSD	-
	Diet Diversity score	DDS survey	MAFFS	PEMSD	-
Value addition	Post-harvest loss score	NSADP 2009	MAFFS	PEMSD	-
	Value added products seen in markets	N/A	MAFFS	PEMSD	-
Family planning and education	Age at first pregnancy	DHS 2008	MOHS	Planning & Information	5 years
	Interval in months between last two births	DHS 2008	MOHS	Planning & Information	5 years
Improve nutritional status of PLHIV/ AIDS/TB	Prevalence of malnourished PLHIV and TB patients	HMIS	MOHS	Planning & Information	Routine
	OVCs 5-18 years food insecure	-	-	-	-
Reduce incidence of NCDs	Prevalence of obesity and overweight among women	SMART 2010	MOHS	Planning & Information	-
	Prevalence of NCDs (Diabetes, Hypertension, Coronary heart disease)	HMIS	MOHS	Planning & Information	Routine

This plan provides all the relevant parameters for monitoring and evaluation, which can be viewed in the annexes. They include:

- *Timeframe:* Each intervention indicates the time period by which it should be completed. It is important to appreciate though that some interventions are continuous and have no end date;
- *Input:* An estimated financial resources required to implement each intervention is stated;
- Outputs: Current and target coverage is defined for each intervention that involves a service delivery. All other interventions can be measured based on the existence at the end of the timeframe (e.g. policy or guidelines developed);
- *Impact*: Current and target outcome indicators are defined for each action area. The plan also sets the overall goal indicators.

The following activities will be undertaken as part the strategic action to strengthen monitoring and evaluation of nutrition and food security systems:

- Develop an integrated M&E framework and necessary tools for Food and nutrition security
- Establish a joint M&E multi-stakeholder team at national and district levels
- Establish high level indicators to be controlled at a higher level
- Establish high level indicators to be controlled at a higher level
- Establish a food and nutrition security database
- Evaluate plan implementation progress
- Develop progress reports on a quarterly basis and annual reports to monitor progress

2.7 PRIORITY AREA 7: OPERATIONAL RESEARCH

The specific objective of priority 7 is to enhance evidence-based decision making on food and nutrition issues through research.

Operational research is often needed to better implement field programmes. Valuable contributions that can improve nutrition are being made through these research, but there is need to disseminate and apply the finding widely.

2.7.1 Promotion of action oriented research on food and nutrition issues

Current situation

Operational research is currently taking place on a low scale in Sierra Leone with limited collaboration among relevant sectors. Inadequate dissemination of research findings is another cause for concern. Consequently, advocacy, policy and programme decision-making are not well informed and backed by empirical evidence. This in turn has led to constraints in the identification of relevant research areas and the utilisation of research recommendations to strengthen the impact of programmes. Therefore, there is a need to conduct timely and appropriate operational research taking into consideration the gaps identified in food and nutrition security interventions.

To improve the situation, efforts will be made to integrate operational research into the food and nutrition intervention programmes and advocate for more resources for relevant research. More collaboration between programmes and universities (internships, scholarships and consultancy) will be enhanced and partnerships with international research institutions fostered in developing capacities where needed.

Implementation Strategies

- Integration of operational research into the food and nutrition intervention programmes;
- Advocacy for more resources for relevant research;
- Increased collaboration between programmes and universities through internships, scholarships and consultancy;
- Development of partnerships with international research institutions;
- Timely and wide Dissemination of research finding.

The following activities will be undertaken as part the strategic action for promotion of action oriented research on food and nutrition issues:

- Advocate for adequate funding for operational research
- Advocate for improved linkages between programmes and universities/research institution (internships, scholarships, consultancy)
- Develop partnerships between local research institutions and international research institutions to strengthen capacity
- Facilitate closer participation of research institutions in programming to enhance identification of research ideas and dissemination of results
- Dissemination of research findings
- Training stakeholders on research concepts and principles to strengthen their capacity to conduct research
- Establish and maintain research unit to coordinate research

2.8 PRIORITY AREA 8: COORDINATION OF ACTIVITIES OF RELEVANT AGENCIES INVOLVED IN FOOD AND NUTRITION ISSUES

The specific objective of priority 8 is to strengthen the effective and efficient coordination of food and nutrition interventions.

Addressing the multi-faceted nature of the causes of malnutrition will be best done through a well-coordinated multi-sectoral approach. This section provides an overview of how the Food and Nutrition Security Policy Implementation Plan will be implemented and coordinated at the national, district and community levels to accomplish the intended goal and objectives of the multi-sector Action Plan. The aim of the arrangement is to support nutrition stakeholders at all levels in the country to minimise duplication, address unnecessary wastage of resources, ensure fair distribution of available resources and maximise the benefits accrued to the beneficiary population.

The following strategic interventions will be undertaken to achieve the objectives of priority area 8:

- Appropriate structures to coordinate nutrition activities developed and implemented;
- An information-sharing platform established.

2.8.1 Appropriate structures to coordinate nutrition activities developed and implemented

One of the major reasons for the challenges of past efforts in tackling the malnutrition problems in the country has been the lack of an institutionalized mechanism to govern and coordinate the implementation of the interventions. This has often resulted in duplication of services and programmes, inequitable distribution of resources leading to limited impact of interventions. Nutrition interventions have been implemented mostly as vertical projects with limited human capacity; technical competency and inadequate numbers in the implementation landscape. There is need therefore to assure inter-ministerial cooperation and coordination on nutrition and food security through an effective coordinating committee.

Current Situation

The Sierra Leone Food and Nutrition Security Policy Implementation Plan recognises the need to strengthen the coordination structure at national institutional level to enhance planning, implementation oversight, monitoring, and supervision. The aim is to optimise the benefits to key target groups with the limited available resources.

The following coordination mechanisms are in place:

1. National level Coordination mechanisms
   - National Food and Nutrition Security Steering Committee
   - National Food and Nutrition Security Technical Coordination Committee
   - Sector based technical coordination mechanisms

2. Sub national level Coordination mechanisms
   - District Food and Nutrition Security Coordination committee
   - District Sector Coordination Committees
   - Chiefdom/Ward/Village Coordination Committees

National level coordination mechanisms

The Food and Nutrition Security Steering Committee is the top-most policy making body governing the Food and Nutrition Security Implementation Plan. The Vice President chairs it and its members include all Ministers (MOHS, MAFFS, MSWGCA, MEST, MMR, MTI, MLG, MWR, and MOFED), and representatives from NaCSA, UN, and Donor agencies involved in the implementation of the Food and Nutrition Security Implementation Plan. The Steering Committee meets once every quarter In line with its existing roles, it provides the overall strategic vision to promote food and nutrition security through an inter-sectoral approach.

The steering committee meets on a quarterly basis.

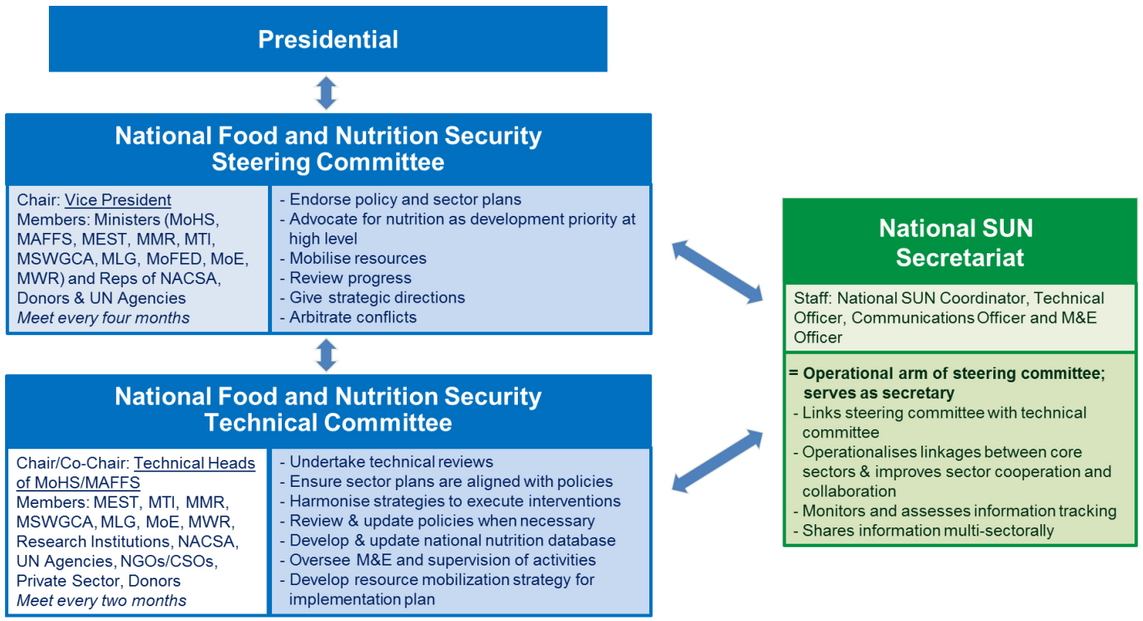
The roles of Food and Nutrition Security Steering Committee include:

- To provide strategic direction to the Food and Nutrition Security Implementation Plan and take key policy decisions; this include policy issues which cut across a number of areas of government's work, spanning multiple government ministries;

- To commission work to the successful implementation of the Food and Nutrition Security plan to improve the effectiveness in achieving its objectives;

- To ensure that sufficient resources are mobilised to enable full scale-up.

Figure 13: Linkages between the National coordination mechanisms



Establishment of a National Food and Nutrition Security Technical Coordination Committee:

This structure is the operational or technical arm of the steering committee that meets on a quarterly basis. This is a Multi-Sector Technical Committee and its membership comprise of key technical experts from the relevant government ministries, Research Institutions, UN Agencies, Development Partners, Private Sector, Research, Academia, NGOs and the Civil Society (Diagram 11). The Committee will be alternatively chaired and co-chaired by the MOHS (Chief Medical Officer) and MAFFS (Director General) and will meet on a quarterly basis and report to the Steering Committee through the SUN Secretariat.

Roles and Responsibilities

The Technical Committee will undertake the following responsibilities:

- Ensure sector plans are aligned with policy
- Promote and support joint sector planning
- Harmonize strategies for execution of interventions
- Provide regular update to the Committee on on-going field activities
- Undertake technical review and propose update of policy
- Develop and update national database for nutrition
- Oversee M&E and supervision of activities
- Coordinate actions with the district level, providing technical support, guidelines, supervision and feedback

The national sector based technical coordination mechanisms i.e. Nutrition technical coordination committee, WASH committee, the Health Development Partners committee and the Agriculture Advisory Group will continue with their functions and they will play a supportive role to the Food and Nutrition security coordination committees.

The SUN Secretariat

The SUN Secretariat has been established in the office of the Vice President with the primary mandate to coordinate the efforts of different SUN Movement stakeholders, to manage the Secretariat of core staff and support the Vice President in facilitating and leading coordination, promote networking, resource mobilization and implementation of SUN activities as well as muster multi-sectoral collaboration with a clear and sustained political commitment.

Roles and responsibilities

Specific roles and responsibilities of the SUN Secretariat include the following:

Support for Coordination Meetings

- Prepare, organise and take minutes for the steering committee meeting in close liaison with the Chairperson. Agenda items for the steering committee to be proposed by the technical committee
- Follow-up action points decided during the technical and steering committee meeting to ensure that they are fully implemented
- Disseminate minutes to all members of the steering and technical committees
- Develop the capacity of districts to establish multi-sectoral coordination mechanisms for nutrition
- Liaise with all SUN Networks to ensure that they fully participate in the Scaling Nutrition actions

Planning, M&E

- Analyse trends and risks and provide cross-sector analytical support for nutrition on a regular basis to inform policy and programming
- Conduct mapping exercise to update who is working where and possible gaps that need attention
- Organise annual review and planning meetings for all sectors and stakeholders to monitor progress against targets and develop new plans
- Regularly track investments and identification of funding gaps for the national nutrition plan
- Support resource mobilisation function for sections of the plan that are not well resourced
- Establish a consolidated M&E database and continuously provide reports to the technical committee and the steering committee
- Facilitate sector cooperation and collaboration and improve linkages between core sectors
- Provide support and sensitisation to the sectors to better understand how they contribute to the broader nutrition agenda
- Provide support to the districts to prioritise nutrition actions and develop integrated district plans
- Coordinate the review of the national nutrition implementation plan at midterm and end term

Information Sharing

- Maintain a database and a mailing list of all key stakeholders for communication purposes
- Organise stakeholder events to discuss key issues on nutrition on a need basis
- Provide coordination support to all sectors and stakeholders to ensure progress in implementation of the plan
- Establish and operationalise an information sharing platform to ensure that all partners are fully engaged

Advocacy

- Coordinate and lead advocacy events for issues requiring joint advocacy

- Coordinate the development and implementation of an advocacy strategy for the national implementation plan
- Prepare and support nutrition champions to advocate for nutrition by providing materials and other relevant information

District level coordination mechanisms:

Provisions of social services in Sierra Leone have been decentralized to the District Councils. The Councils in collaboration with the Technical Ministries and the communities design, plan, implement, monitor and supervise development activities at the district level. One of the mandates of the District Council is the overall coordination of all development activities in the district. Each District Council is consistently working towards the development of a single integrated development plan. Through the mainstreaming of the right to food at all levels, the capacity of local councils to plan and integrate food and nutrition security into the district development plans will be enhanced. The district councils will establish a District Food and Nutrition Security Coordination Committee composed of representatives of departments in the relevant sectors, civil society organizations, NGOs, private sector, and other relevant institutions at the district level. The Committee will be chaired by the Chief Administrator and will meet once every quarter and will link and report to the National Food and Nutrition Security Technical Committee.

Roles and Responsibilities

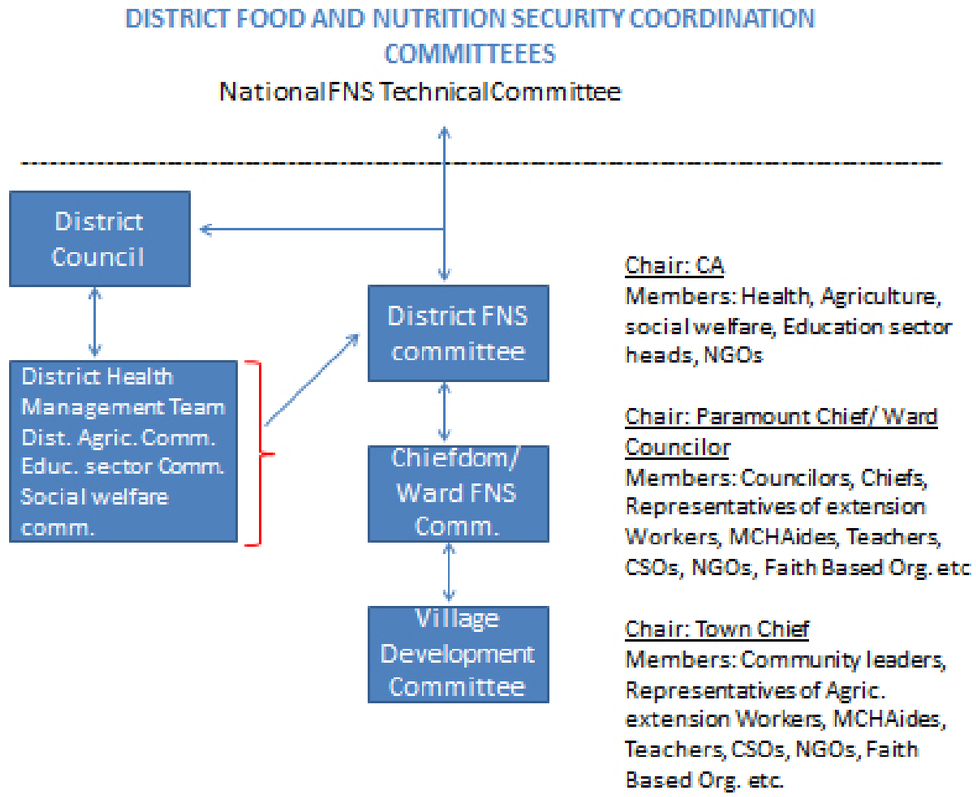
Specifically the roles of the Committee will be as follows:

- Ensure that food and nutrition security considerations are fully integrated in the district development plans
- Assist the various sectors to generate resources for their interventions
- Ensure that every stakeholder generates the requisite data vital for informed coordination and decision making
- Support assessments, reviews, monitoring and supervision of food security and nutrition security interventions
- Ensure that district and sector plans are implemented as planned
- Coordinate actions at the community levels providing technical support, guidelines, supervision and feedback

District Sectorial Coordination Committees:

Some government ministries have well established technical coordination mechanisms at the district level. These are the District Health Management Teams (DHMTs) and the District Agriculture Committees (DAC). They meet every month to plan, monitor progress of implementation and address challenges encountered. The sectoral committees also interpret and execute policies to all stakeholders so that they can align their interventions accordingly. Members of these sector committees comprise of key departments, NGOs, relevant civil society groups and private sector entities providing services within the mandate of the Sector. The sector coordination committees will be strengthened for the smooth implementation of this plan and to provide technical support to the District Food and Nutrition Security coordination committee.

Figure 14: District food and nutrition security coordination Structure



Community level coordination:

The participation of the community is critical in the implementation of this action plan. Through the right to food initiative, the community will be sensitised to enhance their participation in claiming their rights and holding the duty bearers to account on the implementation of the plans. Community level coordination committees are composed of the Ward Committees, Chiefdom Development Committees and the Village Development Committees. While some of these committees function well in some districts, they are dormant in others. The functional committees will be used as entry points to coordinate food and nutrition interventions at the community level and enhance information flow to and from the district. The functions of the different governance systems are as indicated in Table 6.

Table 27: Governance structures at the community level

Unit	Leadership	Governance body	Responsibility
Ward	Ward Councillor (Democratic structure)	Ward Committee (5 men, 5 women)	• Political representation of the community • Articulate and prioritise community needs for planning
Chiefdom	Paramount Chief (Traditional structure)	Chiefdom Development Committee	• Traditional leadership • Resource allocation • Custodian of cultural and traditional norms
Village	Town Chief	Village/Area/Health Development Committee	• Manage community development interventions

For each of these coordination mechanisms (Table27), TORs will be developed, defining membership, roles and responsibilities and reporting lines. To enhance coordination, a mechanism to enhance communication and information sharing will also be defined. It will also be important that the coordination committees are provided with the necessary technical support to enable them function effectively.

The following activities will be undertaken as part the strategic action:

- Develop food and nutrition security coordination mechanism framework at a district levels
- Advocate for the implementation of the coordination framework
- Develop the capacity of a national secretariat to support coordination of all multi-sector activities at district level

2.8.2 An information sharing platform established

The important role of information is well recognized as one of the key elements in addressing both immediate- and long-term nutrition and food security issues. There are many key players involved in developing and maintaining food security information systems – including government line ministries/agencies, development partners, and non-governmental organizations. However, there is need for a platform for sharing standards, methods, tools, knowledge, news, and capacity development opportunities on nutrition and food security.

There is a need for a facilitator between the networks for capacity development needs and development partners, including the donor community; and an advocate for timely communications and evidence-based analysis and decision-making on nutrition and food security.

Current Situation

Currently, several mechanisms have been put in place to coordinate nutrition and food security information between and among key stakeholders involved in the production, organization and dissemination of nutrition and food security information. However, more work needs to be done to strengthen networking and coordination between and among the information systems in order to facilitate widespread easy access to and use of the information in relation to decision making by potential target audiences.

The following strategies will be applied to address the above problems, namely:

- SUN Secretariat to coordinate the networks providing appropriate information;
- Multi-stakeholder thematic Technical Working Groups, which will be established upon members' request to provide expert advice as required;
- Development of linkages with a broad range of partners to facilitate the exchange of experiences and field practices in food security and nutrition information and analysis among national, regional and other global or thematic networks.
- Sun Secretariat to identify and establish appropriate multi-sector information sharing platform;
- Technical Committee to analyse and disseminate food and nutrition data at national and district levels.

PART III: FINANCING FRAMEWORK

The proposed budget estimates for the implementation of the Sierra Leone National Food and Nutrition Security Action plan cover all activities under each objective of the plan. The total cost of the budget for the five (5) years (2013 – 2017) is US$ 128,661,198.Financing the proposed budget for the implementation of the national action plan will be a joint effort between the Government of Sierra Leone, Development Partners, Civil Society Organizations and the private sector. However the government will make every effort to make very meaningful contributions towards meeting the budget.

THE GOVERNMENT OF SIERRA LEONE

The central and local governments of Sierra Leone, in collaboration with other agencies and development partners will finance the national food and nutrition security action plan through focused resource reallocation within existing budgets as well as mainstreaming nutrition in various sector programmes to increase nutrition visibility and resource availability. This means higher prioritization of food security and nutrition in national programmes – specifically in sectors such as MOHS, MAFFS, MSWGCA, MEST, MOFDEP, MOTI MWR, and local government. The government has established an integrated financial management system and is compiling all allocated budgets to have a full picture of the situation. For effective resource mobilization, there will be strong advocacy campaigns to demonstrate to the various sectors and development partners the cost-effectiveness of improved investment in nutrition compared to the adverse effects of failing to do so. There will be need to coordinate existing and available resources for food and nutrition security within the national budget, private sector, and from development partners to maximize on impact. As much as possible, the government will promote and support community ownership in addressing food and nutrition problems. In this way community contributions will gradually increase towards food and nutrition security interventions. This in turn will engender sustainability of actions through community efforts.

DEVELOPMENT PARTNERS

The Government recognizes the fact that current domestic budgets alone will not be able to finance the national food and nutrition security action plans adequately to meet the desired level of investment required to sustainably achieve the identified nutrition targets. While the Government will seek to entirely fund the action plans from purely domestic sources, it will continue to depend on external resources in the short and medium term, as government progressively reduces its reliance on donors for increasing investment in nutrition. Opportunities for initial resource mobilization will be through the nation's traditional donor partners. The Government will further take advantage of existing and new global and regional initiatives including CAADP, and the Scale Up Nutrition (SUN) among others.

For many years the support for nutrition programmes was fragmented with minimal impact on the nutrition outcomes especially for children and women. In order to address this anomaly, there will be strong advocacy for basket funding for nutrition and food security programmes from the nutrition and food security development partners in order to maximize food and nutrition security investment. This will facilitate a more holistic approach to nutrition programming and implementation, to avoid the tendency to implement only those activities that would have received funding, even when they have limited scope and potential impact.

Some development partners provide direct support to the civil society Organizations, NGOs and to some districts outside the Government budget. Although Government will not discourage this initiative, Government would like to be well informed of the support provided and the types of activities in the action plan being funded so as to have a fairly accurate assessment of coverage and existing gaps.

PUBLIC-PRIVATE SECTOR PARTNERSHIP

Government will seek strategic public–private sector partnership (PPP) especially with interventions that have potential for highest cost effectiveness in sustainably addressing malnutrition in the country. Emphasis will be on the value chain, and labour saving technologies (inputs, food fortification). The government will play a role in promoting investments in nutrition sensitive enterprises by strategies such as tax exemption and advocacy for increased private sector investment programs. In addition, the government will develop capacities of the private sector to invest in nutrition sensitive enterprises e.g. food fortification.

FINANCIAL MANAGEMENT

Budgeting Accountability ACT of 2005 is the system promoted by the government to ensure transparency and accountability. The MOFDEP is currently working on an updated version of the system ACT to be implemented soon. MoFED will mobilize and provide resources and ensure that the budget allocation places priority on nutrition interventions to contribute to the attainment of the MDGs.

PROCUREMENT AND SUPPLIES

The national procurement act and secretariat is the office coordinating all national procurement. Every institution is supposed to follow the procurement plan designed by the national procurement secretariat. Every year, procurement plans are supposed to be designed and procurement related activities identifying various timelines and procurement needs factored into the plan and costed. All line ministries that are implementing nutrition related activities are expected to prepare, cost and submit the procurement plans, to the national procurement secretariat for verification and compliance before activities are carried out. However, the government does not currently have adequate capacity to compile all the procurement plans. All ministries and MDAs should ensure that trained procurement staffs are recruited to handle this function.

Table 28: Summary of five-Year costed Implementation Matrix+

Policy Objectives	2013	2014	2015	2016	2017	Total Budget	%
Specific Objective 1: To advocate for policy makers, policy advisors and programme designers at national and district levels on Nutrition issues and its relationship to development	384,239	131,045	112,848	99,740	111,727	839,599	0.7
Specific Objective 2: Promoting and facilitating adequate national and household food security	2,200,000	3,800,200	4,392,060	3,328,713	3,667,299	17,388,272	14.9
Specific Objective 3: Adoption of appropriate feeding practices for vulnerable groups	1,233,367	6,271,235	6,204,847	2,360,239	2,032,951	18,102,639	15.5
Specific Objective 4: Strengthening preventive measures against nutrition and other related infectious diseases	4,020,433	5,096,180	5,545,214	4,614,099	3,973,904	23,249,830	19.9
Specific Objective 5: Provision of curative services to malnourished individuals	6,596,300	9,517,115	10,499,621	11,506,152	11,329,060	49,448,248	42.3

Specific Objective 6: To institute nutritional surveillance system for monitoring the food and nutrition situation in the country	994,289	1,237,453	1,219,476	851,400	909,270	5,211,888	4.5
Strategic Objective 7: To promote operational research and periodic surveys into food and nutrition issues	140,329	121,045	122,848	124,740	126,727	635,689	0.5
Strategic Objective 8: To coordinate activities of relevant agencies involved in food and nutrition issues	602,256	372,483	358,712	367,863	387,246	2,088,560	1.8
TOTAL	**16,171,213**	**26,546,756**	**28,455,626**	**23,252,946**	**22,538,184**	**116,964,725**	**100**
CONTINGENCY (10%)	**1,617,121**	**2,654,675.60**	**2,845,562.60**	**2,325,294.60**	**2,253,818.40**	**11,696,473**	
GRAND-TOTAL	**17,788,334**	**29,201,431.60**	**31,301,188.60**	**25,578,240.60**	**24,792,002.40**	**128,661,198**	

PART IV: ANNEXES

DEFINITIONS OF ACRONYMS

Agricultural Business Centre: In agriculture, agribusiness is the business of agricultural production. It includes crop production (farming and contract farming), seed supply, agrichemicals, farm
AIDS: a disease of the immune system characterized by increased susceptibility to opportunistic infections, to certain cancers, and to neurological disorders: caused by a virus
Behavior change communication: is a process of any intervention with individuals, communities and/or societies to develop communication strategies to promote positive behaviors which are appropriate to their settings.
Baby Friendly Hospital Initiative (BFHI), also known as Baby Friendly Initiative (BFI), is a worldwide programme of the World Health Organization and UNICEF, launched in 1991(1)(2) following the adoption of the Innocenti Declaration on breastfeeding promotion in 1990.(3) The initiative is a global effort for improving the role of maternity services to enable mothers to breastfeed babies for the best start in life.
Body Mass Index (BMI): is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems.
Basic Emergency Obstetric and Neonatal Care: Explain the rationale for including emergency obstetric and newborn care ... and newborn mortality; Define each of the key functions of basic emergency
Comprehensive Africa Agriculture Development Programme (CAADP): is about bringing together diverse key players - at the continental, regional and national levels - to improve co-ordination, to share knowledge, successes and failures, to encourage one another, and to promote joint and separate efforts to achieve the CAADP goals.
Comprehensive Food Security and Vulnerability Analysis (CFSVA): is a baseline survey that provides an in-depth picture of the food security situation and the vulnerability of households in a given country. It is conducted at normal times, and not during a crisis, in countries subject to vulnerabilities.
Cash for Work: Providing cash in exchange for work makes it possible for the poor and hungry to ... They receive food, so they can devote time to the building work without worry about ... on women · Centre of Excellence Against Hunger · Cash and Vouchers ...
Community health workers (CHW) are members of a community who are chosen by community members or organizations to provide basic health and medical care to their community. Other names for this type of health care provider include village health worker, community health aide, community health promoter, and lay health advisor.
Permanent Interstate Committee for Drought Control in the Sahel (CILSS) A committee involved in the research of food security and to combat the effects of drought and desertification for better ecological stability.
Community-led total sanitation (CLTS) is an innovative methodology for mobilising communities to completely eliminate open defecation (OD). Communities are facilitated to conduct their own appraisal and analysis of open defecation (OD) and take their own action to become open defecation free (ODF).
Community-Based Management of Acute Malnutrition (CMAM): An approach that enables community volunteers to identify and initiate treatment for children with acute malnutrition before they become seriously ill
Catholic Relief Services (CRS) is the international humanitarian agency of the Catholic community in the United States. Founded in 1943 by the U.S. bishops, the agency provides assistance to 130 million people in more than 90 countries and world wide
District Agricultural Committee: committee that renders expert advice as to the nature of farming and forestry and agricultural and forestal resources within the district and their relation to the entire locality.

District Health Management Team (DHMT): Healthcare in Sierra Leone is provided by a mixture of governmental, private and non-governmental organizations (NGOs). The Sierra Leone government has divided the country into 13 health districts based on the administrative districts of Sierra Leone.

Demographic and Health Surveys (DHS) Project is responsible for collecting and disseminating accurate, nationally representative data on health and population in developing countries. The project is implemented by ICF International and is funded by the United States Agency for International Development (USAID) with contributions from other donors such as UNICEF, UNFPA, WHO, and UNAIDS. DHS is highly comparable to the Multiple Indicator Cluster Surveys and the technical teams developing and supporting the surveys are in close collaboration.

Exclusive breastfeeding: Percentage of infants <6 months (0-6 months or <183 days, i.e., until the day before completing their sixth month) who were exclusively breastfed in the previous 24 hours. An infant is considered to be exclusively breastfed if he/she receives only breast milk with no other liquids or solids (not even water), with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.

Expanded Program on Immunization (EPI): The World Health Organization (WHO) initiated the Expanded Program on Immunization (EPI) in May 1974 with the objective to vaccinate children throughout the world. Ten years later, in 1984, the WHO established a standardized vaccination schedule for the original EPI vaccines: Bacillus Calmette-Guérin (BCG), diphtheria-tetanus-pertussis (DTP), oral polio, and measles. Increased knowledge of the immunologic factors of disease led to new vaccines being developed and added to the EPI's list of recommended vaccines: Hepatitis B (HepB), yellow fever in countries endemic for the disease, and Haemophilus influenzae meningitis (Hib) conjugate vaccine in countries with high burden of disease

Early warning system: specifically a functional early warning system, is a chain of information communication systems comprising sensor, detection, decision, and broker subsystems, in the given order, working in conjunction, forecasting and signaling disturbances adversely affecting the stability of the physical world eg. Food production; and giving sufficient time for the response system to prepare resources and response actions to minimize the impact on the stability of the physical world/food security

Farmer Based Organizations: They are membership-based organizations created by specific groups of farmers to provide services to and represent the interests of their own members.

Farmer field school: School without walls. A group of farmers gets together in one of their own fields to learn about their crops and things that affect them.

Food for work: Community members are given food in exchange for work on vital new infrastructure or for time spent learning new skills that will increase the food security of households or communities.

Global Acute Malnutrition (GAM): GAM is a population level indicator that is measured by either WFH <80% of the reference median or <-2 Z scores and/or oedema. Global acute malnutrition is divided into moderate acute malnutrition (MAM) and severe acute malnutrition (SAM).

Height for Age index (HFA): It expresses the height of a child in relation to his/her age and measures stunting (chronic malnutrition). Stunting is indicated by HFA <-2 Z scores; severe stunting is indicated by HFA < - 3 Z scores.

Human immunodeficiency virus: A lentivirus that causes the acquired immunodeficiency syndrome, a condition in humans in which progressive failure of the immune system allows life-threatening opportunistic infections and cancers to thrive

Information, Education and Communication (IEC): A public health approach aiming at changing or reinforcing health-related behaviours in a target audience, concerning a specific problem and within a pre-defined period of time, through communication methods and principles (definition adapted from "Information, education and communication – Lessons from the past; perspectives for the future").

International Fund for Agricultural Development (IFAD): A specialized agency of the United Nations, was established as an international financial institution in 1977 as one of the major outcomes of the 1974 World Food Conference. Works with poor rural people to enable them to grow and sell more food, increase their incomes.

Intermittent Preventive Treatment in Pregnancy (IPTP): WHO recommends that this preventive treatment with sulfadoxine- pyrimethamine (IPTP-SP)be given to all pregnant women at each scheduled antenatal care visit except during the first trimester. WHO in all areas with moderate to high malaria transmission in Africa.

Insecticide-treated bed nets (ITNs): are a form of personal protection that has been shown to reduce malaria illness, severe disease, and death due to malaria in endemic regions. The insecticides that are used for treating bed nets kill mosquitoes, as well as other insects. In community-wide trials in several African settings, ITNs have been shown to reduce the death of children under 5 years from all causes by about 20%.

Infant and Young Child Feeding (IYCF): Age appropriate feeding practices for infant and young children for optimal growth and development. Major components include early initiation of breastfeeding, exclusive breastfeeding 0-6 months, continued breastfeeding with giving of age appropriate complementary foods up to 24 months. Feeding of children during illness including HIV/AIDS hygiene practices and growth monitoring.

Inland valley swamps (IVS): are defined as the upper sections of a river drainage system, comprising valley bottoms, their hydromorphic fringes and flood plains. Their soils are submerged or saturated during a substantial part of the year.

Ministry of Agriculture, Forestry and Food Security (MAFFS): Agricultural development is a priority for the Government of Sierra Leone and falls under the remit of the Ministry of Agriculture, Forestry and Food Security.

Micronutrients: Nutrients required by humans and other organisms throughout life in small quantities to orchestrate a range of physiological functions consisting mainly of minerals and vitamins

Micronutrient Powder (MNP): Home-based multiple micronutrient supplements developed to date have primarily taken the form of powders to be added to food just before it is eaten. They provide easy-to use, practical solutions to mothers and caregivers who are interested in improving the vitamin and mineral health of their children

Moderate Acute Malnutrition(MAM): MAM is indicated by WFH < 80% and >70% of the reference median or <-2 Z scores and > -3 z scores or MUAC > 110 but < 120 mm.

Multiple Indicator Cluster Surveys (MICS): Survey program developed by the United Nations Children's Fund to provide internationally comparable, statistically rigorous data on the situation of children and women.

Mother to Mother Support Groups (M2M): Group of mothers that meet regularly and offer emotional, social and educational (counselling) support as peers on infant and young child feeding. Target is usually pregnant & breastfeeding mothers & families.

Mid Upper Arm Circumference index (MUAC): MUAC is a good indicator of mortality risk associated with acute malnutrition. MUAC<110mm indicates severe acute malnutrition; MUAC >110 and <120 mm indicates moderate acute malnutrition.

National Commission for Social Action (NaCSA): NaCSA (formerly National Commission for Reconstruction, Resettlement and Rehabilitation, NCRRR) is to promote community-based, demand-driven and sustainable social and economic activities, leading to the alleviation of poverty, reduction in the threat of renewed conflict and improvement in the speed, quality and impact of development initiatives, in collaboration with other stakeholders.

Non Communicable Diseases (NCDs): Also known as chronic diseases, are not passed from person to person. They are of long duration and generally slow progression. The four main types of non-communicable diseases are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.

Non-governmental organization (NGO): also often referred to as "civil society organization" or CSO) is a not-for-profit group, principally independent from government, which is organized on a local, national or international level to address issues in support of the public good.

Nutritional oedema: Nutritional oedema is a form of severe acute malnutrition characterized by bilateral pitting oedema of the feet.

Open Defecation Free (ODF): CLTS is a critical component of UNICEF's work in water, sanitation and hygiene. Through a participatory process, community's desire for change are ignited and encouraged to find their own solutions to safe sanitation.

Oral Rehydration Salts (ORS): A special drink that consists of a combination of dry salts. When properly mixed with safe water, the ORS drink can help rehydrate the body when a lot of fluid has been lost due to diarrhea. A child with diarrhea should never be given any tablets, antibiotics or other medicines unless these have been prescribed by a medical professional or a trained health worker. The best treatment for diarrhea is to drink lots of liquids and oral rehydration salts (ORS) properly mixed with water.
Oral rehydration therapy (ORT) A home and medical treatment that involves the oral administration of a solution of small amounts of sugar and salt in water, in order to prevent or treat dehydration. ORT is used to treat dehydration caused by diarrhoea or vomiting in infants and children, especially those with cholera
Outpatient Therapeutic Programme (OTP): Feeding programme for rehabilitation of severely acutely malnourished (SAM) children without complication at peripheral Health Unit (PHU) level in the communities using Ready to use therapeutic food (RUTF)
Orphans and Vulnerable Children (OVC): An orphan is a child aged zero to 17 years whose mother, father, or both have died (World Bank OVC Toolkit). There are, however, other children who are referred to as social orphans even though one or both their parents may still be alive but who have been unable to perform parental duties because of illness or acute poverty among other reasons. -
Purchase for Progress (P4P): is a five-year initiative of the United Nations World Food Programme (WFP), started in 2008 in partnership with Bill and Melinda Gates Foundation, the Howard G. Buffett Foundation and other donors. The program, largely developed by the Executive Director of the WFP, arose as the WFP desired to purchase food in a way that was part of the "solution to hunger, and it enables low-income farmers to supply food to the WFP's operations
Peripheral Health Unit (PHU) Healthcare in Sierra Leone is provided by a mixture of governmental, private and non-governmental organizations (NGOs). The Sierra Leone government has divided the country into 13 health districts based on the administrative districts of Sierra Leone and manned by the District Health Management Team
People living with HIV and/or Tuberculosis (PLHIV/TB): Proper nutrition is an essential means of protecting the lives and livelihoods of people living with HIV and/or Tuberculosis (TB). Improved food security also plays a critical role in helping to stop the spread of the epidemics.
Prevention of Mother to Child Transmission (PMTCT) HIV is the leading cause of death for women of reproductive age worldwide and a major contributor to infant mortality. PMTCT strategies reduce the risk of mother-to-infant transmission from nearly 40 percent to under 5 percent. PMTCT is a gateway for HIV prevention, treatment, care, and support services for the whole family.
Renewed Efforts Against Child Hunger and Under-nutrition (REACH): Is the joint United Nations initiative to address Millennium Development Goal (MDG) 10, Target 3, i.e., to halve the proportion of underweight children under 5 years old by 2015. The United Nations Food and Agriculture Organization (FAO), the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP), and the International Fund for Agricultural Development (IFAD) developed and tested a facilitation mechanism to act as a catalyst for scaling up multisectoral nutrition activities.
Reproductive Health and Family Planning (RHFP): Family planning and reproductive health are integral components of a broad, integrated health framework that links to maternal and child health, the prevention and treatment of HIV/AIDS, and other health areas. Family planning is a proven, cost-effective intervention that empowers women and men to exercise their right to make voluntary and informed decisions about the number, spacing, and timing of pregnancy and childbearing. It contributes to reductions in unwanted pregnancies, maternal and child death, malnutrition, poverty, and the spread of HIV and to economic development
Severe Acute Malnutrition (SAM): SAM is indicated by WFH < 70% of the reference median or <-3 Z scores or MUAC < 110 mm and/or the presence of oedema.
Smallholder Commercialization Programme: commercialization of smallholder agriculture through increasing productivity, value addition, and marketing with emphasis on commodity chain development and institutional strengthening of farmer based organizations.
Supplementary feeding programmes (SFP): Feeding programmes primarily designed to distribute food among targeted beneficiaries in order to improve their nutritional status or to prevent deteriorate on in their health and nutrition, both under emergency conditions and in response to chronic food and nutrition insecurity and structural vulnerability.

Standardize Methodologies for Assessment of Relief and Transition (SMART): standardize methodologies for assessing needs based on nutritional status, mortality rate, and food security. They monitor the extent to which the relief system is meeting the needs of the population and the overall impact and performance of humanitarian response – thus, these indicators are appropriate for monitoring global trends as a collective effort.
Soil-Transmitted Helminth (STH): Different species of parasitic worms which contaminate the soil in areas where sanitation is poor and cause worm infestation in humans and animals.
Scaling Up Nutrition (SUN): Is a unique Movement founded on the principle that all people have a right to food and good nutrition. It unites people—from governments, civil society, the United Nations, donors, businesses and researchers—in a collective effort to improve nutrition.
Timely initiation of breastfeeding: Percentage of infants under 12 months of age (0-12 months or <366 days, i.e., until the day before their first birthday) who were put to the breast within one hour of birth.
Village Health Committees (VHC): Village Health Committee is a joint initiative of State Rural Health. It work in collaboration with government, NGOs, various stake holders civil society groups with a view to provide and facilitate proper training, monitoring and support to the Village Health Committees.
Weight for Age index (WFA): It is a composite index expressing either wasting and/or stunting and measures underweight. Underweight is indicated by WFA <-2 Z scores; severe underweight is indicated by WFA < - 3 Z scores.
Weight for Height index (WFH): It expresses the weight of a child in relation to his/her height and measures wasting (acute malnutrition). Wasting is indicated by WHF <-2 SD; severe wasting is indicated by a WHF < -3 SD.
Z-SCORE: Standard scores are also called z-values, z-scores, normal scores, and standardized variables; the use of "Z" is because the normal distribution is also known as the "Z distribution". They are most frequently used to compare a sample to a standard normal deviate (standard normal distribution, with $\mu = 0$ and $\sigma = 1$

M&E Plan

Indicator	Assumptions	Indicator Definition (& unit of measurement)	Data Collection Methods/Sources	Frequency & Schedule	Responsibilities	Information Use/ Audience
IMPACT: Reduced under-five mortality in Sierra Leone						
Impact Indicator: Under-five mortality rate due to malnutrition	Political will/commitment in support of nutrition programmes.	Rate of death of under-five children attributed to malnutrition	DHS, MICS	3-5 years	MoHS, SSL	Planning for nutriton interventions that will contribute to reduce U5 mortality rate, policy foumulation, resource mobilisation, for accountability to Donors, communities
OUTCOME: Reduced malnutrition among under-five children						
Outcome Indicator 1.1: % of Under-five children severely underweight		% of under-fives with weight-for-age below 3 standard deviations of the Z-score	DHS, MICS, SMART and coverage surveys	3-5 years		Planning for nutriton interventions that will contribute to reduction of sunting, wasting and under weight in U5 children. Policy fomulation, resource mobilisation, for enhancment of Nutrition inteventions and accountability to Donors, communities
Outcome Indicator 1.2: % of Stunting among children under five years		% of under-fives with height-for-age below 3 standard deviations of the Z-score	DHS, MICS, SMART and coverage surveys	3-5 years	MoHS, SSL	
Outcome Indicator 1.3: % of wasting among children under five years		% of under-fives with weight-for-height below 3 standard deviations of the Z-score	DHS, MICS, SMART and coverage surveys	3-5 years	MoHS, SSL	
Outcome Indicator 1.4: Food consumption score		% of Households with food consumption score above 20%	Vulnerability Assessment mapping (WFP) Food security survey (MAFFS, FAO))			
Outcome Indicator 1.5: % of the national budget allocated to addressing food and nutrition issues						
Outcome Indicator 1.6: % of members in Cabinet, Parliament and District Councils who are Food and Nutrition Security Champions						
OUTPUT 1: Nutrition is high profied in the national development agend by all stakeholders and at all levels.						
Output indicator 1.1: # of targeted advocacy efforts reaching Cabinet, Parliament, and District Councils						
Output indicator 1.2: # of partners using harmonised messages on food and nutrition security across all sectors						
Output indicator 1.3: # of Food and Nutrition Focal Persons across all sectors						
Output indicator 1.4: # of trained staff in nutrition and food security at the national and district levels						
Output indicator 1.5: # of institutions implementing national policy on maternity entitlements						
OUTPUT 2: Improved household food security						
Output indicator 2.1: # of small scale Farmers receiving training and accessing inputs	> Adequae land is provided to small scale farmers and women for increased agricultural activities. > There is sustained alternative coping mechanism for farmers while they train to produce more > People living with HIV/AIDS and TB and their ofsprings receive Appropriate treatment and supported with supplementary foods	Small scale farmers doing subsistence farming with access to agricultural extensionservices and training	Agricultural extension surveys, VAM,	every two years	MoAFFS, FAO, WFP, IFAD	Planning for increased food production ad distriution to enhane accessibility and affordability
Output indicator 2.2: # of Mother support groups receiving training and accessing inputs		Mother-mother support groups with access to information on IYCF practices	MoHS, UNICEF and external evaluations	Monthly, Quarterly and annually	MoHS,	Enhanced information through educational institutions
Output indicator 2.3: Nutrition education integrated into schools and institutions of higher learning		Schools and other instutions of learning including nutrition education in their curricular	Review of school curricular	Annually	MEST	MAFE extension workers, small scale farmers,
Output indicator 2.4: # of farmers supported to process and market their farm produce		Small scale farmers doing subsistence farming with access to agricultural extensionservices and training	MAFE extension and training reports	Monthly, Quarterly and annually	MAFE	Donors,
Output indicator 2.5: Vulnerable groups receive livelihood support through cash and food for work		Vulnerable groups receiving support in cash and kind through food for work	Reports from cash for work beneficiaries	Monthly, Quarterly and annually	MAFE	
OUTPUT 3: Improved breastfeeding and appropriate feeding practices for under fives and other vulnerable groups						

Indicator 3.1: Timely initiation of breast-feeding within one hour of birth	Communities and service providers are fully sensised on optimal infant and young child feeding. >Greater proportion of pregnant women deliver in recognised clinics. >Pregnant women and lactating mothers attend antenatal and postnatal clinics regularly	% of live births breastfed immediately after birth	HMIS, PHU records	Six monthly, annually	MoHS,	Planning for senitization of communities, Policy fomulation, resource mobilisation for scaling up of early, exclusive and continued breast-feeding. Comunities,Policy Makers, Donnor partners
Indicator 3.2: % of Infants 0-6 months exclusively breastfed		Children who are given only breast milk for the first six months	HMIS, PHU records	Six monthly, annually, 3-5 years	MoHS,	
Indicator 3.3: % of Children 6-23 months old with minimum acceptable diet		Children who continue breastfeeding after 6 months and are given minimum acceptable complementary feeds up to 23 months	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 3.4: % of Children 6-23 months old on timely initiation of semi/sold foods at 6 months		Children who are given timely complementary feeds at six months and continued breast feeding up to 23 months	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 3.5: Nutritional support to children infected and affected by HIV/AIDS, TB and OVCs provided		Under two years children of people living with HIV/AIDS that are given nutritional suppor	HMIS, PHU records, MICS, DHS	Monthly, Quarterly and annually, years 3-5	MoHS, SSL	
Indicator 3.6: Nutrition messages aimed at decision makers in households (fathers, mothers, grandmothers) developed and disseminated						

OUTPUT 4: Increased consumption of micronutrient fortificed foods and increased utilisation of services to prevent malnutrition, malaria and diarrhoe in pregnant women and underfive children						
Indicator 4.1: % of < 5s receiving Vitamin A supplementation (Routine)	Adequate supply of improved water and sanitation facilities are ensured >Communities are sensitised on good hygiene practises >Soap and water for hand washing facilities are positioned in critical areas. > That awareness raising, training of health workers and improved quality of care will lead to an increased uptake of SRH services including ANC. > HMIS data are reliable and provide relevant information to monitor activities. > That quality and accessible public, private, FBO and NGO services are available. > There is sufficient knowledge to overcome cultural barriers to access and uptake of ANC and MNH services and in the utilization of LLINs to protect against malaria. > Adequate ANC supplies and medicines are available to meet demand at the level of PHUs and private service providers. > There is sufficient knowledge to overcome cultural barriers to access and uptake of ANC and MNH services and in the utilization of LLINs to protect against malaria. > Adequate ANC supplies and medicines are available to meet demand at the level of PHUs and private service providers. > That stock-outs of ANC commodities (LLINs) and medicines are eliminated and that when requested, drugs and commodities are made readily avaliable and transported to service providers in	Children under-five years who receive routine Vitamin A supplementation at PHUs every six months	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	Planning for scaling up and resource mobilisation for twice yearly Vitamin A suppmentation for children 6-59 months and post-partum women
Indicator 4.2: % of Postpartum woment receiving Vitamin A supplementation (routine)		Post-partum women who receive routine Vitamin A supplementation immediately after delivery to within eight weeks	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.3: % of children 6-35 months old consuming foods rich in fruits and vegetables		Children aged 6-35 months whose mothers/caretakers report to have given fruits and vegetables in their diets	SMART, Special micronutrient surveys	Six monthly, annually, 3-5 years	MoHS,	
Indicator 3.4: % of diarrhoea among children <5 yrs		Children under-five years who report three or more watery stools per day in the past week	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	Emergency Planning and preparedness, resource mobilisation against outbreaks of diaarrhea diseases
Indicator 4.5: % care givers of under-five children who wash hands with soap and water at critical times		Care givers of under-five children who report washing their hands with soap and water before handling food and after using a toilet	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.6: % of Household with access to improved Sanitation facilities		Households who have access to safe disposal of human and household wastes	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.7: % of Household with access to improved water sources		Households who use water from sources that are considered safe	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.8: % HH using adequate water treatment methods		Households who report knowledge of water treatment methods	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.9: % Pregnant women attending four or more ANC sessions.		Pregnant women attending antenal clinic and are given Fansidar twice during pregnancy	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	Planning, Revision of strategies to improve antenatal care, institutional delivery and post-pertum care
Indicator 4.9: % Pregnant women attending four or more ANC sessions.		Pregnant women attending antenal clinic and are given Fansidar twice during pregnancy	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.10: % pregnant Women at ANC who receive two doses of Intermittent Preventative Treatment (IPT) for malaria.		New borns with birth weight less than 2.5 Kg	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	

Indicator 4.11: % of live births with Low Birth weight		Pregnant women with low haemoglobin levels	Micro nutrient surveys, DHS	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.12: Prevalence of Anaemia among pregnant women		Women of child bearing age who report using modern contraceptive methods	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS,	Improved strategies for uptake and scaling up family methods
Indicator 4.13: % of women who use modern contraceptive methods		Girls who become pregnant before age 18 years	MoHS, UNICEF and external evaluations	Six monthly, annually, 3-5 years	MoHS,	
Indicator 4.14: % of girls who become pregnant before age 18 years						
OUTPUT 5: Improved integrated management of acute malnutrition						
Indicator 5.1: SAM prevalenve among under-five children		under-fives with weight-for-height below 3 standard deviations of the Z-score	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS, SSL	Planning, resource mobilisation/MoHS, Donors, communities
Indicator 5.1: SAM prevalenve among under-five children		under-fives with weight-for-height below 2 standard deviations of the Z-score	HMIS, PHU records, MICS, DHS	Six monthly, annually, 3-5 years	MoHS, SSL	
OUTPUT 6: Functional early warning systems for threats to household food security or and nutrtion during emergencies						
Indicator 6.1: Identification and inclusion of relevant early warning indicators for nutriong surveillance	National nutritional planning provides for early warning systems and emergencies affecting household food security	Small scale farmers doing subsistence farming with access to agricultural extensionservices and training during emergencies	Agricultural extension surveys, VAM,	every two years	MoAFFS, FAO, WFP, IFAD	Planning for increased food production ad distriution to enhane accessibility and affordability during emergencies
Indicator 6.2: Development and use of national preparedness plans for threats to household food security		Availability of national preparedness plan on nutrition	MoHS, UNICEF and external evaluations	Monthly, Quarterly and annually	MoHS,	
Indicator 6.3: Quarterly nutrition surveillance reports on the situation of the Sierra Leone food annutriton d		rapid evaluations and monitoring of nutritional situation in the country	MoHS, UNICEF, WFP, MAFE, FAO and external evaluations	Periodic	MoAFFS, FAO, WFP, IFAD	
OUTPUT 7: Available evidence informs policy and programming on nutrition and food security situation in Sierra Leone						
Indicator 7.1: Identification and annual conduction of at least 2 operational researches on the nutrition and food security	Research institutions and policy makers are committed to research and generating evidence for nutrition and food security in the country. > Farmers are willing to adopt new nutrition and food security practices	conduction of research on nutrition and food security	MoHS, UNICEF, WFP, MAFE, FAO and external evaluations	Annually	MoAFFS, FAO, WFP, IFAD	
Indicator 7.2: # of new high yielding food crop varies identified		introduction of new food varieties in the agricultural sector	MoHS, UNICEF, WFP, MAFE, FAO and external evaluations	Annually	MoHS, MoAFFS, FAO, WFP, IFAD	
Indicator 7.3: Proportion of farming families adopting new nutrtion and food security practices		Rapid reseaches in farming families on the adoption of new food consumption practices	MoHS, UNICEF, WFP, MAFE, FAO and external evaluations	Annually	MoAFFS, FAO, WFP, IFAD	

OUTPUT 8: Nutrition and food security programmes in Sierra Leone effectively coordinated at levels						
Indicator 8.1: Establishment of nutrition and food security structures at all levels	National commitment to sustained nutrition and food security in Sierra Leone	Availability of functional nutrition and food security governance structures at national and district levels		Ongoing	MDAs and other stakeholders responsible for nutrition and food security	
Indicator 8.2: Quarterly national nutrition and food security committees meetings held		Minutes of meetings held to discuss nutrition and food security issues at national level in the country		Ongoing		
Indicator 8.3: Monthly district nutrition and food security committees meetings held		Minutes of monthly meetings held to discuss nutrition and food security issues at district level in the country	Minutes of meetings	Ongoing		
Indicator 8.4: # of recommendations acted upon from the national and district meetings		Implementation of relevant recommendations from meetings held	Minutes of meetings			

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