Government of Sierra Leone

SIERRA LEONE FOOD AND NUTRITION SECURITY POLICY IMPLEMENTATION PLAN

2012-2016

20TH SEPTEMBER 2012

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LIST OF ACRONYMS

ABC	Agricultural Business Centre
AIDS	Acquired Immune Deficiency Syndrome
BCC	Behaviour Change Communication
BHFI	Baby Hospital Friendly 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	Outside 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

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 services and overcrowded 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 engage in small holder 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 a 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.

1.2 NUTRITION SITUATION

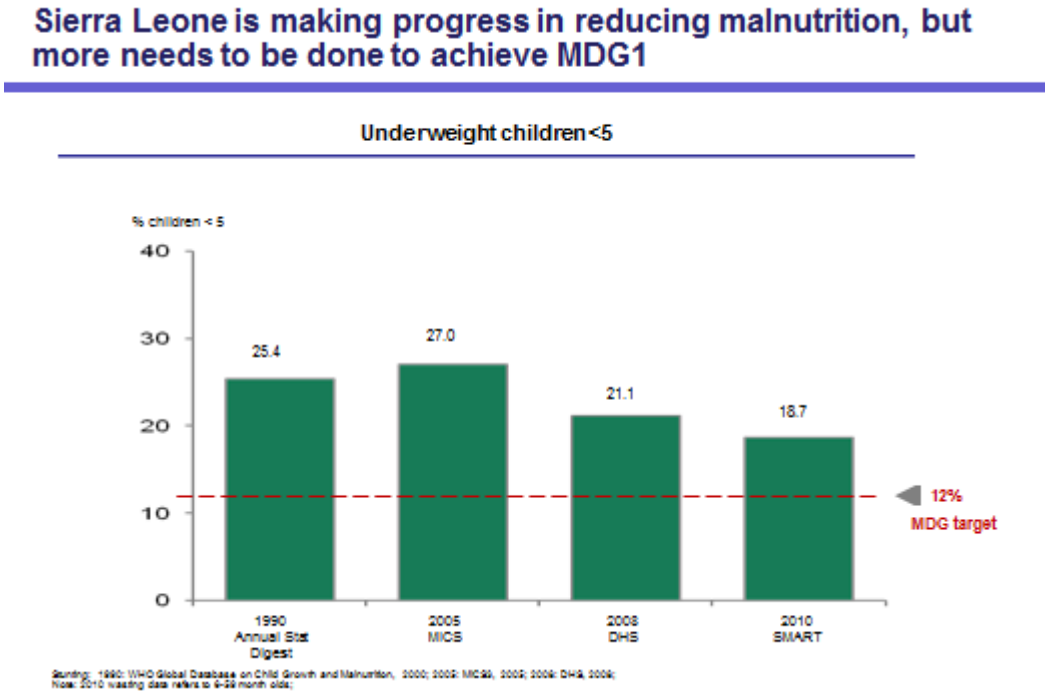
Malnutrition still remains an important contributor to infant morbidity and mortality in the country. It is also a major impediment to the manpower and economic development of the country. While there has been some reduction in malnutrition rates in Sierra Leone since 2005, it remains a serious problem 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 (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 numbers of stunted children are in Bo, Kenema, and Western Urban areas.

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

[1] Statistics Sierra Leone. 2004. National Population and Housing census survey
[2] UNICEF. 2010. The Nutritional Situation in Sierra Leone, Nutrition Survey using SMART Methods

2008[3]). 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[4], MICS 2005[5], DHS 2008, SMART 2010)



Infant and young child feeding (IYCF) practices indicate that 32% of infants in Sierra Leone are exclusively breastfed (MICS 2010). Only 51% of children 6-9 months are given timely introduction of complementary foods and amongst children 6-23 months (DHS 2008), only 19%are fed with the minimum acceptable complementary diet (MICS 2010). These inappropriate feeding practices are important contributors to child morbidity, which exacerbates the already heavy burden of disease. Access to safe water and adequate sanitation are critically low especially in rural areas.

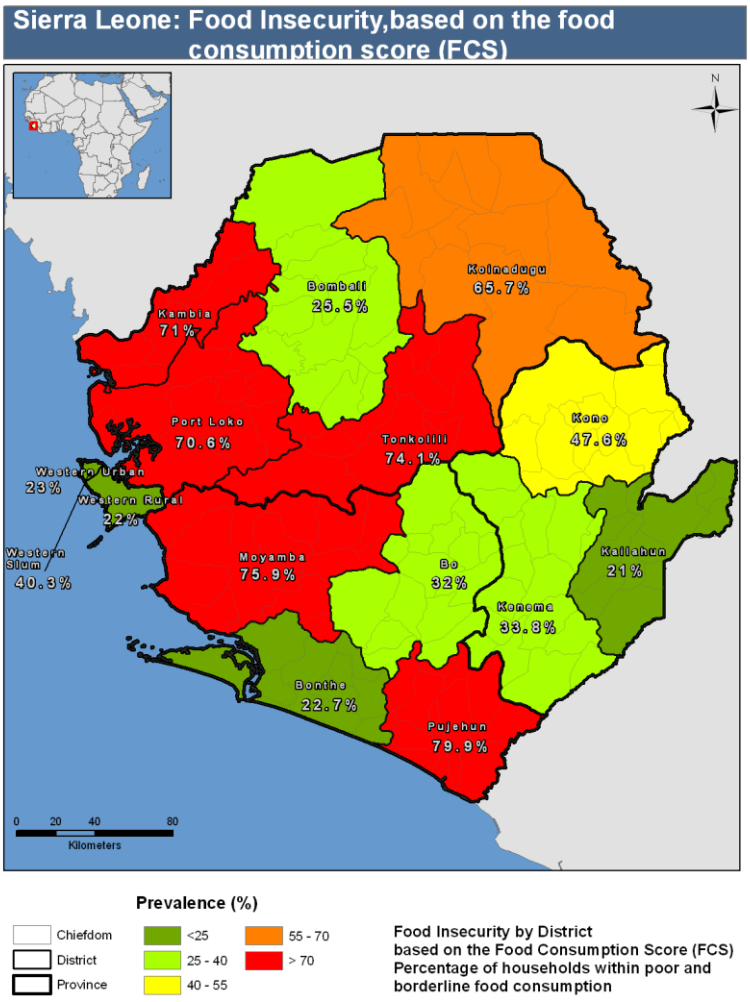
Pregnant women who attended at least four antenatal care services in their most recent pregnancy were 75% in 2010(MICS).). However, only 50% subsequently delivered in a health facility (MICS 2010). Insufficient numbers of health facilities are equipped and staffed to acceptable standards to provide emergency 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 SITUATION OF FOOD SECURITY

[3] Sierra Leone (SSL) and ICF Macro. 2009. Sierra Leone Demographic and Health Survey 2008. Calverton. Maryland, USA: Statistics Sierra Leone and ICF Macro
[4] 1990: WHO Global Database on Child Growth and Malnutrition
[5] Statistics Sierra Leone and UNICEF-Sierra Leone. 2007. Sierra Leone Multiple indicator Cluster Survey 2005. Final report. Freetown, Sierra Leone: Statistics Sierra Leone and UNICEF Sierra Leone

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[6]). 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.

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 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

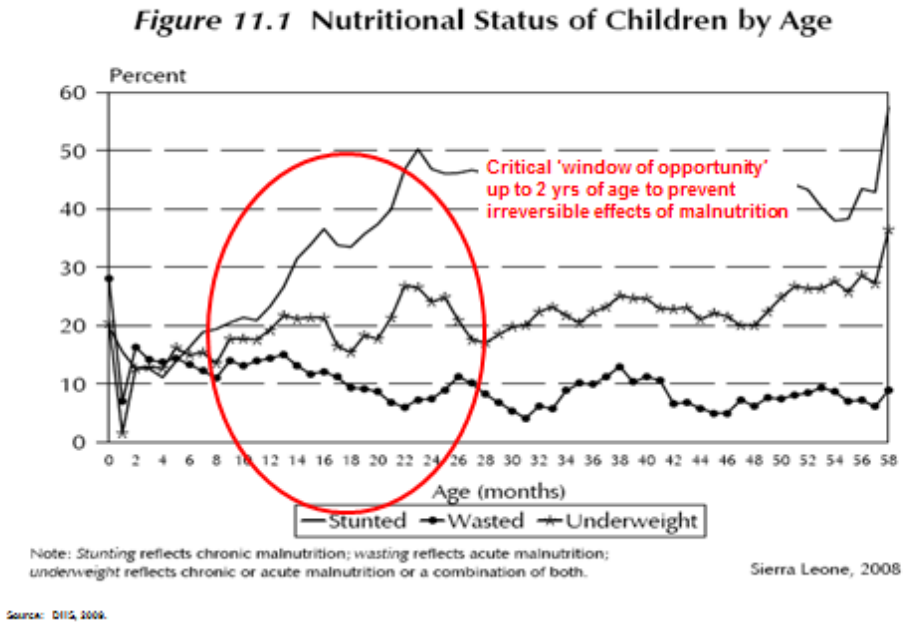
[6] WFP. 2011. WFP. Comprehensive food security and vulnerability analysis (CFSVA)

insecurity. Rural households purchase 65% of their food from markets while urban households purchase nearly all food from markets (91%).

1.4 OPPORTUNITIES OF SCALING UP

When it comes to implementing nutrition actions, Sierra Leone has several recent at-scale successes. Some programs already being scaled-up include 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, activities specifically focused on the '*critical window of opportunity*' (between conception and two years of age) need strengthening. As shown in Figure 3, this stunting increases dramatically up to 23 months of age after which time it becomes irreversible.

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



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

- Strengthening focus on children and women from conception to two years of age to prevent the irreversible effects of stunting
- Improving the effectiveness and increasing the coverage of nutrition 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, family planning and other health initiatives
- Improving the livelihoods of poor households by linking farmers to markets in order to link income generation and good nutrition
- Strengthening the social protection package to increase coverage and targeting: School feeding, supplementary feeding and livelihoods support
- Strengthening integrated nutrition and food security surveillance
- Strengthening governance, coordination, advocacy and capacity to scale-up nutrition interventions through global initiatives such as REACH[7] and Scaling up Nutrition (SUN[8])

7 REACH is a country led approach to scale-up proven and effective interventions addressing child under nutrition through the partnershiphip of UN agencies, civil society, donors, private sector under the leadership of national governments

1.5 POLICY CONTEXT

The government recognises that ensuring maternal and childhood health is crucial for a healthy society and is committed to reducing the high rates of maternal and child morbidity and mortality. The government has taken steps through the 'President's Agenda for Change' and has developed a Basic Package of Essential Health Services. Another important step has been the introduction of the Free Health Care Initiative in April 2010 for all pregnant women, lactating mothers and children of less than five years of age. This initiative has considerably improved access to health care, with the hope that this will result in the steady improvement of maternal and child health indicators in Sierra Leone.

The Ministry of Health and Sanitation (MOHS) has put several policies in place, including the National Health Policy (2009), the Reproductive New born and Child Health Policy (2011), the Food and Nutrition Security Policy (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 Food and Nutrition Security Policy was a crucial step in addressing the nutrition problems of Sierra Leone. The Policy was revised in 2009 to reflect the complex nature of the causes of malnutrition and the need for multi-sectoral collaboration by different stakeholders and sectors in government to address them. The vision of the National Food and Nutrition Security 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".

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. 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 Food and Nutrition Security Policy document.

These specific objectives are:

1. To advocate to policy makers, policy advisors and programme designers at national and district levels on nutrition issues and its relationship to national development
2. To actively promote and facilitate adequate household food security (quantity, quality and safety) to satisfy daily dietary needs of the population
3. To promote adoption of appropriate feeding practices of households
4. To strengthen preventive measures against nutrition related diseases

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8 Scaling Up Nutrition is a movement of all countries whose populations experience under-nutrition and for all stakeholders committed to providing support

5. To promote provision of curative services to individuals who are either malnourished or present a condition requiring diet therapy
6. To institute nutritional surveillance system for monitoring the food and nutrition situation in the country
7. To promote operational research and periodic surveys into food and nutrition issues
8. To coordinate activities of relevant agencies involved in food and nutrition issues

1.6 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 Food and Nutrition Security 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 2012-2016. It has the overall target to reduce malnutrition rates among infants and young children in Sierra Leone by 30% by 2016 (Table 1). However, stunting rates are expected to be reduced from 34.1% to 28.5%by 2016 because of its irreversible nature.

Table 1: Nutrition Indicator Targets of the implementation plan

Indicator	**Current status**	**Target, 2016**
Stunting	34.1%	28.5%
Underweight	18.7%	13.1%
Wasting	6.9%	4.8%
Overweight	8% (DHS)	5.6%
Child mortality	140/1000 live births	98/1000 live births

This document is divided into four parts.

Part 1: Presents an overview that provides summarised background 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 seven 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 frameworks of how to operationalise 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 span the first year of implementation, medium and long term periods will span the following 2-3 and 4-5 years respectively.

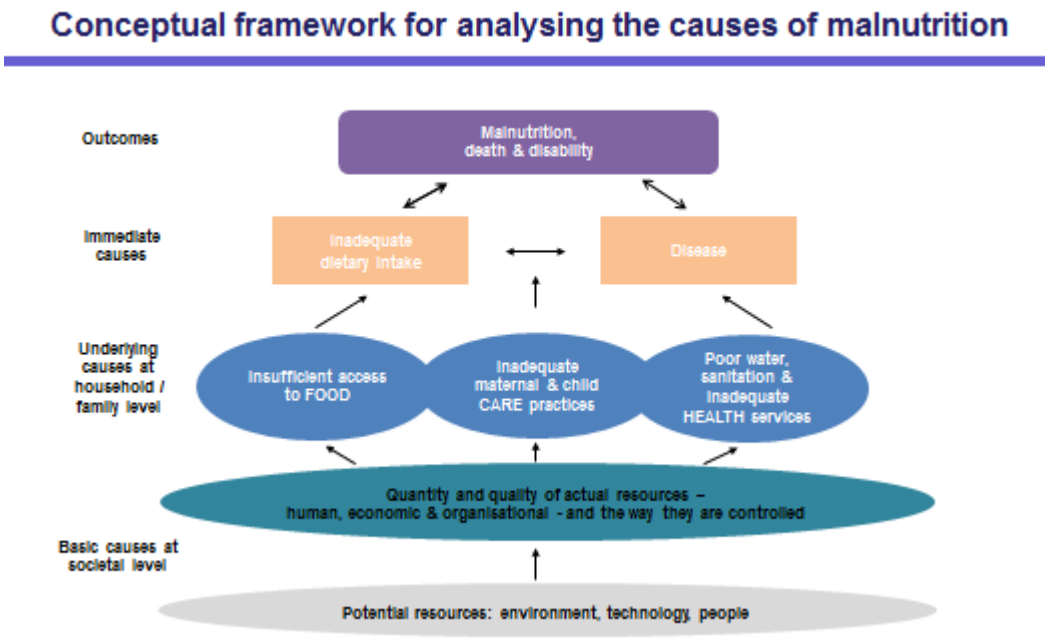
PART 2: STRATEGIC INTERVENTIONS

This section discusses strategic interventions as well as cross cutting issues relevant for the successful implementation of the interventions.

2.1 PRIORITY FOOD AND NUTRITION 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



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 seven priority areas (Table 1).

Table 1: Priority food and nutrition security interventions

Priority areas	**Interventions**
1. Improve breastfeeding and complementary feeding	• Early initiation of breastfeeding • Exclusive breastfeeding • Complementary feeding
2. Increase micronutrient intake	• Vitamin A supplementation and fortification • Iron folate supplementation and fortification • Zinc in ORS for diarrhoea treatment • Iodine fortification • Micronutrient Powders • Consumption of micronutrient rich foods

3. Improve diarrhoea and parasite control	• Household water treatment • Hand washing with soap and water • Food safety and hygiene • Insecticide Treated Nets (ITN) distribution • Intermittent Preventive Treatment for pregnant women (malaria) • Deworming
4. Treat acute malnutrition	• Treatment of <5 children with SAM • Treatment of < 5 children with MAM
5. Improve Household food security	• Household Food production • Consumption of diversified foods • Food processing and value addition • School feeding • School gardens • Kitchen gardens • Food/Cash for work, Cash transfer • Blanket feeding for <2s • Blanket feeding for lactating and pregnant women • Supplementary feeding for malnourished Lactating &Pregnant women, all pregnant teenage girls and mothers with multiple births
6. Improve maternal nutrition	• Family Planning • Nutrition education
7. Improve nutritional status of PLHIV/AIDS/TB/OVCs & reduce prevalence of NCDs	• Nutrition for PLHIV/AIDS/TB & OVCs • NCDs preventive measures

The implementation details of the seven interventions are outlined in the action plan in Part 4 annex 1, following the logic of the National Food and Nutrition Security 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).

PRIORITY AREA 1: IMPROVE BREASTFEEDING AND COMPLEMENTARY FEEDING

This is composed of (i) Early initiation of breastfeeding (ii) Exclusive breastfeeding (iii) Complementary feeding 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 child care practices.

(i) Early initiation of breastfeeding, Exclusive breastfeeding and Complementary feeding

a. Indicators

Early initiation of breastfeeding

	Description	Actual 2012	Target 2016
Indicator	Timely initiation of breastfeeding within one hour of birth	45%	60%
Coverage	Health Facilities (District and BEmONC) compliant with Baby Friendly Hospital Initiative (BFHI)	TBD	100%
Target group	Pregnant women		

Exclusive breastfeeding

	Description	Actual	Target

		2012	2016
Indicator	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		

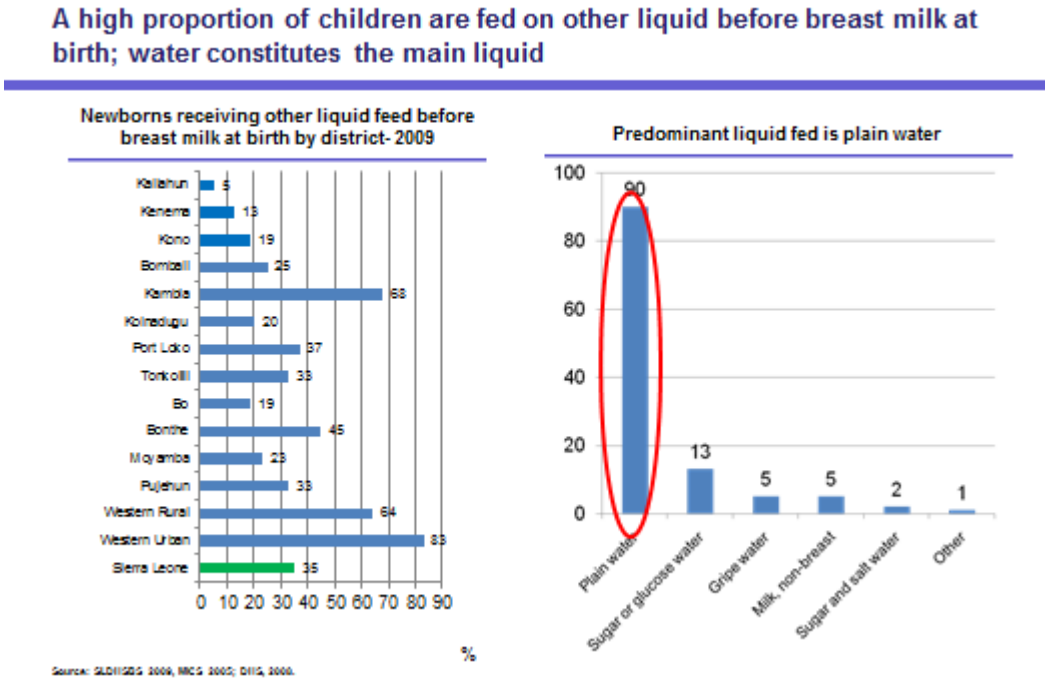
Complementary feeding

	Description	Actual 2012	Target 2016
Indicator	Children 6-23 months old with minimum acceptable diet	19%	40%
	Timely initiation of semi/sold 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		

b. Current situation

A child should be introduced to the breast 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 (SLDHSBS 2009, DHS 2008). Most of these liquids fed to the new-borns are not of good hygienic quality (Figure 5).

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

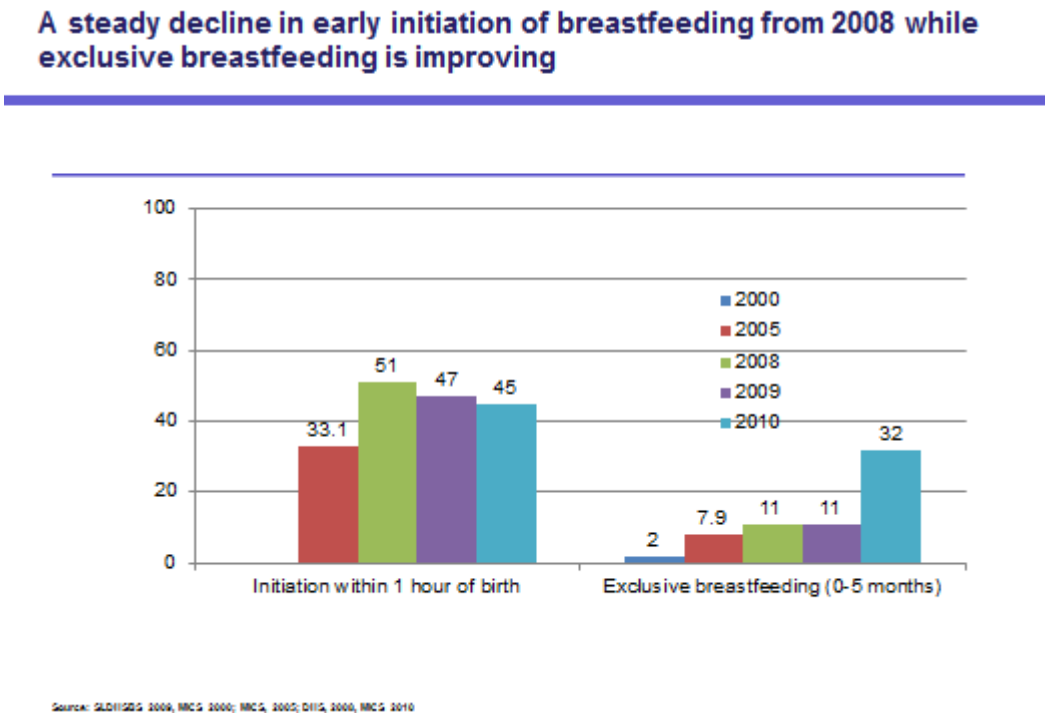


Trends in the timely initiation of breastfeeding (Figure 6) show an improvement from 33.1% in 2005 to 47% in 2008 (DHS, 2008), followed by a steady decrease to 45% in 2010 (MICS). A higher coverage can be achieved by encouraging more women to deliver their babies in health facilities (currently 50%-MICS 2010). In 2009, 58% of the women do not access health care due to lack of money to pay for treatment, 44% due to long distances to the health facility and 42% due to lack of transport fees (SLDHSBS 2009). While the Free Health Care initiative introduced by the government in 2010 is

expected to cover hospital fees for pregnant, lactating women and children less than five years, more efforts are needed in establishing new health facilities and poverty alleviation. The continued active role of TBAs in home deliveries (29%-MICS 2010) is also a barrier to achieving high levels of deliveries in health facilities as it is an income generating activity and they don't receive any incentives for any referrals. On this basis, the 2016 target for early initiation of breastfeeding has been set as 60%.

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

Figure 6: Trends in initiation of breastfeeding and exclusive breastfeeding

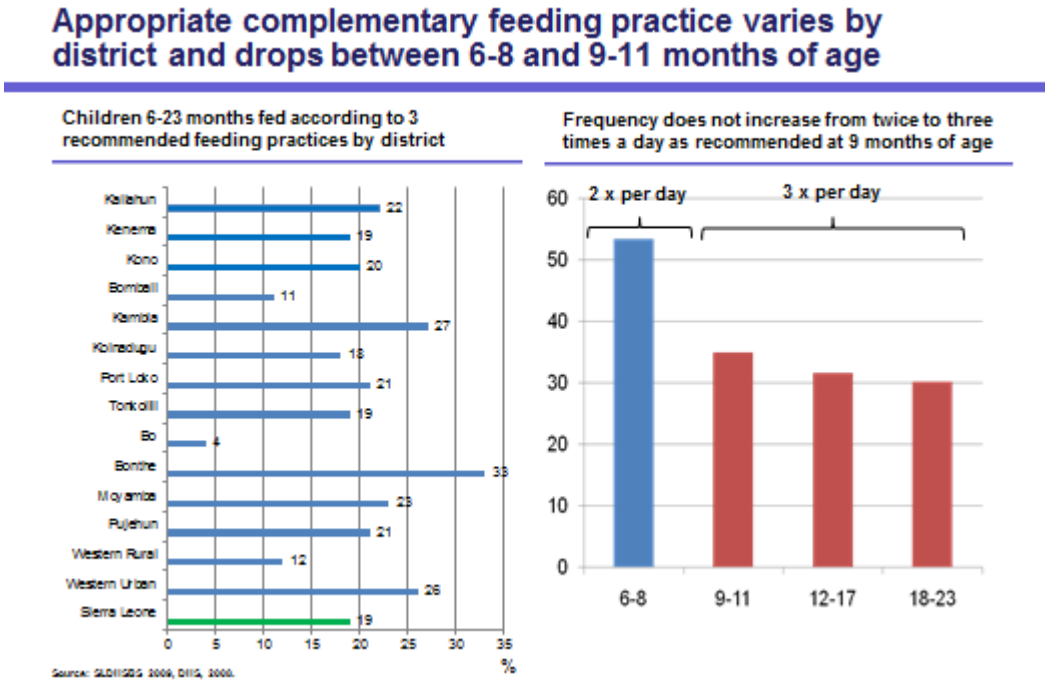


Exclusive breastfeeding (EBF) has improved from 2% in 2000 (MICS) to 32% in 2010 (MICS). Even at early ages, majority of children receive liquids or foods other than breast milk. Most of the liquids and complementary foods are not prepared, stored or handled under proper hygiene conditions and this may 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 percent 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 (twice 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). Promotion of adequate complementary feeding is

done by health workers through the health system and MSGs at the community level, mass campaigns and media campaigns 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



c. 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 (Objective 3.1)
- 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. (Objective 3.2)
- Promote and strengthen the implementation of Baby Friendly hospital initiative and Baby Friendly Community Initiative by accrediting hospitals for their readiness to implement the recommended ten steps as per the WHO guidelines, promotion of baby friendly farms and construction of birth waiting homes in communities with PHUs for emergency obstetric care. (Objective 3.3)
- Promotion of nutrition education component of IYCF and development of strategies for reaching hard to reach groups such as teenage mothers. Develop new IEC/BCC materials and disseminate through mass media. At the community level the messages will be disseminated through mother support groups, faith based organisations, CHWs, Village Health Committees (VHCs), TBAs, Farmer Field Schools (FFS), decision makers at the household level etc. Routine IYCF education during antenatal and postnatal care, EPI and outreach will also continue. (Objective 2.1, 3.4)
- Promote appropriate complementary feeding practices for children six months to 2 years and optimum feeding practices for children 2-5 years by promoting awareness, operational research on complementary foods and proper feeding habits, support production of fortified

complementary foods, development of recipes, Kitchen gardens, food demonstrations through the MSGs and introduction of micronutrient powders. (Objectives 2.1, 2.2, 2.3, 2.6, 3.3, 3.6, 4.6)

- Review and update the IYCF university course contents for nutrition, food security and home economics disciplines and also incorporate appropriate information on IYCF into the pre-service curricula/training for social workers and community health volunteers. (Objective 3.4)

d. Scale-up strategies

Channel	Priority actions
Health Facilities	• Group counselling through antenatal, postnatal, 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 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

(ii) Roles and Responsibilities in improving exclusive breastfeeding and complementary feeding

Ministry/Partners	Role and responsibility
MOHS	• Finalise policy/strategy document on IYCF • Adapt and adopt the code on marketing of breast milk substitutes and monitor its implementation • Adapt guidelines on standards for BFHI • Train Health workers on BFHI • Coordinate the development of IYCF promotion materials and disseminate • Provide technical support to the private sector in food fortification

	standards • Map and manage the construction of Birth Waiting Homes
Consumer watch protection agency	• Monitor the implementation of the code on marketing of breast milk substitutes
Ministry of Trade (Standards Bureau)	• Develop standards for compliance with the code
Universities/SLARI	• Review nutrition and food security curricula for higher learning institutions to include IYCF • Undertake operational research on complementary feeding and implement recommendations
MEST	• Support curricula development and approve content for primary schools, secondary schools and tertiary institutions
MAFFS	• Contribute in the development of food based IYCF promotion materials • Disseminate IYCF promotion materials through agricultural channels
Ministry of Information	• Disseminate IYCF promotion materials
Ministry of Social Welfare Gender and Children Affairs	• Mobilise the community to manage birth waiting homes • Review labour laws for maternity leave and establish community mechanisms for women care practice
Ministry of Justice	• Reinforce the code
Ministry of Lands and environment	• Provide land for construction of Birth Waiting homes in urban areas
Ministry of local authorities	• Provide land for construction of Birth Waiting homes in rural areas
UNICEF, FAO, WFP, WHO	• Technical support and advocacy, resource mobilisation
NGOs	• Advocacy, capacity development and technical support • Community mobilisation • Dissemination of messages

PRIORITY AREA 2: INCREASE MICRONUTRIENT INTAKE

The prevalence of micronutrient deficiencies in Sierra Leone remains especially high among women of childbearing age and children under five years. Sierra Leone has consequently made efforts over the past few years to address the high prevalence of micro-nutrient 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.

Specific interventions to increase micronutrient intake are:

- Vitamin A supplementation and fortification
- Iron folate supplementation and fortification
- Zinc in ORS for diarrhoea treatment
- Iodine fortification
- Micronutrient Powders
- Consumption of micronutrient rich foods (More details in Priority area 5)

(i) Vitamin A Supplementation and Fortification

a. Indicators

	Description	Actual	Target

		2012	2016
Indicator	Children < 5 years with Vitamin A deficiency	TBD 47?	20%
Coverage	< 5s receiving Vitamin A supplementation	91%	98%
	Children 6-59 months receiving Vitamin A supplementation (routine)	38%	80%
	6-35 months old consuming foods rich in fruits and vegetables	65%	80%
	Postpartum Vitamin A supplementation	40%	80%
Target group	children 6-59 months old, Post-Partum women		

b. Situation analysis

Although the country produces adequate quantities of palm oil, 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 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).

Vitamin A supplementation (VAS) has been scaled up to 91% nationally (SMART 2010) from 26% in 2008 (DHS 2008). However there is need to improve VAS through routine health care delivery, and through consumption of Vitamin A rich foods for longer term sustainability. Vitamin A supplementation is delivered via bi-annual mass campaigns targeting children 6-59 months old, combined with polio immunization and deworming. Vitamin A supplementation has also been integrated into the routine health services and a national guideline developed and disseminated. Promotion of Vitamin A supplementation is conducted through mass media, Health systems and community based structures.

A high dose of Vitamin A is given within six weeks postpartum to mothers through the Health System. Only 40% (SLDHSBS) of women are receiving VAS and hence the need to scale it up. The proportion is equal to women who deliver in health facilities (SLDHSBS 2009). There should be a campaign to encourage 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.

c. Implementation strategies

- Sustain mass administration of Vitamin A (children 6-59 months) and promote VAS and post-partum VAS routine administration. Integrate VAS for children under five into the Expanded Programme on Immunisation (EPI) and post- partum VAS into the Tetanus Toxoid card. Intensify delivery of integrated antenatal, post natal and family packages. (Objective 4.1)
- Develop and disseminate IEC/BCC materials to promote VAS (Objective 4.3)
- 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. (Objective 2.2, 2.6, 4.4)
- Promote the production and consumption of Vitamin A rich foods. Promote food diversification through recipe development, nutrition education and information campaigns (Objective 2.1)

d. Scale-up strategies

Channel	Priority actions
Health Facilities	Supply Vitamin A supplements Disseminate VAS promotion messages
Schools	Promotion of school gardens in schools and nutrition education
CHWs	Monitor compliance of VAS for <5s through the health card Monitor post-partum VAS within 6 weeks Disseminate messages to promote VAS and diet diversity
Mother support groups	Disseminate messages to promote VAS and diet diversity
Mass media	Radio/TV messages
Mass campaign	MCH and Breastfeeding week
Private sector	Fortify food with Vitamin A Import food fortified with Vitamin A
Standards Officers	Regulate fortified food imports through laboratory analysis
Agricultural extension workers	Promote production and consumption of diversified foods, including bio fortification Participate in disseminate nutrition education messages
NGOs	Messages to promote VAS and dietary diversity

(ii) Iron Folate Supplementation and fortification

a. Indicator

	Description	Actual 2012	Target 2016
Indicator	Children 6-59 months with anaemia	76%	51%
	Women 15-49 years with anaemia	45%	36%
Coverage	Children 6-35 months old who consume iron rich foods	59%	80%
	Women who took iron folate supplement during pregnancy for 90 days or more	44%	60%
Target group	Pregnant women, Women 15-49 years		

b. Current situation

Specifically, 76% of children 6-59 months and 46% of women of reproductive age (15-49 years) are anaemic (DHS 2008). Anaemia in pregnant women leads to low birth weight infants. In the control and prevention 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. Foods rich in iron are not consumed by children until nearly two years of age. Efforts in food fortification are as described for Vitamin A.

Iron deficiency in children under five years is projected to be reduced to 51% in 2016 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 2016 from the current 45% with increased efforts to promote production and consumption of micronutrient rich foods.

c. Implementation strategies

- Continue routine and promote compliance of iron folate supplementation for pregnant women through the Health system. (Objective 4.2)

- Develop and disseminate IEC/BCC messages through community radios and other media outlets to improve iron folate compliance and antenatal visits. (Objective 4.3)
- 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. (Objective 2.2, 2.6, 4.4)
- Promote food diversification through nutrition education and information campaigns (Objective 2.1)

d. Scale-up strategies

Channel	Priority actions
Health Facilities	• Supply Iron Folate supplements • Disseminate messages to promote Iron Folate supplementation and compliance through antenatal visits and outreach services • Disseminate messages on consumption of micronutrient rich foods
Schools	• Establish school gardens and nutrition education
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	• Radio/TV messages
Private sector	• Fortify food with iron folate
Agricultural extension workers	• Promote and support production and consumption of diversified foods • Disseminate appropriate recipes • Disseminate nutrition education messages
NGOs	• Disseminate messages to promote compliance for iron folate supplementation • Disseminate messages to promote consumption of diversified foods

(iii) Zinc Supplementation

a. Indicators

	Description	Actual 2012	Target 2016
Indicator	Prevalence of stunting among children < 5 years	34%	23.9%
Coverage	Children <5 receiving zinc in ORT for diarrhoea treatment	6.1%	80%
Target group	Children under <5 years		

b. 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.

c. Implementation strategy

- 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. (Objective 4.7)

- Promotion of zinc rich foods, development of IEC materials (Objective 2.1)
- Zinc fortification for staples (Objective 4.4)

d. Scale-up strategies

Channel	Priority actions
Health Facilities	• Procurement and distribution of Zinc in ORT to all Health Facilities • Treating all <5 diarrhoea cases with zinc in ORT • Promote consumption of Zinc rich foods
Mass media	• Radio/TV messages 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 with zinc

(iv) Iodine Fortification

a. Indicators

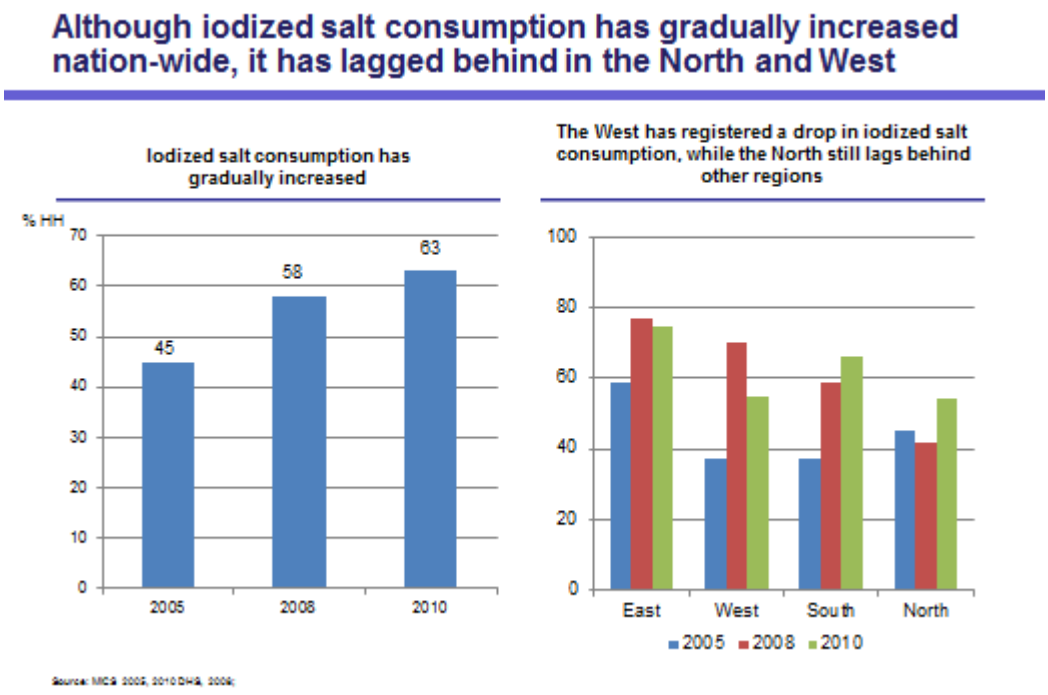
	Description	Actual 2012	Target 2016
Indicator	School aged children with low urinary iodine (less than 100 µg/l)	34%	20%
Coverage	Households consuming adequately iodised salts	63%	80%
Target group	Households		

b. Current situation

According to a national nutrition survey (2003), the proportion of school aged children with low urinary levels of iodine were 34%. Iodised salt consumption has gradually increased from 45% in 2005 to 63% in 2010 (MICS). This has been achieved through quality control of imported salt. The Bureau of Standards has created legislation (2011) on the importation of iodized salt into the country and a monitoring system is 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). The North and Southern regions mine local salts that are used for household consumption, without being 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 mined salts, it is projected that the proportion of school aged children with low urinary levels of iodine will reduce to at least 20% by 2016.

Figure 8: Consumption of iodised salt by region



c. Implementation strategies

- 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)

d. Scale-up strategies

Channel	Priority actions
Health Facilities	• Disseminate messages on consumption of iodised salt during antenatal and outreach services
Mass media	• Disseminate Radio/TV messages
Private sector	• Import iodised salt • Iodise locally mined salt
Standards 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

(v) Micronutrient Powders

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 impact positively on all micronutrients interventions indicators discussed earlier.

a. Implementation strategies

- Review IYCF strategy to include home fortification (Objective 3.1)
- Conduct operational research to introduce the use of MNP in complementary foods. This should include palatability and acceptability tests for MNP for children 6-23 months of age before scale-

up. Train Health workers and CHWs on MNP utilization for complementary feeding (Objective 4.5)

- Promote the use of MNPs. Develop IEC/BCC materials and disseminate the messages through the media, NGOs, and the community. NGOs will also undertake community sensitization and mobilization to raise awareness on availability, importance and use of MNP. (Objective 4.5)

b. Scale-up strategies

Channel	Priority actions
Health Facilities	• Supply of MNPs • Disseminate MNP promotion messages
Mother support groups/ CHWs	• Disseminate MNP promotion messages
Mass media	• Radio/TV messages
Mass campaign	• MCH and Breastfeeding week
NGOs	• Disseminate MNP promotion messages

(vi) Roles and Responsibilities in increasing micronutrient intake

Ministry/Partners	Roles and Responsibility
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
NGOs	Provide Technical support Procure supplies Promotion of micronutrient dietary intake

PRIORITY AREA 3: IMPROVE DIARRHOEA AND PARASITE CONTROL

Most of the interventions under this priority area address the problem of poor hygiene and sanitation as well as inadequate health services. However, some of the interventions are also associated with inadequate maternal and child care practices such as hand washing with soap and water and use of ITNs. The interventions are:

- Household water treatment
- Hand washing with soap and water
- Insecticide Treated Nets (ITN) Distribution
- Intermittent Preventive Treatment for pregnant women (malaria)
- Deworming
- Food safety and hygiene

(i) Household water treatment

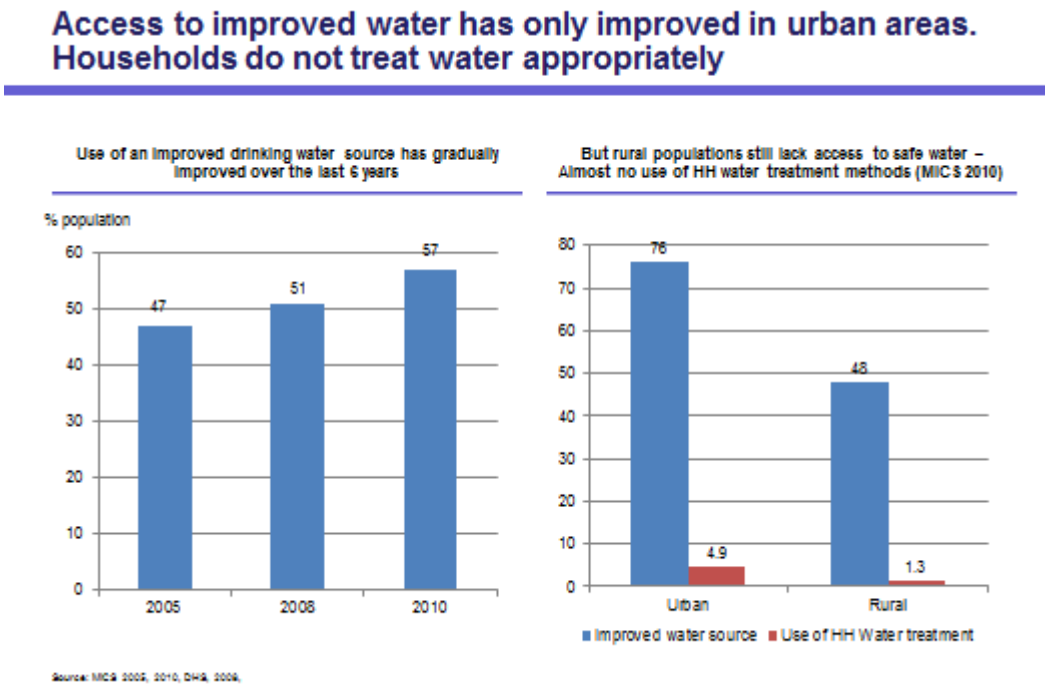
a. Indicators

	Description	Actual 2012	Target 2016
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		

b. Current Situation

National use of an improved water source for household utilisation has gradually increased over the last six years from 47% in 2005 (MICS) to 54% in 2010 (MICS). The proportion of households accessing an improved water source is 76% in urban areas and 48% in rural areas (MICS 2010). Only 2% (4.9% urban and 1.3% rural) of households using unimproved drinking water sources are using appropriate water treatment methods (MICS 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.

Figure 9: Access to improved water source and household water treatment



c. Implementation strategies

- Restore and institute management systems for the wider water supply schemes- Gravity Fed scheme, spring boxes & degremont stations. (Objective 4.10)
- 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. (Objective 4.10)
- 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. (Objective 4.10)
- Set up water quality monitoring and surveillance system. (Objective 4.10)

d. Scale-up strategy

Channel	**Priority actions**
Health Facilities	• Disseminate messages to promote household water treatment and safe storage
Water Services division	• Restore the wider water supply schemes
Sierra Leone Water Company	• Water treatment and supply
District laboratories	• Water quality monitoring and surveillance
Local councils	• Community mobilization and water tariff collection
Mass media	• Disseminate Radio/TV messages
Community water point technicians	• Operate and maintain water facilities nationwide
Community emerging leaders	• Train other community members on CLTS
Mother Support groups and CHWs	• Disseminate messages on household water treatment and safe storage to pregnant and lactating women
NGOs	• Disseminate messages on household water treatment and safe storage

Private sector	• Procure and supply water facility maintenance spare parts

(ii) Hand washing with soap and water and sanitation

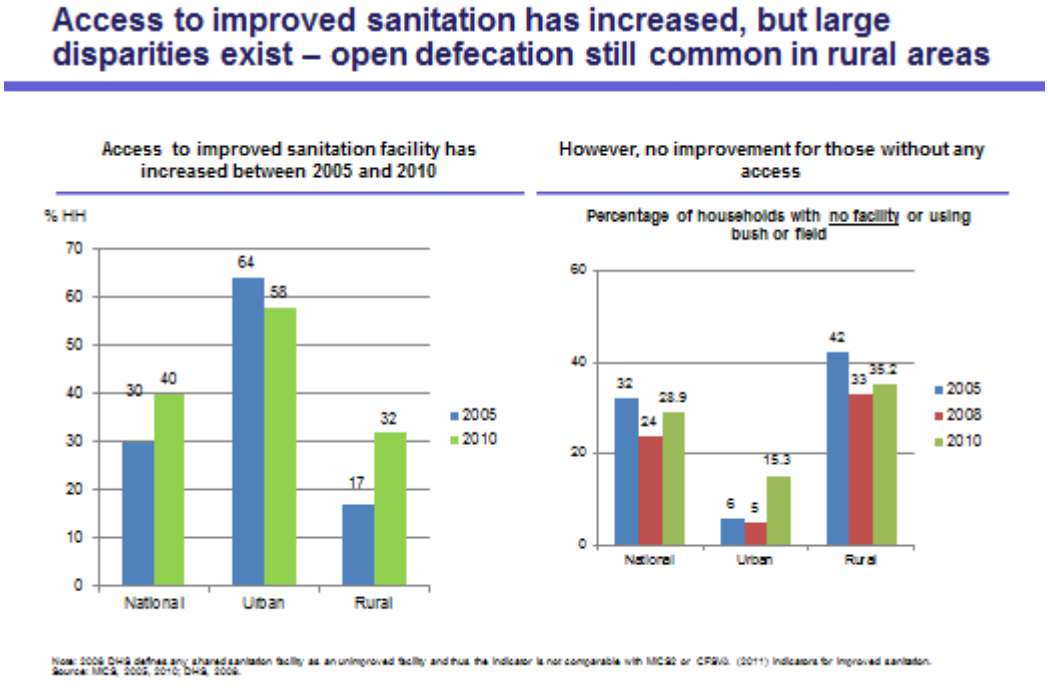
a. Indicators

	Description	Actual 2012	Target 2016
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		

b. Current situation

Hand washing should take place following key risk activities that include contact with faeces and contact with food. In 2010, only 13% of households had a designated place for hand washing with soap and water (MICS 2010). Promotion of hand washing with soap and water in the community is delivered through the CLTS programme and School Sanitation and Hygiene Education (SSHE) programme that targets school going children. In schools the hand washing promotion education 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.

Figure 10: Access to improved sanitation



According to MICS 2010, 40% of the population in Sierra Leone live in households using improved sanitation facilities. The situation is worse in rural areas (Figure 10).The situation is expected to improve to 66%, which is also the MDG target. Also of sanitation importance is the safe disposal of child's faeces by the child using a toilet or by rinsing the stool into a toilet or latrine. The current situation is 54% and this needs to be scaled up to 80% by 2016.The community will be targeted through the CLTS approach while school children will be targeted through the SSHE approach.

c. 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, telecommunication companies and community theatres. Train emerging CLTS natural leaders in Outside Defecation Free (ODF) communities. (Objective 4.11)
- Advocate to the private sector to produce affordable soap to promote hand washing with soap. (Objective 4.11)
- Develop environmental health and sanitation policy and update the public health bill (Objective 4.11)

d. Scale-up strategy

Channel	Priority actions
Sanitation division of MOHS	• Review and improve VIP latrine designs at PHUs and schools
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
Mass media	• Disseminate Radio/TV messages
Schools	• Promote School Sanitation and Health Education
Private sector	• Supply affordable soap
NGOs	Disseminate messages on hand washing with soap and sanitation marketing

(iii) Insecticide Treated Nets distribution

a. Indicators

	Description	Actual 2012	Target 2016
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		

b. 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. The distribution of nets has almost reached scale and 30% of children under five and 28% of pregnant women were sleeping under an ITN in 2010 (MICS). This number needs to be scaled up to 80% to reduce malaria prevalence.

c. Implementation strategies

- Continue mass (annual) and routine distribution of ITNs, targeting pregnant women and children less than 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. (Objective 4.9)

- 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. (Objective 4.9)

d. Scale up strategies

Channel	Priority actions
Health Facilities	• Disseminate messages to promote proper use of ITNs • Distribute ITNs
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
Mass campaigns	• Disseminate messages to promote use of ITNs • Distribute ITNs
Mass media	• Disseminate Radio/ TV, newspaper messages
Private sector	• Supply and promote use of ITNs
NGOs/CBOs	• Disseminate messages to promote use of ITNs • Conduct hanging-up campaigns for proper utilisation of ITNs
Local councils	• Advocate for the use of ITNs by pregnant women and <5s

(iv) Intermittent Treatment of Pregnant Women (IPTP)

a. Indicators

	Description	Actual 2012	Target 2016
Indicator	Prevalence of anaemia among pregnant women	62%	32%
Coverage	Women following correct IPTp during pregnancy	41%	90%
Target group	Pregnant women		

b. Current situation

The Intermittent Preventive Treatment of malaria during pregnancy (IPTp) requires that pregnant women take at least two doses of anti-malarial tablets to protect them from malaria. This is done during antenatal care and outreach services. This intervention will need to be scaled up as only 40% of women are following the correct IPTp during pregnancy.

c. Implementation strategies

- 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 (Objective 4.9)
- Develop and disseminate IEC materials on malaria prevention and control at community level. Community theatres will be promoted to stimulate discussions by community groups on what causes malaria and how it could be prevented. Radio discussions on IPTp for pregnant women will be conducted and jingles aired on use of IPTp by Pregnant women. (Objective 4.9)

d. Scale-up strategy

Channel	Priority actions

Health Facilities: PHUs	• Develop and disseminate messages to promote use of IPTp • Supply antimalarial tablets for IPTp
CHWs	• Disseminate message on use of IPTp by pregnant women • Monitor the use of IPTp for pregnant women
Community theatres	• Disseminate messages on use of IPTp
Mass media	• Disseminate Radio/TV messages
NGOs/CBOs	• Disseminate messages on use of IPTp to pregnant women

(v) Deworming

a. Indicators

	Description	Actual 2012	Target 2016
Indicator	Children < 5 infected with Soil Transmitted Helminths	54%	20%
Coverage	Children 12-59 months de-wormed two times a year	85.8%	95%
	Children 12-59 months de-wormed two times/year (routine)	18%	60%
	Pregnant women who take intestinal parasite drugs	36%	60%
	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		

b. Current situation

De-worming for children 12-59 months is delivered on a national scale via biannual mass campaigns together with VAS. Routine deworming of children 12-59 months takes place through the health systems including outreach services. The <5s infected with Soil Transmitted Helminths (STH) are expected to reduce from 54% (HKI/UNICEF 2011) to 20% in 2016 because deworming is currently fully scaled up with high coverage. National school-based deworming campaigns targeting primary school and out of school children also take place routinely. Currently mass administration of albendazole is taking place in 90% of the schools (HKI June 2010 report) and this should be scaled up to 100%. Deworming of school children takes place every 6 months and it is delivered by teachers and government health staff. Schools are selected in districts with high prevalence of soil transmitted worms. On the other hand, deworming for pregnant women is delivered during antenatal visits at the PHUs and during outreach services. Only 36% (SLDHBS 2009) of pregnant women are dewormed.

c. 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. (Objective 4.8)
- Continue and scale up routine administration of albendazole in 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 (Objective 4.8)
- Continue with routine administration of albendazole for pregnant women during antenatal visits at the PHUs. The community, including the local authorities will be sensitized on the need for pregnant women to attend antenatal clinics to boost the number of women being dewormed. (Objective 4.8)
- Develop and disseminate appropriate IEC/BCC materials to promote deworming. The messages will be disseminated through the mass media (radio, television), community theatres. (Objective 4.8)

d. Scale-up strategies

Channel	Priority actions
Health Facilities	• Routine administration of deworming tablets for pregnant women and children 12-59 months • Supply of deworming tablets to schools • Disseminate messages to promote deworming of children 12-59 months old, Pregnant women and school children
Mother support groups & CHWs	• Disseminate messages to promote deworming to 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 Radio/TV messages
NGOs	• Disseminate messages to promote deworming
Schools	• Administration of deworming tablets in schools

(vi) Food safety and hygiene

a. Indicators

	Description	Actual 2012	Target 2016
Indicator	Prevalence of diarrhoea among children under five	11%	7%
	% of population tested and confirmed to be affected by food borne diseases	N/A	Reduce by 25%
Coverage	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		

b. Current situation

Poor food safety and hygiene is one of the major sources of infections and diseases within households in poor communities. This together with unclean hands and utensils used to feed children is one of the causes of diarrhoea and typhoid prevalent among children. Food safety sensitisation has taken place on a low scale for market women, butchers and housewives on the general safe and hygienic management of food including its preparation and storage. 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. This intervention needs to be scaled up significantly.

c. Implementation strategy

- Strengthen the institutional framework and implement national food standards and laws including code and guidelines on food hygiene for locally produced and imported foods (Objective 4.12)
- 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. (Objective 4.12)
- 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. (Objective 4.12)

- 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 (Objective 4.12)

d. Scale-up strategies

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 Ensure compliance on hygiene and nutrition standards of food prepared in the school feeding programme and other institutional feeding setups
Schools	Promotion of food safety and hygiene
Mass media	Disseminate Radio/ TV/ newspaper messages
NGOs	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

(vii) Roles and responsibilities in improving diarrhea and parasite control

Ministry/Partner	Roles and Responsibilities
MEWR	WASH • Restore water supply schemes 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	**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 options • Put in place Environmental Health and sanitation policy and Public Health bill **Parasite control** • Supply drugs and commodities for malaria and worm control and prevention; deworming tablets, antimalarial drugs, ITNs • Administration of deworming and antimalarial tablets • 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 children
MIC	• Raise awareness on good household water treatment techniques, good hygiene practices and hand-washing with soap and water
MEST	**WASH** • Promotion of School Sanitation and Hygiene Education **Parasite control** • Administration of deworming tablets in schools • Disseminate messages to promote deworming **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 consumed by the public
NGOs	**WASH** • Provide technical support in construction and rehabilitation of water schemes • Development of 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 water treatment and hand-washing messages **Parasite control** • Procure deworming tablets • Develop and disseminate deworming promotional materials • Support distribution of commodities and sensitization
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 ABCs undertaking food processing and value addition **WASH** • Promote hand washing with soap
Research Institutions and Higher institutions of learning	• Develop water treatment and purification methods training manual for use by teachers and community members • Translate CLTS Audio and other existing training manuals in other local languages • Research on water treatment and purification methods • Develop training manuals for use by teachers and community members
Private sector	• Training and maintenance of water supply sources at the community level and supply of spare parts and affordable soap and sanitation options • Adoption and compliance with standards and guidelines on food safety and hygiene • Issue and sell ITNs at an affordable cost and sensitise the buyers on their use
UN	• Provision of supplies- deworming tablets • Technical support

PRIORITY AREA 4: TREATMENT OF ACUTE MALNUTRIITON

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.

(i) Treatment of Severe and Moderate acute malnutrition

a. Indicators

	Description	Actual 2012	Target 2016
Indicator	SAM prevalence among children 6-59 months	1%	0.2%
	GAM prevalence among children 6-59 months	6.9%	4.8%
Coverage	CMAM coverage	12%	50%
Target group	SAM and MAM Children		

b. Current situation

The CMAM programme is the integration of three modes of care and treatment for children under five years, Inpatient Therapeutic feeding Programme (ITP), Outpatient Therapeutic feeding Programme (OTP) and supplementary Feeding Program (SFP) and consists of four basic principles: access and high coverage, timelines, multi-sectoral integration and capacity building. It is within this continuum of care where 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 CMAM interventions are readily available and accessible to all children, especially those among the vulnerable populations across the country. CMAM is part of the Basic package of essential Health services under the Free Health Care initiative.

Severely acute malnourished (SAM) children with complications are treated in hospitals/stabilisation centres, while SAM children without complications are enrolled in outpatient therapeutic programmes in PHUs. Children with Moderate Acute Malnutrition (MAM) are referred to the Supplementary Feeding Programme (SFP) where they receive take home rations. A CMAM 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 done by CHWs and those who are malnourished are referred to PHUs for further screening and treatment. It is important that the coverage is improved to ensure that all malnourished children receive treatment.

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 2016. Similarly, effective treatment and management of children with SAM will contribute to a reduction in under five mortality.

c. Implementation plan

- Promote quality care for children with acute malnutrition. Conduct additional training on the new WHO Child Growth Standards and key messages on CMAM including tools for PHU with feeding programs; admission and discharge criteria and monitoring tools for PHUs with OTP staff. Review CMAM full guidelines to develop full guidelines and a user friendly version. (Objective 5.1)
- Continue the supply of therapeutic/supplementary foods and other supplies 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. (Objective 5.1)

- Develop and utilise effective community sensitisation and mobilisation systems to ensure full participation of all children and their parents/carers 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 done on a continuous basis. (Objective 5.2)
- Develop and disseminate BCC messages/materials to address the attitudes of key household members on SAM/MAM prevention and management. (Objective 5.2)

d. Scale up strategies

Channel	Priority actions
Health facility	• 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 Stabilisation Centers
Mother support groups & CHWs	• Sensitisation and mobilisation for screening • Screening, referral and counselling
NGOs	• Disseminate messages to address negative attitudes on SAM/MAM
MAFFS	• Support mothers with malnourished children to establish livelihoods projects/kitchen gardens • Detection and referral of malnourished children
SLARI Nutrition instructors	• Detection and referral of malnourished children • Awareness creation
Social Welfare	• Detection and referral of malnourished children • Awareness creation

(ii) Roles and responsibilities in treatment of acute malnutrition

Ministry/Partner	Role and responsibilities
MOHS	• Treatment of acute malnourished children • Train all Health workers on CMAM • Train NGOs on community mobilization and CMAM • Train other sector staff on community detection and referral
UNICEF, WFP, WHO	• Technical support • support procurement of therapeutic/supplementary food for OTP and SC including Drugs • Strengthen supply chain management • Capacity building of personnel
NGO/CSO	• Manage and supervise active screening and referral of malnourished children • Distribution of supplementary food • Community sensitization and mobilisation
MAFFS/Social Welfare, NU	• Support community detection, referral of malnourished children and awareness creation • Support mothers to undertake livelihoods projects or assist them to establish kitchen gardens as a source of diversified foods

PRIORITY AREA 5: IMPROVE HOUSEHOLD FOOD SECURITY

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

- Local Household Food Production
- Consumption of diversified diets
- Value addition and food processing
- Cash for work and food for work, cash transfer
- Food distribution

(i) Local household food production

a. Indicators

	Description	Actual 2012	Target 2016
Indicator	Food consumption score	45%	20%
	Food diversity score	N/A	N/A
Coverage	Farmers receiving training and accessing inputs	45% estimate	80%
	Mother support groups receiving training and accessing inputs	N/A	80%
Target group	Farming Households, Mother Support groups		

b. Current situation

Most interventions in agriculture have over the years 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 respectively in order to achieve food self-sufficiency. Rice production has increased significantly since 2000 but 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 2: Projected food Crop Production

Crop	Actual 2011 (Mt)	Projected 2016 (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

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[9]).

- 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[10]).
- Research to identify nutrient content of rice varieties to find opportunities for cross-breeding 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[11] and soft[12] 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[13]).

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) that can be used in complementary feeding. Due to its use in the industrial production of supplementary foods, the crop 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. Vegetable production is mainly carried out by women. 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.

Several opportunities on how production of vegetables can contribute to improved nutrition have been identified (WUR/NU/SLARI 2011). They include:

- Timely access to required inputs like seeds, fertilizer and pesticides

[9] REACH, WUR, SLARI, Njala University. 2011. Improving Nutrition through Agriculture: Challenges and Opportunities
[10] Cakmak I (2008). "Enrichment of cereal grains with zinc: Agronomic or genetic biofortification?" Plant and Soil 302 (1-2): 1-17
[11] Hard dough: Harvested 123 days from seeding
[12] Soft dough: Harvested 110 days from seeding
[13] 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

- 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

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 3: Projected livestock production

Livestock	Baseline 2011	2016 Target
Cattle	568,700	856,462
Sheep	750,200	1,129,801
Goats	883,300	1,330,250
Chicken	10,406,000	15,671,436
Ducks	882,768	1,329,448
Pigs	52,100	78,462

Source: Planning Evaluation Monitoring and Statistics Division 2011

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

Agricultural extension services are delivered by government extension workers 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 grow 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.

(ii) Consumption of diversified diets

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. MAFFS will work in close collaboration with MOHS and other line ministries to develop nutrition education materials, to be disseminated through multiple channels including the FFS and FBOs. MAFFS will also support food preparation demonstration in FFS, MSGs, agricultural shows, mass media etc.

c. 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. (Objective 2.1, 2.3)
- 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. (Objective 2.1)
- 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. (Objective 2.3)
- 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. (Objective 2.4)
- 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. (Objective 2.4)
- 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. (Objective 2.2)

- 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)

d. Scaling up strategy

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

(ii) Value addition and food processing

a. Indicators

	Description	Actual 2012	Target 2016
Indicator	Post-harvest loss score	40%	25%
	Value added products seen in the market	5% (source)	40%
Coverage	% small holder farmers supported to enhance value chain of agricultural products	9% source	50%
Target group	Farmers/FBOs, especially women		

b. Current situation

Farmers have limited access to agricultural services and installations, resulting in post-harvest losses estimated at 40% (for rice). This figure is expected to reduce to 25% by 2016 because the postharvest and value addition equipment and facilities are currently being provided by the SCP in addition to what other organisations are doing. 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. Proper local drying equipment is already being used by some women. So 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 both decrease resulting in lower costs and less spoilage.

While agricultural interventions increase household income, they do not necessarily lead to improved nutritional wellbeing (see Haddad, 2000[14]; 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 micro-nutrients. 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.

c. 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. (Objective 2.5)
- 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. (Objective 2.5, 2.6)
- 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. (Objective 2.6)
- 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. (Objective 2.6)

d. Scaling up strategies

Channel	Priority actions
Government extension	Provide systematic advice to minimize postharvest 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

[14] 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 Biofortification, Washington D.C (9-11 November).

NGOs	Train farmers on packaging, processing of value added products and post-harvest loss prevention technologies Link farmers to markets Purchase for progress

(iii) Cash for work and food for work

a. Indicators

	Description	Actual 2012	Target 2016
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		

b. 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.

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.

b. Implementation strategy

- 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 (Objective 2.7)
- 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. (Objective 2.7)
- Develop a cash transfer implementation strategy targeting pregnant and lactating women (Objective 2.7)

d. Scaling 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

(iv) Food distribution

a. Indicators

	Description	Actual 2012	Target 2016
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		

b. 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. All schools falling under these geographical areas are covered by the school feeding programme. 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.

c. Implementation strategy

- Scale-up blanket feeding for (i) all children 6-23 months (ii) Pregnant and lactating women especially in districts with stunting rates over 40% (Objective 2.8)
- Scale up targeted feeding of malnourished PLWs, all teenagers, women with multiple births, women on PMTCT and maintain them in the programme (Objective 2.8)
- 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. (Objective 2.8)

d. Scaling up strategy

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	Manage food preparation
Teachers association	Make in-kind contributions
Mother Support Groups	Provide counselling support to malnourished PLWs

(v) Roles and responsibilities in improving household food security

Ministry/Partners	Roles and Responsibilities
MAFFS	• Develop and promote nutrition sensitive agri-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	• Provide credit facilities for small scale farmers and other vulnerable groups
MIC	• 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 • Development of 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 • 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

PRIORITY AREA 6: IMPROVE MATERNAL NUTRITION

This section is composed of two interventions (i) Family planning (ii) Nutrition Education. Since nutrition education is a cross cutting issue and has been mentioned in all interventions, the section will only concentrate on family planning measures.

(i) Family Planning

a. Indicators

	Description	Actual 2012	Target 2016
Indicators	Average age at first pregnancy among women 20-49 (years)	19	20
	Median number of months since preceding birth	36.2	36.5
Coverage	% of women who use modern contraceptive methods	18%	25%

	% of Young boys and girls 10-24 years receiving family planning information/counselling messages	TBD	80%
Target group	Women of reproductive age, girls, Men		

b. Current situation

Family Planning 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 themselves and their children. The programme targets women of 15-49 years old and also men. Strategies applied include advocacy to reach 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 pregnancy, 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.

c. 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 outreach services/community distribution points for family planning services for easy community access and train CHWs to manage the community distribution points. Orient mother support groups on family planning issues to provide information and counselling services along with breast feeding messages. Emphasise family planning counselling and services during ANC and PNC. Integrate post-partum family planning counselling and services including lactational Amenorrhoea method (LAM) with the immunisation services to address missed opportunity through training of service providers. (Objective 4.14)
- Review, print and disseminate IEC materials on RH/FP. Sensitise local authorities (gate keepers) at chiefdom level about the role of family planning on maternal and child health and education of the girl child for delayed marriage and first pregnancy. 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 bylaws against early marriage and girl child abuse in schools and at home. (Objective 4.14)
- 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. (Objective 4.14)

d. Scaling up strategy

Channel	Priority actions
Health Facilities	• Provide uninterrupted family planning counselling, commodities distribution and services including LAM
Community Health Worker	• Provide Family Planning information, education and counselling services • Distribute IEC materials • Manage community outreach services points
Mother Support group	• Provide Family Planning information, education and counselling services • Distribute IEC materials

Mass media	• TV, Radio and newspaper messages, interactive programs using role models
NGOs, CSOs	• Family planning education and services at community level • Advocate for girl child education, delay early marriage and pregnancy, and other cultural practices that inhibit girl child education
Schools	• Family life education and counseling in schools • Provide additional incentives to retain girls in school e.g. take home rations for girls

(ii) Roles and responsibilities in promoting family planning

Ministry/Partner	Roles and responsibilities
MOHS	• Provide policy direction for integration of FP with immunisation services and outreach services • Provision of family planning commodities and creation of community distribution points • Creation of adolescent friendly Health Facilities • Providing family planning counselling support • Development of IEC/BCC materials
MEST	• Ensure inclusion of adolescent sexual and reproductive health in the curricula of schools and include at-least one question on RH/FP in the annual exam • Support creation of an enabling environment to discuss RH/FP issues in 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 of IEC/BCC materials • Sensitization and training • Provision of family planning commodities and services
Ministry of Justice	• Ensure that the Act on early marriage is enforced and penalties set for non-compliance

PRIORITY AREA 7: IMPROVE NUTRITION STATUS OF PLHIV/TB/OVCS AND REDUCE PREVALENCE OF NCDS

(i) Nutrition for PLHIV/TB/OVCs

a. Indicators

	Description	Actual 2012	Target 2016
Indicators	Prevalence of malnourished PLHIV	44%[15]	20%
	OVCs 5-18 years food insecure	50% (WFP est.)	25%

[15] WFP PLHIV/TB and OVCs nutritional surveillance status analysis 2012 (Western Areas statistics)

	Prevalence of malnutrition among TB patients	40%[16]	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		

b. Current situation

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 acquires HIV or TB, the disease increases their energy requirements, and the infected person's ability to absorb and use 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 2010 Annual Report of the National TB Control Programme, 10% (976) of the people screened and found to be HIV positive are also infected with Tuberculosis (co-infected).

Pregnant 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.

c. Implementation strategies

- Provide supplementary feeding to PLHIV with poor nutritional status, TB patients on treatment and OVCs (Objective 2.8).
- Assess the nutritional status of PLHIV/TB and other vulnerable children in the country to understand the severity of the problem. (Objective 3.7)
- Review and update the national nutrition guidelines for nutrition support to PLHIV/TB and train health care providers. (Objective 3.7)
- 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. (Objective 3.6)
- Incorporate, nutritional counselling and support for HIV/TB/OVC into the curriculum of all training institutions. (Objective 3.7)
- 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. (Objective 2.7,3.7)

c. Scale-up strategies

[16] MoHS TB programme assessment (2009)

Channel	Priority actions
Health Facilities	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	TV, Radio and newspaper messages 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

(ii) Prevention measures for Non-Communicable Diseases

a. Indicators

	Description	Actual 2012	Target 2016
Indicators	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		

b. 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.

c. Implementation strategies

- Establish community and facility surveillance system for NCDs through the STEPS survey. (Objective 4.14)
- Develop and disseminate (nationwide) IEC materials on NCDs to promote a healthy lifestyle for prevention of NCDs. (Objective 2.1, 4.14)
- 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. (Objective 4.14)

d. Scale up strategies

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

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

Ministry/Partner	Roles and Responsibility
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 • Development and disseminate of 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 • Dissemination of IEC/BCC materials • Provide counselling support
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

2.2 CROSS CUTTING ISSUES

2.2.1 GENDER CONCERNS IN NUTRITION

Poor nutrition early in life reduces learning potential, increases reproductive and maternal health risks and lowers productivity. Similar to other developing countries, the main problem that women face in Sierra Leone is poor access to land, information, technology, low participation in decision making forums 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.

To address these problems, a number of strategies will be applied. They include the roll out 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.). Advocacy at the community level targeting the Paramount Chiefs, other local authorities, Local councils and secret societies will be conducted to address cultural barriers and promote the girl child school enrolment. Finally, deliberate efforts to will be made to actively target men and increase their participation in food and nutrition security interventions for them to better provide support to the women. (Objective 1.4)

2.2.2 COMMUNICATION

In Sierra Leone, many high level policy makers and national programme designers do not have adequate knowledge on the relevance of Nutrition to national development. This is despite the fact that nutrition related interventions are articulated in national policy documents as well as other sectoral policy documents. Due to limited knowledge of the relevance of nutrition, they neither demand for nutrition-related data for decision making nor consider nutrition outcomes in national programme design. A national food and nutrition security forum was conducted in Sierra Leone in 2011 but more needs to be done to increase the knowledge level. At the beneficiary level, the messages are not well integrated and targeted and are not reaching the targeted groups in ways that could impact positively on their lives. The lack of a harmonized policy that explicitly guides each sector on their roles and responsibilities with a clear accountability framework has been one of the shortfalls.

To address these gaps, 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 nutrition advocacy will be developed and used to advocate for increased investment in nutrition to support nationwide scale-up of nutrition interventions. (Refer to Objective 1 for detailed activities). (Objective 1.1)

Similarly, at the intervention level, nutrition education is a crosscutting issue with many players across all sectors. There will be a need to harmonise messages and leverage on each agencies' comparative advantage to successfully accomplish the nutrition education component. This requires a common nutrition communication strategy to build consensus on joint messages and delivery mechanisms and joint development of nutrition messages. The materials developed will then be used by all the stakeholders. 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 put in place. (Objective 1.2)

2.2.3 CAPACITY DEVELOPMENT

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 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, the actual numbers and skills sets cannot be determined until a capacity assessment is conducted to determine existing gaps including gaps in pre and in-service training needs in the main sectors concerned in food and nutrition security interventions. Some of the 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. (Objective 1.3)

Table 4: 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 Nurse: 196 MCH Aide: 1876 Midwife: 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

2.2.4 OPERATIONAL RESEARCH

Operational research is currently taking place on a low scale in Sierra Leone with limited collaboration among relevant sectors and inadequate dissemination of research findings. As a result, 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. There is 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 will also be useful in developing capacities where needed. (Objective 7.1)

2.2.5 DISASTER PREPAREDNESS

Food and nutrition disaster 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 and thus

the need to strengthen the food and nutrition early warning and surveillance system. To strengthen disaster preparedness, the following should be put in place (Objective 6.2):

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 priority 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 micro-nutrients and feeding 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 recognised organisations.

PART 3: INSTITUTIONAL ARRANGEMENTS, IMPLEMENTATION AND FINANCING

3.1 NUTRITIONAL SURVEILLANCE, MONITORING AND EVALUATION

3.1.1 NUTRITION SURVEILLANCE

The high prevalence of malnutrition and existence of the double burden of disease, the 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 for the purpose of detecting changes in trend or distribution in order to initiate corrective measures. This will assist in long term health and development planning, programme management, timely warning and design of intervention programmes. The National integrated nutrition surveillance 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. (Objective 6.1)

3.1.2 EARLY WARNING SYSTEMS

In Sierra Leone 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.

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 data base, 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) Pastorization (vi) crop Yield (vii) Hydrology (viii) Market Information (ix) Nutrition Surveillance. (Objective 6.1)

3.1.3 MONITORING

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.

At the national level joint supervision 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. Supervision will be strengthened at the district level through a number of modalities (Objective 6.3):

- Strengthen the district technical committees e.g. the DHMT, DAC
- 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.
- Provide logistical support for Community-based organisations to monitor and supervise interventions at the community level

3.1.4 EVALUATION

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, 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 and Complementary Feeding 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, 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:

- 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-sectorality 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. (Objective 6.3, 8.2)

Table 5: Nutrition 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 folate 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 over-weight 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.

3.2 COORDINATION MECHANISM

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.

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.

The Sierra Leone Food and Nutrition Security Policy Implementation Plan recognizes the need to establish and strengthen the coordination structure at national institutional level by establishing three new coordination structures 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 being proposed:

1. National level Coordination mechanisms
   - The Presidential Task Force on Agriculture (In existence)
   - National Food and Nutrition Security Steering Committee (To be established)

- National Food and Nutrition Security Technical Coordination Committee (To be established)
- Sector based technical coordination mechanisms (In existence)

2. Sub national level Coordination mechanisms
   - District Food and Nutrition Security Coordination committee (To be established)
   - District sector coordination committees (In existence)
   - Chiefdom/Ward/Village coordination committees (In existence, some are dormant)

3.2.1 NATIONAL LEVEL COORDINATION MECHANISMS

The *Presidential Task Force on Agriculture* (PTAG) is the top-most policy making body governing the SCP. It is chaired by the President and its members include all Ministers involved in the implementation of the SCP. The taskforce meets once every quarter. In line with its existing TOR, it is proposed that the PTAG also provides the overall strategic vision to promote food and nutrition security through an inter-sectoral approach. The following additional roles have therefore been proposed for PTAg.

Roles of PTAG

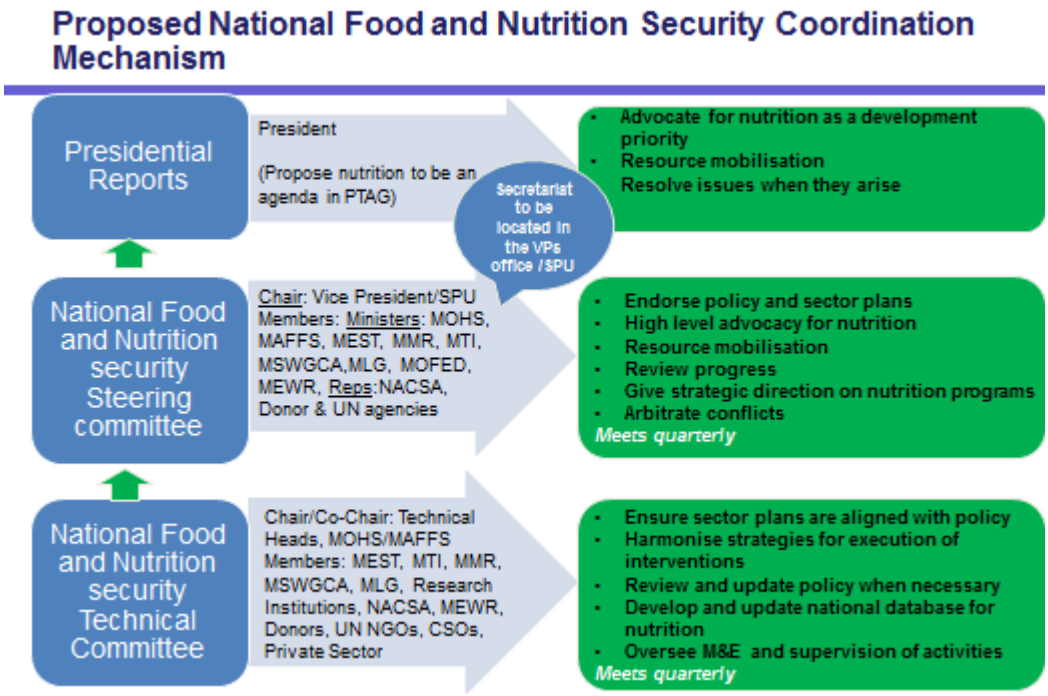
- To provide strategic direction to the Food and Nutrition security implementation plan and take key policy decisions; this will include policy issues which cut across a number of areas of Government's work, spanning multiple Government ministries
- To review the Food and Nutrition Security implementation plan on a quarterly basis, holding responsible persons to account
- To commission work as required to unblock barriers to the successful implementation of the programme or to otherwise improve the effectiveness of the Food and Nutrition security policy implementation plan in achieving its objectives
- To ensure that sufficient resources are mobilised to enable the full scale-up of all the interventions

The *National Food and Nutrition Security Steering Committee* will be established in the office of the Vice President's/SPU to facilitate the coordination of the multi-sector food and nutrition security interventions at the strategic level. The committee will be chaired by the Vice President. The members will comprise of Ministers of MOHS, MAFFS, MSWGCA, MEST, MMR, MTI, MLG, MEWR and MOFED and representatives from NaCSA, UN, and Donor agencies. The office will establish a secretariat under the leadership of a senior technical specialist to manage its coordination functions. The steering committee will meet on a quarterly basis.

Specifically the committee will undertake the following functions:

- Provide strategic direction to nutrition programming, and coordinate joint planning, implementation and review with the relevant stakeholders.
- Endorse nutrition-related policies and sector plans
- Provide monitoring oversight and facilitate national nutrition response nationwide.
- Mobilize resources and support for nutrition response.
- Lobby and advocate for the development of relevant nutrition structures and adequate resource allocation.
- Facilitate cross Sector collaboration

Figure 11: Linkages between the National coordination mechanisms



The *National Food and Nutrition Security Technical Committee* will be the operational or technical arm of the steering committee. It will meet on a quarterly basis. This is a Multi-Sector Technical Committee and its membership will be comprised 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.

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 ongoing 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.

3.2.2. 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 steadily 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.

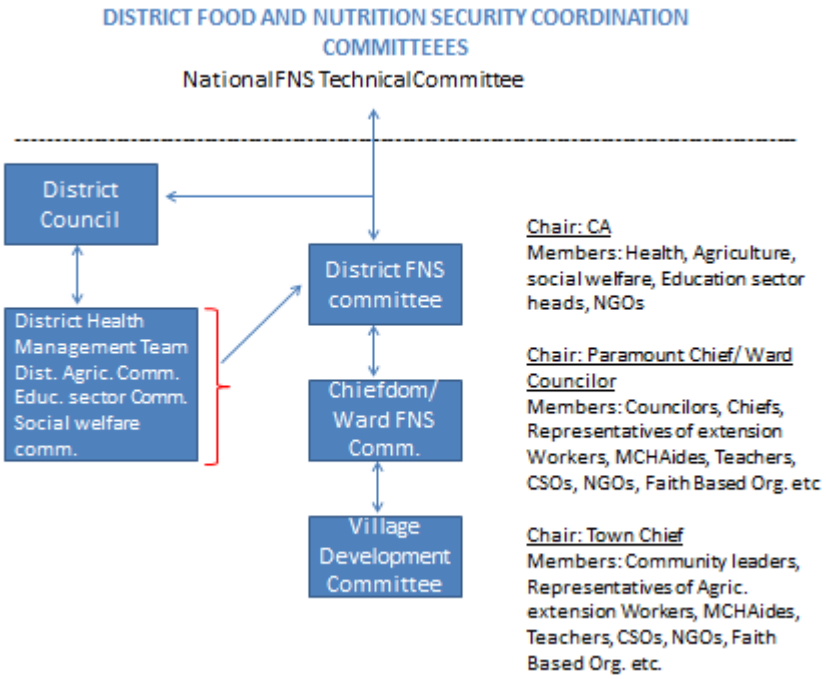
Specifically the roles of the Committee will be as follows:

- 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 sectoral 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) respectively. 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 11: District Food and Nutrition Security Coordination Structure



3.2.3 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 6: 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, 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. (Objective 8)

3.3 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 (2012 – 2016) is USD 605520511. 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.

3.3.1 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 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.

3.3.2 DEVELOPMENT PARTNERS

The Government recognizes the fact that current domestic budgets alone will not be able to independently 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.

3.3.3 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.

3.3.4 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. MoFDEP will mobilize and provide resources and ensure that the budget allocation places priority on nutrition interventions to contribute to the attainment of the MDGs.

3.3.5 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 staff are recruited to handle this function.

Table 7: Summary of five-Year costed Implementation Matrix

Policy Objective	2012	2013	2014	2015	2016	Total (USD)
Objective 1: Advocacy						
Advocacy costs	280,000	90,000	70,000	55,000	65,000	560,000
Sub Total	**280,000**	**90,000**	**70,000**	**55,000**	**65,000**	**560,000**
Objective 2: Food Security						
Food production & Nutrition education	301,000	684,000	905,000	340,000	201,000	2,431,000
Processing and value addition	27,433,000	31,657,000	31,667,000	5,000	5,000	90,767,000
Food and cash for work	5,380,000	6,003,000	6,733,000	7,515,000	8,351,000	33,982,000
Food distribution	10,862,000	28,705,000	30,641,000	32,616,000	34,586,000	137,410,000
Sub Total	**43,976,000**	**67,049,000**	**69,946,000**	**40,476,000**	**43,143,000**	**264,590,000**
Objective 3: Feeding practices						
Infant and young child feeding	840,000	2,762,000	2,877,000	977,000	900,000	8,356,000
Feeding practices, PLHIV/TB/OVCs	116,000	455,000	295,000	286,000	294,000	1,446,000
Sub Total	**956,000**	**3,217,000**	**3,172,000**	**1,263,000**	**1,194,000**	**9,802,000**
Objective 4: Preventive measures						
Micronutrients & deworming	2,735,000	3,374,000	3,045,000	3,217,000	3,194,000	15,565,000
Malaria control (ITN, IpTp)	1,079,000	1,068,000	16,033,000	1,033,000	1,078,000	20,291,000
Water Sanitation and Hygiene	37,279,000	37,579,000	37,429,000	37,429,000	37,429,000	187,145,000
Food safety and hygiene	220,000	200,000	170,000	150,000	120,000	860,000
NCD control						

	235,000	99,000	113,000	123,000	121,000	691,000
Family planning and adolescent reproductive health	656,000	6,721,000	801,000	2,769,000	788,000	11,735,000
Sub Total	**42,204,000**	**49,041,000**	**57,591,000**	**44,721,000**	**42,730,000**	**236,287,000**
Objective 5: Therapeutic measures						
CMAM	3,920,000	6,707,000	7,549,000	8,408,000	8,076,000	34,660,000
Sub-Total	**3,920,000**	**6,707,000**	**7,549,000**	**8,408,000**	**8,076,000**	**34,660,000**
Objective 6: Nutrition surveillance						
Early warning and surveillance	227,000	694,000	598,362	365,000	276,000	2,160,362
Contingency planning	250,000	100,000	55,000	30,000	25,000	460,000
Monitoring and evaluation	25,000	197,000	204,000	110,000	191,000	727,000
Sub Total	**502,000**	**991,000**	**857,362**	**505,000**	**492,000**	**3,347,362**
Objective 7: Operational research						
Operational research coordination and advocacy costs	70,000	85,000	85,000	85,000	85,000	410,000
Sub-Total	**70,000**	**85,000**	**85,000**	**85,000**	**85,000**	**410,000**
Objective 8: Coordination						
Staffing and operational costs	81,140	52,900	60,700	61,000	71,090	326,830
Information sharing platform	40,000	135,000	105,000	105,000	105,000	490,000
Sub Total	**121,140**	**187,900**	**165,700**	**166,000**	**176,090**	**816,830**
Grand Total	**92,029,140**	**127,367,900**	**139,436,062**	**95,679,000**	**95,961,090**	**550,473,192**
Total including 10% Contingency 10%						**605520511**