



Republic of Kenya

NATIONAL FOOD AND
NUTRITION SECURITY POLICY
IMPLEMENTATION
FRAMEWORK

2017-2022

June 2017



REPUBLIC OF KENYA

NATIONAL FOOD AND NUTRITION SECURITY POLICY IMPLEMENTATION FRAMEWORK

2017-2022

JUNE 2017

TABLE OF CONTENTS

FIGURES AND TABLES	vi
LIST OF ABBREVIATIONS AND ACRONYMS.....	vii
FOREWARD	ix
ACKNOWLEDGEMENT.....	xi
EXECUTIVE SUMMARY.....	xiii
1.0 BACKGROUND AND CONTEXT.....	1
1.1 Introduction	1
1.2 Food and Nutrition Security.....	1
1.3. Food and Nutrition Security Status.....	2
1.3.1 Chronic and acute malnutrition.....	3
1.3.2 Micronutrient Deficiencies	3
1.3.3 Other diet-related Non-Communicable Diseases	3
1.4 Agricultural Performance and Economic Growth	4
1.5 National Food and Nutrition Security Policy.....	4
1.5.1 Policy Scope and Context	4
1.5.2. Policy Implementation Framework	5
2.0 ACHIEVING FOOD SECURITY OBJECTIVES.....	7
2.1 National Food Availability	7
2.1.1 Overview.....	7
2.1.2 Domestic production	7
2.1.3 Domestic, Regional and International Food Trade	8
2.1.4 Agro-Processing and Value-Addition.....	8
2.1.5 Storage facilities	9
2.1.6 Strategic Food Reserve.....	9
2.1.7 Commercialization of Agriculture	10
2.2 Food Accessibility.....	10
2.2.1 Improvement and Expansion of On-Farm and Off-Farm Employment.....	11
2.2.2 Improvement of Urban and Peri-Urban Food Accessibility.....	11
2.2.3 Improving Food Access and Functioning of Markets.....	12
2.2.4 Cultural, Social and Political Aspects in Food Access	12
2.3 Household Resource Productivity	13
2.3.1 Accessibility to Productive Resources for Rural Agriculture	13
2.3.2 Sustainable Intensification and Diversification of Agricultural Production Systems	14
2.3.3 Urban and Peri-urban Agriculture	14

2.3.4 Food Storage, Preservation and Value-addition.....	15
2.4 Food Safety And Quality	15
3.0 NUTRITION IMPROVEMENT	17
3.1 Nutrition Throughout Life Cycle	17
3.2 Micronutrient Deficiency Prevention and Control.....	17
3.3 Nutrition Advocacy, Communication and Social Mobilization	18
3.4 Nutrition and Infection	19
3.5 Nutrition and Non-Communicable Diseases.....	19
3.6 Urban Nutrition	20
3.7 Nutrition in Schools, Public and Private Institutions	20
3.8 Food and Nutrition Education in Schools and Institutions	21
4.0 FOOD AND NUTRITION DURING CRISIS AND EMERGENCY	23
4.1 Emergency Preparedness.....	23
4.2 Emergency Response.....	23
4.3 Recovery, Building Resilience and Long-Term Development	24
5.0 FOOD AND NUTRITION INFORMATION & COMMUNICATION	25
5.1 Data Collection and Information Management	25
5.2 Information, Education and Communication	25
6.0 INSTITUTIONAL, LEGAL FRAMEWORK AND FINANCING	27
6.1 Institutional Framework	27
6.1.1 National Structures	28
6.1.2 County Institutional Structures	30
6.1.3 Stakeholder Technical Committees for Food and Nutrition (STC-FN)	32
6.2 Legal Framework	32
6.3 Financing the Implementation of the Food and Nutrition Security policy	33
7.0 IMPLEMENTATION MATRIX	35
8.0 THE STRATEGIC RESULTS FRAMEWORK	36
9.0 MONITORING AND EVALUATION	37
9.1 Rationale and Objectives	37
9.2 Performance Indicators	37
10 RISK ASSESSMENT	39
APPENDIX I: IMPLEMENTATION MATRIX	42
FOOD SECURITY	42
PRIORITY AREAS, RESULTS, INTERVENTIONS AND BUDGETS	42
NUTRITION IMPROVEMENT.....	54
FOOD AND NUTRITION IN CRISIS, EMERGENCY SITUATIONS	61
5.0 Food and Nutrition Information & Communication	64

6.0 INSTITUTIONAL, LEGAL FRAMEWORK AND FINANCING	66
Other Food Security Indicators	71
NUTRITION IMPROVEMENT KEY PERFORMANCE INDICATORS	72
CRISIS AND EMERGENCY MANAGEMENT	79
APPENDIX III: TECHNICAL COMMITTEE MEMBERS AND CONTRIBUTORS	81
LIST OF REFERENCES	82
CONCEPTUAL FRAMEWORKS	83

FIGURES AND TABLES

Figure 1: Elements of national and household food and nutrition security (Adopted from FANTA)	2
Figure 2: National Food and Nutrition Security Policy Implementation Coordination Structure	28
Figure 3: Schematic Representation of the National Food and Nutrition Security Results Framework	36
<i>Table 1: Priority listing of risks</i>	<i>39</i>
<i>Table 2: Risk Analysis and Evaluation Matrix</i>	<i>39</i>

LIST OF ABBREVIATIONS AND ACRONYMS

4H	Head, Heart, Hands and Health
4K	Kuungana, Kufanya, Kusaidia, Kenya
ASAL	Arid and Semi-Arid Lands
ASCU	Agricultural Sector Coordination Unit
ASDS	Agricultural Sector Development Strategy
AUC	African Union Commission
ATFFND	African Task Force on Food and Nutrition Development
SBCC	Behaviour Change Communication
BFHI	Baby Friendly Hospital Initiative
CAADP	Comprehensive Africa Agricultural Development Program
CBS	Central Bureau of Statistics
CFNSS	County Food and Nutrition Security Secretariats
CG	County Government
CoG	Council of Governors
CSTC-FN	County Stakeholder Technical Committees on Food and Nutrition
CSO	Civil Society Organizations
ERS	Economic Recovery Strategy for Wealth and Employment Creation
FAO	Food And Agriculture Organization of the United Nations
FBO	Faith Based Organization
FNSC	Food and Nutrition Security Council
FSNIF	Food and Nutrition Security Implementation Framework
GDP	Gross Domestic Product
GIZ	German Corporation for International Cooperation
IEC	Information, Education and Communication
ISCFN	Inter-ministerial Steering Committee on Food and Nutrition
KALRO	Kenya Agricultural and Livestock Research Organization
KDHS	Kenya Demographic and Health Survey
KEPHIS	Kenya Plant Health Inspectorate Services
KES	Kenya Shilling
KFSM	Kenya Food Security Meeting
KIPPRA	Kenya Institute for Public Policy Research Analysis
KNBS	Kenya National Bureau of Statistics
KNMS	Kenya National Micronutrient Survey
MFI	Micro Finance Institutions
MoALF	Ministry of Agriculture, Livestock and Fisheries
MoDP	Ministry of Devolution and Planning
MoE	Ministry of Education
MoENR	Ministry of Environment and Natural Resources
MoH	Ministry of Health
MoL	Ministry of Lands

MoPSY&GA	Ministry of Public Service, Youth and Gender Affairs
MoRPW	Ministry of Roads and Public Works
MoTC	Ministry of Trade and Cooperatives
MoWI	Ministry of Water and Irrigation
MSE	Medium and Small Enterprises
MSME	Micro, Small and Medium Enterprises
MTEF	Medium Term Expenditure Framework
MTIP	Medium Term Investment Plan
MTP	Medium Term Plan
NCD	Non-Communicable Diseases
NCPB	National Cereals and Produce Board
NCST	National Council of Science and Technology
NDMA	National Drought Management Authority
NDOC	National Disaster Operations Center
NEPAD	New Partnership for African Development
NFNEC	National Food and Nutrition Steering Committee
NFNS	National Food and Nutrition Secretariat
NFNSC	National Food and Nutrition Steering Committee
NFNSP	National Food and Nutrition Security Policy
NFNSP-IF	National Food and Nutrition Security Policy Implementation Framework
NFSCC	National Food Safety Coordination Committee
NFNSC	National Food and Nutrition Steering Committee
NFSNP	National Food Security and Nutrition Policy
NGO	Non-Governmental Organization
OP	Office of the President
PLWHA	People Living with HIV and AIDS
PRSP	Poverty Reduction Strategy Paper
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goals
SFR	Strategic Food Reserves
SGR	Strategic Grain Reserves
SP	Social Protection
SRA	Strategy for Revitalizing Agriculture
STC	Stakeholder Technical Committee
TWG	Technical Working Group
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNICEF	United Nations Children Education Fund
VAT	Value-Added Tax
WASH	Water, Sanitation, and Hygiene
WFS	World Food Summit

FOREWARD

Food and nutrition security is key to achieving both human and economic development agenda of our country. Indeed the Government strives to achieve a food secure, healthy, productive and wealthy nation as enshrined in the Constitution of Kenya 2010 Article 43 (c), that assures kenyans of the right to be free from hunger and to have adequate food of acceptable quality. This is further emphasized in the country's long term development blue print, Kenya Vision 2030 whose vision is *“A globally competitive and prosperous country with a high quality of life [for its people] by 2030”*.

Rapid population growth, poverty, unsustainable production systems and climate change pose the biggest challenge to sustainable food production, consumption expectations and patterns. Kenya experiences a 20-30% deficit in staple foods every year as the overall national food production has not increased in tandem with population growth. This scenerio is likely to continue especially with the current increase in the annual population growth rate by 2.6% (World Bank report, 2015). At this rate it is projected that the Kenyan population may reach 64 million by year 2030. Thus, more effort is needed to increase food production and productivity to satisfy future demand for food by the increasing population

Transformation strategies beyond dependence on rain fed agricultural production and embracing irrigation, mechanization and modern technologies are required to improve stability of food availability and access. This also implies that environmental sustainability for food production be assured at all times. We are aware of the social cultural and political obstacles that should be addressed as part of the prevailing food insecurity challenges. The National Food and Nutrition Security Policy adopts a wide range of approaches to address these challenges to attain the desired food and nutrition security status at individual, household, community and national levels. The overall goal of the policy is to ensure that all Kenyans throughout their lifecycle enjoy at all times safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal health. It provides an overarching framework that covers the four dimensions of food security—availability, accessibility, utilization and stability.

Studies have shown that a significant proportion of the population cannot meet their daily food requirements. The Kenya Demographic and Health Survey (KDHS, 2014) report indicates that, nationally, 25% of children under five years are stunted. The attributing factors include: poverty, diseases and household resource constraints that many Kenyans face. The impact of acute malnutrition in early life has irreversible lifelong damages. A malnourished child is less able to fight off illness, cannot thrive, often ends up with poor cognitive development and is physically stunted. Such children are less likely to achieve highly in school due to poor attention, reasoning, learning and memory. Affected individuals later get trapped in the poverty and malnutrition cycle, which is difficult to break without external support. Good nutrition balance through dietary diversity is therefore key to achieving our human development goals. It is important to ensure availability of diverse, wholesome and nutritious foods, not just for survival, but for people to thrive and grow to their full potential for meaningful contribution to the socio-economic development of our country.

On the flipside, however, the opposite scenario of over-nutrition and increasing cases of non-communicable diseases (NCDs) has emerged as the new public health concern. This is associated with poor food choices and lifestyle mainly due to inadequate nutrition knowledge. The complications include overweight, obesity, diabetes, hypertension, gout and some types of cancers, among others. Increased effort is necessary to enhance nutrition education in order to improve nutrition knowledge among the populace. This would enable Kenyans to make better food choices, proper food utilization and adjust their lifestyles for better nutrition and health to lead more productive lives.

Water, sanitation, and hygiene (WASH) issues are also essential for human nutrition and health. About 50% of cases of under nutrition and 25% of stunting cases are tied to chronic diarrhoea, intestinal worms, and other diseases that are linked to poor WASH.

This implementation framework (2016-2020) puts into consideration the complex nature of food and nutrition insecurity and recommends priority strategies for achieving our common goals and objectives. The proposed strategies embrace the multi-dimensional, multi-sectoral and holistic life cycle approaches

adopted in the National Food and Nutrition Security Policy. Based on the elements of our national and household food and nutrition security, a multi-sectoral approach will be employed involving the wide range of actors in Agriculture, Health, Water, Education, Food and other relevant sectors. The proposed priority interventions will also target the vulnerable populations including the poor, mothers, children, people with disabilities and the elderly citizens. Further, appropriate social protection programs will be scaled up or established to ensure regular access to adequate wholesome food by all people at all times. The impact of such initiatives will be felt by the populations today and in future.

This Implementation Framework is a tool for effective implementation of the National Food and Nutrition Security Policy. The main policy areas are elucidated in terms of the, development objectives, priority interventions, implementation approaches and result areas as described in the Implementation Matrix. It will guide all stakeholders in the implementation of the National Food and Nutrition Security Policy for the period 2017 to 2020. It is therefore recommended as the guide for developing effective programs, strategies, or action plans. The Implementation framework may be contextualized at all levels to satisfy the needs of diverse social economic and ecosystem settings. This will also guide in partnerships, mobilization and commitment of resources. The Monitoring and Evaluation (M&E) aspects, critical to affirming nutritionally adequate and safe food are also specified this framework to measure performance and demonstrate results.

Good progress in the implementation of the Policy will require enhanced collaboration, mutual accountability and strengthening of coordination of all actors to ensure greater coherence, desired momentum and synergy of all food and nutrition security programs. This will be achieved through utilization of the mandates of relevant ministries and establishing effective linkages between existing institutional structures as proposed in this framework. All relevant stakeholders' interests shall be integrated through the joint Secretariat that will be responsible for establishing appropriate horizontal and vertical linkages in order to promote broad multi-sectoral collaboration of diverse stakeholders. This framework provides the institutional coordination structure that will facilitate high level commitment, leadership by the Government, collaboration and joint planning by all sectors and stakeholders at all levels. This will be achieved through the establishment of the envisaged Food and Nutrition Security Council and Steering Committee.

This Implementation Framework was developed through a highly consultative and participatory process by a multi-disciplinary committee drawn from all key ministries. It is comprehensive enough to address most of the issues relating to food and nutrition security in our context. We acknowledge that overcoming these challenges is our collective responsibility and we should work together to achieve our objectives. We are confident that this Implementation Framework will guide us to realize our national food and nutrition security goal: — *“Ensuring that all Kenyans enjoy at all times safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal health”*.

Mr. Willy Bett, EGH
Cabinet Secretary
Ministry of Agriculture, Livestock and Fisheries

Dr. Cleopa Kilonzo Mailu, EGH
Cabinet Secretary
Ministry of Health

Hon. Mwangi Kiunjuri, EGH
Cabinet Secretary
Ministry of Devolution and Planning

Dr. Fred O. Matiang'i, EGH
Cabinet Secretary
Ministry of Education

Hon. Eugene Wamalwa, EGH
Cabinet Secretary
Ministry of Water and Irrigation

H.E Hon. Josphat Nanok,
Chair, Council of Governors
Governor Turkana County

ACKNOWLEDGEMENT

Food and nutrition security is a basic human right. It is with this in mind that the government through the relevant sector ministries developed the Food and Nutrition Security Policy and now this Implementation Framework as a guide in the development of action plans and programmes that address food and nutrition security matters. This Implementation Framework is a product of the review of the 2013-2017 draft that was not finalized after the adoption of the devolved governance system in 2013. Its development was through highly consultative and participatory processes led by a multi-disciplinary Technical Committee drawn from relevant sector ministries, with financial resources mobilized from the State Department of Agriculture. The additional financial support of the German Corporation for International Cooperation (GIZ) and United Nations Children Education Fund (UNICEF) at some stages during development of this Implementation Framework is highly acknowledged.

I wish to acknowledge the leadership and guidance provided by the Cabinet Secretaries: Willy Bett (EGH) Ministry of Agriculture, Livestock and Fisheries; Hon. Eugene Wamalwa (EGH), Ministry of Water Resources and Irrigation; Dr. Cleopa K. Mailu (EGH), Ministry of Health; Mr. Mwangi Kiunjuri (EGH), Ministry of Devolution and Planning; and Dr. Fred Matiang'I (EGH), Ministry of Education, in developing this Implementation Framework.

The contributions of the County Executive Committee (CEC) Members responsible for Food and Nutrition Security matters during the County consultations are highly appreciated. The active role of Agriculture Secretary Ms. Ann Onyango and Dr. Johnson Irungu, Director Crops Resources, Agribusiness and Market Development in steering the review process is also highly acknowledged.

The exemplary dedication and good work of the following members of the National Inter-ministerial Food and Nutrition Security Policy dissemination committee, under the coordination of Mary Mwale, is specially acknowledged: Stephen Andika, Hilda Njoroge, Jacinta Ngwiri, Christopher Macharia, Jane Wambugu, Eng. Musa Sang, Leonard K. Kamaru, Tom Kinara, and Kithama Mbolu of the Ministry of Agriculture Livestock and Fisheries; Ian Thande Githae and Phaniel Webi of the Ministry of Water and Irrigation; Gladys Mugambi, Grace Gichohi, Leila Akinyi and Florence Mugo of the Ministry of Health; Tom Obunde of the Ministry of Devolution and Planning; and Sicily Matu of UNICEF. The team successfully conducted extensive consultations at both National and County levels during review of the first Draft Implementation Framework (2013-2017) to give rise to this version.

Dr. Richard L. Lesiyampe, (PhD), CBS
Principal Secretary, State Department of Agriculture

EXECUTIVE SUMMARY

About 40% of Kenya's population is poor and on average, 25% suffer from chronic food insecurity and poor nutrition. In recent years, it is estimated that at any one time about two million people require relief food assistance. During periods of drought, floods, or other calamities, the number of people in need more than doubles.

The growing problem of food and nutrition insecurity in Kenya is linked to the stagnated growth of agricultural production, low use of agricultural technology, high food prices, frequent disasters and climatic change. These factors have a direct effect on most of the country's population (75%) as they reside in the rural areas where agriculture dominates. Even though the country has generally experienced positive growth in agricultural output over the past four decades, it has experienced serious periodic food deficits especially the main staples. While Kenya has achieved modest and sustained economic growth, and maternal and child nutrition over the last two decades, food insecurity and poverty levels have not shown satisfactory improvement.

The high burden of malnutrition in Kenya is not only a threat to the achievement of the goal of Kenya Vision 2030 and the Sustainable Development Goals (SDGs), but also a clear indication of inadequate realization of human rights. Regional disparities in nutrition indicators are significant with the chronically food-insecure spread across all counties in Kenya. While this scenario is true for some regions, some sections of the population especially in urban areas are showing an increase in over nutrition. Kenya's past policies have had limited success in addressing the country's food and nutrition insecurity due to several reasons. Chief among these being inadequate budgetary allocations to agriculture and health, unstable macro-economic conditions, limited involvement of the private sector, inadequate sectoral coordination, lack of effective monitoring and evaluation systems, limited stakeholder participation, and lack of a clear food and nutrition security strategy.

This Implementation Framework is aligned to the National Food and Nutrition Security Policy (NFNSP), in which both food security and nutrition are recognized as basic human rights. The framework takes the view that the right to food includes not only sufficient numbers of calories but the right to nutritious foods that guarantee health, growth and development throughout a person's lifecycle. The overall goal of this framework for action to achieve food and nutrition security is ***“ensuring that all Kenyans enjoy at all times safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal health”***.

The overarching framework covers all the four dimensions of food security—availability, accessibility, stability and meeting nutritional requirements. It also addresses the synergy linking food and nutrition security with poverty reduction.

Four broad objectives have been derived from the overall goal:

1. To achieve good nutrition for optimum health of all Kenyans;
2. To increase the quantity and quality of food available, accessible and affordable to all Kenyans at all times;
3. To protect vulnerable populations using innovative and cost-effective safety nets and emergency relief programs linked to long-term development; and
4. To develop implementation arrangements that would achieve the objective of the policy.

This Implementation Framework has been developed through a participatory and consultative process that was steered by a multi-disciplinary committee from all relevant Government ministries. The participants included technical staff of relevant government ministries including Agriculture, Livestock and Fisheries, Public Health and Sanitation, Education, Water and Irrigation, Environment and Mineral Resources, Devolution and Planning. Several steps were undertaken in the process that included stakeholder consultative workshops and meetings to share relevant international, regional and national experiences, and to analyse both existing and new programs whose improved or new strategies had the potential to increase food security or address current nutrition challenges. The FNSP-IF recognizes the potential and significant efforts and range of on-going programs by all sectors and aims to support these initiatives and develop new

ones based on the identified cross-sectorial gaps and sector vision.

The main goals of the IF are:

- i. To ensure that all Kenyans have the means to access affordable, nutritious and personally acceptable foods;
- ii. To guarantee a sustainable, safe and high quality food supply; and
- iii. To promote food consumption patterns that maximizes health and minimizes disease.

These three goals will be addressed through strategic interventions discussed in this Implementation Framework. A multi-sector implementation structure is proposed to achieve the desired linkages, and to coordinate and monitor food and nutrition strategies at both national and county levels.

The implementation structure emphasizes strong leadership at the Executive level and strengthening of inter-sectoral collaboration of all actors to create the desired synergy for achievement of the common goal. This will be achieved through the establishment of the National Food and Nutrition Security Council and Inter-ministerial Steering Committees at both National and County levels. The Council will be supported by a joint National Food and Nutrition Security Secretariat. The Secretariat will link the decision making and implementation actors at all levels. A robust Monitoring and Evaluation system is recommended in this framework.

The Food and Nutrition Security Policy statements inform the implementation approaches, which are discussed in Chapter 2, 3, 4, 5, 6 and 7. The objectives in the framework are supported by strategic interventions creating the Implementation Matrix captured in Appendix 1. Chapter 8 discusses the monitoring and evaluation framework critical to demonstrating results and measure performance of the implementation processes. A number of related programs are on-going and will require continued support and strengthening. In order to measure performance and achievement of results, a set of critical indicators harmonized with the Strategic Results Framework are set out in Appendix II.

Finally, this FNISP-IF recognizes that policies without workable and fundable plans do not have much impact; strategies are needed to identify areas where better linkages will work; and that food and nutrition security improvement requires much greater cross-sectoral collaboration and synergies, which this Implementation Framework recommends.

1.0 BACKGROUND AND CONTEXT

1.1 Introduction

Freedom from hunger is a constitutional right for all Kenyans and the Government is strongly committed to reducing hunger and malnutrition, build self-reliance to reduce chronic food insecurity, as well as institute measures that assist those in need when emergencies occur. The Food and Nutrition Security Policy (FNSP) was developed as an overarching framework that covers multiple dimensions of food security and nutrition improvement to add value and create synergy to existing sectoral and other government and partner initiatives. It is framed in the context of basic human rights, child rights and women's rights, including the universal 'Right to Food'.

This Food and Nutrition Security Policy Implementation Framework (FNSP-IF) is derived from the National Food and Nutrition Security Policy (NFSNP) and expresses the scope within which action should occur. It further integrates the major policies, objectives, programs, institutional structures and related actions into a coordinated and cohesive approach to managing the multifaceted challenges of food and nutrition security. Thus, the FNSP-IF provides a mechanism through which the government, private sector, Non-governmental Organizations (NGOs) and other stakeholders will facilitate, in a comprehensive and coordinated manner, the implementation of actions to improve and ensure the food and nutrition security requirements of Kenyans. This will, in the most part, assist in boosting other spheres of the country's economy and thus contribute to national development. It is only a food and nutritionally secure citizenry that can effectively participate in socio-economic activities.

The elements of the Implementation Framework (IF) are aimed at achieving the objectives of the Food and Nutrition Security Policy by making food accessible to all Kenyans at all times in safe and nutritionally acceptable quality. It also seeks to improve food security for Kenyans even in times of instability, emergencies and natural calamities. This IF will strengthen coordination and networking among relevant public and private institutions across sectors such as agriculture, trade water and health locally, regionally and globally. In addition, it reinforces efforts to safeguard food and nutrition security for the vulnerable groups in society, youth and women in urban, rural and other institutional contexts.

1.2 Food and Nutrition Security

Food security is understood to exist when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Ensuring food and nutrition security in Kenya is a critical challenge. Food security encompasses food availability through production, storage or imports; and the access to food by people through their purchasing power in markets. Access derives from the constitutionally ensured entitlements a household has to food, either through own-production of foodstuffs or through income to buy food in the market. The household makes decisions over the amount and kind of food produced or bought, prepared, and its internal distribution within the household. To achieve nutrition security, food security should be combined with education, a sanitary environment, clean water, adequate health services and proper care and feeding practices for all household members.

The main elements of food and nutrition security, which are understood to include adequate food availability, adequate food access, and appropriate food use and nourishment, are influenced by several national and/or household-level attributes. Food availability and access are influenced by both on-farm production and off-farm factors. The on-farm factors include farm resources (inputs) such as land, capital assets and access to information from research through extension; while off-farm factors include infrastructural development, marketing, processing and wage employment.

Food security is further seen as a relationship between household food consumption (which depends on availability and access) on the one hand and household structure (attributes), national and community level factors and on-farm and off--farm linkages on the other. Figure 1 shows the elements of national and household food and nutrition security, providing a simple conceptual scheme of food security and nutrition.

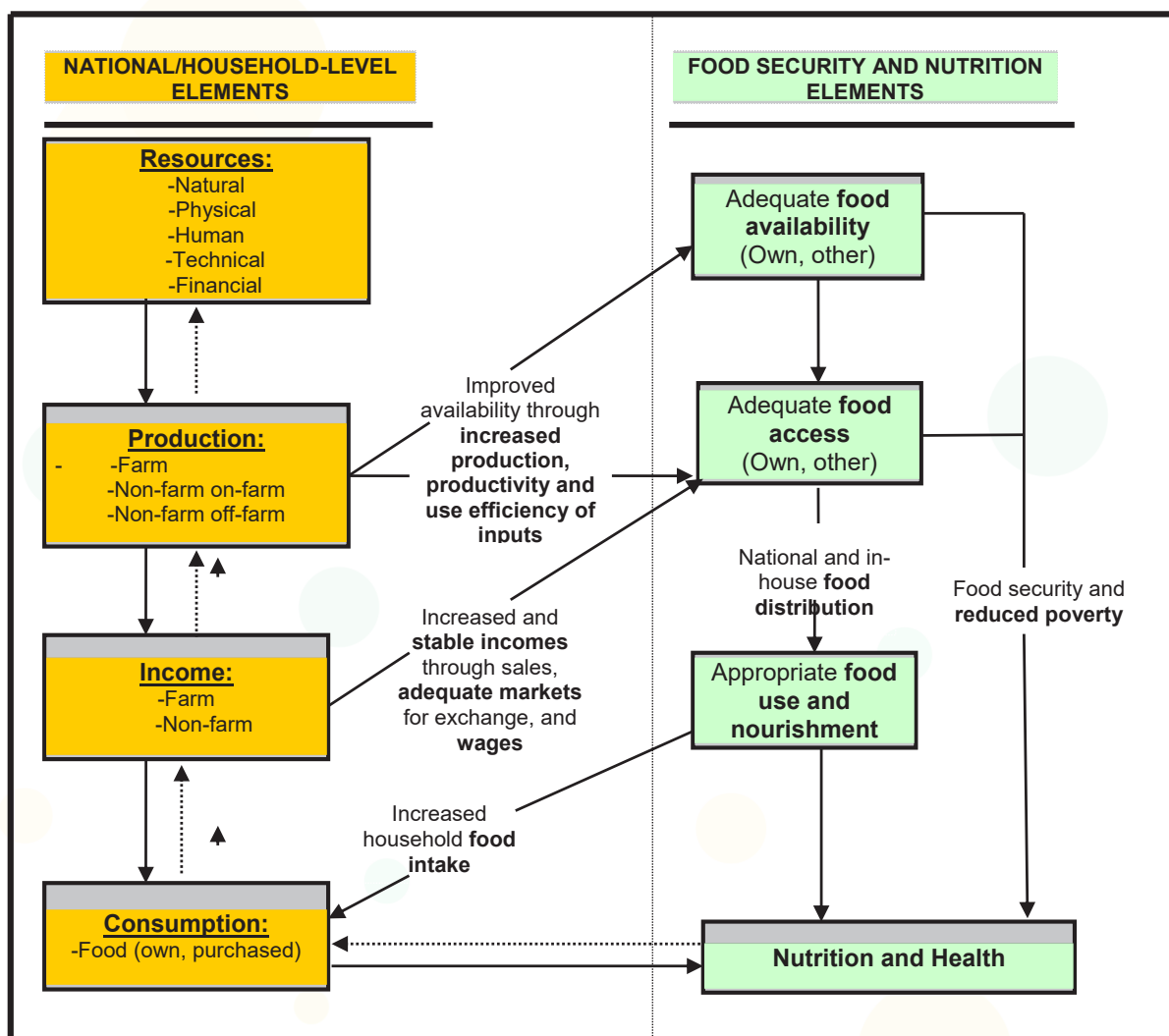


Figure 1: Elements of national and household food and nutrition security (Adopted from FANTA)

One of the major attributes that determine the ability of a household to acquire adequate food is its ability to produce or purchase food. Implied in this is the ability of the household to use available resources efficiently. In turn, the resources should be sufficiently productive. Other attributes include the nature and extent of endowment of these resources to the household, production processes, income accrued from production, and the level and methods of consumption.

Household food availability is influenced by own-production, production by other households (which influences the availability of loans and gifts), and food markets. Production levels are, in turn, influenced by the productivity of the resources (inputs) available. The resources may be natural, physical, human, technological and financial.

Another major component of household-level elements of food security is production of farm and non-farm outputs, using the resources available such as land and labour. When land is limited, the labour resource of a household determines the income to be earned from non-farm employment to supplement own-farm production. Households may also be involved in generation of income from farm and/ or non-farm product sales. In addition to improved production, there should be improved in-house food distribution resulting in appropriate food use and intake and, therefore, adequate food consumption. When improved food availability and access is achieved, and assuming food is appropriately used, the household is then likely to realize improved nutrition and health.

1.3. Food and Nutrition Security Status

Food and nutrition insecurity is closely linked to poverty. About 50% of the Kenyan population fall below the poverty line. Among these are those living in extreme poverty. Some of these are resident in relatively well-endowed rural and urban areas. Chronically food insecure people suffer from extreme poverty and

with no access to some of the safety net programmes available to those suffering acute food shortages during emergencies.

Under-nutrition in Kenya is a serious public health challenge. For instance, chronic and acute malnutrition, micronutrient deficiencies and infectious diseases are prevalent, particularly among the rural populations and the urban poor. The main problems contributing to childhood malnutrition include inadequate household food security, inadequate care giving capacity, and an unhealthy environment coupled with limited access to health facilities, predisposing the young children to infections. Nutritional deficiencies significant in public health in Kenya include protein and energy malnutrition, iodine deficiency disorders, iron deficiency anaemia, vitamin A and zinc deficiencies.

1.3.1 Chronic and acute malnutrition

Nutritional trends show that, nationally, 26% of children less than five years are stunted¹, depicting chronic undernourishment, which remains a serious and national development concern. The 2014 Kenya Demographic and Health Survey (KDHS) report shows that 4% are wasted and 11% are underweight (KDHS, 2014). There are significant regional disparities in nutrition indicators with the chronically food-insecure in arid and semi-arid areas showing consistently higher levels of acute malnutrition with Turkana leading at 22.9%.

Stunting is considered most serious because of the irreversible consequences. Stunting is highest in West Pokot and Kitui counties at 46%; Kilifi, Mandera, Bomet, Tharaka Nithi, Narok and Uasin Gishu counties at (31-39%); Kwale, Tana River, Lamu, Wajir, Marsabit, Meru, Embu, Machakos, Nyandarua, Samburu, Trans Nzoia, Uasin Gishu, Elgeyo Marakwet, Nandi, Baringo, Laikipia, Kericho, Kakamega, and Nairobi counties at (26-30%). The level of stunted children in the remaining counties range between 16-25%; while Nyeri, Garissa and Kiambu have the lowest with 15% (KDHS report 2014).

As in many other parts of the world, children living in rural areas and children from poorer households are more likely to be malnourished. Urban poverty and vulnerability are increasingly at the forefront of joint efforts to address the needs of the increasing number of malnourished people living in informal settlements. This represents more than 60% of the population of Nairobi, Mombasa and Kisumu cities.

1.3.2 Micronutrient Deficiencies

Micronutrient deficiencies are highly prevalent in Kenya, particularly at the critical stages of life when requirements for specific micronutrients (minerals and vitamins) are high. Vitamin and mineral deficiencies exist even among population groups with sufficient food in terms of meeting energy requirements. The Kenya National Micronutrient Survey (KNMS)² conducted in 2011 showed that children under five years are particularly affected by micronutrient deficiencies: vitamin A (9.2%), anemia is 26.3%, iron deficiency 21.3% and iron deficiency anemia is 13.3%, zinc (83.3%), Women, especially pregnant women, are also among the most vulnerable with anemia prevalence of 41.6%, iron deficiency 36.1% and iron deficiency anemia is 26% among pregnant woman. Among non-pregnant women of reproductive age anemia prevalence is 21.9%, iron deficiency 21.3% and iron deficiency anemia 14%. (KNMS, 2011).

The average national per capita calorie supply per day is less than the FAO recommended rate of 2,200 Kcal. Even in years of food self-sufficiency, chronic under-nutrition (nutritional stunting) affects nearly 30% of children, indicating insufficient food intake. This suggests that the problem goes well beyond national food availability and access. Thus, other major constraints to attaining good nutritional status include inadequate awareness and knowledge on nutritionally adequate diets, and limited resource allocation and capacity to support the implementation of comprehensive nutrition programs in the country.

1.3.3 Other diet-related Non-Communicable Diseases

Kenya is increasingly faced with the emergence of diet-related non-communicable diseases such as diabetes, heart diseases, hypertension, obesity and gout. These diseases are mainly caused by a change in lifestyle characterised by excessive intake of highly refined and high-fat foods, sugar and salt, coupled with limited

1. KDHS, 2014

2. Kenya National Micronutrient Survey, 2011

physical activity, a characteristic of urban settings. Obesity is especially a big challenge in urban areas with 33% of women of reproductive age being overweight or obese. The Kenya Stepwise Survey for NCD risk factors (2015) shows that 28% of Kenyans aged 18-69 years are either overweight or obese. With the percentage being significantly higher in women (38.5%) than men (17.5%). It is especially high in urban areas with 43% as compared to rural areas (26%). 47% of women in Nairobi overweight or obese and 4th and 5th wealth quintile being the most affected with 41% and 50% respectively. Almost half of women living in Nyeri, Kirinyaga and Mombasa are overweight or obese. NCDs account for 50% of total hospital admissions and over 55% of hospital deaths. Approximately 7% of Kenyans die from cancer, 22.6% of adults aged 18-69 years have raised blood pressure or currently on medication for raised BP while 2.3 have elevated levels of fasting blood glucose (Ministry of Health, 2015).

Further, food safety is an important component of food security and nutrition considering that millions of children and adults suffer from ill-health due to effects of food-borne diseases.

1.4 Agricultural Performance and Economic Growth

Economic performance has a direct bearing on the food and nutrition situation of the Kenyan people. In the first two decades after independence, the country was food self-sufficient and witnessed acceptable per capita consumption with significant economic growth and improvement in living standards. However, economic growth was not in tandem with population growth rates, therefore affecting per capita consumption patterns.

The agricultural sector plays an important role in the overall economy of Kenya. Currently, the sector directly contributes about 26% of the GDP and an additional 25% through linkages with manufacturing, distribution and service sectors. In the years when the agricultural sector has shown impressive growth, so has the gross domestic product (GDP); when the sector has slipped, so has GDP. During the second half of the 1980s, for example, the annual growth in GDP peaked in 1986 at 5.5%. In that year, the agricultural sector grew at an impressive rate of 4.9%, similar to that of the early years after independence. In 1991, agricultural output fell by 1.1% and GDP declined to 2.3%. In 1992, it fell further by 4.2% and GDP slipped to its lowest level of 0.4% in the post-independence period. Within the period 1980–1990, the average economic growth declined to 3.5%, closely associated with dwindling agricultural performance. The period between 1990–2000, the average economic growth had declined to 1.3%, a reflection of the low agricultural growth rate compared to that of 6% during the first two decades after independence. In 2012 the agriculture sector powered the GDP growth from 4.4% in 2011 to 4.7% in 2012. This was attributed to the sector growth

The growing problem of food and nutrition insecurity in Kenya is linked to the slow growth of agricultural production. Kenya has about 75% of its population residing in the rural areas where agriculture dominates. Over the last four decades, the country has generally experienced positive growth in agricultural output but has often not managed to achieve national food self-sufficiency. This is partly due to over reliance on rain fed agriculture (98%), which results in recurrent crop failures due to vagaries of weather and climate change; and fast human population growth. The net deficit in staple foods has been met mainly through food imports annually. Kenya often experiences episodic food deficits and in a number of cases acute food shortages. The per capita food availability has declined by about 25% over the past three decades.

1.5 National Food and Nutrition Security Policy

1.5.1 Policy Scope and Context

The National Food and Nutrition Security Policy Sessional Paper Number 1 of 2012, recognizes food security as a basic human right. The overall goal of the policy is to ensure that all Kenyans throughout their lifecycle enjoy at all times safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal health. The Policy provides an overarching framework covering all the four dimensions of food security—**availability, accessibility, utilization and stability**, as recognised by the World Food Summit. It also addresses the synergy linking food security and nutrition with poverty eradication. The broad objectives of the Policy are:

- 1) To achieve good nutrition for optimum health of all Kenyans
- 2) To increase the quantity and quality of food available, accessible and affordable to all Kenyans at all times
- 3) To protect vulnerable populations using innovative and cost-effective safety nets and emergency relief programs linked to long-term development

The success of the NFNSP is anchored in several international and national initiatives and commitments to end hunger and extreme poverty. The policy is formulated within the context of the international conventions, ratified by the country. The new initiatives to improve food and nutrition security are in line with the declaration of the World Food Summit (WFS) of 1996; the United Nations (UN) Sustainable Development Goals (SDGs); the African Union Commission (AUC) and the African Task Force on Food and Nutrition Development (ATFFND); the New Partnership for African Development (NEPAD) of 2002; the Comprehensive African Agriculture Development Program (CAADP); and the Malabo Declaration of 2014. The Policy is also aligned to relevant national strategic planning documents including the Kenya Vision 2030 and the Agricultural Sector Development Strategy (ASDS) 2010-2020.

Further, the policy is framed in the context of basic Human Rights, Child Rights and Women's Rights; the Constitution of Kenya 2010: Article 43 (1) (c), Article 53 (1) (c), Article 21 and Article 27. All these guarantee the right to food and adequate nutrition and the universal right to food and nutritional health and protection from discrimination. The right to food is considered as not only sufficient numbers of calories, but the right to nutritious foods that guarantee optimal health, growth and development throughout a person's lifecycle. In the context of Child and Women's Rights that are fundamental values, the policy also focuses on the right of every woman and child to share equally or to have greater shares of the available food because of their special needs, required for growth and development.

1.5.2. Policy Implementation Framework

Past food policies have had limited success in addressing food and nutrition insecurity in the country. Some of the factors that have hindered effective implementation of the food policies include inadequate budgetary allocations, unstable macro-economic conditions, limited involvement of the private sector, inadequate sectoral coordination, ineffective monitoring and evaluation systems, and limited stakeholder participation.

A major impetus for this Implementation Framework (IF) is the need to achieve higher levels of success in improving food and nutrition security. The IF recognizes the significant efforts and range of programs relevant to food and nutrition security that are on-going or are being planned for implementation within multiple sectors. The aim is to support these initiatives and develop new ones based on the identified cross-sectoral gaps. Thus, the IF identifies priority areas and implementation approaches to achieve food and nutrition security. It also includes a snapshot of programs and projects that operate in support of the National Food and Nutrition Security Policy.

Among the factors underpinning the implementation framework is the National Food and Nutrition Security Policy that calls for multi-disciplinary approach at both National and County levels. An integrated approach with strong coordination mechanisms involving public-private partnerships, inter-ministerial linkages, County and National government synergies are clear requirements in achieving the envisaged goals.

This implementation framework also proposes the strengthening of oversight and implementation structure, legislations and coordination mechanism for purposes of ensuring harmonised implementation in an accountable manner. Establishment of a National Food and Security Council, Steering Committees and other support institutions for supervision and coordination of all food and nutrition matters in the country are necessary. To enhance monitoring and evaluation (M&E), a framework including regular surveys at all levels will continuously provide feedback on progress of policy implementation by all stakeholders.

Objectives of the Implementation Framework

The main development objectives supported in this implementation plan are:

1. To guarantee a sustainable, adequate, safe and high quality food availability,
2. To ensure that all citizens have access to affordable, nutritious and socially acceptable foods,
3. To promote food consumption patterns that maximize health and minimize disease, and
4. To ensure collaboration and synergy among the institutions and related sector actors working to foster food and nutrition security

The main challenges to be addressed include:

- Low agricultural productivity hence low food self-sufficiency at household level.
- Recurrent/chronic food insecurity affecting large populations both in urban and rural Kenya.
- Poorly integrated and inefficient markets in agricultural sector that threaten food security.
- Low access to high quality foods for many rural and urban population groups.
- High levels of protein/energy malnutrition and vitamin and mineral deficiencies.
- Low collaboration and synergy between some existing actors and programs.

The priority program areas identified in this IF include:

- National food availability
- Food accessibility
- Household resource productivity
- Food safety, standards and quality control.
- Nutrition improvement
- Food and nutrition education in Schools and institutions
- Food and nutrition in crisis and emergency
- Food and nutrition security data and information management
- Domestic water availability and access.

These priority areas do not stand alone but are linked in a results matrix that brings development logic and causal effects to bear (refer to figure 3).

National and local governments implement many of these interventions, while the private sector, development partners and CSOs also implement related programs. Food and nutrition security requires robust collaboration and institutional strategies to identify areas where better linkage will work, and close the gaps. The IF indicates that policies without workable and fundable programs and cross linkages cannot be fully implemented. Thus, another important part of the implementation plan is the institutional framework that links the many existing partners. The IF aims at strengthening the sectoral impact by converging knowledge, actions, and learning across all relevant sectors and groups.

Finally, this IF builds upon from the National Food and Nutrition Security Policy in several ways. First, it sets out implementation approaches, development objectives and interventions for the main Policy areas, discussed in 2, 3, 4, and 5. The objectives in the framework are supported by outputs and interventions to create a comprehensive framework, the Implementation Matrix, discussed in Appendix 1. Chapter 6, 8, and 7 presents the institutional and coordination arrangement, Results Framework and Monitoring and evaluation framework critical to demonstrate results and measure performance.

2.0 ACHIEVING FOOD SECURITY OBJECTIVES

2.1 National Food Availability

2.1.1 Overview

Food availability in the country is mainly considered in terms of cereal supply, however, at the national level, food availability is a combination of domestic food production, domestic food stocks, commercial food imports and food aid. Food availability is influenced by the ability of individuals and households to produce their own food in sufficient quantity and/or presence of adequate stocks in the food supply chain. Other factors include access and control of productive resources (land, seed and water), governance, legal and regulatory frameworks, the macroeconomic environment, gender dynamics, pests and disease outbreaks, emergencies and conflicts. Kenya's per capita food availability has however declined by about 25% over the last three decades due to population increase and declining agricultural land productivity and the effects of climate change.

The NFNSP presents the micro and macro-economic framework and incentives needed to increase food production and access in a sustainable manner; enhance availability of food that is diversified to promote health; expand food trade and market opportunities based on comparative and competitive advantages at domestic, regional and global levels; promote agro-processing and value addition; encourage investment in storage of surplus produce; establish and effectively manage strategic food reserves at county and national levels and improve re-distribution and accessibility of food from areas of high supply to deficit areas.

2.1.2 Domestic production

Agricultural production systems are largely rain fed (98%), making them susceptible to impacts of climate change such as droughts and floods, which hinder production. (Water Master plan 2030). The country has diverse agro-ecological zones. Areas with relatively high rainfall have experienced rapid population growth, deforestation and continuous cultivation of soils which has decreased farming area, and led to a decline in soil fertility and yields. The arid and semi-arid lands (ASALs), which cover about 84% of the country, have the highest rate of food insecurity, due to unsustainable land and natural resources management practices such as over grazing and bush clearing and burning for charcoal. Significant loss of bio-diversity has been witnessed, which has adversely affected traditional sources of food, income and other basic needs of many rural communities. In addition the low budgetary allocation to the sector has affected the overall production of food for these communities.

Urban and peri-urban agriculture holds potential to improve food access and overall food and nutrition security. However, there has been inadequate support, guidance and concerted effort to develop this potential, including support to capture fisheries and aquaculture. Further, food production potential is often unexploited due to the high cost of inputs.

The objective is to increase agricultural productivity and production of food that is diversified, affordable and able to meet diverse nutritional requirements of all people.

Strategic interventions:

- Establishment of an Agricultural Development Fund
- Increase in funding to food and agriculture sectors by at least 10% of the national budget
- Promote sustainable food production systems with special attention to increasing soil fertility, agrobiodiversity, organic farming and sustainable range and livestock management systems
- Promote nutrient-rich foods through increased production, diversification and bio-fortification
- Promote, expand and support sustainable irrigation and water management systems

- Promote measures that reduce cost of agricultural food production
- Support and promote agro-forestry, afforestation and re-afforestation to enhance livelihood systems and environmental resources
- Support investments in infrastructure, including roads, water, power, communications and markets, throughout the country to increase agricultural productivity
- Promote integrated climate change adaptation in agricultural development programmes and policies
- Improve weather forecasts and climatic change information dissemination to support communities respond to new opportunities and challenges
- Promote Urban and Peri-Urban agriculture to improve food availability and access for better nutrition.

2.1.3 Domestic, Regional and International Food Trade

Kenya has increasingly become dependent on food imports (30-40%) to bridge the national deficit. This is attributed to declining per capita food production and self-sufficiency, urbanisation and globalisation trends and changing feeding habits. While consumers may benefit from cheap food imports, there should be deliberate efforts to improve local production and food distribution. Cross-border trade in the region has been on the increase which improves regional food availability. However, the major challenge is to improve on distributive and market efficiency to reduce the cost of production for enhanced competitiveness. Whereas some parts of the country occasionally experience surplus, poor infrastructural networks have hampered food distribution from surplus to deficit areas.

The objective is to promote national food availability and access through strategic liberalization of food trade and private sector participation along the value chains.

Strategic interventions:

- Review and harmonise food and related trade policies and regulations to promote domestic, regional and international food trade
- Increase competitiveness of local agricultural produce by addressing the cost of production including infrastructural constraints
- Support harmonization of regional and international food safety and quality standards and regulations
- Institutionalize multi-sectoral food and agricultural trade, policy formulation, implementation and coordination
- Negotiate for the removal of free trade barriers to trade by trade partners

2.1.4 Agro-Processing and Value-Addition

The returns to agricultural production are relatively low as most produce is sold in its primary form. Small scale farmers operate at the lower levels of the commodity value-chains, with low profit margins, owing to their inability to engage in cottage industries or farm level agro-processing and value-addition. Whereas most of Kenya's high quality agricultural produce such as tea and coffee is widely used for blending relatively low quality produce from other countries, the additional proceeds from the resultant products do not benefit the producers. The country has not adequately promoted the use of appropriate technology for value-addition by small and medium scale enterprises. This has been exacerbated by inadequate infrastructure and insufficient access to sources of credit, knowledge and skills on appropriate technology.

The objectives is to increase the level of value-addition for agricultural produce meant for domestic and export markets through adoption of appropriate technology and enhance net returns.

Strategic interventions:

- Provide incentives to promote value-addition and agro-processing industries both in rural and urban areas.
- Establish a fund to support SMEs involved in agro-processing and other means of value-addition
- Empower youth and women to utilize allocated development funds for promotion of value-addition, cottage type industries and agro-processing development
- Develop key infrastructure such as roads, power and water both in rural and urban areas to stimulate development of value-addition processes
- Capacity development of agro-processors, particularly SMEs, to meet relevant quality and safety standards
- Promote research and adoption of appropriate food processing methods and equipment suitable to the needs of small scale enterprise
- Promote technology incubation or value addition equipment development

2.1.5 Storage facilities

During periods of sufficient rainfall, Kenya often realises surplus harvests of many agricultural commodities, particularly maize, fruits, milk and pasture/fodder. However, a significant proportion of produce is lost due to inadequate and inappropriate storage facilities, poor storage practices and lack of deliberate initiatives in post-harvest management. It has been estimated that post-harvest losses for small scale producers for maize range from 30–40%; up to 50% for fruits and about 7% for milk per annum.

Although the country generally lacks storage capacity, there are pockets of surplus capacity spread across the country under the management of National Cereals and Produce Board (NCPB). Out of the total NCPB storage capacity of 21 million bags (1.89 million tonnes), on average only about 40% of this is utilized. Farmers are at times forced to dispose of their produce at very low prices during glut periods due to lack of appropriate storage facilities.

The objectives are to promote appropriate storage practices and expansion of storage facilities to extend shelf life and reduce farm losses.

Strategic interventions:

- Promote appropriate household post harvest handling of produce and food storage structures and practices for improved food and nutrition security
- Develop farmers' capacity to manage appropriate storage facilities from community to national level.

2.1.6 Strategic Food Reserve

The Strategic Food Reserve, currently managed by NCPB, comprises of mainly maize grain. The reserve acts as a buffer to stabilize supply of cereals in the market. The Strategic Food Reserve Trust Fund is also meant to cushion farmers from depressed market prices during glut periods, and to provide a first line of protection for coping with food emergencies. The recommended stocking level of the SFR, is at least 4 million Bags (3.6million MT) plus a cash equivalent for the same quantity of grain. However, NCPB is often not able to make prompt purchases of grain for the strategic reserve owing to insufficient funds. Further, other foods, other than maize should be included in the SFR.

The objective therefore is to diversify and attain sufficient nutritious foods in the SFR to stabilize food supply and staple food market prices.

Strategic interventions:

- Increase budget support to the SFR to include other critical foodstuffs such as sorghum, millet, rice, pulses, milk, meat, fish, root crops, fruits, nuts and livestock feeds.
- Regularly review the appropriate stocks and cash levels for the SFR based on demographic, economic and climate dynamics.
- Institutionalise and strengthen management of the Strategic Food Reserve (SFR) at national and county levels.
- Encourage continuous research and technology transfer for effective management of the SFR

2.1.7 Commercialization of Agriculture

The vision of the Government is to transform Kenya's agriculture into a profitable commercially oriented, internationally and regionally competitive Sector that provides gainful employment. Currently, the major hindrances to commercialization of agriculture include low profitability of the agricultural sector due to high cost of production, poor access to agricultural support services, multiple taxation, and inefficient market systems. The sector can provide gainful employment and income if productivity and profitability area guaranteed.

The objective is to increase net incomes from farming and related value chain activities.

Strategic interventions:

- Build the capacity of farmers, SMEs and Cooperatives to undertake farming as a business along commodity value-chains
- Strengthen support services including extension and provision of financial services for sustainable commercialization of Agriculture.
- Support marketing of agricultural produce and products both locally and internationally.
- Promote the development and consumption of locally produced agricultural products.
- Promote linkages between supply and market demands through Public Private Partnerships.
- Strengthen legislation of food marketing and institutions to protect all actors along commodity value chains
- Expand food production through irrigation especially in the ASALs
- Promote agricultural research, innovation and technology transfer and uptake in production and post harvest management
- Streamline the taxation regime for food commodities to avoid multiple taxation along the value chains

2.2 Food Accessibility

Food access is ensured when all households and individuals within those households have sufficient resources to obtain appropriate foods for a nutritious diet. It is dependent on the level of household resources: – capital, labour and knowledge; and on food prices. Access is influenced by the ability of individuals and households to produce their own food in sufficient quantity and to generate sufficient income to purchase food, effectiveness and efficiency of infrastructure, effectiveness of food distribution systems and the affordability of food prices. Other limiting factors include: control of productive resources (land, seed and water), governance, legal and regulatory frameworks, the macroeconomic environment, gender dynamics, disabling diseases, emergencies and conflicts.

High poverty levels have affected household access to food. While most of the poor live in rural areas, the number of urban poor is rising fast and requires special focus and support. Kenyans living in urban areas

mainly rely on markets for some or all of their food needs, therefore there is need to improve markets and access to food.

2.2.1 Improvement and Expansion of On-Farm and Off-Farm Employment

Agricultural enterprises provide the bulk of employment to the rural population. However, income levels in these areas are generally low with high unemployment rates. These have exacerbated rural-urban migration putting pressure on the services and resources in urban centres. The high unemployment rates and low incomes are due to limited access to productive resources, low technology uptake, inadequate marketing infrastructure, low value-addition initiatives and inadequate regulatory frameworks.

The target of the government is to collaborate with other stakeholders in the creation of on-farm jobs to increase on-farm employment at a rate of 5% per year on a sustainable basis; and double the share of off-farm employment with respect to on-farm employment.

The objective is to support measures that enhance rural employment opportunities as a means of increasing the level of food and nutrition security.

Strategic interventions:

- Support measures that improve security and access to land, water and technologies especially by women, pastoralists and child-headed households.
- Support cooperatives, out-grower schemes and fair trade policies to increase the share of small producers in the production and export of high value crops and livestock.
- Review minimum wages regularly to taking into account the food and nutrition needs, inflation rates and labour productivity.
- Simplify business registration, licensing and regulation through the introduction of multi-user licences and operationalization of the Single Business Permits to minimize bureaucracy.
- Provide legal and institutional support to small rural enterprises
- Enhance linkages with training institutions to diversify technological innovations, research and development
- Strengthen business linkage opportunities by encouraging the establishment of agro-processing enterprises.
- Support investment in rural infrastructure including access roads and locally generated renewable energy to lower production and marketing costs.

2.2.2 Improvement of Urban and Peri-Urban Food Accessibility

Urban and peri-urban agriculture is increasingly being practiced and holds potential to improved food access and overall food and nutrition security in these areas. However, to date, there has been inadequate support, guidance and effort to develop this potential. Past policies and strategies did not adequately address chronic food insecurity of urban and peri-urban poor. Additionally, regulatory guidelines do not guarantee the safety and quality of food produced, sold and consumed in these areas.

Though the informal sector provides the bulk of employment opportunities, the wages are generally low. While the government has taken some measures to provide a favourable environment for urban food trade, the production, value addition and processing activities are not closely monitored resulting in the emergence of new challenges of food safety and quality assurance. The situation is further exacerbated by uncoordinated and poor waste management, and lack of safe water for irrigation.

Domestic and industrial wastewater is at times used in urban farming because it is the only reliable source of water for irrigation. However, use of untreated wastewater introduces the risk of exposure to high microbial and chemical contaminants by handlers and consumers of the agricultural produce. Poor waste disposal may also increase the risk of contamination of crops and farm produce.

The objective is to promote and regulate safe peri-urban agriculture for enhanced food security, and to promote employment creation activities for improved household incomes in order to enhance food accessibility in the urban and peri-urban settings.

Strategic interventions:

- Fast track implementation of the micro, small and medium enterprises (MSME) policy.
- Review and streamline regulatory frameworks governing urban and peri-urban agriculture.
- Review and streamline regulatory frameworks governing formal and informal sectors focusing on employment creation and poverty alleviation.
- Support and promote mechanisms that enhance agro-processing, small businesses and entrepreneurial skills.
- Provide an appropriate working environment and suitable zones for the informal sector.
- Support activities that enhance the income generation capacity of vulnerable people with special needs..
- Promote urban and peri-urban agricultural extension services for safe food production

2.2.3 Improving Food Access and Functioning of Markets

Efficient and effective markets are a pre-requisite for optimum benefit for producers, intermediary traders, processors and consumers. There are on-going government efforts to enhance infrastructure development geared towards addressing inadequate access to markets. The key market infrastructure includes roads, power, telecommunications, work spaces, water and sanitation, among others. Furthermore, poor market information systems have significantly contributed towards poor functioning of the markets.

The objective is to improve market infrastructure, marketing skills and information systems for effective and efficient market functioning and access to food.

Strategic interventions:

- Establish and maintain efficient market infrastructure to facilitate food access.
- Develop capacity building programs for food producers and traders.
- Improve governance and accountability of service providers in development and modernization of food commodity markets.
- Enforce the physical planning rules and regulations in market systems.
- Develop a comprehensive data base for agricultural products, markets and an information flow system for food market players.

2.2.4 Cultural, Social and Political Aspects in Food Access

Cultural, social, governance and political factors play a key role in food production, processing, distribution, storage and consumption. Culture is known to influence intra-household food access. Women play a key role in primary agricultural production. Men and youth are more interested in cash intensive activities leaving the perceived low income generating food production to the women. This has contributed to the current status of food insecurity since women do not have adequate access to improved technologies and other productive resources. There is need to integrate more men and youth in food value chain systems.

Food accessibility is further influenced by the political environment which is exacerbated by the slow pace of appropriate policy development and implementation, corruption, lack of accountability and poor governance.

Lack of basic water and sanitation services also perpetuate the cycle of poverty, reduces household resources and opportunities to access nutritious foods. The poorest households spend a significant proportion of their income on securing water for general household needs, including food preparation. This is often diverted from their meagre food budget, and even when food is available, sometimes households cannot afford water for cooking and drinking.

The objective is to mainstream cultural, social and political considerations in the food and nutrition security strategies and activities, with particular attention to vulnerable groups (such as women, children and PLWHA).

Strategic interventions:

- Advocate for the enforcement of Human Right to Food and Nutritional Health; and protection from hunger, discrimination of right holders by duty bearers.
- Sensitize communities to discard retrogressive cultural practices with regard to access to nutritious foods.
- Facilitate access to land and other production resources especially for youth and women
- Promote active involvement of youth and men in food production activities.
- Enhance access to technology and promote adoption by vulnerable groups especially women and youth
- Fast track development and implementation of policies that enhance access to food.
- Promote accountability and good governance at all levels.

2.3 Household Resource Productivity

2.3.1 Accessibility to Productive Resources for Rural Agriculture

High levels of poverty in the country have exacerbated food insecurity and vulnerability problems. At the household level the problem of poverty includes, in addition to inadequate incomes, factors such as poor access to productive resources like land (including pasture), seeds, water, technology and affordable credit. Other limitations relate to inadequate knowledge on existing agricultural and livestock support services. There is unequal access to, control and management of productive resources across gender which needs to be addressed. Poor organisation of farmers and their institutions have further compromised their ability to advocate and demand for better services. Disabling diseases such as HIV/AIDS pandemic have also impacted negatively on agricultural labour and service delivery, compounding the problem of erosion of productive resources.

The objective is to improve equity in access and control of productive resources and harness the existing potential of productive resources by all genders and vulnerable groups.

Strategic interventions:

- Develop an Agriculture Land Use Master Plan
- Establish an efficient and easily accessible land registry system.
- Adopt participatory approaches to rural development and sustainable management of productive resources.
- Promote equitable access to, control and management of productive resources across gender.

- Strengthen the capacity of communities to adapt to changing needs, environmental and socio-economic conditions.
- Promote technical and social options for improvement of productivity and incomes in marginal agricultural areas and other fragile ecosystems.
- Improve information flow and networking among stakeholders.
- Facilitate benefit sharing from community resources through sustainable management and conservation

2.3.2 Sustainable Intensification and Diversification of Agricultural Production Systems

The growth rate in per capita food production has not kept pace with population growth rate in the country. High population density in high and medium agro-ecological areas has placed too much pressure on land leading to sub-divisions into non-economical units and encroachment into fragile ecosystems. In addition, over-reliance on rain-fed agriculture, unsustainable water, pastures and land use management practices have exacerbated this problem. High costs of inputs and limited diversification in terms of production of nutrient-rich foods have increased the risks of livelihood failure and health challenges. Increased productivity of small land units and marginal ecosystems can be ensured through intensification of the production processes and diversification for adaptability to various agro-ecological zones.

The objective is to promote agricultural intensification through sustainable and efficient use of productive resources and reduce the risk of livelihood failure and nutritional health challenges facing vulnerable households.

Strategic interventions:

- Promote appropriate intensified and sustainable agricultural production systems that are friendly to fragile ecosystems
- Promote diversification and production of nutrient rich foods
- Strengthen research and research-extension-farmer linkages to enhance flow and utilisation of technical information appropriate for intensified and diversified agricultural production systems.
- Support the development of training guidelines for the promotion of intensified and diversified agricultural production systems.

2.3.3 Urban and Peri-urban Agriculture

Although urban and peri-urban areas have generally very small land holdings, there exists substantial potential for agricultural production. However, the urban by-laws discourage any agricultural activities within municipalities. There are instances where water from raw sewage, including waste products from industries, is used to grow crops in urban and peri-urban areas. Keeping animals in urban and peri-urban areas can also be a public nuisance particularly in congested areas. There is need to develop guidelines for agricultural land use in urban and peri-urban areas.

The objective is to improve household food availability, through urban and peri-urban agriculture.

Strategic interventions:

- Develop guidelines for urban and peri-urban agriculture
- Review the urban and peri-urban agriculture regulatory framework to align it with the developed legislation and guidelines.
- Target sensitization and capacity building of farmers and other stakeholders on good agricultural practices in urban and peri-urban areas.

- Strengthen monitoring and surveillance system in enforcement of urban/peri-urban agricultural production rules and regulations.

2.3.4 Food Storage, Preservation and Value-addition

The post-harvest losses and food waste at household level as a result of poor storage facilities, utilization and handling practices are high. These ranges from 10% - 40% of maize produced locally, 50% of fresh vegetable produce and an average of 2-5% of milk produced per annum. There are also high levels of post-harvest contamination that pose health risk to consumers. Effective preservation and processing of food is hindered by factors such as access to and limited knowledge on storage and preservation techniques and fluctuations in output due to seasonality and over-reliance on rain-fed agriculture. There is need to enhance use and application of modern cost-effective food and forage storage and preservation technologies at household level for the realization of food and nutrition security.

The objective is to minimize post-harvest losses and waste at house-hold level by enhancing capacity of households in food and forage storage, preservation and processing /value addition.

Strategic interventions:

- Sensitize and promote community based food storage and preservation.
- Promote research and development of appropriate technologies for food/forage handling, preservation, value-addition and storage.
- Enhance capacity of households on indigenous technical knowledge and appropriate safe handling, preservation, value-addition and storage technologies of food products.
- Facilitate development of support infrastructure for cold storage and processing in food production zones.
- Promote warehouse receipting systems for storage of grains and other foods in all counties

2.4 Food Safety And Quality

The Kenyan food safety and quality control system is multi-sectoral in approach and is embodied in various statutes implemented by various Government ministries/departments and regulatory agencies. This has created inefficiencies, gaps or lack of accountability in the national food safety control system resulting in recurrence of food related hazards, rejections of export food shipments and other undesirable consequences.

The National Food Safety Bill 2007, proposes to address Food Safety concerns in the broad areas of legislation, institutional framework, monitoring and evaluation, traceability, resources, information, education and communication. The Bill envisages protecting and promoting consumer health while facilitating the orderly development of the food industries as well as fair practices in food trade. This will also ensure the country fulfils the international obligations or conventions, particularly those arising from membership in international organizations such as in the World Trade Organization. Furtherance to this, through the implementation of the National Food Safety Policy, all the existing food control infrastructure and services will be effectively coordinated to eliminate areas of overlap and conflict. There is therefore need to develop participatory national food safety legislation to ensure the policy is implemented systematically and effectively. While the proposed National Food Safety Bill provides for the formal food safety control mechanisms, the responsibility of food safety rests with all players along the food chains.

The main objective is to establish and maintain a rational, integrated *farm-to-fork* food safety system and to protect the public health and nutrition.

Strategic interventions:

- Review and harmonize the current laws and regulations to address emerging challenges pertaining to food safety and provide for functional responsibilities along the food value chain at both

national and counties levels.

- Enhance linkages between research and industry to promote food safety and quality control.
- Develop an effective farm to folk food safety monitoring and evaluation system to ensure that only safe food is availed to consumers.
- Strengthen capacity of institutions to undertake risk analysis and early warning at both national and county levels in order to prevent outbreak of food borne illnesses and diseases.
- Mobilize resources to mainstream food safety and quality concerns in programme planning and implementation at both national and county levels
- Develop a mechanism for certification and accreditation of food testing laboratories and maintain an inventory of certified/accredited laboratories for food testing and analysis
- Establish data banks on food safety at National and County levels by taking inventory of expertise and scientific works.
- Harmonize and strengthen inter-agency efforts in food safety and quality control monitoring to minimize overlaps and inter-agency conflicts.
- Develop a safeguard mechanism for safe food trade, communication, feedback and information dissemination for consumer protection and other food chain actors

3.0 NUTRITION IMPROVEMENT

Achieving food security will only translate to nutrition security if utilization component of food is well addressed. Agriculture production also leads to increased income. This is further enhanced with increased youth and women empowerment in agricultural production.

3.1 Nutrition Throughout Life Cycle

This Policy Implementation Framework adopts a lifecycle approach, which focuses on the health and nutrition needs of individuals. The lifecycle approach focuses on the health and nutrition needs of individuals through the six stages of human developmental and physiological lifecycle. The six stages include; pregnancy and the new-born, early childhood, late childhood, adolescence, adulthood and the older persons. The nutritional needs change with different physiological states and developmental life cycle stages in terms of specific nutrient types, amounts and varieties of food. Using the lifecycle approach will ensure that nutritional needs of different age groups and stages of life are addressed appropriately. This will entail promoting optimal maternal, infant and young child nutrition; and improving nutrition care and support systems for older children, adolescents, adults and elderly persons.

The objective is to maintain optimal nutrition for developmental and physiological functions at all stages throughout the human lifecycle.

Strategic interventions:

- Develop, review and disseminate appropriate cohort specific nutrition guidelines
- Institutionalise routine assessment and monitoring of the nutritional status of all cohorts
- Strengthen and support nutrition support systems for all cohorts at community, health facilities and workplaces.
- Promote and scale up high impact nutrition interventions while addressing disparities in various contexts including informal child care centres
- Promote consumption of diversified and nutritionally adequate diet across cohorts in the lifecycle.
- Implement and enforce Food and Nutrition related legislation and regulations
- Strengthen linkages with other sectors to promote good nutrition in all cohorts.
- Strengthen and support integration of nutrition agenda in all agriculture sector projects and programs designs and plans in value chains and food security activities
- Promote hygienic food preparation, research and adoption of appropriate household food processing methods to reduce post-harvest losses and seasonality of food

3.2 Micronutrient Deficiency Prevention and Control

There is a high prevalence of micronutrient deficiencies across the population in Kenya that affects mostly children under five years and women of reproductive age. There is a need to focus on micronutrients since they contribute to reduction in morbidity, mortality and improve overall development and well being of an individual. Strategies to alleviate micronutrient deficiencies include short term strategies such as supplementation, promotion of consumption of micronutrient rich foods and long-term strategies such as dietary diversification, fortification and public health measures, among others.

The objective is to reduce and prevent micro-nutrient deficiencies and disorders to promote public health among all cohort groups in Kenya.

Strategic interventions:

- Promote production, appropriate utilization and preservation of micronutrient-rich foods at household level.
- Promote consumption of diversified and nutritionally adequate diets throughout the lifecycle.
- Formulate legislation to promote blending of flours using traditional high value crops to guarantee production, productivity and consumption of these crops for improved food and nutrition security.
- Scale-up programs to promote and facilitate fortification, or bio-fortification of widely consumed staple foods, cooking oils and sugar.
- Strengthen routine and therapeutic micronutrient supplementation (vitamin A, iron and folate, zinc) for children, women and identified vulnerable groups
- Scale up interventions on public health measures that prevent micronutrient deficiencies
- Develop a monitoring and evaluation system on micronutrient deficiency prevention and control.
- Develop, review and implement micronutrient guidelines and strategies

3.3 Nutrition Advocacy, Communication and Social Mobilization

Food and nutrition promotion agenda has not been given the priority it deserves for a long time. There is need to advocate for promotion of food and nutrition agenda to ensure that it is well articulated and prioritized by Government and other stakeholders in decision making and planning. Reducing malnutrition calls for a multi-sectorial focus, driven by a political good will that acknowledges the integral role that nutrition plays in ensuring a healthy population and productive workforce. At population level, nutrition knowledge is a key aspect in confronting malnutrition at all levels of society and in all sectors. Therefore, there is need to foster social mobilization and communication strategies in order to influence decision making, behaviour change and modelling for healthy lifestyles.

The objectives are:

- i. To improve prioritization, generate demand and adoption of food and nutrition agenda
- ii. To enhance knowledge on nutrition and encourage attitude change towards diets among the population for enhanced and healthy lifestyles.

Strategic interventions:

- Increase and sustain the political prioritization of nutrition at both National and County levels
- Improve and maintain an enabling policy environment in support of an affectively coordinated and integrated food and nutrition sector.
- Increase financial resource allocation and expenditure on nutrition programmes.
- Develop and implement a comprehensive nutrition advocacy, communication and social mobilization strategy.
- Scale up and strengthen the human capacity and skills for nutrition promotion in the sector
- Improve knowledge and attitudes on optimal nutrition for increased demand of nutrition services and practices
- Strengthen community engagement, participation and feedback mechanism in nutrition services and decision making processes
- Promote utilization of appropriate energy and time saving technologies for nutrition promotion.

3.4 Nutrition and Infection

Infection compromises the nutritional status of people, particularly the vulnerable who include children, pregnant and lactating women, and the elderly. Malnutrition is the single greatest underlying cause of child mortality in Kenya, estimated at 50%. Very often, infection and malnutrition become a spiral that leads to more illness and malnutrition, and for many, especially young children, to death. Improved survival and quality of life of individuals is therefore achieved through adequate nutrition. The aim of nutrition care and support for people with infections is to attain and maintain healthy weight and body composition, improve the immune system and optimize medical therapy. An integrated approach for nutritional care and support in disease management is necessary. Further, food safety in the home, at school lunch programs, and in the work place through the use of hygiene practices such as safe drinking water and washing of hands are crucial for food safety and disease prevention. Inadequate safe drinking water, poor sanitation, and improper hygiene often cause under-nutrition due to diarrheal and other intestinal tract diseases.

The objective is to improve the nutritional care, treatment and support during illness to support optimal body healing and functioning.

Strategic interventions:

- Review, develop, and implement national guidelines and standards for nutritional care and support during illness and diseases management.
- Strengthen the capacity of healthcare providers to give optimal nutrition care, treatment and support in management of illnesses/diseases
- Promote programs on awareness creation on disease prevention strategies at household level including investment in safe water and sanitation facilities
- Promote integration of water sanitation and hygiene with food and nutrition promotion
- Promote resource allocation and mobilization for medical nutrition therapy in all health facilities.
- Increase public awareness on nutrition management during infection and illness
- Promote appropriate management of malnutrition of pregnant and lactating women
- Strengthen referral mechanisms and linkage between the community and health facility

3.5 Nutrition and Non-Communicable Diseases

There is an increase in the prevalence of Non-Communicable Diseases (NCDs) such as diabetes, obesity, heart disease, some cancers, kidney and liver diseases in Kenya. This is largely attributed to dietary change reflected in the consumption of foods low in fibre and highly refined foods high in fat, sugar, and salt. These changes have been occasioned by changing lifestyles due to increased urbanization and globalization. There is limited awareness in the population about the effects of these lifestyle changes on health. There is an urgent need to determine the magnitude and effect of these diseases and to address their prevention, control and management modalities.

The objective is to halt and reverse the prevalence of diet related NCDs and enhances their control and management.

Strategic interventions:

- Develop and implement a national nutrition guidelines for the management of NCDs
- Promote routine screening of diet related NCDs
- Increase support to programs on Screening, assessment, prevention and management of diet related NCDs.
- Support research and monitor prevalence and trends of NCDs using the life cycle approach to create healthy lifestyles and effective nutrition interventions

- Sensitize and create awareness on the economic impacts of diet related NCDs and the importance of healthy lifestyles to prevent diet related diseases.
- Promote increased production and utilization of nutrient dense indigenous foods to prevent common nutrition related NCDs.
- Enhance public sensitization on healthy diets and lifestyles to reduce diet related diseases conditions.

3.6 Urban Nutrition

Urban poverty and vulnerability is on the increase affecting about 50% of the people living in informal settlements. Urban households spend up to 70 % of their income on staple foods, and are the most affected by inflation of basic food commodities. This impacts negatively on school attendance as families try to cope. On the other hand, there is an increase in diet related chronic diseases as a result of obesity due to utilization of highly processed foods. This poses a double burden of nutrition nationally.

The objective is to promote optimal nutrition and health for urban dwellers.

Strategic Interventions:

- Establish an effective monitoring system to track urban malnutrition and other issues affecting people living in urban areas.
- Analyse and address the barriers to multi-sectorial scaling up of high impact nutrition interventions in urban areas.
- Promote multi-sectoral coordination, joint planning and implementation by establishing linkages with relevant sectors for enhanced urban nutrition.

3.7 Nutrition in Schools, Public and Private Institutions

Good nutrition is important for an active, productive and healthy life. Individuals who are confined or spend long hours away from their homes need special nutrition attention to ensure optimum nutritional health. There is need to review and harmonize guidelines for the achievement of adequate nutrition in schools, hospitals, institutions for higher learning, prisons, children's homes, early childhood development centres, and homes for older persons, among others.

School meals and nutrition program in Kenya is one of the successful institutional meals programs. However, this is only implemented in some parts of the country, mainly to address short term hunger. Many children go to school without breakfast and do not carry snacks to eat during time spent in school. This leads to under-nutrition and affects learning, resulting in poor performance, absenteeism and dropouts. There is need to improve nutrition status of school children to increase enrolment, retention and performance at school.

Malnutrition in early childhood affects school enrolment, retention and overall performance. Good nutrition therefore is essential to realise the learning potential of children and to maximise returns to educational investments. Nutrition education and promotion of good nutrition practices in schools are known to have a significant effect in fostering healthy eating habits. Further, schools provide an ideal setting to promote nutrition education and good nutrition habits early in life.

Institutional meals and nutrition needs to be regulated and monitored to ensure optimal nutrition for different target groups. Nutrition management in the hospital is disease specific and individualized. Currently, the health management system does not adequately respond to patients' nutrition needs. In addition, regulatory mechanisms need to be developed or strengthened in order to monitor public health nutrition aspects in all institutions.

The objective is to transition institutional meals and nutrition programs to ensure optimal nutritional health for all individuals in the institutions.

Strategic interventions:

- Develop, harmonize and disseminate institutional meals and nutrition guidelines to promote the provision of nutritious meals to individuals in schools, private and public institutions
- Promote appropriate food safety, water sanitation and hygiene interventions in all institutions where provision of meals is part of the programs.
- Promote establishment of agricultural production projects at institutions (gardens, livestock and fish) for diverse foods and income generation.
- Mainstream basic nutrition training curriculum for all meal service providers in schools and other institutions
- Enforce compliance to food standards through capacity building, certification and licensing of food handlers and other service providers in the institutions
- Promote use of time and energy saving technologies to enhance institutional capacity in providing nutritionally adequate diets.
- Establish linkages between routine health and nutrition services providers and institutions
- Scale up home grown institutional meals approaches in all areas

3.8 Food and Nutrition Education in Schools and Institutions

The current curriculum for primary and secondary schools, and institutions of higher learning does not include nutrition as a core subject. As a result, a significant proportion of the school population is not adequately sensitized on good nutrition. Nutrition education can be a long term measure in addressing the challenges of malnutrition through fostering long term healthy eating habits. This has immediate and long-term health benefits for individuals and their families..

The objective is to create and promote nutrition knowledge in schools and institutions for the achievement of optimal nutritional health and active life.

Strategic interventions:

- Integrate food and nutrition education in school curricula at all levels including teacher training, pre-service and in-service training institutions
- Build the capacity of school management and teachers on early identification of health and nutrition problems and timely referral for appropriate action.
- Develop, review and disseminate appropriate food and nutrition Information, Education and Communication (IEC) materials
- Strengthen and establish young farmers 4K and 4H clubs for demonstrations on production of nutrient rich foods that promote nutrition and health
- Promote linkages between routine health and nutrition services providers, including regular monitoring of nutritional status;
- Support the detection and referral of malnourished individuals to health facilities, counselling services, social protection, or meals programmes and other community agencies and services.

4.0 FOOD AND NUTRITION DURING CRISIS AND EMERGENCY

4.1 Emergency Preparedness

The main disasters that lead to food and nutrition emergencies in Kenya are droughts, floods, fires, landslides, armed conflict and displacements, human/wildlife conflicts, political upheavals, pest and diseases outbreak, market disruptions, food price fluctuations, chronic poverty and marginalization. Some disasters such as droughts and floods are predictable and can be planned for with a view to reducing their adverse impact. Generally, poor management of crises in the past have contributed to poor access to water, sanitation, health care and erosion of livelihoods, leading to emergencies. The Government is tasked with the protection of people's right to adequate quantity and quality of food at all times and to ensure that food security and nutrition is sustained even in times of emergencies.

The objective of emergency preparedness is to reduce risk and vulnerability to food insecurity and malnutrition occasioned by such disasters, thus preventing crises from developing into emergencies.

Strategic interventions:

- Strengthen and support early warning system(s) to detect and provide timely crucial information on potential food insecurity and malnutrition.
- Support integrated vulnerability analysis for emergency preparedness
- Establish and strengthen food and animal feed distribution infrastructure and networks in crisis prone areas.
- Enhance support to appropriate social protection (SP), schemes to protect vulnerable populations.
- Enhance budget support to the Strategic Food Reserves for maintenance of appropriate food reserve stocks and price controls.
- Enhance capacities and opportunities for improving and sustaining food security livelihood assets and strategies.
- Enhance the contingency funds to manage emerging food and nutrition crises.
- Support continuous peace building initiatives and enhancement of national security
- Develop capacity of disaster response institutions to mitigate disasters effectively.

4.2 Emergency Response

Emergency interventions during crisis are always costly and outweigh the capacity of Government to respond in an effective and timely manner. The response to crisis has generally been affected by ineffective coordination, poor resource management and accountability. The decision making processes have been top-down sometimes leading to implementation of programmes in some instances without considering the preferential needs of the recipients. Poor and untimely responses in many cases has in the past led to an increase in malnutrition, loss of lives and livelihoods amongst the affected.

The Government is committed to reducing vulnerability to shocks and to assist those in need when emergencies occur and to reduce recurrent food insecurity and malnutrition. Food and nutrition emergencies arise when depleted food supplies are not replaced in the short term which predisposes people to a high risk, or actual rise in mortality due to acute malnutrition. This therefore is considered the most serious public health problem in an emergency. Emergency food security and nutrition interventions are intended to protect affected populations to maintain access to adequate and nutritious food.

The objective is to establish a well-coordinated response mechanism that ensures all persons in emergencies receive timely and appropriate assistance to protect their food security and nutritional status and to avoid loss of lives and livelihoods.

Strategic interventions:

- Strengthen public-private sector for effective coordination mechanisms for efficient and effective emergency response.
- Streamline and harmonies guidelines for timely management of targeted responses during emergencies
- Promote and support mechanisms for devolved decision making for emergency response
- Strengthen financial and technical capacity of devolved structures to respond to crisis.
- Promote timely operationalization of contingency programmes, plans and funds
- Promote priority intervention actions that minimize the loss of lives and livelihoods
- Promote emergency intervention programs that address special nutrition needs of the affected population.
- Establish an effective monitoring and evaluation system for the assessment of impacts of responses.

4.3 Recovery, Building Resilience and Long-Term Development

Recovery from emergency situations has been poor leading to cumulative loss of livelihood assets. The problem has been accentuated by the climatic variability, global economic downturn, political uprising and conflict over resources. It is therefore necessary to deliberately plan for interventions that link emergency to recovery and long-term development to ultimately lift affected populations out of high vulnerability situations.

All emergency response interventions should have recovery and long term development plans integrated in the programme design. To effectively address the issue of chronic poverty, it is essential to move poor households from relief to resilience and development. Traditionally emergency response and development programming have been distinctly separated in both Government and Development Partner programming.

The objective is to improve post-emergency recovery through resilience building and long term development in order to reduce vulnerability of the populations to food and nutrition insecurity.

Strategic interventions:

- Invest in disaster recovery programmes to mitigate the impact of disasters
- Promote household and community managed disaster risk reduction and resilience building measures
- Promote appropriate social protection schemes to protect communities from food and nutrition insecurity.
- Support integration of Supplementary and Therapeutic feeding programs for populations with specific nutrition needs.
- Promote and support livelihood recovery programs by addressing primary production factors to improve food availability and access.
- Promote programs that activate market functioning and service provision
- Support primary health care/essential nutrition action programmes to promote health and nutrition security.
- Enhance school enrolment, retention and completion rates among food insecure households through appropriate programming.
- Establish and promote livelihood insurance schemes to cushion and support communities to recover from emergencies

5.0 FOOD AND NUTRITION INFORMATION & COMMUNICATION

5.1 Data Collection and Information Management

There are many organizations, both government and non-governmental, involved in food and nutrition programs. Currently, there are several information systems serving different sub-sectors of the agricultural sector yet these are not linked in any way. This situation is compounded by the lack of a harmonised agricultural information management system. Most analyses in food and nutrition are usually conducted for specific purposes and therefore limited in scope and depth. Capacity for cross-sectoral analysis of food and nutrition security is inadequate. There is need to enhance capacity and coordination of food and nutrition information and knowledge systems, including data collection and management.

The objective is to enhance capacity for cross-sectoral data collection and management and coordination to facilitate information sharing and widespread utilization.

Strategic interventions:

- Establish and strengthen coordination mechanisms on food and nutrition security information systems.
- Strengthen capacity of the relevant institutions in cross-sectoral data collection and management at national and county levels.
- Streamline management and sharing of food and nutrition security information and knowledge management systems across sectors.
- Conduct inventory/diagnosis and needs assessment of data collection and management systems for both short and long-term decision making.
- Standardize and harmonize data sets and storage between the two levels of government and in various institutions for improved data sharing.
- Review existing legislation on data collection and sharing to enhance access and transparency
- Develop and implement an audit and validation mechanism to data collection and management

5.2 Information, Education and Communication

Although food and nutrition information is available from various sources, the awareness of its existence among the population is low. Information generation and dissemination are not demand driven at the moment. The general packaging and medium of communication are also not always appropriate to the needs of the users. There is therefore, a need to link appropriately packaged information to potential users at all levels.

Strategic interventions:

- Strengthen the capacity to collect, collate, analyse and disseminate food and nutrition security information among all stakeholders.
- Develop and implement *communication strategy* for food and nutrition security information.
- Develop a mechanism to ensure smooth flow of information between generators and uses of food and nutrition security information

6.0 INSTITUTIONAL, LEGAL FRAMEWORK AND FINANCING

Introduction

Past food policies in Kenya have not been very successful in addressing food and nutrition insecurity in part because of lack of a results and implementation framework. Other factors that have contributed to inadequacies in implementation include inadequate budgetary allocations, unstable macro-economic conditions, limited involvement of all stakeholders, inadequate sectoral coordination, and weak monitoring and evaluation systems.

This chapter sets out the implementation framework consisting of institutional and legal framework, funding, and implementation matrix. The framework takes into consideration the wide range of actors who will be involved in the implementation of the NFNSP. The chapter thus describes a coordinated framework for effective management of resources, by building on the existing structures to implement programs and projects. However, successful implementation requires a parallel advocacy plan based on principles of social justice and equity, environmental sustainability and health as they relate to issues of nutrition and food.

6.1 Institutional Framework

Improvement in the country's food and nutrition security requires multi-dimensional and multi-sectoral interventions. In order to achieve the overall goal of food and nutrition security, the complexities of the four dimensions; availability, accessibility, utilization and stability must be addressed concurrently by establishing effective linkages for collaboration and coordination of all sectors.

The existing structures lack clarity of function and are not effectively linked and coordinated. As a result, there are gaps and overlaps in dealing with implementation of food and nutrition policies and programs at both national and county levels. It is therefore important to strengthen linkages and put in place institutional structures involving the National and County governments, development partners' private sector, civil society, and local communities. To achieve this, certain steps must be taken to establish functional, organizational and legal frameworks. These include establishing effective leadership, coordination and stakeholder platforms at all levels that require the setting up of a National Food and Nutrition Security Council, at both levels Government, Food and Nutrition Security Steering Committees and Secretariats; and/or strengthening Food and Nutrition Security Stakeholder Technical Committees.

The envisaged structures are essential for creating an enabling environment to facilitate multi-sectorial stakeholder participation. These will also enable effective flow of information from policy making to the implementation and beneficiary levels. Figure 3 shows the recommended National Food and Nutrition Security Policy implementation coordination structure.

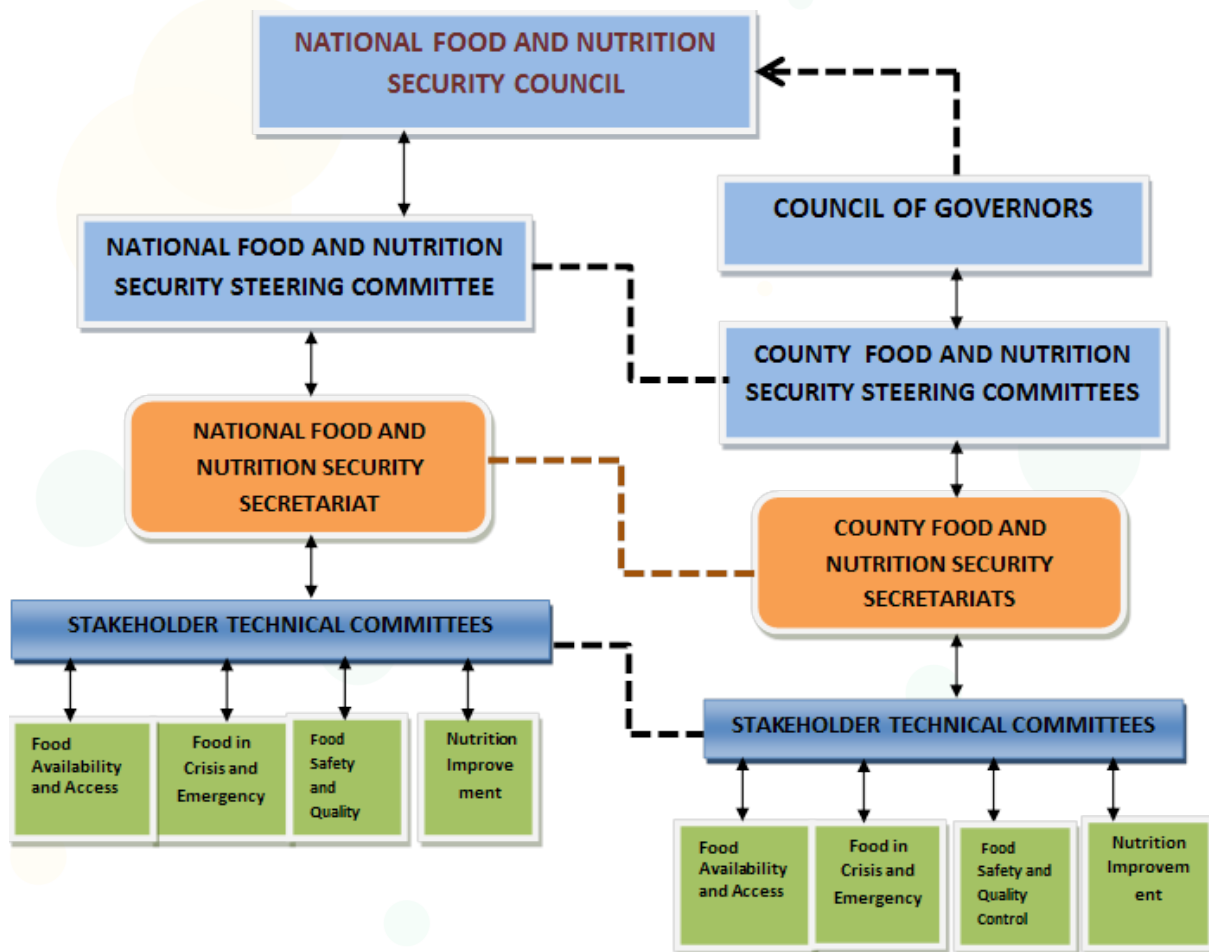


Figure 2: National Food and Nutrition Security Policy Implementation Coordination Structure

6.1.1 National Structures

National Food Security and Nutrition Council

The National Food and Nutrition Security Council will be the highest decision making body in the proposed structure. It will provide leadership and a national platform for review of progress on implementation of the National Food and Nutrition Security Policy. The Council will:

- Direct commitment of national resources for effective implementation of the FNS policy
- Provide policy direction, guidance and oversight on food and nutrition security matters
- Direct commitment of national resources for effective implementation of the Food and Nutrition Security strategy
- Approve and oversee the implementation of the National Food and Nutrition Implementation Framework
- Ensure mainstreaming of national food and nutrition policy function by the national and county governments.

Membership of the Council

The membership of the Council shall be drawn from both state and non-state actors working on diverse issues and in diverse ways in the area of food nutrition and security.

The Membership shall include the following:

- i. The Presidency , Chair
- ii. Chair of the Council of Governors

- iii. Cabinet Secretaries responsible for matters related to Food and Nutrition Security: Agriculture, Livestock, Fisheries, Health, The National Treasury, Devolution, Planning, Interior, Coordination of National Government, Water, Irrigation, Education, Industrialization and Enterprise Development
- iv. The Head of the National Food and Nutrition Security Secretariat will be an Ex-officio member and Secretary to the Council.
- v. The Council may co-opt the following and not limited to representatives from: Strategic Food Reserve/Strategic Food Trust Fund, Apex body for Consumers, Apex body for farmers, Apex body for the private sector, Donors/Development Partners, Civil Society Organizations representative, the United Nations; Science, Research media and Academia

Meetings of the Council

- 1) The Council shall meet at least two times in every financial year and not more than six months shall elapse between the date of one meeting and the date of the next meeting.
- 2) The Presidency may convene a special meeting of the Council where it is expedient for the transaction of the business of the Council.

National Food Security and Nutrition Steering Committee

The National Food and Nutrition Steering Committee (NFNSC) shall be composed of Principal Secretaries of implementing/line ministries and representatives of the County Executive Committees. The committee shall be chaired by a Principal Secretary on rotational basis as determined by the Committee. The Head of the NFNS Secretariat shall be the secretary of Steering Committee. The committee shall meet at least once every quarter in a fiscal year.

The National Food and Nutrition Steering Committee will:

- Recommend for approval Policies to the Council,
- Provide Policy direction, guidance and oversight to implementing agencies
- Prepare the National Food and Nutrition Security status report to the Council
- Facilitate resource mobilization, allocation, supervision and guidance for FNSP implementation.
- Facilitate cross-section collaboration and cooperation between government ministries, development partners, civil society, the private sector, and academia in addressing Food and Nutrition Security matters
- Facilitate capacity building, research and analysis to improve food and nutrition security
- Coordinate development of national gender and inter-generational responsive public education strategy and implementation program for Food and Nutrition Security

National Food and Nutrition Secretariat (NFNS)

It is recommended that The National Food and Nutrition Secretariat (NFNS Secretariat) be set up in the Office of the President. The Secretariat shall be headed by a Chief Executive Officer, and will be the Secretary to the Council. The Secretariat shall have at least four desks for coordinating emergencies; monitoring of food production, availability and access; food safety and standards; and monitoring of the SFR. It will work with all relevant institutions to ensure that they work collectively in addressing issues of food and nutrition in the country.

The Secretariat shall be the center of coordination of all actors. It will draw two critical factors into the institutional coordination process and decision making. Firstly it will bring Government and all stakeholders (public and private) together; and secondly ensure strong technical competencies are included and coordinated in addressing national food and nutrition security challenges. The inclusion of various relevant sectors and stakeholders will ensure appropriate linkages such that each will contribute from their own

technical and operational base to achieving the immediate and longer-term objectives. An important early task for the NFN Secretariat is to establish the right set of committees, technical working groups and draw appropriate stakeholders into them.

The mandates of the National Food and Nutrition Secretariat will be to:

- Provide technical support and back-up to the Food and Nutrition Security Council and Steering Committee
- Collate, consolidate, monitor & review progress on performance of key food and nutrition performance indicators and reports
- Analyse budget performance of food and nutrition programmes, constraints to implementation, and provide strategic direction.
- Coordinate development, formulation, review and implementation of national policy, programs, projects and plans that promote food and nutrition security across sectors.
- Monitor and support joint monitoring of food and nutrition security situation, emergency response, including SFR, food safety and quality control
- Support, joint monitoring and evaluation of food and nutrition plans and strategies including ensuring that international obligations are met.
- Facilitate and coordinate broad, multi-sectoral collaboration for effective implementation of all food and nutrition programs in the country.
- Set standards for Food and Nutrition Security actions during and after emergencies
- Convey executive decisions and recommendations to relevant stakeholders
- Create and manage a database on food and nutrition security interventions.
- Prepare progress reports for the NFNSC.

6.1.2 County Institutional Structures

In line with the policy on devolution, counties will establish their local coordination structures. County Food and Nutrition Steering Committees will be established supported by a County Food and Nutrition Security Secretariat. The Steering Committees will be chaired by the Governors in each County.

The general role of the county institutions will be to plan, coordinate, implement and monitor food and nutrition security activities. A County may directly establish County Stakeholder Technical Committees (STCs) incorporating recognized local institutions, including communities' and other stakeholders' participation to effectively address food and nutrition security concerns.

The Council of Governors

The Council of Governors (CoG) deal collectively with matters of public policy and governance that concern Counties. In this respect, the role of the Council of Governors shall include identifying priority food and nutrition security programs for their counties in line with the National Policy; considering matters of common interest to County governments and promoting best practice where necessary; mitigating food insecurity by promoting linkages between various stakeholders and the national government; and monitoring the implementation of inter- agency and inter-county agreements on food and nutrition security.

County Food and Nutrition Steering Committees (CFNSC)

The County Food and Nutrition Security Steering Committees shall provide leadership, oversight and policy guidance to achieve FNS objectives at the county level. The committees will facilitate appropriate linkages between diverse sectors operating in the county to facilitate stakeholder collaboration and harmonization of their activities to achieve the developmental goals. The committees shall approve and monitor all food

and nutrition security programs in the county, mobilize resources and recommend commitment of county resources to facilitate implementation of the Food and Nutrition Security programs.

Specific functions of the Steering Committee will be to:

- Provide policy direction, guidance and oversight to implementing agencies at the county level.
- Facilitate preparation and approval of the County Food and Nutrition Security status report for the county executive committee for necessary action.
- Facilitate resource mobilization and allocation for implementation of the FNS activities.
- Facilitate cross-sector collaboration and cooperation between departments, development partners, civil society, the private sector, and academia.
- Facilitate undertaking of research, analysis and uptake to improve food and nutrition security
- Provide the vital link to the County Executive Committee, Assembly and National -level committees.

County Food and Nutrition Security Secretariats (CFNSS)

The County FNSS will be set up in the department of Agriculture, Livestock and Fisheries and directly support the County FNS Steering Committee. It will be responsible for facilitating cross sector collaboration of all stakeholders in the county level. Their role will be to convey decisions of the steering committee and executive to the stakeholder technical; committees and ensure their responses and activities are appropriately synchronized. The main functions of the Secretariat will be:

- Consolidate, monitor & review progress on performance of key food and nutrition security indicators.
- Coordinate development, review and implementation of county plans, programs and projects that promote food and nutrition security.
- Support, joint monitoring and evaluation of food and nutrition plans and strategies.
- Coordinate development, review and implementation of County plans, programs and projects that promote food and nutrition security.
- Collate and review progress monitoring reports from counties' food and nutrition security programs and projects.
- Facilitate and coordinate policy and strategy harmonization, review and formulation as necessary,
- Monitor implementation of policies and convey executive decisions and recommendations to relevant stakeholders.
- Coordinate response and the participation of relevant ministries, institutions, stakeholders for effective implementation of food and nutrition programs in the country.
- Apply National Standards for FNS interventions during emergency and recovery stages in the county.
- Facilitate appropriate horizontal and vertical linkages to promote broad, multi-sectoral collaboration between all stakeholders.
- Prepare quarterly reports on implementation plans and progress reports and report to the NFNS Responsible for knowledge management to facilitate information sharing among all actors, and archiving of FSN data.
- Responsible for consolidation and sharing of food security updates with the national secretariat and communication of feedback to counties.

6.1.3 Stakeholder Technical Committees for Food and Nutrition (STC-FN)

The STC-FN will provide a platform for cooperation, collaboration and coordination of all food and nutrition security programmes. They will be the technical advisory groups responsible for generating pertinent information on food and nutrition security programs to be shared with the Secretariats. The Committees will plan jointly to create synergies and harmonization of programs to avoid overlap and gaps in activities of independent organizations. The stakeholder committees will specifically be responsible for:-

- Implementation and adherence to all relevant government policies and legislation.
- Generation, analysis and sharing of food and nutrition security data and information
- Facilitation and implementation of food security and nutrition security programs and projects
- Implementation protocols and standards on food security and nutrition interventions and responses
- Provision of support to the national and county Food and Nutrition Secretariat (NFNS)

6.2 Legal Framework

The “right to food” is a human right. This was first formally recognized by the United Nations in 1948, the Universal Declaration of Human Rights (UDHR), UDHR Article 25, protecting the right for people to feed themselves in dignity. Further, at the UN World Food Summit of 1996, the Heads of States and Governments reaffirmed the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger. They pledged their political will and commitment to achieving food security for all and eradicate poverty and hunger in all countries. In 1990, the United Nations set the Millennium Development Goal to halve the number of people suffering from hunger by 2015. Later, in September 2015, Kenya was among 153 United Nations (UN) countries that unanimously adopted the 17 Sustainable Development Goals of Agenda 2030, among them the common goal to eradicate Hunger. To achieve this goal, everyone must play their part: governments, private sector, civil society and individuals. The Constitution of Kenya 2010: Article 43 (1) (c), Article 53 (1) (c), Article 21 and Article 27 guarantees the right to food and adequate nutrition and the universal right to food and nutritional health, and protection from discrimination.

The Policy implementation process shall involve revision of existing legislation and formulating new laws, regulations and guidelines to ensure availability and access of adequate, safe and quality food; and adherence to internationally recognized standards and nutritional guidelines. To ensure food and nutrition security is achieved, the National and County Governments shall:

- Review/Enact legislation for efficient and effective implementation of the FNNSP at both national and county levels.
- Develop regulations and guidelines for implementation of the NFNS Policy
- Support measures to ensure compliance and enforcement of existing laws and regulations on Food and Nutrition Security.
- Establish or review existing laws, regulations and guidelines governing all institutions related to FNNSP.
- Domestication of international and regional treaties, declarations and conventions related to food and nutrition security.
- Submit annual report to parliament on the national food and nutrition security status of the country in fulfilling its constitutional obligation.

6.3 Financing the Implementation of the Food and Nutrition Security policy

There has been limited awareness and linkage between planning priorities and budgets for food and nutrition security. Awareness and commitment needs to be improved to ensure effective planning and increased budgetary allocations for food and nutrition security activities by all sectors. The National and County governments shall commit financial resources annually through the normal budgetary processes to meet the goals of the FNSP. In addition, the National and County Secretariats shall adopt clear and consistent strategies for advocacy and resource mobilization over the implementation period.

The County Secretariats will establish specific budget lines for administration, coordination and operational purposes, which should be approved by the County FNS Steering Committees. Detailed rationalised budgets developed through consultative processes involving various stakeholders will be drawn each year to fund specific activities of the Secretariats.

The objective is to achieve high level commitment and increase overall budgetary allocation for food and nutrition activities.

Strategic interventions

- Introduce specific budget lines for sustainable implementation of Food and Nutrition Security programs/projects at both National and County levels.
- Establish resource mobilization desks for the inclusion of all stakeholders in financing Food and Nutrition Security programs/projects
- Develop guidelines for access and allocation of Food and Nutrition Security funds by various stakeholders
- Establish a mechanism for maintaining accountability and auditing in utilization of the Food and Nutrition Security funds

7.0 IMPLEMENTATION MATRIX

The past Food and Nutrition Security Policies have not shown significant impact because Policy documents are often shelved and not implemented. This is partly attributed to lack of high level commitment and leadership in implementation of policies. Consequently, resources allocated for roll out and full implementations of Policy interventions are usually inadequate. In this IF, it is recognized that a FNS policy without feasible plans, funds, and cross linkages between programs cannot work. The Implementation Matrix presented in **Appendix 1** highlights the desired objectives and outcomes, including the necessary interventions with associated indicative budgets for each program area. The mandates, roles and functions of the wide range of actors to be involved in its implementation and their contribution to the overall Policy objective is recognized.

The detailed indicative budgets on specific sub-programs are provided in the Implementation Matrix (Appendix 1). The matrix indicates the critical interventions that should be undertaken according to the specified time-frames in order to successfully achieve the desired food and nutrition security impact. This will require a combination of immediate, short term and long term interventions. The matrix is informed by estimates from ongoing FNS programs, including Vision 2030 among others. For each intervention area, lead ministries/agencies are identified (highlighted in the Table in Appendix 1) together with the collaborating link agencies for which work plans and result matrices will be developed. It will be therefore important to harmonize all new and follow-on projects, matching the priorities identified, to support the priorities of this Implementation framework.

8.0 THE STRATEGIC RESULTS FRAMEWORK

A key part of the Implementation Framework is the Strategic Results Framework that sets out the goals, objectives and outcomes that build a logical framework to achieve food and nutrition security (figure 3). This will create a strategic frame where programs fit together and support the higher level goal and objectives.

The Implementation Framework operates as an effective communication tool as it succinctly captures the elements of the multi-sector approach. Further, the harmonization of programs by the counties, development partners and other investors will be facilitated through the use of this Strategic Results Framework. The design of individual programs and the selection of their inputs, outputs and outcomes will be driven by this results framework. The existing food and nutrition programs operating across multiple sectors also have outcomes that support the planned results.

As illustrated in the results framework (Figure 3), the first objective — improved (nutritious) food availability and access — will be supported by achieving three outcomes, namely: improved household resource productivity; improved national food availability; and improved food/market access and incomes. The second objective — improved quality and safety of food — will be supported by achieving improved food safety and quality control, improved public food service and domestic water supply. The third objective — which is improved food utilization/consumption for maximum health and minimum disease, is expected to be achieved through four main outcomes: improved nutrition in public institutions and among consumers; improved food and nutrition education in schools; improved food nutrition in crisis and emergency; and improved food nutrition information and communication, and improved water availability, access and safety.

This Implementation Framework also provides a hierarchy of results and a set of indicators needed to design and implement a robust monitoring and evaluation (M&E) system. An effective M&E system is critical to monitoring and comparing county performance and information arising from the performance indicators will therefore be useful in revising and improving implementation of programs.



Figure 3: Schematic Representation of the National Food and Nutrition Security Results Framework

9.0 MONITORING AND EVALUATION

Introduction

An effective, harmonized and well coordinated Monitoring and Evaluation (M&E) framework is an important aspect of the overall strategy given that a wide range of actors are involved in the implementation of the Food and Nutrition Security programs and for the management of the available resources. The aim is to determine a set of appropriate indicators to measure performance and results during implementation of the food and nutrition security programs. The common results framework in the implementation matrix will guide the development of objectively verifiable indicators and performance targets. Overall, a set of performance indicators for each thematic area are provided in Appendix 2.

The Secretariats will refer to the results framework to harmonize outcomes, and draw indicators for the performance targets at each level. The results framework provides missing linkage between policy and implementation of food and nutrition security programs and the results framework. This will show the causal linkage and enable effective performance monitoring toward achievement of our National Food and Nutrition Security Goal.

9.1 Rationale and Objectives

Monitoring feedback for policy makers and other stakeholders on the outcomes of their interventions is important. The rationale for putting in place a food and nutrition security monitoring system is to provide feedback information concerning emerging developments, which in turn would form the basis for program design/redesign and implementation during planning. A participatory M&E system helps to improve program design and delivery; and also provides the basis for timely corrective actions in case of poor performance. The objectives is to institutionalise effective M&E and link Food and Nutrition Security investments to other development programs.

A robust monitoring and evaluation tool shall be designed to collect and analyze information on all indicators covering the four food and nutrition security pillars. This will effectively stimulate the active participation and reporting of all stakeholders in order to ensure improved planning and implementation of programs towards the achievement of the common FNS goal.

9.2 Performance Indicators

The monitoring and evaluation of policy impact on food and nutrition security would require taking into account the long term measurement of global level performance indicators and the national sectoral goals and objectives. Careful selection of indicators at all levels is therefore crucial for effective monitoring and evaluation. The selection of program performance indicators should take place at the design stage of each of the food and nutrition security programs areas, and harmonized with the Strategic Results Framework (Figure 3).

The indicators should take into consideration the program objectives and outputs, and include performance measures for activities and inputs. Outcome or impact indicators measure the effect of activities in respect of the extent to which they meet the set objectives, while process and output indicators measure how activities are planned and implemented.

The national indicators considered in the M&E framework is illustrated in Table 3. The elements of food security and nutrition as illustrated in Figure 1 and the goals and programs of the FSNP-IF shown in Figure 3 provide a framework for determining the major categories of indicators related to the four dimensions of food and nutrition security; —improved food availability, increased food access, increased stability in food production, reduced vulnerability and nutritional adequacy. These indicators include increased food production, improved food access and food markets, increased income of households and individuals, reduced inflation, reduced consumer price index, and increased employment opportunities. Others are stable food production, increased food stocks, increased food intake, more appropriate food use, and increased nourishment. Howev-

er, the precise indicators and measures will depend on the program and aspect of food security it is addressing, taking into account the specific nature of target groups, such as women, children and farmers, consumers e.t.c.

10 RISK ASSESSMENT

Risk analysis is the systematic use of available information to determine how often specified events may occur and the magnitude of their consequences. Risk evaluation is used to determine risk management priorities whereby the level of risk is compared against predetermined standards or target risk levels.

The successful implementation of the FNSP will require enhanced coordination of the relevant stakeholders. In addition, political goodwill and support is necessary to provide an enabling environment for policy implementation, including adequate resources and accountability. The threats to food and nutrition security require constant monitoring and assessment for appropriate mitigation and accountability measures.

The highly consultative process through which the policy and Implementation Framework were developed provides an opportunity for the harmony and therefore efficiency with which the implementing ministries and other collaborators will perform. Furthermore, considering that Kenya has successfully managed food and nutrition security crisis and emergencies, through the Kenya Food and Nutrition Security Meeting (KFSM), the institutional memory will provide vital lessons learnt for this implementation framework for the Policy. **Table 3** and **Table 4** show the risk priority listing, risk analysis and evaluation matrix.

Table 1: Priority listing of risks

Likelihood of Occurrence	Impact		
	High	Medium	Low
High	5	4	3
Medium	4	3	2
Low	3	2	1

Key: The Numerals represent the risk ranking:- Where 5 is High and 1 is Low

Table 2: Risk Analysis and Evaluation Matrix

Risk event	Risk consequence	Likelihood	Impact	Risk priority	Strategy	Responsibility
Inadequate political support	Inadequate funding affecting implementation	Medium	High	4	<ul style="list-style-type: none"> Adapt FSNP-IF to the changed political landscape, identifying new key stakeholders and frameworks in which they operate Stakeholder advocacy to maintain momentum for implementation. Empowerment of rural communities in the monitoring process. 	FNS Council, Development Partners Civil society
Inadequate funding	<ul style="list-style-type: none"> Activities slowed or halted. Implementation linkages and relationships disrupted. 	High	High	5	<ul style="list-style-type: none"> Maintain dialogue with Development Partner funders to facilitate funding forecasts. Identify possible alternative funding streams. Identify and adopt contingency plans based on priority interventions. 	FNS Council, FNS Secretariats, Development Partners

Risk event	Risk consequence	Likelihood	Impact	Risk priority	Strategy	Responsibility
Mechanisms for financial management and external funding not consolidated	Timely implementation of activities disrupted	medium	High	3	Streamline financial management system with a view to enhancing accountability and reducing red-tape.	FNS Council, Development Partners
Disasters (drought, floods, landslides, fires, earthquakes)	<ul style="list-style-type: none"> Unable to respond to disasters on time and therefore unable to achieve the national/county FSNS goals and objectives 	Medium	High	5	<ul style="list-style-type: none"> Monitor situation and develop contingency plans. Estsblish contingency fund for Instituting mitigation plans and early response. Mainstream in all relevant sectors. 	FNS Council, FNS Secretariats, Development Partners
Deterioration in security	<ul style="list-style-type: none"> Interruption of FNS programs, projects and communication infrastructure. Human safety risk. 	Medium	High	4	Continous monitoring through early warning system and development of effective contingency plans	FNS Council, FNS Secretariats, Ministry of Interior and Coordination of Government.
Poor adherence to financial agreements	<ul style="list-style-type: none"> Ineffective and inefficient program implementation. Poor accountability and credibility in implementation of FNS programs and and 	Low	Medium	3	<ul style="list-style-type: none"> All stakeholders to promote accountability as part of program sensitization and ensure transparent procedures. Ensure monitoring systems are in place with appropriate mechanisms for enforcing compliance consistent with legislative requirements. Enhance feedback mechanisms between implementers and accounting officers. 	FNS Council, Development Partners
Resistance to collaboration by key stakeholders	<ul style="list-style-type: none"> Fragmentation and duplication of FNS programs and projects Lack of accountability, confusion and mistrust among stakeholders 	Low	High	4	<ul style="list-style-type: none"> Initiate regular dialogue with stakeholders at all levels. Sensitization and development of stakeholder operational and consultation procedures Joint planning and prioritization of interventions by all stakeholders Regular reporting and briefings on the programs. 	FNS Council FNS Secretariats, Development Partners Beneficiary communities

Risk event	Risk consequence	Likelihood	Impact	Risk priority	Strategy	Responsibility
Poor resource absorption and responsive capacity management of the collaborating partners	<ul style="list-style-type: none"> • Resource wastage. • Support constricted. • FSNP-IF objectives not realised to the detriment of beneficiaries. 	Medium	Medium	4	<ul style="list-style-type: none"> • Sound and effective work plans • Streamlining and reduction of excessive procurement procedures and bureaucracy. • Effective monitoring and support at all levels. 	FNS Secretariat, Development Partners

APPENDIX I: IMPLEMENTATION MATRIX

FOOD SECURITY

PRIORITY AREAS, RESULTS, INTERVENTIONS AND BUDGETS

RESULT AREA I: IMPROVING FOOD AVAILABILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MIL. KES)	TIME FRAME	RESPONSIBILITY*
2.1 National food Availability						
2.1.2. Improving domestic food availability	To increase food productivity and production of food that is diversified affordable and able to meet diverse nutritional requirements of all people.	Agricultural fund Established	Establish an Agricultural Development Fund	200	2017-2022	MOALF, Treasury, DP, CG
		Funding to agriculture sector enhanced to 10% of national budget.	Increase funding to the food and agriculture sectors to 10% of the national budget		2017-2022	
		Sustainable food production systems promoted	Promote sustainable food production systems	100	2017-2022	MOALF, CG, DP,
		Increased nutrient-rich foods produced	Promote production of traditional high value and nutrient-rich foods	250	2017-2022	MOALF, CG
		Irrigation and water management systems promoted and supported	Promote and support sustainable irrigation and water management systems	100	2017-2022	MWI, MOALF, DP, CG
		Improved accessibility to affordable farm inputs and credits.	Improve accessibility to affordable farm inputs and credits	700	2017-2022	MOALF, CG, DP,
		Increased conservation of Natural resources.	Promote natural resource management for improved livelihoods	100	2017-2022	MOALF, CG, MENR, DP
		Increased investments in infrastructure development to increase food production and availability	Support investments in infrastructure, to increase food production; and availability	400	2017-2022	MOALF, CG, DP
		Climate change adaptation and mitigation practices in agricultural development programmes and policies adopted	Promote integration of climate change adaptation and mitigation practices in agricultural development programmes and policies	80	2017-2022	MOALF, CG, MWI, MENR, DP
		Urban and peri-urban agriculture promoted for better food and nutrition security.	Promote Urban and Peri-Urban agriculture to improve food availability and access for better nutrition	100	2017-2022	MOALF, CG, DP,

RESULT AREA I: IMPROVING FOOD AVAILABILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MIL. KES)	TIME FRAME	RESPONSIBILITY*
Sub Total				2,030		
2.1.3 Domestic, Regional and International Food Trade	To promote national food availability and access through strategic liberalization of food trade and private sector participation along the value chains	Harmonized food and related trade policies and regulations to enhance food flow.	Review and harmonise the existing food and related trade policies and regulations	20	2017-2022	MOTE&I, MFA
		Improved access to food by addressing the high cost of production.	Increase the competitiveness of Kenya's agricultural produce by addressing the high cost of production.	50	2017-2022	MOALF, CG, MFA
		Increased domestic, regional and international food trade	Promote domestic, regional and international food trade	100	2017-2022	MOTE&I, MFA, EAC & IT
		Food safety and quality standards and regulations harmonized.	Support harmonization of regional and international food safety and quality standards and regulations to improve health	100	2017-2022	MOH, MOALF, MFA
		Agribusiness Council established and operationalized	Institutionalize multi-sectoral food and agricultural trade, policy formulation implementation and coordination (Create an agribusiness Council)	200	2017-2022	MOALF, MOTE&I Industrialization
		Trade subsidies and other barriers by trade partners negotiated and removed	Negotiate for the removal of free trade barriers by trade partners	10	2017-2022	MOTE&I, Treasury, MOALF,
		Increased irrigated agriculture	Improve irrigation infrastructure to promote irrigated agriculture	60	2017-2022	MoWI, MoALF
		Increased water harvesting and storage	Water harvesting and storage	50	2017-2022	MoWI, MoALF
Sub Total				590		

RESULT AREA 1: IMPROVING FOOD AVAILABILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MIL. KES)	TIME FRAME	RESPONSIBILITY*
2.1.4 Agro-Processing and Value-Addition	To increase the level of value-addition for agricultural produce meant for domestic and export markets through adoption of appropriate technology.	Tax incentives to promote value-addition and agro-processing industries both in rural and urban areas in place	Provide tax incentives to promote value-addition and agro-processing industries both in rural and urban areas	500	2017-2022	Treasury, MOALF, MOTE& Industrialization
		Fund for supporting SMES in Agro-processing established	Establish a fund to support SMEs involved in agro-processing and other means of value addition	500	2017-2022	Treasury, MOALF, MOTE&I
		Increased number of youth and women accessing allocated funds for investment in value-addition, cottage industries and agro-processing	Empower youth and women to utilize allocated funds for promotion of value-addition, cottage industries and agro-processing development.	500	2017-2022	MOTE&I, Treasury, MOALF,
		Key infrastructure such as roads, power and water both in rural and urban areas to stimulate development of value-addition processes developed	Develop key infrastructure such as roads, power and water both in rural and urban areas to stimulate development of value-addition processes	800	2017-2022	MoI Treasury, DP
		Agro-processors, particularly SMEs, able to meet international quality and safety standards	Agro-processors, particularly SMEs, able to meet international quality and safety standards	100	2017-2022	MOTE&I, Treasury, MOALF,
		Research for appropriate processing methods and equipment suitable to small scale enterprise needs promoted and adoption	Promote research and adoption for appropriate processing methods and equipment suitable to small scale enterprise needs	90	2017-2022	MOE, Treasury
Sub Total		Increased number of value addition products and equipment	Promote technology incubation or value addition equipment development.	100	2017-2022	MOTE&I, NACOSTI Treasury, MOALF,
2.1.5 Improving food storage facilities	To promote appropriate storage practices and expansion of storage facilities to extend shelf life and reduce farm losses	Improved food storage structures and practices	Promote appropriate household food storage structures and practices for improved food and nutrition security	25	2017-2022	MoALF
		Improved institutional and farmers capacity to manage food storage facilities	Develop farmers' capacity for management of appropriate storage facilities from community to national level.	50	2017-2022	MoALF
Sub Total				75		

RESULT AREA 1: IMPROVING FOOD AVAILABILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MIL. KES)	TIME FRAME	RESPONSIBILITY*
2.1.6 Strategic Food Reserve	To diversify and attain sufficient nutritious foods in the SFR to stabilize food supply and food market prices	Recommended Strategic Food Reserve budget increased and other critical food stuffs included: sorghum, millet, rice, pulses, milk, meat, fish, root crops, fruits, nuts and livestock feeds	Increase budget support to the Strategic Food Reserve to include other critical foodstuffs such as sorghum, millet, rice, pulses, milk, meat, fish, root crops, fruits, nuts and livestock feeds	39,000	2017-2022	Treasury, MOALF, NCPB
		Adequate SFR stock and cash levels achieved and maintained based on demographic, economic and climate dynamics	Regularly review the appropriate stock and cash levels for the SFR based on demographic, economic and climate dynamics	20	2017-2022	Treasury, MOALF, NCPB
		SFR management institutionalized and established at both National and County levels.	Strengthen management of SFR at national and County levels	200	2017-2022	MOAF, CG
		SFR effectively managed.	Encourage continuous research and technology transfer on preservation technologies	80	2017-2022	MOE, KARLO
			Institutionalise management of SFR	39,300		
2.1.7 Commercialization of Agriculture	To increase net incomes from farming and related value chain activities.	Capacity of farmers, SME, cooperatives to undertake farming as a business enhanced	Strengthen capacity of farmers, SMEs and Cooperatives to undertake farming as a business across the commodity value-chains	100	2017-2022	MDP, MOALF, County Governments
		Support services including extension and provision of financial services for sustainable commercialization of Agriculture strengthened	Strengthen support services including extension and provision of financial services for sustainable commercialization of Agriculture.	100	2017-2022	MDP, MOALF, County Governments
		Consumption of locally produced agricultural products increased	Promote development and consumption of locally produced agricultural products.	100	2017-2022	MOALF, County Governments, MT& Industry
		Linkages between supply and market demands strengthened.	Promote linkages between food supply and market demands through Public Private Partnerships	30	2017-2022	MDP, MOALF, County Governments

RESULT AREA 1: IMPROVING FOOD AVAILABILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
		Legislation and regulations on food marketing and institutions to protect all actors along commodity value chains in place	Strengthen legislation and regulations of food marketing and institutions to protect all actors along commodity value chains	20	2017-2022	MDP, MOALF, County Governments, KARLO, AFA
		Agricultural research, innovation and technology transfer promoted	Promote agricultural research, innovation and technology transfer and uptake in production and post-harvest management	60	2017-2022	MDP, MOALF, County Governments
		Taxation regime to avoid multiple taxation along the food commodities value chains streamlined	Streamline the taxation regime for food commodities to avoid multiple taxation along the value chains	5	2017-2022	MDP, MOALF, County Governments, KARLO, Treasury, MFA
Sub Total				415		

RESULT AREA 1: IMPROVING FOOD ACCESSIBILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
2.3 National food Accessibility						
2.2.1. Improvement and Expansion of On-Farm and Off-Farm Employment	To enhance rural employment opportunities as a means of increasing the level of food and nutrition security	Improved access to Household resources Production and marketing of smallholder produce enhanced. Improved food access	Support measures that improve security and access to land, water and technologies especially by women, pastoralists and child-headed households Support cooperatives, out-grower schemes and fair trade policies to increase the share of small producers in the production and export of high value crops and livestock Review minimum wages regularly to take account of food and nutrition needs, inflation rates and labour productivity	200 200 100	2017-2022 2017-2022 2017-2022	MOALF, Treasury, DP, CG MOALF, County Governments, MT& Industry MOALF, CG, DP, CG

RESULT AREA 1: IMPROVING FOOD ACCESSIBILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
		Increased food trade	Simplify business registration, licensing and regulation through the introduction of multi-user licences and operationalization of the Single Business Permits to minimize bureaucracy	50	2017-2022	MOALF, CG
		Increased food production	Provide legal and institutional support to small rural enterprises	50	2017-2022	MWI, MOALF, DP, CG
		Increased and diversified food production	Enhance linkages with training institutions to diversify technological innovations, research and development	250	2017-2022	MOALF, CG, DP,
		Increased food trade and value addition	Strengthen business linkage opportunities by encouraging the establishment of agro-processing enterprises	400	2017-2022	MOALF, CG, MENR, DP
		Improved food access	Support investment in rural infrastructure including access roads and locally generated renewable energy to lower production and marketing costs	200	2017-2022	MOALF, CG, DP
Sub Total				1,450		
2.2.2 Improvement of Urban and Peri-Urban Food Accessibility	To promote and regulate safe peri-urban agriculture and to improve household incomes in order to enhance food accessibility	Policy implemented	Fast track implementation of the micro, small and medium enterprises (MSME) policy.	20	2017-2022	MOTE&I, MFA
		Regulatory framework in place and enforced	Review and streamline regulatory frameworks governing urban and peri-urban agriculture.	20	2017-2022	MOALF, County Governments, MFA
			Review and streamline regulatory frameworks governing formal and informal sectors focusing on employment creation and poverty alleviation.	50	2017-2022	MOTE&I, MFA, EAC & IT, DP, CoG

RESULT AREA 1: IMPROVING FOOD ACCESSIBILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
		Improved food processing skills	Support and promote mechanisms to enhance agro-processing, small businesses and entrepreneurial skills.	200	2017-2022	MOH, MOALF, MFA, DP, CoG
		Appropriate working environment and suitable zones for the informal sector	Provide an appropriate working environment and suitable zones for the informal sector.	100	2017-2022	MOALF, MOTE& Industrialization, DP, CoG
		Income generation capacity of vulnerable people enhanced	Support activities that enhance the income generation capacity of vulnerable people with special needs.	500	2017-2022	MOTE&I, Treasury, MOALF, CoG
		Safe food production in urban and peri-urban areas	Promote urban and peri-urban agricultural extension services for safe food production	100	2017-2022	MOH, MOALF, MFA, DP, CoG
Sub Total				990		
2.2.3 Improving Food Access and Functioning of Markets	To improve market infrastructure, marketing skills and information systems for effective and efficient market functioning and food access	Improved markets access and roads Markets installed with appropriate facilities Capacity of food producers enhanced Improved governance and accountability of market service providers Improved physical planning and running of food markets Market information and technology enhanced	Establish and maintain efficient market infrastructure to facilitate food access. Develop capacity building programs for food producers and traders. Improve governance and accountability of service providers in development and modernization of food commodity markets. Enforce the physical planning rules and regulations in market systems. Develop a comprehensive data base for agricultural products, markets and an information flow system for food market players.	100 100 50 20 100	2017-2022 2017-2022 2017-2022 2017-2022 2017-2022	Treasury, MOALF, MOTE& Industrialization, CoG Treasury, MOALF, MOTE&I, CoG MOTE&I, Treasury, MOALF, CoG MoI Treasury, Donors, CoG MOTE&I, Treasury, MOALF, CoG
Sub Total				370		

RESULT AREA 1: IMPROVING FOOD ACCESSIBILITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
2.2.4 Address cultural, Social and Political Aspects affecting Food Access	To mainstream cultural, social and political considerations in the food and nutrition security strategies and activities, with particular attention to vulnerable groups	Human Right to Food and nutritional health effected	Advocate for the enforcement of Human Right to Food and nutritional health; and protection of right holders from hunger and discrimination of by duty bearers.	50	2017-2022	
		Communities sensitized on retrogressive practices with regard to individuals' access to nutritious foods.	Sensitize communities to discard retrogressive cultural practices with regard to access to nutritious foods.	80	2017-2022	
		Improved access to land and other production resources especially for youth and women	Facilitate access to land and other production resources especially for youth and women	20	2017-2022	
		Involvement of youth and men in food production activities enhanced	Promote active involvement of youth and men in food production activities	400	2017-2022	
		Technology access and adoption by vulnerable groups especially women and youth enhanced.	Enhance technology access and adoption by vulnerable groups especially women and youth.	20	2017-2022	
		Policies to enhance food access in place	Fast track development and implementation of policies that will enhance food access.	20	2017-2022	
		Accountability and good governance enhanced at all levels	Promote accountability and good governance at all levels.	40	2017-2022	
		Sub Total			630	

RESULT AREA: 2.3 IMPROVING HOUSEHOLD RESOURCE PRODUCTIVITY							
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*	
2.3.1 Accessibility to Productive Resources for Rural Agriculture	To improve equity in access and control of productive resources and harness the existing potential of productive resources by all genders and vulnerable groups	Agriculture land use Master Plan developed	Development of an Agriculture Land Use Master Plan	100	2017-2022		
		Efficient and readily accessible land registry system developed	Establish an efficient and easily accessible land registry system.	15	2017-2022		
		Sustainable management of productive resources	Adopt participatory approaches to rural development and sustainable management of productive resources.	20	2017-2022		
		Improved access to, control and management of productive resources across genders	Promote equitable access to, control and management of productive resources across gender including women and youth.	20	2017-2022		
		Capacity of communities to adapt to changing needs and environmental and socio-economic conditions strengthened.	Strengthen the capacity of communities to adapt to changing needs and environmental and socio-economic conditions.	100	2017-2022		
		Technical and social options for improvement of productivity and incomes in marginal agricultural areas and other fragile ecosystems promoted.	Promote technical and social options for improvement of productivity and incomes in marginal agricultural areas and other fragile ecosystems.	60	2017-2022		
		Improved information flow and networking among stakeholders	Improve information flow and networking among stakeholders.	20	2017-2022		
		Improved benefit sharing from community resources	Facilitate benefit sharing from community resources through sustainable management and conservation	20	2017-2022		
				350			

RESULT AREA: 2.3 IMPROVING HOUSEHOLD RESOURCE PRODUCTIVITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
2.3.2 Sustainable Intensification and Diversification of Agricultural Production Systems	To promote agricultural intensification through sustainable and efficient use of productive resources and reduce the risks of livelihood failure	Increased output per unit area	Promote appropriate intensified and sustainable agricultural production systems that are friendly to fragile ecosystems	1000	2017-2022	
		Improved diversification and production of nutrient rich foods	Promote diversification and production of nutrient rich foods	25	2017-2022	
		Research and research-extension-farmer linkages to enhanced	Strengthen research and research-extension-farmer linkages to enhance flow and utilisation of technical information appropriate for intensified and diversified agricultural production systems.	50	2017-2022	
		Training guidelines for promotion of intensification and diversification of agricultural production systems developed	Support development of training guidelines for promotion of intensification and diversification of agricultural production systems.	10	2017-2022	
2.3.3 Improving Urban and Peri-urban Agriculture	To improve household food availability, through urban and peri-urban agriculture	Guidelines for urban and peri-urban agriculture developed	Develop guidelines for urban and peri-urban agriculture	10	2017-2022	
		Urban and peri-urban agriculture regulatory framework reviewed	Review the urban and peri-urban agriculture regulatory framework to be in line with the developed legislation and guidelines.	20	2017-2022	
		Farmers sensitized on good agricultural practices in urban and peri-urban areas	Sensitization and capacity building of farmers and other stakeholders on good agricultural practices in urban and peri-urban areas.	20	2017-2022	
		Monitoring and surveillance system in enforcement of urban/peri-urban agricultural production rules and regulations strengthened.	Strengthen monitoring and surveillance system in enforcement of urban/peri-urban agricultural production rules and regulations.	20	2017-2022	
2.3.4 Improving Food Storage, Preservation and Value-addition at household level.	To minimize post-harvest losses and waste at house-hold level by enhancing capacity of households in food and forage storage, preservation and value addition.	Community based food storage and preservation systems promoted	Sensitization and promotion of community based food storage and preservation.	20	2017-2022	

RESULT AREA: 2.3 IMPROVING HOUSEHOLD RESOURCE PRODUCTIVITY						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
		Appropriate technologies for food/forage handling, preservation, value-addition and storage in place.	Promote research and development of appropriate technologies of food/forage handling, preservation, value-addition and storage.	20	2017-2022	
		Households knowledge on appropriate safe handling, preservation, value-addition and storage technologies enhanced	Enhance capacity of households on indigenous knowledge and appropriate safe handling, preservation, value-addition and storage technologies of food products.	20	2017-2022	
		Support infrastructure for cold storage and processing in food production zones promoted.	Facilitate development of support infrastructure for cold storage and processing in food production zones.	1000	2017-2022	
		Warehouse receipting systems for storage of grains and other foods promoted	Promote warehouse receipting systems for storage of grains and other foods in all counties	60	2017-2022	
Sub Total				1,370		

RESULT AREA: 2.4 IMPROVING FOOD SAFETY AND QUALITY ASSURANCE						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
2.4 Protect the public health and nutrition of all Harmonizing the Institutional and Legislative Framework for protecting food safety and quality.	To establish and maintain a rational, integrated <i>farm-to-fork</i> food safety system to protect public health and nutrition	Laws and regulations to address emerging challenges pertaining to food safety and quality reviewed and harmonized. Enhanced linkages between research and industry to promote food safety and quality control.	Review and harmonize the current laws and regulations to address emerging challenges pertaining to food safety and provide for functional responsibilities at along the food value chain at both national and counties levels. Enhance linkages between research and industry to promote food safety and quality control.	100	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG
To created efficiencies in the national food safety control system,	An effective farm to folk food safety monitoring and evaluation system in developed.	Develop an effective farm to folk food safety monitoring and evaluation system to ensure that only safe food is availed to consumers.		20	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG

RESULT AREA: 2.4 IMPROVING FOOD SAFETY AND QUALITY ASSURANCE						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
	To reduce gaps or lack of accountability resulting in recurrence of food related hazards,	Capacity of institutions to undertake risk analysis and early warning enhanced.	Strengthen capacity of institutions to undertake risk analysis and early warning at both national and county levels in order to prevent outbreak of food borne illness and diseases.	100	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG
		Increased resources for mainstreaming food safety and quality concerns at all levels.	Mobilize resources to mainstream food safety and quality concerns in programme planning and implementation at both national and county levels	100	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG
		A mechanism for certification and accreditation of food testing laboratories in place An inventory of certified/ accredited laboratories for food testing and analysis in place	Develop a mechanism for certification and accreditation of food testing laboratories and maintain an inventory of certified/accredited laboratories for food testing and analysis	20	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG
		Data bank on food safety developed.	Establish data bank on food safety at National and County levels by taking inventory of expertise and scientific works.	20	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG
		A harmonized and coordinated inter – agency institutional framework in place Food safety regulations that are in conformity with local and international trade requirements in place	Harmonize and strengthen inter-agency efforts in food safety and quality control monitoring to minimize overlaps and inter-agency conflicts.	20	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG
		A safeguard mechanism for safe food trade, communication, feedback and information dissemination for consumers protection and other food chain actors in place.	Develop a safeguard mechanism for safe food trade, communication, feedback and information dissemination for consumers protection and other food chain actors	20	2017-2022	MoALF, MoH, MoDP, MTIC, DP, CG
Sub Total				420		

NUTRITION IMPROVEMENT

3.0 NUTRITION IMPROVEMENT						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL. KES)	TIME FRAME	RESPONSIBILITY*
3.1 Lifecycle Approach to Nutrition Improvement	To achieve optimal nutrition and developmental and physiological functions at all stages throughout human lifecycle.	Developed, reviewed and disseminated appropriate cohort specific nutrition guidelines	Develop, review and disseminate appropriate cohort specific nutrition guidelines	105	2017-2022	MOH, MOALF, County Governments, Development and implementing partners
		Routine assessment and monitoring of the nutritional status of all cohorts institutionalized	Promote routine assessment and monitoring of the nutritional status of all cohorts at community, health facilities and workplace	200	2017-2022	MOE, County Governments, Development and implementing partners, private institutions
		Nutrition systems for all cohorts at community, health facilities and workplace strengthened and supported	Strengthen and support nutrition systems for all cohorts at community, health facilities and workplace	600	2017-2022	MOH, MOPD, County Governments, Development and implementing partners, private institutions
		Good nutrition practices among all lifecycle cohorts promoted	Promote good nutrition practices among cohorts	800	2017-2022	MOH, MOE, MoALF, County Governments, Development and implementing partners, private institutions
		Consumption of diversified and nutritionally adequate diet across the lifecycle promoted	Promote consumption of diversified and nutritionally adequate diet across the lifecycle.	800	2017-2022	MOH, MODP, MoALF, County Governments, Development and implementing partners, private institutions
		Implemented and enforced food and nutrition related legislations and laws	Implement and enforce the food and nutrition related legislations and laws	500	2017-2022	MOH, MOWI, MOE, MODP, MoALF, County Governments, Development and implementing partners, private institutions, Employers
	Nutrition agenda in all agriculture sector projects and programs in designs and plans in value chains and food security activities integrated	Strengthen and support integration of nutrition agenda in all agriculture sector projects and programs designs and plans in value chains and food security activities	60	2017-2022	MOH, MoALF, County Governments, Development and implementing partners, private institutions,	

3.0 NUTRITION IMPROVEMENT						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		Hygienic food preparation, research and adoption of appropriate household food processing methods to reduce post-harvest losses and seasonality of food promoted	Promote hygienic food preparation, research and adoption of appropriate household food processing methods to reduce post-harvest losses and seasonality of food	600	2017-2022	MOH, MoALF, County Governments, Development and implementing partners, private institutions,
Total				3,665		
3.2. Micronutrient Deficiency Prevention and Control	To prevent and reduce micro-nutrient deficiency disorders,	Production, bio-fortification and preservation of micronutrient-rich foods at household level promoted.	Promote production, bio-fortification and preservation of micronutrient-rich foods at household level.	900	2017-2022	MOALF,MOH, MOE, County Governments, Development and implementing partners, private institutions, research institutions
		Consumption of diversified and nutritionally adequate diet throughout the life cycle promoted.	Promote consumption of diversified and nutritionally adequate diet throughout the lifecycle.	600	2017-2022	MOALF, MOH,MOE, County Governments, Development and implementing partners, private institutions
		Scaled up programs to promote and facilitate fortification of widely consumed staple foods, cooking oils and sugar.	Scale up programs to promote and facilitate fortification of widely consumed staple foods, cooking oils and sugar.	800	2017-2022	MOH, MOALF, County Governments, Development and implementing partners, private institutions
		Strengthened routine and therapeutic micronutrient supplementation (vitamin A, iron and folate, MNPs) for children, women and identified vulnerable groups.	Strengthen routine and therapeutic micronutrient supplementation (vitamin A, iron and foliate, zinc) for children, women and identified vulnerable groups.	75	2017-2022	MOH, MOE, MODP, County Governments, Development and implementing partners, private institutions
		Scale up interventions of public health measures that prevent micronutrient deficiencies supported	Support Scale up interventions on public health measures that prevent micronutrient deficiencies	117	2017-2022	MOH,MOALF, County Governments, Development and implementing partners, private institutions
		Monitoring and evaluation system on micronutrient deficiency prevention and control developed and reviewed	Develop and ,review a monitoring and evaluation system on micronutrient deficiency prevention and control	30	2017-2022	MOH,MOALF, County Governments, development and implementing partners, private sector

3.0 NUTRITION IMPROVEMENT						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		Developed, reviewed and implemented micronutrient guidelines and strategies	Develop, review and implement micronutrient guidelines and strategies	40	2017-2022	MOH, MOALF, County Governments, development and implementing partners, private sector
Sub-total				2,562		
3.3 Nutrition advocacy, communication and social mobilization among the population	The objective is to improve prioritization of food and nutrition agenda To generate demand and adoption of food and nutrition services and practices.	The political prioritization of nutrition at regional, national and county level increased and sustained	Increase and sustain the political prioritization of nutrition at regional, national and county level	94	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS,
		Enabling policy environment in support of a coordinated and effective nutrition n sector Improved and maintained	Improve and maintain an enabling policy environment in support of a coordinated integrated and effective nutrition sector	230	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS
		Increased financial resource allocation and expenditure on nutrition for sustained and more equitable services	Increase the financial resource allocation and expenditure on nutrition for sustained and more equitable services	90	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS
		Increase and strengthening of the human capacity and skills of the nutrition sector scaled up	Scale up the Increase and strengthening of the human capacity and skills of the nutrition sector	75	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS
		The efficiency of nutrition sector financial, monitoring and evaluation, and knowledge management systems	Improve the efficiency of nutrition sector financial monitoring, evaluation and knowledge management systems	11	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS
		Knowledge attitudes and practice on optimal nutrition improved and demand nutrition services and practice increased	Improve knowledge and attitudes on optimal nutrition for increased demand of nutrition services and practice	300	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS
		Community engagement, participation and feedback mechanism in nutrition services and decision making processes strengthened.	Strengthen Community engagement, participation and feedback mechanism in nutrition services and decision making processes	125	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS

3.0 NUTRITION IMPROVEMENT						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		Prioritization of resource allocation to support medical nutrition therapy in hospitals	Prioritization of resource allocation to support medical nutrition therapy in hospitals	600	2017-2022	MOH
		The adoption of nutrition approaches by sector actors to reach and support individuals with nutrition increased	Increase the adoption of nutrition approaches by sector actors to reach and support individuals with nutrition	120	2017-2022	MOH, MOALF, County Governments, SUN NETWORKS
				1,645		
Sub-total						
3.4 Nutrition and Infection	To improve the nutritional care, treatment and support during illness	National guidelines and standards for nutritional care and support during illness and diseases management developed, reviewed and disseminated.	Develop, review and disseminate national guidelines and standards for nutritional care and support during illness and diseases management	110	2017-2022	MOH, development and implementing partners, private sector, public and private referral hospitals, training institutions
		Capacity of healthcare providers to give optimal nutrition care, treatment and support in management of common diseases strengthened	Strengthen the capacity of healthcare providers to give optimal nutrition care, treatment and support in management of common diseases	200	2017-2022	MOH, County Governments, development and implementing partners, private and mission hospitals
		Programs on awareness creation on disease prevention strategies at household level including investment in safe water and sanitation facilities promoted	Promote programs on awareness creation on disease prevention strategies at household level including investment in safe water and sanitation facilities	300	2017-2022	MOH, County Governments, development and implementing partners, private partners
		Integration of water sanitation and hygiene with nutrition promoted	Promote integration of water sanitation and hygiene with nutrition	20	2017-2022	MOH, MODP, MOWI, County Governments, development and implementing partners, private and mission hospitals
		Procured medical nutrition therapy equipment	Procure medical nutrition therapy equipment	14,000	2017-2022	MOH, County government, development and implementing partners, private and mission hospitals

3.0 NUTRITION IMPROVEMENT						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		Appropriate management of malnutrition of pregnant and lactating women, children and other lifecycle cohorts promoted	Promote appropriate management of malnutrition for pregnant, lactating women, children <5 years and other lifecycle cohorts	200	2017-2022	MOH, county government, development and implementing partners, private and mission hospitals.
		strengthened referral mechanisms and linkage between the community and health facility	Strengthen the referral mechanisms and linkage between the community and health facility	10	2017-2022	MOH, COUNTY GOVERNMENT, development and implementing partners, private and mission hospitals
		Persons with other chronic conditions counselled on good nutrition practices	Ensure persons with other chronic conditions are counselled on good nutrition practices	700	2017-2022	MOH, county government, development and implementing partners, private and mission hospitals
Sub-Total				15,540		
3.5 Nutrition and Non-Communicable Diseases	To halt and reverse the prevalence of diet related NCDs and enhance their control and management	Development and implementation of national nutrition strategies and guidelines for management of NCDs supported	Support development and implementation of national nutrition strategies and guidelines for management of NCDs	10	2017-2022	MOH, county government, development and implementing partners
		Routine screening of diet related NCDs and its predisposing factors like overweight and obesity promoted	Promote routine screening of diet related NCDs and its predisposing factors like overweight and obesity	700	2017-2022	MOH, county government, development and implementing partners, private and mission hospitals
		Support to programs on assessment; prevention and management of diet related NCDs increased.	Increase support to programs on assessment; prevention and management of diet related NCDs.	1,170	2017-2022	MOH, county government, development and implementing partners, private and mission hospitals

3.0 NUTRITION IMPROVEMENT						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		Research and monitor prevalence and trends of NCDs using the life cycle approach to create healthy lifestyles and effective nutrition interventions supported	Support research and monitor prevalence and trends of NCDs using the life cycle approach to create healthy lifestyles and effective nutrition interventions	70	2017-2022	MOH, county government, development and implementing partners, private and mission hospitals
Subtotal				1950		
3.6 Urban Nutrition	To promote optimal nutrition and health for urban dwellers	Tracking system for urban malnutrition in established areas	Establish an effective monitoring system to track malnutrition in urban individuals	80	2017-2022	MOH, County government, development and implementing partners, private and mission hospitals
		High impact nutrition interventions scaled up in urban areas	Scale up of high impact nutrition interventions in urban areas	100	2017-2022	MOH, County government, development and implementing partners, private and mission hospitals
		Multi-sectoral coordination platform established in urban areas	Establish a multi-sectoral coordination, joint planning and implementation mechanism in urban areas	20	2017-2022	MOH, County government, development and implementing partners, private and mission hospitals
Sub-total				200		
3.7 Nutrition in schools, public and private institutions	To improve optimal nutrition and health for individuals in these institutions.	Institutional meals and nutrition strategies and guidelines developed harmonized and disseminated	Develop, harmonize and disseminate institutional meals and nutrition strategies and guidelines	200	2017-2022	MOE, MOH, MOALF, MODP, county government,
		Promote the provision of nutritious meals to individuals in schools, private and public institutions developed harmonized and disseminated	Promote the provision of nutritious meals to individuals in schools, private and public institutions	100	2017-2022	MOE, MOH, MOALF, MODP, county government,
		Basic nutrition training mainstreamed in all schools and other institutions curricula	Mainstream basic nutrition training in all schools and other institutions curricula	40	2017-2022	MOE, MOH, MOALF, MODP, KICD

3.0 NUTRITION IMPROVEMENT						
PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		Appropriate nutrition interventions in schools and other institutions implemented	Support implement of appropriate nutrition interventions in schools and other institutions.	3,000	2017-2022	MOE, MOH, MOALF, MODP county government, Development and implementing partners,
		Establishment of agricultural production (gardens, livestock and fish) for food and nutrition education and To increase access to diverse foods and for income generation promoted	Promote establishment of agricultural production (gardens, livestock and fish) for food and nutrition education and to increase access to diverse foods and for income generation.	500	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Capacities of school management and teachers on early identification of health and nutrition problems and timely referral for appropriate action build.	Capacity building of school management and teachers on early identification of health and nutrition problems and timely referral for appropriate action.	50	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Linkages between routine health and nutrition services and school activities, including regular monitoring of nutritional status promoted;	Promote linkages between routine health and nutrition services and school activities, including regular monitoring of nutritional status.	200	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Detection and referral of malnourished students to health facilities, counseling services, social protection, or meals programs and other community agencies and services supported.	Support the detection and referral of malnourished students to health facilities, counseling services, social protection, or meals programs and other community agencies and services.	150	2017-2022	MOE, MOH, MOALF, MODP county government, Development and implementing partners,,
		Use of time and energy saving technologies to enhance capacities of households to providenutritionally adequate diets promoted.	Promote use of time and energy saving technologies to enhance capacities of households to provide nutritionally adequate diets.	200	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners.
		Prioritization of resource allocation to support medical nutrition therapy in hospitals	Prioritization of resource allocation to support medical nutrition therapy in hospitals	600	2017-2022	MOH, , county government, Development and implementing partners, private partners
Sub-total				5,040		

FOOD AND NUTRITION IN CRISIS, EMERGENCY SITUATIONS

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
4.0 FOOD AND NUTRITION IN CRISIS, EMERGENCY AND RECOVERY						
4.1 Emergency preparedness	To manage risk and vulnerability to food insecurity and malnutrition occasioned by catastrophes, thus preventing crises from developing into emergencies.	<p>Reduced impact of drought and other catastrophe on human lives and livelihood asset</p> <p>Reduced morbidity and prevalence of micronutrient deficiencies during emergencies</p> <p>Mortality and malnutrition levels maintained below the emergency thresholds.</p> <p>Loss of productive livelihood assets during emergency reduced by 75% by 2017.</p> <p>Effective early warning information system in place</p> <p>Timely and effective disaster response and management of relief operations</p> <p>Capacity of communities to sustain food security and nutrition enhanced</p>	<p>Strengthen and support early warning system(s) to detect and provide timely crucial information on potential food insecurity and malnutrition.</p> <p>Support integrated vulnerability analysis for emergency preparedness</p> <p>Establishment and strengthening food and animal feed distribution infrastructure and networks in crisis prone areas.</p> <p>Enhance budget support to the Strategic Food Reserves for maintenance of appropriate food reserve stocks.</p> <p>Enhancing capacities and opportunities for improving and sustaining food security livelihood assets and strategies.</p> <p>Enhance the contingency funds to manage emerging food and nutrition crises.</p> <p>Support to continuous peace building initiatives and enhancement of national security</p>	200	2017-2022	NDMA, MOH
				100	2017/18	MODP, NDMA
				1,500	2017-2022	MOALF, NDMA
				5,000	2017-2022	MOALF, MODP
				25,000	2017-2022	NDMA
				15,000	2017-2022	NDMA
				500	2017-2022	MOICNG, NDMA

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
			Support capacity and development to disaster response institution and centre for improvement of coordination	250	2017-2022	MOICNG, NDMA
				32,550		
4.2 Emergency Response	To establish a well-coordinated response mechanism that ensures all persons in emergencies receive timely and appropriate assistance to protect their food security and nutritional status, and to avoid loss of lives and livelihoods.	Human lives, nutritional status and livelihoods protected Mortality and malnutrition levels maintained below the emergency thresholds. Reduced loss of livelihood assets to catastrophes. Effectiveness and timeliness of interventions improved Functional multi-sectoral coordination structures for humanitarian response in place Joint planning for humanitarian response achieved	Strengthen public-private partnership to ensure effective coordination for efficient and effective response. Streamline and harmonise guidelines for timely management of targeted response during emergencies Promote and support mechanisms for devolved decision making for emergency response	100 30	2017-2022 2017-2022	MODP, MOALF, NDMA MODP, MOALF, NDMA
			Strengthen financial and technical capacity of devolved structures to respond to crisis.	120	2017-2022	MODP, CoG, NDMA
			Timely operationalization of contingency programmes, plans and funds	200	2017-2022	MODP, CoG
			Promote priority intervention actions that minimise the loss of lives and livelihoods	80	2017-2022	MODP, NDMA
			Promote emergency intervention programs that address special nutrition needs of the affected population.	2500	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA
			Establishment of an effective and monitoring and evaluation system for the assessment of impact of response.	8,000	2017-2022	MOH, MOALF
				200	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA
				11,230		

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (Mill. KES)	TIME FRAME	RESPONSIBILITY*
4.3 Recovery, Resilience Building and Long-term Development	To ensure quick recovery from hazards and build resilience in order to reduce vulnerability of the populations to food and nutrition insecurity	Disaster recovery programmes implemented	Invest in disaster recovery programmes to mitigate the impact of disasters	20,000	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA
		Disaster risk reduction and resilience building carried out	Promote household and community managed disaster risk reduction and resilience building measures	5,000	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA
		Social protection programmes introduced and implemented	Promote appropriate social protection schemes to protect communities from food and nutrition insecurity.	30,000	2017-2022	NDMA
		Populations with specific nutrition needs benefit from supplementary and therapeutic feeding programs	Support integration of Supplementary and Therapeutic feeding programs for populations with specific nutrition needs.	4,000	2017-2022	MOH, MOE, CoG, MODP, MOALF
		Livelihood recovery programs supported	Promote and support livelihood recovery programs by addressing primary production factors to improve food availability and access.	5,000	2017-2022	MOALF, CoG, MODP, MOWI, NDMA
		Programs that activate market functioning and service provision promoted	Promote programs that activate market functioning and service provision	1,000	2017-2022	MOALF, CoG, MODP, NDMA
		Primary health care/ essential nutrition actions programmes supported	Support the primary health care/essential nutrition actions programmes to promote health and nutrition security	5,000	2017-2022	MOH, MOALF, CoG, NDMA
		School enrolment, retention and completion rates among food insecure households enhanced	Enhance school enrolment, retention and completion rates among food insecure households.	10,000	2017-2022	MOE, CoG, MODP, MOALF, MOH, NDMA
		Livelihood insurance schemes established and promoted	Establish and promote livelihood insurance schemes to cushion and support communities to recover from emergencies	15,000	2017-2022	MOALF, CoG, MODP, NDMA
		Sub total				85,000

5.0 Food and Nutrition Information & Communication

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
5.1 data collection and information management	To improve food and nutrition information and communication management	Coordination mechanisms of food and nutrition security information systems established and strengthened.	Establish and strengthen coordination mechanisms for food and nutrition security information systems.	400	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Capacity of the relevant institutions in collection and management of food and nutrition security data at national and county levels strengthened.	Strengthen capacity of the relevant institutions in collection and management of food and nutrition security data at national and county levels.	640	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Management and sharing of food and nutrition security information and knowledge management systems across sectors streamlined.	Streamline management and sharing of food and nutrition security information and Knowledge management systems across sectors.	140	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Inventory/diagnosis and needs assessment of data collection and management systems for both short and long-term decision making conduct.	Conduct inventory/diagnosis and needs assessment for food and nutrition data collection and management systems for both short and long-term decision making.	270	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Data sets and storage between the two levels of government and in various institutions for improved data sharing Standardization and harmonization.	Standardization and harmonization data sets and storage between the two levels of government and in various institutions for improved data sharing.	70	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Promote use of appropriate technology to enhance quality of data collection.	Promote use of appropriate technology to enhance quality of data collection.	700	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Existing legislation on data collection and sharing to enhance access and transparency reviewed	Review existing legislation on data collection and sharing to enhance access and transparency	80	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		An audit and validation mechanism to data collection and management developed and implemented	Develop and implement an audit and validation mechanism for data collection and management	70	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Research coordination mechanisms at national and county level strengthened/ established	Strengthen/establish research coordination mechanisms at national and county level	85	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,
		Resource mobilization to address critical gaps in food and nutrition research conducted	Conduct resource mobilization to address critical gaps in food and nutrition research	45	2017-2022	MOE, MOH, MOALF, MODP
		Need based research to inform policy, program design and implementation for food and nutrition conducted	Conduct need based research to inform policy, program design and implementation for food and nutrition programs	210	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,,
		Capacity of relevant research institutions to conduct food and nutrition research strengthened	Strengthen the capacity of relevant research institutions to conduct food and nutrition research	140	2017-2022	MOE, MOH, MOALF, MODP, , county government, Development and implementing partners,
		A national monitoring plan for nutrition commodities developed	Develop a national monitoring plan for nutrition commodities	70	2017-2022	MOE, MOH, MOALF, MODP, county government, Development and implementing partners,,
				2,920		
5.2 Information, Education, Communication	To contribute to the improvement of nutrition and health outcomes through enhanced service provision	Existence of systematic, organizational, technical and community capacity systems for supporting nutrition service delivery supported	Support the existence of established systematic, organizational, technical and community capacity systems for supporting nutrition service delivery	45	2017-2022	MOH,MOA,Development and implementing partners, county government, MOE, research institutions, regulatory bodies
		System wide capacity development to improve overall food and nutrition service delivery strengthened	Strengthen system wide capacity development to improve overall environment for nutrition service delivery	150	2017-2022	MOH,MOA, Development and implementing partners MOE,County government, research institutions, regulatory bodies

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE (MILL KES)	TIME FRAME	RESPONSIBILITY*
		The working arrangements and coordination framework of key institutions for improved organizational capacity for nutrition enhanced	Enhance the working arrangements and coordination framework of key institutions for improved organizational capacity for nutrition	1,215	2017-2022	MOH,MOA, county government, Development and implementing partners MOE, research institutions, regulatory bodies
		The community ability to access, consume and demand for food and nutrition services through increased nutrition service awareness strengthened	Strengthen the community ability to access, consume and demand for nutrition services through increased nutrition service awareness	40	2017-2022	MOH,MOA, county government, Development and implementing partners, MOE, research institutions
		The presence as well as the proficiency levels of food and nutrition service providers supported and strengthened	Support and strengthen the presence as well as the proficiency levels of food and nutrition service providers.	860	2017-2022	MOH,MOA, county government, Development and implementing partners, MOE, research institutions,
				2,310		

6.0 INSTITUTIONAL, LEGAL FRAMEWORK AND FINANCING

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE	TIME FRAME	RESPONSIBILITY*
6.1 and 6.2. Institutional and Legal Framework	To establish and strengthen institutional framework for effective coordination, oversight and implementation of the NFNSP	<ul style="list-style-type: none"> National Food and Nutrition Security Council established and operationalized National Food and Nutrition Security Steering Committee established and operationalized National Food and Nutrition Security Secretariat established and operationalized Relevant Stakeholder technical committees in place 	<ul style="list-style-type: none"> Establish and operationalize National Food and Nutrition Security Council, Steering Committee and Secretariat Establish and operationalize relevant Stakeholder Technical Committees at National level. 	400	2017-2022	MOALF, CoG, MODP, MOWI, MOH, MOE, NDMA
				200		

PRIORITY PROGRAM AREAS	OBJECTIVES	OUTPUTS	INTERVENTIONS	COST ESTIMATE	TIME FRAME	RESPONSIBILITY*
		<ul style="list-style-type: none"> County Food and Nutrition Security Steering Committee established and operationalized County Food and Nutrition Security Secretariat established and operationalized. 	<ul style="list-style-type: none"> Establish and operationalize County level Food and Nutrition Security Steering Committees and Secretariats Establish and operationalize relevant Stakeholder Technical Committees at counties levels. 	300	2017-2022	MOALE, CoG, MODP, MOWI, MOH, MOE, NDMA
	To provide a legal and regulatory framework for implementation of the NFNSP	Legislative framework and guidelines for efficient implementation of the FNNSP developed/ reviewed	Review the existing legislative framework and guidelines for efficient implementation of the FNNSP	20	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA
		Legislation regulating enacted and enforced	Enact legislation and guidelines regulating effective implementation of the FNNSP at both the national and county levels Enforce existing legislation on Food and nutrition security	30	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA
		Measures to ensure compliance with existing laws and regulations supported	Support measures to ensure compliance and enforcement of existing laws and regulations	60	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA, KEBS
		International and regional treaties, declarations and conventions related to food and nutrition security domesticated	Domesticate international and regional treaties, declarations and conventions related to food and nutrition security	60	2017-2022	MODP, CoG, MOALF, MOWI, MOH, MOE, NDMA, KEBS
				1,070		
6.3 Funding Implementation of the NFNS	To mobilize and advocate for resources for effective planning and implementation of NFNSP	Advocacy and resource mobilization desk at the NFNS established Resource Mobilization Strategy developed Budgetary allocation for food and nutrition security interventions	Establish an Advocacy and Resource Mobilization Desk at the NFNS. Develop a government Resource Mobilization Strategy	50	2017/18	MOALF
				20	2017/18	MOALF, MODP, NDMA, MOWI, CoG, MOH, MOE
				70		

*The lead ministries (highlighted) responsible for implementation; the rest are link ministries and institutions. The ministry names are as were known before the Coalition Government was formed in April 2008. The departments concerned still remain relevant.

**Includes infrastructural construction costs, e.g. roads.

APPENDIX II: FOOD SECURITY PERFORMANCE INDICATORS

Strategic Objective: Goal: Improved food self sufficiency

Objective: Increase overall food production and processing

Program/ project	Expected output	Objectively verifiable indicator	Means of verification	Target (2022)	Baseline	Annual Targets					
						2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023
Cereals production	Improve staple cereals production	Total annual cereal food production	KIHBS report, Annual food production reports, Food assessment reports	6.57m MT	4.05m MT	4.554m MT	5.058m MT	5.562m MT	6.066m MT	6.57m MT	7.17m MT
Protein Foods (MT)	Self-sufficiency in protein foods.	Total annual protein food production	KIHBS report Annual food production reports, Food assessment reports	1.445m MT	1.656m MT	FIF11.483m MT	1.522m MT	1.561mMT	1.602MT	1.643m MT	1.686,057MT
Animal protein sources (MT)	Self-sufficiency in animal proteins	Total annual animal protein foods production	KIHBS report, Annual food production reports, Food assessment reports	662,475MT	4,839,416MT	593,192MT	608,615MT	624,439MT	640,675MT	657,332MT	674,423MT
Plant protein sources (MT)	Self-sufficiency in plant proteins	Total annual plant protein foods production	KIHBS report, Annual food production reports, Food assessment reports	993,713MT		889,788MT	912,923MT	936,659MT	961,012MT	985,998MT	1,011,634 MT

Program/ project	Expected output	Objectively verifiable indicator	Means of verification	Target (2022)	Baseline	Annual Targets					
						2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023
Nuts /oil crops (Fats/oils) (MT)	35% increase in nuts and oils crops	Total annual animal protein production	KIHBS report, KIHBS report, Annual food production reports, Food assessment reports	280,662 MT	187,108	200,206MT	214,220MT	229,215MT	245,260MT	262,429MT	280,799MT
Vegetable production (MT)	Current 4,117,200,000MT	Total annual vegetable production	KIHBS report, Annual food production reports, Food assessment reports	4.818 m MT	TBD						
Fruit production	Current 2,744,800MT	Total annual fruit production	KIHBS report, Annual food production reports, Food assessment reports	3.212m MT	TBD						
Maize production per unit area	Increased maize production per unit area	Yield per Ha	Annual food production reports, Food assessment reports	4.05	1.9 MT	2.28	2.74	3.28	3.94	4.73	5.68
Maize production cost	Reduced/ affordable cost of production	Cost of producing one bag of maize	Annual food production reports, Food assessment reports	Less than 10% annual steady increase in production cost	1,800	1,800					
Roots and tuber crops production	Improved production of root/tuber crops	Total annual roots and tuber crops production	Annual food production reports, Food assessment reports	129,600 MT	81MT	91	102	114	127	143	

Program/ project	Expected output	Objectively verifiable indicator	Means of verification	Target (2022)	Baseline	Annual Targets					
						2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023
Utilization of traditional high value food crops	Increased utilization of Traditional high value foods	Number of high value traditional food crops widely consumed.	Annual food production reports, Food assessment reports	10% increase	2%	3%	5%	7%	8%	10%	
Fertilizer cost reduction (Ksh)	Increased use of fertilizer	Fertilizer market price	Annual food production reports, Food assessment reports	2,000	3,200	2,000	2,000	2,000	2,000	2,000	
Cereal Production yield gap	Reduced production yield gap	Cereal yield gap	Annual food production reports, Food assessment reports	50%	0%	30%	20%	10%	10%	0%	
Agricultural mechanization equipment/ machinery	Increased agricultural mechanization equipment / machinery	Number of farm equipment/ tractors	Annual agricultural mechanization reports	16,000	12,600	13,230	13,892	14,586	15,315	16,081	
Irrigated Agriculture	Increased irrigated agriculture	Area under irrigated agriculture	Annual water and irrigation reports,	600,000 Ha	161,840	210,392.00	273,509.60	355,562.48	462,231.22	600,900.59	
Water harvesting and storage	Increase amount of water harvested and stored	Annual water harvested and stored	Annual water and irrigation reports	TBD	TBD						
Domestic water	To increase amount of water harvested and stored	Amount of water harvested and stored	Census report, household survey reports	80%	65%	68%	70%	75%	78%	80%	
SFR budget	Increased SFR allocation	SFR allocation	Annual budget estimates, SFR minutes, SFR reports	2 months stocks for 10% of population	5 Billion	24Billion	24B	30 B	30 B	36B	30 B

Program/ project	Expected output	Objectively verifiable indicator	Means of verification	Target (2022)	Baseline	Annual Targets						
						2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023	
SFR food stocks (Bags of maize or equivalent).	Recommended SFR level achieved.	SFR level	NCPB reports, SFR minutes, SFR reports	12 Million bags	1.67 Million bags	8M	9M	10M	11M	12M	13M	
Agriculture sector budget allocation	To allocate at least 10% of the National budget to Agriculture Sector.	Allocation at least 10%.	Agriculture sector budget	Annual economic survey reports, Annual printed estimates,	10% (229 Billion)	2.8% (35B)	6%	7%	8%	9%	10%	

Other Food Security Indicators

Program/ project	Objective	Expected output	Objectively verifiable indicator	Means of verification	Target (2022)	Baseline	Annual Targets					
							2017/18	2018/19	2019/20	2020/21	2021/22	2022/2023
Consumer price index (CPI)	Reduce the consumer price level index to an affordable	CPI reduced and maintained within affordable range	Monthly CPI	Annual economic survey reports, KNBS Consumer survey reports	99	182.98						
Food inflation rate	Food inflation reduced below 3%	Monthly Food inflation	Monthly Food inflation	Annual economic survey reports, KNBS Consumer survey reports	<3%	18.56%						
Tree cover	Increase total land forest cover to the recommended level.	Improved land productivity	Total land forest cover	Annual NRM reports	10%	6.7%	7%	8%	9%	10%	10%	
Land use management (soil fertility)	To conserve agricultural land	Improved land productivity	Conserved land area	Land degradation maps.	40%	37.5%	35%	32.5%	30%	27.5%	25%	

Program/ project	Objective	Expected output	Objectively verifiable indicator	Means of verification	Target (2022)	Baseline	Annual Targets				
							2017/18	2018/19	2019/20	2020/21	2021/22
Emergency and crisis management	To reduce the risk of food insecurity and malnutrition	Reduced food insecurity and emergencies	Number of food insecure people	Food security reports Food security assessment reports	26%	5%	20%	20%	20%	20%	
	To prevent crisis from developing into emergencies	Timely response to crisis and emergencies	Number of crisis episodes that develop into crisis	Disaster management reports	No emergency situations reported	Number of crisis developing into emergencies	No crisis developing into emergencies	No crisis developing into emergencies	No crisis developing into emergencies	No crisis developing into emergencies	
Institutional structure for Food and nutrition	Establish a leadership and coordination structure for implementation of the FNSP	Food and Nutrition Security Council, Steering Committee and Secretariats in place	Established Council, Steering Committees, and Secretariats for managing Food and Nutrition Security	Food and Nutrition security reports	FNSP Implementation Council, Steering Committees and Secretariats in place	Not in place	Institutional structure in place	Institutional structure in place	Institutional structure in place	Institutional structure in place	

NUTRITION IMPROVEMENT KEY PERFORMANCE INDICATORS

KEY RESULT AREA: NUTRITION IMPROVEMENT

Program or project area	Objective	Expected output/ outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets				
							Y1	Y2	Y3	Y4	Y5
Lifecycle approach to nutrition improvement	To achieve optimal nutrition for all cohort groups throughout the life cycle	Reduced levels of stunting among children <5 years	Proportion of children < 5 years stunted	KDHS, nutrition surveys, KNMS	15%	26% (KDHs 2014)	22	20	18	16	15

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets				
							Y1	Y2	Y3	Y4	Y5
		Reduced levels of underweight among children <5 years	Proportion reduction in children <5 years underweight	KDHS, nutrition surveys, KNMS	Sustain below 5% as per WHA targets	11% (KDHS 2014)	11	10	9	8	7
		Reduced levels of wasting among children <5 years	Proportion of children <5 years wasted	KDHS, nutrition surveys, KNMS	Sustain below 5% as per the WHA targets	4% (KDHS 2014)	<5%	<5%	<5%	<5%	<5%
		Reduced levels of overweight/obesity in children <5 years	Proportion of children <5 years who are overweight or obese	KDHS, Nutrition Surveys, KNMS	Sustain below 5% as per WHA targets	4.1% (KDHS 2014)	<5%	<5%	<5%	<5%	<5%
		Increased exclusive breastfeeding rates for children aged below six months	Proportion of children <6 months who are exclusively breastfed	KDHS, Nutrition surveys	75%	61% (KDHS 2014)	65%	68%	70%	72%	75%
		Increased minimum acceptable diet among children aged 6-23 months with	Proportion of children 6-23 months with minimum acceptable diet	MIYCN KAP survey, Nutrition surveys, KDHS	60%	31% (KDHS 2014)	35%	40	50%	55%	60%
		Increased minimum dietary diversity - women	Proportion of WRA with minimum dietary diversity - women	MIYCN KAP survey, Nutrition surveys	60%	TBD					

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets				
							Y1	Y2	Y3	Y4	Y5
		Reduced overweight or obesity among adults aged 18-69 years	Proportion of adults 18-69 years who are overweight or obese	Stepwise survey, nutrition survey reports	20% Ensure that there is no increase in obesity	28%	26%	24%	22%	21%	20%
2.5.2. Micronutrient Deficiency Prevention and Control	To prevent and reduce micro-nutrient deficiency disorders,	Reduced prevalence of anaemia among WRA	Proportion reduction in anaemia among WRA	KNMS Report,	15% %	21%	19%	18%	17%	16%	15%
		Reduced prevalence of anaemia among pregnant women	Proportion reduction in anaemia among pregnant women	KNMS Report,	20%	36%	30%	28%	25%	23%	20%
		Increased consumption of fortified foods.	Proportion of households consuming fortified foods	Survey Reports; KDHS; KIHBS	80%						
		Reduced prevalence of zinc deficiency among pregnant women	Proportion of pregnant women with zinc deficiency	KNMS report, other study and survey reports	55%	60%	59%	58%	57%	56%	55%
		Reduced prevalence of zinc deficiency among pre-school children in Kenya	Proportion of under five children with zinc deficiency among pre-school children in Kenya	KNMS, other study and survey reports	50%	83.3%	78%	70%	60%	65%	50%

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets				
							Y1	Y2	Y3	Y4	Y5
		Reduced Vitamin A Deficiency among children <5 years	Proportion of children <5 years with Vitamin A deficiency	KNMS, other study and survey reports	4%	9.2%	8%	7%	6%	5%	4%
		Reduced iodine Deficiency among children <5 years	Proportion of children <5 years with iodine deficiency	KNMS, other study and survey reports	<10%	22%	18%	16%	15%	13%	<10%
		Reduced iodine deficiency among non-pregnant women	Proportion of non-pregnant women with iodine deficiency	KNMS, other study and survey reports	<10%	25.6%	22%	20%	27%	15%	<10%
		Reduced folate Deficiency among non-pregnant women	Proportion of non-pregnant women with folate deficiency	KNMS, other study and survey reports	20%	39%	35%	30%	36%	30%	20%
		Increased population consuming iron rich foods	Proportion of children aged 6-23 months who consume iron rich foods	KDHS, Periodic nutrition program assessments	60%	30%	35%	40%	45%	50%	60%
		Increased population consuming vitamin A rich foods	Proportion of children aged 6-23 months who consume vitamin A rich foods	KDHS, Periodic nutrition program assessments	80%	68%	70%	72%	73%	75%	80%

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets								
							Y1	Y2	Y3	Y4	Y5				
		Increased population adopting energy saving technologies	Proportion of population who adopt energy saving technologies	Agriculture sector reports											
Nutrition advocacy communication and social mobilization	To improve nutrition knowledge and attitude and practice of the population for enhanced nutrition and healthy lifestyles	Increased knowledge attitude and practices in the population	Proportion of community members reporting awareness of basic nutrition.	-national and county reports; KAP	TBD										
		Increased population adopting healthy diets	Proportion of population who adopt healthy diets (i.e. percent taking various numbers of servings of fruits and vegetables on average per day).	KDHS, Stepwise survey	20%	6% (>or equal to 5 servings) (Stepwise survey)	8%	10%	13%	16%	20%				
		Increased knowledge on dangers of high salt intake	Proportion of population with knowledge on dangers of high salt intake	KDHS, Stepwise survey	90%	78% (Stepwise survey)	80%	82%	84%	86%	90%				
		Increased population adopting physical activity	Proportion of population who adopt physical activity	KDHS, Stepwise survey	60%	34%	38%	42%	46%	50%	60%				

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets				
							Y1	Y2	Y3	Y4	Y5
Nutrition and infection	To improve the nutritional care, treatment and support during illness	Establishment of National and county nutrition Nutrition multi-stakeholder forum	Multistakeholder Platforms established at National and county levels	Program progress implementation report	24 (0%)	0	10	15	17	19	20
		Increased nutritionists/dieticians employed at national and county governments	Number of clinical nutritionists/dieticians employed at national and county governments	Health sector reports,	5,400 (50% Increase)	2,700 (Are registered)	3,000	3500	4,000	4,500	5,400
Nutrition and infection	To sustain cure rates for acute malnutrition at above 75%	Increased allocation for medical nutrition therapy commodities and equipment	Allocation for procurement of medical nutrition therapy commodities and equipment at both national and county levels	Annual procurement plans							
		Increased cure rates of acutely malnourished children.	Proportion of acutely malnourished children cured.	DHIS	Maintain SPHERE standards (Greater than 75%)	82%	>75%	>75%	>75%	>75%	>75%
Nutrition and infection	To maintain mortality rates at below 10% for MAM and 3% for SAM	Reduced mortality rates among acutely malnourished children.	Proportion of deaths among acutely malnourished children	DHIS	Maintain SPHERE standards	MAM mortality 0.2% and SAM 1.7%	Maintain SPHERE Standards	Maintain SPHERE Standards	Maintain SPHERE Standards	Maintain SPHERE Standards	Maintain SPHERE Standards

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets							
							Y1	Y2	Y3	Y4	Y5			
Non-communicable diseases	To halt and reverse the rise of diet related NCDs and enhance their control and management	Reduced population with raised blood pressure or currently on medication for	Proportion of population with raised blood pressure or currently on medication	Step wise surveys, health and nutrition surveys		24%								
		Reduction of population with raised fasting blood sugar	Proportion of adults 18-69 years with raised fasting blood sugar	Step wise surveys, health and nutrition surveys		2.3%								
		Increase in men with normal waist hip ratio	Proportion of men with normal waist hip ratio	Step wise surveys, health and nutrition surveys		73%								
Nutrition in schools, public and private institutions	Increase in women with normal waist hip ratio	Increase in women with normal waist hip ratio	Proportion of women with normal waist hip ratio	Step wise surveys, health and nutrition surveys		64%								
	Improve optimal nutrition and health for individuals in institutions.	Increased agricultural production projects in schools and other institutions Increased nutrition knowledge among workers in schools and institutions dealing with meals and health for schools	%of agricultural production projects in schools and institutions % of food and nutrition skilled staff in institutions	-Minutes of feeding committee										

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets	Y1	Y2	Y3	Y4	Y5
		Schools and institutions offering nutritious meals	Number of schools offering nutritious meals	School assessment reports, Monitoring survey reports	90%							
		Increased schools with school gardens	Number of schools with school gardens	School assessment reports, survey reports	TBD	TBD						

CRISIS AND EMERGENCY MANAGEMENT

KEY PERFORMANCE INDICATORS

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline	targets	Y1	Y2	Y3	Y4	Y5
Emergency preparedness	To reduce risk and vulnerability to food insecurity and malnutrition occasioned by disasters	Increased allocation of drought contingency fund to nutrition programming- Contingency plans in place in all counties Stakeholder disaster management planning committees in place	Proportion of Drought contingency fund allocated to nutrition programming Emergency contingency plans - Stakeholder disaster management technical committees in place at National and County levels	NDMA Early warning reports NDOC reports MoDP Contingency plans Minutes of contingency planning meetings		Contingency fund 10 Billion per year Biannual contingency planning		2%	4%	6%	8%	10%

Program or project area	Objective	Expected output/outcome	Objectively verifiable Indicators	Means of verification	Target	Baseline					targets								
						Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5				
		Community managed disaster risk reduction and resilience building	Number of Community managed disaster risk reduction and resilience building programs in place	Program/project reports	50%	TBD													
		Livelihood insurance schemes to cushion and support communities to recover from emergencies in place	Livelihood insurance schemes in place	Insurance programme reports	TBD	7													
		Functional Disaster risk reduction community units	Number of community units formed against recommended	Capacity assessment	50%	TBD													

Appendix III: Technical Committee Members and Contributors

	NAME	MINISTRY/STATE DEPARTMENT
1	Dr, Johnson Irungu	Ministry of Agriculture Livestock and Fisheries
2	Ann Onyango	Ministry of Agriculture Livestock and Fisheries
3	Mary Mwale	Ministry of Agriculture Livestock and Fisheries
4	Stephen Andika	Ministry of Agriculture Livestock and Fisheries
5	Hilda Njoroge,	Ministry of Agriculture Livestock and Fisheries
6	Eng. Musa Sang	Ministry of Agriculture Livestock and Fisheries
7	Tom Kinara	Ministry of Agriculture Livestock and Fisheries
8	Kithama Mbolu	Ministry of Agriculture Livestock and Fisheries
9	Leonard K. Kamaru	Ministry of Agriculture Livestock and Fisheries
10	Ian Thande Githae	Ministry of Water and Irrigation
11	Phanuel Webi	Ministry of Water and Irrigation
12	Gladys Mugambi,	Ministry of Health
13	Grace Gichohi	Ministry of Health
14	Leila Akinyi	Ministry of Health
15	Florence Mugo	Ministry of Health
16	Tom Obunde	Ministry of Devolution and Planning
17	Paul Kimeu	Ministry of Devolution and Planning
18	Jacinta Ngwiri,	Ministry of Agriculture Livestock and Fisheries
19	Christopher Macharia	Ministry of Agriculture Livestock and Fisheries
20	David Ombalo	Ministry of Agriculture Livestock and Fisheries
21	Jane Wanbugu	Ministry of Agriculture Livestock and Fisheries
22	Dr. Boaz Otieno	Ministry of Agriculture Livestock and Fisheries
22	Josephine Mogere	Ministry of Agriculture Livestock and Fisheries
23	Demeke Mulat	Food and Agricultural Organization (FAO)
24	Sicily Matu	United Nations Children’s Fund (UNICEF)
25	Janet Ntwiga	United Nations Children’s Fund (UNICEF)
26	Grainne Moloney	United Nations Children’s Fund (UNICEF)
27	Shadrack Mutavi	German Cooperation for International Cooperation (GIZ)

LIST OF REFERENCES

1. Butta Z.A et al., Maternal and child under nutrition study group. What works? Interventions for Maternal and Child Under-nutrition and Survival. *Lancet* 2008;37:417-40.
2. Kenya national Bureau of statistics (KNBS) and ICF Macro.2010. Kenya Demographic and Health Survey 2014. Calverton, Maryland: KNBS and ICF Macro.
3. Republic of Kenya (2005). *Kenya Integrated Household Budget Survey*. Central
4. Bureau of Statistics, Ministry of Planning and National Development, Nairobi, Kenya.
5. Republic of Kenya (2007). Basic Report on well-being in Kenya. Kenya National Bureau Of Statistics, Ministry of Planning and National Development, Nairobi, Kenya
6. Republic of Kenya (2008). *Kenya Vision 2030. A globally competitive and prosperous Kenya*. Nairobi: Ministry of Planning and National Development and the National Economic and Social Council (NESC).
7. Republic of Kenya (2012). Food and Nutrition Security Strategy
8. Republic of Kenya (2011). The Kenya National Micronutrient Survey 2011.
9. Republic of Kenya (2012). The Kenya National Nutrition Action Plan 2012 – 2017.
10. Republic of Kenya (2012). National Food and Nutrition Security Policy 2012. *Sessional Paper No. 1 of 2012*
11. Republic of Kenya (MOH, 2015). Kenya STEPwise Survey for NCDs Risk Factors 2015 Report
12. Republic of Kenya (2017). National Disaster Risk Management Policy
13. FANTA (1999). Food Security Indicators and Framework for Use in the Monitoring and Evaluation of Food Aid Programs
14. Republic of Kenya(2012). The National Policy for Sustainable Development of Northern Kenya and Other Arid lands: *Sessional Paper No. 8 of 2012*.
15. Republic of Kenya (2014). Kenya National Capacity Development Framework 2014-2019.
16. Republic of Kenya (2016). Kenya Nutrition Advocacy, Communication and Social Mobilization Strategy 2016 – 2020.
17. Republic of Kenya (MOH, 2017). Kenya Guidelines on Healthy diets and lifestyle
18. Republic of Kenya (2014). Ending Drought Emergencies: Common Programming Framework
19. Konrad-Adenauer-Stiftung e.V. (2016). Food Security mapping and Analysis Report
- 20. Republic of Kenya (2008). National Livestock Policy: *Session Paper No 2 of 2008***
21. Republic of Kenya (2016). Kenya National Bureau of Statistics: Economic Survey report
22. Republic of Kenya (2010). Agricultural Sector Development Strategy (2010-2020).
23. IPC Global Partners. 2012. Integrated Food Security Phase Classification Technical Manual Version 2.0. Evidence and Standards for Better Food Security Decisions. FAO
24. FAO. 2011. A Response Analysis Framework for Food and Nutrition Security Interventions. Rome.
25. FAO. 1996. World Food Summit (WFS) – Rome Declaration on World Food Security and WFS Plan of Action. Rome.
26. UNICEF (2013). Improving Child Nutrition. Newyork, United Nations Children’s Fund

Online resources

www.fns.usda.gov/sites/default/files/FSGuide.pdf

http://www.fao.org/elearning/course/FA/en/pdf/P-01_RG_Concept.pdf

www.ipcinfo.org/.../docs/IPC-Manual-2-Interactive.pdf

<https://www.knbs.or.ke>. Quarterly Gross Domestic Product Report First Quarter 2017

<https://sustainabledevelopment.un.org>. SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

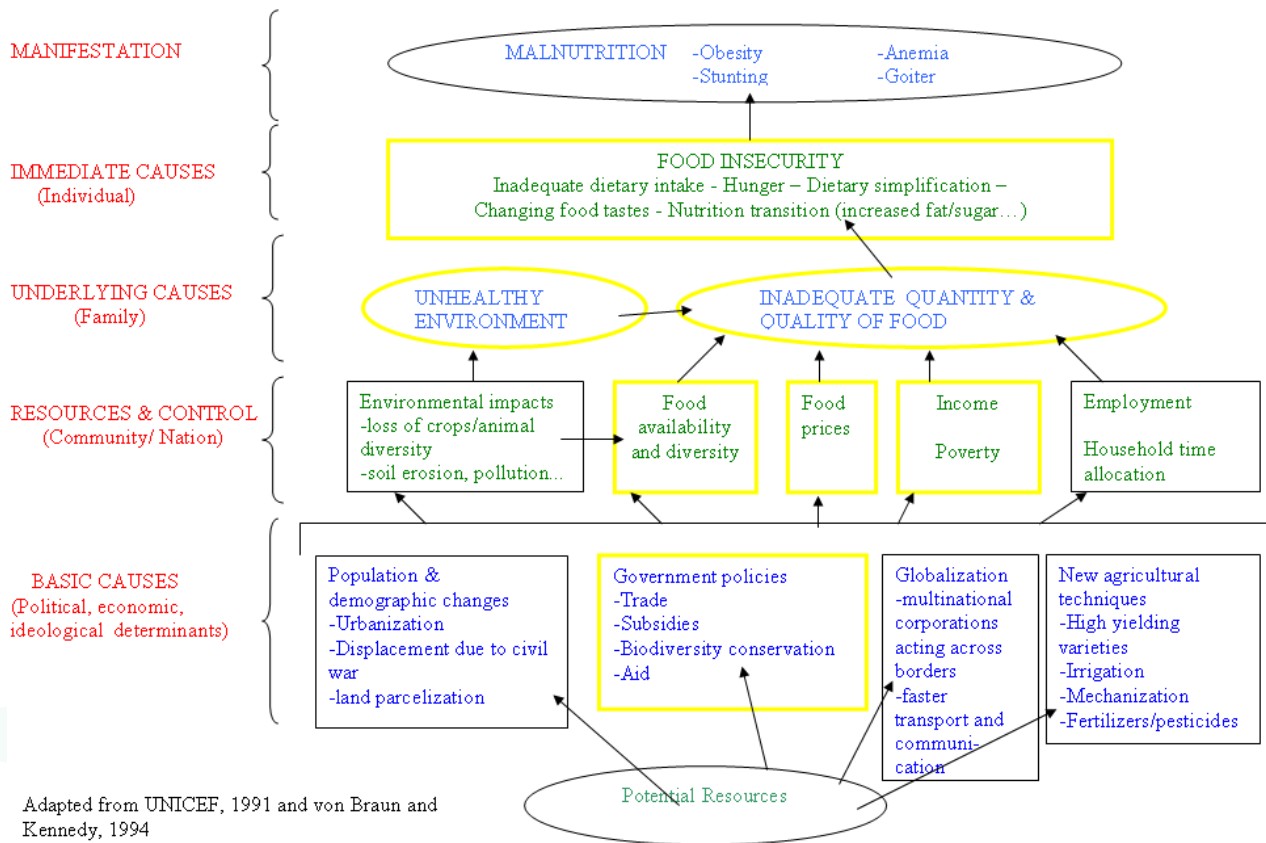
<https://www.disasterriskreduction.net/east-central-africa/reglap>

<http://www.urbangateway.org>

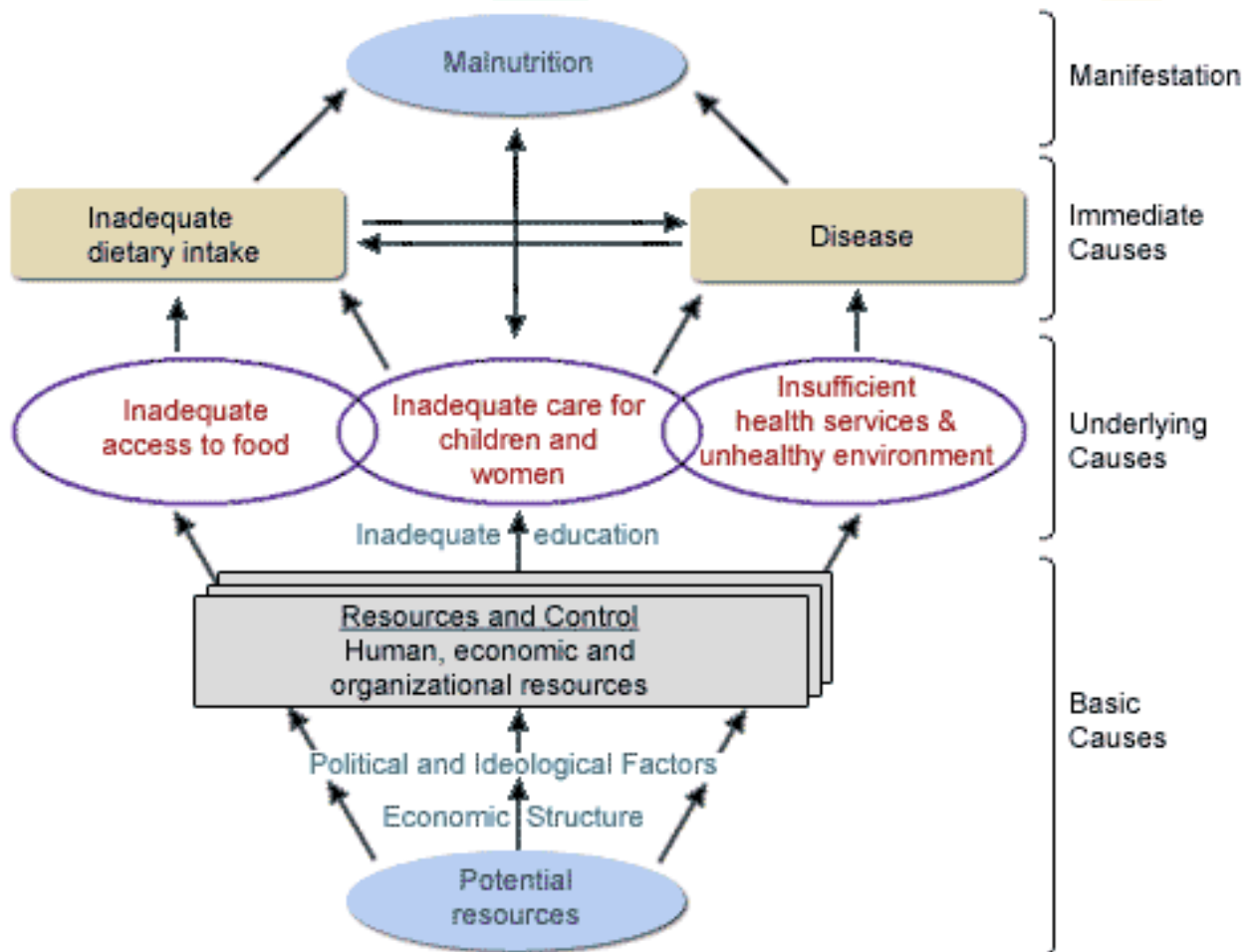
<https://www.jica.go.jp/kenya/english/office/topics/140529.html>

<http://ilakenya.org/three-out-of-ten-households-going-without-food-shows-new-survey>

CONCEPTUAL FRAMEWORKS

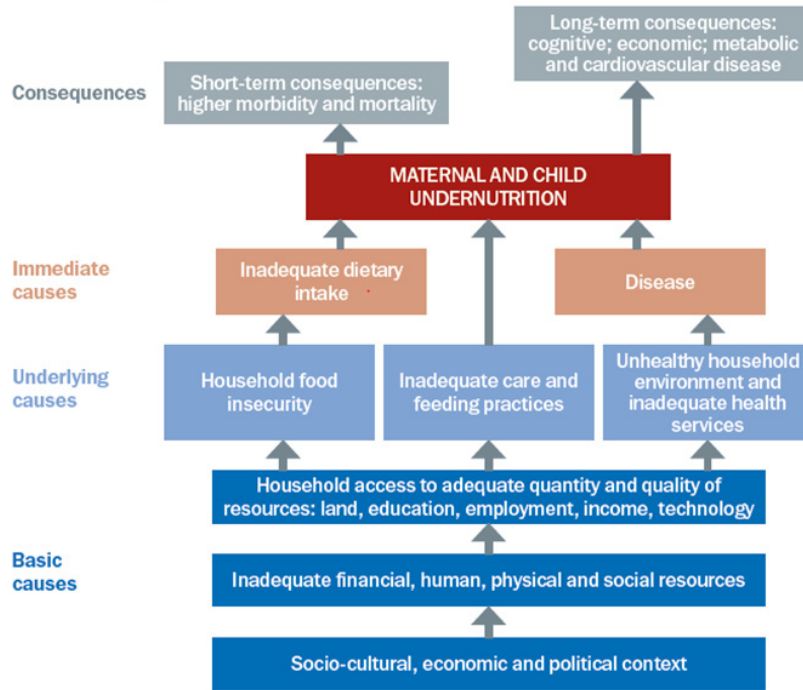


Adopted from UNICEF by Food and Nutrition Technical Assistance (FANTA)

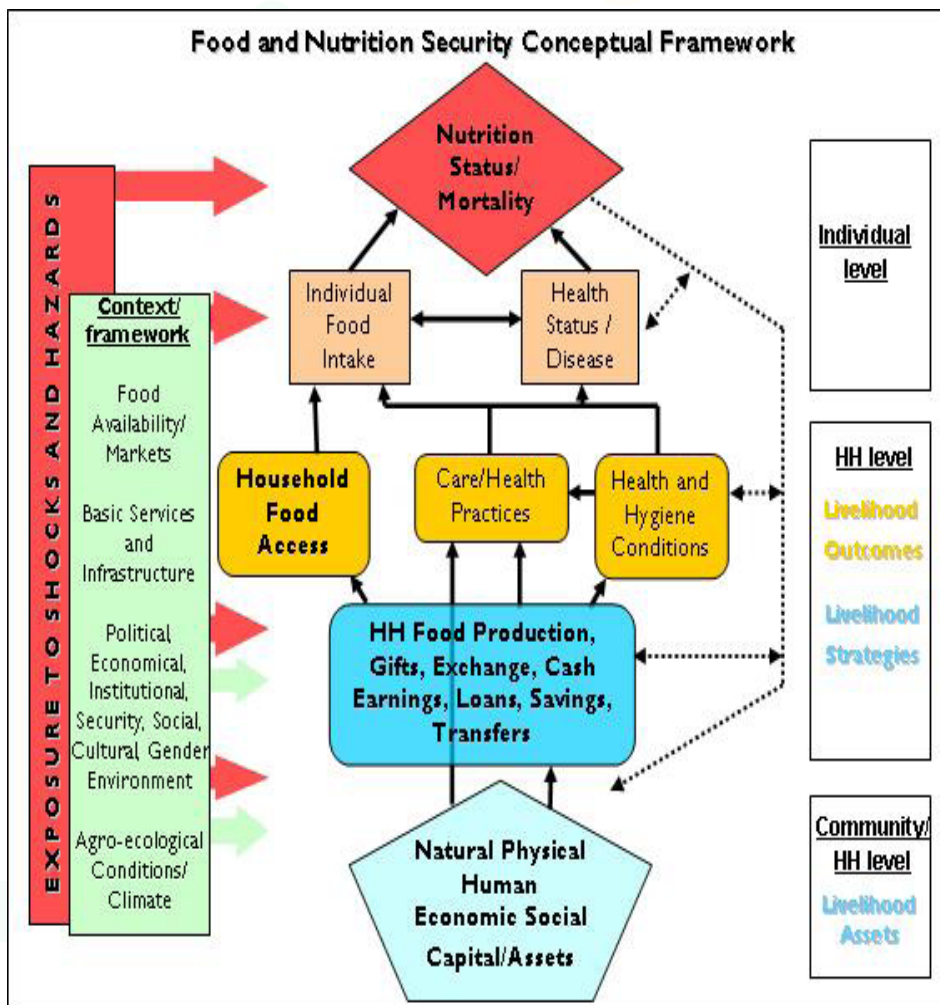


UNICEF'S Original Conceptual Framework of Malnutrition

Conceptual framework of the determinants of child undernutrition



Reference
UNICEF. Improving Child Nutrition. New York, United Nations Children's Fund (UNICEF), 2013.



FAO IPC Global Partners. 2012. Integrated Food Security Phase Classification Technical Manual Version 2.0. Evidence and Standards for Better Food Security Decisions



