REPUBLIC OF KENYA

GOVERNMENT OF
THARAKA NITHI COUNTY

DEPARTMENT OF HEALTH SERVICES AND SANITATION

COUNTY NUTRITION ACTION PLAN (CNAP) 2018/19-2022/23

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LIST OF ABBREVIATIONS AND ACRONYNMS

ANC	Antenatal Care
CNAP	County Nutrition Action Plan
CNTF	County Nutrition Technical Forum
DNDs	Division Of Nutrition and Dietetics Services
DRNCDs	Diet Related Non-Communicable Diseases
EBF	Exclusive Breast Feeding
ECDE	Early Childhood Development Education
HIV	Human Immunodeficiency Virus
HINI	High Impact Nutrition Interventions
IFAS	Iron Folic Acid Supplementation
IMAM	Integrated Management of Acute Malnutrition
KDHS	Kenya Demographic Health Survey
KNAP	Kenya Nutrition Action Plan
KHP	Kenya Health Policy
MAD	Minimum Acceptable Diet
MIYCN	Maternal Infant and Young Child Nutrition
MNPs	Micronutrient Powders
NCD	Non Communicable Disease
NDMA	National Drought Management Authority
NFNSP	National Food and Nutrition Security Policy
NHPplus	Nutrition and Health Program plus
NI	Nutrition International
ORS	Oral Rehydration Solution
SMART	Standardized Monitoring & Assessment of Relief and Transition
TB	Tuberclosis
UN	United Nations
UNICEF	United Nation Childrens' Fund
UHC	Universal Health Care
WASH	Water Sanitation and Hygiene
WBW	World Breastfeeding Week
WHA	World Health Assembly

FOREWORD

Kenya is a signatory to several nutrition-related global agreements and mechanisms including the Scaling Up Nutrition (SUN) movement, the World Health Assembly (WHA) 2025 nutrition targets, the Sustainable Development Goals (SDGs), the United Nations (UN) Decade of Action on Nutrition (2016–2025), and the ICN2 Declaration and Plan of Action. The agreements lay down the foundation for addressing the immediate, underlying and basic causes of malnutrition including expanding the political, economic, social and technological space for nutrition actions.

The Constitution of Kenya article 43 (1) gives every person the right to: the highest attainable standard of health, freedom from hunger and access to adequate food of acceptable quality. The government is committed to creating an enabling environment for citizens to realize these rights as evidenced in the Vision 2030, Kenya Health Policy (2014–2030) and the National Food and Nutrition Security Policy, 2012.

The Kenya Health Policy (KHP) and the National Food and Nutrition Security Policy (NFNSP) outline some of the key measures the government will put in place for realization of the Vision 2030. This is to be achieved through supporting the provision of equitable, affordable and quality health and related services at the highest attainable standards to all Kenyans. The government's commitment to providing a high quality of life to all its citizens was further affirmed by the declaration of His Excellency President Uhuru Kenyatta's Big Four Agenda in 2017 in which Universal Health Coverage (UHC) by the year 2022 is prioritized.

The County Government of Tharaka Nithi through the launch of Governor's manifesto in 2017 has embraced the same by prioritizing health access to all its citizens. Following the development of the Kenya Nutrition Action Plan (KNAP) 2018-2022;

Tharaka Nithi County has developed a County Nutrition Action Plan (CNAP) which will be a milestone in the realization of the Governor's manifesto. The County CNAP focuses on 11 Key result areas which will provide opportunities to integrate the most impactful nutrition interventions into existing county programming and to use these identified opportunities to advocate for a sustainable strategy that will increase county commitments to nutrition programming and achievement of the SDGs. The CNAP has taken into consideration that addressing malnutrition requires multisectoral approaches and has identified key result areas which are categorized into three broad areas namely: nutrition specific; nutrition sensitive; and enabling environment. Gender equality and good nutrition are mutually reinforcing; improving nutrition is critical to achieving gender equality, and in turn improving gender equality leads to improved nutrition (NI, 2018).

In an effort to ensure effective and sustainable nutrition outcomes and health related outcomes, the action plan has integrated gender responsive interventions to address the underlying and deep-rooted gender inequalities, socio-cultural and economic differences closely affecting improved food and nutrition security and wellbeing of men and women across different ages and diversities in the county.

This is in line with the several conventions targeted to achieve gender equality, women and girls' empowerment and sustainable elimination of hunger and malnutrition of which the government of Kenya is a signatory and has committed to achieve. These include but not limited to the Sustainable Development Goal 2 on elimination of Hunger, SDG 5 on promoting gender equality including SDGS 1,3,4,6 and 10, the Convention of the Rights of the Child, Convention on Elimination of all forms of Discrimination Against Women and the Declaration of the Human Rights, which are key in creating an enabling environment for improved and sustainable food and nutrition security. At the national level the government has a gender policy which was created in 2008, a national food and nutrition security policy, the Constitution of Kenya (2010) which recognizes the rights of every person to be free from hunger and have adequate food of acceptable quality.

In recognition that health is a devolved function with promotion of primary health care being a County function, the CNAP provides the county strategic direction for nutrition programming 2018-2023.

Dr. Gichuyia Nthuraku M'riara
CECM HEALTH SERVICES & SANITATION

PREFACE

Quality health care forms the foundation for a County's accelerated overall County development agenda. Vision 2030 envisages Kenya as a globally competitive middle-income country by 2030. To realize this dream at County level, Tharaka Nithi Department of Health Services and Sanitation must institutionalize its planning processes in order to operate efficiently and cohesively. To this effect, H.E Tharaka Nithi Governor Muthomi Njuki in his Manifesto has put a lot of emphasis on the provision of quality and affordable health care in Tharaka Nithi County.

Nutrition has a direct relationship with child survival, physical and mental growth, learning capacity, adult productivity and overall social and economic development. Unacceptably high levels of malnutrition remain a public health concern and a hindrance to achieving the county's developmental agenda, with an emerging triple burden of malnutrition, where undernutrition (underweight, stunting and wasting), overweight and obesity and micronutrient deficiencies are on the increase in addition to the burden of Non-Communicable Diseases.

Tharaka Nithi County Nutrition Action Plan (CNAP) 2018/19–2022/23 is the first action plan that will assist the County to participate in implementation of the second Kenya Nutrition Action Plan (KNAP) 2018–2022. Beyond early exposure to adverse conditions such as illness and/or inappropriate diets and feeding practices poor diets as the immediate causes of malnutrition, underlies the socio-cultural, political and economic factors contributing to malnutrition.

The CNAP 2018/19–2022/23 applies a multisectoral approach and promotes cross sectoral collaboration to address the social determinants of malnutrition sustainably with an overall aim of ensuring 'Optimal Nutrition for all Tharaka Nithi citizens.

This will be achieved by having clear roles and responsibilities of different sectors and ensuring each carries out its action in cognizance that addressing the triple burden of malnutrition requires multisectoral and multi-disciplinary approaches.

The process of development of the CNAP 2018/19–2022/23 was driven by Tharaka Nithi County Government through a sector-wide approach that involved broad-ranging consultations within and across the sector. Critical to note is the engagement of various County departments and other stakeholders in the development of this CNAP. A series of dedicated meetings were held with stakeholders during the entire development process. The CNAP will provide a critical catalyst for enhancing accountability, multisectoral collaboration and coordination, linking county and national actions, and tracking progress of the CNAP results. Key priorities to be implemented during the five years from 2019 to 2023 have been identified. It is my expectation that in working together, the overall objectives of the CNAP will be achieved.

Fridah Muthoni Murungi
CHIEF OFFICER PUBLIC HEALTH AND SANITATION

ACKNOWLEDGEMENT

The Health department takes this opportunity to appreciate everyone who participated in the development of the County Nutrition Action Plan (CNAP) 2018/19–2022/23. The CNAP could not have been finalized without the valuable contributions and full commitment of the technical committee members of different working groups drawn from both the government and partner organizations. The support from the Ministry of Health, Division of Nutrition & Dietetics is highly appreciated.

This CNAP was developed with technical and financial support from Nutrition International under the Technical Assistance for Nutrition (TAN) project, funded with UK aid from the UK government and the Kenya Nutrition and Health Program plus (NHPplus) funded by USAID.

Special thanks go to Nutrition International (NI) staff led by Joy Kiruntimi, Sarah Kihianyu and Joan Irungu, and the Kenya Nutrition and Health Program plus (NHPplus) staff led by Victor Mwiti, for the immense technical leadership support in the entire process of developing the CNAP 2018/19-2022/23.

We also thank partners including NDMA, Chuka University, FAO, CARITAS, Kenya Red Cross and Department of Social Protection for playing an important role in enriching the document.

The contributions of the following ministries in providing overall leadership and technical inputs to the CNAP are also highly appreciated: This particularly goes to Ministries of but not limited to Health; Education; Gender, Youth, Culture, Sports, Social and Children Services, Agriculture, Water, Irrigation, Livestock and Fisheries.

The contribution of the County Executive Committee Member of Health (CECM), Chief Officers of Health (Medical Services and Public Health), the County Health Management Teams (CHMT), Sub-County Health Management Teams (SCHMTs) other Health Programme Officers and Sub-County Nutrition Officers (SCNOs) and Health Facility Nutrition Officers during the development and/or validation of the CNAP is gratefully acknowledged.

Lastly, the County Department of Health greatly appreciates the technical support of Betty Samburu and the consulting team; Dr. Daniel Mwai, lead consultant (Health Financing and Universal Health Coverage Expert, Strategic planning, Resource mobilization, Costing, and Resource Tracking); Njuguna David (Health systems strengthening expert, Health policy, Costing, Resource Tracking, Strategy Development); Dr. Elizabeth Wangia (Clinical Nutrition, accountability plan, Monitoring and evaluation of health Programs) Clementine Ngina (Nutrition technical specialist); Agatha Muthoni (Gender Specialist); and Edna Muthoni (Programme Assistant) for providing the technical support throughout the whole development process.

JOHN M. MBOGO
COUNTY DIRECTOR OF HEALTH SERVICES AND SANITATION

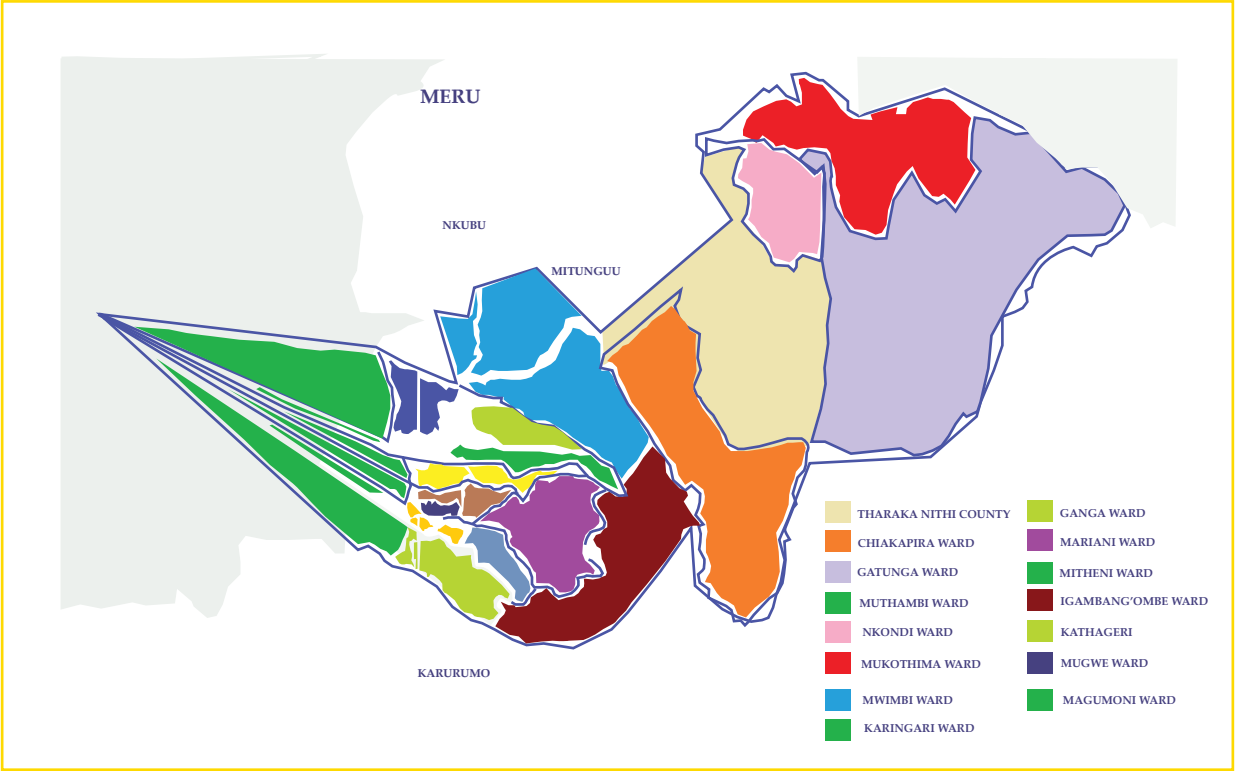
1 CHAPTER 1: INTRODUCTION

1.1 Background information

1.1.1 Location and size

Tharaka-Nithi County is one of the forty-seven (47) Counties in Kenya created by the Constitution of Kenya, 2010. The County borders the Counties of Embu to the South and South West, Meru to the North and North East, Kitui to the East and South East while sharing Mount Kenya. The headquarters of the County is at Kathwana. The County has a total population of 393,177 as per the 2019 population and housing census.

Figure 1.1: Administrative Map of Tharaka-Nithi County



1.2 County and sub county Population and demographic population per cohort

The County is divided into six (6) Administrative Sub-Counties namely Tharaka-North, Tharaka-South, Chuka, Igambang'ombe, Muthambi and Mwimbi. There are fifteen (15) Wards, fifty-two (52) locations and one hundred and sixty-four (164) Sub-Locations in the County. The table below summarizes the population per Sub County

Table 1.1: Tharaka-Nithi Population per sub-county

	2019						
Sub-County	Chuka	Igamba-ngombe	Muthambi	Mwimbi	Tharaka North	Tharaka South	Total
Total Population	104,643	54,676	41,455	88,275	61,399	98,891	449,339
Population male	48,995	25,999	20,603	44,041	29,778	47,703	217,119
Population female	55,648	28,677	20,852	44,234	31,621	51,188	232,220

Source: County Data 2019

1.2.1 Demographic profiles

Tharaka Nithi county profile is information about the population. The information will assist in the provision of services to different segments of the population.

Table 1.2: Demographic Profile

Description	Estimated proportion (%)	Estimated Population 2018	Estimated Population 2019
Total Population	100	381,775	393,177
Total Number of Households	4.1	107,378	109,595
Children under 1 year (12 months)	2.68%	10,232	10,537
Children under 5 years (60 months)	13%	49,631	51,113
Under 15-year population	38%	145,075	149,407
Women of child bearing age (15 – 49 Years)	25%	95,444	98,294
Total number of adolescent (15-24)	21%	80,173	82,567
Total number of adults (25-59)	35%	133,621	137,612
Total number of elderly (60+)	8%	30,542	31,454

1.3 Status of access to health facilities

Tharaka-Nithi County is served by a total of 151 health facilities with coverage of Hospitals 6.0%, Health Centre's (12.6%), Dispensaries (58.9%) and Medical Clinics being (22.5%). By ownership the County Government facilities cover 58.3%, Mission- 17.9%, Private Clinics-22.5% while NGOs take 1.3%.

Table 1.3: Facility Distribution per Type

Tharaka Nithi Summary 2017/18					
	GOK	Mission	NGO	Private	Total
Hospital	4	3	0	2	9
Health/Centre	15	4	0	0	19
Dispensary	69	20	0	0	89
Medical clinic	0	0	2	32	34
	88	**27**	**2**	**34**	**151**

Source: KHMFL, 2019

1.3.1 Disease pattern and top ten causes of morbidity (Number and proportions)

Table 1.4: Top Ten Conditions.

Disease/condition	Number in 2018	% contribution to all diseases
Respiratory Tract Infections	311,941	27.3%
Intestinal worms	89,715	7.8%
Disease of the skin	85,134	7.4%
Arthritis, Joint pains etc.	70,654	6.2%
Urinary Tract Infection	42,488	3.7%
Hypertension	38,541	3.4%
Pneumonia	21,654	1.9%
Diarrhoea	21,202	1.9%
Dental Disorders	17,451	1.5%
Eye Infections	17,109	1.5%
All other conditions	304,806	26.6%
Total	**1,143,904**	**100.0%**

Source: (KDHS, 2014)

1.4 National Nutrition Situation

Undernutrition including micronutrient deficiencies, affects mainly children and women especially during the first 1,000 days of life due to their high nutrient requirement, while obesity and DRNCDs affect mainly women of reproductive age and adults in general. Because of the ageing of body organs and systems, older persons too are at a very high risk of malnutrition.

There has also been an improvement in the nutritional status of children in Kenya: stunting declined from 35% in 2008-9 to 26% in 2014, wasting from 7% to 4% and underweight from 16% to 11% (KDHS, 2014). About, 8% of children are severely stunted in Kenya according to (KDHS 2014). Analysis of stunting by age group shows that stunting is highest in children aged 18-23 months at 36%, and lowest among children aged less than 6 months at 10%.

The high rate of stunting is attributed to food insecurity and poor infant and young child feeding practices (World Vision Kenya, 2015) Nationally, 61% of mothers are exclusively breastfeeding for the first six months and Minimum Acceptable Diet (MAD) is at 22% among children aged 6-23 months (KDHS, 2014)

In Kenya, malnutrition places children at increased risk of morbidity and mortality and is also shown to be related to impaired cognitive development. Various forms of malnutrition can coexist in an individual. A child can be stunted as well as wasted, underweight, and suffer from one or more micronutrient deficiencies. On the other hand, a person may be overweight or obese and at the same time suffer from multiple micronutrient deficiencies.

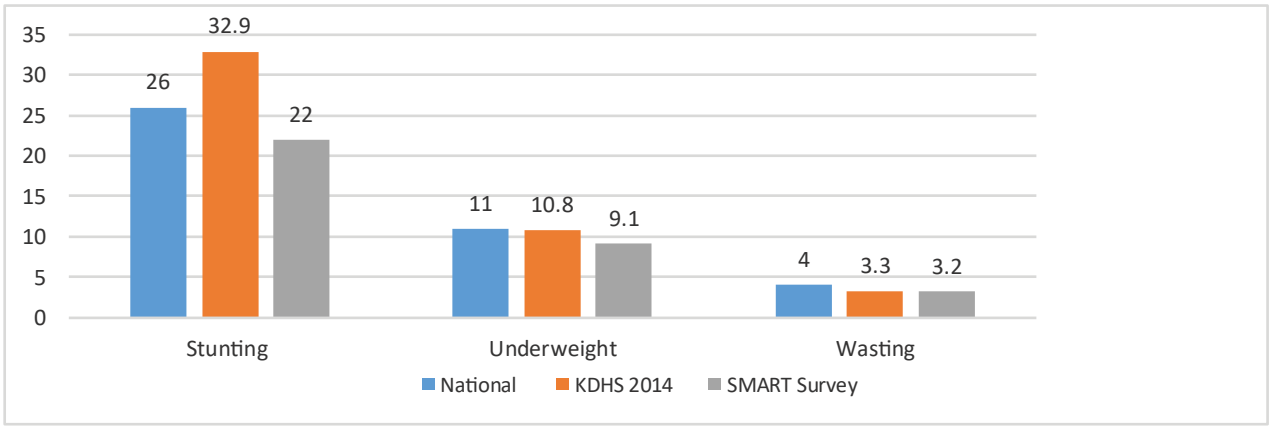
Beyond poor diets and morbidity which are the immediate causes of malnutrition, underlies the socio-cultural, political and economic factors. These include but not limited to family food insecurity; inadequate care of vulnerable household members including cultural norms and practices influencing food sharing and uptake; poor access to clean water, hygiene and sanitation; inadequate health services; poor health seeking behavior and care practices among men and women across all ages and diversities; low community and male support in relieving women of overburdening maternal workload; inadequate and inequitable access to nutrition and health education, unequal access, use and control of benefits from productive assets disproportionately affecting women and girls including their discrimination in decision making on issues pertaining their nutrition and wellbeing, which must be addressed as part of effective and sustainable ways in addressing malnutrition.

1.5 Undernutrition among under five children

Nearly half of all deaths in children under 5 are attributable to undernutrition; undernutrition puts children at greater risk of dying from common infections, increases the frequency and severity of such infections, and delays recovery.

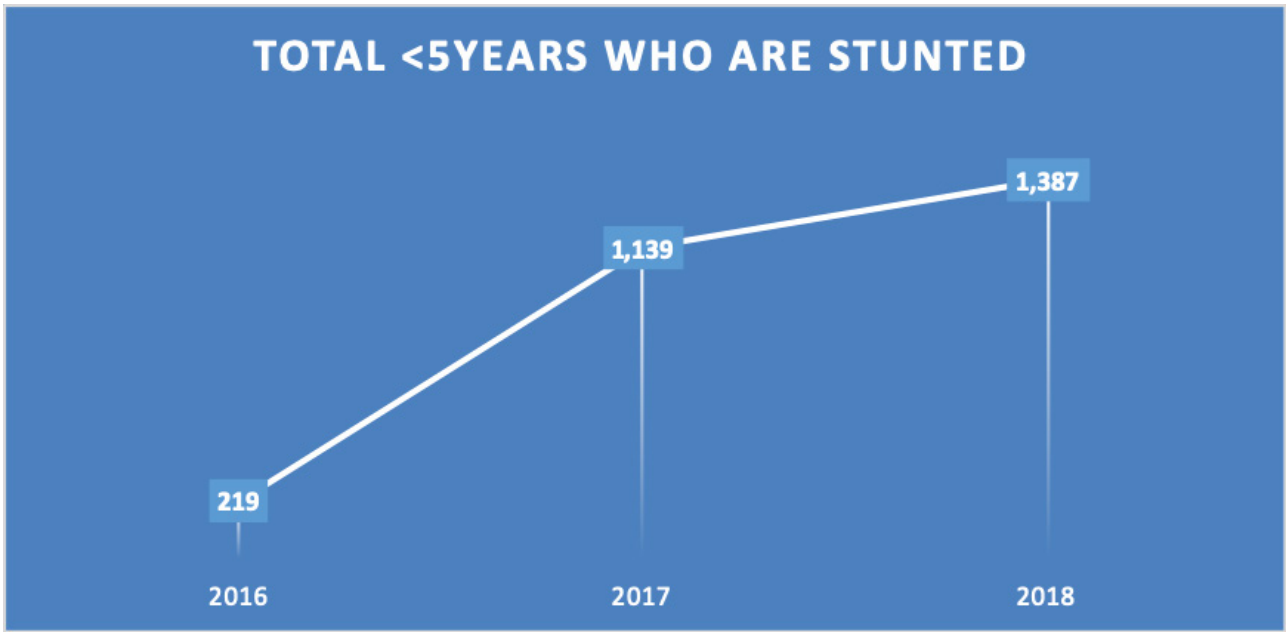
The interaction between undernutrition and infection can create a potentially lethal cycle of worsening illness and deteriorating nutritional status. Poor nutrition in the first 1,000 days of a child's life can also lead to stunted growth, which is associated with impaired cognitive ability and reduced school and work performance. The following figure shows the stunting, underweight and wasting levels of Tharaka Nithi as compared to the national levels as per (KDHS, 2014) and (SMART SURVEY, 2016)

Figure 1.2: Stunting, Underweight and Wasting for Under-Fives



Tharaka Nithi has high levels of children under nutrition due to poor Mother, Infant, Young Child Nutrition practices. Stunting rates stand at 32.9% (KDHS, 2014) and 22.9% from the SMART survey conducted in 2016.

Figure 1.3: Stunting for Under-Fives



1.6 Overweight, Obesity and Diet Related Non-Communicable Diseases (DRNCDs)

Diet-Related Non-Communicable Diseases (DRNCDs) are the most frequent cause of morbidity and mortality in most countries in the Eastern Mediterranean Region (EMR), particularly cardiovascular disease, diabetes, and cancer. The main risk factors for these diets related non-communicable diseases include high blood pressure, high concentrations of serum cholesterol, tobacco smoking, unhealthy eating habits, overweight or obesity, physical inactivity, demographic and socioeconomic status. Early detection, screening and treatment of DRNCDs, as well as palliative care, are key components of the response to NCDs which have been factored in the CNAP.

1.7 Micronutrient deficiencies

Micronutrients (vitamins and minerals) contribute to good health and are necessary for proper growth and development. They are associated with 10% of all children's deaths and are therefore of public health concern. Deficiencies of essential vitamins or minerals such as Vitamin A, Iron, and Zinc may be caused by long-term shortages of nutritious food or by infections such as intestinal worms. They may also be caused or exacerbated when illnesses (such as diarrhoea or malaria) cause rapid loss of nutrients through diarrhea or vomit. Micronutrient deficiencies cause significant health complications, deficiency-related disorders, and increase the risk of mortality and burden of disease. Tharaka Nithi County Nutrition Action Plan has prioritized micronutrient supplementation, fortification and community-based nutrition promotion among the activities which will be carried out as solutions toward hidden hunger.

1.8 Infant and young child Feeding practices among children under five years

Nutrition and nurturing during the first years of life are both crucial for life-long health and well-being. In infancy, no gift is more precious than breastfeeding. Malnutrition is responsible, directly or indirectly for about one third of deaths among children under five. Well above two thirds of these deaths, often associated with inappropriate feeding practices which occur during the first year of life. The World Health Organization recommends that infants start breastfeeding within one hour of life, are exclusively breastfed for six months, with timely introduction of adequate, safe and properly fed complementary foods while continuing breastfeeding for up to two years of age or beyond. Socio- cultural and economic factors in the county such as gender roles and responsibilities between men and women resulting to overburdening maternal workload for women and girls, with limited community and male support lead to limited time for women and girls of reproductive age especially PLWs to practice optimal care and feeding practices for themselves and their young children.

Family food insecurity and water scarcity, aggravated by unequal social systems and deep rooted gender inequalities, have a wide range influence to unequal access to, ownership and control over benefits from productive resources. This disproportionally affects decision making disproportionately affecting women and girls in the county, having a great impact on maternal and infant and young children care and feeding practices. Further cultural norms, beliefs and practices such as food sharing and uptake related stereotypes and practices, effects maternal, infant and young children optimal dietary diversity through locally available and affordable nutritious foods. Levels of knowledge on nutrition among men and women across different ages and diversities, further greatly determines the level of support especially by men and other key influencers within communities, which is key in prompting increased uptake of optimal nutrition and health care and practices by women and children in the county. Promoting sound feeding practices is one of the main intervention areas that the department of Nutrition in Tharaka Nithi will focus on.

1.9 Health status

Measures of health status provide information on the health of a population. Health status is a product of the quality of health care services, economic status and other social parameters like education and agriculture. Good Health is also a pre-requisite for the socio-economic development. The onset of HIV/Aids and increasing burden of TB has had a profound negative effect on the health of the population. Other health problems in Tharaka-Nithi County include increasing burden of new emerging diseases like hypertension, diabetes and heart failure. Alcoholism and drug abuse are also major cause of poor health and increasing levels of violence and injury. The table below represents the main health status of the people in Tharaka-Nithi County

Table 1.5: Health Impact

Impact level Indicators	County estimates
Life Expectancy at birth (years)	60 (WHO, 2013)
Annual deaths (per 1,000 persons) – Crude mortality	8 *(World Bank, 2014)*
Neonatal Mortality Rate (per 1,000 births)	43 *(KDHS 2014/15)*
Infant Mortality Rate (per 1,000 births)	54 *(KDHS 2014/15)*
Under 5 Mortality Rate (per 1,000 births)	63.7 *(KDHS 2014/15)*
Maternal Mortality Rate (per 100,000 births)	191 *(KDHS 2014/15)*

Table 1.6: Major Causes of Morbidity and Mortality in Tharaka-Nithi County

Causes of death		*Causes of ill health (disease or injury)*			
No	***Condition***	**No**	***Condition***	**No of Cases**	**%**
1	Pneumonia, unspecified	1	Upper Respiratory Tract Infections	168,818	34%
2	Cardiac arrest, unspecified	2	Intestinal worms	50,771	10%
3	Tuberculosis of lung	3	Disease of the skin	48,405	10%
4	Septicemia, unspecified	4	Arthritis, Joint pains etc.	40,372	8%
5	Diarrhea and gastroenteritis of presumed infectious origin	5	Urinary Tract Infection	26,990	5%
6	Anemia, unspecified	6	Hypertension	23,142	5%
7	Unspecified human immunodeficiency virus [HIV] disease	7	Diarrhea	14,586	3%
8	Essential (primary) hypertension	8	Pneumonia	14,442	3%
9	CA of esophagus, unspecified	9	Ear Infections/ Conditions	12,793	3%
10	Other and unspecified intestinal obstruction	10	Suspected Malaria	10,453	2%
11	Pneumonia, unspecified		Dental Disorders	10,209	2%
12	Cardiac arrest, unspecified		All Other Diseases	71,481	15%
13	Tuberculosis of lung		Total	492,462	100%

1.10 Food access

The people of Tharaka Nithi depend on agriculture, which include crop and livestock production for food access. The main food crops grown include; maize, beans, cowpeas, sorghum, green grams, millet, pigeon peas, and bananas. The cash crops include tea and coffee grown mainly in Maara and Chuka/ Igambang'ombe constituencies. However, farmers from Tharaka grow green grams and sorghum as a food and cash crop. Access to high yielding drought tolerant crops, promotion of bio-fortified foods and the provision of subsidized agricultural inputs can enhance productivity in the agricultural sector. Tharaka Nithi County has enormous potential in agriculture and livestock production.

However, despite the enormous potential the County has, agricultural land is limited, and the supply of farm inputs is irregular, particularly to non-cash crop growers who are not members of cooperative societies. Prices of the inputs are high, and the distribution chain is not well coordinated. Shortage of inputs leads to low productivity of staple food crops such as maize, beans, Irish potatoes, green grams, millets, and cabbages in the county. Inadequacy of these staple food crops in the county affects the livelihoods of the community. This is made worse by the limited amount of rainfall received especially in the lower parts of the County to support rain fed crop production.

Low productivity in agriculture and livestock is further worsened by the poor marketing infrastructure for the products. There is need to provide subsidies for the farm inputs, provide the basic infrastructure for value addition and facilitate market expansion beyond the local market.

Tharaka Nithi is experiencing high post-harvest losses of up to 30% due to poor storage facilities and post-harvest handling for cereals and legumes. There is also evidence of high level of aflatoxin in foods which may contribute to stunting. To promote productivity, there is need to enhance capacity of farmers to produce high yielding drought resistant crops, fast maturing crops, as well as interventions to prevent post-harvest losses through investing in a modern cooling facility along the horticulture priority value chains and better storage methods and facilities.

1.11 Human resource for nutrition

Health and nutrition are one of the important components of human resource development. The relationship between health-nutrition and human resource development is reciprocal and takes a cyclical fashion

There is a consensus that to address the challenges facing nutrition in the County human resource is crucial. In Tharaka-Nithi County, the current staffing levels is too far below the required officers based on the existing staffing norms and standards. Currently, the County Department of Health services and Sanitation has only 13 Nutritionists against the standard norm of 152 thus translating to a deficit of 139 staff. Additionally, there is need for training clinical nutrition specialities to offer services in nutrition units as well as public health nutrition services including community nutrition as per the human resource norms and standards for the Ministry of health (MOH, 2014). As part of efforts towards health system strengthening, the department will collaborate with the county departments for gender and social services in the county to help build capacity of health care workers across all cadres to effectively identify and address the underlying gender, socio- economic and cultural dynamics for improved provision and implementation of transformative nutrition and health care services and programming.

Table 1.7: Health Personnel and their Distribution by Sub-County

Nutrition Staff	No
Chuka	3
Igambang'ombe	2
Muthambi	2
Mwimbi	2
Tharaka North	1
Tharaka South	2
County Hqs	1
Totals	**13**

1.12 Constraints and challenges contributing to malnutrition in Tharaka-Nithi

- Inadequate human resources for nutrition
- Harsh climatic conditions in most parts of the County (¾ of the County is arid and semi-arid)
- Inadequate financial resources for nutrition activities
- Knowledge gap on the use of locally produce food stuff
- Poor coverage and documentation of VIT A, deworming and IFAS
- Inadequate supply of nutritional commodities
- Inadequate knowledge on IFAS and MIYCN,
- Retrogressive religious beliefs and sects e.g. Kabonokia,
- Gender inequalities and socio-economic vulnerabilities disproportionately affecting women, girls and youth.
- Unequal access, use and control of benefits from productive assets by women and girls.
- Lack of autonomy in decision making among women and girls as strong agents for improved food and nutrition security.
- Low male engagement in support of improved uptake of optimal nutrition and health related services and practices.
- Attitude of mothers on breastfeeding,
- Poor dietary diversification of complimentary foods,
- Inadequate anthropometric tools,
- Teen pregnancies, mostly eat outsides their homes,
- Lack of youth friendly centers,
- Anemia among adolescents leading to high maternal deaths among adolescent mothers
- Low knowledge on preservation methods,
- Occasional stock out of Micronutrient Powders (MNPs),
- Knowledge & skills gap among Health workers and community health volunteers on lifestyle diseases,
- Inadequate budget for nutrition activities
- Lack of provision of services for clinical nutrition in disease management
- Poor hospital food service management
- Inadequate equipment's for dietary modification, no special therapeutic Kitchen
- Inadequate and erratic supply of supplementary feeds for HIV and TB clients
- Increasing cases of malnutrition among HIV and TB clients
- Inadequate and erratic supply of water treatment chemicals
- Lack of an integration framework for Nutrition and WASH interventions
- Poor farming methods and overreliance on rain fed agriculture which is vulnerable to climate change and weather variability
- Aflatoxin control and management
- Low overall budgetary allocation for County Dept. of Health services and Sanitation
- Lack of county multi-sectoral coordination forum
- Low knowledge among health care workers on IMAM and Inadequate reporting tools for IMAM
- Erratic supply of nutritional commodities for IMAM
- Limited budget allocation for coordination activities
- Low awareness on nutrition related issues in the County Assembly.

1 CHAPTER 2: COUNTY NUTRITION ACTION PLAN (CNAP) FRAMEWORK

2.1 Introduction

Malnutrition is caused by factors which are broadly categorized as immediate, underlying and basic. Immediate causes of malnutrition include disease and inadequate food intake; this means that disease can affect nutrient intake and absorption, leading to malnutrition, while not taking sufficient quantities and the right quality of food can also lead to malnutrition.

The underlying causes are food insecurity-including availability, economic access and use of food; feeding and care practices-at maternal, household and community level; and environment and access to and use of health services (World Health Organization, and The World Bank, 2012). Household food insecurity implies that there is lack of access to sufficient, safe, nutritious food to support a healthy and active life.

The level of nutrition awareness among mothers or caregivers and other influencers affects the child feeding and care practices, consequently impacting on their nutrition. Similarly, poor access to and utilization of health services as well as environmental contaminants brought about by inadequate water, poor sanitation and hygiene practices, cultural beliefs, norms and practices, socio-economic vulnerabilities influence the nutrition of households.

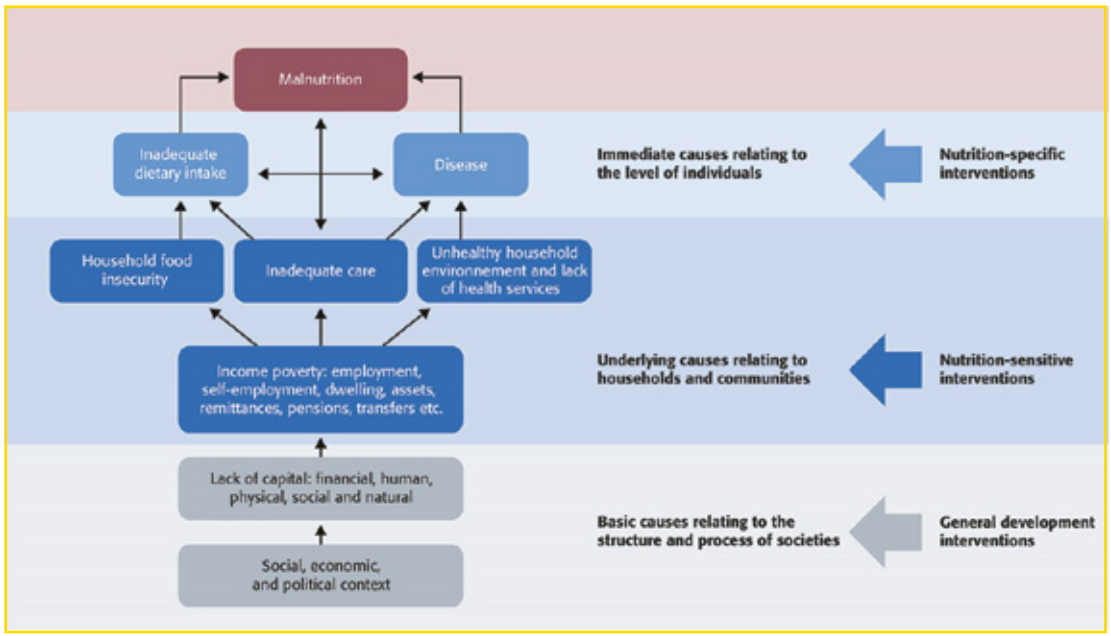
Lastly, the basic causes of malnutrition which act at the enabling environment on macro level include issues such as knowledge and evidence, politics and governance, leadership, infrastructure and financial resources In general nutrition specific interventions address the manifestation and immediate causes; nutrition sensitive interventions the underlying causes and enabling environment interventions address the basic or root causes of malnutrition.

Nutrition is neither a sector nor a domain of one ministry or discipline but a multisectoral and multi-disciplinary issue that has many ramifications from the individual, household, community national to global levels.

Addressing all forms of malnutrition at all three levels of causation (immediate, underlying and basic) requires triple-duty actions that have the potential to improve nutrition outcomes across the spectrum of malnutrition, through integrated initiatives, policies and programmes. The potential for triple-duty actions emerges from the shared drivers behind different forms of malnutrition, and from shared platforms that can be used to address these various forms.

Examples of shared platforms for delivering triple-duty actions include health systems, agriculture and food security systems, education systems, social protection systems, WASH systems and nutrition sensitive policies, strategies and programs. Strategies for integration of nutrition specific interventions and sensitive interventions have been tested and proven to work.

Figure 2.1: Conceptual Framework for Malnutrition



Source: (UNICEF, June 2015)

2.2 Vision and Mission for Nutrition in Tharaka-Nithi County

2.2.1 Vision

A County free from malnutrition

2.2.2 Mission

To provide effective nutrition leadership and participate in provision of high-quality health care services, those are equitable responsive, accessible and accountable to Kenyans.

2.3 National policy and legal framework for CNAP

The Constitution of Kenya gives every child the right to basic nutrition (Article 43 c) and all individuals the right to free from hunger and food of acceptable quality (Article 53c). The country has a huge responsibility of ensuring the communities have access to good quality health care and live a healthy life. To achieve the aspirations of the Constitution and Vision 2030, Kenya has given legislative force to some key aspects of nutrition interventions.

These include legislation on the following

1. Prevention and control of iodine deficiency disorders through mandatory salt iodization,
2. Mandatory food fortification of cooking fats and oils and cereal flours, through the Food Drugs and Chemical Substances Act.
3. The benefits of breastfeeding are protected through the Breast Milk Substitutes (Regulation and Control Act) 2012.
4. Mandatory establishment of lactation stations at workplaces (Health act art 71 & 72
5. The Food, Drugs and Chemical Substances Act (food labeling, additives, and standard (amendment) regulation 2015 on Trans fats) is also key legislation central to the control of DRNCDs.
6. The Nutritionists and Dieticians Act 2007 (Cap 253b) which determine and set up a framework for the professional practice of nutritionists and dieticians;

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2.4 Rationale for investing in nutrition

There is overwhelming evidence that improving nutrition contributes to economic productivity and development and poverty reduction by improving physical work capacity, mental capacity and school performance. Improving nutrition is tremendous value for money as it reduces the costs related to lost productivity and health care expenditures. Globally, it is estimated that each dollar spent on nutrition delivers between USD 8 and USD 138, which is a cost–benefit ratio of around 1:17, like that of infrastructure development like roads, railways and electricity. Table 2.1 shows the cost–benefit ratios of different nutrition intervention programs (World Bank 2016)

Table2.1: Cost Benefit Ratios of Different Nutrition Intervention Programs.

Nutrition intervention program	Cost Benefit (USD$)	Cost benefit ratio
Breastfeeding promotion in health facilities	5-67	1:3
Integrated child care programme	9-16	1:1.8
Iodine supplementation women	15-520	1:35
Vitamin A supplementation (children<6 years	4-43	1:11
Iron fortification (per capita)	176-200	1:1.4
Iron supplementation (per pregnant)	6-14	1:1.3

Cost–benefit analysis conducted in Kenya in 2016 by UNICEF, the World Bank and Ministry of Health reported that every USD1 invested in scaling up high-impact nutrition interventions has the potential return of USD22, higher than the global estimates of USD16–18. The study was done to help guide the selection of the most cost-effective interventions as well as strategies for scaling up a package of interventions tailored to County specific needs, as done in this CNAP. The study considered high-impact nutrition-specific interventions that largely rely on typical health sector delivery mechanisms. It is estimated that the costs and benefits of implementing these 11 critical nutrition-specific interventions could avert more than 455,000 Disability Adjusted Life Years (DALYs) annually, save over 5,000 lives, and avert more than 700,000 cases of stunting among children under five.

The 11 High-Impact Nutrition Interventions (HINI) were: (i) Promotion of good infant and young child nutrition and hygiene practices, (ii) vitamin A supplementation, (iii) therapeutic Zinc supplementation with Oral Rehydration Salts (ORS), (iv) Multiple micronutrient powders for children, (v) deworming, (vi) Iron-Folic Acid Supplementation during pregnancy, (vii) iron fortification of staple foods, (viii) salt iodization, (ix) public provision of complementary food for the prevention of moderate acute malnutrition, (x) management of moderate acute malnutrition and (xi) treatment of severe acute malnutrition. The implementation of CNAP will help in improving the county nutrition more for children less than five years.

2.5 CNAP Objectives

Tharaka Nithi County Nutrition Action Plan will contribute to the national agenda on ending malnutrition in all its forms in line with Kenya's Vision 2030 and sustainable development goals focusing on specific achievements by 2022. The expected result or desired change for the CNAP is that 'The entire population of Tharaka Nithi county achieve optimal nutrition for a healthier and better quality of life and improved productivity for the county's accelerated social and economic growth'.

Key strategies that will be adopted for the implementation of the CNAP include:

- Life-course approach to nutrition programming: a holistic approach to nutrition issues for all population groups
- Gender mainstreaming towards ensuring consistent application of gender transformative approaches across all interventions in all sectors.
- Coordination and partnerships: sectoral and multisectoral approach to enhance programming across various levels and sectors, and within the SUN movement platforms
- Integration which considers the various platforms in place to deliver gender transformative nutrition services e.g. health centres, schools and at the community level.
- Capacity strengthening for implementation of nutrition services responsive to the specific needs of men and women across different ages and diversities targeting service providers and related systems
- Advocacy, Communication and Social Mobilization: acknowledging that nutrition improvements require political goodwill for increased investments and raising population-level awareness for their increased support and participation for improved food and nutrition security for all.
- Promoting equity and human rights especially among vulnerable and marginalized populations in effort to ensure that every person is free from hunger and have adequate food of acceptable quality.
- Resilience and risk-informed programming: focus on anticipating, planning and reducing disaster risks to effectively protect persons, communities, livelihoods and health
- Monitoring, Evaluation, Accountability and Learning: promotion of use of the triple A (Assessment, Analysis & Action) cyclic process to provide feedback, learn lessons and adjust strategy as appropriate
- Sustainability: empowerment for sustainability of results – the need to ensure predictable flow of resources, develop technical and managerial capacity of implementers, motivate implementers, ensure vertical and horizontal linkages, and gradual exit when exiting an intervention.

2.6 CNAP Development process

The development of CNAP was driven by county department of health, nutrition department with involvement of other health departments as well as the line ministries (Agriculture, Education, Water, Social Protection and Gender). The process also ensured that the CNAP is results-based and provides for a common results and accountability framework for performance-based M&E. Evidence was gathered through desk reviews of relevant documents, information from key sectors and overall guidance from the Kenya Nutrition Action Plan.

2.7 Nutrition through the life course approach

Nutritional needs and concerns vary during different stages of life from childhood to elderly years. Nutritional requirements in the different segments of the population can be classified into the following groups which correspond to different parts of the lifespan, namely; pregnancy and lactation, infancy, childhood, adolescence, adulthood, and old age

The development of this CNAP had been through intensive consultation to in order capture nutritional requirements of individuals or groups across different gender, age and diversities living in the county. The CNAP has considered the following factors: Physical activity — whether a person is engaged in heavy physical activity; age and sex of the individual or group; body size and composition, Geography; and Physiological states, such as pregnancy and lactation.

From infancy to late life, nutritional needs change. Children must grow and develop, while older adults must counter the effects of aging. The importance of gender, age and diversity appropriate nutrition during all stages of the life cycle cannot be overlooked. It is against this background that this action plan is developed taking into consideration nutrition needed per specific appropriate stages of life to captures and optimized the heterogeneity of nutrition need with regard to gender, age and other social economics, cultural and physiological determinants and dimensions.

2.8 Gender mainstreaming

Gender and nutrition are inextricable parts of the vicious cycle of poverty and it's an important cross-cutting issue. Gender inequalities are a cause as well as an effect of malnutrition and hunger. Higher levels of gender inequality are associated with higher levels of undernutrition, both acute and chronic undernutrition. Gender equality is firmly linked to enhanced productivity, better development outcomes for future generations, and improvements in the functioning of institutions. Across Kenyan communities which are patriarchal in nature, women continue to face discrimination and often have less access to power and resources, including those related to nutrition. It is therefore imperative to provide equal opportunity for all genders to participate in economic development for optimal resource generation. Adoption of gender responsive approach to identification, planning and implementation of development activities is eminent for improved, transformative and sustainable food and nutrition security.

Household food insecurity aggravated biased social systems, cultural norms, beliefs and practices that greatly influence the socio-economic vulnerability and human development form part of the major factors leading to malnutrition in Tharaka Nithi County. Deep rooted gender inequalities within the county including unequal access to, use and control over benefits from productive resources especially by women and girls and their limited autonomy in decision making which is culturally a preserve for men denies women and girls equal opportunities to exploit their potential as strong agents for increased food and nutrition security (CIDP, 2018) The youth who form majority of the productive population have equally been left out thus the possibility of missing out on the existing potentials and their important role towards contributing socio-economic development in the county.

On the other hand, above 64 years' category is mainly composed of the aged with a large proportion being dependent on the working population. This places a heavy burden on the economically active population that contributes to the economic development and at the same time provides basic needs to the households. This calls for the need to direct more resources to provide adequate youth polytechnics and invest special programmers to create employment opportunities.

Poverty alleviation programmes should aim at providing subsidies and healthcare programmes for the aged population and their dependants.

Despite their social status as custodians of household and community based productive resources and decision making, men are inadequately involved in issues related to nutrition largely perceived as women's role. This is likely to result to inadequate of lack of support by men which can have a major negative impact on the efforts being made towards achieving improved nutrition and health related outcomes. Other factors such as overburdening maternal roles, socio-cultural beliefs and practices around food sharing and uptake, negative cultural practices such as child and forced marriages, unequal or limited access to information and literacy levels disproportionately women and girls further represent part of the factors negatively impacting on food and nutrition security. This underscores the need to apply a rights-based approach to gender programming, with opportunities to leverage complementary rights-based and gender responsive nutrition principles which has been factored in the county CNAP.

Notwithstanding, the roles, priorities, norms, needs and use of resources may differ between men and women. The way women and men are affected by nutrition actions may also differ as demonstrated within the CNAP. Weak inter-sectoral linkages, inadequate gender integration in nutrition assessments, surveys/research leads to lack of evidence-based decision making and the design of tailor-made nutrition and health interventions responsive to the specific nutrition needs, priorities, challenges while building on the existing capacities, experience and knowledge among men and women of different age and diversities. Additionally, disaggregation of data by sex, age groups and diversities at all levels is important to inform the necessary response interventions to address different population groups specific nutrition and health related needs in the county.

In order to achieve effective and sustainable nutrition and health outcomes, the CNAP seeks to integrate a gender transformative approach through effective gender mainstreaming at all levels of nutrition and health interventions. Specifically, this nutrition action plan has used mix approaches to a larger extent integrate gender in the development process and the final action plan. These include:

- The use of the life cycle approach "all residents of Tharaka Nithi County, throughout their life-cycle enjoy safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal health at all times". Using the life-course approach, the action identifies key nutrition interventions for each age cohort and provides the linkages of nutrition to food production and other relevant sectors that impact on nutrition.
- Ensuring nutrition programming at all levels in Tharaka Nithi County is consistently informed by context-based gender analysis defining the gender issues and relations relating to the specific nutrition needs and priorities of men and women of different ages and diversities across the county
- Specific strategies , interventions and activities are prioritized within the CNAPs addressing nutrition needs specific to women, men, adolescents (boys and girls) giving weight in identification and addressing the socio-cultural, economic, technology and political barriers to achieving gender equality in areas of human rights, equal participation of men and women in key decision processes pertaining to their nutrition and wellbeing, equal access, use and control over and benefit from resource development resources adequately respond to the specific nutrition and health related needs of women and men across all ages and diversities.

- Development and implementation of an SBCC strategy to address underlying socio-economic barriers, cultural norms, beliefs, knowledge and practices affecting improved and sustainable food, nutrition and health related outcomes in Tharaka Nithi county.
- Support interventions promoting increased male and community engagement on their role in supporting improved uptake of optimal nutrition and health practices at the household level, community and across the county at large.
- Strengthening health systems to improve delivery of gender responsive health services by health care workers as well as increased demand and equitable uptake of optimal nutrition and health services and practices, by men and women of all ages and diversities in Tharaka Nithi County.
- The CNAP development process has mainstreamed gender in its development process by making sure both females and males are invited and make meaningful participation all the stages of CNAP development, this include active participation in the inception meeting, writing and interventions prioritization meetings including validation, making the process inclusive and participatory with women and men having equal opportunity to in setting Nutrition agenda for Tharaka Nithi county.
- The common result and accountability framework for Tharaka Nithi CNAP has intentionally included indicators that are meant to monitor and evaluate gender transformative nutrition interventions for improved and sustainable nutrition and health related outcomes.
- Accountability for results is enhanced to improve transparency, leadership and the quality of statistics and information made available to the various stakeholders and the public by collecting sex age disaggregated data at all levels.

2.9 Target Audience for CNAP

The target audience for the County Nutrition Action Plan (CNAP) cuts across policy makers and decision makers both at national and county governments, donors and implementing partners of both nutrition specific and sensitive interventions, line ministries, County Health Management Teams, Sub County Health Management Teams, nutrition workforce in health and other departments that influence and provide enabling environment for nutrition to be achieved and the communities at the grassroots level. This will enable them to understand what the county government is doing to ensure optimal nutrition for the entire population and what they can do individually to contribute to the effort.

3 CHAPTER 3: KEY RESULT AREAS (KRAS), OUTCOMES, OUTPUTS AND ACTIVITIES

3.1 Introduction

The overall expected result or desired change for the CNAP is to contribute to the goal of KNAP 2018-2022 in achieving optimal nutrition for a healthier and better-quality life and improved productivity for the country's accelerated social and economic growth. To achieve the expected result, a total of 11 key result areas (KRAs) have been defined for Tharaka-Nithi County. The KRAs are categorized into three focus areas: (a) Nutrition-specific (b) Nutrition-sensitive and (c) Enabling environment, See, Table 3.1. The KRAs have been matched with corresponding set of expected outcomes and outputs, as well priorities activities per each of the KRA presented in see, section 3.3).

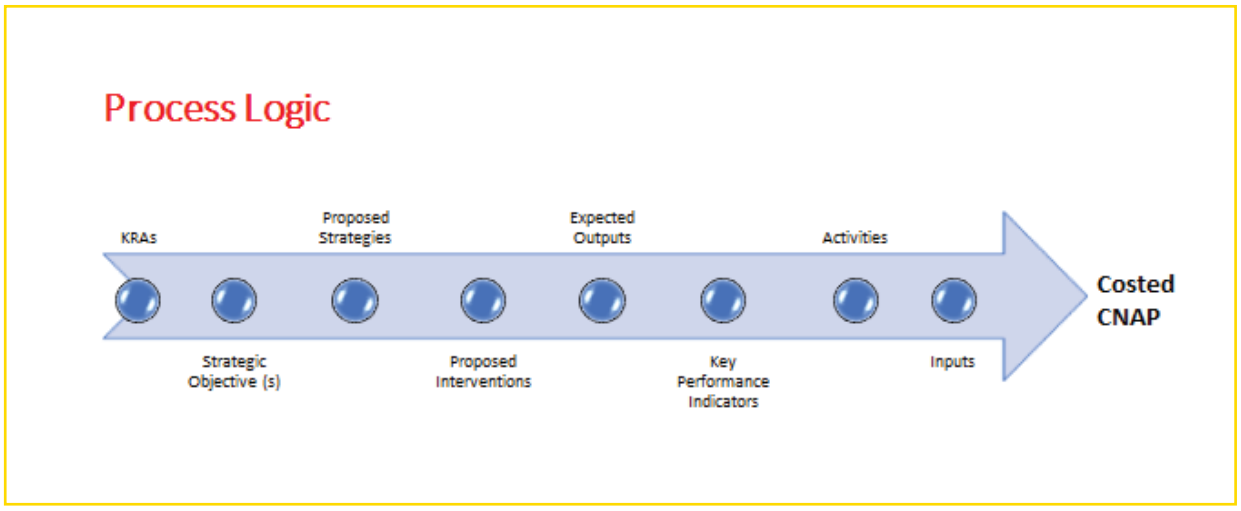
Table 3.1: Prioritized KRAs per Focus Area

CATEGORY OF KRAs BY FOCUS AREAS	KEY RESULT AREAS (KRAs)
Nutrition specific	1. Maternal, Infant, Young Child and Adolescent's Nutrition (MIYCAN) scaled up
	2. Prevention, control and management of micronutrient deficiencies scaled up.
	3. Prevention, control and management of Diet Related Non-Communicable Diseases (DRNCDs) scaled up
	4. Nutrition in Integrated Management of Malnutrition and emergency strengthened
	5. Clinical nutrition and Dietetics strengthened
Nutrition sensitive	6. Nutrition in Agriculture and WASH promoted
	7. Nutrition in education and Social protection promoted
Enabling Environment	8. Sectoral and multisectoral Nutrition Governance, Coordination, Legal/regulatory frameworks, Leadership and Management strengthened
	9. Sectoral and multisectoral Nutrition Information, learning and research systems strengthened
	10. Supply chain management for nutrition commodities and equipment strengthened
	11. Advocacy, communication and social mobilization (ACSM) strengthened

3.2 Theory of change and CNAP logic framework.

The "Theory of Change" (ToC) is a specific type of methodology for planning, participation, and evaluation that is used to promote social change – in this case nutrition improvement. ToC defines long-term goals and then maps backward to identify necessary preconditions. It describes and illustrates how and why a desired change is expected to happen in a particular context. The pathway of change for the CNAP is therefore best defined through the theory of change. The ToC was used to develop a set of result areas that if certain strategies are deployed to implement prioritized activities using the appropriate then a set of results would be realized and if at scale, contribute to improved nutritional status of Tharaka Nithi residents. The logic framework outlining the key elements in the change process is captured in the Figure 3.1. The expected outcome, expected output and priorities activities in line with the process logic have been discussed in section 3.3.

Figure 3.1: The CNAP Logic Process



3.3 Key result areas, corresponding outcome, outputs, and activities

KRA 01: Maternal, infant, young child and adolescent nutrition (MIYCAN) scaled up

Expected outcome
Improved nutrition status of women of reproductive age, children aged 0-59 month and adolescent

Output 1
Strengthen the capacity of health care providers to deliver quality and gender transformative MIYCN services

Activities
1. Train male and female health care workers on BFHI
2. Train male and female health care workers on MIYCN
3. Train male and female health care workers on BFCI
4. Train male and female health volunteers on c-BFCI
5. Train male and female health care workers on BMS Act 2012
6. Train male and female health service providers on WHO growth charts
7. Train male and female health service providers on workplace support for breastfeeding to
8. Train male and female health care actors on effective gender mainstreaming for improved provision and implementation of transformative nutrition and health care services and programming.

Output 2
Increased advocacy communication and social mobilization (ACSM) activities for MIYCAN

Activities
Establish mechanisms for collaboration with local media to promote MIYCAN
1. Hold engagement meetings with key influencers from the community on MIYCAN
2. Sensitize community and religious leaders on MIYCAN
3. Establish community peer to peer support groups e.g. mother to mother, father to father support groups to be used as platforms for peer to peer support and health education on MIYCN.

4. Conduct community health and nutrition education targeting men for their increased engagement on their role and support on MIYCN.
5. Advocate for enforcement of school re-entry policy for teenage mothers at least 1 year after delivery to allow uptake of Exclusive Breast Feeding (EBF) and optimal complementary feeding
6. Strengthen the implementation of SBCC strategy on MIYCN.
7. Conduct activities to observe World Breastfeeding Week (WBW) and Malezi Bora

Output 3
Strengthened monitoring of MNCAH activities

Activities
1. Conduct quarterly supportive supervision to monitor and evaluate MNCAH programs

KRA 02: Prevention, control and management of micronutrient deficiencies scaled up

Expected outcome
Improved micronutrient status of the population

Output 1
Increased knowledge of health care workers, agriculture officers and community members on micronutrient rich foods

Activities
1. Train male and female health care workers on dietary diversification
2. Hold fora with community members together with agricultural extension workers/ agric-nutritionist/ agronomist to promote crop diversification
3. Sensitize health care workers and community members (men and women across different ages and diversities) on micronutrient intake through eating diversified diet

Output 2
Increased coverage of micronutrient supplementation

Activities
1. Carry out routine micronutrient supplementation in health facilities (VIT A, IFAS, MNPs)
2. Conduct integrated outreaches at the community for micronutrient supplementation
3. Conduct integrated mentorship and supportive supervision on micronutrient program

Output 3
Increased intake of fortified foods by the populations

Activities
1. Increased intake of fortified foods by the populations
2. Train PHOs on monitoring and surveillance of fortified foods in the markets
3. Conduct surveillance of fortified foods in the markets (flours, salt, fats and oils)
4. Conduct surveillance on iodized salt through schools
5. Sensitize communities (men and women across different ages and diversities) on consumption of fortified foods.
6. Sensitize health care workers and CHVs on food fortification.

KRA 03: Prevention, control and management of Diet Related Non-Communicable Diseases (DRNCDs) scaled up

Expected outcome
Improved access to quality services for diet related non communicable diseases

Output
Increased knowledge on prevention, control and management of diet related non communicable disease among health care workers and community members

Activities
1. Celebrate the National Days e.g. World Diabetic Day
2. Conduct Training/CME/OJT of health care workers and CHVs on healthy diets and lifestyle
3. Conduct integrated screening for NCDs in the Service delivery points
4. Sensitize communities (targeting men and women across different ages and diversities) on health diets and lifestyle through the community forums

KRA04: Nutrition in Integrated Management of Malnutrition (IMAM) and emergency strengthened

Expected outcome
Improved Management of Acute Malnutrition (IMAM) and capacity for emergency preparedness

Output 1
Enhanced capacity of health care providers for IMAM Service delivery and programming.

Activities
1. Train health care providers on IMAM
2. Sensitize CHVs on CMAM
3. Train CHVs and Health care workers to effectively identify, document and address underlying social cultural and economic factors contributing to malnutrition, affecting optimal adherence to IMAM services and relapse by MAM/SAM patients.
4. Carry out DQA on IMAM Program
5. Carry out support supervision on IMAM

Output 2
Strengthened coordination and partnerships for integrated preparedness and response initiatives
Conduct stakeholder's fora to discuss nutrition situation

Activities
1. Sensitize county health assembly committee members on emergency nutrition activities
2. Hold sub county meetings to constitute emergency response teams
3. Hold county meetings to constitute emergency response teams
4. Hold stakeholder's analysis meeting for nutrition specific and nutrition sensitive activities during emergencies
5. Prepare sub county nutrition contingency plan
6. Develop nutrition surveillance tool
7. Conduct annual nutrition needs assessment during emergencies,

KRA 05: Clinical nutrition and Dietetics strengthened

Expected outcome
Improved access to quality clinical nutrition and dietetics services

Output 1
Improved competencies, skills and knowledge of health care workers in disease management and dietetics services

Activities
1. Disseminate clinical nutrition and dietetics reference manual to health care providers
2. Train health care providers on nutrition care process
3. Conduct CMEs/OJT to health care providers on clinical nutrition and dietetics
4. Training of clinical nutritionist and dietetics on short courses
5. Training on of specialties on post basic clinical nutrition and dietetics
6. Sensitize health care workers on enteral and parenteral feeds

Output 2
Enhanced standards of quality of nutrition and dietetics services for inpatients and general hospital services

Activities
1. Develop individualized SOPs for provision of clinical nutrition and dietetics services in the hospital
2. Develop inpatient feeding protocol
3. Disseminate inpatient feeding protocol to the county, hospital management, health care workers and food inspection committee
4. Develop assessment tools for quality of care for clinical nutrition in hospitals
5. Conduct quality assurance assessments for clinical nutrition services at the facility
6. Hold review meetings for discussion of findings on QA assessments findings for clinical nutrition and dietetics services

Output 3
Strengthened monitoring and reporting of clinical nutrition and dietetics services from all facilities

Activities
1. Train user's hospital data base for clinical nutrition with modern data archiving and retrieval
2. Development of the system for hospital data base for clinical nutrition with modern data archiving and retrieval
3. Sensitize nutritionists and dieticians on clinical nutrition and dietetics monitoring and reporting tools
4. Print clinical nutrition and dietetics monitoring and reporting tools
5. Sensitize county policy makers and managers within health department to prioritize clinical nutrition
6. Construct a modern kitchen with a designated room for therapeutic dietary modification
7. Construct designated rooms in wards for preparation of therapeutic feeds

Output 4
Strengthened capacity of health care providers to provide quality nutrition services for HIV and TB clients

Activities
1. Disseminate national guidelines on TB and HIV
2. Train TOTs on HIV nutrition focused therapy
3. Train Health care providers on HIV focused nutrition therapies
4. Train CHVs on HIV focused nutrition therapies
5. Train TOTs on nutrition in TB focused therapy
6. Train health care workers on TB focused nutritional therapies
7. Train CHV on TB focused nutrition therapies
8. Establish nutrition screening services in all HIV and TB services points
9. Screen HIV and TB patients on nutrition status
10. Conduct mentorship and OJT on nutrition in TB and HIV
11. Print and distribute TB and HIV registers
12. Conduct data quality assessments using QIT/ work improvement teams' activities at all levels on NACS

KRA 06: Nutrition in Agriculture and WASH promoted
Improved linkages between nutrition agriculture and WASH

Output 1
Increased capacity of the community and agriculture staff to produce diversified crops of nutrient dense

Activities
1. Develop county specific modules for agri- nutrition
2. Train agri- nutritionist and agronomists on agri-nutrition
3. Train communities on water harvesting for small scale agrinutrition
4. Train extension staff on modern farming techniques
5. Train the staff and community on kitchen gardens
6. Diversify crop production to include high value nutrient dense produce
7. Promote diversification of crop enterprises
8. Train staff and communities on value addition
9. Train community peer to peer support groups on agri--nutrition livelihoods activities and IGAs and link them to productive livelihood-based sectors and financial institutions for support.
10. Train communities and extension staff on proper storage preservation and processing of produce
11. Conduct sensitization meeting to agriculture department on impact unsafe use of pesticides on nutrition

Output 2
Increased intake of diversified diet among women of reproductive age and children under five years

Activities
1. Develop recipe books for women of reproductive age and children
2. Conduct food demonstration during Agriculture related world-world food days

Output 3
Increased opportunities for knowledge sharing among stakeholders in health and agriculture

Activities
1. Conduct agrinutrition conference
2. Conduct benchmarking visits on modern farming technology

Output 4
Increased uptake of WASH services for improved nutrition

Activities
1. Advocate for provision of adequate sanitation facilities in Health facilities, schools, and other institutions in collaboration with public health and sanitation department
2. Create demand for sanitation uptake by promoting Community Led Total Sanitation in collaboration with public health department
3. Advocate for equal engagement of men and women across different diversities in decision making in the design and installation of water supplies to ensure easy and equitable access to safe water by all, and in support of reduced maternal workload among women and improved nutrition care and hygiene practices.
4. Sensitize households on water handling technologies

Output 5
Integration of WASH into nutrition strengthened

Activities
1. Incorporate WASH in Nutrition Technical Working Group (TWG) and Inter-agency coordinating Committee (ICC)
2. Hold joint Nutrition-WASH integrated planning meetings
3. Develop WASH-Nutrition integrated operational Plans
4. Develop and disseminate IEC materials for integrated WASH into nutrition
5. Develop an integrated quantification report for Nutrition, WASH (water treatment chemicals) among other pharmaceuticals and non-pharmaceuticals in collaboration with public health officers
6. Mainstream Nutrition and WASH framework in County Health services and Sanitation Bill
7. Hold joint public hand washing and nutrition awareness campaigns equally targeting men and women across different ages and diversities in collaboration with public health department
8. Conduct joint house to house visits to sensitize caregivers on hand washing and nutrition
9. Conduct joint supportive supervision on WASH activities

KRA 07: Nutrition in education and social protection promoted

Expected outcome
Improved linkages between nutrition, education and social protection

Output 1
Increased knowledge of teachers and stakeholders on optimal feeding for school going children

Activities
1. Conduct sensitization meeting to stakeholder and teachers on school feeding program
2. Train ECDE teachers on child growth assessment
3. Develop and print IEC materials on school feeding
4. Conduct sensitization meetings on dietary diversification to teachers in schools
5. Conduct quarterly monitoring and evaluation of health and nutrition programmes

Output 2
Increased knowledge of school going children on uptake of diversified diet for improved nutrition

Activities
1. Establish integrated kitchen gardens in schools for dietary diversity in collaboration with agriculture sector
2. Establish 4k clubs in primary schools in collaboration with agriculture sector
3. Establish agriculture youth clubs in high schools in collaboration with agriculture sector

Output 3
Increased uptake of nutrition services in schools to promote health of children

Activities
1. Conduct growth monitoring in ECDE in collaboration with teaches
2. Conduct ECDE VAS and deworming during Malezi Bora weeks
3. Conduct Malezi bora activities (VIT A and deworming) in schools
4. Rehabilitate food storage facilities in schools.
5. Enhance capacity among teachers and health care workers to offer youth friendly nutrition and related health education and services.
6. Conduct health education sessions on Nutrition in schools.

Output 4
Increased knowledge of social protection staff and health care workers on provision of optimal nutrition for vulnerable population

Activities
1. Train gender and social services department and social protection actors on basics on health and nutrition and its linkage to social protection programmes.
2. Train health care workers on importance of geriatric nutrition
3. Conduct sensitization to children home managers on importance of good nutrition

KRA 8: Sectoral and multi-sectoral Nutrition Governance, Coordination, Legal/regulatory frameworks, Leadership and Management strengthened

Expected outcome
Efficient and effective nutrition governance, coordination and legal and M &E frameworks in place

Output 1
Strengthened coordination and partnership for nutrition

Activities
1. Carry out stakeholder mapping for sectoral and multi sectoral Nutrition coordination and Collaboration in the County
2. Conduct stakeholder forums for development of sectoral and multisectoral coordination framework
3. Hold annual governance and accountability meetings
4. Hold joint planning meetings with sectoral and multisectoral stakeholders
5. Hold quarterly County Nutrition Technical Forum (CNTF)

Output 2
Enhanced development and implementation of nutrition and dietetics relevant regulatory framework

Activities
1. Finalize preparation of the Health Services and Sanitation bill
2. Sensitize legislators on nutritional acts

KRA 9: Sectoral and multisectoral Nutrition Information, learning and research systems strengthened

Expected outcome
Sectoral and multisectoral nutrition information systems, learning and research strengthened.

Output 1
Strengthened nutrition sector capacity in nutrition information and evidence-based decision-making

Activities
1. Conduct data quality surveillance and audit on quarterly basis to facilities
2. Conduct training of Health care workers on gender, age and diversity sensitive data management for nutrition services
3. Carry out monthly data review meetings for nutrition activities
4. Conduct joint learning conferences with other sectors
5. Conduct joint work planning with multi sectors on nutrition information system

Output 2
Quality gender, age and diversity disaggregated nutrition data generated for evidence-based programming

Activities
1. Conduct gender integrated MIYCN KAPs survey after every 2 years
2. Conduct gender integrated SMART survey
3. Conduct a gender integrated operational research on nutrition

KRA10: Supply chain management for nutrition commodities and equipment strengthened

Expected outcome
Improved availability of nutrition commodities, equipment, resources and management of supply chain

Output 1
Increased capacity of health care providers to manage commodities for nutrition

Activities
1. Establish county commodity technical working group
2. Train health care workers on LMIS for nutrition commodities (IMAM, HIV, TB e.t.c)
3. Conduct bench marking trips on best practices for nutrition

Output 2
Availability of nutrition commodities, supplies and equipment enhanced

Activities
1. Forecast and quantify therapeutic and supplementary feeds
2. Procure anthropometric equipments.
3. Procure enteral and parenteral feeds
4. Distribute, enteral, parenteral, therapeutic feeds, and supplementary feeds
5. Rehabilitation of stores in health facilities

KRA 11. Advocacy, communication and social mobilization (ACSM) strengthened

Expected outcome
Enhanced commitment and continued prioritization of nutrition in the county agenda

Output 1
Increased advocacy activities for prioritization of nutrition into the county budgetary and plans

Activities
1. Conduct advocacy meeting with decision makers for increased budgetary allocation for nutrition
2. Conduct sensitization Meeting for multilevel and multisector sensitization on prioritization of nutrition into county strategic planning and investment plan
3. Sensitize Sub-County and County training committees on nutrition training needs
4. Sensitize decision makers and political leaders on need to equitably recruit additional male and female nutritionists

Output 2
Increased human resource for nutrition

Activities
1. Equitably recruit and deploy male and female nutritionist and dieticians as per human resource norms and standards
2. Orientation of newly male and female recruited staff oriented on clinical nutrition and dietetics
3. Conduct capacity assessment for nutrition and dietetics/training needs assessment

4 CHAPTER 4: MONITORING, EVALUATION, ACCOUNTABILITY AND LEARNING (MEAL) FRAMEWORK

4.1 Introduction

This chapter provides guidance on the monitoring, evaluation, accountability and learning process, and how the monitoring process will inform the county nutrition action plan. The CNAP will evolve as the county assesses data gathered through monitoring.

Monitoring and evaluation systematically track the progress of suggested interventions, and assesses the effectiveness, efficiency, relevance and sustainability of these interventions. Monitoring is the ongoing, routine collection of information about a programs activity in order to measure progress toward results. That information tells us if a change occurred (the situation got better or worse) which, in turn, helps in making more informed decisions about what to do next. Regular monitoring helps in detection of obstacles resulting in data-driven decisions, on how to address them. A program may remain on course or change significantly based on the data obtained through monitoring. Monitoring and evaluation therefore form the basis for modification of interventions and assessment of the quality of activities being conducted.

It is critical to have a transparent system of joint periodic data and performance reviews that involves key health stakeholders who use the information generated from it. In order to ensure ownership and accountability, the nutrition program will maintain an implementation tracking plan which will keep track of review and evaluation recommendations and feedback. Stakeholders may include donors, departments, staff, national government and the community. Involvement of stakeholders contributes to better data quality because it reinforces their understanding of indicators, the data they expect to collect, and how those data will be collected. In addition, it helps to ensure that their user needs will be satisfied.

An assessment of the technical M&E capacity of the program within the county is key. This includes the data collection systems that may already exist and the level of skill of the staff in M&E. It is recommended that approximately 10% of a programs total resources should be slated for M&E, which may include the creation of data collection systems, data analysis software, information dissemination, and M&E coordination.

4.2 Background and Context

The CNAP outlines expected results, which if achieved, will move the county and country towards attainment of the nutrition goals described in the global commitment e.g. WHA, SDGs, NCDs, and national priorities outlined in the KNAP and Food and Nutrition Security Policy. It also described the priority strategies and interventions necessary to achieve the outcomes, strategy to finance them, and the organizational frameworks (including governance structure) required to implement the plan.

4.3 Purpose of the MEAL Plan

The CNAP MEAL Plan aims to provide strategic information needed for evidence-based decisions at county level through development of a Common results and Accountability framework (CRAF). The CRAF will form the basis of one common results framework that integrates the information from the various sectors related to nutrition, and other non-state actors e.g. Private sector, CSOs, NGOs; and external actors e.g. Development partners, technical partners resulting in overall improved efficiency, transparency and accountability.

While the CNAP describes the current situation (situation analysis), and strategic interventions, the MEAL Plan outlines what indicators to track when, how and by whom data will be collected, and suggests the frequency and the timeline for collective, program performance reviews with stakeholders.

Elements to be monitored include:

- Service statistics
- Service coverage/Outcomes
- Client/Patient outcomes (behavior change, morbidity)
- Clients Access to services
- Quality of health services
- Impact of interventions

The evaluation plan will elaborate on the periodic performance reviews/surveys and special research that complement the knowledge base of routine monitoring data. Evaluation questions, sample and sampling methods, research ethics, data collection and analysis methods, timing/schedule, data sources, variables and indicators are discussed.

In effort to ensure gender integration at all levels of the CNAP, all data collected, analyzed, and reported on will be broken down (disaggregated) by sex and age to provide information and address the impact of any gender issues and relations including benefits from the nutrition programming between men and women.

Sex disaggregated data and monitoring can help detect any negative impact of nutrition programming or issues with targeting in relation to gender. Similarly, positive influences and outcomes from the interventions supporting gender equality for improved nutrition and health outcomes shall be documented and learned from to improve and optimize interventions. Other measures that will be in place to mainstream gender in the MEAL plan will include:

- Development / review M&E tools and methods to ensure they document gender differences.
- Ensuring that terms of reference for reviews and evaluations include gender-related results.
- Ensuring that M&E teams (e.g. data collectors, evaluators) include men and women as diversity can help in accessing different groups within a community.
- Reviewing existing data to identify gender roles, relations and issues prior to design of nutrition programming to help set a baseline.
- Holding separate interviews and FGDs with women and men across different gender, age and diversities including other socio-economic variations.
- Inclusion of verifiable indicators focused on the benefits of the nutrition programming for women and men.
- Integration of gender-sensitive indicators to point out gender-related changes leading to improved nutrition and related health outcomes over time.

4.4 MEAL Team

The County M&E units or equivalent will be responsible for overall oversight of M&E activities. The functional linkage of the nutrition program to the department of health and the overall county intersectoral government M&E will be through the county M&E TWG. Health department M&E units will be responsible for the day to day implementation and coordination of the M&E activities to monitor this action plan.
The nutrition program will share their quarterly progress reports with the county department of health (CDOH) M&E unit, who will take lead in the joint performance reviews at subnational level.
The county management teams will prepare the quarterly reports and in collaboration with county stakeholders and organize the county quarterly performance review forums. These reports will be shared with the national M&E unit during the annual health forum, which brings together all stakeholders in health to jointly review the performance of the health sector for the year under review.

For a successful monitoring of this action plan, the county will have to strengthen their M&E function by investing in both the infrastructure and the human resource for M&E. Technical capacity building for data analysis could be promoted through collaboration with research institutions or training that target the county M&E staff.

Low reporting from other sectors on nutrition sensitive indicators is still a challenge due to the use different reporting systems that are not inter-operational. Investment on Health Information System (HIS) infrastructure to facilitate e-reporting is therefore key. Timely collection and quality assurance of health data will improve with a team dedicated to this purpose.

4.5 Logic Model

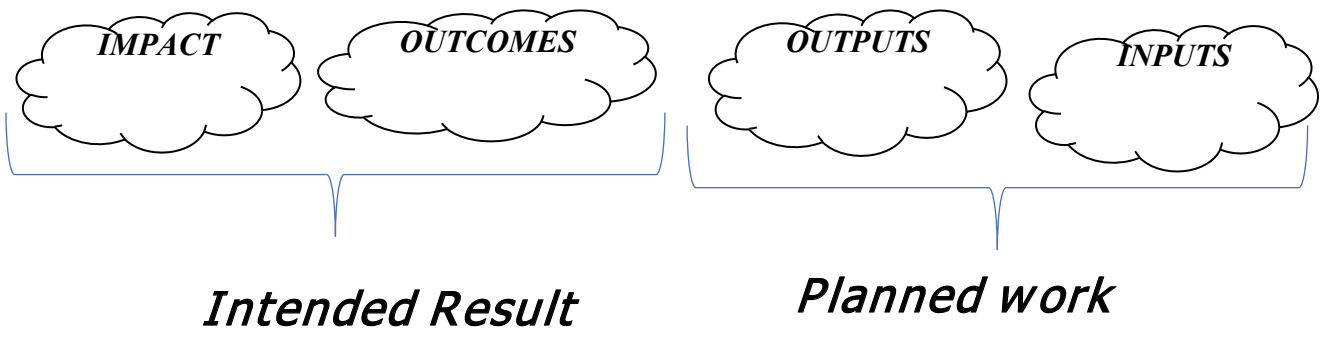


Figure 4.1: The Logic Model

Table 4.1: Common Results and Accountability Framework

OUTCOMES	**Outcome 1. Reduction in undernutrition:** -Reduce prevalence of stunting among children under five years by 40%; -Reduce and maintain childhood wasting to less than 5%; -Reduce and maintain childhood underweight to less than 10%; -Increase dietary diversity by 90%.	**Outcome 2. Reduction of micronutrient deficiencies** -Reduce folic acid deficiency among non-pregnant women by 50%; -Reduce vitamin A deficiency in children by 50%; -Reduce iodine deficiency among children <5 years by over 50%;	**Outcome 3.** **Halt/ Reverse the rising cases of dietary related non communicable diseases** - Improved access to quality services for diet related non communicable diseases - Increased proportion of men with normal waist: hip ratio - Reduce mortality due to dietary risk factors by 20% -No increase in childhood overweight/obesity;	**Outcome 4.** **Increased financing for nutrition** Increased domestic financing for nutrition	**Outcome 5. Strengthened cross sectoral collaborations** -Increased collaboration with all nutrition sensitive sectors
OUTPUTS	**Output 1. Improved knowledge of HCW on management of nutrition** **Indicators:** **-** No. of male and female Health care workers trained on MIYCN - No. of male and female health care workers trained on BFCI - No. of male and female CHVs trained on c-BFCI - No. of male and female health care workers trained on BFHI **-** No. of male and female HCW trained on complimentary feeding **-** Proportion of Children 6-59 months Supplemented with Vitamin A **-** Proportion of women attending ANC supplemented with IFAS **-** No. of Health care workers and community health volunteers sensitized on food fortification including fortification **-** No. of male and female HCWs trained on IMAM and related gender integration.	**Output 2. Improved care for mothers, children and community on better feeding** practices **Indicators** -No. of sensitization meetings held to the community and religious leaders on MNCAN Health - Number of nutrition awareness and education sessions conducted for caregivers in schools **-** No. of sensitization sessions to the community on Healthy Lifestyle and increased physical activity -	**Output 3:** **Improved nutrition commodity security** **Indicators** - Proportion of hospitals stocked with adequate therapeutic and supplementary feeds - Proportion of hospitals provided with adequate enteral and parenteral feeds -	**Output 4:** **Improved nutrition management of the critically ill patients** **Indicators:** - Proportion of hospitals with clinical nutrition SOPs - Number of male and female HCWs sensitized on the new clinical nutrition and dietetics monitoring and reporting tools - Number of specialties Trained on post basic clinical nutrition and dietetics	**Output 5 Improved intersectoral collaboration** **Indicators** -No. of nutrition technical fora held - No.of nutrition data review meetings held - No. of nutrition data quality audits conducted - No. of nutrition surveys conducted - Proportion of county health budget allocated to nutrition - No. of male and female nutritionists recruited - No. of sensitization meetings with multisector leadership on prioritization of nutrition -
INPUTS	1. Organization of service delivery for nutrition; 2. Human Resource for Nutrition; 3. Nutrition infrastructure; 4. Nutrition products and Technology; 5. Nutrition Information; 6. Nutrition Financing;			7. Nutrition research; 8. Nutrition leadership; 9. Household access to better quality and quantity of resources; 10. Financial, human, physical and social capital; 11. Socio cultural, economic and political context	

4.6 Implementation Plan

The implementation of MEAL framework will be spearheaded by the county in collaboration with development partners and stakeholders. This will ensure successful implementation of the CNAP.
To ensure coordinated, structured and effective implementation of the CNAP, the county government will work together with partners and private sector to ensure implementation through:

a) Develop standard operating procedures for management of data, monitoring, evaluation and learning among all stakeholders.
b) Improve performance monitoring and review process
c) Enhance sharing of data and use of information for evidence-based decision making

4.7 Roles and responsibilities of different actors in the implementation of CNAP:

Nutrition M&E Staff Members

- Ensuring overall design of the MEAL plan is technically sound
- Working with stakeholders to develop and refine appropriate outputs, outcomes, indicators and targets
- Providing technical assistance to create data collection instruments
- Helping program staff with data collection (including selection of appropriate methods, sources, enforcement of ethical standards)
- Ensuring data quality systems are established
- Analysing data and writing up the findings
- Aiding program staff to interpret their output and outcome data
- Promoting use of M&E data to improve program design and implementation
- Conducting evaluations or special studies

Management at program level

- Determining what resources, human and financial, should be committed to M&E activities
- Ensuring content of the M&E plan aligns with the overall vision and direction of the county
- Assuring data collected meet the information needs of stakeholders
- Tracking progress to confirm staff carry out activities in the M&E plan
- Improving project design and implementation based on M&E data
- Deciding how results will be used and shared
- Identifying who needs to see and use the data
- Deciding where to focus evaluation efforts
- Interpreting and framing results for different audiences

County Departments of health services

- Provision of technical services and coordination of M&E activities.
- Establishment and equipping of robust M&E units aligned to their respective departmental organograms
- Provide dedicated staff team comprised of the entire mix of M&E professionals needed to implement this scope (M&E, officers, HRIOs, Statisticians, planners, economics, and epidemiologists.
- Coordinating and supervising the implementation of all M&E activities at the county and sub-county and facility levels

Nutrition Sensitive Sectors

- Monitor and report on progress towards implementation of key activities that fall within their mandates in line with jointly agreed indicators
- Participate in high level M&E activities at the county
- Supporting surveys and evaluations needed to assess shared impact of joint interventions

Implementing partners and agencies

- Aligning all their M&E activities to realize the goals of this plan as well as the institutional M&E goals articulated in sectoral, programmatic and county specific M&E Plans
- Routine monitoring and evaluation of their activities
- Using existing systems/developing M&E sub systems that utilize existing structures at all levels of the health information system
- Utilization of the data collected for decision making within the institution

Development Partners

- Provide substantive technical and financial support to ensure that the systems are functional.
- Ensure that their reporting requirements and formats are in line with the indicators outlined in the M&E framework.
- Synchronize efforts with existing development partners and stakeholder efforts based on an agreed upon one county-level M&E system.
- Will utilize reports generated in decision making, advocacy and engaging with other partners for resource mobilization.

Health Facilities

- Ensure that data collected, and reports generated are disseminated and used by the implementers to monitor trends in supply of basic inputs, routine activities, and progress made.
- Use this data in making decisions on priority activities to improve access and quality of service delivery.

Community Health Units

- Identification and notification to the health authority of all health and demographic events including M&E that occurs in the community.
- Generate reports through community main actors e.g. the CHWs, teachers and religious leaders through a well-developed reporting guideline Community Health Information System (CHIS)

4.8 Calendar of key M&E Activities

The county will adhere to the health sector accountability cycle. This will ensure the alignment of resources and activities to meet the needs of different actors in the health sector.

Updating of the Framework

Regular update of the M&E framework will be done based on learnings experienced along the implementation process. The framework will be adjusted to accommodate new interventions to achieve any of the program-specific objectives. A mid-term review of the framework will be conducted in 2020/21 to measure progress of its implementation and hence facilitate necessary amendments.

Indicators and Information Sources.

The indicators that will guide monitoring of the implementation of CNAP a will be captured and outlined in the Common Results and Accountability Framework, (See, Table 4.3.)

4.9 Monitoring process

In order to achieve a robust monitoring system, effective policies, tools, processes and systems should be in place and adequately disseminated. The collection, tracking and analysing of data thus making implementation effective to guide decision making. The critical elements to be monitored are: Resources (inputs); Service statistics; Service coverage/Outcomes; Client/Patient outcomes (behaviour change, morbidity); Investment outputs; Access to services; and impact assessment.
The key monitoring processes as outlined in Figure 2 will involve:

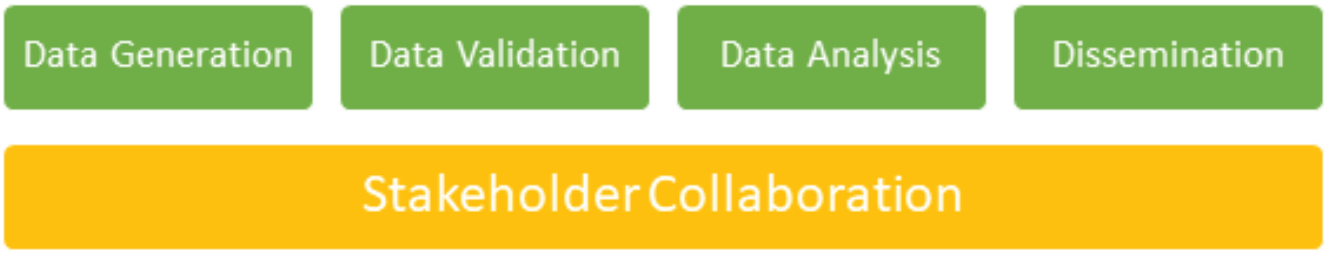


Figure 4.2 Monitoring Process

i. Data Generation

- Various types of data will be collected from different sources to monitor the implementation progress. These data are collected through routine methods, surveys, sentinel surveillance and periodic assessments among others.
- Routine data will be generated using the existing mechanisms and uploaded to the KHIS monthly.
- Strong multi-sectoral collaboration with nutrition sensitive sectors.
- Data flow from the primary source through the levels of aggregation to the national level will be guided by reporting guidelines and SOPs.
- Data from all reporting entities should reach MOH by agreed timelines for all levels.

ii. Data Validation

- Data validation through checking or verifying whether or not the reported progress is of the highest quality and ensures that data elements are clear and captured in various tools and management information systems, through regular data quality assessment. Annual and Quarterly verification process should be carried out, to review the data across all the indicators.

iii. Data analysis

- This step ensures transformation of data into information which can be used for decision making at all levels.

iv. Information dissemination

- Information products developed will be routinely disseminated to key sector stakeholders and the public as part of the quarterly and annual reviews to get feedback on the progress and plan for corrective measures.

v. Stakeholder Collaboration

- There is need to effectively engage other relevant Departments and Agencies and the wider private sector in the health sector M&E process.
- Each of these stakeholders generates and requires specific information related to their functions and responsibilities.
- The information generated by all these stakeholders is collectively required for the overall assessment of sector performance.

4.10 Monitoring Reports

The following are the monitoring reports and their periodicity:

Table 4.2: Monitoring reports

Process/Report	Frequency	Responsible	Timeline
Annual Work Plans	Yearly	All departments	End of June
Surveillance Reports	Weekly	DSSC and health facility in charges	COB Friday
Health Data Reviews	Quarterly	All departments	End of each quarter
Monthly reports submissions	Monthly	Facilities, CUs	5th of every month
Quarterly reports	Quarterly	All departments	After 21st of the preceding Month
Bi-annual Performance Reviews	Every six Months	All departments	End of January and end of July
Annual performance Reports and reviews	Yearly	All departments	Begins July and ends November
Expenditure returns	Monthly	All levels	5th of every month
Surveys and assessments	As per need	Nutrition program	Periodic surveys

4.11 Evaluation of the CNAP

Evaluation is intended to assess if the results achieved can be attributed to the implementation of CNAP by all stakeholders.

Evaluation ensures both the accountability of various stakeholders and facilitates learning with a view to improving the relevance and performance of the health sector over time.
A midterm review and an end evaluation will be undertaken to determine the extent to which the objectives of this CNAP are met.

Evaluation Criteria

To carry out an effective evaluation of the CNAP, there will be need for clear evaluation questions. Evaluators will analyze relevance, efficiency, effectiveness and sustainability for the CNAP. The proposed evaluation criterion is elaborated on below

Relevance: The extent to which the objectives of the CNAP correspond to population needs including the vulnerable groups. It also includes an assessment of the responsiveness in light of changes and shifts caused by external factors.
Efficiency: The extent to which the CNAP objectives have been achieved with the appropriate amount of resources
Effectiveness: The extent to which CNAP objectives have been achieved, and the extent to which these objectives have contributed to the achievement of the intended results. Assessing the effectiveness will require a comparison of the intended goals, outcomes and outputs with the actual achievements in terms of results.
Sustainability: The continuation of benefits from an outlined intervention after its termination and the commitment of the beneficiaries leverage on those benefits.

The CNAP will be evaluated through a set on indicators outlined in the Common Results and Accountability Framework in Table 4.3

4.12 Common Results and Accountability Framework

Table 4.3: Common Results and Accountability Framework

THARAKA NITHI CNAP COMMON RESULTS AND ACCOUNTABILITY FRAMEWORK 2018-2022							
KEY RESULT AREA 1: Maternal, Newborn Child and Adolescents Nutrition (MNCAN) Scaled Up							
Outcome	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Improved nutrition of maternal, newborn, older child and adolescent nutrition	Prevalence of stunting in children 0-59 months (%)	32.9	23	15	KDHS	Every 5 Years	Nutrition Program
	Prevalence of wasting (W/H <2SD) in children 0-59 months (%)	11.4	4	2	KDHS	Every 5 Years	
	Prevalence of underweight (W/A <2SD) in children 0-59 months	9.1	4	2	SMART Survey	Annually	
	Prevalence of exclusive breastfeeding in children 0-6 months (%)	88	95	98	KHIS	Quarterly	
	Proportion of Newborn initiated breast milk within 1 hour of life	84.2	94	98	KHIS	Annually	Nutrition program
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Strengthen the capacity of health care providers to deliver quality MIYCN services	Number of male and female Health care workers trained on MIYCN	No Data	200	400	Program Reports	Annually	Nutrition Program
	Number of sensitization meetings held to the community and religious leaders on MNCAN Health	No Data	10	20	Program Reports	Annually	Nutrition Program

THARAKA NITHI CNAP COMMON RESULTS AND ACCOUNTABILITY FRAMEWORK 2018-2022

KEY RESULT AREA 1: Maternal, Newborn Child and Adolescents Nutrition (MNCAN) Scaled Up							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
	Proportion of Children 12-59 months dewormed	46.9	55	65	SMART Survey	Annually	Nutrition Program
	Number of male and female health care workers trained on BFCI	No Data	200	400	Program Reports	Annually	Nutrition Program
	Number of male and female CHVs trained on c-BFCI	No Data	100	250	Program Reports	Annually	Nutrition Program
	Number of male and female health care workers trained on BFHI	No Data	200	400	Program Reports	Annually	Nutrition Program
Increased advocacy communication and social mobilization (ACSM) activities for MIYCAN	Celebration of World Breastfeeding week	Yes	Yes	Yes	Program Reports	Annually	Nutrition Program
	Number of key nutrition influencers	0	2	4	Program Reports	Annually	Nutrition Program
Strengthened monitoring on MIYCAN activities	Number of supportive supervision on MNCAH	4	12	20	Program Reports	Annually	Nutrition Program
	Number of data review meetings for MNCAH programs	4	12	20	Program Reports	Annually	Nutrition Program
	Number of data quality audits for MNCAH programs done	4	12	20	Program Reports	Annually	Nutrition Program
	Number of gender integrated KAP surveys conducted on MNCAN	0	1	2	Program Reports	Annually	Nutrition Program
	Number of schools reached with mentorship sessions on nutrition	0	50	70	Departmental Activity Reports	Quarterly	Nutrition Program/Department of education
Improved hemoglobin levels of adolescents	Proportion of adolescent girls in school supplemented with WIFs	90%	95%	98%	Departmental Activity Reports	Monthly	Nutrition Program/Department of education
	Proportion of adolescent girls and boys in school reached with nutrition education and counselling	60%	70%	80%	Departmental Activity Reports	Monthly	Nutrition Program/Department of education
	Number of male and female school principals and head teachers sensitized on WIFs	301	400	500	Departmental Activity Reports	Annually	Nutrition Program/Department of education
	Number of IFA tablets procured	2000000	2500000	2800000	Departmental Activity Reports	Annually	Nutrition Program

THARAKA NITHI CNAP COMMON RESULTS AND ACCOUNTABILITY FRAMEWORK 2018-2022

KEY RESULT AREA 2: Prevention, control and management of Micronutrient Deficiencies Scaled up							
Outcome	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Increased knowledge of health care workers and community health volunteers on nutrition for older children	Proportion of community identified malnourished children disaggregated by age and sex referred and received in link facilities	No data	70%	90%	Program reports	Annual	Nutrition Program
Improved micronutrient intake for adolescent girls in schools	Number of male and female teachers trained on WIFAs	0	100	250	Program training reports	Annual	Nutrition
Malnourished children in schools and community detected early for treatment and referral	Number of gender, age and diversity sensitive nutrition assessments conducted for older children in schools	0	4	8	Program reports	Annual	Nutrition Program
	Number of nutrition awareness and education sessions conducted for caregivers in schools	0	7	15	Program reports	Annual	Nutrition Program
Increased knowledge of health care workers, agriculture officers and community members on micronutrient rich foods	Number of male and female HCW trained on complimentary feeding	0	100	200	Program Reports	Annually	Nutrition Program
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Increased coverage of micronutrient supplementation	Proportion of women attending ANC supplemented with IFAS	65%	70%	75%	KHIS	Annually	Nutrition Program
	Proportion of Children 6-59 months Supplemented with Vitamin A	72.2	85	95	SMART Survey	Annually	Nutrition Program
Increased intake of fortified foods by the populations	Number of Health care workers and community health volunteers sensitized on food fortification including fortification	0	100	200	Program Reports	Annually	Nutrition Program
	Proportion of flours in the market that are fortified	No Data	80%	90%	Program surveillance Reports	Annually	Nutrition Program/Private sector/National Government

THARAKA NITHI CNAP COMMON RESULTS AND ACCOUNTABILITY FRAMEWORK 2018-2022

KEY RESULT AREA 3: Prevention, control and management of Diet Related Non-Communicable Diseases (DRNCDs) scaled up							
Outcome	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Improved access to quality services for diet related non communicable diseases	Proportion of adults 18-69 years with raised fasting blood sugar (%)	No Data	30%	15%	STEP Survey	Every 5 years	Nutrition Program
Increased proportion of men with normal waist: hip ratio	Proportion of men with normal waist: hip ratio (%)	No Data	50%	40%	STEP Survey	Every 5 years	Nutrition Program
Reduce mortality due to dietary risk factors by 20%	Mortality attributable to dietary risk factors	No Data	40%	30%	GBD	Annual	Nutrition Program
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Increased knowledge on prevention, control and management of diet related non communicable disease among health care workers and community members	Number of sensitization sessions to the community on Healthy Lifestyle and increased physical activity	20	40	60	Program reports	Annually	Nutrition Program/NCD program
	Number of joint activities conducted between the NCD and nutrition program	4	8	16	Program reports	Quarterly	Nutrition Program/NCD program
	Participation of the nutrition program in the National Days e.g. World Diabetic Day	Yes	Yes	Yes	Program reports	Quarterly	Nutrition Program/NCD program
KEY RESULT AREA 4: Nutrition in integrated management of malnutrition and emergency strengthened							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Improved management of acute malnutrition and capacity for emergency preparedness	Proportion of deaths, of discharges from treatment program, who had SAM/MAM	NO data	<10%/<3%	<10%/<3%	Program reports	Quarterly	Nutrition Program/NCD program

THARAKA NITHI CNAP COMMON RESULTS AND ACCOUNTABILITY FRAMEWORK 2018-2022

KEY RESULT AREA 4: Nutrition in integrated management of malnutrition and emergency strengthened							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Enhanced capacity of health care providers for gender responsive IMAM service delivery and programming.	Number of male and female HCWs trained on IMAM and related gender integration.	No Data	200	350	Program reports	Annual	Nutrition program
Strengthened coordination and partnerships for integrated preparedness and response initiatives	Number of emergency nutrition response teams constituted	0	5	5	Program reports	Annual	Nutrition program
	Need based gender integrated Rapid assessment on nutrition situation conducted	1	2	2	Nutrition status Report in Tharaka North and South	Bi-annual	Nutrition program
	Number of Sub counties with contingency plans in place	2	5	5	Nutrition status Report in Tharaka North and South	Every 5 Years	Nutrition program
KEY RESULT AREA 5: Clinical nutrition and Dietetics strengthened							
Outcome	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Improved access to quality clinical nutrition and dietetics services.	Proportion of hospitals stocked with adequate therapeutic and supplementary feeds	25%	70%	80%	TNCDHS	Quarterly	Nutrition Program
	Proportion of hospitals provided with adequate enteral and parenteral feeds	25%	70%	80%	TNCDHS	Quarterly	Nutrition Program
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Improved competencies, skills and knowledge of health care workers in disease management and dietetics services	Number of specialties Trained on post basic clinical nutrition and dietetics	0	0	2	TNCDHS	Every 2 Years	Nutrition Program
	Number of male and female county policy makers and managers within health department sensitized on clinical nutrition	0	40	40	TNCDHS	Annually	Nutrition Program

THARAKA NITHI CNAP COMMON RESULTS AND ACCOUNTABILITY FRAMEWORK 2018-2022

KEY RESULT AREA 5: Clinical nutrition and Dietetics strengthened							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Enhanced standards of quality of nutrition and dietetics services for inpatients and general hospital services	Proportion of hospitals with clinical nutrition SOPs	50%	75%	80%	TNCDHS	Monthly	Nutrition Program
	Proportion of facilities with a hospital kitchen system for dietary modification	30%	50%	75%	TNCDHS	Annually	Nutrition Program
Strengthen monitoring and reporting of clinical nutrition and dietetics	Number of male and female HCWs sensitized on the new clinical nutrition and dietetics monitoring and reporting tools	0	200	300	TNCDHS	Annually	Nutrition Program
Strengthened capacity of health care providers to provide quality nutrition services for HIV and TB clients	Number of male and female TOTs trained on HIV and TB nutrition focused therapy	0	45	90	TNCDHS	Quarterly	Nutrition Program/HIV -TB Program
	Number of male and female HCW trained on gender and age responsive HIV /TB focused nutritional therapies	0	60	80	TNCDHS	Quarterly	Nutrition Program/HIV -TB Program
	Number of male and female CHVs trained on gender and age responsive HIV /TB focused nutritional therapies	0	250	500	TNCDHS	Annually	Nutrition Program/HIV -TB Program
	Proportion of HIV/TB patients screened for nutrition status	75%	80%	85%	TNCDHS	Monthly	Nutrition Program/HIV -TB Program
	Proportion of Health facilities provided with adequate supplementary feeds for TB and HIV patients	25%	70%	85%	TNCDHS	Quarterly	Nutrition Program/HIV -TB Program

THARAKA NITHI CNAP COMMON RESULTS AND ACCOUNTABILITY FRAMEWORK 2018-2022

KEY RESULT AREA 6: Nutrition in Agriculture and WASH promoted							
Outcome	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Improved linkages between nutrition agriculture and WASH	Proportion of households washing hands in the four critical areas	7.10%	30%	50%	SMART survey	Annually	Nutrition Program/WASH
	Proportion of schools with adequate sanitation	20	40	60	TNCDHS	Annually	Nutrition Program/WASH
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Increased capacity of the community and agriculture staff to produce diversified crops of nutrient dense	Number of male and female agriculture extension staff trained on modern farming techniques	0	200	300	Program Reports	Annual	Nutrition Program/department of Agriculture
	Number of male and female Agri nutritionist and agronomists trained on Agri nutrition	0	50	100	Program Reports	Annual	Nutrition Program/department of Agriculture
Increased intake of diversified diet among women of reproductive age and children under five years	Number of food demonstrations conducted during Agriculture related world food days	0	4	8	Program Reports	Annual	Nutrition Program/department of Agriculture
Increased opportunities for knowledge sharing among stakeholders in health and agriculture	Number of Agri-Nutrition Conferences conducted	0	1	2	Program Reports	Every 2 years	Nutrition Program/Department of Agriculture
Increased uptake of WASH services for improved nutrition	Proportion of schools with adequate sanitation facilities	60%	70%	80%	Program reports	Annual	Nutrition Program/WASH
Integration of WASH into nutrition strengthened	Number of County nutrition and WASH ICC meetings held	0	1	1	TNCDHS	Every 5 Years	Nutrition/WASH Program
	An annual Nutrition and WASH integrated Work Plan	0	2	4	TNCDHS	Annually	Nutrition/WASH Program

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KEY RESULT AREA 7: Nutrition in education and Social protection strengthened							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Increased knowledge of teachers and stakeholders on optimal feeding for school going children	Number of ECDE teachers trained on child growth assessment	33	100	100	Training report	Annually	Nutrition Program/ECDE
Increased knowledge of school going children on uptake of diversified diet for improved nutrition.	Proportion of schools with integrated kitchen gardens	0	15	30%	Assessment data	Bi-annual	Nutrition Program/ECDE
	Proportion of primary schools with 4K clubs established	0	40%	60%	Program Reports	Annual	Nutrition Program/department of Agriculture
	Proportion of high schools with agriculture youth clubs	0	40%	60%	Program Reports	Annual	Nutrition Program/department of Agriculture
Increased uptake of nutrition services in schools to promote health of children	Proportion of ECDE children reached with VAS and deworming	80%	90%	90%	KHIS	Bi-annual	Nutrition Program/ECDE
	Number of ECDE teachers trained on child growth assessment	33	100	100	Training attendance registration report	Annually	Nutrition Program/ECDE
	Number of monitoring and evaluation of health and nutrition programs visits conducted	0	160	320	Supervisory reports,	Quarterly	Nutrition Program/ECDE
Increased knowledge of social protection staff and health care workers on provision of optimal nutrition for vulnerable population	Number of healthcare workers trained on geriatric nutrition	0	160	320	Program reports	Annual	Nutrition Program/ECDE

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KEY RESULT AREA 8: Sectoral and multisectoral Nutrition Governance, Coordination, Legal/regulatory frameworks, Leadership and Management strengthened							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Strengthened coordination and partnership for nutrition	Number of nutrition technical fora held	0	8	16	Nutrition program reports	Annual	Nutrition Program
Enhanced development and implementation of nutrition and dietetics relevant regulatory framework	Proportion of legislatures sensitized on nutrition acts	0%	30%	40%	Nutrition program reports	Annual	Nutrition Program
KRA 9. Sectoral and multisectoral Nutrition Information, learning and research systems strengthened							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Strengthened nutrition-sector capacity in nutrition information and evidence-based decision-making	Number of nutrition data review meetings held	0	24	48	Nutrition Program	Annual	Nutrition Program
	Number of nutrition data quality audits conducted	0	8	16	Nutrition Program	Annual	Nutrition Program
Quality nutrition data generated for evidence-based programming	Number of nutrition surveys conducted	0	2	4	Nutrition Program	Annual	Nutrition Program
KEY RESULT AREA 10: Supply chain management for nutrition commodities and equipment strengthened							
Outcome	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Improved availability of nutrition commodities, equipment, resources and improved management of supply chain	Proportion of health facilities reporting stock outs of nutrition commodities	30%	20%	10%	DHIS	Monthly	Nutrition Program

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KEY RESULT AREA 10: Supply chain management for nutrition commodities and equipment strengthened							
Output	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Increased capacity of health care providers to manage commodities for nutrition	Number of HCWs trained on nutrition LMIS	0	8	16	Training report	Annually	Nutrition program
Availability of nutrition commodities, supplies and equipment enhanced	Proportion of hospitals with enteral and parenteral therapeutic feeds	No Data	50%	80%	Nutrition Program Reports	Annual	Nutrition Program
KEY RESULT AREA 11: Advocacy, communication and social mobilization (ACSM) strengthened							
Outcome	**Indicator**	**Baseline (2018)**	**Mid-term Target (2020)**	**End-Term target (2022)**	**Data Source**	**Frequency of data collection**	**Responsible person**
Enhanced commitment and continued prioritization of nutrition in the county agenda	Proportion of county health budget allocated to nutrition	0%	0.5%	1%	County Budget Office	Annual	Chief finance officer/Nutrition program
	No. of male and female nutritionists recruited		0	20	County public service	Annual	Nutrition Program
Increased advocacy activities for prioritization of nutrition into the county budgetary and plans	Nutrition prioritized in annual work plans	Yes	Yes	Yes	Program reports	Annually	Nutrition Program
	No. of sensitization meetings with multisector leadership on prioritization of nutrition	0	8	16	Program/Departmental reports	Annual	Nutrition Program
Increased human resource for nutrition	No of newly recruited male and female nutritionists	0	20	20	Program/Departmental reports	Annual	Nutrition Program
	Nutrition Capacity Needs assessment conducted	No.	Yes	Yes	Program/Departmental reports	Annual	Nutrition Program

5 CHAPTER 5: CNAP RESOURCE MOBILIZATION AND COSTING FRAMEWORK

5.1 Introduction

A good health system raises adequate revenue for health service delivery, enhances the efficiencies of management of health resources and provides the financial protection to the poor against catastrophic situations. By understanding how the health systems and services are financed, programs and resources can be better directed to strategically compliment the health financing already in place, advocate for financing of needed health priorities, and aid populations to access available health services.

Costing is a process of determining in monetary terms, the value of inputs that are required to generate a particular output. It involves estimating the quantity of inputs required by an activity/programme. Costing may also be described as a quantitative process, which involves estimating both operational (recurrent) costs and capital costs of a programme. The process ensures that the value of resources required to deliver services are cost effective and affordable.

This is a process that allocates costs of inputs based on each intervention and activity with an aim of achieving set goals /results. It attempts to identify what causes the cost to change (cost drivers). All costs of activities are traced and attached to the intervention or service for which the activities are performed.

The chapter describes in detail the level of resource requirements for the strategic plan period, the available resources and the gap between what is anticipated and what is required.

5.2 Costing Approach

Financial resources need for the CNAP was estimated by costing all the activities necessary to achieve each of expected outputs in each of Key Result Area (KRA). The costing of the CNAP used result-based costing to estimate the total resource need to implement the action plan for the next five years. The action plans were costed using the Activity-Based Costing (ABC) approach.

The ABC uses a bottom-up, input-based approach, indicating the cost of all inputs required to achieve Strategic plan targets. ABC is a process that allocates costs of inputs based on each activity, it attempts to identify what causes the cost to change (cost drivers); All costs of activities are traced to the product or service for which the activities are performed. The premise of the methodology under the ABC approach will be as follow; (i) The activities require inputs, such as labor, conference hall etc.; (ii) These inputs are required in certain quantities, and with certain frequencies; (iii) It is the product of the unit cost, the quantity, and the frequency of the input that gave the total input cost; (iv) The sum of all the input costs gave the Activity Cost. These were added up to arrive at the Output Cost, the Objective Cost, and eventually the budget.

The cost over time for all the thematic areas provides important details that will initiate debate and allow CDOH and development partners to discuss priorities and decide on effective

5.3 Total Resource Requirements (2018/19 – 2022/23)

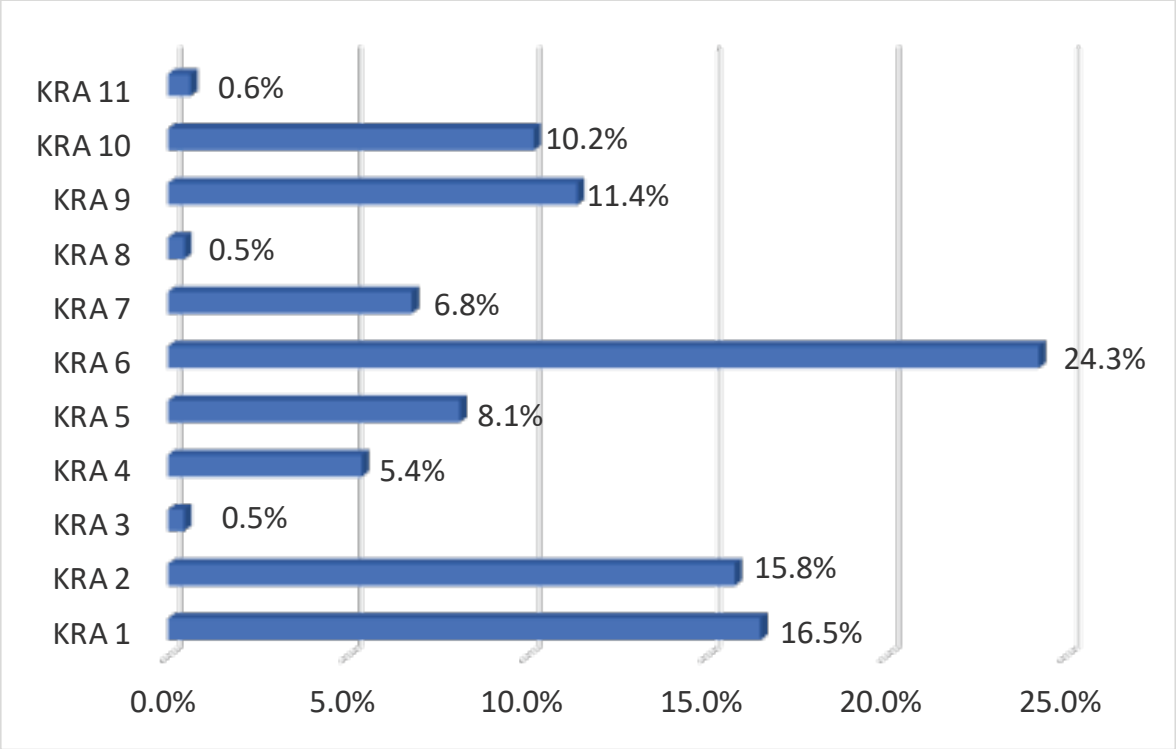
The CNAP was costed using the Activity Based Costing (ABC) approach. The ABC uses a bottom-up, input-based approach, indicating the cost of all inputs required to achieve planned targets for the financial years of 2018/19 – 2022/23. The cost over time for all the Key Result Areas provides important details that will initiate debate and allow County health management and development partners to discuss priorities and decide on effective resource allocation. The KRAs provided targets to be achieved within the plan period and the corresponding inputs to support attainment of the targets. Based on the targets and unit costs for the inputs, the costs for the strategic plan were computed. The total cost of implementing Tharaka-Nithi CNAP for the five years is estimated at KSh. 1.6 billion, See, and table 5.1. Further annual breakdown of cost requirement (s) is presented by each of the output and activities in Appendix A.

Table 5.1: Summary Cost by KRA

KRAs BY FOCUS AREAS	KEY RESULT AREAS (KRAs)	2018/19	2019/20	2020/21	2021/22	2022/23	TOTAL
COST IN KSH							
Nutrition specific	1. Maternal, infant, young child and adolescent's nutrition (MIYCAN) scaled up	-	29,307,950	98,881,600	111,711,200	19,433,700	259,334,450
	2. Prevention, control and management of micronutrient deficiencies scaled up.	-	61,130,750	64,219,350	61,385,550	61,385,550	248,121,200
	3. Prevention, control and management of Diet Related Non-Communicable Diseases (DRNCDs) scaled up	-	1,777,800	1,777,800	1,777,800	1,777,800	7,111,200
	4. Nutrition in integrated management of malnutrition and emergency strengthened	-	32,247,900	10,752,700	31,142,600	10,752,700	84,895,900
	5. Clinical nutrition and Dietetics strengthened	-	23,269,340	23,269,340	54,427,840	26,769,340	127,735,860
Nutrition sensitive	6. Nutrition in Agriculture and WASH promoted	34,575,320	85,690,420	85,754,420	87,539,920	87,539,920	381,100,000
	7. Nutrition in education and Social protection promoted	19,968,448	22,739,584	21,272,084	21,734,084	21,074,200	106,788,400
	8. Sectoral and multisectoral Nutrition Governance, Coordination, Legal/regulatory frameworks, Leadership and Management strengthened	364,200	1,792,600	1,692,600	1,692,600	1,692,600	7,234,600
Enabling Environment	9. Sectoral and multisectoral Nutrition Information, learning and research systems strengthened	119,500	34,666,101	54,807,600	77,087,201	12,386,500	179,066,902
	10. Supply chain management for nutrition commodities and equipment strengthened	4,740,560	26,890,700	51,442,660	55,539,000	21,519,360	160,132,280
	11. Advocacy, communication and social mobilization (ACSM) strengthened	111,000	1,917,000	3,805,800	2,450,100	1,594,500	9,878,400
GRAND TOTAL		59,879,028	321,430,145	417,675,954	506,487,895	265,926,170	1,571,399,192

The annual break down of cost key result areas is presented in Table 5.1. KRA 06. Nutrition in Agriculture and WASH promoted account for the highest proportion of total resources need accounting for 24.3% while KRA 3 Prevention, control and management of Diet Related Non-Communicable Diseases (DRNCDs) scaled up and KRA 8 Sectoral and multisectoral Nutrition Governance, Coordination, Legal/regulatory frameworks, Leadership and Management strengthened account for the least at 0.5% respectively of the total resource requirement (See, figure 5.1).

Figure 5.1: Proportion of resource requirements by KRA



5.4 Strategies to ensure available resources are sustained

Strategies to mobilize resources from new sources

- Lobbying for a legislative framework in the county assembly for resource mobilization and allocation
- Identification of potential donors both bilateral and multi-lateral
  Conducting stakeholder mapping
- Call the partners to a resource mobilization meeting
- Identification, appointment and accreditation of eminent persons in the community as resource mobilization good will ambassadors

Strategies to ensure efficiency in resource utilization

- Through planning for utilization of the allocated resources (SWOT analysis)
- Implementation plans with timelines
- Continuous monitoring of impact process indicators
- Periodic evaluation objectives if they have been achieved as planned.

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APPENDICES

Annex A : Summary table resources needs KRA, Outputs and Activities

Key Result Areas ,Outputs and Activities	2018/19	2019/20	2020/21	2021/22	2022/23	Total
KRA 01. Maternal, infant, young child and adolescent's nutrition (MIYCAN) scaled up	**-**	**29,307,950**	**98,881,600**	**111,711,200**	**19,433,700**	**259,334,450**
Output 1: Strengthen the capacity of health care providers to deliver quality and gender transformative MIYCN services	-	18,524,200	78,020,000	90,849,600	18,037,800	205,431,600
Train male and female health care workers on BFHI	-	-	20,665,900	20,665,900	-	41,331,800
Train male and female health care workers on MIYCN	-	13,570,800	13,570,800	13,570,800	-	40,712,400
Train male and female health care workers on BFCI	-	-	12,822,900	25,652,500	12,829,600	51,305,000
Train male and female health volunteers on c-BFCI	-	-	10,570,000	10,570,000	-	21,140,000
Train male and female health care workers on BMS Act 2012	-	4,953,400	4,953,400	4,953,400	4,953,400	19,813,600
Train male and female health care workers on WHO growth charts	-	-	12,716,600	12,716,600	-	25,433,200
Train male and female health care workers on workplace support for breastfeeding	-	-	2,465,600	2,465,600	-	4,931,200
Train male and female health care actors on effective gender mainstreaming for improved provision and implementation of transformative nutrition and health care services and programming	-	-	254,800	254,800	254,800	764,400
Output 2: Increased advocacy communication and social mobilization (ACSM) activities for MIYCAN	-	10,432,750	20,510,600	20,510,600	1,044,900	52,498,850
Establish mechanisms for collaboration with local media to promote MIYCAN	-	4,114,000	8,228,000	8,228,000	-	20,570,000
Hold engagement meetings with key influencers from the community on MIYCAN	-	-	60,000	60,000	-	120,000
Sensitize community and religious leaders on MIYCAN	-	-	630,000	630,000	-	1,260,000
Establish community peer to peer support groups e.g. mother to mother, father to father support groups to be used as platforms for peer to peer support and health education on MIYCN.	-	720,000	720,000	720,000	720,000	2,880,000
Conduct community health and nutrition education targeting men for their increased engagement on their role and support on MIYCN.	-	99,900	99,900	99,900	99,900	399,600

KRA 01. Maternal, infant, young child and adolescent's nutrition (MIYCAN) scaled up	**-**	**29,307,950**	**98,881,600**	**111,711,200**	**19,433,700**	**259,334,450**
Output 2: Increased advocacy communication and social mobilization (ACSM) activities for MIYCAN	-	10,432,750	20,510,600	20,510,600	1,044,900	52,498,850
Advocate for enforcement of school re-entry policy for teenage mothers at least 1 year after delivery to allow uptake of EBF and optimal complementary feeding	-	225,000	225,000	225,000	225,000	900,000
Conduct activities to observe WBW & Malezi Bora	-	5,273,850	10,547,700	10,547,700	-	26,369,250
Output 3: Strengthened monitoring on MIYCAN activities	-	351,000	351,000	351,000	351,000	1,404,000
Conduct quarterly supportive supervision to monitor and evaluate MNCAH programs	-	351,000	351,000	351,000	351,000	1,404,000
KRA 02. Prevention, control and management of micronutrient deficiencies scaled up	**-**	**61,130,750**	**64,219,350**	**61,385,550**	**61,385,550**	**248,121,200**
Output 1: Increased knowledge of health care workers, agriculture officers and community members on micronutrient rich foods	-	58,698,350	61,532,150	58,698,350	58,698,350	237,627,200
Train male and female health care workers on dietary diversification	-	52,945,600	55,779,400	52,945,600	52,945,600	214,616,200
Hold fora with community members together with agricultural extension workers/agrinutritionist/agronomist to promote crop diversification	-	100,000	100,000	100,000	100,000	400,000
Sensitize health care workers and community members (men and women across different ages and diversities) on micronutrient intake through eating diversified diet	-	5,652,750	5,652,750	5,652,750	5,652,750	22,611,000
Output 2: Increased coverage of micronutrient supplementation	-	1,726,500	1,726,500	1,726,500	1,726,500	6,906,000
Carry out routine micronutrient supplementation in health facilities (VIT A, IFAS ,MNPs)	-	1,200,000	1,200,000	1,200,000	1,200,000	4,800,000
Conduct integrated outreaches at the community for micronutrient supplementation	-	300,000	300,000	300,000	300,000	1,200,000
Conduct integrated mentorship and supportive supervision on micronutrient program	-	226,500	226,500	226,500	226,500	906,000
Output 3: Increased intake of fortified foods by the populations	-	705,900	960,700	960,700	960,700	3,588,000
Train PHOs on monitoring and surveillance of fortified foods in the markets	-	-	254,800	254,800	254,800	764,400
Conduct surveillance of fortified foods in the markets (flours, salt, fats and oils)	-	99,900	99,900	99,900	99,900	399,600
Conduct surveillance on iodized salt through schools	-	96,000	96,000	96,000	96,000	384,000

KRA 02. Prevention, control and management of micronutrient deficiencies scaled up	**-**	**61,130,750**	**64,219,350**	**61,385,550**	**61,385,550**	**248,121,200**
Output 3: Increased intake of fortified foods by the populations	-	705,900	960,700	960,700	960,700	3,588,000
Sensitize communities (men and women across different ages and diversities) on consumption of fortified foods	-	150,000	150,000	150,000	150,000	600,000
Sensitize health care workers and CHVs on food fortification	-	360,000	360,000	360,000	360,000	1,440,000
KRA 03. Prevention, control and management of Diet Related Non-Communicable Diseases (DRNCDs) scaled up	**-**	**1,777,800**	**1,777,800**	**1,777,800**	**1,777,800**	**7,111,200**
Output: Increased knowledge on prevention, control and management of diet related non communicable disease among health care workers and community members	-	1,777,800	1,777,800	1,777,800	1,777,800	7,111,200
Celebrate the national days e.g. World Diabetic Day	-	937,800	937,800	937,800	937,800	3,751,200
Conduct Training/CME/OJT of health care workers and CHVs on healthy diets and lifestyle	-	540,000	540,000	540,000	540,000	2,160,000
Sensitize communities (men and women across different ages and diversities) on health diets and lifestyle through the community forums	-	300,000	300,000	300,000	300,000	1,200,000
KRA 4. Nutrition in integrated management of malnutrition and emergency strengthened	**-**	**32,247,900**	**10,752,700**	**31,142,600**	**10,752,700**	**84,895,900**
Output 1: Enhanced capacity of health care providers for IMAM service delivery and programming.	-	21,922,200	1,815,700	21,922,200	1,815,700	47,475,800
Train health care providers on IMAM	-	1,459,500	-	1,459,500	-	2,919,000
Sensitize CHVs on CMAM	-	19,184,000	-	19,184,000	-	38,368,000
Train CHVs and Health care workers to effectively identify, document and address underlying social cultural and economic factors contributing to malnutrition, affecting optimal adherence to IMAM services and relapse by MAM/SAM patients.	-	-	537,000	-	537,000	1,074,000
Carry out DQA on IMAM Program	-	776,000	776,000	776,000	776,000	3,104,000
Carry out support supervision on IMAM	-	502,700	502,700	502,700	502,700	2,010,800
Output 2: Strengthened coordination and partnerships for integrated preparedness and response initiatives	-	10,325,700	8,937,000	9,220,400	8,937,000	37,420,100
Conduct stakeholders fora to discuss nutrition situation	-	972,000	972,000	972,000	972,000	3,888,000
Sensitize county health assembly committee members on emergency nutrition activities	-	103,000	-	103,000	-	206,000
Hold sub county meetings to constitute emergency response teams	-	145,300	-	-	-	
						145,300
Hold county meetings to constitute emergency response teams	-	152,000	152,000	152,000	152,000	608,000

KRA 4. Nutrition in integrated management of malnutrition and emergency strengthened	**-**	**32,247,900**	**10,752,700**	**31,142,600**	**10,752,700**	**84,895,900**
Output 2: Strengthened coordination and partnerships for integrated preparedness and response initiatives	-	10,325,700	8,937,000	9,220,400	8,937,000	37,420,100
Hold stakeholders analysis meeting for nutrition specific and nutrition sensitive activities during emergencies	-	181,400	1,000	181,400	1,000	364,800
Prepare sub county nutrition contingency plan	-	6,394,000	6,394,000	6,394,000	6,394,000	25,576,000
Develop nutrition surveillance tool	-	963,400	3,400	3,400	3,400	973,600
Conduct annual nutrition needs assessment during emergencies,	-	1,414,600	1,414,600	1,414,600	1,414,600	5,658,400
KRA 05. Clinical nutrition and Dietetics strengthened	**-**	**23,269,340**	**23,269,340**	**54,427,840**	**26,769,340**	**127,735,860**
Output 1: Improved competencies, skills and knowledge of health care workers in disease management and dietetics services	-	3,579,240	3,579,240	3,579,240	7,079,240	17,816,960
Disseminate clinical nutrition and dietetics reference manual to health care providers	-	140,000	140,000	140,000	140,000	560,000
Train health care providers on nutrition care process	-	537,000	537,000	537,000	537,000	2,148,000
Conduct CMEs/OJT to health care providers on clinical nutrition and dietetics	-	942,240	942,240	942,240	942,240	3,768,960
Train nutritionist and dietitians on short courses	-	1,680,000	1,680,000	1,680,000	1,680,000	6,720,000
Train nutritionist and dieticians on specialized post graduate courses on clinical nutrition	-	-	3,500,000-	-	3,500,000	3,500,000
Sensitize health care workers on enteral and parenteral feeds	-	280,000	280,000	280,000	280,000	1,120,000
Output 2: Enhanced standards of quality of nutrition and dietetics services for inpatients and general hospital services	-	1,042,100	1,042,100	1,018,100	1,042,100	4,144,400
Develop individualized SOPs for provision of clinical nutrition and dietetics services in the hospital	-	187,400	187,400	187,400	187,400	749,600
Develop inpatient feeding protocol	-	36,000	36,000	36,000	36,000	144,000
Disseminate inpatient feeding protocol to the county, hospital management, health care workers and food inspection committee	-	48,000	48,000	24,000	48,000	168,000
Conduct quality assurance assessments for clinical nutrition services at the facility	-	70,700	70,700	70,700	70,700	282,800
Hold review meetings for discussion of findings on QA assessments findings for clinical nutrition and dietetics services	-	700,000	700,000	700,000	700,000	2,800,000
Train users hospital data base for clinical nutrition with modern data archiving and retrieval	-	105,000	105,000	105,000	105,000	420,000
Develop system for hospital data base for clinical nutrition with modern data archiving and retrieval	-	-	-	6,000,000	-	6,000,000
Sensitize nutritionists and dieticians on clinical nutrition and dietetics monitoring and reporting tools	-	105,000	105,000	105,000	105,000	420,000

KRA 05. Clinical nutrition and Dietetics strengthened	**-**	**23,269,340**	**23,269,340**	**54,427,840**	**26,769,340**	**127,735,860**
Output 2: Enhanced standards of quality of nutrition and dietetics services for inpatients and general hospital services	-	1,042,100	1,042,100	1,018,100	1,042,100	4,144,400
Print clinical nutrition and dietetics monitoring and reporting tools	-	252,000	252,000	252,000	252,000	1,008,000
Output 3: Strengthened monitoring and reporting of clinical nutrition and dietetics services from all facilities	-	602,000	602,000	31,402,000	602,000	33,208,000
Sensitization of county policy makers and managers within health department to prioritize clinical nutrition	-	140,000	140,000	140,000	140,000	560,000
Construct a modern kitchen with a designated room for therapeutic dietary modification	-	-	-	24,000,000	-	24,000,000
Construct designated rooms in wards for preparation of therapeutic feeds	-	-	-	800,000	-	800,000
Output 4: Strengthened capacity of health care providers to provide quality nutrition services for HIV and TB clients	-	18,046,000	18,046,000	18,428,500	18,046,000	72,566,500
Disseminate national guidelines on TB and HIV	-	180,000	180,000	180,000	180,000	720,000
Train TOTs on HIV nutrition focused therapy	-	307,500	307,500	307,500	307,500	1,230,000
Train Health care providers on HIV focused nutrition therapies	-	797,500	797,500	797,500	797,500	3,190,000
Train CHVs on HIV focused nutrition therapies	-	7,500,000	7,500,000	7,500,000	7,500,000	30,000,000
Train ToTs on nutrition in TB focused therapy	-	-	-	382,500	-	382,500
Train health care workers on TB focused nutritional therapies	-	1,012,500	1,012,500	1,012,500	1,012,500	4,050,000
Train CHV on TB focused nutrition therapies	-	7,500,000	7,500,000	7,500,000	7,500,000	30,000,000
Conduct mentorship and OJT on nutrition in TB and HIV	-	508,800	508,800	508,800	508,800	2,035,200
Print and distribute TB and HIV registers	-	36,000	36,000	36,000	36,000	144,000
Conduct data quality assessments using QIT/ work improvement teams' activities at all levels on NACS	-	203,700	203,700	203,700	203,700	814,800

KRA 06. Nutrition in Agriculture and WASH promoted	**34,575,320**	**85,690,420**	**85,754,420**	**87,539,920**	**87,539,920**	**381,100,000**
Output 1: Increased capacity of the community and agriculture staff to produce diversified crops of nutrient dense	-	39,510,500	39,510,500	41,381,000	41,381,000	161,783,000
Develop county specific modules for Agri-nutrition	-	705,000	705,000	705,000	705,000	2,820,000
Train Agri nutritionist and agronomists on agri-nutrition	-	2,291,000	2,291,000	2,291,000	2,291,000	9,164,000
Train communities on water harvesting for small scale Agri-nutrition	-	8,250,000	8,250,000	8,250,000	8,250,000	33,000,000
Train extension staff on modern farming techniques	-	2,291,000	2,291,000	2,291,000	2,291,000	9,164,000
Train the staff and community on kitchen gardens	-	3,082,500	3,082,500	3,082,500	3,082,500	12,330,000
Diversify crop production to include high value nutrient dense produce	-	7,380,000	7,380,000	7,380,000	7,380,000	29,520,000
Promote diversification of crop enterprises	-	320,000	320,000	320,000	320,000	1,280,000
Training of staff and communities on value addition	-	10,541,000	10,541,000	10,541,000	10,541,000	42,164,000
Train community peer to peer support groups on Agri-nutrition livelihoods activities and IGAs and link them to productive livelihood-based sectors and financial institutions for support.	-	-	-	1,870,500	1,870,500	3,741,000
Train communities and extension staff on proper storage preservation and processing of produce	-	4,290,000	4,290,000	4,290,000	4,290,000	17,160,000
Conduct sensitization meeting to agriculture department on impact unsafe use of pesticides on nutrition	-	360,000	360,000	360,000	360,000	1,440,000
Output 2: Increased intake of diversified diet among women of reproductive age and children under five years	-	1,480,000	1,480,000	1,480,000	1,480,000	5,920,000
Develop recipe books for women of reproductive age and children	-	580,000	580,000	580,000	580,000	2,320,000
Food demonstration during related Agriculture world food days	-	900,000	900,000	900,000	900,000	3,600,000
Output 3: Increased opportunities for knowledge sharing among stakeholders in health and agriculture	-	8,640,000	8,640,000	8,640,000	8,640,000	34,560,000
Conduct agri-nutrition conference	-	7,990,000	7,990,000	7,990,000	7,990,000	31,960,000
Conduct benchmarking visits on modern farming technology	-	650,000	650,000	650,000	650,000	2,600,000

KRA 06. Nutrition in Agriculture and WASH promoted	**34,575,320**	**85,690,420**	**85,754,420**	**87,539,920**	**87,539,920**	**381,100,000**
Output 4: Increased uptake of WASH services for improved nutrition	14,591,820	14,703,820	14,703,820	14,703,820	14,703,820	73,407,100
Advocate for provision of adequate sanitation facilities in Health facilities, schools, and other institutions in collaboration with public health and sanitation department	5,304,320	5,304,320	5,304,320	5,304,320	5,304,320	26,521,600
Create demand for sanitation uptake by promoting Community Led Total Sanitation in collaboration with public health department	8,187,500	8,187,500	8,187,500	8,187,500	8,187,500	40,937,500
Advocate for equal engagement of men and women across different diversities in decision making, including sensitize households on water handling technologies (in the design and installation of water supplies to ensure easy and equitable access to safe water by all, and in support of reduced maternal workload among women and improved nutrition care and hygiene practices)	1,100,000	1,212,000	1,212,000	1,212,000	1,212,000	5,948,000
Output 5: Integration of WASH into nutrition strengthened	19,983,500	21,356,100	21,420,100	21,335,100	21,335,100	105,429,900
Incorporate WASH in Nutrition Technical Working Group (TWG) and Inter-agency coordinating Committee (ICC)	440,000	440,000	440,000	440,000	440,000	2,200,000
Hold joint Nutrition-WASH integrated planning meetings	191,000	191,000	191,000	191,000	191,000	955,000
Develop WASH-Nutrition integrated operational Plans	52,500	182,500	182,500	182,500	182,500	782,500
Develop and disseminate IEC materials for integrated WASH into nutrition	-	684,000	684,000	684,000	684,000	2,736,000
Develop an integrated quantification report for Nutrition, WASH (water treatment chemicals) among other pharmaceuticals and non-pharmaceuticals in collaboration with public health officers	369,000	384,000	369,000	369,000	369,000	1,860,000
Mainstream Nutrition and WASH framework in County Health services and Sanitation Bill	-	-	85,000	-	-	85,000
Hold joint public hand washing and nutrition awareness campaigns equally targeting men and women across different ages and diversities in collaboration with public health department	631,000	631,000	631,000	631,000	631,000	3,155,000
Conduct joint house to house visits to sensitize caregivers on hand washing and nutrition	18,300,000	18,300,000	18,300,000	18,300,000	18,300,000	91,500,000
Conduct joint supportive supervision on WASH activities	-	543,600	537,600	537,600	537,600	2,156,400

KRA 07. Nutrition in education and Social protection promoted	**19,968,448**	**22,739,584**	**21,272,084**	**21,734,084**	**21,074,200**	**106,788,400**
Output 1: Increased knowledge of teachers and stakeholders on optimal feeding for school going children	3,427,848	4,086,984	3,081,484	3,081,484	2,421,600	16,099,400
Conduct sensitization meeting to stakeholder and teachers on school feeding program	306,600	306,600	306,600	306,600	306,600	1,533,000
Train ECDE teachers on child growth assessment	1,006,248	659,884	659,884	659,884	-	2,985,900
Develop and print IEC materials on school feeding	-	1,005,500	-	-	-	1,005,500
Conduct sensitization meetings on dietary diversification to teachers in schools	915,000	915,000	915,000	915,000	915,000	4,575,000
Conduct quarterly monitoring and evaluation of health and nutrition programmes	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	6,000,000
Output 2: Increased knowledge of school going children on uptake of diversified diet for improved nutrition	2,754,600	4,194,600	4,194,600	4,194,600	4,194,600	19,533,000
Establish integrated kitchen gardens in schools for dietary diversity in collaboration with agriculture sector	2,754,600	2,754,600	2,754,600	2,754,600	2,754,600	13,773,000
Establish 4k clubs in primary schools in collaboration with agriculture sector	-	720,000	720,000	720,000	720,000	2,880,000
Establish agriculture youth clubs in high schools in collaboration with agriculture sector	-	720,000	720,000	720,000	720,000	2,880,000
Output 3: Increased uptake of nutrition services in schools to promote health of children	13,200,000	13,872,000	13,410,000	13,872,000	13,872,000	68,226,000
Conduct growth monitoring in ECDE in collaboration with teachers	6,300,000	6,300,000	6,300,000	6,300,000	6,300,000	31,500,000
Conduct ECDE VAS and deworming during Malezi Bora weeks	6,300,000	6,300,000	6,300,000	6,300,000	6,300,000	31,500,000
Conduct Malezi bora activities (VIT A and deworming) in schools	-	210,000	210,000	210,000	210,000	840,000
Rehabilitate food storage facilities in schools.	600,000	600,000	600,000	600,000	600,000	3,000,000
Enhance capacity among teachers and health care workers to offer youth friendly nutrition and related health education and services.	-	462,000	-	462,000	462,000	1,386,000
Output 4: Increased knowledge of social protection staff and health care workers on provision of optimal nutrition for vulnerable population	586,000	586,000	586,000	586,000	586,000	2,930,000
Train gender and social services department and social protection actors on basics on health and nutrition and its linkage to social protection programmes.	25,000	25,000	25,000	25,000	25,000	125,000

KRA 07. Nutrition in education and Social protection promoted	**19,968,448**	**22,739,584**	**21,272,084**	**21,734,084**	**21,074,200**	**106,788,400**
Output 4: Increased knowledge of social protection staff and health care workers on provision of optimal nutrition for vulnerable population	586,000	586,000	586,000	586,000	586,000	2,930,000
Train health care workers on importance of geriatric nutrition	462,000	462,000	462,000	462,000	462,000	2,310,000
Conduct sensitization to children home managers on importance of good nutrition	99,000	99,000	99,000	99,000	99,000	495,000
KRA 8. Sectoral and multisectoral Nutrition Governance, Coordination, Legal/regulatory frameworks, Leadership and Management strengthened	**364,200**	**1,792,600**	**1,692,600**	**1,692,600**	**1,692,600**	**7,234,600**
Output 1: Strengthened coordination and partnership for nutrition	264,200	1,506,600	1,506,600	1,506,600	1,506,600	6,290,600
Carry out stakeholder mapping for sectoral and multi sectoral Nutrition coordination and Collaboration in the County	-	182,000	182,000	182,000	182,000	728,000
Conduct stakeholder forums for development of sectoral and multisectoral coordination framework	-	197,000	197,000	197,000	197,000	788,000
Hold annual governance and accountability meetings	121,200	121,200	121,200	121,200	121,200	606,000
Hold joint planning meetings with sectoral and multisectoral stakeholders	-	188,400	188,400	188,400	188,400	753,600
Hold quarterly Nutrition Technical forum	143,000	818,000	818,000	818,000	818,000	3,415,000
Output 2: Enhanced development and implementation of nutrition and dietetics relevant regulatory framework	100,000	286,000	186,000	186,000	186,000	944,000
Finalize preparation of the Health Services and Sanitation bill	100,000	100,000	-	-	-	200,000
Sensitize legislators on nutritional acts	-	186,000	186,000	186,000	186,000	744,000
KRA 9. Sectoral and multisectoral Nutrition Information, learning and research systems strengthened	**119,500**	**34,666,101**	**54,807,600**	**77,087,201**	**12,386,500**	**179,066,902**
Output 1: Strengthened nutrition sector capacity in nutrition information and evidence-based decision-making	119,500	15,392,500	33,909,600	47,364,600	1,937,500	98,723,700
Conduct data quality surveillance and audit on quarterly basis to facilities	-	378,000	378,000	378,000	378,000	1,512,000

KRA 9. Sectoral and multisectoral Nutrition Information, learning and research systems strengthened	**119,500**	**34,666,101**	**54,807,600**	**77,087,201**	**12,386,500**	**179,066,902**
Output 1: Strengthened nutrition sector capacity in nutrition information and evidence-based decision-making	119,500	15,392,500	33,909,600	47,364,600	1,937,500	98,723,700
Conduct training of Health care workers on gender, age and diversity sensitive data management for nutrition services	-	-	31,972,100	31,972,100	-	63,944,200
Carry out monthly data review meetings for nutrition activities	-	1,440,000	1,440,000	1,440,000	1,440,000	5,760,000
Conduct joint learning conferences with other sectors	-	13,455,000	-	13,455,000	-	26,910,000
Conduct joint work planning with multi sectors on nutrition information system	119,500	119,500	119,500	119,500	119,500	597,500
Output 2: Quality gender, age and diversity disaggregated nutrition data generated for evidence-based programming	-	19,273,601	20,898,000	29,722,601	10,449,000	80,343,202
Conduct gender integrated MIYCN KAPs survey after every 2 years	-	-	10,449,000	10,449,000	-	20,898,000
Conduct gender integrated SMART survey	-	10,449,000	10,449,000	10,449,000	10,449,000	41,796,000
Conduct gender integrated operational research on nutrition	-	8,824,601	-	8,824,601	-	17,649,202
KRA 10. Supply chain management for nutrition commodities and equipment strengthened	**4,740,560**	**26,890,700**	**51,442,660**	**55,539,000**	**21,519,360**	**160,132,280**
Output 1: Increased capacity of health care providers to manage commodities for nutrition	3,554,000	9,499,340	5,278,500	8,494,840	4,128,000	30,954,680
Establish county commodity technical working group	146,000	-	-	146,000	-	292,000
Train health care workers on LMIS for nutrition commodities (IMAM, HIV, TB e.t.c.)	-	6,091,340	1,870,500	4,940,840	720,000	13,622,680
Conduct bench marking trips on best practices for nutrition	3,408,000	3,408,000	3,408,000	3,408,000	3,408,000	17,040,000
Output 2: Availability of nutrition commodities, supplies and equipment enhanced	1,186,560	17,391,360	46,164,160	47,044,160	17,391,360	129,177,600
forecast and quantify therapeutic and supplementary feeds	-	280,000	280,000	280,000	280,000	1,120,000
Procure anthropometric equipment	351,360	7,751,360	36,524,160	36,524,160	7,751,360	88,902,400
Procure enteral and parenteral feeds	-	8,340,000	8,340,000	9,220,000	8,340,000	34,240,000
Distribute, enteral, parenteral, therapeutic feeds, and supplementary feeds	-	184,800	184,800	184,800	184,800	739,200
Rehabilitation of stores in health facilities	835,200	835,200	835,200	835,200	835,200	4,176,000

KRA 11. Advocacy, communication and social mobilization (ACSM) strengthened	**111,000**	**1,917,000**	**3,805,800**	**2,450,100**	**1,594,500**	**9,878,400**
Output 1: Increased advocacy activities for prioritization of nutrition into the county budgetary plans and increased human resource for nutrition	111,000	1,857,000	2,307,600	2,450,100	1,594,500	8,320,200
Conduct advocacy meeting with decision makers for increased budgetary allocation for nutrition	96,000	553,500	1,064,100	1,206,600	351,000	3,271,200
Conduct sensitization Meeting for multilevel and multisector sensitization on prioritization of nutrition into county strategic planning and investment plan	-	225,000	225,000	225,000	225,000	900,000
Sensitize Sub-County and County training committees on nutrition training needs	-	900,000	900,000	900,000	900,000	3,600,000
Sensitize decision makers and political leaders on need to equitably recruit additional male and female nutritionists	15,000	178,500	118,500	118,500	118,500	549,000
Output 2: Increased human resource for nutrition	-	60,000	1,498,200	-	-	1,558,200
Equitably recruit and deploy male and female nutritionist and dieticians as per human resource norms and standards	-	60,000	1,252,500	-	-	1,312,500
Orientation of newly male and female recruited staff oriented on clinical nutrition and dietetics	-	-	175,000	-	-	175,000
Conduct capacity assessment for nutrition and dietetics/training needs assessment	-	-	70,700	-	-	70,700
GRAND TOTAL	**59,879,028**	**319,923,245**	**415,839,254**	**502,855,695**	**261,756,970**	**1,571,399,192**

LIST OF KEY CONTRIBUTORS

	NAME	DESIGNATION	ORGANIZATION
1.	DR. GICHUYIA M'RIARA	COUNTY EXECUTIVE COMMITTEE MEMBER (CECM MHPS)	THARAKA NITHI COUNTY
2.	FRIDAH MUTHONI MURUNGI	CHIEF OFFICER – PUBLIC HEALTH AND SANITATION	THARAKA NITHI COUNTY
3.	MR. DIEGO N. WILSON	CHIEF OFFICER – PUBLIC HEALTH	THARAKA NITHI COUNTY
4.	SIMON NYAGA	COUNTY NUTRITION COORDINATOR	THARAKA NITHI COUNTY
5.	LENITY KAWIRA	SUB COUNTY NUTRITIONIST	THARAKA NITHI COUNTY
6.	ZACHARY MBERIA	SUB COUNTY MEDICAL OFFICER OF HEALTH	THARAKA NITHI COUNTY
7.	ROSE MICHENI	COUNTY NURSING SERVICES MANAGER	THARAKA NITHI COUNTY
8.	ALEX MUGENDI GITONGA	DEPUTY SUB COUNTY PUBLIC HEALTH NURSE	THARAKA NITHI COUNTY
9.	JENNIFER MBITHE NDUVA	DEPUTY COUNTY HEALTH RECORDS AND INFORMATION OFFICER	THARAKA NITHI COUNTY
10.	PETER GICHURU	ACCOUNTANT	THARAKA NITHI COUNTY
11.	FRIDAH GITARI	SUB COUNTY PUBLIC HEALTH NURSE	THARAKA NITHI COUNTY
12.	JEDIDAH WANJIKU	ASSISTANT LECTURER - NUTRITION	CHUKA UNIVERSITY
13.	JONATHAN MUTUA	COUNTY HEALTH ADMINISTRTION OFFICER	THARAKA NITHI COUNTY
14.	KENNETH MICHENI	DEPUTY COUNTY NURSING SERVICES MANAGER	THARAKA NITHI COUNTY
15.	GEORGE KABURU	DIRECTOR - E.C.D. E	THARAKA NITHI COUNTY
16.	MARTIN MUTUMA	SUB-COUNTY SOCIAL DEVELOPMENT OFFICER	THARAKA NITHI COUNTY
17.	FAITH KARIMI	PROJECT OFFICER - CARITAS	THARAKA NITHI COUNTY
18.	JESCAH VAATI	SUB COUNTY HEALTH RECORDS AND INFORMATION OFFICER	THARAKA NITHI COUNTY
19.	ELIPHELET GITONGA	COUNTY HEALTH RECORDS AND INFORMATION MANAGER	THARAKA NITHI COUNTY
20.	LUCY WANYAGA NJAU	SUB COUNTY NUTRITION OFFICER	THARAKA NITHI COUNTY
21.	DANIEL MURITHI	COUNTY MEDICAL LABORATORY. COORDINATOR.	THARAKA NITHI COUNTY
22.	ANNE WANJIKU NJAGI	SUB-COUNTY CROPS DEVELOPMENT OFFICER	THARAKA NITHI COUNTY
23.	SAMSON KOMER	COUNTY DIRECTOR - WATER	THARAKA NITHI COUNTY
24.	CORNELLIUS MUSEMBI	COUNTY PUBLIC HEALTH OFFICER	THARAKA NITHI COUNTY
25.	VICTOR MWITI	TECHNICAL OFFICER - NUTRITION	NHP PLUS
26.	JOAN IRUNGU	COUNTY PROGRAM COORDINATOR	NUTRITION INTERNATIONAL
27.	EVELYN KAARI NJUE	CHIEF OFFICER MEDICAL SERVICES	THARAKA NITHI COUNTY