THE UNITED REPUBLIC OF TANZANIA

PRESIDENT'S OFFICE

REGIONAL ADMNISTRATION AND LOCAL GOVERNMENT AUTHORITIES

RUKWA REGION

REGIONAL MULTISECTORAL NUTRITION STRATEGIC PLAN (RMNSP)

JULY 2018- JUNE 2021

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ACRONYMS

CHMT	-	Council Health Management Team
CYF	-	Children, Youth and Families
DCC	-	District Consultative Committee
DDSC	-	District Defense and Security Committee
DRNCDs	-	Diet Related Non-Communicable Diseases
EBF	-	Exclusive breastfeeding
ECD	-	Early Childhood Development
FC	-	Full Council
IQ	-	Intelligence Quotient
IYCF	-	Infant and Young Child Feeding
KRAs	-	Key Result Areas
LBWs	-	Low Birth Weights
LGAs	-	Local Government Authorities
MCDs	-	Most Critical Days
MoHCDGEC	-	Ministry of Health, Community Development, Gender, Elderly and Children
NMNAP	-	National Multisectoral Nutrition Action Plan
PORALG	-	President's Office Regional Administration and Local Government Authorities
RCC	-	Regional Consultative Committee
RDSC	-	RegionalDefense and Security Committee
RHMT	-	Regional Health Management Team
RMNSP	-	Regional Multisectoral Nutrition Strategic Plan
RS	-	Regional Secretariat

SDGs	-	Sustainable Development Goals
SES	-	Social Economic Status
SUN	-	Scaling Up Nutrition
TDHS	-	Tanzania Demographic and Health Survey
TFR	-	Total Fertility Rate
TOR	-	Terms of Reference
USI	-	Universal Salt Iodization
VAD	-	Vitamin A Deficiency
VC	-	Village Committee
WDC	-	Ward Development Committee
WHO	-	World Health Organization

FORERWORD

Tanzania has made a good progress in addressing the problem of undernutrition in children. However, the pace of improvement, especially for the alleviation of stunting, has been slow, with data showing that the prevalence of stunting reduced from about 50% in 1992 to about 34% in 2015/16. In terms of its public health importance, the current National level of stunting is categorized as “high” and it is higher than the observed African stunting level of 30%. Moreover, this high level of stunting is a result of high prevalence observed in some Regions, Rukwa being among them, with the highest level of stunting (56%) in the Country.Furthermore, the double burden of malnutrition has emerged,where undernutrition exists together with the rapidly increasing problem of diet-related non-communicable diseases; overweight, obesity, hypertension and type-2 diabetes. Results show that these conditions have doubled in the past ten years (TOR).

One of the key factors for the existing slow progress in alleviating stunting and other nutritional problems in the country and in the Region as well, has been the limited capacity to translate the political commitment and economic growth into effective, impactful and sustainable strategies and interventions, and an ability to implement community-centered actions and interventions which are based into scale-up, multisectoral, well-coordinated, integrated, resourced and monitored. To address this fallback, the Regional administration has started to strengthen and fully involve in the leadership and management of nutrition activities throughout the Region. One of the steps made by the Region in this aspect include the inclusion of nutrition activities in the RS and LGA plans and annual budgets, formation of Regional and Council multisectoral steering committees on Nutrition which ensured full of participation key stakeholders on nutrition issues and employment of nutrition officers at Region and all council levels.

Therefore, the desired change for this RMNSP will be same as expected to be met by the NMNAP 2016-2021, that *“Children, adolescents, women and men in Rukwa are better nourished leading to healthier and more productive lives that contribute to the Regional economic growth and sustainable development”*. Similarly, to achieve this change, the Region will put more emphasis on improving nutrional status of the Regional community in line with the seven key result areas (KRAs) identified in the NMNAP;

(i) Scaling-up maternal, infant, young child and adolescent nutrition
(ii) Scaling up prevention and control of micronutrient deficiencies,
(iii) scaling up integrated management of acute malnutrition,
(iv) scaling up prevention and management of diet-related non-communicable diseases,

(v) integration of multisectoral nutrition sensitive interventions,
(vi) improving multisectoral nutrition governance, and

(vii) establishing a multisectoral nutrition information system within the Region.

I therefore, call upon all stakeholders within and outside the Region, National and International-level development partners to support the Region in the implementation of our Regional Multisectoral Nutrition Strategic Plan.

Hon. Joachim LeonardWangabo

Regional Commissioner.

ACKNOWLEDGEMENT

This three year Regional Multisectoral Nutrition Strategic Plan is Rukwa's first Multi-sectoral response to combat malnutrition in the Region. The development of this Plan was made possible due to an extensive review and consultation process of nutrition stakeholders in the Region and involvement of heads of sections and departments related and/or sensitive to nutrition from the Regional Secretariat and Local Government Authorities. On behalf of the Regional administration, I would like to convey sincere thanks to all individuals and institutions for their fruitful contributions.

Special appreciations also go to the Central Government through the Prime Minister's office for developing the National Multisectoral Nutrition Action Plan of 2016-2021.This vital document has been the main reference and of help during the whole process of developing this Strategic plan.

Despite that I am fully aware of the involvement of the above mentioned contributors of this document, I would also to like mention some of members who dedicated their time to cite and implore the contributions from various documents and stakeholders respectively and finally coming with a final Regional Strategic plan document. These are Dr. Boniface D. Kasululu (Regional Medical Officer), Ms. Alice C.Kipanga (Regional Nutritionist), Ms. Riziki I. Mbilinyi(Nutritionist), Godfrey J. Mapunda (Regional Social welfare officer), Cylicus F. Twamalenke (Regional pharmacist) and other members of the Regional Health Management Team. Their contributions are highly valued.

Lastly, but not least I would like to recognize the leadership role shown by the Regional Commissioner, Hon. Joachim Leonard Wangabo from early stages of developing this important tool. He always made follow up on all preparation stages to its finalization. The members of parliament from the five Rukwa's constituenciescannot be forgotten as important stakeholders during the development process of this plan.

Bernard M. Makali
Regional Administrative Secretary

EXECUTIVE SUMMARY

CHAPTER 1: INTRODUCTION

1.1. Background

This document articulates the Rukwa Regional Multisectoral Nutrition Strategic plan (RMNSP) for the period of July 2018 to June 2021.The period concides with the National Multisectoral Nutrition Action Plan (2016 to 2021). This three-years RegionalMultisectoralNutrition Strategic Plan (RMNSP) is Rukwa'sfirst Multi-sectoral response to address the unacceptably high levels of malnutrition in the Region. The plan focuses on 7 key result areas related to improving nutrition situationin the Region. The strategic plan gives a majorpriority to new multi sector, synergistic efforts to strengthen and expand interventions related to and promote prevention of stunting in children less thantwo years by targeting the first 1,000 Most Critical Days (i.e. the period from conception, all duration of pregnancy and delivery until the child attain the age of two years). Careful application of these interventions will bring long-term added health benefits and contribute significantly to the productivity ofRukwa’s population and the Region at large.

In January, 2018 theresponsible Minister for PORALG, signed a contract with all Regional Commissionersof all Mainland Tanzania including RukwaRegion on the importance of new strategic actions in nutrition and reinforced advocates for scaling up of most effective and affordable proven high impact nutrition interventions that could be implemented at country level as articulated in the National Multisectoral Nutrition Action Plan. This initiative highlighted the cost of stunting in children less than two years of age in terms of health and constraints on the future growth and development of the child. The persistence of stunting was recognized and critical action was to focus on the critical period of the first 1,000 days in a child's life.Tanzania being a SUN Country, has committed itself to contribute to the SUN'sRoadmap which is well-articulated in the National Nutrition Strategy 2011/2012 to 2015/2016 and the new MultisectoralNutrition ActionPlan.

Tanzania's Development Vision 2025 seeks to attain middle income economy for the country by enhancing human capital development and increasing productivity. As productivity depends on the overall health of a population, a well-nourished and healthy society is needed to achieve this goal. Malnutrition increases the risk of illness and death and impairs physical growth and cognitive development. Furthermore, malnourished children develop more slowly, perform worse in school and complete fewer years of school, hencenegative impact on economic productivity.

To ensure attainment of good nutritional outcomes for the Rukwa's population, this RMNSP aims to design and implement interventions for reducing prevalence of poor nutritional status due to both undernutrition and overnutrition.

1.2. Malnutrition

The term malnutrition is commonly used to refer to both undernutrition and overnutrition.Undernutrition is mainly described into a number of forms or indicators.These include; (i) Stunting (Low height-for-age or chronic undernutrition), (ii) Wasting (low weight-for-height or acute undernutrition), (iii) Underweight (low weight-for-age and is the combination of stunting and wasting), (iv) low birth weight (weight of less than 2.5Kg of a new born at birth) and (v) Micronutrient deficiencies (often called hidden hunger). Micronutrient deficiencies are caused by deficiencies of essential vitamins and minerals. The main essential vitamin deficiencies in Tanzania are vitamin A, Vitamin B9 (Folic acid/folate) and vitamin B12, while the main essential mineral deficiencies are Iodine, Iron and Zinc. (TOR). The nutritional status of children under the age of five years is an important indicator of children's health. Nutritional status of a child can be assessed through evaluation of the anthropometric data on height and weight while that of adult can be assessed through body mass index (BMI) (2015/16TDHS)

In contrast, overnutrition, manifests mainly as overweight and obesity and it leads to the development of diet related non-communicable diseases (DRNCDs) including diabetes, hypertension, cardio-vascular diseases, weight-related joint pains and several types of cancer (NMNAP 2016-2021).

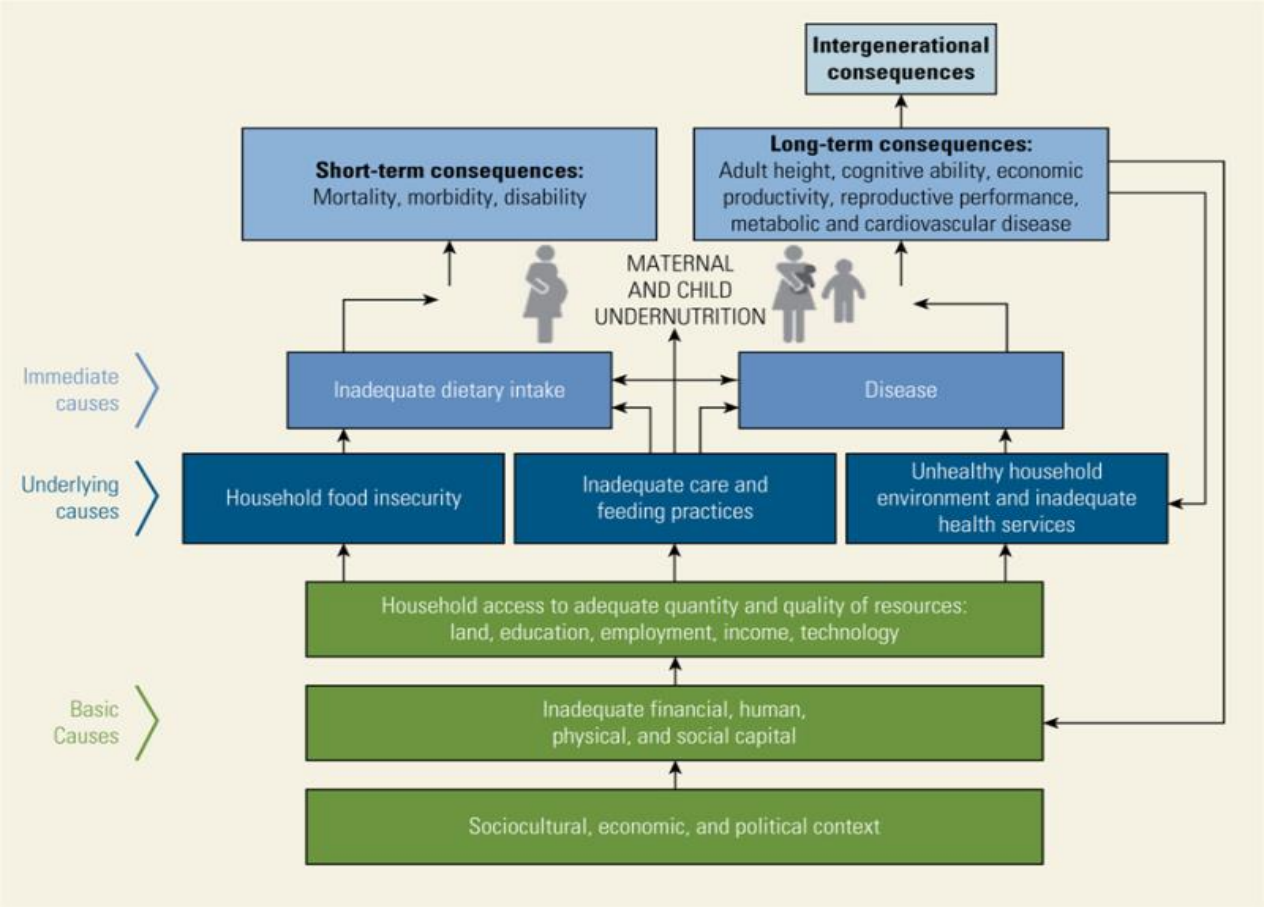
1.3. Magnitude of Malnutrition in Tanzania

Recent data (TDHS 2015/16) shows that although Tanzania has made good progress in addressing the problem of undernutrition, the pace of improvement, especially for stunting and anaemia has been slow. Between 2010 and 2015/16, stunting in children below five years of age was reduced from 42% to 34%. Prevalence of anaemia in this group remained at 58% while that in women in the reproductive age increased from 40% to 45%

1.4. Causes of Malnutrition

Although majority can take it as a simpler as such, but in reality, the causes of malnutrition are complex, usually interrelated and multisectoral. In broader terms, the causes of malnutrition can be divided into main three forms. These are (i) immediate causes which are inadequate or poor dietary intake and diseases, (ii) Underlying causes including household food insecurity, inadequate maternal and child care (health and feeding), inadequate availability and access to basic services like health, education and WASH and (iii) basic causes. The determinants of maternal and child undernutrition are illustrated in figure 1.

Figure 1: The 2015 UNICEF Conceptual Framework of the Determinants of Maternal and Child Undernutrition.



This justifies to the importance of holistic Early Childhood Development (ECD) interventions focusing to different developmental aspects (mental and physical) and different contexts (home, school and community).

1.5. Forms of undernutrition (indicators of nutritional status)

1.5.1. Stunting among children under five (Height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Stunting indicates a failure to achieve a one's own genetic potential for height and it is a manifestation of severe, irreversible physical and cognitive damage caused by chronic malnutrition in early life of a child, often beginning before birth. In children of less than 24 months of age, stunting negatively and permanently affects their health, learning capacity and future productivity level. It affects both health and cognitive development of children with implications across the full lifecycle and as a result negatively impacting on national economic development. When compared with a stunted child, a well-nourished child completes more years of schooling, learns better, and earns higher wages in adulthood, thereby increasing the odds that he or she will escape a life of poverty.

Globally, over 162 million children under the age of five years are stunted and most of the cases are found in the sub-Saharan Africa and South Asia which contributes to almost three quarters of all stunted children in the world, each zone by 40% and 39% respectively meaning that, out of 162 million stunted children; 64,800,000 and 63,180,000 children are found in the Sub-Saharan Africa and South-Asia respectively (WHO).

1.5.2. Wasting among children under five years of age (Weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes the current nutritional status of a child. It is estimated that, over 52 million children under the age of five years globally are moderately or severely wasted (thin). The current global levels of severe wasting are responsible for up to 2 million deaths annually as a wasted child is three times more likely to die than a healthy child (WHO).

1.5.3. Under-weight (Weight-for-Age)

Weight-for-age is a composite index of height-for-age and weight-for-height that takes into account both acute and chronic under nutrition.

1.5.4. Low Birth weight

A child's weight at birth is a very important indicator as birth weight is strongly associated with mortality during the first year of life and, to a lesser degree with developmental problems in childhood and the risk of various diseases in adulthood. Low birth weight is the proxy indicator of maternal malnutrition. It is estimated that 15%-20% of all births worldwide are Low birth weight (<2.5kg), representing more than 20 million births annually (WHO).

1.5.5. Anaemia in Children below five years

Anaemiais a condition marked by low levels of haemoglobin in the blood. Since Iron is the key component of haemoglobin, its deficiency is estimated to be responsible cause for half of all anaemias globally.Other causes of anaemia include malaria, hookworm and other helminthes infestation, other nutritional deficiencies, chronic infections, and genetic conditions. Anaemia is a serious concern for children because it can impair cognitive development, stunt growth, and increase morbidity from infectious diseases.

1.6. Maternal Nutritional Status

1.6.1. Body mass index (BMI)

The commonest way to assess maternal nutrition status in adult is through a calculation that relatesbody mass and height (Weight inKg/Height in m2) commonly termed as the Body mass index. BMI less than 18.5 indicates thinnest against height hence the sign for chronic energy deficiency. On the other hand, a woman is considered overweight if the BMI is between 25.0 and 29.9 and obese if BMI reaches 30 and above. Low BMI in women is related to LBWs, a significant factor associated with stunting in children below 24 months of age.

1.6.2.Anaemiain women

According to WHO, Anaemia affects half a billion women of the reproductive age worldwide. Furthermore, in 2011 29% of non-pregnant women and 38% of pregnant women aged 15-49 years were anaemic.The most nutritionally vulnerable women are those with the additional nutritional stress of pregnancy and lactation. Too often women do not see the need for or cannot afford additional and high-quality diets and micronutrient supplements during these periods and few are encouraged to eat differently by their spouses and other influential family members. Frequently, the results are poor nutritional status that threatens not only the health and a safe birth for the woman but also for the baby.

1.7. Micronutrient deficiencies

The common forms of micronutrient deficiencies in infants and young children include Vitamin A, iodine, folic acid andIron deficiencies.

In Tanzania micronutrient deficiencies are highly prevalent, affecting mostly infants and young children aged 6-59 months and pregnant and lactating women. In other cases, adolescent girls are also affected. Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation and in this aspect, breastfeeding children benefits from supplements given to the mother.

1.7.1. Vitamin A deficiency

Vitamin A is an essential micronutrient for development of the body’s immune system especially in children below five years. Thus, severe vitamin A deficiency (VAD) can cause eye damage and thus, is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrheal disease in children.Measures to prevent vitamin A deficiency in children below five years is through consumption of foods rich in Vitamin A both to pregnant women, lactating mothers,

children of 6-59 months, exclusive breastfeeding during the first six months, followed by vitamin A fortified complementary foods (6-24months) and vitamin A supplementation from the age of six months (6-59month).

1.7.2. Iodine deficiency

Iodine is an essential micronutrient in the human body, and its deficiency has serious effects on body growth and mental development. This is the commonest cause of dwarfism and preventable mental retardation in developing countries including Tanzania. In order to overcome the problems resulting from iodine deficiency, Tanzania has adopted universal salt iodization (USI) as a measure to prevent iodine deficiency disorders among children and adults.

1.7.3. Folic acid deficiency

This is the commonest cause of neural-tube defects in the newborn. Neural-tube defects are severe birth defects of the brain (anencephaly-where the baby is born without some parts of the brain and skull) and spinal bifida (where the spinal cord at the lower back is open to the outside). Folic acid deficiency can easily be prevented by ensuring women consume foods rich in folic acid including fortified foods and consuming folic acid tablets before pregnancy.

1.7.4. Iron deficiency

Iron deficiency is one of the primary causes of anaemia, which has serious health consequences for both children and women. Iron deficiency can be prevented through consuming iron rich foods for both women and children, providing iron tablets (Ferrous sulphate) to pregnant women and women in the reproductive age, breastfeeding for children below 24months and iron fortified complementary foods.

1.8. Infant and young child feeding practices

Appropriate infant and young child feeding (IYCF) practices include early initiation of breast feeding within the first hour after birth, exclusive breastfeeding in the first 6 months of life, continue breastfeeding until the age of 2years, introduction of solid and semisolid foods at the age of 6months, and gradual increases in the amount of food and frequency of feeding as the child grows older. Furthermore, it is also important for young children to receive a diverse diet that include eating foods from different food groups in order to satisfy the growing micronutrient needs (WHO, 2008, TDHS2015/16).

1.8.1. Initiation of breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. The first breastmilk contains colostrum, which is highly nutritious and contains antibodies that

protect the newborn from diseases. Early initiation of breastfeeding not only encourages bonding between the mother and her newborn but also facilitates regular breast milk production. Therefore, it is recommended that children be put to the breast immediately or within 1hour after birth and pre-lacteal feeding (feeding the newborn anything other than breast milk before breast milk is regularly given) be discouraged.

1.8.2. Exclusive breastfeeding (EBF)

Globally, only 38% of infants are exclusively breastfed. Suboptimal breastfeeding contributes to over 800,000 infant deaths worldwide per year (WHO). For these reasons, it is recommended that children be exclusively breastfed in the first 6 months of their life (i.e. they should be given nothing but breast milk) as, breast milk contains all of the nutrients needed by the children in the first 6 months of life and therefore, EBF during this period is important to child's survival and well-being. Complementing breast milk before the age of six month is unnecessary and therefore discouraged due to high chance of contamination resulting into high risk of diarrheal diseases. Furthermore, early initiation of complementary feeding also reduces breast milk output as the production and release of breast milk is modulated by the frequency and intensity of suckling.

1.8.3. Complementary feeding

The transition from exclusive breastfeeding to family foods is referred to as complementary feeding. This is the most critical period for children because during this transition, children are most vulnerable to becoming undernourished. Complementary feeding should be timely, in which all infants receiving foods in addition to breast milk from age 6months. Appropriate complementary feeding for children should include a variety of foods in order to meet the important nutritional requirements. In this perspective, fruits and vegetables rich in vitamin A and iron should be consumed daily without leaving behind other varieties of vegetables and fruits. Studies have shown that, plant-based complementary foods alone are insufficient to meet the need for certain micronutrients. For these reasons therefore, it has been recommended that meat, poultry, fish or eggs should be part of the daily diets (WHO, 1998)

1.8.4. Minimum acceptable diet

Infants and young children must be fed minimum acceptable diet (MAD) to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children become vulnerable to undernutrition, and in most cases stunting and micronutrient deficiencies hence, increased morbidity and mortality. WHO minimum acceptable diet recommendation, which is a combination of dietary diversity and minimum meal frequency, is different for breastfed and non-breastfed children.

Dietary diversity is a proxy to adequate micronutrient-density of food. On the other hand, minimum dietary diversity means feeding the child food from at least four out of the seven food groups: grains, roots and tubers, legumes and nuts, dairy products (milk yogurt, cheese), flesh foods (meat, fish, poultry and liver/organ meat), eggs and fruits and vegetables rich in vitamin A without leaving behind other fruits and vegetables. Consumption of food from at least four groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetables in addition to staple food (grains, roots or tubers-WHO, 2008)

The minimum meal frequency is a proxy for a child's energy requirements for infants and young children. Breastfed children are considered to be consuming at the minimum meal frequency if they receive solid, semi-solid or soft foods at least twice a day for infants aged 6-8months and at least three times a day for children age 9-23 months. On the other hand, non-breastfed children aged 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semi-solid or soft foods at least four times a day.

1.9. Consequences of Malnutrition

1.9.1. Consequences of Undernutrition

The consequences of undernutrition are multiple; effects manifest from individual, household, community and the National levels. The worst damages of undernutrition usually occur during the first 1,000 MCDs of life. Undernourished children have weaker immune system and are therefore more susceptible to infections, illnesses and early deaths compared to well-nourished children. Long-term effects of insufficient nutrient intake and frequent infections can cause stunting. The effects of stunting are usually irreversible and are mainly delayed motor and cognitive development (impaired mental processes of perception, memory, judgement and reasoning). Furthermore, stunted girls are likely to experience obstructed labour during childbirth hence, increasing the risk of developing fistulas and even maternal and/or newborn deaths. Stunting also, predisposes an individual to overweight, obesity and related consequences like cardio-vascular heart diseases, hypertension and diabetes in later life stages.

Various studies indicate that chronic malnutrition and lack of early stimulation impact brain development and impair their ability to learn, develop and become productive in adulthood. Moreover, vitamins and mineral deficiencies in the womb (during pregnancy) and in early childhood can cause nutritional blindness, dwarfism, mental retardation and neural tube defects (Severe handicaps in Tanzania and in our societies).

1.9.2. Other factors for brain Development

It should be noted that undernutrition is just one aspect that can lead to poor brain development. There are multiple and overlapping factors that contribute to poor brain development and other social and economic development. Brain development requires the presence of rich and stimulating environment and responsive caregiving. Chronic malnutrition and lack of early stimulation affects learning abilities and educational achievements, contributing to potentially lower levels of employability, and productivity compared to the well-nourished. This situation leads to an intergenerational transfer of a vicious cycle of ***"Undernutrition-Poverty-Undernutrition"***

1.9.3. Consequences of overnutrition

The common consequence of overconsumption or "over-eating" and inactivity in general is overweight and obesity. In general, the major causes of obesity are overeating that exceeds the body's energy needs, stunting during childhood, and lifestyle circumstances like inactivity, lack of exercise and excessive consumption of alcohol, fats and sugar. Obesity is characterized by excess weight gain due to the accumulation of excessive body fats. However, genetics and some medical conditions and/or medications can also lead to overweight and obesity.

1.9.4. Nutrition and Poverty

Acute and chronic under malnutrition are profound global and country problems. Poverty and inequality sit at the heart of hunger. The poor often cannot afford to grow or buy food, and therefore sources needed to get access to food are inequitably distributed. The poor also suffergreater than other groups from low literacy, gender inequality, and poor health. All of these contribute to situations where, even with sufficient access to food, the nutritional needs, particularly of young children and women (the most vulnerable groups) are not met.

Agenda 2030 on Sustainable Development Goals (SDGs) challenged countries to end all forms of malnutrition by 2030 in its Sustainable Development Goal No.2 (SDG-2) of end Hunger, achieve food security and improved nutrition and promote sustainable agriculture.The 2012World Health Assembly nutrition targets for 2025 and the National Development Agenda VISION 2025will not be reached unless the nutrition of vulnerable groups such as women and children is given high priority.

The common major health risks of obesity include;hypertension, heart diseases and heart attacks, chronic liver diseases, diabetes, gallstones, infertility to both males and females and several diet-related cancers (colon, breast and kidney cancers). These conditions are generally referred to as Diet Related Non-Communicable Diseases (DRNCDs). Other risks of obesity are premature ageing, lack of energy and higher risks of surgical complications. Moreover, overweight and obesity reduce physical work efficiency and intellectual articulation due to poor supply of oxygen to the muscles and brain resulting into several episodes (or all the time) of being lazy/sleepy by the affected individual (TOR).

1.10. Nutritional and Industrial growth.

It has been proved that good nutrition is critical for industrial growth and sustainable development. The most critical resource in any development endeavor is a physically, emotionally and intellectually strong human resource which is capable of converting the available potential resources into value for human and economic development. Good nutrition is central to industrial growth and sustainable human and economic development as it is the foundation of human capital formation. Improved nutrition increases life expectancy and productivity of adults, which are key factors in sustainable development. Furthermore, good nutrition improves learning ability and capacity to operate creatively and innovatively in a competitive environment important for rapid industrial growth in a middle-income country context.

Investing in nutrition is critical for industrial growth and sustainable development. Since most of the impacts of undernutrition on mental development are **irreversible**and occur during the first 1,000 days of life, therefore ***“investing in nutrition during the early***

childhood is one of the most critical investment a Region and Country as well can make"

The World Bank's 2016 paper on "Why invest in Nutrition" summarizes findings from various studies which show strong relationships between nutrition, mental development and adult work productivity as follows;

i. Stunting may reduce IQ by 5-11points
ii. Iodine deficiency reduces IQ by as much as 10-15 points
iii. Low birthweight (2.5kg and below) may reduce a person's later IQ by 5%
iv. Iron deficiency anaemia reduces performance on tests of mental abilities (including IQ) by 8points
v. Eliminating anaemia can lead up to 5-17% increase in adult productivity
vi. A 1% loss in adult height due to childhood stunting is associated with with a 1.4% loss in productivity
vii. A1% increase in height is associated with an increase in wages by 4%
viii. Extreme BMI (below 18.5 and above 25) are associated with lower productivity. (TOR)

Therefore, there's overwhelming evidence that improving nutrition contributes to economic productivity and development and poverty reduction by improving physical work capacity, mental capacity and school performance. Additionally, improving nutrition is tremendous value for money as it reduces the costs related to lost productivity and expenditures in health care. (TOR).

It is estimated that each dollar spent on nutrition delivers between USD 8 and USD 138, which is a cost-benefit ratio of around 1:20, like that of infrastructure development like roads, railways, electricity etc. Thus, investing in nutrition is an investment in the grey matter (component of the brain) infrastructure and generates growth that directly benefits the poor, reduces inequality and assist in social mobility through increased employability and productivity (TOR).

Estimates show that eliminating malnutrition in Tanzania can contribute up to 2.5% of GDP growth annually. In addition, eliminating malnutrition is one of the best ways to address poverty given that malnutrition is both a cause and a consequence of poverty (***malnutrition-poverty-malnutrition***) (TOR)

1.10.1. Current investment on Nutrition interventions

The proposal for the Sustainable Development Goals (SDGs) put forwards by the UN member states (including Tanzania), sets out a goal to “end hunger, achieve food security and improved nutrition, and promote sustainable agriculture” (Goal 2). The goal is accompanied by a target to “by 2030 end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children less than five years of age (target 2.2). However, the world is currently badly-off track to meet the global stunting target to reduce the number of children under the age of five years who suffer from stunting by 40% by 2025.

Despite the overwhelming evidence of the economic impact of reducing young child malnutrition, current investment levels on malnutrition elimination are woefully inadequate to drive the progress that is needed to meet the target and therefore, urgent action to scale up financing in nutrition interventions is highly required.

CHAPTER 2: SITUATION ANALYSIS OF NUTRITION STATUS IN RUKWA

2.1. Nutritional problems in children

2.1.1. Stunting among children under five years of age (Height-for-age)

Despite several efforts implemented by the Country, the prevalence of stunting in Tanzania is still high as it has slowly decreased from 42 % (2010) to 34 (2015/16). Overall, stunting prevalence among children less than five years in Rukwa is higher (56.3%)thanthe National average (TDHS-2015/16) meaning that, more than half of all children below five years in the Region are stunted.

2.1.2. Wasting among children under five years of age (Weight-for-height)

Based into TDHS 2015/16, only 4% and 7% of all underfive children in Tanzania mainland and Zanzibar respectively are wasted and the situation in Rukwa Region is 5.3%.

2.1.3. Under-weight (Weight-for-Age)

The prevalence of under-weight in Rukwa is 23% compared to 13.6% and 13.8% of Tanzania mainland and Zanzibar respectively. Rates of stunting, wasting and underweight generally decrease with increasing mother's education. Also, all three nutritional status indicators are highest among children in the lowest wealth quintile and lowest among children in the highest wealth quintile (2015/16TDHS).

2.1.4. Low Birth weight

The status of this indicator countrywide is encouraging as only 3% of infants are very small, 7% smaller than average and 89% average or larger than average (TDHS 2015/16). In Rukwa, only 1.6% of the children are very small, 7.8% smaller than average and 82.4% average or larger than average.

2.1.5. Anaemia among under-five children

Like other African Countries, Tanzania also is still facing the problem of anaemia particularly in the under five children. In this area, Tanzania as a Country has not made good progress as the prevalence decreasing trend of anaemiain children below five years has been so slow from 72% (2004/05), 59% (2010) to 58% (2015/16). Moreover, the prevalence of anaemia is higher in children below 2years (highest was 81% in 2015/16 survey) than in older children. The problem is also positively related to education of the mother and wealth quintiles of the households where prevalence of anaemia for under-five children whose mothers have at least secondary education was 54% compared to children whose mothers have no education (66%).Similarly, the prevalence was low (50%) for children coming from high income families compared to those from poor families (64%).In 2015/2016 survey, the prevalence of anaemia in under-five children for Rukwawas 53.4% which is slightly lower than the National average.

2.2. Maternal nutrition problems.

2.2.1. Body mass index (BMI)

The 2015/16 survey shows that, 10% of women are thin, majority (62%) have normal BMI while more than a quarter (28%) are overweight (18%) and obese (10%). While the prevalence of under nutrition in women remained virtually unchanged between 2004/05 TDHS and 2015/16 TDHS-MIS, that of over nutrition (overweight or obese) increased from 18% to 28%. Women in urban areas are more likely (42%) to be overweight than those in rural areas (21%). Furthermore, women with higher education are more likely to be overweight (34%) than those without education (21%). Similarly, overweight is higher for women in the highest quintile (47%) than those in the lowest wealth quintile (12%).

In Rukwa, data from 2014 NNS shows that 3.2% of women in the reproductive age are undernourished or thin. From the 2015/16 TDHS, majority (72.7%) of women in the Region have normal nutritional status, 22% total of overweight or obese (overweight-16.5% and obese 5.5%) and only 5.3% are undernourished with their BMI below the normal range.

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2.2.2. Prevalence of Anaemia among women

Like in children below five years, Tanzania also is still facing the problem of anaemia in women of the reproductive age, as the prevalence decreasing trend of anaemia in this group has been so slow from 48%, 40% to 45% between 2004/05, 2010 and 2015/2016 respectively. Results of the TDHS 2015/2016, the prevalence of anaemiafor women in the reproductive age in Rukwa is 31.7% which is slightly lower than the National average.

2.3. Infant and young child feeding practices

2.3.1. Initiation of breastfeeding

According to TDHS 2015/16, In Tanzania more than half (51%) of the infants are breastfed within 1 hour after birth, 93% breastfed within 24hours and 14% were given pre lacteal feed. Similar survey shows that, in Rukwa 61.7% of children are initiated breast feeding within 1hour after birth, 96.2% within one day and pre lacteal feeding is less practiced in the Region (2%).

2.3.2. Exclusive breastfeeding (EBF)

Recent data shows that, in Tanzania 59% of infants under 6 months are exclusively breastfed. In addition, EBF declines rapidly with age as only 27% of infants age 4-5 months are exclusively breastfed compared with 84% of those in age 0-1 month and 59% of infants age 2-3 months. Furthermore, some infants are given other liquids (22% plain water and 4% other milk) in addition to breast milkcontrary to recommendation. Also, over 22% of infants under 6months consume complementary foods in addition to

breastmilk. Countrywide, EBF shows an increasing trend as the percentage of infants who are exclusively breastfed increases from 26% (1991-92), 41% (2004-5), 50% (2010) to 59% (2015-16). On the other hand, exclusive breastfeeding habit for women in Rukwa is not promising as only 16.9% of infants are exclusively breastfed, 14.8% are not breastfed at all and over 66.5% consume breast milk and complementary foods (TDHS2015-16)

2.3.3. Complementary feeding

Findings of the 2015-16 TDHS-MIS show that, types of foods and liquids received by children during the day and night depends on the child's age and breastfeeding status. In some children, solids and semi-solid foods are introduced early. Six percent of breastfeeding children receive some solid or semi-solid food during the first two months of life and 52% of children at age 4-5 months are given some type of solid or semi-solid foods on top of breast milk. Furthermore, foods made from grains are the most commonly consumed food group by majority of children in Tanzania, followed by fruits and vegetables rich in vitamin A. Few children consumed eggs or cheese, yogurt or other milk products.

2.3.4. Minimum acceptable diet (MAD)

The 2015-16 TDHS-MIS shows that, only 26% of Tanzanian children aged 6-23 monthsreceive adequately diverse diet, while less than half (40%) receive the minimum recommended meal frequency according to their age. Furthermore, only 10% of children aged 6-23 months are fed in accordance with the minimum acceptable standards with respect to all three IYCF practices.

For Rukwa Region, 32.8% of breastfed children aged 6-23 months receives meals with a minimum of 4 food groups, 40.9% receive minimum meal frequency as per WHO recommendation while only 14.8% consume both meals with minimum 4food groups and minimum acceptable meal frequency. In contrast, despite that, over 81.4% of breastfed and non-breastfed children are receiving breast milk, milk or milk product but only 34.7% and 35.7% of non-breastfed infants aged 6-23 months are given meals with at least four food groups and minimum acceptable diet respectively, while only 12.1% met the 3IYCF practices as per recommendation (TDHS2015-16).Similarly, results of the Tanzania National Nutrition Survey (TNNS2014) shows that, only 24.5% of children in the Region were given the minimum dietary diversity, 35.1% received minimum meal frequency and 16.2% were provided with the minimum acceptable diet.,

2.4. Micronutrient deficiencies

Based on the 2015-16 TDHS-MIS, 76% of children aged 6-23 months consume foods rich in vitamin compared to only 36% who consuming iron-rich foods. Less than half (41%) of children aged 6-59 months were given vitamin A supplement and only 38% received deworming medication in the six months period before the survey. On the

other hand, over 81% of household in Tanzania consume salts which contain iodine when tested using rapid kits and the status on laboratory test, although the salt was adequately iodized, but the iodine content met or exceeded the standard in only 61% of the households. Both southern western (93%) and Eastern (91%) highlands are the zones with the highest percentages of households with iodized salts.

In Rukwa, 81.9% and 44.5% of 6-23 months children consume foods rich in vitamin A and iron respectively. However, only 34.7% and 24.1% of children aged 6-59 months were given vitamin A supplements and deworming medication in past six month preceding the survey. About 78.9% of the households in the Region consume iodized salt, although only 36.2% of the salt has adequate iodine content while over 63.2% of the salts used contain inadequate iodine content (<15ppm)

2.5. HIV and nutrition

Rukwa has been one of the Regions with highHIV prevalence inthe Country. The epidemic has affected all aspects of social and economic life with an adult HIV prevalence of 4.4% (THIS-2016-17) after its reduction from 6.2% (2011/2012). Despite development in medical treatment, nutrition remains a key component in managing this condition.

2.6. Specific factors for under nutrition in Rukwa

There are so many questions raised by various stakeholders within and outside the Region on why there's high prevalence of stunting (56%) and low percentages of performance in other important nutrition indicatorsdespite that, Rukwa being among the five leading Regions in the Country for agricultural production. However, the response to these questions may need more research and analysis of the Rukwa community taking into account of the various contexts including: Socio-cultural, socioeconomic, and basic education for the general population. Also, for many years since its establishment (1974), Rukwa has been among the underserved Regions in the country in terms of infrastructures, human resource for health, potential economic activities and programs, electric power supply and presence of development partners who can work together with the Region administration to fight against the catastrophe. Some of the contributing factors for under nutrition in the Region are shown in section 2.6.1 to 2.6.11)

2.6.1. Poor IYCF practice

As it has been discussed in this chapter, majority of the families especially those in rural areas do not follow the recommended feeding practice for feeding their infants and young children. Fortunately, children in the crucial age (first 1,000 MCDs) are the most affected.

2.6.2. Lack of knowledge on Nutritional issues

The general population in the Region lack important information and knowledge on nutritional issues. Thus, despite the availability of a wide variety of food products in the Region, most of the families and households persistently consume some common type of foods (staple foods) which may lack other important nutrients.

2.6.3. Inadequate food security

Availability at all times of adequate food supply of basic food stuffs is very important to sustain a steady expansion of food consumption and to offset the fluctuations in production and price. However, this concept may not be well practiced in the Region. Following the high production cost, most of the agricultural products particularly grains are sold to compensate the production cost. Most of the purchased food crops are usually exported outside the Region leaving behind many families and households without enough surpluses to sustain them towards the following season.

2.6.4. Women involvement in economic activities

As the majority of the families and households in the Region have low income, women are highly involved in various income generating activities in order to meet their daily requirements largely family food. The common income generating activities which involve larger number of women include agriculture, small scale business, laborious in the food processing industries, milling machines and in construction works. Most of these women while performing these activities, they are usually accompanied with their young children or left at homes without good care. Therefore, under these circumstances, most of the young children lack the important care, and the most important lack of the recommended feeding hence, ending up with under nutrition.

2.6.5. Low socio-economic status of the general population

Low socio-economic status (SES) affects overall human functioning, including physical and mental health. Low SES is highly associated with low educational achievements, poverty and poor health hence, great effect to the whole society development.Research indicates that, SES is a key factor influencing quality of life, across the life span for children, youth and families (CYF). In general, majority of households and families in the Region have low income and low SES hence poor health outcomes including under nutrition.

2.6.6. High total fertility rate among women and high population growth rate.

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births and her fecundity (the ability to produce an abundance of offspring or new growth). Postponing first birth and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes to both newborns and their mothers, such as preterm births, low birth weight, and death. Childbearing at a very young age is associated withan increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

According to the TDHS 2015-16, total fertility rate (TFR) for Tanzanian women is 5.2%.TFR seems to be nearly twice (6.0) in women living in rural as much as that in women living in urban (3.8). Also, TFR is higher in the western zone (6.7) and low in Southern zone (3.8). Moreover, TFR is higher for women with no education (6.9) and women in low wealth quintiles/economic status (7.5) while low in women with higher education (3.6) and higher wealth quintiles (3.1). TFR for Rukwa and that of the southwestern highlands is 5.2 children per woman. In addition, the Region has high population growth rate (3.2%) compared to the National rate (2.7%).

2.6.7.Birth intervals

Short birth intervals (less than 24months), place newborns and their mothers at increased health risk. The median birth interval length in Tanzania is 35months, thus half of non-first births occur within three years after a previous birth. About 19% of the children are born within two years after the previous birth, 34% occur within 24-35months and 48% occur at an interval of at least 3 years after the previous birth. In contrast, 17% of children in Rukwa Region are born within 2years after the previous birth, 41% within 2 and 3years and 42% at an interval of at least 3 years after previous births.

2.6.8. Teenage childbearing

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality of both mother and child. Childbearing during the teenage years (15-19) frequently has adverse social consequences, particularly for educational attainment, because women who become mothers in their teens are more likely to curtain their education.

Results show that in Tanzania, 27% of women age 15-19have began childbearing and 21% have given birth. The percentage of teenagers who had a child or who were pregnant was 26% in 2004-05, 23% in 2010 and 27% in 2015-16. The western zone (38%) and South west Highlands (34%) have the highest levels of teenage childbearing in Tanzania. In these two zones, Tabora has the highest levels of teenage childbearing (45%) followed by Katavi (43%) and Rukwa (29%).It has been shown that, teenage

childbearing is higher (52%) in girls who had no education than in girls with secondary education and above by 10%

2.6.9. Age at first birth

The age at which childbearing commences is an important determinant of the overall levels of fertility as well as the health and welfare of both the mother and the child. In some societies, postponement of first birth due to an increase in age at marriage has contributed to an overall fertility decline. Therefore, a rise in the median age at first birth is a typical sign of transition to lower fertility levels. Despite that the Government guidelines advice women to start childbearing at age 20 and above, results show that, in Tanzania, the median birth at first age is 19.8 years among women aged 25-49. This means that, half of women give birth for the first time before age 20. Rukwa annual reproductive and child health report (both 2016 and 2017) show that, 24% of all women attended their first visit at the ANC clinic were below 20 years.

Therefore, high fertility rate with its associated parameters (Age at first birth and birth intervals) have high impact on the nutritional status to both the mother and the child. Biologically, the ability of the mother's body to build and regain nutritionally after birth is affected by repeated pregnancies which occur within short intervals, hence the nutrition of the expected child also, will be compromised. Therefore, high fertility rate of women in Rukwa Region contributes to the existing poor nutrition status.

2.6.10. Inadequate investment in nutrition interventions

As it was mentioned earlier, for many years, Rukwa remained to be among the underserved Regions of Tanzania. Less priority was given to this area hence there was little resources invested by both Government and partners in the designing and implementation of nutritional interventions in the Region. In order to improve the current nutritional status of Rukwa communities, we have no choice, but to make sure that both the Government (LGAs, RS, PORALG and MoHCGDEC) and development partners invest a lot in this area and making sure that all allocated resources are used appropriately to overcome this problem.

2.6.11. Social cultural factors affecting nutritional status.

3.0. CHAPTER 3:KEY RESULT AREAS

3.1. Expected results and key Strategies

This Regional Multi SectoralNutritionStrategic Plan aligns with the countrys' efforts to meet and sustain the Sustainable Development Goals (SDGs) and the National aspirations as stated in Vision 2025.Special priority is given to multi-sector collaboration on the National nutritionobjective of preventing stunting in children less than two years of age as stated in the National Multi-Sectoral Nutrition Action Plan 2016.

3.2. Mission Statement

The mission statement of the Regional Nutrition Strategic Plan is to achieve sustainable food and nutrition security and to eliminate all forms of malnutrition in order to have a well-nourished and healthy population that can contribute optimally to both Regional and National economic development.

3.3. Vision Statement

The vision of the Regional Multi SectoralNutrition Strategic Plan is to achieve optimalnutritional status of the Rukwapopulation.

3.4. Outline of Key Result Areas

The overall priorities of the RMNSP during its operational period 2018-2021 comprise 7 key result areas each with a target. Key result areas were identified during a highly participative, cross sector planning process reflecting current evidence, contributions and consensus among stakeholders, and anticipated trends in nutrition that affect the Region. Thesekey result areas are laid out in thematic areas that will be addressed over the three years period of the strategic plan (section 3.7).

3.5. Expected impact and targets

The main expected impact or desired change of the RMNSP is that "children, adolescent, women and men in Rukwa Region are better nourished leading to healthier and more productive lives that contribute to economic growth and sustainable development". The 26key indicators associated targets demonstrating progress towards the achievement of the 2021 desired change are shown in table 1.

Table 1:RMNSP key impact and outcome targets by 2021

No	Indicator	Baseline/Current status		Planned targets and expected impact for 2021	
		National	Regional	NMNAP	RMNSP
1	Prevalence of stunting among children 0-59 months	34.4% (TDHS,2015)	56.3%	28%	40%
2	Prevalence of global acute malnutrition	4.5% (TDHS,2015)		<5%	<5%
3	Prevalence of low birth weight	7% (TDHS,2015)	7.8%	<5%	<5%
4	Prevalence of wasting among underfive children	Tanzania mainland-4% (TDHS,2015)	5.3%		<5%
5	Prevalence of underweight among underfive children	Tanzania mainland-13.6% (TDHS,2015)	23%		<10%
6	Proportion of children underfive years with anaemia	58% (TDHS,2015)	53.4%		42%
7	Proportion of women 15-49 years with anaemia	44.7% (TDHS,2015)	31.7%	33%	20%
8	Prevalence of vitamin A deficiency	33% (TDHS,2010)		26%	26%
9	Median urinary iodine of women of reproductive age	100-299ug/L (TDHS,2010)		100-299ug/L	100-299ug/L
10	Prevalence of diabetes among adults	9.1% (STEPS,2012)		<10%	<10%
11	Prevalence of overweight among children underfive	3.6% (TDHS,2015)		<5%	<5%
12	Prevalence of overweight among adults	29% (STEPS,2012)		<29%	<29%
13	Prevalence of women of reproductive age who are undernourished	10% (TDHS,2015)	3.2%		<5%
14	Prevalence of women of reproductive age with overnutrition (overweigth)	18% (TDHS,2015)	16.5%		<10%
15	Prevalence of women of reproductive age with overnutrition (obesity)	10% (TDHS,2015)	5.5%		<5%
Outcome results					
16	Proportion of children aged 0-5 months who are exclusively breastfeeding	41% (TNNS,2014) 59% (TDHS,2015)	16.9% (TDHS, 2015)	50%	37%

17	Proportion of newborns who are initiated breastfeeding within 1hour after birth	51% (TDHS,2015)	61.7%		80%
18	Proportion of children aged 6-23 months who receive adequately diverse diet (minimum of 4food groups)	26% (TDHS,2015)	32.8%		50%
19	Proportion of children aged 6-23 months who receive the minimum recommended meal frequency	40%	40.9%		60%
20	Proportion of children aged 6-23 months who receive a minimum acceptable diet	20% (TNNS,2014) and 10% (TDHS,2015)	16.2% (2014) and 12.1% (2015)	30%	32%
21	Proportion of children aged 6-59 months who receive vitamin A supplementation during the last 6 months	72% (TNNS,2014) and 41% (TDHS,2015)	34.7% (TDHS, 2015)	90%	100%
22	Proportion of children aged 6-59 months who receive deworming medication during the last 6 months	38% (TDHS,2015)	24.1%		90%
23	Proportion of household consuming adequately iodized salt	61% (TDHS,2015)	36.2%	80%	60%
24	Proportion of pregnant women taking iron and folic acid (IFA) for 90+days during pregnancy	8% (TNNS,2014)		50%	50%
25	Proportion of underfive children who are in need of SAM treatment who are admitted in the program annually	9% (BNA/SAM,2015-16)		75%	75%
26	Proportion of underfive children who are in need of MAM treatment who are admitted in the programm annually	<1% (WFP Project report,2015)		75%	75%

3.6. Regional priorities

Together with the Regional's focus for achieving the National key priority areas, there are additionalpriorities which will be implemented as efforts to attain the intended outcomes. These Regional priorities are in line with the signed performance compact between the Minister for PORALG and the Rukwa's Regional Commissioner which commenced on January, 2018, and they are as follows:-

i. To ensure both Region and its respective Councils include special budget for nutrition interventions in their annual plans and make sure that the plans are scaled up and reflected in the Regional MTEF
ii. Make sure that all budgeted funds for nutrition interventions are properly utilized to implement the intended activities
iii. Presence of this RMNAP
iv. Make sure that all children of 6-59months old receive vitamin A supplementation
v. Ensure all pregnant women receive iron and folate (tablets) supplementation
vi. Ensure provision of nutrition education on exclusive breastfeeding to all women with children below 6months in the Region
vii. Ensure provision of nutrition education on complementary foods to all women with children between 6-24 months old in the Region
viii. Ensure provision and scale up of management of underfive children with SAM
ix. Make sure that Regional and Council multisectoral nutrition steering committee meetings are conducted according to the current TOR
x. Ensure inspection of foods and medicine for quality assurance within the Region

3.6.1. Regional leadership roles in implementing its priorities and MNSP

In order for the Region to implement this strategic plan and priorities, the Region will assume the following leadership roles

i. Plan and budget for nutrition interventions according to the respective financial year planning and budgeting guidelines
ii. Management of employment for nutritionists in the Region
iii. Ensure formation of R/CMNC according to the current TOR Guidelines
iv. Ensure all cros-cutting sectors plan and budget for nutrition interventions
v. Make sure that the Region has its own Multsector strategic plan on nutrition
vi. Make sure plans and budgets for all nutrition-related partners and interventions are incorporated into Regional and Council plans (MTEF)
vii. Making nutrition as a permanent agenda in all authoritative meetings at Regional and Distric levels
viii. Ensure the discussion of nutrition score-card report before send to other/higher levels followe by sharing of feedback
ix. Discuss and sign performance contract with Regional and District managers/leaders

x. Establish and maintain suitable environment for workers in the responsible sectors to perform their duties efficiently in order to meet the intended results
xi. Supervise day to day operations for adherence to policies, strategies and National priorities in line with the NMNAP
xii. Identify and submit overall Regional performance challenges, including contributions on how to alleviate them
xiii. Conduct assessment on the Regional performance on the implantation of the NMNAP whenever necessary
xiv. Preparation and submission of implementation reports to respective levels according to the stated time periods
xv. Conduct self-assessment on the implementation of Regional performance contract and submit the report to higher levels
xvi. To participate in the assessment of the Regional performance contract at the PORALG at the end of each year
xvii. Ensure submission of quarterly and annual implementation reports to PORALG before 30th of the following month.

3.7. KEY RESULT AREAS

KEY RESULT AREA 1: Scaling Up Maternal, Infant, Young Child and Adolescent Nutrition (MIYCAN)					
Target: Stunting among children less than two years of age reduced from 56.3% to 40% by June, 2021					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
1	Ensure the presence of at least 2CHWs to all villages in the Region who are trained on various health and nutrition related issues	Increased coverage and quality of MIYCAN services at the community level by June 2021	Increased proportion of adolescents, pregnant women and mothers/caregivers of children under two years who practice optimal maternal, infant and young child nutrition behaviors	Health	RS and LGAs and partners
2	Mapping of eligible households and conduct home visits, group counselling on MIYCAN and cooking demonstrations	Increased coverage and quality of MIYCAN services at the community level by June 2021		Health	RS, LGAs and Partners
3	Mapping of Regional and District stakeholders and interventions relevant to improving MIYCAN and prevention of stunting in children below two years.	Increased coverage and quality of MIYCAN and stunting reduction services at the community level by June 2021		Health	RS, LGAs and Partners
4	Support the commemoration of World breastfeeding week every year to promote optimal IYCF practices	Increased community awareness on the importance of breastfeeding	Increased proportion of children below 6 months who are exclusively breastfed and children aged 6-24months who consume both breastmilk and complementary *feeding*	Health	RS, LGAs,and Partners

KEY RESULT AREA 1: Scaling Up Maternal, Infant, Young Child and Adolescent Nutrition (MIYCAN)					
Target: Stunting among children less than two years of age reduced from 56.3% to 40% by June, 2021					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
5	Conduct social behaviour change communication (SBCC) activities using different communication approaches (including edutainment) and social mobilization for MIYCAN at Ward and Village levels (community)	Increased community awareness on the importance and adherence to MIYCAN	Increased proportion of adolescents, pregnant women and mothers/caregivers of children under two years who practice optimal maternal, infant and young child nutrition behaviors	Health	RS, LGAs and Partners
6	Conduct in-service training to HCPs on SBCC for MIYCAN and Growth Monitoring using the New WHO Growth charts/cards	Improved quality of MIYCAN services at the health facilities level by June 2021		Health	RS, LGAs, and Partners
7	Train health workers, and scale up of health facilities providing BFHI	Improved quality of MIYCAN services at the health facilities level by June 2021		Health	RS, LGAs,and Partners
8	Assure appropriate training and counseling needed for optimal IYCF practices in the general population and in the context of HIV at facility, community and household level to HCWs and CHWs	Improved quality of MIYCAN services at the health facilities level by June 2021		Health	RS, LGAs, and Partners

9	Ensure availability of adequate amount of Zinc tablets and ORS at all health facilities to enable appropriate management of acute watery diaarhoea in underfive children (DTC)	Improved quality of MIYCAN services at the health facilities level by June 2021		Health	RS, LGAs,and Partners

KEY RESULT AREA 1: Scaling Up Maternal, Infant, Young Child and Adolescent Nutrition (MIYCAN)					
Target: Stunting among children less than two years of age reduced from 56.3% to 40% by June, 2021					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
10	Ensure commemoration of village health days to all Councils for provision of nutrition education and demonstrations which targets pregnant women and children below five years involving all stakeholders (HCWs, CHWs, Village and Ward leaders, influential people etc.)	Improved quality of MIYCAN services at the health facilities level by June 2021		Health	RS, LGAs and Partners
11	Ensure health facility-based distribution of ITNs to pregnant women and underfive children as measure to prevent Malaria in pregnant women and children below five years	Increased proportions of health facilities with adequate number of ITNs		Health	RS, LGAs and Partners

12	Ensure prevention of Malaria to both pregnant women and underfive children through promoting the use of ITNs for both pregnant women and their children below 24months and provision of SP for IPT to all pregnant women.	Increased numer of pregnant women and undrfive children prevented from malaria infection		Health	RS, LGAs and Partners
13	Conduct advocacy and awarenes creation meetings to Regional, District, ward and Village stakeholders including media and private Sectors on MIYCAN and other relevant nutrition issues	MIYCAN is promoted at all levels through mass-media and the use of new technologies by June 2021		Health	RS, LGAs and Partners
14	Conduct quarterly supportive supervision to HCP and CHWs on MIYCAN services	Increased coverage and quality of MIYCAN services at the facility and community level by June 2021		Health	RS, LGAs and Partners

KEY RESULT AREA 2: Scaling Up Prevention and Management of Micronutrient Deficiencies					
Target: Increase Micronutrient Availability, Accessibility and utilization among people of Rukwa					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
1	Ensure availability of Micronutrients satchets at health facilities and Scaling up home fortification (Virutubishi) for all pregnant women attending ANC	Increased access to food fortification (home and mass) for children aged 6-23 months, pregnant women and women of childbearing age by 2021	Increased micronutrient consumption by children, adolescents and women of reproductive age (15-49 years	Health	RS, LGAs,and Partners
2	Conduct micronutrient supplementation campaigns and community sensitization through radio programmes (locally available) on the importance of micronutrient rich/fortified foods consumption	Increased proportion of women, adolescent girls, pregnant women and underfive children using micronutrient -rich foods	Reduced proportion of micronutrient deficiencies in the population of Rukwa	Health, TEHAMA	RS, LGAs,and Partners
3	Ensure provision of Vitamin A suplement to children of 6-59 months through Vitamin A supplementation and deworming campaign during bi-annual health and nutrition months (June and December)	Increased proportion of underfive children supplemented with vitamin A	Reduced proportion of children with vitamin A deficiency and improved health of underfive children	Health, Community Development	LGA and Partners
4	Ensure Supportive Supervision and technical support during implementation of HNM	Increased proportion of underfive children supplemented with vitamin A	Reduced proportion of children with vitamin A deficiency and improved health of underfive children	Health, Community Development	RS and LGAs

KEY RESULT AREA 2: Scaling Up Prevention and Management of Micronutrient Deficiencies					
Target: Increase Micronutrient Availability, Accessibility and utilization among people of Rukwa					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
5	Sensitize Regional and LGA, including members of Defence and Security Committee on the importance of community consumption of iodized salt and enforcement of the salt law and Regulations	Increased availability and Consumption of adequately iodized salt by 2021	Reduced proportion of children with iodine deficiency and improved health of underfive children and the general population	Health	RS
6	Conduct regular salt monitoring and inspections in all salt whole salers, retailers, and salt vendors according to the Act and salt Regulations	Increased availability and Consumption of adequately iodized salt by 2021	Reduced proportion of children with iodine deficiency and improved health of underfive children and the general population	Health	RS and LGAs
7	Community Sensitization on the importance, and promote consumption of adequately iodized salt through community social gatherings (Village assembly, village health days)	Increased availability and Consumption of adequately iodized salt by 2021	Reduced proportion of children with iodine deficiency and improved health of underfive children and the general population	Health	RS, LGAs,and Partners
8	Ensure availability of Iodine rapid Test Kits at all levels (Council, Ward and Community)	Increased availability and Consumption of adequately iodized salt by 2021	Reduced proportion of children with iodine deficiency and improved health of underfive children and the general population	Health	LGA and Partners

9	Conduct rapid and laboratory test for presence and iodine content in salt samples from households, Markets, salt vendors, retailers and retailers within the Region	Increased availability and Consumption of adequately iodized salt by 2021	Reduced proportion of children with iodine deficiency and improved health of underfive children and the general population	Health	LGA and Partners

KEY RESULT AREA 2: Scaling Up Prevention and Management of Micronutrient Deficiencies					
Target: Increase Micronutrient Availability, Accessbility and utilization among people of Rukwa					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
10	Promote sustainable production, processing, marketing and consumption of locally grown food crops rich in vitamin A, iron and iodine (especially legumes, vegetables and fruits), aquatic products (fish), poultry and livestock keeping.	Improved anaemia prevention and control interventions among women of childbearing age and children under 5 years old by 2021	Improved nutrition and health of childbearing women and underfive children	Health, Agriculture	LGA and Partners
11	Promote increased production and utilization of fortified foods including home fortification to improve micronutrient nutrition to the community of Rukwa	Improved anaemia prevention and control interventions among women of childbearing age and children under 5 years old by 2021	Improved nutrition and health of childbearing women and underfive children	Health, Agriculture	LGA and Partners
12	Ensure all pregnant women receive full course of Iron and folic acid (fefo) supplement tablets during early pregnancy and deworming medication at the facility and/or community level to prevent them from iron deficiency anaemia	Improved anaemia prevention and control interventions among women of childbearing age and children under 5 years old by 2021	Improved nutrition and health of childbearing women and underfive children	Health	RS and LGAs
13	Region in partnership with private sector to expand production of fortified staple foods (Maize meal, wheat flour, potato and cooking oil) and other targeted fortified food products for use in complementary feeding	Improved anaemia prevention and control interventions among women of childbearing age and children under 5 years old by 2021	Improved nutrition and health of childbearing women and underfive children	Health, Agriculture	LGA and Partners

KEY RESULT AREA 2: Scaling Up Prevention and Management of Micronutrient Deficiencies					
Target: Increase Micronutrient Availability, Accessbility and utilization among people of Rukwa					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
14	Monitoring and strengthen compliance of food fortification regulations	Improved anaemia prevention and control interventions among women of childbearing age and children under 5 years old by 2021	Improved nutrition and health of childbearing women and underfive children	Health, Agriculture	LGA and Partners
15	Develop and disseminate IEC package materials to promote compliance on utilization of iron and folic acid supplements by pregnant women	Improved anaemia prevention and control interventions among women of childbearing age and children under 5 years old by 2021	Improved nutrition and health of childbearing women and underfive children	Health	RS and LGAs

KEY RESULT ARE 3: Scaling Up Integrated Management of Acute Malnutrition (IMAM)					
Target: To reduce prevalence of Wasting among 0-59 months children from 5.3% to 2% by June 2021					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
1	Distribution of the National guidelines for Integrated Management of Acute Malnutrition to all levels responsible for diagnosis and management (health facility and community)	increased proportions of health care workers at facilities and community using national guidelines on IMAM	Improved quality of IMAM at facility and community levels	Health	RS and LGAs
2	To carry out orientation and training (including in-service training) to Health service providers at lower facility level and CHWs on IMAM	Improved quality of services for management of severe and moderate acute malnutrition	Increased coverage of Integrated Management of Acute Malnutrition (IMAM).	Health	RS, LGAs and Partners
3	Provide training and support to CHWs on early identification and referral of underfive children with SAM using MUAC and by screening bilateral pitting oedema within their communities	Increased number of identified and referred cases with SAM	Improved health and reduced morbidity and mortality of underfive children with SAM	Health	RS, LGAs and Partners
4	Strengthen and expand services for early identification, management and referral of acutely malnourished children, including community-based treatment, care and follow-up to avoid relapses.	Increased number of identified and referred and managed cases with SAM at both facility and community settings	Improved health and reduced morbidity and mortality of underfive children with SAM	Health	RS, LGAs and Partners

KEY RESULT ARE 3: Scaling Up Integrated Management of Acute Malnutrition (IMAM)					
Target: To reduce prevalence of Wasting among 0-59 months children from 5.3% to 2% by June 2021					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
5	Ensure all health facilities and community centers (villages for CHWs) have adequate anthropometric measurement equipment (weighing scale for adult and infant, MUAC tape, length measuring boards) and special nutrition data registers for screening nutritional status of underfive children and pregnant women at facility and community levels	Early identification and management of undernourished children	Improved health and reduced morbidity and mortality of underfive children with SAM and improves availability of data-based information for action	Health	RS, LGAs and Partners
6	Establish and strengthen community groups (including CHWs and village committee members) that provide continued counseling and growth monitoring follow up of the children discharged from malnutrition treatment	Number of previous malnourished children followed up	Reduction of relapse cases of MAM/SAM and hence improved health for underfive children	Health	RS, LGAs and Partners
7	Strengthen linkage mechanisms where, households with acute malnutrition cases and MVC are linked to community social support networks including farmer groups	Number of households with malnourished children and MVCs linked with SSN		Health, Agriculture and Community development	RS, LGAs and Partners

8	Conduct quarterly supportive supervision of health service providers and CHWs on application of the IMAM protocol	Improved quality of IMAM services	Improved health and reduced morbidity and mortality of underfive children with SAM	Health	RS, LGAs and Partners

KEY RESULT ARE 3: Scaling Up Integrated Management of Acute Malnutrition (IMAM)					
Target: To reduce prevalence of Wasting among 0-59 months children from 5.3% to 2% by June 2021					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
9	Ensure and support HSP and CHWs on facility and community-based screening of underfive children for SAM and MAM though mobile and outreach approaches	At least 75 percent of children under five years old are reached through screening for severe and moderate acute malnutrition at health facility level and at community level by 2021	Improved health and reduced morbidity and mortality of underfive children with SAM	Health	
10	Conduct quarterly supportive supervision of trained CHWs and HSP on IMAM services		Improved health and reduced morbidity and mortality of underfive children with SAM	Health	RS, LGA and Partners
11	Ensure availability of RUTF, therapeutic milk, medicines, tools and equipment for IMAM at health facilities and community	Essential therapeutic nutrition supplies and equipment are available in at least 50 percent of health facilities providing services for management of SAM and MAM by June, 2021	Improved health and reduced morbidity and mortality of underfive children with SAM	Health, Agriculture and Community development	RS, LGAs and Partners

KEY RESULT AREA 4: Scaling Up Prevention and Management of Diet-Related Non-Communicable Diseases (DRNCDs)					
Target: To reduce the prevalence of Overweight from 16.5% to 13% and Obesity from 5% to 3% among women of reproductive age					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
1	Train Health Care Providers and Community Health Workers on Diet and Nutrition Related Non-Communicable Diseases at all levels	At least 50 percent of women of reproductive age sensitized on the risk factors for NCDs by 2021	Communities in Rukwa are physically more active and eat healthier diet	Health	RS, LGA and Partners
2	Ensure and promote adult nutritional status assessment (BMI) and Screening, management and follow up programmes for Diet related non-communicable disease (Diabetes, hypertension, CVDs and cancers) for both adult men and women in the Region	Proportion of adults screened for their nutritional status and for DRNCDs increased	Most of adult men and women will be aware of their health and nutrition status and take actions	Health	RS, LGA and Partners
3	Develop and disseminate IEC package materials to promote compliance on good behavior in relation to food intake, alcohol use, and life style (exercises) to prevent overweight and obesity to both adult men and women	Improved nutrition related behaviour change among community members	Reduced prevalence of DRNCD	Health	RS, LGA and Partners
4	Conduct advocacy and awareness creation meetings to Regional, District, ward and Village stakeholders including media and private Sectors on prevention of obesity and DRNCDs	Awareness created to Regional and District stakeholders		Health	RS, LGA and Partners

KEY RESULT AREA 5: Scaling Up Multisectoral Nutrition Sensitive Interventions (Agriculture and Food Security; Health and HIV; Water Sanitation and Hygiene (WASH); Education; Social Protection; and Environment and Climate Change)					
Target: To strengthenMultisectoral Nutrition coordination					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
1	Promote small scale livestock keeping, poultry and fish farming for domestic consumption in the Region.	Communities have access to a diverse range of nutritious foods throughout the year	Increased coverage of nutrition sensitive interventions from Agriculture and Food Security,Health,Water, Sanitation and Hygiene,Education and Early Childhood Development,Social Protection and Environment and Climate Change	Agriculture	RS and LGAs
2	Ensure orientation and support to extension officers in order to supervise farmers on diverse crop production	Communities have access to a diverse range of nutritious foods throughout the year		Agriculture	RS and LGAs
3	Conduct social and behavior change communication to increase production and consumption of diverse range of nutritious food at community level, including developing special IEC package materials	Communities have access to a diverse range of nutritious foods throughout the year		Agriculture and Health	RS and LGAs

4	Incorporate nutrition considerations in HIV and AIDS clinical assessment and counseling protocol (NACS) with special focus on HIV positive women in reproductive age and infants and young children	Communities regularly use quality maternal health, family planning prevention services and treatment of HIV and malaria.		Health	RS, LGA and Partners
5	Orient HCPs from health facilities on NACS in the context of HIV/AIDS in line with National guidelines			Health	RS, LGA and Partners
6	Ensure utilization of clean and safe water at household level by promoting household water treatment and safe Storage	Communities and schools access adequate water,sanitation and hygiene services		Health,Water	LGA and partners
7	Promote availability of adequate and use of safe water, sanitary latrines and hand washing in all Secondary and primary schools in the Region	Increased proportion of secondary and primary schools with adequate sources of safe water, sanitation and hand washing facilities		Health,Water	LGA and partners
8	Promoting improved food hygiene, storage and handling among community members and farming groups to improve food security	Proportion of household with improved food hygiene, storage and handling		Health	LGA and partners

9	Advocacy and orientation of key government and non-government stakeholders on the importance and linkage between WASH and Nutrition	Regional and District stakeholders aware for the importance and linkage between WASH and nutrition	Improved WASH activities in the community	Health	LGA and partners
10	Promoting availability of Hand washing facilities at household level (Kibuyuchirizi innovations) to prevent fecal oral-transmission of diseases	increased proportion of households with hand washing facilities		Health	RS and LGAs

KEY RESULT AREA 5: Scaling Up Multisectoral Nutrition Sensitive Interventions (Agriculture and Food Security; Health and HIV; Water Sanitation and Hygiene (WASH); Education; Social Protection; and Environment and Climate Change)					
Target: To strengthen Multisectoral Nutrition coordination					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
11	Promote establishment of school health clubs and manage Sanitation and Hygiene school and inter-school competitions among primary and Secondary schools in the Region	Number of schools with school health clubs and number of schools conducted competitions		Health and Education	RS and LGAs
12	Promotion of community wide sanitation facilities, including safe handling and disposal of children feaces and waste management	Proportion of households with improved latrines		Health	RS and LGAs
13	Ensure availability and accessibility of improved sources of clean and safe water supply at community level in the Region	Proportion of safe water sources		Health and Water	RS and LGAs

14	Build capacity of school health and nutrition program coordinators of primary and secondary school on effective implementation of nutrition sensitive activities in the schools			Health and Education	RS and LGAs
15	Ensure provision of nutrition education package to primary and secondary school children and teachers through routine teaching programms and outreach			Health and Education	RS and LGAs
16	Provision of nutrition education to TASAF beneficiaries during TASAF session	Poorest households benefit from TASAF conditional cash transfers, cash for work, and nutrition education during the community sessions		Health and Community development	RS and LGAs
KEY RESULT AREA 6: StrengtheningMultisectoral Nutrition Governance					
Target: To coordinate the Multi Sectoral Nutrition Interventions efficiently and effectively by Region and development partners.					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**
1	Establish and conduct meetings for Regional and Council Multisectoral Steering committees on Nutrition at Regional (RMNSC) and Council (CMNC) level according to revised TOR of March, 2018	Increased stakeholder's involvement in nutrition initiatives		Health	RS and LGA
2	Ensure Planning and budgeting for Nutritional activities and interventions for all sectors and incorporated into Regional and Council MTEF	Plans and budget inclusion into MTEF	Nutrition given special attention by all levels	Health	RS and LGA

3	Ensure inclusion of Nutrition agenda in all important decision-making meetings at Regional and District level (RCC, RDSC, Expenditure Committee, DCC, DDSC, FC, WDC, VC etc.)	Nutrition included in important meetings as a permanent agenda		Health	RS and LGA
4	Conduct mapping of nutrition stakeholders (interventions and geography)	Functional multisectoral coordination at all levels		Health	RS and LGA
5	Deployment of nutrition professionals	Improved human resources and capacities for nutrition		Human resource management	RS and LGA

KEY RESULT AREA 7: Establishing a Multisectoral Nutrition Information System					
Target: To strengthen Monitoring and Evaluation of the implementation status of Nutritional interventions					
No	**Activities/Interventions**	**Expected Outputs**	**Expected Outcomes**	**Co-Ordinating Sector**	**Responsible Authority/Level**

1	Equip all health facilities and each community health worker with anthropometric equipment (weighing scale, length measuring boards, MUAC tapes and special nutrition data registers)	Robust systems of data collection, analysis, interpretation and feedback among stakeholders are in place at all level	Increased access to quality nutrition related information to allow the Region and partners make timely and effective evidence Informed decisions	Health	RS and LGA
2	Build capacities for conducting research, monitoring and evaluation at Regional, District and Ward levels			Health	RS and LGA
3	Ensure nutrition data are collected, filled in the nutrition scorecard, BNA tool, JMNR and reported to higher levels			Health	RS and LGA
4	Conduct nutrition baseline survey/Nutrition research at Region level to generate evidence-based information for the Regional own strategic plans	Relevant nutrition indicators integrated, collected and reported in national survey		Health	RS and LGA
5	Carry out annual joint multisectoral nutrition review meeting (review of implementation of nutrition activities with LGA and nutrition partners			Health	RS and LGA

4.0. CHAPTER 4: IMPLEMENTATION PLAN OF ACTION

KEY RESULT AREA:1. Scaling Up Maternal, Infant, Young Child and Adolescent Nutrition (MIYCAN)

TARGET: Stunting among children less than two years of age reduced from 56.3% to 40% by June, 2021													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1	Ensure the presence of at least 2CHWs to all villages in the Region who are trained on various health and nutrition related issues												
2	Mapping of eligible households and conduct home visits, group counseling on MIYCAN and cooking demonstrations												
3	Mapping of Regional and District stakeholders and interventions relevant to improving MIYCAN and prevention of stunting in children below two years.												
4	Support the commemoration of World breastfeeding week every year to promote optimal IYCF practices												
5	Conduct social behavior change communication (SBCC) activities using different communication approaches (including edutainment) and social mobilization for MIYCAN at Ward and Village levels (community)												
6	Conduct in-service training to HCPs on SBCC for MIYCAN and Growth Monitoring using the New WHO Growth charts/cards												
7	Train health workers, and scale up of health facilities providing BFHI												
8	Assure appropriate training and counseling needed for optimal IYCF practices in the general population and in the context of HIV at facility, community and household level to HCWs and CHWs												

KEY RESULT AREAS: 1. Scaling Up Maternal, Infant, Young Child and Adolescent Nutrition (MIYCAN)													
TARGET: Stunting among children less than two years of age reduced from 56.3% to 40% by June, 2021													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
9	Ensure availability of adequate amount of Zinc tablets and ORS at all health facilities to enable appropriate management of acute watery diaarhoea in underfive children (DTC)												
10	Ensure commemoration of village health days to all Councils for provision of nutrition education and demonstrations which targets pregnant women and children below five years involving all stakeholders (HCWs, CHWs, Village and Ward leaders, influential people etc.)												
11	Ensure health facility-based distribution of ITNs to pregnant women and underfive children as a measure to prevent Malaria in pregnant women and children below five years												
12	Ensure prevention of Malaria to both pregnant women and underfive children through promoting the use of ITNs for both pregnant women and their children below 24 months and provision of SP for IPT to all pregnant women.												
13	Conduct advocacy and awareness creation meetings to Regional, District, ward and Village stakeholders including media and private Sectors on MIYCAN and other relevant nutrition issues												
14	Conduct quarterly supportive supervision to HCP and CHWs on MIYCAN services												

Key result area:2 Scaling Up Prevention and Management of Micronutrient Deficiencies													
Target: Increase Micronutrient Availability, Accessibility and utilization among people of Rukwa													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1	Ensure availability of Micronutrients sachets at health facilities and Scaling up home fortification (Virutubishi) for all pregnant women attending ANC												
2	Conduct micronutrient supplementation campaigns and community sensitization through radio programmes (locally available) on the importance of micronutrient rich/fortified foods consumption												
3	Ensure provision of Vitamin A supplement to children of 6-59 months through Vitamin A supplementation and deworming campaign during bi-annual health and nutrition months (June and December)												
4	Ensure Supportive Supervision and technical support during implementation of HNM												
5	Sensitize Regional and LGA, including members of Defense and Security Committee on the importance of community consumption of iodized salt and enforcement of the salt law and Regulations												

6	Conduct regular salt monitoring and inspections in all salt whole salers, retailers, and salt vendors according to the Act and salt Regulations												
7	Community Sensitization on the importance, and promote consumption of adequately iodized salt through community social gatherings (Village assembly, village health days)												
8	Ensure availability of Iodine rapid Test Kits at all levels (Council, Ward and Community)												

Key result area:2 Scaling Up Prevention and Management of Micronutrient Deficiencies													
Target: Increase Micronutrient Availability, Accessibility and utilization among people of Rukwa													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
9	Conduct rapid and laboratory test for presence and iodine content in salt samples from households, Markets, salt vendors, retailers and retailers within the Region												
10	Promote sustainable production, processing, marketing and consumption of locally grown food crops rich in vitamin A, iron and iodine (especially legumes, vegetables and fruits), aquatic products (fish), poultry and livestock keeping.												
11	Promote increased production and utilization of fortified foods including home fortification to improve micronutrient nutrition to the community of Rukwa												

12	Ensure all pregnant women receive full course of Iron and folic acid (fefo) supplement tablets during early pregnancy and deworming medication at the facility and/or community level to prevent them from iron deficiency anaemia												
13	Region in partnership with private sector to expand production of fortified staple foods (Maize meal, wheat flour, potato and cooking oil) and other targeted fortified food products for use in complementary feeding												
14	Monitoring and strengthen compliance of food fortification regulations												
15	Develop and disseminate IEC package materials to promote compliance on utilization of iron and folic acid supplements by pregnant women												

Key result area:3. Scaling Up Integrated Management of Acute Malnutrition (IMAM)													
Target: To reduce prevalence of Wasting among 0-59 months children from5.3% to 2% by June 2021.													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1	Distribution of the National guidelines for Integrated Management of Acute Malnutrition to all levels responsible for diagnosis and management (health facility and community)												
2	To carry out orientation and training (including in-service training) to Health service providers at lower facility level and CHWs on IMAM												

3	Provide training and support to CHWs on early identification and referral of underfive children with SAM using MUAC and by screening bilateral pitting oedema within their communities													
4	Strengthen and expand services for early identification, management and referral of acutely malnourished children, including community-based treatment, care and follow-up to avoid relapses.													
5	Ensure all health facilities and community centers (villages for CHWs) have adequate anthropometric measurement equipment (weighing scale for adult and infant, MUAC tape, length measuring boards) and special nutrition data registers for screening nutritional status of underfive children and pregnant women at facility and community levels													
6	Establish and strengthen community groups (including CHWs and village committee members) that provide continued counseling and growth monitoring follow up of the children discharged from malnutrition treatment													

Key result area:3. Scaling Up Integrated Management of Acute Malnutrition (IMAM)													
Target: To reduce prevalence of Wasting among 0-59 months children from5.3% to 2% by June 2021.													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**

7	Strengthen linkage mechanisms where, households with acute malnutrition cases and MVC are linked to community social support networks including farmer groups													
8	Conduct quarterly supportive supervision of health service providers and CHWs on application of the IMAM protocol													
9	Ensure and support HSP and CHWs on facility and community-based screening of underfive children for SAM and MAM though mobile and outreach approaches													
10	Conduct quarterly supportive supervision of trained CHWs and HSP on IMAM services													
11	Ensure availability of RUTF, therapeutic milk, medicines, tools and equipment for IMAM at health facilities and community													

Key result area:4. Scaling Up Prevention and Management of Diet-Related Non-Communicable Diseases (DRNCDs)

Target: To reduce the prevalence of Overweight from 16.5% to 13% and Obesity from 5% to 3% among women of reproductive age													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1	Train Health Care Providers and Community Health Workers on Diet and Nutrition Related Non-Communicable Diseases at all levels												
2	Ensure and promote adult nutritional status assessment (BMI) and Screening, management and follow up programmes for Diet related non-communicable disease (Diabetes, hypertension, CVDs and cancers) for both adult men and women in the Region												
3	Develop and disseminate IEC package materials to promote compliance on good behavior in relation to food intake, alcohol use, and life style (exercises) to prevent overweight and obesity to both adult men and women												
4	Conduct advocacy and awareness creation meetings to Regional, District, ward and Village stakeholders including media and private Sectors on prevention of obesity and DRNCDs												

Key result area :5. Scaling Up Multisectoral Nutrition Sensitive Interventions (Agriculture and Food Security; Health and HIV; Water Sanitation and Hygiene (WASH); Education; Social Protection; and Environment and Climate Change)													
Target: To strengthenMultisectoral Nutrition coordination													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1	Promote small scale livestock keeping, poultry and fish farming for domestic consumption in the Region.												
2	Ensure orientation and support to extension officers in order to supervise farmers on diverse crop production												
3	Conduct social and behavior change communication to increase production and consumption of diverse range of nutritious food at community level, including developing special IEC package materials												
4	Incorporate nutrition considerations in HIV and AIDS clinical assessment and counseling protocol (NACS) with special focus on HIV positive women in reproductive age and infants and young children												
5	Orient HCPs from health facilities on NACS in the context of HIV/AIDS in line with National guidelines												
6	Ensure utilization of clean and safe water at household level by promoting household water treatment and safe Storage												
7	Promote availability of adequate and use of safe water, sanitary latrines and hand washing in all Secondary and primary schools in the Region												
8	Promoting improved food hygiene, storage and handling among community members and farming groups to improve food security												

9	Advocacy and orientation of key government and non-government stakeholders on the importance and linkage between WASH and Nutrition														

Key result area :5. Scaling Up Multisectoral Nutrition Sensitive Interventions (Agriculture and Food Security; Health and HIV; Water Sanitation and Hygiene (WASH); Education; Social Protection; and Environment and Climate Change)															
Target: To strengthen Multisectoral Nutrition coordination															
No	**Activities**	**YEARS**													
		2018/2019				**2019/2020**				**2020/2021**					
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**		
10	Promoting availability of Hand washing facilities at household level (Kibuyuchirizi innovations) to prevent fecal oral-transmission of diseases														
11	Promote establishment of school health clubs and manage Sanitation and Hygiene school and inter-school competitions among primary and Secondary schools in the Region														
12	Promotion of community wide sanitation facilities, including safe handling and disposal of children feaces and waste management														
13	Ensure availability and accessibility of improved sources of clean and safe water supply at community level in the Region														
14	Build capacity of school health and nutrition program coordinators of primary and secondary school on effective implementation of nutrition sensitive activities in the schools														
15	Ensure provision of nutrition education package to primary and secondary school children and teachers through routine teaching programms and outreach														

16	Provision of nutrition education to TASAF beneficiaries during TASAF session												

Key result area.6. StrengtheningMultisectoral Nutrition Governance													
Target: To coordinate the Multi Sectoral Nutrition Interventions efficiently and effectively by Region and development partners													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1	Establish and conduct meetings for Regional and Council Multisectoral Steering committees on Nutrition at Regional (RMNSC) and Council (CMNC) level according to revised TOR of March, 2018												
2	Ensure Planning and budgeting for Nutritional activities and interventions for all sectors and incorporated into Regional and Council MTEF												
3	Ensure inclusion of Nutrition agenda in all important decision-making meetings at Regional and District level (RCC, RDSC, Expenditure Committee, DCC, DDSC, FC, WDC, VC etc.)												
4	Conduct mapping of nutrition stakeholders (interventions and geography)												
5	Deployment of nutrition professionals												

Key result area.7. Establishing a Multisectoral Nutrition Information System													
Target: To strengthen Monitoring ad Evaluation of the implementation status of Nutritional interventions													
No	**Activities**	**YEARS**											
		2018/2019				**2019/2020**				**2020/2021**			
		Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
1	Equip all health facilities and each community health worker with anthropometric equipment (weighing scale, length measuring boards, MUAC tapes and special nutrition data registers)												
2	Build capacities for conducting research, monitoring and evaluation at Regional, District and Ward levels												
3	Ensure nutrition data are collected, filled in the nutrition scorecard, BNA tool, JMNR and reported to higher levels												
4	Conduct nutrition baseline survey/Nutrition research at Region level to generate evidence-based information for the Regional own strategic plans												

5	Carry out annual joint multisectoral nutrition review meeting (review of implementation of nutrition activities with LGA and nutrition partners												

5.0. CHAPTER 5: References

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8. Rukwa Regional health report, 2016 and 2017
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