NATIONAL PLAN OF ACTION FOR FOOD AND NUTRITION (2011-2015)

Draft (Feb, 2013)

Table of Contents

FOREWORD ii
EXECUTIVE SUMMARY iii
ACKNOWLEDGEMENTS v
Acronyms/Abbreviations vi
I. INTRODUCTION 1
II. The Food and Nutrition Situation and key challenges 2
A. Status of Food Security 2
B. Nutrition Situation 2
1. Child Under nutrition 3
2. Micronutrient Deficiencies 3
3. Adult Nutrition: Under-Weight, Overweight and Obesity 5
III. Causes of Malnutrition and Food Insecurity 6
A. Immediate causes 6
1. Dietary Intake and Diversity 6
2. Food and water- borne and Infectious Diseases 6
B. Underlying causes 7
1. Food availability and accessibility 7
2. Maternal and Infant/ Young Child Care Practices 8
C. Basic causes 9
IV. Goal 10
V. Targets 10
VI. Guiding Principles 11
VII. Strategic Directions 12
VIII. Implementation roadmap 14
A. Short-term (2010-2012) 14
B. Medium term (2010-2015) and Long term (2010-2020) 15
C. Working and Governance Structure 15
1. Policy framework 15
2. Working and governance structure 17
IX. Monitoring & Evaluation 19
Plan of Action 21

FOREWORD

On behalf of the Ministry of Health, I wish to congratulate the Department of Health for spearheading the formulation of the third National Plan of Action for Food and Nutrition (2011-2016) of the Republic of the Union of Myanmar (RoUM).

I also wish to express our full support and commitment to the full implementation of the NPAFN to address food and nutrition insecurity in the country.

We are very pleased not only to be associated with this important undertaking but to have been able to ensure that the National Plan of Action for Food and Nutrition explicitly highlight the important link between food security and nutrition. This document is trail blazing because it identifies and attempts to address the major problems along the farm to table food chain up to biological utilization that impinge on nutrition and health status. It also takes into account the life cycle approach with special focus on the 1000 days window of opportunity to help accelerate the achievement of Millennium Development Goals (MDGs) 4 and 5. Hence, this plan is integrative, intersectoral, holistic and likely to be sustainable in its approach. Also, the NPAFN recognizes the importance of scaling up cost-effective evidenced based food and health and related interventions along with enabling mechanisms like capacity building, action-oriented research and information systems, communications and advocacy among others. This paradigm ensures that we have a NPAFN that will be able to mobilize and generate domestic and external investments for nutrition.

The road ahead as has been acknowledged by many, is likely to be more if not equally challenging. Undeniably there are still key issues to be resolved particularly implementation issues like convergence of interventions at the sub state levels, vertical and horizontal integration and coordination, absorptive capacity of frontline nutrition, health and other development workers etc. But with all of us joining hands, I am truly convinced that we will be able to witness in the near future a food secure and well-nourished citizenry in Myanmar.

Signed:

EXECUTIVE SUMMARY

Overall, the Republic of the Union of Myanmar (RoUM) has achieved modest improvements across a range of dimensions that measure the general well-being of the citizens of the country over a five year period starting from 2005. These indicators which also assess progress made against Millennium Development Goals showed that while major areas that relate to poverty, employment , education and improved sanitation have significantly improved, the country continues to lag behind gender equality, immunization against measles, antenatal care. Out of the 8 MDGs, the Republic of the Union of Myanmar is still off track in so far as MDGs 1, 2, 4, 5 are concerned with general but modest improvements noted between 2005 and 2010. It is recognized the world over that in almost all of the 8 MDGs, nutrition is a cross cutting concern where it is either an input or an output of development processes that can help fast track the attainment of MDGs.

As a response, the Republic Union of Myanmar has formulated the National Plan of Action for Food and Nutrition (NPAFN) to put in place a coherent set of strategies, priorities and decisions which when adopted can provide all members of the Myanmar population, within a specified period of time, with food, health, social cultural, political and economic conditions that are essential for food security and better nutrition.

The NPAFN is a strategic guideline based on a holistic causal analysis of the malnutrition situation in Myanmar. As such, it forms a comprehensive approach to address the immediate, underlying and basic causal factors from a farm to table food chain perspective and along the different life stages. On the basis of these analyses, strategic directions and objectives are outlined: (1) to address the immediate causes at the individual level, focus will be on improving nutrient intake and reducing food and water-borne as well as infectious diseases that affect the biological utilization of food. (2) To address the underlying causes (mainly at the household and community level), there is a need to improve food availability and accessibility. Further, mother and child care practices and environmental health/sanitation and access to health services should be improved. (3) Lastly, a number of strategies to address basic causes (mainly at the national level) have been identified. This includes improving institutional and human capacity, the collection and dissemination of relevant information, and advocating for investments in food based and health based interventions. The breadth and depth of the NPAFN aims to fast track and break the current trends in some forms malnutrition (under as well as over nutrition) and sustain any cumulative gains made in the past to achieve the priority national development goals of the government including the MDGs, National Socio-economic Development Plan, National Health Plan and National Agricultural Plan

The effective and efficient implementation of the NPAFN requires rigorous cross-sectoral coordination, cooperation, communication, collaboration, and partnership (including non-governmental organizations, civil society, academia, private sector and the donors) at all levels. Hence, a three-tiered multisectoral and multistakeholder engagement is proposed.

Recognizing that the implementation may be constrained by available resources, priority will be given to proven interventions with a high benefit / cost ratio targeted to the population with the highest need, as well as human and institutional capacity building. Further, high priority will be given to advocacy and fundraising activities in order to expand resources. The critical role of evidence-based information from well-conducted research and a functioning food security and nutrition information system that can inform policy and program planning as well as implementation, monitoring and evaluation is also emphasized in the NPAFN.

ACKNOWLEDGEMENTS

The preparation of this National Plan of Action for Food and Nutrition (NPAFN) would not have been possible without the support, hard work and endless efforts of a large number of individuals from various sectors, international as well as local agencies. We are particularly grateful for the Food and Agriculture Organization of the United Nations (FAO-UN), both in the country and regional offices for providing technical as well as financial assistance from draft formulation to finalization[1].

Likewise, the Director General of the Department of Health (DoH) and staff wishes to thank the National Nutrition Center (NNC) Deputy Directors and staff who provided the leadership in preparing the NPAFN, the Deputy Director General (DDG) of DOH and focal members of the Technical Working Group (TWG) who supported the effort and gave valuable contributions to the development of this material from drafting to finalization.

We are particularly grateful for the valuable support and technical guidance of the following:

Focal members of NPAFN Technical working group from the following Ministries; Ministry of Agriculture and irrigation, Ministry of livestock and Fishery, Ministry of Cooperative, Ministry of Mine , Ministry of social Welfare, relief and resettlement, Ministry of Industry, Ministry of Science and Technology, Ministry of National Planning and Economic Development, Ministry of Commerce, Ministry of Environmental Conservation and Forestry, Ministry of Education, Ministry of Border Affair , Ministry of Construction, Ministry of Home Affair, Ministry of Transport and Ministry of Railways Transportation

Members of MNTN

DPs especially UNICEF, WFP, WHO, UNFPA and UNDP

INGOs such as ACF

FSWG

To all, we express our sincerest gratitude.

[1] FAO has supported the formulation and finalization of the NPAFN with financial contribution by the European Union.

Acronyms/Abbreviations

ARI	Acute Respiratory Tract Infection
BFHI	Baby-Friendly Hospital Initiative
BFHD	Baby-Friendly Home Delivery
BFCI	Baby-Friendly Clinic Initiative
BMI	Body Mass Index
CSO	Central Statistical Organization
CDC	City Development Committees
CNC	Community Nutrition Centers
CCCIDD	Central Committee for Control of Iodine Deficiency Disorders
CCEIDD	Central Committee for Elimination of IDD
CFR	Case Fatality Rate
DDA	Dept of Development Affairs
DOTS	Direct Observed Treatment Short course
DOF	Department of Fishery
DDOH	Deputy Director Department of Health
DOH	Department of Health
DPs	Development Partners
FDSC	Food and Drug Supervisory Committees
FDA	Food and Drug Administration
FAO-UN	Food and Agricultural Organization of the United Nations
GMP	Growth Monitoring Promotion
HDI	Human Development Initiative
HNU	Hospital Nutrition Units
HDL	High Density Lipids
HIV/AIDS	Human Immunodeficiency Virus, Acute Immunodeficiency Syndrome

HMIS	Health Management Information System
INGOs	International Non-governmental Organizations
ICN	International Conference on Nutrition
IDD	Iodine Deficiency Disorders
IGT	Impaired Glucose Tolerance
IPC	Integrated Food Security Phase Classification
LQAS	Lot Quality Assurance Sampling
LBVD	Live Stock Breeding Veterinary Department
LFME	Live Stock Foodstuffs and Milk Products Enterprises
MNPE	Ministry of National Planning & Economic Development
MAS	Myanmar Agricultural Services
MDGs	Millennium Development Goals
MOAI	Ministry for Agriculture and Irrigation
MFDBA	Food and Drug Board of Authority
MMCWA	Myanmar Maternal and Child Welfare Association
MSMCE	Myanmar Salt and Marine Chemicals Enterprise
MOH	Ministry of Health
MNAIP	Myanmar Nutritional Anemia Initiative project
NIDs	National Immunization Days
NCD	Non-Communicable Diseases
NPAFN	National Plan of Action for Food and Nutrition
NHP	National Health Plan
NNC	National Nutrition Centre
NGOs	Non-governmental Organizations
NHC	National Health Committee
NCHS	National Centre for Health Statistics
NHL	National Health Laboratory

NTP	National TB Control Programme
OPV	Oral Polio Vaccine
OGTT	Oral Glucose Tolerance Test
PEM	Protein energy malnutrition
PPS	Probability Proportionate to Size
RDA	Recommended Daily Allowance
RoUM	Republic of Union of Myanmar
TMO	Township Medical Officers
UNDP	United Nation Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nation Children's Fund
USI	Universal Salt Iodization
UIE	Urinary Iodine Excretion
VFB	Village Food Bank
VAD	Vitamin A Deficiency.
WHO	World Health Organization
WFA	Weight for Age
WFP	World Food Programme
YCDC	Yangon City Development Committee

I. INTRODUCTION

In 1992 the International Conference on Nutrition (ICN), convened by FAO, UNICEF and WHO, the Ministers and the Plenipotentiaries representing 159 countries and states and the European Economic Community had declared " *Hunger and malnutrition are unacceptable in a world that has both the knowledge and resources to end this human catastrophe ... that access to nutritionally adequate and safe food is a right of each individual... that the nutritional well-being of all people is a precondition for the development of societies and that it should be a key objective of progress in human development . It must be the center of all our socio-economic development plans and strategies... Furthermore, that each government has the prime responsibility to protect and promote food security and nutritional well-being, especially the vulnerable groups*". As an expression of its commitment to this World Declaration and Plan of Action on Nutrition, the Republic of the Union of Myanmar has since 1994 formulated its 5 year National Plan of Action for Food and Nutrition (NPAFN). Now, on its third successor plan , the RoUM with strong resolve is embarking on a national strategy for action that recognizes that food security and nutrition deserves to be an area of public policy and should be a major driver for public investments. Thus, the NPAFN for 2011-2016 clearly underscores the need to make investments in nutrition if the RoUM is to achieve its long term goal of national socio-economic development and attain its Millennium Development Goals (MDGs). It is now widely recognized that better nutrition leads to improved intellectual capacity, greater economic productivity and lowered risk of non-communicable diseases. In short, better nutrition is a vital element to ensuring long-term national development.

Through the years, the different RoUM NPAFNs have evolved and reflected changes in perspectives and demonstrated a more focused approach for addressing food insecurity and the entire spectrum of malnutrition (i.e. from under to over nutrition). The present plan recognizes that balancing food supply and demand is necessary but is not a sufficient condition for achieving nutrition well-being. Also, the recommended courses of actions underscore the importance of putting in place a complex of evidence-based cost-effective interventions that prioritizes the 1,000 days 'window of opportunity' alongside nutrition sensitive sectoral strategies implemented by various sectors in a coordinated and integrated manner. For the latter, the vital roles of agriculture, health, education, social welfare, employment, economic sectors, development partners, CSOs, INGOs and donor agencies, among others are highlighted. Lastly, that while poverty plays a major role in malnutrition it is not a problem of poverty alone – there is also a need for promoting a healthy environment and lifestyle.

The National Plan of Action for Food and Nutrition consists of six chapters: Chapter 1 is the introduction and provides the overall context of nutrition and the NPAFN. Chapter 2 gives the overview of the food and nutrition situation in Myanmar. It presents the magnitude of the overall problem, identifies both acute and chronic problems, triple burden of malnutrition and provides a demographic and geographic overview of the

most food insecure and nutritionally vulnerable. Further, it provides an overview of the main causes of malnutrition in the country in terms of immediate, underlying and basic causes. Chapter 3 states the guiding principles of the Republic of the Union of Myanmar in achieving food security and better nutrition. This chapter also incorporates the SUN promoted guiding principles with the end in view of becoming a member country for the Global SUN initiative. Chapter 4 provides the framework of the NPAFN. It elaborates on concrete strategies to address the immediate, underlying, and the basic causes of malnutrition. Chapter 5 presents the log frames for the different strategies in terms of specific activities proposed, population to be targeted and lead agency from both government and Development Partners (DPs). This chapter builds on cumulative gains made by development partners in their areas of responsibility and highlights the cost-effective strategies as espoused by the Lancet Series (2008) as well as SUN. Lastly, chapter 6 presents an overview of the NPAFN in terms of how it will be implemented (specifically governance and multistakeholder coordination mechanisms), monitored and evaluated.

II. The Food and Nutrition Situation and key challenges

A. Status of Food Security

Based on the MDG Data Report of the Integrated Household Living Conditions Survey in Myanmar (2011), the proportion of the population living below the minimum level of dietary energy requirements has declined as measured by a proxy measure known as food poverty incidence. Overall, there was a significant reduction in food poverty incidence from 10 % to 5 % from 2005 to 2010. In terms of rural-urban differentials food poverty was found to be higher in rural areas. When disaggregated by states, Chin has the highest food poverty incidence at 25% followed by Rakhine (10%), Tanintharyi (9.6%) and Shan (9%).

The same study noted that the consumption share of poorest quintile in national consumption has increased slightly from 11.1% to 12%. Rural areas appear to be also most disadvantaged although a faster rate was noted in urban areas.

Global Hunger Index, a multidimensional statistical tool to describe country's hunger situation was estimated at 18.8 in 2010. This implies that Myanmar has a serious hunger situation which contributed to undernutrition among young children.

B. Nutrition Situation

The nutrition situation of Myanmar shows the typical triple burden of developing countries in transition towards sustained economic growth and more affluent living conditions. Both under-nutrition and over-nutrition are matters of concern. While micronutrient deficiencies especially, Vitamin A and Iodine deficiencies are under control, other equally debilitating micronutrient deficiencies like iron deficiency anemia and infantile beriberi persist.

1. Child Under nutrition

Comparability of malnutrition data in Myanmar over the years is problematic due to changes in methodology and reference standards. In the earlier years, the prevalence of malnutrition amongst children under three years of age was surveyed, instead of the standard under five years of age in practice today. The latest Multi Indicator Cluster Survey (MICS3) of 2009/10 used the revised WHO growth standards, but was also analyzed against the earlier National Centre for Health Statistics (NCHS) reference values. From 1991, there appears to be a clear downward trend in malnutrition in Myanmar. According to the most recent estimates (MICS3, 2009/10), the prevalence of underweight is 22.6 percent, prevalence of stunting is 35.1 percent and prevalence of wasting is 9.4 percent as per the new WHO growth standards.

Stunting (height-for-age) is a reflection of chronic malnutrition as a result of failure to receive adequate nutrition over a relatively long period, both in terms of macronutrients and micronutrients, and recurrent or chronic illness. Stunting increases with age, and is highest around the age of 30 months, after which some limited catch-up growth takes place. The MICS3 (2009/10) findings showed that wasting (weight-for-height) is highest around the age of 18 months, which can probably be attributed to poor infant and child feeding practices and increased exposure to infections due to insufficient care practices in this age group. Same study found that 2 percent of children under five were overweight.

There are important regional differences in malnutrition prevalence. Undernourishment in children is more common in Rakhine and Chin, and to some extent also in Ayeyarwady, Magwe and Shan North, compared to other states and divisions. Wasting is relatively highest in Yangon state/division. Undernourishment is most common among children in the poorest households. More children in rural areas are underweight and stunted than children in urban areas, whereas there is little difference between urban and rural children in terms of wasting. Higher maternal education is positively correlated with lower rates of stunting and underweight. These differences in malnutrition need to be addressed by appropriate targeting of priority actions, based on an understanding of the underlying causes.

The most recent MICS3 (2009/10) found a low birth weight (LBW) rate of 8.6 percent, somewhat improved compared to a 2004 survey estimate of 10 percent. Low birth weight, defined as a birth weight <2,500g, can be caused by two processes: preterm birth and intra-uterine growth retardation. Growth retardation is associated with permanent deficits in growth and neurocognitive development, and affected infants have an increased risk of non-communicable diseases like diabetes, hypertension, and coronary artery disease when they reach middle age.

2. Micronutrient Deficiencies

***Iodine Deficiency Disorders (IDD)*:** Endemic goiter has been recognized as a problem in the northern hill regions of Myanmar since as early as 1896. Assessments in the

1980s and 1990s showed that Iodine deficiency disorders were a nationwide problem. Due to effective implementation of the Universal Salt Iodization Programme, iodine deficiency disorders are no longer a public health problem. The targets set for the programme have been realized based on a study done by the National Nutrition Center (2008) but need to be sustained or still improved.

Vitamin A Deficiency (VAD): Vitamin A deficiency used to also be a public health problem amongst Myanmar's children. Prevalence of Bitot's spots in children was found to be well over 0.5%, in the early 1990s. Biannual supplementation with high potency Vitamin A capsules was started in 1993 and has since reduced the prevalence of Bitot's spots to acceptable levels by 2000. Serum retinol levels were also found to have improved: 4% of urban children had mild sub-clinical Vitamin A deficiency and all rural children had normal vitamin A status (serum retinol ≥0.70 (µmol/l) (NNC, Xeropthalmia Survey 2000).

While progress has been good, achievements need to be maintained. The latest MICS3 survey (2009/10) findings did not confirm universal coverage of Vitamin A supplementation in children under five years of age (67.8 percent total: 55.9 percent in last 6 months, plus 11.9 percent more than six months ago). Vitamin A supplementation within one and half month after delivery for postpartum mothers was 66.4 percent (more in rural than in urban areas).

***Iron Deficiency Anemia (IDA)*:** The prevalence of anemia in Myanmar women and children is very high. Despite iron-folate supplementation for pregnant women, adolescent school girls, and children aged 6 to 36 months, the prevalence rates have not improved or have even increased. Iron deficiency anemia among pregnant women was 58 percent in 1994 according to a survey by the Department of Medical Research, and 71 percent in 2003. Prevalence of anemia among preschool children was 30 percent in 1994 (DMR) and 75 percent in 2004 (NNC). Anemia was more common in coastal and delta regions.

The prevalence of anemia assessed by hemoglobin status of non-pregnant women between 15 and 45 years of age was 45% in 2001 (NNC, 2001) Only the prevalence of anemia among adolescent school girls (26% in 2002) was found to be within acceptable limits (NNC, 2002)

Infantile Beriberi: Beriberi (Thiamine/Vitamin B1 deficiency) is caused by an unbalanced diet high in carbohydrate, specifically polished rice, and low food diversity. High alcohol consumption will increase the thiamine requirement of the body. According to a cause-specific under-5 mortality survey, infantile Vitamin B1 deficiency (Beriberi) is the fifth leading cause of deaths among children between 1-12 months in Myanmar (NNC, 2007). The majority of deaths due to infantile beriberi occur among babies 2-3 months of age.

Hospital based Infantile Beriberi Surveillance from May 2005 to November 2007 by the NNC in 35 hospitals of 21 townships, showed in a total of 725 reported cases, of which

44 cases died (6.2 percent), mostly in the 2-3 months age group. About half of the reported cases were identified with a definitive diagnosis of infantile beriberi (54 percent of reported cases and 47 percent of death cases), establishing mortality rate at 5.3 percent.

3. Adult Nutrition: Under-Weight, Overweight and Obesity

Like other developing countries, Myanmar is a country in nutrition transition and faces the double burden of both under-weight and over-weight. A nationwide study on the nutritional status of Myanmar adults in 2003 indicated that 20.5 percent of men and 21.7 percent of women have a low body mass index. Under-nutrition in women is an important contributing factor to low birth weight.

The same study found that 7.2 percent of men and 14.5 percent of women were overweight (BMI>25), and 1.4 percent of men and 3.7 percent of women were obese (BMI>30). Overweight and obesity prevalence were higher amongst urban populations compared with those in rural areas, and among skilled laborers and dependent individuals, compared to unskilled laborers. These findings show the emerging issue of over-nutrition, and its probable association with increasing urbanization, life style changes and changing consumption patterns.

Diabetes, associated with overweight and obesity, is a growing public health problem in Myanmar. WHO has estimated the prevalence of diabetes at 2.4 percent in 1995 and 2.5 percent in 2000, predicting it will rise to 3.2 percent by the year 2025. A survey in 2003-04 in rural and urban areas of Yangon Division using standard oral glucose tolerance test (OGTT) found a prevalence of diabetes 11.8 percent. Prevalence for pre-diabetes was 13.4 percent. Prevalence of diabetes was nearly two times higher amongst urban compared to rural populations, but varied little between household income quintiles. Accordingly, it may be assumed that adult prevalence of diabetes in other areas of Myanmar may range between 3% to 6%.

A more recent study done in 2009 (STEPS,2009) showed that of the 7,429 aged 15-64 years who participated in the survey, 25.38 % were found to be overweight or obese. When gender disaggregated, there were more females found to be overweight (BMI ≥ 25 kg/m^2) and obese (BMI ≥ 30kg/m^2), 30.27 % and 8.37%, respectively. However, using waist circumference the males had a slightly higher 76.33cm versus 75.64 cm for females. When various risk factors such as current daily smoker, consumes less than 5 servings of fruits and vegetables per day, low level of activity, overweight or obese and raised blood pressure (BP) or currently on medication for raised BP are combined, it was found that almost a third (29.64%) of the population studied had raised risk for

developing diabetes Type II (at least 3 of the risk factors are present) for with more males (31.22%) having raised risk than females (28.61%).

III. Causes of Malnutrition and Food Insecurity

A. Immediate causes

Adequate nutrient intake requires both sufficient quantity and quality of nutrients consumed. At the national level, diets have sufficient caloric intake on average, which is one indicator of quantity of intake. However, this hides disparities (geographic and seasonal). In addition, the high prevalence of certain micronutrient deficiencies indicates that the *quality* of diets is insufficient – particularly, diets lack adequate diversity to ensure the necessary consumption of foods rich in essential micronutrients (vitamins and minerals).

1. Dietary Intake and Diversity

A 1998 household food security survey found that the average per capita energy consumption met 92.4% of the Recommended Dietary Allowances (RDA). About one-third of households consumed more than 100%; another third (30.5 percent) consumed less than 80% of the RDA for energy. The survey found that pregnant and lactating women in particular were not consuming sufficient quantity of calories and nutrients. Inadequate consumption was largely due to avoidance of certain foods because of traditions, such as meat, fish, beans and milk. Other foods were said to be unaffordable in rural areas, like eggs, vegetables and fruits. There was clearly a problem of lack of diversification.

Improving balanced diets can be delicate from a cultural perspective. Although local supplies of some foods may be sufficient, such as meat, eggs, and vegetables, traditional food habits and cooking practices causing nutrient loss, play a crucial role in inadequate food and nutrient consumption, and need to be addressed by improving knowledge on nutrition.

The STEPS survey of chronic disease risk factors (2009) showed that the fruit and vegetable consumption in a typical week that fruits are consumed more than 4 days a week while the mean consumption of vegetables was 5.65 days for both males and females aged 15-64 years. However, over 90% of those included in the study ate less than 5 of combined servings of fruits and vegetables per day. This combined with unhealthy lifestyles like smoking, alcohol consumption, low physical activity and high BMI have been implicated as risk factors for NCDs including diabetes mellitus.

2. Food and water- borne and Infectious Diseases

The synergistic relationship between infectious diseases and malnutrition is widely known. When diarrhea, malaria and parasitic infections occur at alarming rates, chances are different forms of malnutrition are present.

Immunization against diseases such as diphtheria, polio, tuberculosis, tetanus, and measles can help reduce the incidence of infectious disease. In 1995 the vaccination rates ranged from 75 percent to 83 percent (MICS, 1995). Since then, measles immunization coverage has increased to 90.7 percent (MICS, 2010). The proportion of fully immunized children increased from 79.9 percent in 2000 to 88.6 percent.

Diarrhea impairs nutrient absorption from the gastrointestinal tract. In total, 6.7 percent of the children surveyed in the MICS 2010 had diarrhea in the two weeks prior to survey. Prevalence was highest in Chin State (13.1 percent). The case fatality rate (CFR) of diarrhea very significantly decreased below 0.5%, because of effective case management. Only two-thirds of children with diarrhea received oral rehydration salts.

Acute respiratory infections (ARI) are amongst the five leading causes of morbidity and mortality in most states and divisions. High morbidity seems correlated with high population density. Although care seeking practices for children with suspected pneumonia has increased; roughly 70% of cases are attended by appropriate health services, improvements in coverage still need to be made. Urban and higher income children are more likely to receive appropriate care than poor and rural children. Almost a third of the suspected pneumonia cases received antibiotic treatment.

Food borne infections can seriously affect nutrition status of individuals and populations. Unsafe practices in food production, processing, storage, distribution, and food preparation and consumption lead to infections and diseases.

Various sources of contamination can be identified along the food chain. Farmers may use untreated waste water or human excreta for fertilizer. Industrial affluent leads to chemical pollution (heavy metals, PCBs, etc.) in the environment and ultimately in food crops. Pesticide residues may be present in excessive amounts as a result of poor agricultural practice. Improper handling during later stages of processing and distribution of food can introduce contaminations. Pickled tea which is very popular in Myanmar has known to be adulterated with the use of non-food coloring.

B. Underlying causes

1. Food availability and accessibility

The availability of adequate food strongly influences the nutrition and food security status. Adequate nutrient intake requires both sufficient quantity and quality of nutrients consumed. At the national level, diets have sufficient caloric intake on average, which is one indicator of quantity of intake. However, this hides disparities (geographic and seasonal). In addition, the high prevalence of certain micronutrient deficiencies indicates that the *quality* of diets is insufficient – particularly, diets lack adequate diversity to ensure the necessary consumption of foods rich in essential micronutrients (vitamins and minerals).

Food accessibility which is a function of purchasing power is a major contributory factor to food insecurity. A joint government/UN household living condition survey

conducted in March 2007 found that 10% of the population fell below the food poverty line at the national level. Poverty is highest in Chin State, where some 40% of the population suffer from food poverty, followed by Shan north and Shan east. The lowest incident of food poverty was in Kayin State, at 2%. The findings indicated considerable variability in food security conditions at sub-national levels.

These findings confirm earlier results from of the Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS) analysis in 2002, which identified a total of 52 townships (18%) as very highly vulnerable. Twenty nine of these townships were located in Shan State, representing 79% of Shan townships. All townships in Chin and two thirds of townships in Kachin were also found to be very highly or highly vulnerable. Less than half of the townships (43%) was classified as having a low level of vulnerability.

The identification of vulnerable and at risk areas and populations allows for targeting of safety networks, disaster preparedness and risk reduction activities and eventually emergency relief.

2. Maternal and Infant/ Young Child Care Practices

Exclusive breast feeding was practiced by only 16 percent of mothers according to the IYCF Survey (NNC, 2000). The 2009/10 MICS3 showed some improvement in exclusive breastfeeding, at 23.6 percent. About 94 percent of mothers start breastfeeding, but often with a delayed initiation. MICS findings indicate that most mothers start complementary feeding too early. Timely introduction of complementary feeding has improved since 1995 and is now more than 80%. Nevertheless, infant and young child feeding practices leave much room for improvement. To better address this issue, there is a need to further study the factors inhibiting exclusive breastfeeding and appropriate complementary feeding.

Table 1: Infant and Young Child Feeding Indicators

Impact Indicators	MICS1 (1995)	MICS2 (2000)	MICS3 (2009-10)
Exclusive breast feeding	30%*	15.8 %**	23.6 %
Timely initiation (within 1 hour after birth)			75.8 %
Continued breastfeeding rate 12-15 months		89.0 %	91.0 %
Continued breastfeeding rate 20-23 months	56 %	67.4 %	65.4 %
Timely complementary feeding (at 6 months)	40 %	67.3 %	80.9 %

Appropriate frequency of complementary feeding (2x per day 6-8 months old; 3x per day 9-11 months old)			56.5%
Adequately fed infants			41.0%

* Up to 4 months

** 0-3 months

Antenatal visit or care coverage (at least one visit) increased slightly from 82.5 % to 83.3 % between 2005 to 2010 where levels are considerably lower for the poor households and those living in rural areas. Rakhine and Chin had the lowest coverage with 67% and 60.1%, respectively. (IHLC Survey, 2011)

C. Basic causes

The basic causes of the nutrition problems and food insecurity in Myanmar were found to be deeply rooted in a number of factors. Food security and nutrition objectives have not yet been mainstreamed in national development policies and plans which consequently resulted in limited investments made for nutrition and related actions.

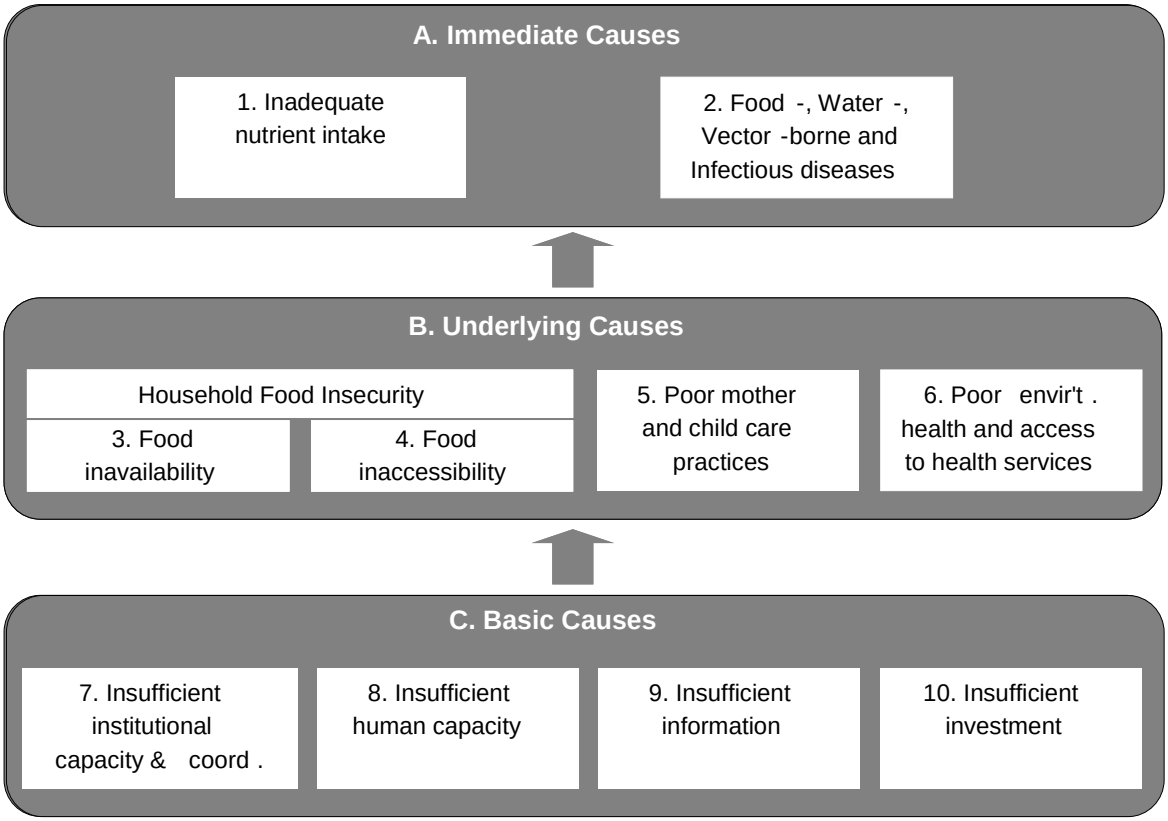
Knowledge/information systems, targeted initiatives and programmes supported by consistent, coherent and effective actions at all levels of government are prerequisites to a sustainable and effective integrated and holistic nutrition strategy and action plan. Timely and forward looking assessments are needed for the design and implementation of appropriate policies, prioritized investments programmes and interventions to address food security challenges also need to be put in place. These underscores the need for capacity-building and development in the areas of formulating nutrition-sensitive policies and plans as well as translating plans into specific programs and interventions that would ultimately result in improvements in individual's nutrition and health status.

Myanmar is becoming more and more inter-linked into the regional and global economies. Under such open economy conditions, the country's food supply as well as its ability to access food markets will become the subject of exogenous shocks. Such disruptions can leave significant proportions of the population facing severe food shortages and compromised nutritional status, including hunger and starvation.

People must have access to food to utilize it to sustain their health and nutrition status. Accessing food has a number of inter-related dimensions. From the physical point of view infrastructures such as roads, markets and post- harvest storage facilities are needed to ensure that food is available in the right places and at the right times for utilization. Often is also essential to process the food so that the consumer can access when it is in a form that facilitates its utilization. From the economic point of view, the consumer needs to have the amount of income and financial resources that are required to access and utilize the food that are made available. In Myanmar, the situation

indicates that there are still improvements that are needed in the physical facilities as well as in the income and financial conditions in order to ensure that the population can access food in the right place, at the right time and in the right form.

Figure 1: Causal Analysis of Malnutrition in Myanmar



IV. Goal

The goal of the updated NPAFN is to ensure adequate access to, and utilization of food that is safe, adequate and well-balanced on a long term basis in order to enhance the physical and mental development of the people of Myanmar.

V. Targets

Hunger

Indicator	20 (Baseline)	Target by 2016
Households with inadequate calorie intake	70%	85%

Protein-Energy Malnutrition

Indicator	Baseline	Target by 2016
Prevalence (in percent) of underweight under-five children	22.6%	20%
Prevalence (in percent) of stunted under-five children	35.1%	30%
Prevalence (in percent) of wasted under-five children	7.9%	7%
Percent of low birthweight	8.6%	8%

Anemia, percent with hemoglobin levels below recommended level

Population Group	baseline	2016
Pregnant women	71%	60%

* Target is to bring or maintain levels below public health significance per WHO cut-off

Iodine deficiency based on urinary iodine excretion (UIE), µg/L

Indicator	baseline	2016
Children, 6-12 years old		
- Median UIE	123.5%	150%
-		

* Target is to keep at levels below public health significance per WHO cut-off

Overweight and obesity

Population Group	Baseline 2009	2016
Children, 0-5 years old	2.6%	2.2%

VI. Guiding Principles

A. The overall goal of the NPAFN is food and nutrition security for all. This implies the need for improvement of in-country responses to achieve food security such as improved production of foods that will enhance the diversity and nutritional quality of local foods, improved complementary foods using locally available and affordable foods, improving nutritional content of processed foods

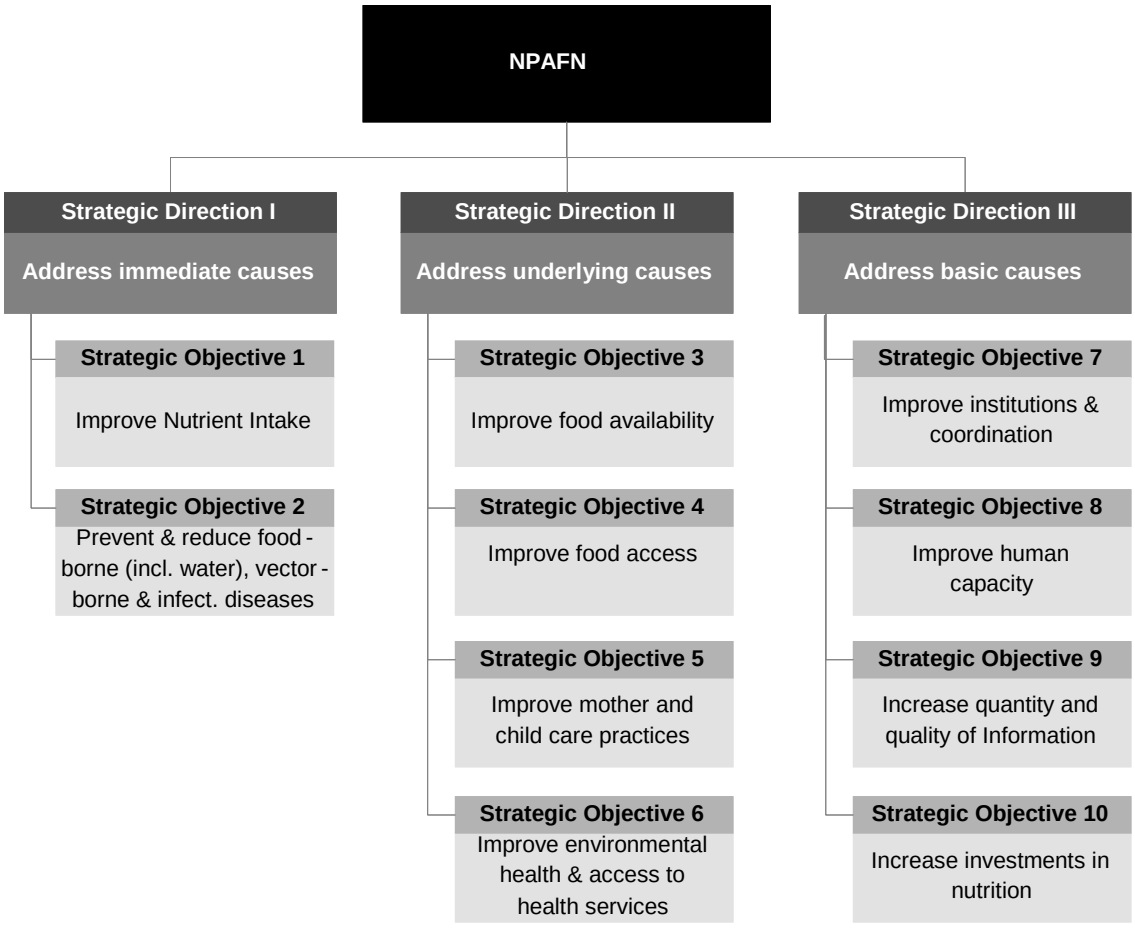
B. Advocate for nutrition-focused development. There is a need to promote nutrition as the goal of national development as well as relevant sectoral policies.

C. Evidence based nutrition-specific as well as food based interventions proven to be cost-effective will be promoted and scaled up

D. Priority will be given to households and individuals with less access and most food insecure and nutritionally vulnerable

E. Good governance is at the center of all efforts to promote food security and nutrition well-being but equally considers the responsibility of families and communities to ensure nutritional well-being of its members through provision of adequate care

VII. Strategic Directions



1. Contribute to the reduction of disparities related to nutrition through a focus on population groups and areas highly affected or at-risk to malnutrition, specifically: (SO1)

- Pregnant women, infants, and children 1-2 years old

- Families with pregnant women, children 0-2 years old, and underweight children 0-5 years old
- States with high levels of child undernutrition or at risk to increased levels of undernutrition and food insecurity

2. Increase investments and go to scale in the identified promising interventions that could impact more significantly on undernutrition among under-fives and pregnant and lactating women (SO1,SO2, SO5 and SO6)
    - Promotion of optimum and safe infant feeding and young child feeding practices anchored on exclusive breastfeeding in the first six months of life, the introduction and use of calorie- and nutrient-dense and safe solid and semi-solid foods (complementary foods) from 6th month of life onward with continued breastfeeding up to 2 years of age and beyond.
    - Promotion of sanitary practices including personal hygiene and hand washing and environmental sanitation.
    - Supplementation with vitamin A, zinc in the management of diarrhea, iron for pregnant women and infants and young children and iodine for pregnant women in areas endemic to iodine deficiency disorders
    - Dewormization
    - Appropriate medical and dietary management of acute malnutrition as well as of other forms of infections
    - Iron fortification of rice and flour, vitamin A fortification of other staples, and universal iodization of salt
3. Strengthen food-based approaches to address malnutrition and food insecurity (SO3 and 4)
4. Strengthen the nutrition information, education and communication component of the healthy lifestyle education/promotion program (SO5)
5. Strengthen the linkage of nutrition with other sectors of development (SO7)
6. Converge with other existing sectoral efforts, e.g. conditional cash transfer, universal health care coverage, agriculture development, labor and employment, among others. (SO7)
7. Strengthen and nurture interagency structures for integrated and coordinated implementation of nutrition and related services at national and local levels (SO7)
8. Capacity-building of NNC and relevant staff/institutions (SO8)

9. Identify, document, and adopt good practices and models for community-based nutrition improvement (SO9)
10. Strengthen system for planning, monitoring and evaluation of nutrition plan implementation at national and local levels (SO9)
11. Formulate and implement a nutrition research agenda (SO9)
12. Strengthen advocacy efforts through promulgation of coherent policies and increased internal as well as external investments for nutrition (SO10)

VIII. Implementation roadmap

The NPAFN implementation roadmap is based on the prioritization and sequencing principles. For this NPAFN roadmap implementation will be carried out over a time frame of 5 years which can be considered medium term. However, some of the interventions can be implemented over a short-term period. Hence, the interventions can either be implemented on the following time periods:

A. Short-term: Implementation over the next 2 years (2013– 2015)
B. Mid-term: Implementation over the next 5 years (2015 – 2016)

While there is not an exact match between the three strategic dimensions of the NPAFN and time periods mentioned above, the goal is to largely address all immediate causes in over the next two years. The underlying causes will be largely addressed over the next five years (coinciding with rapid scale up) and the basic causes will be addressed starting the period covered by this NPAFN but may have to be extended beyond the scope of this NPAFN.

A. Short-term (2010-2012)

To achieve immediate impact and set the foundations for sustainable long-term development, the Republic Union of Myanmar has defined a set of high-priority interventions for short-term implementation. These interventions form a subset of the interventions of the 10 strategic objectives described in chapter 3 and fall within two categories.

Existing initiatives

Most near-term high-priority interventions fall within existing government and DPs' initiatives, most of the entire MNCH core package.

The MNCH core Package is a government-led project facilitated by UNICEF, WHO, and UNFPA, and many INGO and NGO especially Myanmar Maternal and Child Welfare Association (MMCWA). It is an integrated approach for the care of mothers, newborns, and children, includes essential evidence based interventions likely to improve MNCH survival and nutrition through coordination all efforts and resources for MNCH and

further for Primary Health Care (PHC) services. The package brings together promotive, preventive and curative interventions that are mutually beneficial and inextricably link to the goals of reducing maternal, neonatal and child mortality and the prevalence of malnutrition in children. It is a phased approach which is builds on the existing structure with focus on improving the delivery system.

The RoUM is intending to be included as a SUN country. SUN is a global initiative that was initiated in July 2008 to effectively address the near-term / high-priority causes of nutrition and food security. Its initiating partners are UNICEF, FAO, WFP, and WHO. The analysis of the nutrition situation together with the stock-taking activity to be conducted under SUN should provide a systematic situational and gap analysis that will help define a package of highly-effective evidence-based solutions for rapid scale-up. The aim is to put in place interventions that have an efficacy rate of around 60%. This will help achieve a minimum of 80% target coverage for the interventions that would reduce the nutrition-related burden of disease of the main target group, children under five, by around 50%. The SUN promoted interventions build upon current activities and structures but also realize new synergies to increase effectiveness and efficiency through coordinating the efforts of stakeholders across sectors.

Additional initiatives

Additionally, there are a number of short-term interventions that are covered by above-mentioned existing nutrition programs, but are most important to be addressed in the short-term. These include a rapid institutionalization of nutrition, a solid base lining of the relevant coverage and outcome indicators, continuous implementation and progress monitoring and evaluation, natural resource management, and disaster preparedness.

B. Medium term (2010-2015) and Long term (2010-2020)

Medium term and long term interventions represent the remaining interventions listed in the strategy section. For the period of 2010-2015, these will be further detailed in the logframes.

C. Working and Governance Structure

1. Policy framework

The NPAFN will not operate in a vacuum. In fact, it will leverage on a number of existing relevant policies, legislations, laws and regulations developed by different sectors, and by international treaties and conventions including its constitution that will contribute towards the creation of an enabling macroenvironment. It is recognized that the interventions identified to address the causality of food insecurity and malnutrition require a nutrition sensitive policy environment. Foremost of these policies and strategy papers are:

Myanmar's **Rural Development and Poverty Reduction Strategy**, aims to reduce poverty levels to 16 per cent by 2015. The strategy prioritizes agricultural production,

livestock and fishery, rural productivity and cottage industries, micro saving and credit enterprises, rural cooperative, rural socio-economy, rural energy, and environmental conservation.

The **National Health Policy** (1993) aims for "Health for All", with primary health care as the main approach. Since 1991, short term **National Health Plans** have been developed and implemented, as an integral part of the **National Development Plan**, in tandem with the **National Economic Plan**. The main objectives of the National Health Plan (2006-2011) included are to develop the national health system, enhance the quality of health care and coverage, and accelerate rural health development activities.

Achievement of the long-term **Myanmar Health Vision 2030**, set out in 2001, will contribute significantly to reducing malnutrition in Myanmar. Eliminating or reducing communicable diseases will positively impact on nutrition status, since infectious diseases like diarrhea, ARI, malaria and measles are important causes of malnutrition. Similarly, universal health services coverage will help prevent malnutrition, and will facilitate early diagnosis and treatment. Obesity, caused by changing food consumption patterns and unbalanced diets, cause non-communicable disease like cardio vascular diseases, high serum cholesterol, hypertension, diabetes mellitus and cancer. Good nutrition can help in the prevention and control of overweight and obesity, and associated health problems.

The **Five-Year Strategic Plan for Child Health Development** (2010-2014) recognizes the need for national coverage, avoiding overlap in projects and ensuring consistency in training. Its main nutrition-related initiatives include extending coverage to prevent and treat diarrhea and pneumonia, exclusive breastfeeding of infants up to six months, and intensifying programmes to treat acute moderate and severe malnutrition

The Myanmar National Strategic Plan on Adolescent Health and Development (2009-2013) was developed to achieve a focused and coordinated response to priority issues affecting the adolescents and the young people in the country. In the light of a life-cycle approach to improving nutritional well-being, the importance of this strategic plan cannot be overemphasized.

The Five Year Strategic Plan for Reproductive Health (2009-2013) recognizes the centrality of reproductive health and rights in improving maternal and new born health and achieving the agreed MDGs 4 and 5. It spells out the core elements needed to improve the reproductive health situation as well as services including antenatal delivery, postpartum and new born care which is essential inputs to good nutrition.

The **Public Health Law** and related notifications and updates have been issued by the Ministry of Health since 1972. These include laws related to food and drug activities. In addition to guidance from the Public Health Law, Myanmar food control activities are conducted in line with the **National Food Law** (1997), Departmental Directives and refer to **Codex** guidelines and standards.

The **agriculture sector has declared as one of its priority areas** the needs of local consumers, the export of surplus agricultural products, and contributing to rural development. It allows freedom of choice in agriculture production, expansion of agricultural land and safeguarding the right of farmers, and engages the participation of private sector. Key strategies for agriculture development include development new agricultural land, providing sufficient irrigation water, supporting agricultural mechanization, applying modern agro-technologies, and developing and using modern varieties.

The **Livestock Breeding and Fishery sector on the other hand** promotes the distribution of good quality seeds of livestock and fish, the all round development in the livestock and fisheries sector, increasing meat and fish production for domestic consumption and for export, encouraging investments in livestock and fisheries, expanding shrimp production, conserving sustainable fisheries resources, expanding marine and fresh water aquaculture, and upgrading the socio-economic status of livestock and fisheries in communities.

2. Working and governance structure

The working and governance structure for the implementation of the NPAFN builds on the existing structures however, it should be recognized that there are organizational constraints that may warrant the establishment of a new multi-stakeholder platform for the NPAFN. A robust decision-making process and mechanisms by which those decisions are implemented are extremely important for translating SN which is the National Nutrition Center (NNC) of the Department of Health (DoH) should perform the following functions:

- Overall design and implementation of the programme and its results
- Channeling and mobilizing appropriate resources for the different strategic directions
- Monitoring and evaluation
- Aligning with broader development strategies
- Aligning with sectoral policy processes
- Setting priorities a, targets and guidelines for the programmes
- Identifying key implementation functions
- Diagnosing capacity and capacity gaps
- Providing overall supervision

Coordination among the various institutional and non-institutional stakeholders is important to effectively address the NPAFN focus areas, ensure smooth planning,

mobilize and allocate human and financial resources and create legislative and policy support for the interventions. The actual effectiveness of the coordination mechanisms depend on the power of the institution that is accountable for it. The institutional home, NNC, is also the "guardian of the coordination process".

1. High-level leadership

The institutional mechanism that provides high-level leadership is proposed to be the National Health Committee chaired by the Minister of Health with Deputy Ministers of relevant sectors as members. It should include the most senior representation from all relevant organizations. The concerned institution acts as the high-level reporting and decision making body, takes policy and major strategic decisions, and ensures full commitment from all relevant stakeholders. It was also recommended that a Food and Nutrition Advisory Group (FNAG) composed of retired technical experts or those working with UN agencies be constituted to provide technical advice to this high level body.

2. Inter-Ministerial / Inter-Agency Technical coordination

A steering committee or an interagency technical working group that includes the senior technical staff or representatives of the public sector and other important groups such as academia, national and international NGOs, civil society and bilateral donors will be (re)established. This body will function as an oversight committee, requesting groups to assume accountability for programme components and activities and reinforcing internal control mechanisms including the monitoring of the implementation and progress and effectively coordinate all cross-cutting issues related to nutrition and food security, and report to the high-level leadership body. Existing structures that are already performing similar functions such as NPAFN working group or MNTN can be expanded to include other relevant sectors and organizations.

3. Ministry / agency level coordination

Each of the Ministries / agencies involved in the implementation of the NPAFN will outline arrangements for planning and implementation of the sector-specific interventions and for coordinating activities with actors within their respective organizations that participate in the promotion of improved nutrition and food security in Myanmar. Each ministry involved in the implementation of the NPAFN, will report on a regular basis to an inter-ministerial coordination body.

The final governance structure will be decided by the Government and communicated to all policy and implementing bodies. It will be incorporated into the NPAFN as a working annex.

A list of the various ministries/agencies involved in the NPAFN is outlined in Appendix.

IX. Monitoring & Evaluation

To ensure a solid planning process, guide implementation and measure outcomes and impact, a solid baselining in terms of a National Survey on the key indicators is most urgent and important. This type of survey should take place also midway the implementation road map and at the end.

In addition, a National Monitoring and Evaluation (NME) system will be put in place but will build on existing information systems like census, IHLC, MICS, FSIN, IPC[2]. Data on inputs (human, material, and financial etc), processes, outputs, outcome and impact will be collected from the village, district, provincial and central level. These data will consist of a set of key indicators that look into delivery, outputs and outcomes agreed by all relevant ministries as well as those endorsed by SUN (Table xx) to be used on a sector-wide basis. Efforts to ensure that data generated are precise, accurate and timely will be made. The capacity of all those involved in data generation, analysis and reporting will also be prioritized.

Reports and other dissemination materials will be prepared based on the information generated by NME to inform and advocate among politicians, policy makers, and donors. Moreover, it will guide program planners and implementers and other stakeholders on the progress of the implementation of the NAPFSN to ensure effective and efficient implementation of identified interventions.

Table 2: SUN promoted indicators

No	Indicator	Definition	Data Source	Frequency of collection
1	Proportion of stunted children below age five (<2 y and 2-5y)	Height-for age<-2 SD of the WHO CGS median		
2	Proportion of wasted children below age five (<2 y and 2-5y)	Weight-for –height <-2 SD of the WHO CGS median		
3	Proportion of Women in reproductive age with Hb, 11g/dL	Pregnant women with Hb < 11g/dL at sea level Non-pregnant women (age 15+years) as Hb <12 g/dL at sea level		
4	Incidence of low birth	Weight at birth of <2500		

[2] The Integrated Food Security Phase Classification (IPC) is an analysis tool to consolidate food security and nutrition indicators and produces a concise statement on food security situation. It is being successfully introduced in Asia by FAO, with financial support from the European Union.

	weight	grams (5.5 pounds)		
5	Proportion of overweight children below age five (<2 years and 2-5 years)	Wt-for-ht > +2 SD of the WHO CGS median		
6	Proportion of population below minimum level of dietary energy consumption	This is a measure of food deprivation and is based on a comparison of usual food consumption expressed in terms of dietary energy (Kcal) with minimum energy requirement norms. Part of the population with food consumption below the minimum energy requirement is considered underfed		
7	Household dietary diversity score	HDDS is a summing up (using 24 hours recall) of how many of a common list of 12 food groups were consumed by members of the household		
8	Infants under 6 months who are exclusively breastfed	Proportion of infants aged 0-5 months who are fed exclusively on breastmilk		
9	Proportion of children 6-23 months who receive a minimum acceptable diet	Composite indicator is calculated from the proportion of breastfed children aged 6-23 months who had at least the minimum dietary diversity and minimum meal frequency during the previous day and, the proportion of non-breastfed children aged 6-23 mos. Who received at least two milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimal meal frequency during the previous day		

Part II. Plan of Action

Plan of Action

Below is the Plan of Action for Food and Nutrition. It is a compilation of ten (10) log frames each directed to a specific strategic direction. The log frames specify the interventions or action areas, indicators (in red), targets (whenever available), prioritization based on consensus among RoUM agency representatives and responsible agency from both government and development partners.

Strategic Objective 1: Improve Nutrient Intake								
#		Action Areas / Interventions	Target Group	Outcome / Coverage Indicator			Responsibilities	
				Current	2016	Timeframe	RoUM	Partners
1	1	**Exclusive Breastfeeding and Complementary Feeding**				ST	MOH	UNICEF
	1.1	% of exclusively breastfed < 6 months olds		23.6%	60%			
		proportion of children 6-23 mos who receive a minimum acceptable diet		TBD	TBD			
	1.2	% of Infant 6-9 months given timely complementary feeding		80.9%	>90%			
	1.3	% of Children 6-11 months receiving approp. complementary foods		56.5%	80%			
	1.4	% of continued breast feeding 2 years		65.0%	80%			
	1.5	Other IYCF indicators (WHO major & minor IYCF indicators)			20% more			
1.1		Monitoring of Enforcement of legislation on breastmilk substitutes / artifical feeding parphenalia	Entire population					
1.2		Promote excl. breastfeeding for infants up to 6 months (incl. BFHI, BFCI)	Women of reproductive age (WRA)					
1.3		Provide continued and complementary feeding education	WRA					
1.4		Encouraging proper IYCF in Emergency situations	Disaster affected areas					
2	2	**Micronutrients**				ST	MOH	UNICEF
	2.1	Prevalence of Bitot's spot in Children 6-59 months of Age.		0.03%	0.01%			
	2.2	Prevalence of Night blindness in Children 24-59 months of Age		TBD	TBD			
	2.3	% of serum retinol levels ≤ 0.7 µmol/L in Children 6-59 months of Age		TBD	TBD			
	2.4	% of Pregnant women received >120 iron tabs		TBD	TBD			
	2.5	Prevalence of anemia for 6-59 months		75%	50%			
	2.6	Proportion of WRA with < Hb 11g/dL		45%	30%			
	2.7	Prevalence of anemia for pregnant women		71%	60%			
	2.8	% of IDA (serum-ferritin) 6-59 months		TBD	TBD			
	2.9	% of IDA (serum-ferritin) WRA		TBD	TBD			
	2.10	% of IDA (serum-ferritin) pregnant women		TBD	TBD			
	2.11	Median urinary iodine concentration (µg/L)		123.5	150.0			
	2.12	% Primary School-age children with urinary iodine levels below 100µg/L		34%	<50%			
	2.13	% of HH consumed adequately iodized salt		34%	90%			
	2.14	% of Villages/Ward > 90% HH consume adequately iodized salt (LQAS)		~80%	90%			
	2.15	% of Salt factories which >95% of production with 40-60 ppm		~50%	95%			
	2.16	% of Salt factories > 6 times/yr externally monitored		TBD	TBD			
	2.17	% of Lactating mother received 90 iron tabs		TBD	TBD			
	2.18	% of WRA received iron tabs		TBD	TBD			
	2.19	% of targeted children who received micronutrient powder		TBD	TBD			
	2.20	Prevalence of B1 deficiency in Preg mothers		6.8%	5.0%			
	2.21	Prevalence of B1 deficiency in lactating mothers		4.4%	3.0%			
2.1		Develop national legislation or strategy on micronutrient fortification	Entire Population					
2.2		Develop national supplementation guidelines for micronutrients (add. potentially Zinc, B1, etc.)	< 3 for routine, < 5 for disaster					
2.3		Vitamin A supplementation (community-based distribution for remote area)	Children 6-59 mths., Post-PW					
2.4		Iron folate acid supplementation (6 mths. pre 3 mths. post delivery) via ANC, and distribution through outreach and community based approach for remote areas	P&L women, Desaster Strik. Areas					
2.5		Home-fortification with micronutrient powder (Sprinkles)	6m-< 3 for routine,6m- <5 for disaster					
2.6		Continue the promotion of use of iodized salt	Salt producers		100%		inc. Min of Mines	WHO / UNICEF
2.7		Facilitate prod. of economically viable fort. processes (for Iron, Zinc, folic acid, Vit. A ,VitB1)	Producers					

2.8		Control quality of fortified products (incl. imports) in the market	Producers					
2.9		Control market for non-fortfied products (for Iodine, Iron, Zinc, Vit. A)	Entire Population					
2.10		Social marketing of fortified products (for Iodine, Iron, Zinc, Vit. A)	Entire Population					
2.11		Nutrition education in support of supplementation and fortification programmes	Entire Population					
3	**3**	**Supplementary and Therapeutic feeding programmes**				**ST**	**MOH**	**WFP**
	3.1	Prevalence of Moderate Acute Malnutrition in CU5		**5.8%**	**5%**			
	3.2	Prevalence of Severe Acute Malnutrition in CU5		**2.1%**	**2%**			
	3.3	# of facilities based feeding center (HNU)		**34**	**40**			
	3.4	# of community based feeding center		**35**	**55**			
	3.5	# of schools with supplementary feeding			**25**			
3.1		Develop countrywide treatment protocol for acute malnutrition	CU5					
3.2		Implement and conduct regular countrywide screening / referral procedure accord. to protocol	CU5					
3.3		Provision of treatment for all acute malnutrition cases according to protocol	CU5					
3.4		Emergency feeding programmes	Disaster Affected Areas				MOH, MAF	WFP, FAO
3.5		Conduct feasibility study on local production of RUTF	Nut Priority Area				MoH	UNICEF
3.6		Supplementary feeding programmes	women at risk at malnourishment)					
3.7		School Feeding/ Healthy School Canteen/School Milk Programmes	Primary and Pre-School Children				MOH, MAF	WFP, FAO
3.8		Nutrition education in support of supplementary feeding programmes	All					
4	**4**	**Nutrition education and communication to combact malnutrirtion (both under& over nutrition)**				**ST**	**MOH**	**UNICEF/WHO**
	4.1	incidence of LBW		**8.6%**	**8%**			
	4.2	proportion of stunted of children < 5 (≤2 SD of WHO CGS median)		**35.1%**	**30%**			
	4.3	proportion of wasted children <5 (wt-for ht ≤ 2SD of WHO CGS median)		**22.6%**	**20%**			
	4.4	proportion of OW children below age five (<2 years and 2-5 years)		**2.6%**	**2.2%**			
	4.5	prevalence of underweight(BMI<18.5) of Women 15-49		**20.1%**	**18.0%**			
	4.6	prevalence of Over weight (BMI >25) of Women 15-49		**14.5%**	**12.0%**			
	4.7	prevalence of Obesity (BMI >30) of Women 15-49		**3.7%**	**2.5%**			
	4.8	household Dietary diversity scores I18		**TBD**	**TBD**			
	4.9	% increase in Nutrition Knowledge of target group (+ Scoring)		**TBD**	**TBD**			
	4.10	# of FBDG developed for specific group			**3**			
	4.11	# of new IEC materials developed			**10**			
4.1		Develop nutrition guidelines / food based dietary guidelines for various age groups	Entire Population					
4.2		Develop and disseminate IEC material via various communication channels	Entire Population					
4.3		Improve social mobilization and participation of communities for nutriton education	Entire Population					
4.4		Nutrition education for behaviour change and impact (BCC and combi; including efficient allocation of food on HH level)	Entire Population					
4.5		Develop legislations on nutrition labeling and consumer protection	Food manufacturers					
5	**5**	**Prevention of NCDs**				**ST**	**MOH**	**UNICEF/WHO**
	5.1	% adult underweight, over weight & obese		**TBD**	**TBD**			
	5.2	Prevalence of risk factors for NCD		**TBD**	**TBD**			
	5.3	Prevalence of each NCD among target groups		**TBD**	**TBD**			
	5.4	Morbidity & Mortality rates associated with NCD		**TBD**	**TBD**			
	5.5	Intake of total fat, saturated fat, cholesterol and salt		**TBD**	**TBD**			
5.1		Awareness raising on healthy dietary food behavior	Entire Population					
5.2		Awareness raising activities on healthy lifestyles (smoking, inactivity, diet, harmful use of alcohol, etc.)	Entire Population					
		Analysis of Fat, transfat, cholesterol and sodium content in commonly consumed foods						
5.3		Food & Nutrients Supplementation for Elderly	Entire Population					
5.4		BCC on healthy food preparation	Food handlers & Venders					

All in light grey zone are indicators to be monitored

Strategic Objective 2: Prevent and Reduce Food-, Water-, Vector-borne and Infectious Diseases								
#	Action Areas / Interventions	Target Group	Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1							**MoH**	**WHO/UNICEF**
	Prevalence of Intestinal Parasitism among Children 12-59 months		**31%**	**15%**				
	Prevalence of Intestinal Parasitism among Children 6-12 years		**69%**	**30%**				
1.1	Regular national deworming campaigns	Children <5, Primary School Children			High	ST		
1.2	Regular national deworming campaigns (with ANC and distribution through outreach and community based approach for remote areas)	CU5, school children and WRA			High	ST		
1.3	Health and Nutrition education in support of deworming programmes				High	ST		
2	**Malaria and Dengue Fever Prevention**						**MoH**	**WHO/UNICEF**
	% Malaria Prevalence Children <5		**49665**	**34000**				
	% of children under 4 at risk sleeping under ITN		**11%**	**78%**				
	% of HH with at least one LLIN/ITN		53%	98%				
2.1	Insecticide Treated Bednets (provision, promotion, correct usage)	Household			High	ST		
2.2	Health and Nutrition ed. in support of Malaria and Dengue Fever Prevention	Entire population			High	MT		
3	**Prevention and management of malnutrition associated to HIV / AIDS and TB**						**MoH**	**UNFPA/UNICEF**
	% of Population with HIV / AIDS		**TBD**	**TBD**				
	proportion of the population, 15-24 years, with comprehensive, correct knwoledge of HIV/AIDS		**92.1%**	**100%**				
	Diet Diversity score of people living with HIV/AIDS		**TBD**	**TBD**				
	Incidence of malnutrition among people living with HIV/AIDS		**TBD**	**TBD**				
	# of mothers living with HIV/AIDS received Nut Councelling for BF		**TBD**	**TBD**				
3.1	Provide and promote guidelines for Nutrition care	HIV-infected people / PLWA	N/A		High	ST		
3.2	Provide counseling on infant feeding for HIV infected mothers	Mothers and WRA who are infected by HIV			High	ST		
4	**Promotion of Immunizations**						**MoH**	**WHO/UNICEF**
	DPT-HepB-HIB3: % of Infants immunized (DPT_3)		**87%**	95%				
	Measles: % of infants immunized (MSL_1, MSL_2)		**88%, 80%**	95%, 95%				
4.1	Scale-up immunization for target population	Infants, WRA	N/A		High	ST		
	(1) Intensification of Routine Immunization	Infants, Pregnant Women						
	(2) Reaching every community strategy (Immunization program doesn't use scale up immunization for target population. We use intensification of routine immunization plan)	Infants, Pregnant Women						
4.2	Promote health and nutrition behaviour during immunization period	WRA			High	MT		
	Health education was given during immunization session regarding health and nutrition behavior for prevention of measles complication we use Vitamin A in cooperation with nutrition project.	1) Pregnant women 2) Mother of eligible children						
5	**Diarrhea Prevention and Control**						MOH	WHO / UNICEF
	% of CU5 with Diarrhea		**TBD**	**TBD**				
	proportion of children with diarrhea who reeceived ORT		**51%**					
5.1	Zinc supplementation	Children 6-59 months	N/A		High	ST		
5.2	Food safety, health and nutrition education related to diarrhea	WRA						
5.3	Social marketing of oral rehydration therapy (ORT)	CU5			High			

All in light grey zone are indicators to be monitored

Strategic Objective 3: Increase and Diversify Domestic Food Production								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Expand and intensify the production of nutritionally enhancing food.**				High	MT	MAL	FAO
	no of HHs engaged in food processing		TBD	TBD				
	no of sustainable home gardens established esp among food insecure HHs		TBD	TBD				
	no of HHs engaged in small animal raising		TBD	TBD				
	no of HHs enagged in aquaculture		TBD	TBD				
	no of HHs with access to extension services		TBD	TBD				
	No. of small holder Livestock production							
	No. of trainings conducted on environmentally sound livestock farming technologies							
	production							
	Amount of production of safe and healthy food by producers at all levels,							
	No. of (100) Small Scale business producing nutrition foods							
	No. of (50) trainings to nutrition food production acquired training in quality							
	No. of Regular vocational training for preservation of food products							
1.1	Integrate food-based nutrition education into agricultural planning and production	DAP						
1.2	Transfer of technology on sustainable ecologically sound agriculture and nutrient enhancing methods (i.e organic farm, soil improvement..)	Farmers						
1.3	Promote & diversify homestead food production (incl. home gardens, fish ponds, livestock) including nutrition education,	Farmers						
1.4	Promote crops resistant to pests, droughts and floods	Farmers	TBD	TBD				
1.5	Promote improved mechanization and tools for improved productivity	Farmers						
1.6	Provide technique and quality extension support for increasing crop & livestock production & improve quality	Village Cluster						
1.7	Promote safe and nutritionally enhancing food processing technology (FF)	SME/small family business						
1.8	Promote sustainable aquatic animal consumption & conservation of the resources	HH & village development Cluster						
2	**Stabilize Food Supplies Programme**				High	MT	MA and relevant mins/depts.	FAO
	% Increase in food stock		TBD	TBD				
	No. of new SMEs established		TBD	TBD				
	consumption share of the poorest quintile in national consumption		12%	TBD				
	proportion of population below minimum level of dietary energy consumption							
2.1	Formulation of disaster prepardness and risk reduction plan with nutrition component	Areas in risk of disasters						
2.2	National-, Regional-, Community-, and HH-level emergency food reserves	Entire Population						
2.3	Review of relevant import-export legislations for FNS impact							
2.4	New SM enterprise development in rural areas esp those that promote nutritious processed foods							
2.5	Develop food balance sheet							
2.6	Water Shed Management							

All in light grey zone are indicators to be monitored

Strategic Objective 4: Improve Access to Food								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Improve Physical Access to Food**				**High**	**LT**	**MPW/Natl govt**	**FAO**
	% increase in infrastructure facilities		**TBD**	**TBD**				
	No. of shops with License for food production or selling food in one township							
	% of shops with License for food production or selling food in all townships							
	No. of shops which broke the License aggrement							
1.1	Transport infrastructure and services improvement	Rural Population						
1.2	Market infrastructure,services and networks development	Rural Population						
1.3	Establishment of Post-harvest facilities including food storage	Upland Areas						
2	**Improve Economic Access to Food**				**High**	**MT**	**MC/DSSID**	**FAO**
	National Poverty incidence		**26%**					
	employment/population ratio		**57%**					
	No. of (100) new enterprises development in rural areas							
	increase in "support" for value added activities							
	No. of income generating activities, Small business/small industries (Small-Scale dairy production, fruit juice, jam making)							
	% of rural poor population (e.g. farmers) who received micro-credit loan							
2.1	New enterprise development in rural areas	Rural area						
2.2	Alternative income generation activities like SME	Rural area						
2.3	Skills development on small livelihood projects	Poor HH, esp. upland areas						
2.4	MicroCredit for capital provision	Rural Poor						
2.5	Establish an effective Food price control system	Entire Population						
3	**Improve women access to food and resources (apply to 1, 2, 3)**				**High**	**ST**	**MoH**	**UNFPA/FAO**
	share of women in wage employment in the non-agric sector		45%	TBD				
3.1	Gender Education/Sensitization	Entire Population						

All in light grey zone are indicators to be monitored

Strategic Objective 5: Improve Mother and Child Care Practices								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Integrated Health Education (can be integrated with nutrition education)**		**77.90%**		**High**	**ST**	**MoH**	**WHO/UNICEF**
	proportion of births attended by skilled health personnel		**83.00%**	**90.00%**				
	Antenatal coverage (at least 1 visit)							
	No of school curricula with strengthened nutrition and health topics/subjects		**Middle School**	**High + Higher**				
	# of WRA & preg mother who received H&NE		**TBD**	**TBD**				
	# of BHS trained on IYCF		**250**	**1000**				
	% of CU5 included in Growth monitoring		**20%**	**30%**				
	% of PEM CU5 whose growth were monitored and promoted		**20%**	**30%**				
1.1	Maternal health education (before, during and after pregnancy)	WRA		100%				
1.2	Training on IYCF	WRA/health workers						
1.3	Improve health-seeking behaviour through NICE	CU5		100%				
1.4	Conduct regular growth monitoring activities	Secondary School						
1.5	Integrating health education in school curriculum	Students						
2	**Family Planning / Responsible Parenthood**				**High**	**ST**	**MoH**	**UNFPA**
	% of unmet need for family planning		**24%**					
	% increase in coverage of FP services		**TBD**	**TBD**				
	% of population reached by health education campaigns		**TBD**	**TBD**				
	% of newly married couples received NE (pre preg package)							
2.1	**Family Planning / Responsible Parenthood**	WRA, husbands						
2.2	Enhance community awareness on reproductive health	Newly Married Couples						
2.3	Nutrition and Health education for newly married couples	WRA, husbands						
2.4	Access and adequacy of Family Planning Services	WRA, husbands						

All in light grey zone are indicators to be monitored

Strategic Objective 6: Improve Environmental Health and Food Safety								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Access, Treatment and Storage of Water and environmental sanitation**				**High**	**ST**	**MoH**	**UNICEF/WHO**
	Proportion of the Population using an Improved drinking water source		**69%**	**TBD**				
	% of population an improved latrine facility		**79%**	**TBD**				
	% of pop using soap(or alternatives) when washing hands before eating		**TBD**	**TBD**				
1.1	Provide improved water sources	Poor districts, Schools, Health Facilities						
1.2	Sanitary Toilets construction	Poor districts, Schools, Health Facilities						
1.3	Promotion of personal hygiene and environmental health education	Entire Population						
1.4	Provision and promotion of appropriate HH Water Treatment Methods (e.g. chlorine tablets, filters, solar disinfection) by promoting informed choice model	Entire Population						
1.5	Promotion of Safe Water Storage	Entire Population						
1.6	Sanitary waste management in community and public places	Entire Population						
2	**Improved food quality and food safety**				**High**	**ST**	**MoH, DoF, MoCoop**	**FAO**
	Incidence of food-borne diseases		**TBD**	**TBD**				
	Proportion of unsafe water analyzed (instead of Number of water analyses done)							
	No. of concerned staff trained on HACCP, GAP and GMP							
	No.of small scale food industries educated in food quality management and food safety							
	No. of international approvals for Myanmar fish and fishery products							
	No. of (300) food products tested for adulteration							
	No of laboratories fully equipped on food / water analysis							
	# of foods and food/fishery products monitored for contamination							
2.1	Conduct trainings on HACCP, GAP and GMP in food processing	Individ. in food prod. & processing						
2.2	Strengthen capacity on food / water analysis and inspection (incl. laboratories)	Entire Population						
2.3	Contaminated food and food borne disease surveillance	Entire Population						
2.4	Promote food and water safety awareness and education	Entire Population						
2.5.	Develop nutrition labeling legislation	Entire Population						
2.6	Build awareness on consumer rights	Entire Population						
3	**Improved Acess to Nutrition and Health Services**				**High**	**ST**	**MoH**	**WHO/UNICEF/WFP**
	% population with access to basic health and nutrition services		**TBD**	**TBD**				
	% of health staff trained on effective delivery of services		**TBD**	**TBD**				
	increase in no of health facilities (Hosp, Rural Health Centers)		**TBD**	**TBD**				
	% population with access to health financing		**TBD**	**TBD**				
	# of trained health or Nut volunteers		**TBD**	**TBD**				
	# of Schools with Nut intervention		**TBD**	**TBD**				
3.1	Promote access to Health Facilities to bring facility-based services closer to communities and improve quality of services, including routine delivery of nutrition interventions	CU5, Mothers						
3.2	Develop routine community delivery of NFS interventions through existing community resources	CU5, WRA						

3.3	Recruitment and training of health staff and volunteers	Health staff						
3.4	Strengthen health information system	Entire population						
3.5	Promote use of Schools as delivery channel for nutrition/health interventions	CU5 and mothers						
3.6	Engage private sector along four dimensions: workplace, production, distribution, sales & marketing	Private sector						
3.7	Promote health financing strategy to increase access to health service (insurance, equity funds, community-based structures)	Entire Population						

All in light grey zone are indicators to be monitored

Strategic Objective 7: Improve Institutions and Coordination								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Implement and strengthen institutions for NFS and ensure their coordination**				**High**	**ST**	**MoH**	**MNTN**
	Estabished and fully functional coordination structures /institutions		**NPAFN TWG**					
	No. of meetings conducted by coordination structures (with documented minutes)							
	No. of Annual progress report on implementation of NPAFN		**none**	**established and functioning**				
	No. of government, regional and partner plans integrated with NPAFN							
1.1	Establish NPAFN coordination and high level Committees and develop TORs	officials of relevant sectors						
1.2	Strengthening of the National Nutrition Center	officials of MoH						
1.3	Regular reporting to high-level leadership body on implementation of NPAFN	interministerial com						
1.4	Regular reporting to WG on NPAFN implementation	members of TWG on NPAFN						
1.5	Advocacy for integration of NPAFN into GoL / Devlop. Partner Annual Plans	DPs						

All in light grey zone are indicators to be monitored

Strategic Objective 8: Improve Human Capacity								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Capacity Building for better nutrition and food security**				**High**	**MT**	**NNC**	**MNTN**
	Multisectoral Training Needs Assessment Report							
	Number of concerned government staff trained on nutrition		**TBD**	**TBD**				
	Capacity-building Road Map for NPAFN		**TBD**	**TBD**				
1.1	Conduct Training Needs Assessment	National Staff						
1.2	Development and implementation of a national capacity building Plan (ensure engagement of partners)	Selected Staff						
1.3	Engage short-term international professionals to build capacity of national staff	National Staff						
1.4	Send selected staff abroad for training	Selected Staff						
1.5	Strengthening of capacity from relevant sectors like extension workers	Selected Staff from Min of Coop/Dept of SSID						
	Development of advanced laboratory for determination of nutritional values of Myanmar food	Selected Sections						
1.6	Conduct Training of Trainers (ToT) in Food and Nutrition	Trainers of Nutrition Education						
2	**Integrating Nutrition and Food Security into Academic Study**				**medium**	**LT**	**MoE**	**MNTN**
	Academic programs in nutritional sciences Curricular programs which have integrated FNS and related topics Number of nutritionists with bachelor's degree		**TBD** **TBD** **TBD**	**TBD** **TBD** **TBD**				
	Number of nutritionists with master degree		**TBD**	**TBD**				
2.1	Develop nat'l university level curriculum and faculty positions in FNS	Universities						
2.2	Develop & implement formal/informal progr. to build leadership capacity in FNS	Professionals / Students of relevant curr programs						
2.3	Develop & implement formal/informal progr. to build technical capacity in FNS	Professionals / Students of relevant curr programs						
2.4	Develop & incorporate nutrition & health education in school curricula	Primary and secondary school children						
3	**Upgrading National Nutrition Laboratory and relevant research institutions**				**medium**	**LT**	**MoH**	**donors**
	Number of concerned government staff trained on nutrition laboratory techniques		**defuncted**					
	Upgraded Nutrition laboratories							
	No. of staff training (local or International)							
3.1	Upgrade Nutrition laboratory equipment							
3.2	Recruiment and capacity building for nutrition lab techniques	Selected Staff						
3.3	Engage short-term international professionals to build capacity of national staff	National Staff						
3.4	Send selected staff abroad for training	Selected Staff						
3.5	Strengthening of relevant research institutions	National Staff						

All in light grey zone are indicators to be monitored

Strategic Objective 9: Increase Quality and Quantity of Information								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Improve Nutrition Information and surveillance System and M&E for NPAFN**				**High**	**ST**	**CSO/NNC**	**FAO, WFP< UNICEF, WHO**
	Established and Fully functional NFS surveillance system							
	# of reports published		**TBD**	**TBD**				
	No. of new food items analyzed to update of "Food Composition Table" (FCT)		**TBD**	**TBD**				
1.1	Establish a Nat'l Nutrition Information Unit in Nat'l Nutrition Center	NNC						
1.2	Establish a nutrition and food security surveillance and information system	NPAFN TWG				ST		
1.3	Regular monitoring and evaluation of NPAFN implementation (inputs,outputs, processes, impact)							
1.4	Conduct rigorous baselining of all coverage and outcome indicators mentioned in NPAFN							
1.5	Conduct standardized regular surveys on progress of output and outcome/impact indicators mentioned in NPAFN	NNC/Academia and MRI						
1.6	Conduct regular food analyses to determine nutritive content and food contamination	NNC/MRI						
1.7	Update food composition table	NNC/MRI						
2	**Scientific Research**						**MRI/academia**	
	national research agenda for FNS formulated		**TBD**	**TBD**				
	# of conducted identified researches							
	# of conducted publications on researches conducted							
2.1	Develop a national research agenda for nutrition and food security	relevant res inst/academia						
2.2	Conduct research on identified key research areas (e.g. effects of climate change and food prices on FNS							
2.3	Research on fortification (technologies, economic viability,cost-effectiveness etc.)							
	Conduct research on identified key research areas (like effects of climate change and food prices on FNS							
3	**Dissemination and application of FNS and related information (this is in support of other actions areas that may require the collected information to be disseminated)**						**MoH**	**UN agencies**
	# of policies reviewed and revised based on evidences							
	no. of food and nutrition bulletins published (popular and technical)							
3.1	Dissemination of survey results for different target groups							
3.2	Publish results of NPAFN monitoring and evaluation as basis for scientific research, planning, and information dissemination							
3.3	Publish and disseminate results of scientific research to inform policy, program formulation and improve implementation							
3.4	Popularization of research results for non-technical readers							
3.5	Regular publication of Food and Nutrition Bulletins							

All in light grey zone are indicators to be monitored

Strategic Objective 10: Increase Investment in Nutrition and Food Security								
#	Action Areas / Interventions	Target Group	Outcome / Coverage Indicator		Priority	Timeframe	Responsibilities	
			Current	2016			RoUM	Partners
1	**Advocacy and Fundraising of Nutrition and Food Security**						**NPAFN TWG**	**MNTN/One UN**
	% Increase in national budget allocated to NFS							
	% Increase in donor's finncial assistance to NPAFN priority interventions							
	National Investment Plan for NPAFN formulated							
	No of proposals for funding developed		**TBD**	**TBD**				
	% of budget coming from the private sector							
1.1	Pursue membership to SUN and conduct SUN related activities		**not member**	**member**				
1.2	Advocate for the integration of NPAFN/FNS into NSEDP	Ministry of SED and Planning/High government officials	Not explicit	FNS mainstreamed into NSEDP	High	ST		
1.3	Develop and implement a national advocacy and national investment plan for NPAFN	Donors and high govt officials	None	Yes	High	ST		
1.4	Conduct proactive fundraising in a coordinated way (incl. joint proposal preparation)	Global SUN and IFIs	None	Yes	High	ST		
1.5	Conduct advocacy campaigns for NFS as high-priority investment for all stakeholders (incl. GoL and Private Sector)	Donors and high govt officials	Limited	Yes	High	ST		
1.6	Promote social entrepreneurship and private sector investments in the field of FNS	Private sector	Limited	Yes	High	ST		

All in light grey zone are indicators to be monitored