KINGDOM OF CAMBODIA
NATION RELIGION KING

FAST TRACK ROAD MAP FOR IMPROVING NUTRITION 2023 - 2030

National Nutrition Program
National Maternal and Child Health Center

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With Support from

Preface

The Royal Government of Cambodia commits to improving nutrition for all, by enabling a system that delivers quality nutrition services and interventions. The health system has enabled the integration of nutrition services within routine health services, an integration that promotes optimal nutrition and the best start in life.

The second edition of the 'Fast Track Road Map for Improving Nutrition (FTRIN) 2023-2030' was developed by the National Nutrition Programme of the National Maternal and Child Health Center in close collaboration and consultation with various departments of the Ministry of Health, relevant line ministries, and development partners. With the ultimate vision for all people in Cambodia to have optimal nutrition, health, and well-being, the FTRIN has the goal to contribute to optimizing nutrition and offering universal access to quality nutrition interventions for all people and communities in Cambodia. The document focuses on scaling up and increasing efficiency of nutrition-relevant services and interventions for all, by planning to optimize the maternal and child services and nutritional levels and expanding the programme support to optimize nutrition in middle childhood, adolescence, and reproductive age.

The FTRIN highlights the role of the Ministry of Health in ensuring universal access to nutrition-related services and interventions and promoting nutrition for all to maximize impact, we are strongly urging for close and efficient collaboration with relevant ministries and departments, development partners, NGOs, academia, and the private sector.

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Minister of Health

Prof. CHHEANG RA

Acknowledgement

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Special acknowledgment is given to the members of the Steering Committee to update the Fast Track Road Map for Improving Nutrition, with members from National Nutrition Programme of the National Maternal and Child Health Center, UNICEF, Helen Keller International, GIZ/MUSEFO, WHO, World Vision International, Alive & Thrive/FHI 360 and World Bank, who have actively participated and contributed to the process of developing the document.

Finally, we would like to particularly acknowledge UNICEF for their assistance and support in developing and finalizing the updated version of 'Fast Track Road Map for Improving Nutrition 2023-2030'.

List of Acronyms and Abbreviations

ANC	: Antenatal care
BFHI	: Baby-Friendly Hospital Initiative
BMS	: Breastmilk Substitute
CARD	: Council for Agricultural and Rural Development
CDHS	: Cambodia Demographic and Health Survey
CCWC	: Commune Council for Women and Children
CMF	: Commercial Milk Formula
DPs	: Development Partners
FSN	: Food Security and Nutrition
FTRIN	: Fast Track Road Map for Improving Nutrition
GMP	: Growth Monitoring and Promotion
GNR	: Global Nutrition Report
HMIS	: Health Management Information System
IFA	: Iron/Folic Acid
MAM	: Moderate Acute Malnutrition
MEF	: Ministry of Economy and Finance
MMS	: Multiple Micronutrient Supplements
MOEYS	: Ministry of Education, Youth, and Sports
MOH	: Ministry of Health
MOP	: Ministry of Planning
NGO	: Non-Governmental Organization
NMCHC	: National Maternal and Child Health Center
NNP	: National Nutrition Program
OD	: Operational District
PHD	: Provincial Health Department
SAM	: Severe Acute Malnutrition
SBCC	: Social and Behavior Change Communication
SD133	: Sub-Decree No. 133 on Marketing of Products for Infant and Young Child Feeding
SUN Movement	: Scale-up Nutrition Movement
VHSG	: Village Health Support Group

Glossary of Terms

Middle childhood	The stage in life where children from the age of 5 years to 9 years fully developed foundational skills and start attending schools, as well as, having increasing roles in the household and in the community.
Adolescence	The transitional phase of growth and development between childhood and adulthood the stage,10 and 19 years old, marked by puberty and a fast rate of brain development.
Women of reproductive age	Age group represented by women between the ages of 15 and 49 years
Development partners	Multilateral and bilateral organizations which support developments in the country by providing aid, resources, and support directly to another country. In this document, the NGOs and other CSO actors are included in this category.
Anemia	A pathological condition characterized by low levels of hemoglobin or poor oxygen-carrying capacity of the red blood cells. Anemia is an indicator of poor nutrition, health, and wellbeing
Delayed cord clamping	The prolongation of the time between the delivery of a newborn and the clamping of the umbilical cord, being associated with neonatal benefits such as improved transitional circulation, better establishment of red blood cell volume, decreased need for blood transfusion, and improved iron profile.
Skin-to-skin contact	The practice where a baby is dried and laid on the mother's bear chest after birth and left for an uninterrupted period of 60 to 90 minutes; a practice that is benefiting the newborn's comfort and early development outcomes, as well as the mother's milk supply.
Early initiation of breastfeeding	Practice that allows the mother to breastfeed within the first hour of birth and ensures that the new-born receives colostrum; this practice protects the new-born from acquiring infections and reduces newborn mortality
Exclusive breastfeeding	Practice of feeding the children solely with breast milk, not any other foods or liquids, with exception of vitamins or medication. This is the only feeding practice recommended to be used for newborns until 6 months of age
Continuous breastfeeding	Practice of feeding the children with breastmilk, in addition to complementary soft, liquid, and semi-liquid foods, being able to provide essential nutrients for improved immunity, promoted nutrition, and has long-term health benefits
Perinatal period	The period commences at 20 completed weeks (140 days) of gestation and ends 28 completed days after birth.

Antenatal period	The period from conception until the birth of the child
Postnatal period	The period begins after childbirth and extends until 42 weeks after birth, according to WHO guidelines
Antenatal and postnatal care	Pregnancy care consists of prenatal (before birth) and postpartum (after birth) healthcare for expectant mothers, covering access to essential health services for reducing maternal and child mortality. Antenatal care services help pregnant women by identifying complications associated with the pregnancy or diseases that might adversely affect the pregnancy; women benefit from various interventions, including counseling about healthy lifestyles, the provision of iron/folic acid supplements, and tetanus toxoid vaccinations reported to protect newborns against neonatal death. On the other hand, postnatal care services enable health professionals to identify post-delivery problems, including potential complications, and to provide treatments promptly.
Health service providers	The health professionals working in health facilities, health centers, or hospitals, providing health services for clients. The professions cover nurses, midwives, general practitioners, and others
Chronic malnutrition	It is commonly known as stunting and can be described as being too short for his age as indicated by a low height-for-age (HFA) value calculated based on WHO growth standards. As opposed to acute undernutrition which reflects recent nutritional status, chronic undernutrition is a process occurring over the longer term in the period between conception and 24 months of age. It is a consequence of prolonged or repeated episodes of nutritional deficiencies (energy or micronutrients) and can also reflect exposure to repeated infection or other illnesses throughout the early years of life, compromising the growth of a child
Acute malnutrition	It is commonly known as wasting and is described as too small for the height, as indicated by a low weight-for-height (WFH) value based on WHO growth standards. The condition can be also identified through the presence of edema or a low mid-upper arm circumference. The condition develops as a result of recent rapid weight loss, or a failure to gain weight within a reasonably short period of time. It is considered under 2 categories, moderate and severe, with the latter one posing serious health complications and a high risk of death
Sub-national level	It describes all administration offices of the capital/province (CP), operational district/municipality/Khan, and commune/ Sangkat council. The sub-national level represents the RGC at the local level and undertakes local administrative tasks, it is increasingly engaged in local planning, implementation, and monitoring as part of the Decentralization and Deconcentration (D&D) reform

Nutrition Focal Point	It is a designated role at the provincial and district level, as part of the sub-national administration that ensures adequate planning, supplies, monitors, and offers training to health service providers for delivery of nutrition services. Furthermore, they are in charge of coordinating implementation and collaborating with DPs for field implementation
BMI	Short for Body-Mass Index, is a measure for indicating nutritional status and an accepted measure of adiposity. It is calculated as weight in kg/height in meters. BMI is gender- and age-specific. BMI-for-age is based on the WHO child and adolescent growth standards
Overweight	WHO defines overweight in middle childhood and adolescence as a BMI-for-age above +1 SD of the WHO growth reference median for children of the same age and sex.
Obesity	WHO defines obesity in middle childhood and adolescence as BMI-for-age above +2 standard deviations (SD) of the WHO growth reference median for children of the same age and sex
Breastmilk Substitute	(BMS) describes all milks and foods being marketed or otherwise presented as a partial or total replacement for breast milk, whether suitable for that purpose
Commercial Milk Formula	(CMF) is used recently as an alternative term to breastmilk substitute in order to highlight the artificial and ultra-processed nature of formula products and to highlight other products that are intended to substitute or complement breastmilk

Table of Contents

I. Background

Since early-2000, Cambodia made great progress in reducing maternal and child mortality[1,2], as a result of improved access to quality essential health care services, universal access to skilled birth attendants, and improvements in nutrition and healthy feeding diets. The under-five and infant mortality decreased from 124 and 95 deaths per 1,000 live births in 2000 to 16 and 12 deaths per 1,000 live births in 2021/22, respectively.[1] This peri-natal care contributed to this remarkable progress, with 86% of pregnant women using a minimum of 4 ante-care visits at health centers and 99% of the live births in the last year were attended by a skilled health professional.[1] Furthermore, the CDHS 2021/22[1] shows positive progress for child nutrition with a 10-percentage point reduction in the prevalence of stunting between 2014 and 2021/22 and with noticeable improvements in the prevalence of underweight children, with a drop of 8-percentage points (figure 1).

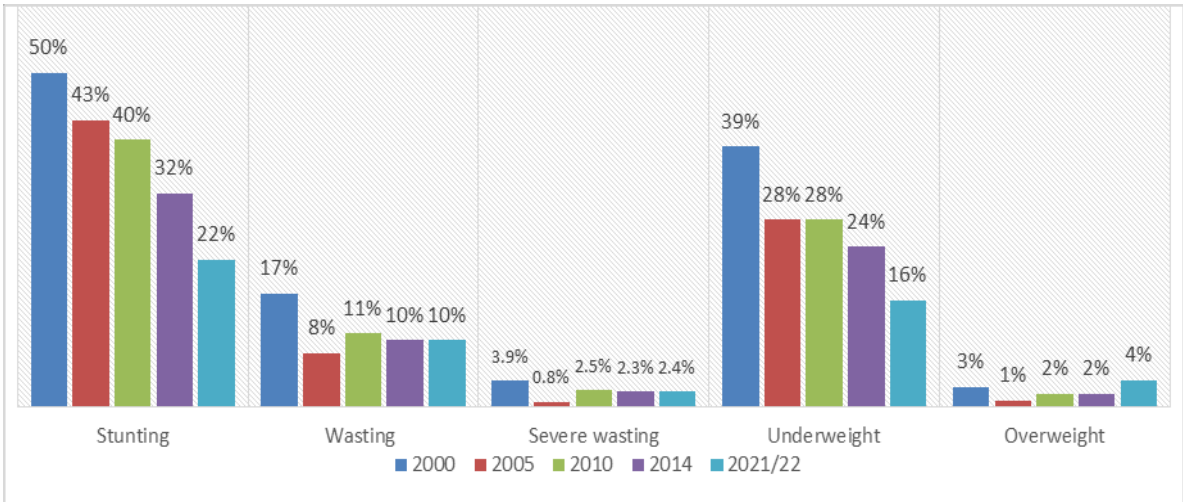


Figure 1. Prevalence of malnutrition among children under 5 years old in Cambodia (CDHS)

At the same time, the key findings are underlying challenging areas for nutrition. The double burden of malnutrition has steadily increased since 2005, with no improvement in the prevalence of wasting, affecting 1 in 10 children, and raising rates of overweight among children (figure 1). Child feeding practices, a significant determinant of a child's nutritional status, show concerning trends in breastfeeding practices with only 54% of children being early initiated to breastmilk and with 50% of children being exclusively breastfed in the first 6 months.[1]

The secondary impacts of COVID-19 and the international price crises highlight the need to further accelerate the efforts for improving nutrition and achieving the targets set by the Sustainable Development Goals (SDGs).[3] It is high time for Cambodia to strengthen the implementation of high-impact nutrition interventions to break the vicious cycle of malnutrition fueled by poor diets and sub-optimal nutritional status, which challenges the national progress.

The first edition of the 'Fast Track Road Map for Improving Nutrition 2014-2020' (FTRIN) emphasized the cross-sectoral dimensions of nutrition and urged for a multi-sectorial approach and stakeholder support. The document successfully set common

priorities and targets in nutrition, by emphasizing the role of the Ministry of Health, with a focus on promoting and protecting child feeding practices and supporting maternal, infant, and young child nutrition through quality nutrition-relevant services delivered by health facilities. The document stressed the importance of universal access and availability of optimized maternal and child-nutrition services and interventions.

The implementation was supported by multiple line ministries, including the Ministry of Education, Youth and Sports (MoEYS), the Council of Agricultural and Rural Development (CARD), Ministry of Rural Development (MRD), and Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSAVY), and Development Partners (DPs).

Following the steps of the FTRIN 2014-2020[4], the second edition of 'The Fast Track Road Map for Improving Nutrition 2023-2030' has been developed to reinforce the national commitments for improving nutrition, based upon the national priorities and strategy to optimize nutrition-relevant services and to improve consumption of healthy diets. The roadmap aims to achieve nutrition results by building on existing efforts and systems, while expanding the target age groups, and supporting the development of cohesive actions with relevant line ministries and other stakeholders in the country. The rapid-performance assessment of the first edition conducted at the end of the implementation period was used to inform this document and develop achievable and feasible targets at the national and sub-national level, with emphasis on the need for adequate resources and governance to ensure implementation, together with a stronger framework of accountability towards strategic implementation, monitoring, and evaluation.

II. Vision and Strategic Approach

A. Vision

Improving the nutritional situation in Cambodia aligns with the priorities set out within the broader national development objectives and the health sector priorities and targets relevant to nutrition. The Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase IV and National Strategic Development Plan (2019-2023) reaffirm the Royal Government of Cambodia's strong commitment to the SDG targets for 2030, poverty reduction and improved health, nutrition, and sanitation, particularly among the poor and the vulnerable. Strategic directions to reduce inequalities in accessing health services and nutrition interventions and strengthen the national systems will be the key directions to minimize the burden of child malnutrition and achieve the FTRIN within the 2023-2030 target. Within the vision and goals mentioned in figure 2, other key documents and ministerial strategies were strongly considered to develop the following plan:

VISION: All people in Cambodia have optimal nutrition, health, and well-being, thereby contributing to sustainable human capital growth and socioeconomic development

GOAL: Optimize the nutritional status and offer universal access to quality nutrition interventions for all people and communities in Cambodia

Figure 2. The FTRIN 2023-2030 Vision and Goal

1. Health Strategic Plan 2016-2020.[5]
2. The Second National Strategy for Food Security and Nutrition 2019-2023.[6]
3. National Strategy for Reproductive and Sexual Health in Cambodia 2017-2020.[7]
4. National Strategic Plan for the Prevention and Control of Non communicable Diseases 2013-2020.[8]
5. National Multisectoral Action Plan for the Prevention and Control of Non communicable Diseases 2018-2027.[9]
6. School Health Policy, 2021.[10]
7. National Action Plan for the Zero Hunger Challenge in Cambodia (NAP/ZHC 2016-2025).[11]
8. Global Action Plan on Child Wasting - Country Operational Roadmap.[12]
9. Cambodia national maternal, infant and you child nutrition (MIYCN) Social and Behavior Change Communication (SBCC) strategy 2020-2025.[13]
10. Interim guidelines on growth monitoring and promotion (GMP) for children under 5 years old in Cambodia.[14,15]
11. National Policy and Guidelines for Micronutrient Supplementation to Prevent and Control Deficiencies in Cambodia, 2012.[16]
12. Community participation policy for health, 2008.[17]
13. The rapid performance assessment of the 'Fast Track Road Map for Improving Nutrition 2014-2021' (Unpublished)

B. Lifecycle Approach to Improve Nutrition

In line with the previous road map, the FTRIN 2023-2030 is adopting a life cycle approach to improve nutrition aiming to ensure access to quality nutrition-specific services, alongside strategies to promote optimal nutrition and healthy diets, for all age groups. The framework presented in figure 3 illustrates the vicious cycle of malnutrition together with the impact of under- and over-nutrition.

The first 1,000 days of life, particularly from the womb until 24 months old, defines the ability of children to reach their full potential later in life.[18,19] It is well demonstrated that a sub-optimal maternal nutritional status inhibits pregnancy outcomes, particularly the development of the fetus, birth outcomes, and initial growth pattern.[20] Childcare and child-feeding practices greatly influence the burden of malnutrition and illness in the first 2 years of life. Suppressed linear growth, low immunity, and developmental delays are commonly recognized impacts of children experiencing under nutrition in the first 2 years, where severe forms of under nutrition can lead to serious health consequences and even death.[21] In addition to the burden of under nutrition, over nutrition or obesity is becoming more prevalent in Cambodia among, both, children and adults. The food industry makes processed and macronutrient-dense products easily available at competitive prices, while fast food shops and stalls are in increasing demand. During childhood and adolescence, malnutrition can limit children's school performance and physical capacity, among other consequences, hence, being more likely not to reach their full potential in life.

Furthermore, the choices of diet and lifestyle later in life are greatly influenced by the childhood experiences and economic conditions of the household. Hence it can be concluded that malnutrition impacts societies through three main channels: (1) health, (2) human capital, and (3) economic. [22]

As a trans-generational issue, a systematic and comprehensive approach to improving nutrition and diet, alongside increased access to quality nutrition-relevant services, has the potential to break the cycle of malnutrition and reduce its consequences. Therefore, it is imperative for the FTRIN 2023-2030 to support the national efforts in reducing the burden of malnutrition, while striving to close inequity gaps through universal health coverage and ensuring access to relevant interventions for vulnerable groups.

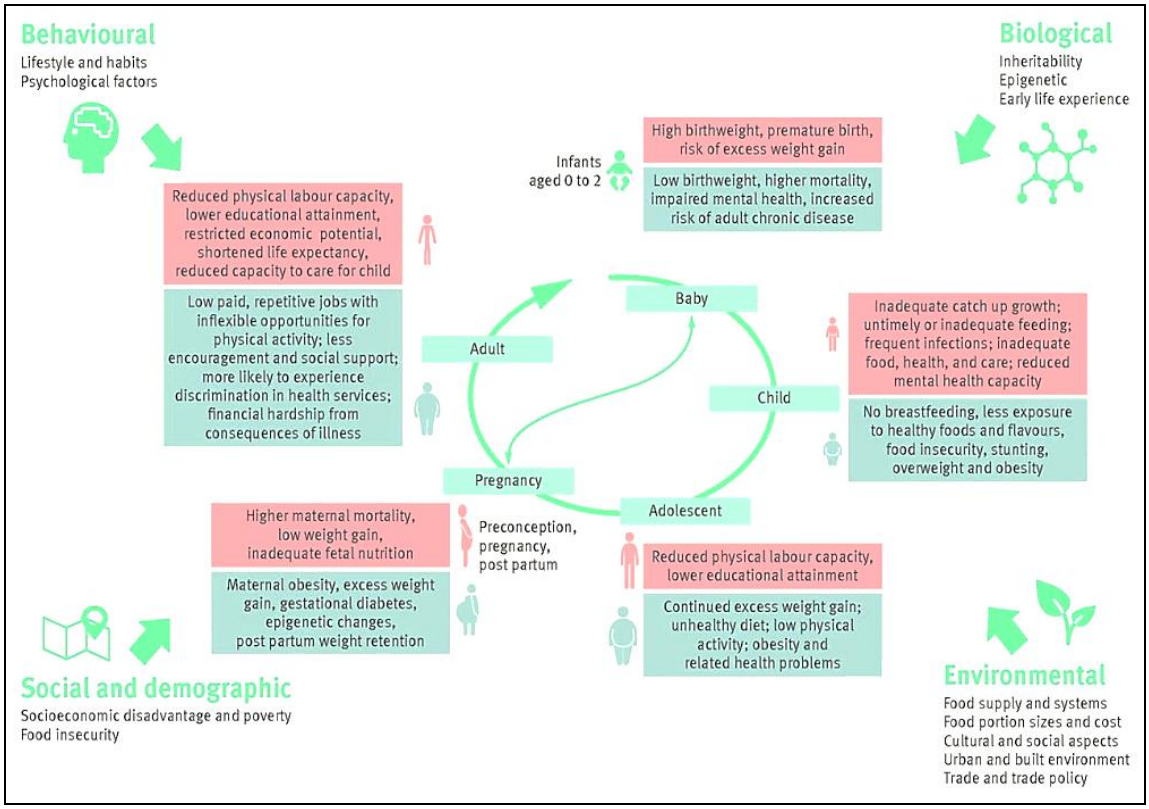


Figure 3. The burden of under- and over- nutrition framework [22]

This document was developed with four target areas for specific age groups, including an additional area that targets the system of delivery. The targets are as follows:

1) **Women of reproductive age, pregnancy, and post-natal period:** to promote the nutritional status of all women of reproductive age (15-49 years), while ensuring adequate diet, and care during pregnancy, and to promote a healthy start in life through safe child delivery and post-delivery practices.

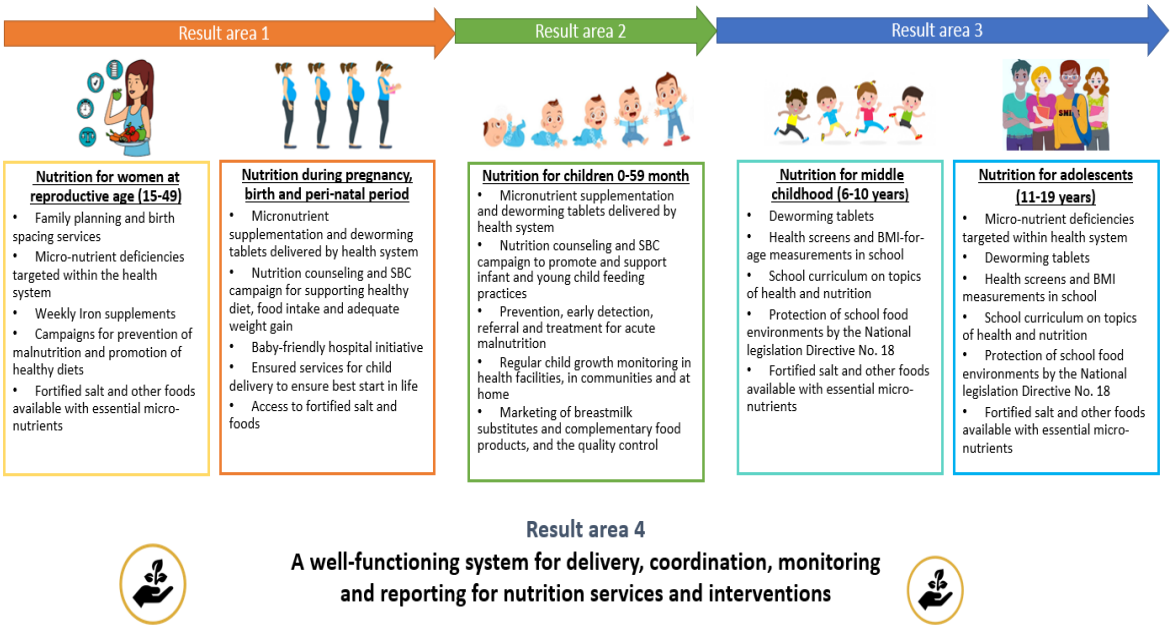
2) **Infants and children up to 5 years of age:** to promote and support age-appropriate feeding practices, growth, and early childhood development, to protect children from consumption of unhealthy commercial products and breastmilk substitutes, and to enable access to nutrition services and including treatment for acute malnutrition.

3) **Middle childhood (6-10 years old) and adolescence (11-19 years):** to integrate nutrition-related services within the health facilities, community-based structures, and

school platforms by targeting the triple burden of malnutrition (under nutrition, over nutrition, and micronutrient deficiencies), and promoting and protecting the school food environment.

4) **Enabling environment and the system functioning:** to strengthen the national and sub-national nutrition governance to coordinate, implement and monitor progress, and to increase engagement and coordination with relevant ministries and the private sector.

Figure 4. Structure of the FTRIN highlighting the conceptual framework and considered services



III. Strategic Principles and Cross-cutting Issues

The FTRIN 2023-2030 aims to ensure a **rights-based approach** by ensuring that human rights are met and prioritized across all actions. Guided by the Universal Declaration of Human Rights (1948), the Convention on the Elimination of all Forms of Discrimination Against Women (1979), and the Convention on the Rights of the Child (1989), children's and women's right to adequate and optimal nutrition has been officially recognized. Therefore, we must support caregivers, service providers, and the private sector to protect and fulfill the right to nutrition and a healthy diet.

The FTRIN aimed to build **evidence-based** strategies and enable interventions, by incorporating elements of research demonstrating the effectiveness of programmes and interventions. Together with a **context-specific** focus, the strategy builds a realistic plan and managed expectations for implementation, while producing continuity through careful consideration of current national priorities, action plans, and nutrition programmes.

Lastly, the FTRIN is **system-based** by focusing on existing health system mandates and on strengthening the system of delivery at the national and sub-national levels, for maximized impact. The multi-sectoral collaborations are vital for nutrition with importance given also to the food, education, water and sanitation, and social protection systems.

Cross-cutting issues

1. **Disability:** should set a stronger emphasis on prioritizing access to health and nutritional services in accordance with the increased needs of people with disability, and on ensuring they are intentionally included in interventions.
2. **Equity:** should be mainstreamed across all actions and priorities to offer equal possibilities and universal access to health and nutrition services.
3. **Gender roles and Family-centered:** should increase the emphasis on interventions that focus on strengthening the family capacity and knowledge to address their needs while enabling males to take an active role in child caregiving and in keeping the household.
4. **Youth:** should increase the active engagement of the young generation in activities that promotes healthy diets and lifestyle.

IV. Result Areas

Result Area 1: Nutrition for women of reproductive age, and during pregnancy, birth, and postnatal period

The birth outcomes and the nutritional status of the infant are directly impacted by the mother's nutritional status pre-pregnancy and during pregnancy. Hence, this result area will aim to ensure the best start in life for all babies, by promoting women's nutritional status and promoting healthy diets, and the utilization of essential health and nutrition services during pregnancy.

The nutritional status during pre-pregnancy is vital for the early development of the fetus. In Cambodia, more than 40% of women of reproductive age have anemia and 31% have vitamin D deficiency[2,23,24], while both micronutrients are vital for optimal fetus growth. In addition, 14% of women of reproductive age are underweight with low BMI values[2,23–25]. Furthermore, evidence also shows that more than 20% of pregnant women have low mid-upper arm circumference measures, an indicator of undernutrition during pregnancy.[26,27] In the perinatal period, including the antenatal, birth, and postnatal period, health services play an essential role in ensuring the identification and prevention of conditions that might threaten the mother's and child's life and health. In Cambodia, nutrition-relevant services, such as micronutrient supplementation and nutrition counseling, are successfully integrated with routine activities in health facilities. However, service providers are not adequately prioritizing nutrition counseling during the ANC/PNC services, minimizing the exposure of women to quality information. The overall access of pregnant women to information on different stages of pregnancy and nutritional recommendation seems to be quite low, while attitudes and practices around pregnancy are influenced by community, social norms, and cultural beliefs[26]. Furthermore, the immediate post-delivery practices, such as delayed cord clamping, continuous skin-to-skin contact, and early initiation of breastfeeding, are known to enhance the health and nutritional status of the newborn.

With 86% of women attending a minimum of 4 ANC visits and 99% of the live births in the last year were attended by health professional, this result area further targets to improve the quality, coverage, and utilization of nutrition services; services that include micronutrient supplementation, deworming tablets, ANC/PNC visits, safe child delivery, neonatal care and promotion of breastfeeding and care, as part of nutrition counseling. A wider range of nutritional needs during pregnancy is to be targeted by transitioning from IFA to MMS use as micronutrient supplementation. Furthermore, it is aimed to enable access to and provide quality information about pregnancy and the perinatal period through multiple channels, including health service providers, social media, and the internet. Optimization of the post-delivery practices represents another priority, together with advocacy for improved maternity leave conditions in the public and private employment sector, as part of Labor Law. Lastly, a number of interventions are planned to be made available with the goal to promote and support a healthy diet, increase the demand for services from health facilities, and support breastfeeding of young children.

Objectives and underlying key Interventions:

1.1. Improving the pre-pregnancy nutritional status of women of reproductive age (15-49 years old)

1.1.1. Optimize the distribution and increase the coverage of weekly Iron/Folic Acid supplements (WIFS) among non-pregnant women at ages between 15 and 49 years, as guided by the 'National Policy and Guidelines for Micronutrient Supplementation to Prevent and Control Deficiencies in Cambodia', as part of the routine and community outreach activities of health facilities.

1.1.2. Support the development and dissemination of the 'National Food-based Dietary Recommendations' for all age groups, including adults, and information campaigns that would support the choices for a diverse and healthy diet. The recommendation shall include guidelines towards a healthy diet, optimal nutritional status, physical activity, and reducing/preventing alcohol and tobacco consumption.

1.1.3. Support line ministries through existing platforms in promoting the consumption of fortified products with essential micronutrients and iodized salt, by emphasizing the prevention of micronutrient deficiencies, disease, and benefits for the development of the fetus.

1.2. Improving nutrition counseling in the perinatal period

1.2.1 Update the 'Clinical Management of Safe Motherhood' protocol, for hospitals and health centers, to ensure a high quality of ANC services, monitoring of weight gain during pregnancy, and ensure health services providers follow the procedure.

1.2.2 Guide and capacitate health service providers to offer quality nutrition counseling, as guided by the guidelines for 'Minimum Package of Activities Module 10', to promote and support adequate nutrition and care in the perinatal period.

1.2.3 Strengthen the roles and responsibilities of VHSG to mobilize and inform communities to provide adequate care and practices during the perinatal period, to

make women more familiar with services available in the perinatal period, and work with health centers to ensure utilization of services.

1.2.4 Establish an online platform, a mobile app, for pregnant and lactating women to coordinate patient information, coordinate and provide reminders for health facility visits and enable access to quality information during pregnancy and lactation period. The information can be transferred between different health service providers and VHSG. The app should aim to support women during and after pregnancy through access to quality vital information, including signs for emergency care and development milestone delays.

1.2.5 Design and implement comprehensive SBCC and family-centered interventions to minimize equity gaps and support vulnerable pregnant and lactating women in adopting adequate care, improving the quality of diet, and accessing services.

1.3. Optimizing the distribution and use of deworming tablets and micronutrient supplements by pregnant and lactating women

1.3.1. Optimize the distribution and increase the coverage of Iron/Folic Acid (IFA) supplements among pregnant women, along with deworming tablets, as guided by the 'National Policy and Guidelines for Micronutrient Supplementation to Prevent and Control Deficiencies in Cambodia'.

1.3.2. Develop a transition plan from IFA to multi-micronutrient supplements (MMS) supplements for pregnant women, if the evidence sustains the effectiveness, feasibility, and cost-benefit of this transition, by considering both the implementation and operationalization process.

1.3.3. Implement a gradual transition from IFA to MMS for pregnant women, by prioritizing the more high-risk and vulnerable geographic areas, and promoting the daily consumption of the supplements through an evidence-based approach.

1.3.4. Support updating the 'National Policy and Guidelines for Micronutrient Supplementation to Prevent and Control Deficiencies in Cambodia'16 to target effectiveness and coverage of deworming tables and micronutrient supplements, while considering the transition from IFA and MMS. Consider including the details on supply chain, staff capacity, and Health Management Information System (HMIS) indicators based on appropriate reviews.

1.3.5. Strengthen the capacity and the roles of CCWC and VHSG to inform about health benefits and encourage pregnant and lactating women to use of micronutrient supplements and deworming tablets while supporting the health center activities.

1.4. Improving the diet of pregnant and lactating women

1.4.1. Implement the national Social Behavior Change Communication (SBCC) for improving the 'Maternal, Infant, and Young Child Nutrition' (MIYCN) to reach national coverage, according to the MIYCN SBCC strategic plan.

1.4.2. Review, design, test, and distribute nationwide the 'Mother and Child Health Educational handbook' through health service providers that are able to use interpersonal communication tools to deliver information to pregnant and lactating women. The handbook should give access to easily understandable information on pregnancy, lactation, child feeding and care practices, and early development milestones.

1.4.3. Motivate and encourage cash transfer beneficiaries (pregnant and lactating women) to use cash transfers and food vouchers to improve the nutrition sensitivity and outcomes.

1.4.4. Initiate, implement, and monitor the impact of lactation rooms at the workplace to enable mothers to exclusively and continue breastfeeding after returning to work.

1.4.5. Advocate and work with relevant ministries and DPs to increase the maternity leave duration and improve benefits as part of Labor Law, to support mothers to exclusively breastfeed their newborns for the first six months of life.

1.4.6. Provide lactation room within the workplace for the public & private sectors to enable breastfeeding for a longer period, and report evidence of the impact and effectiveness.

1.5. Optimizing the practices during birth to ensure a healthy start in life

1.5.1. Strengthen the capacity of health service providers for safe child delivery services and ensure the adoption of those practices to ensure a healthy start for newborns. These services include continuous skin-to-skin contact for a minimum of 90 minutes, delayed cord clamping, early initiation of breastfeeding within one hour of birth, enable exclusive breastfeeding at least until discharge after birth, and lactation counseling and support.

1.5.2. Monitor and coach the health service providers and VHSG at all levels, through the role of national and sub-national level administration, to fulfill their roles and responsibility for ensuring adequate quality of nutrition services after birth.

1.5.3. Revitalize the Baby-Friendly Hospital Initiative by revising the guidelines to include the latest international guidelines, and by extending the initiative to health centers. Develop a monitoring system as part of updated guidelines.

1.5.4. Assess feasibility for capacity development and monitor practices on ANC, child delivery, and PNC within private health facilities. Private health facilities should respect the same protocols, legislation and guidelines for service delivery as national facilities and help in the promotion and protection of breastfeeding practices during ANC, post-delivery, and growth monitoring.

Result area 2: Nutrition for children 0-59 months old

The nutrition-relevant services and interventions for children under 5 years of age have the role of promoting the child's growth and development while enabling the access and utilization of essential services. Due to COVID-19 and other system challenges, the proportion of children accessing nutrition-relevant services has decreased over the past few years. Even though CDHS 2021/22 shows some improvements among nutrition relevant indicators, the stagnant prevalence of wasting and deterioration of breastfeeding practices indicates a need to accelerate efforts and follow a more holistic approach to promote infant and young children feeding practices and nutritional status. Particularly, there is a need to strengthen the delivery and integration of nutrition services within primary health care to achieve the desired results for children.

The health service providers from health facilities should assess the children's nutritional status and administrate vitamin A and deworming tablets regularly, based on the latest guidelines from the 'Growth Monitoring and Promotion (GMP) program; a program that enables early identification of malnutrition (underweight and overweight), establishes a referral link for acute malnutrition (MAM and SAM) treatment, promotes detection of delays in early development milestones, and promotes children's growth and feeding practices. The VHSG has the potential to further support the implementation and mobilization of the community, by supporting children to complete the treatment and receive routine health services. Among the vulnerable groups or families in remote areas, additional public health nutrition interventions have an added value in offering equal opportunities and minimizing the inequality gaps.

The breastfeeding practices showed a deterioration in the new CDHS 2021/22, with the rise of use of breastmilk substitutes, or more recently re-named as Commercial Milk Formula (CMF), and industrially produced complementary foods for infants and young children. Age-appropriate feeding practices should be protected through the regulated marketing of commercial products and breastmilk substitutes under Sub-Decree 133, legislation aiming to protect breastfeeding and promote adequate complementary feeding practices. The SD133 is supported by Joint PRAKAS which intends to be updated with the current marketing procedures to reinforce and accelerate efforts for the protection of child feeding practices.

The areas of focus in section 2 aim to increase universal access to essential and life-saving nutrition-relevant services through the health system for children under 5 years old including prevention, early identification, and treatment for SAM. This will be done through improved capacity of public health facilities and community-based support groups to increase demand, service provision, and continuous use of services until full recovery from SAM. To prevent all forms of malnutrition among these age groups, it is aimed to improve awareness and practices for infant and child feeding through age-appropriate breastfeeding and complementary feeding practices.

Objectives and underlying key Interventions:

2.1. Growth monitoring and promotion for children below 5 years old[14]

2.1.1. Implement and document best practice of the new "Growth Monitoring and Promotion" interim guideline and evaluate the effectiveness and implementation process after 2 years.

2.1.2. Update the "The Interim Guideline for Growth Monitoring and Promotion for Children under 5 years in Cambodia" based on the lessons learned after 2 years of implementation.

2.1.3. Monitor practice and provide in-service coaching to the health service providers at the sub-national level to offer growth monitoring and promotion services, including early detection of milestone delays, to all children below 59 months as part of the services at health facilities and community outreach activities.

2.1.4. Strengthen the capacity of service providers to record and report against the growth monitoring indicators in the HMIS, mentioned in the GMP Registration Book.

2.1.5. Implement interventions to target community-based management of moderate acute malnutrition by using locally produced Ready-to-use Supplementary Foods and behavior change strategies for childcare.

2.1.6. Model and scale-up growth promotion activities for children under 5 years old through DPs activities and monitor the efficiency of these interventions.

2.2. Optimizing the distribution of Vitamin A supplements and deworming tablets for children 6 to 59 months old

2.2.1. Strengthen the capacity of health service providers to improve coverage and delivery of deworming tablets and vitamin A supplements for children 6-59 months as part of their routine activities and monitoring the routine monitoring data.

2.2.2. Strengthen the capacity and role of VHSG to create demand for deworming tablets and vitamin A supplements for children through community sensitization and mobilization during outreach activities.

2.2.3. Strengthen the partnership between health facilities and preschools to enhance nutrition services including vitamin A supplementation, deworming, and nutrition screening using the preschool platform.

2.3. Optimizing early identification and treatment of severe acute malnutrition

2.3.1. Generate evidence on barriers to completing treatment, and develop and implement an adaptable strategy, based on SPHERE standards[28], to improve treatment outcomes by overcoming caregiver barriers, improve quality of services and enable a community-based follow-up for treatment of acute malnutrition.

2.3.2. Develop and implement evidence-based and adaptable strategies to improve the cure rate by overcoming barriers and completing the SAM treatment through community-based follow-up + SPHERE standards.[28]

2.3.3. Update and implement 'Guidelines for Management of Acute Malnutrition', together with the updated handbooks for the management of SAM and MAM for

health service providers and VHSG. These documents are to reflect the management of both MAM and SAM, the activities under the Growth Monitoring and Promotion programme, early identification, and referral.

2.3.4. Pilot and implement community-based interventions for early identification and referral to health services of potential SAM cases through capacity created at the community and household level through a simplified approach (Family-MUAC). The VHSG's are recommended to have additional roles in the community by facilitating early identification, referral, and follow-up procedures, with the assistance of health service providers from health centers and hospitals.

2.3.5. Include locally produced Ready-to-Use Therapeutic Food Nutrix, in the Cambodia's Essential Medicine list and increase national reliance and purchase of Nutrix as a commodity for SAM treatment and improve formula for prolonged shelf life and acceptability levels[29,30] (>50% of the prescribed are consumed and >70% are finding acceptable the taste).

2.3.6. Scale-up inpatient and outpatient SAM treatment services to reach at least 60% of the estimated annual SAM caseload[31] and improve treatment outcomes, as per the SPHERE standard.

2.3.7. Strengthen the capacity of service providers through training and in-service coaching on screening and treatment of acute malnutrition.

2.4. Supporting optimal child nutrition through the promotion, protection, and support of infant and young child feeding practices

2.4.1. Update the 'Infant and Young Child Feeding Practices' package, in line with the 'Infant and Young Child Feeding' policy, guidelines, and training manual, based on World Health Assembly 69.9[32], ASEAN guidelines[33], and other relevant documents.

2.4.2. Support optimal IYCF practices through comprehensive age-appropriate feeding and care practices, as part of 1,000 days initiatives, in health facilities and at the community level. This includes promotion of early initiation of breastfeeding, exclusive breastfeeding until 6 months, continuing breastfeeding with complementary feeding for 2 years and beyond, lactation counseling, and advice.

2.4.3. Implement the 'Maternal, Infant and Young Child Nutrition' SBCC intervention that shall promote the early initiation of breastfeeding within one hour after delivery, exclusive and complementary breastfeeding practice, and nutritious and safe complementary feeding practice.

2.4.4. Develop dietary guidelines to end inappropriate promotion of infant feeding foods, and to ensure appropriate nutrient intake during the complementary feeding period, especially between 6 and 36 months, as per WHO guidelines.

2.4.5. Update and enforce the adherence to SD133 and relevant joint PRAKAS on the marketing of breastmilk substitutes and commercially produced complementary foods for infants and children.

Result area 3: Nutrition in middle childhood (6-10 years) and adolescence (11-19 years)

The middle childhood period (6-10 years) is marked by steady linear growth, and it offers the possibility to catch up with linear growth if they consume adequate diets[34]. Physical, social, and mental skills develop steadily during middle childhood, and children become much more capable of making decisions and maintaining sustained attention while absorbing information at a fast pace[35]. Following this period, adolescence, between 11 and 19 years old, marks a new growth spurt where children have the opportunity to reach the maximum height, and, at the same time, the nutrient demands increase to successfully promote optimal growth. This indicates another window of opportunity to promote growth and ensure the reach of the full potential in adulthood. However, inadequate diets, hunger, and micronutrient deficiencies during this period of life put them at increased health risks which impact future opportunities, including lack of concentration in school and the inability to perform well.

Behaviors towards foods and lifestyle are defined in childhood and adolescence, representing an opportunity to shape preferences and attitudes toward healthy foods, physical activity, and an adequate diet that could fulfill all the nutrient requirements[34,35]. The School Health Department of the Ministry of Education, Youth and Sports (MoEYS) in Cambodia, with support from the United Nations World Food Programme, WFP, acts to ensure a school environment that supports access to healthy school meals and restricts unhealthy foods and beverages from the school environment. In addition, a new health curriculum integrating important lessons on nutrition is to be implemented for all grades until high school, in addition to sports class that promotes physical activity. Schools are identified as ideal platforms for delivering messages and interventions in Cambodia, particularly as part of primary schools, where the enrollment rate is 90% and 55% for secondary school[36].

The FTRIN 2023-2030 recognizes the period of middle childhood and adolescence as important for reaching their full potential and ensuring the best opportunities for the next generation. As a new priority, this result area focuses on promoting a healthy diet, diversity of food, and optimal nutritional status, while sustaining the provision of a nutritious food environment in school. The main platform for fulfilling these aims is the schools.

Objectives and underlying key Interventions:

3.1. Support the promotion of nutrition and healthy diets for children and adolescents in primary and secondary schools

3.1.1. Develop materials, including message of promotion of healthy diet, nutrition screening and counseling, and support capacity building of education officers for rolling out of the 'Operational Guideline on School Health and Nutrition'.

3.1.2. Support the School Health Department of the MoEYS in prioritizing the nutrition of children 6-19 years in school by participating in the development of standards and guidelines concerning feeding programs and the promotion of healthy foods and snacks, in line with the 'School Health Policy' and the related action plan.

3.2. Support efforts and programmes aiming to increase knowledge, attitudes, and behaviors around nutrition, health, and physical activity

3.2.1. Generate evidence on micronutrient deficiencies and support the evidence generation as part of developing food-based dietary recommendations.

3.2.2. Update the 'National Policy and Guideline for Micronutrient Supplementation to Prevent and Control deficiencies in Cambodia' to include efficient treatment and prevention for the most frequent micronutrient deficiencies for children 6-19 years old, based on which, the health service providers can be trained and involved in implementation at the sub-national level.

3.2.3. Support youth initiatives and youth engagement in the media campaign for promoting nutrition for children and adolescents.

3.2.4. Promote and advocate for physical activity and clubs, such as youth clubs, sports clubs, and events based on national strategies that promote physical activity at the sub-national level in coordination with MoH, MOEYS, MOI, and other relevant stakeholders.

Result area 4: Enabling environment for supporting, promoting, and protecting diets and to ensure a well-functioning health system for delivery of nutrition-relevant services

The implementation and adoption of the strategy developed under this document rely on a governance system that could lead implementation, leverage efforts, and operationalize the strategy and plans. In recent years, Cambodia has been undergoing a process of decentralization, with more power being gradually delegated to the sub-national and local authorities, as reflected in several national strategies[37,38]. With an increased allocation of national funds and responsibilities, the local and sub-national levels are the main authorities to target the community's needs and implement national strategies. Nevertheless, the national authorities still have a central role in ensuring adequate coverage, developing and updating policies and national strategies, and ensuring available resources for a well-functioning health system for delivery at the sub-national level. Hence, this last result area targets the system of implementation and operationalization of the FTRIN 2023-2030 by aiming to strengthen the national and sub-national level, while establishing a system that supports changes in the programme and efficient delivery of quality services. This goal implies improved coordination between national and sub-national levels and establishing a system of monitoring of the quality and coverage of nutrition services.

Multisectoral efforts are important in comprehensively promoting nutrition, where collaborations with line ministries, DPs, and the private sector are vital for ensuring an enabling environment for improving nutrition for all. Multiple line ministries in Cambodia are recognizing the importance of optimal nutrition and integrated it as part of their focus, trying to support better achievements of SDG by 2030. With the active role of DPs in supporting the government in implementing key nutrition interventions, a system shall be

put in place to support the coordination and leveraging of activities, investment, and DPs programs, which shall further optimize the scale and coverage of national interventions.

Objectives and underlying key Interventions:

4.1. Improve the quality of nationally reported data through routine monitoring systems and create evidence for future programmes.

4.1.1. Capacity development of health service providers to use the available materials to accurately perform and register anthropometric measurements according to the new guidelines.

4.1.2. Build capacity at the provincial level and within health facilities to monitor the coverage of maternal and child nutrition services through regular data monitoring and analysis, and to enable a platform for review and assess progress, according to national targets and plans.

4.1.3. Provide training on the new HMIS nutrition indicators, provide periodical refresher training for sub-national reporters, and enable access to materials and job aids to facilitate the process of recording and reporting through online platforms.

4.1.4. Ensure regular data quality assurance and analyze data-for-action conducted by Department of Planning and Health Information, National Nutrition Programme and other MOH structures.

4.1.5. Collaborate with relevant line ministries and institutions, to conduct end-of-year information exchange and analysis of nutrition-relevant data.

4.1.6. Support DPHI to transition HMIS to a web-based reporting system through trained health service providers.

4.2. Strengthening the leadership and governance at the national level

4.2.1. Develop a digital system for ‘Mapping of donor support and activities’ to represent the DPs and CSO activities, timeline, resources, and investment across districts by supporting the national convergence of implementation.

4.2.2. Strengthen the national level structure and capacity to leverage and coordinate programs and their implementation by Government and DPs, to expand universal health coverage, and prioritize vulnerable areas based on evidence and routine data.

4.2.3. Coordinate evaluations and assessment of effectiveness and impact of programme interventions and strategy and provide guidance for scaleup when necessary.

4.3. Increase human resources and capacity for implementing nutrition strategies and interventions

4.3.1. Advocate and collaborate with Universities in Cambodia to initiate and develop curriculum for graduate and postgraduate programmes on nutrition specific subjects in response to country needs (public health nutrition, clinical nutrition, dietician, etc.) and the further integration with existing relevant subjects and programmes.

4.3.2. Integrate nutrition-relevant training into the pre-service education of relevant health professionals (competency-based education) to establish a straightforward transition into practice and incorporation with in-service training.

4.3.3. Improve national human resources in maternal and child nutrition through increased opportunities by establishing a governmental internship program and support the DPs to include more national junior officers and national interns as part of their activities in Cambodia.

4.3.4. Establish partnerships and exchange programs with Nutrition programmes and Institutes of neighboring countries with the aim of transferring knowledge, capacity and lessons learned.

4.4. Strengthen the sub-national capacity to plan, lead, implement, and monitor nutrition services

4.4.1. Support investments in the capacity of sub-national level administration to plan, budget, and analyze investment plans for nutrition, including interventions, supply, and regular supervision and monitoring visits, using the existing platforms.

4.4.2. Collaborate with sub-national level to establish and maintain annual provincial and monthly Commune Council meetings with the relevant working group to discuss and address the nutrition needs of the community.

4.4.3. Ensure that the updated document for the 'Community Participation Policy' and other relevant documents are reflecting the VHSG's responsibilities to support national interventions and nutrition-relevant services and engage with relevant line ministries to ensure clarity over VHSG's role.

4.4.4. Develop guidelines and support the provincial and district Nutrition Focal Point to plan and establish a regular schedule for monitoring visits of health facility visits. The monitoring visits should include monitoring activity at health facilities, in-service training, and provision of feedback, with the aim of improving the quality of service and adapting the practice to the latest protocols and guidelines.

4.4.5. Collaborate at the sub-national level to train health service providers and VHSG on digital platforms that host training videos and job aids.

4.5. Ensure sustainable nutrition financing

4.5.1. Conduct a costing exercise for FTRIN components, specific for each intervention.

4.5.2. Advocate to the Ministry of Economy and Finance (MEF) to increase the annual funding for nutrition, according to the implementation plan of the national nutrition priorities and strategies.

4.5.3. Develop a national nutrition financing strategy, which includes sustainable resource mobilization, effective utilization, and monitoring, in accordance with the national nutrition plans and including domestic and DPs resources.

4.5.4. Strengthen and optimize the distribution of cash transfers to target beneficiaries and expand the scope of the Health Equity Fund, with the aim to increase nutrition service utilization and demand.

4.5.5. Prioritize resource mobilization for nutrition interventions at the sub-national level.

4.6. Improve the multi-sectoral and private-sector engagement

4.6.1. Utilize SUN Network as one of the platforms to facilitate interactions between Government, UN, Donor, and business sectors to prioritize nutrition at the national and subnational levels within planning, resourcing, and implementation.

4.6.2. Participate collaborate through existing platforms and with relevant line ministries (Ministry of Commerce, Ministry of Planning and Ministry of Industry, Science, Technology & Innovation) to support the strengthening of the private sector's engagement and commitment to adequate fortification of food products, sauces, and salt with essential micro-nutrients

4.6.3. Engage with media channels and social media platforms to promote nutrition and improve compliance with national legislation and documents for marketing products meant for infants and young children.

4.6.4. Improve awareness among the private sector, through existing platforms such as SUN Business Network, and support initiatives to promote nutrition and healthy diets.

4.6.5. Maintain a strong collaboration with line ministries to prioritize and integrate nutrition as part of the country's development plans.

V. Accountability for Implementation

A. National leadership and Governance

The Ministry of Health (MOH) guides the national strategy and prioritization for implementation and supports the development of guidelines and policies to protect and promote nutrition for all. MOH shall also lead conversations on strategies for improving the national and sub-national level implementation by targeting the capacity to budget, plan, implement, and monitor investments, plans, and coverage of services. Furthermore, MOH is responsible for leading the strategy for effective coverage of micronutrient supplements and deworming tablets, with relevant departments, NNP and Department of Drugs and Food, enabling the implementation at the national level. MOH shall work with line ministries, DPs, and the private sector to build a comprehensive approach to nutrition, as a cross-sectoral issue. MOH and relevant line ministries will advocate for and support activities to improve nutrition literacy, promote informed decisions among citizens and provide access to fortified food with essential nutrients and public spaces for practicing sports. Lastly, MOH is responsible for monitoring routine data (HMIS) and evaluating the impact of current strategies.

The National Nutrition Program (NNP), under the leadership of the National Maternal and Child Health Center (NMCHC) and MoH**,** has the main role in leading, supporting, and enabling the FTRIN implementation at the national and sub-national level. With the main aim to promote maternal and child health, NNP has the responsibility to formulate policies, regulations, and strategies for specific nutrition-related areas in the health sector. Hence, NNP has an active role in ensuring the capacity of service providers at the national and sub-national level to plan, implement, and budget for nutrition interventions, while monitoring implementation and efficiency. NNP provides technical expertise in evidence-based interventions and engages with relevant stakeholders through relevant platforms (SUN Network and Business). Lastly, NNP also has the role of leveraging efforts and developing a cohesive approach to nutrition, through the support of DPs and line ministries.

The Department of Planning and Health Information, the department of MOH, is responsible for the quality of HMIS data and for ensuring access to reports at the national and sub-national levels. The capacity of those reporting for HMIS is ensured through the help of different departments within MoH, where the NNP is responsible for nutrition-relevant indicators.

The **Council of Agriculture and Rural Development (CARD)** was the agency appointed coordinate the cross-sectoral and nutrition-sensitive initiatives to promote nutrition, engage the private sector, and advocate for food fortification. SUN movement, also coordinated under CARD, is an initiative to unite people and programs in an effort to improve nutrition, by mobilizing and advocating for increased nutrition financing and the provision of technical assistance.

The School Health Department, under the MoEYS, takes leadership in school-based intervention activities to promote the health and nutrition of children in primary and secondary schools. Through enforcement of Directive no.18 and the school feeding program, the school food environment should be protected and the consumption of healthy foods and beverages should be promoted. With support from Ministry of Health, MoEYS is expected to produce guidelines and recommendations for implementation of the action plan for the 'Health School Policy'.

B. Sub-national and Community Implementation

The **sub-national level administration,** through Provincial Health Departments (PHD), Operational District (OD), and Commune Council (CC), are responsible for guiding, planning, and budgeting for adequate resources for implementation, including supplies, community outreach activities, and training, while maintaining continuous monitoring and supervision. The PHD are responsible to engage with private health facilities, providing services according to national guidelines and protocols, and mobilizing them to support sub-national and national efforts for improving maternal and child health and nutrition. PHD should monitor the overall functioning of health facilities and health service providers, and monitor trends in nutrition indicators, by addressing the needs of the population. **The Nutrition Focal Point** (provincial and district) has the role of monitoring, supervising, and offering in-service coaching to health service providers and VHSGs, to effectively include nutrition-relevant activities within routine health services and community mobilization.

The health service providers from health facilities are responsible for offering and delivering quality nutrition and health services, and communicating recommendations responsive to patient needs and understanding, by following protocol, instructions, and guidelines. As main reporters of HMIS, they are responsible for recording and reporting accurate data, including monthly reflections on the reported data and community needs. These activities require the health service providers to collaborate with the provincial level, commune councils, VHSGs, and schools in their catchment areas.

The Village Health Support Group (VHSG) members have the role to mobilize, inform and sensitize pregnant women and communities towards health and nutrition services in relation to pregnancy, child delivery, routine visits, and consumption of a nutritious diet. Furthermore, they are to have new roles concerning community-based children's growth monitoring, screening of acute malnutrition, and support health centers to follow up with patients.

The primary and secondary schools, through school principals and teachers, have the responsibility to plan their curriculum to integrate the health and nutrition subjects, enable implementation from the national level and adhere to Directive no. 18, which targets food safety and types of food and beverages sold in schools. Furthermore, they must collaborate with the nearest health center to ensure the distribution of vitamin A and deworming tablets biannually and perform health and nutrition screenings.

C. *Supporting* Implementation

The DPs, including international organizations, UN agencies, and NGOs, have the role of supporting MoH in the development of national materials and strategies, by providing technical expertise, generating relevant evidence, and mobilizing resources. The DPs have the responsibility to initiate, implement and monitor their nutrition-relevant interventions and programs, but also to model and adapt innovatory approaches to improved nutrition, through quality services and system strengthening. Furthermore, they are to implement interventions at the community level in collaboration with sub-national authorities and service providers. As a result, DPs are expected to collaborate with relevant departments within MOH and line ministries, as well as other DPs, to share lessons learned, challenges, and successes in implementation, and with the aim to enable national takeover and scale-up of efficient initiatives.

The private sector is to be engaged in relevant activities and to encourage the promotion of nutrition for all. The companies producing breastmilk substitutes and commercially produced complementary foods shall ensure adequate quality and adherence to Sub-Degree 133 with relevant Joint PRAKAs. The employment sector, both public and private, is to collaborate with Ministry of Labor and Vocational Training to ensure compliance with maternity leave conditions and to promote the use of lactation rooms.

Universities in Cambodia and **pre-service training centers** shall collaborate with the government to ensure nutrition-relevant subjects are included in the curriculum and health service providers are feeling confident in providing nutrition counseling and relevant services, with an increased number of human resources for nutrition.

VI. Monitoring and Evaluation framework

The process for evaluating the implementation of FTRIN includes a mid-term and end-term assessment of the implementation, operationalization, and impact. To facilitate these assessments, the framework includes indicators as presented in two levels (Annex: Monitoring & Evaluation Framework):

1) **Impact indicators** -- that reflect the contributions to higher level commitments with data available from national surveys,
2) **Monitoring indicators** – that reflect the direct impact of the FTRIN, and data can be regularly monitored through the HMIS

The mid-term assessment shall be based on data available from HMIS and relevant national surveys while assessing the progress of implementation and operationalization. The end evaluation shall include a more formative procedure aiming at understanding the overall implementation, investment, multi-sectoral programs, and general impact on the nutrition situation in Cambodia. The evaluation is to be initiated and supported by MOH and its relevant departments.

Continuous monitoring is mainly enabled through the HMIS and is established at different levels in the health system as follows:

a) **Health facilities levels:** health service providers should reflect on a monthly basis, on the coverage of services and follow-up cases (acute malnutrition treatment, distribution of supplements, maternal services, etc.) based on the data recorded and reported for HMIS. These reflections are to be used to plan for responsive action, such as community outreach activities, mop-up campaigns for micronutrient supplements and deworming, or to activate VHSG to support follow-up cases if necessary.

b) **Provincial Health Department**: The Nutrition Focal Points at the provincial and district level, in collaboration with colleagues from the PHD, can use the HMIS reports to follow the trends within their province. This is to be conducted at least quarterly and is used to support the enabling of supporting activities for service providers (training, monitoring of practice, etc.). Furthermore, the PHD is expected to use the HMIS reports yearly to plan and budget for nutrition-relevant activities and supplies for the coming year, as part of the process of the Provincial Annual Plan.

c) **Ministry of Health:** relevant departments within MoH are expected to analyze the HMIS data for action and to organize an annual meeting with relevant departments and line ministries to present findings and recommendations for the way forward. Therefore, MOH shall support DPHI to compile and analyze the indicators annually. The annual meeting should be used for planning and program improvement.

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Annex: Monitoring and Evaluation Framework

Impact indicators		Baseline 2021	Targets		Assumption for projection	Monitoring source
			Mid-term'25	End-term'30		
1	Proportion of women 20-49 years old with low BMI values (BMI <18.5)	7%	6%	5%	CDHS 2021/22	CDHS
2	Proportion of women 20-49 years old with high BMI values (BMI ≥ 25)	33%	30%	27%	CDHS 2021/22	CDHS
3	Proportion of women 15-49 years old consuming a minimum dietary diversity	57%	65%	70%	CDHS 2021/22	CDHS
4	Proportion of children under 5 years old with stunting (High for Age <-2SD)	22%	20%	19%	SDG commitment 2.2.1	CDHS
5	Proportion of infant 0-5 months old being exclusively breastfeed	50%	55%	60%	Global Nutrition Report targets	CDHS
6	Proportion of children 6-23 months old met the minimum dietary diversity	51%	55%	60%	CDHS 2021/22	CDHS
7	Proportion of children 6-23 months old met the minimum acceptable diet	42%	49%	60%	Estimated based on CDHS 2014-2021/22	CDHS
8	Percentage of adolescent women 15-19 years old with low BMI-for-age values (-1 SD mid, moderate and severe thin)	29%	20%	14%	CDHS 2021/22	CDHS
9	Percentage of adolescent women 15-19 years old with high BMI-for-age values (+ 2 SD overweight and obese)	6%	4%	3%	CDHS 2021/22	CDHS
10	Percentage of adolescent women 15-19 years old consuming a minimum dietary diversity	53%	60%	65%	CDHS 2021/22	CDHS
11	Percentage of adolescent women 15-19 years old consuming unhealthy foods	43%	40%	35%	CDHS 2021/22	CDHS

Monitoring indicators		Baseline 2021	Targets		Assumption for projection	Monitoring source
			Mid-term'25	End-term'30		
1	Proportion of pregnant women that had minimum 4 antenatal care visits (% 4 ANC)	58%	70%	85%	Projection on HMIS	HMIS, CDHS
2	Proportion of pregnant women who received 90 tablets Iron/Folic Acid supplementation	77%	80%	85%	Projection on HMIS	HMIS
3	Proportion of deliveries by skill birth attendant	83%	89%	99%	Projection on HMIS	HMIS, CDHS
4	Proportion of deliveries by skill birth attendant a health facility	80%	87%	97%	Projection on HMIS	HMIS, CDHS
5	Proportion of mothers who breastfeed within the first hour after delivery	54%	56%	60%	Projection on HMIS	HMIS
6	Proportion of postpartum women who received 42 tablets of Iron/Folic Acid supplementation	79%	82%	85%	Projection on HMIS	HMIS
7	Proportion of women with live birth that had minimum 3 PNC visits	8%	16%	28%	Projection on HMIS	HMIS
8	Proportion of children 12-59 months old receiving deworming tablets	54%	65%	80%	Projection on HMIS	HMIS
9	Proportion of children 6-59 months old receiving vitamin A supplementation	69%	75%	80%	Projection on HMIS	HMIS
10	Proportion of children under 5 years old with wasting (weigh-for-height <-2SD in both IPD and OPD)	9.4%*	7%	<5%	SDG commitment 2.2.2	HMIS, CDHS
11	Proportion of children under 5 years old with severe wasting (weigh-for-height <-3SD in both IPD and OPD)	2.4%*	2%	1.5%	SDG commitment 2.2.2	HMIS, CDHS
12	Proportion of children under 5 years old with SAM having access to treatment (IPD and OPD)[1]	10%*	25%	45%	Global Nutrition Report, GNR targets	HMIS

13	Number of hospitals providing in-patient SAM treatment	36	40	45	Estimated based on scale-up plan and GNR targets	NNP
14	Number of Health Center providing out-patient SAM treatment	382	450	550	Estimated based on scale-up plan and GNR targets	NNP
15	Proportion of children under 5 years old received GMP services	12%*	20%	40%	Estimated based on GMP plan	HMIS

[1] New GMP indicators included in 2022 and started data collection in 2023 *Data collected from other sources as not available at the date in the HMIS.